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

DATA PACKAGE

METALS

PROJECT NAME : RAYMARK SUPERFUND SITE

NOBIS GROUP

585 Middlesex Street

Lowell, MA - 01851

Phone No: 978-683-0891

ORDER ID : Q1883

ATTENTION : Adam Roy

Laboratory Certification ID # 20012

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Cover Page

Order ID : Q1883

Project ID : Raymark Superfund Site

Client : Nobis Group

Lab Sample Number	Client Sample Number
Q1883-01	OU4-PCS-TC-27-042325
Q1883-02	OU4-PCS-TC-27-042325
Q1883-03	OU4-PCS-TC-28-042325
Q1883-04	OU4-PCS-TC-28-042325
Q1883-05	OU4-PCS-TC-29-042325
Q1883-06	OU4-PCS-TC-29-042325
Q1883-07	OU4-PCS-TC-30-042325
Q1883-08	OU4-PCS-TC-30-042325
Q1883-09	OU4-PCS-TC-31-042325
Q1883-10	OU4-PCS-TC-31-042325
Q1883-11	OU4-PCS-TC-32-042325
Q1883-12	OU4-PCS-TC-32-042325
Q1883-13	OU4-VSL-18-042325
Q1883-14	OU4-VSL-18-042325
Q1883-15	OU4-VSL-19-042325
Q1883-16	OU4-VSL-19-042325
Q1883-17	SO-TB-01-042325

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: 5/8/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Nobis Group
Project Name: Raymark Superfund Site
Project # N/A
Chemtech Project # Q1883
Test Name: SPLP MetalGroup3,SPLP Mercury

A. Number of Samples and Date of Receipt:
17 Solid samples were received on 04/25/2025.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Cyanide, Herbicide Group1, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SPLP Extraction, SPLP Mercury, SPLP MetalGroup3, SVOCMS Group3, VOCMS Group1 and VOCMS Group3. This data package contains results for SPLP MetalGroup3,SPLP Mercury.

C. Analytical Techniques:
The analysis of SPLP MetalGroup3 was based on method 6020B, digestion based on method 3050 (soils). The analysis of SPLP Mercury was based on method 7470A and digestion was based on method 7471B (soils).

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Blank Spike met requirements for all samples.
The Duplicate analysis met criteria for all samples.
The Matrix Spike (OU4-VSL-19-042325MS) analysis met criteria for all samples except for Mercury, Arsenic and Silver due to matrix interference.
The Matrix Spike Duplicate (OU4-VSL-19-042325MSD) analysis met criteria for all samples except for Mercury Arsenic and Silver due to matrix interference.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.
The Serial Dilution met the acceptable requirements.

E. Additional Comments:
All samples are diluted 5X dilution as straight analysis because of high and pure acid concentration of two acids which can cause drastic damage to the instrument.

Internal Standard 89Y(1 & 2) were out side qc limit for sample Q1883-08 in 5X run, so for this sample affected parameters were reported from 25X dilutions.
Internal Standard 89Y(1) were out side qc limit for samples Q1883-02, Q1883-04, Q1883-06, Q1883-10, Q1883-12, Q1883-14, Q1883-16 and its QC set in 5X run, so for these samples affected parameters were reported from 25X dilutions.

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

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_____

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

DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following " Results Qualifiers" are used:

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

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

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1883 MATRIX: Water

METHOD: 6020B,7470A

		NA	NO	YES
1.	Calibration Summary met criteria.			✓
2.	ICP Interference Check Sample Results Summary Submitted.			✓
3.	Serial Dilution Summary (if applicable) Submitted.			✓
4.	Laboratory Control Sample Summary (if applicable) Submitted.			✓
5.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Met Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range. The Matrix Spike (OU4-VSL-19-042325MS) analysis met criteria for all samples except for Mercury, Arsenic and Silver due to matrix interference. The Matrix Spike Duplicate (OU4-VSL-19-042325MSD) analysis met criteria for all samples except for Mercury Arsenic and Silver due to matrix interference.		✓	
7.	Sample Duplicate Analysis Met QC Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range.			✓
8.	Digestion Holding Time Met If not met, list number of days exceeded for each sample:			✓
9.	Analysis Holding Time Met If not met, list those compounds and their recoveries which fall outside the acceptable range.			✓

ADDITIONAL COMMENTS: All samples are diluted 5X dilution as straight analysis because of high and pure acid concentration of two acids which can cause drastic damage to the instrument.
Internal Standard 89Y(1 & 2) were out side qc limit for sample Q1883-08 in 5X run, so for this sample affected parameters were reported from 25X dilutions. Internal Standard 89Y(1) were out side qc limit for samples Q1883-02, Q1883-04, Q1883-06, Q1883-10, Q1883-12, Q1883-14, Q1883-16 and its QC set in 5X run,
so for these samples affected parameters were reported from 25X dilutions.
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

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1883

	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:** 05/08/2025

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LAB CHRONICLE

OrderID:	Q1883	**OrderDate:**	4/25/2025 10:10:00 AM
Client:	Nobis Group	**Project:**	Raymark Superfund Site
Contact:	Adam Roy	**Location:**	L41,L51,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1883-01	**OU4-PCS-TC-27-042325**	**SOIL**			**04/23/25**			**04/25/25**
			Mercury	7471B		04/28/25	04/28/25	
			Metals ICP-TAL	6010D		04/28/25	04/30/25	
Q1883-02	**OU4-PCS-TC-27-042325**	**Water**			**04/23/25**			**04/25/25**
			SPLP Mercury	7470A		04/29/25	04/29/25	
			SPLP MetalGroup3	6020B		04/29/25	04/29/25	
Q1883-03	**OU4-PCS-TC-28-042325**	**SOIL**			**04/23/25**			**04/25/25**
			Mercury	7471B		04/28/25	04/28/25	
			Metals ICP-TAL	6010D		04/28/25	04/30/25	
Q1883-04	**OU4-PCS-TC-28-042325**	**Water**			**04/23/25**			**04/25/25**
			SPLP Mercury	7470A		04/29/25	04/29/25	
			SPLP MetalGroup3	6020B		04/29/25	04/29/25	
Q1883-05	**OU4-PCS-TC-29-042325**	**SOIL**			**04/23/25**			**04/25/25**
			Mercury	7471B		04/28/25	04/28/25	
			Metals ICP-TAL	6010D		04/28/25	04/30/25	
Q1883-06	**OU4-PCS-TC-29-042325**	**Water**			**04/23/25**			**04/25/25**
			SPLP Mercury	7470A		04/29/25	04/29/25	
			SPLP MetalGroup3	6020B		04/29/25	04/29/25	
Q1883-07	**OU4-PCS-TC-30-042325**	**SOIL**			**04/23/25**			**04/25/25**
			Mercury	7471B		04/28/25	04/28/25	
			Metals ICP-TAL	6010D		04/28/25	04/30/25	

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LAB CHRONICLE

Q1883-08	**OU4-PCS-TC-30-042325**	**Water**			**04/23/25**			**04/25/25**
			SPLP Mercury	7470A		04/29/25	04/29/25	
			SPLP MetalGroup3	6020B		04/29/25	04/29/25	
Q1883-09	**OU4-PCS-TC-31-042325**	**SOIL**			**04/23/25**			**04/25/25**
			Mercury	7471B		04/28/25	04/28/25	
			Metals ICP-TAL	6010D		04/28/25	04/30/25	
Q1883-10	**OU4-PCS-TC-31-042325**	**Water**			**04/23/25**			**04/25/25**
			SPLP Mercury	7470A		04/29/25	04/29/25	
			SPLP MetalGroup3	6020B		04/29/25	04/29/25	
Q1883-11	**OU4-PCS-TC-32-042325**	**SOIL**			**04/23/25**			**04/25/25**
			Mercury	7471B		04/28/25	04/28/25	
			Metals ICP-TAL	6010D		04/28/25	04/30/25	
Q1883-12	**OU4-PCS-TC-32-042325**	**Water**			**04/23/25**			**04/25/25**
			SPLP Mercury	7470A		04/29/25	04/29/25	
			SPLP MetalGroup3	6020B		04/29/25	04/29/25	
Q1883-13	**OU4-VSL-18-042325**	**SOIL**			**04/23/25**			**04/25/25**
			Mercury	7471B		04/28/25	04/28/25	
			Metals ICP-TAL	6010D		04/28/25	04/30/25	
Q1883-14	**OU4-VSL-18-042325**	**Water**			**04/23/25**			**04/25/25**
			SPLP Mercury	7470A		04/29/25	04/29/25	
			SPLP MetalGroup3	6020B		04/29/25	04/29/25	
Q1883-15	**OU4-VSL-19-042325**	**SOIL**			**04/23/25**			**04/25/25**
			Mercury	7471B		04/28/25	04/28/25	
			Metals ICP-TAL	6010D		04/28/25	04/30/25	
Q1883-16	**OU4-VSL-19-042325**	**Water**			**04/23/25**			**04/25/25**
			SPLP Mercury	7470A		04/29/25	04/29/25	
			SPLP MetalGroup3	6020B		04/29/25	04/29/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1883 **Order ID:** Q1883

Client: Nobis Group **Project ID:** Raymark Superfund Site

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : OU4-PCS-TC-27-042325									
Q1883-02	OU4-PCS-TC-27-042325	Water	Arsenic	3.50	JD	2.23	6.25	25.0	ug/L
Q1883-02	OU4-PCS-TC-27-042325	Water	Barium	111	D	1.05	6.25	50.0	ug/L
Q1883-02	OU4-PCS-TC-27-042325	Water	Beryllium	1.70	JD	1.60	3.75	5.00	ug/L
Q1883-02	OU4-PCS-TC-27-042325	Water	Chromium	13.1	D	1.05	3.75	10.0	ug/L
Q1883-02	OU4-PCS-TC-27-042325	Water	Copper	136	D	1.50	7.50	10.0	ug/L
Q1883-02	OU4-PCS-TC-27-042325	Water	Lead	1.85	JD	1.05	3.75	5.00	ug/L
Q1883-02	OU4-PCS-TC-27-042325	Water	Nickel	68.8	D	1.35	3.75	5.00	ug/L
Q1883-02	OU4-PCS-TC-27-042325	Water	Mercury	0.28		0.076	0.16	0.20	ug/L
Q1883-02	OU4-PCS-TC-27-042325	Water	Vanadium	270	D	0.39	1.25	25.0	ug/L
Q1883-02	OU4-PCS-TC-27-042325	Water	Zinc	745	D	6.25	7.50	25.0	ug/L
Client ID : OU4-PCS-TC-28-042325									
Q1883-04	OU4-PCS-TC-28-042325	Water	Arsenic	3.75	JD	2.23	6.25	25.0	ug/L
Q1883-04	OU4-PCS-TC-28-042325	Water	Barium	102	D	1.05	6.25	50.0	ug/L
Q1883-04	OU4-PCS-TC-28-042325	Water	Chromium	4.65	JD	1.05	3.75	10.0	ug/L
Q1883-04	OU4-PCS-TC-28-042325	Water	Copper	29.7	D	1.50	7.50	10.0	ug/L
Q1883-04	OU4-PCS-TC-28-042325	Water	Lead	1.50	JD	1.05	3.75	5.00	ug/L
Q1883-04	OU4-PCS-TC-28-042325	Water	Nickel	40.7	D	1.35	3.75	5.00	ug/L
Q1883-04	OU4-PCS-TC-28-042325	Water	Vanadium	339	D	0.39	1.25	25.0	ug/L
Q1883-04	OU4-PCS-TC-28-042325	Water	Zinc	554	D	6.25	7.50	25.0	ug/L
Client ID : OU4-PCS-TC-29-042325									
Q1883-06	OU4-PCS-TC-29-042325	Water	Arsenic	4.00	JD	2.23	6.25	25.0	ug/L
Q1883-06	OU4-PCS-TC-29-042325	Water	Barium	109	D	1.05	6.25	50.0	ug/L
Q1883-06	OU4-PCS-TC-29-042325	Water	Chromium	9.25	JD	1.05	3.75	10.0	ug/L
Q1883-06	OU4-PCS-TC-29-042325	Water	Copper	78.5	D	1.50	7.50	10.0	ug/L
Q1883-06	OU4-PCS-TC-29-042325	Water	Lead	6.55	D	1.05	3.75	5.00	ug/L
Q1883-06	OU4-PCS-TC-29-042325	Water	Nickel	65.4	D	1.35	3.75	5.00	ug/L
Q1883-06	OU4-PCS-TC-29-042325	Water	Vanadium	244	D	0.39	1.25	25.0	ug/L
Q1883-06	OU4-PCS-TC-29-042325	Water	Zinc	625	D	6.25	7.50	25.0	ug/L
Client ID : OU4-PCS-TC-30-042325									
Q1883-08	OU4-PCS-TC-30-042325	Water	Arsenic	2.75	JD	0.45	1.25	5.00	ug/L
Q1883-08	OU4-PCS-TC-30-042325	Water	Barium	118	D	1.05	6.25	50.0	ug/L
Q1883-08	OU4-PCS-TC-30-042325	Water	Chromium	12.4	D	1.05	3.75	10.0	ug/L
Q1883-08	OU4-PCS-TC-30-042325	Water	Copper	93.1	D	1.50	7.50	10.0	ug/L
Q1883-08	OU4-PCS-TC-30-042325	Water	Lead	4.15	JD	1.05	3.75	5.00	ug/L
Q1883-08	OU4-PCS-TC-30-042325	Water	Nickel	59.1	D	1.35	3.75	5.00	ug/L

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Hit Summary Sheet
SW-846

SDG No.: Q1883 **Order ID:** Q1883

Client: Nobis Group **Project ID:** Raymark Superfund Site

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Q1883-08	OU4-PCS-TC-30-042325	Water	Vanadium	297	D	0.39	1.25	25.0	ug/L
Q1883-08	OU4-PCS-TC-30-042325	Water	Zinc	784	D	6.25	7.50	25.0	ug/L
Client ID :	**OU4-PCS-TC-31-042325**								
Q1883-10	OU4-PCS-TC-31-042325	Water	Arsenic	3.50	JD	2.23	6.25	25.0	ug/L
Q1883-10	OU4-PCS-TC-31-042325	Water	Barium	119	D	1.05	6.25	50.0	ug/L
Q1883-10	OU4-PCS-TC-31-042325	Water	Chromium	3.50	JD	1.05	3.75	10.0	ug/L
Q1883-10	OU4-PCS-TC-31-042325	Water	Copper	36.4	D	1.50	7.50	10.0	ug/L
Q1883-10	OU4-PCS-TC-31-042325	Water	Lead	3.50	JD	1.05	3.75	5.00	ug/L
Q1883-10	OU4-PCS-TC-31-042325	Water	Nickel	47.4	D	1.35	3.75	5.00	ug/L
Q1883-10	OU4-PCS-TC-31-042325	Water	Vanadium	264	D	0.39	1.25	25.0	ug/L
Q1883-10	OU4-PCS-TC-31-042325	Water	Zinc	633	D	6.25	7.50	25.0	ug/L
Client ID :	**OU4-PCS-TC-32-042325**								
Q1883-12	OU4-PCS-TC-32-042325	Water	Arsenic	4.00	JD	2.23	6.25	25.0	ug/L
Q1883-12	OU4-PCS-TC-32-042325	Water	Barium	112	D	1.05	6.25	50.0	ug/L
Q1883-12	OU4-PCS-TC-32-042325	Water	Chromium	3.80	JD	1.05	3.75	10.0	ug/L
Q1883-12	OU4-PCS-TC-32-042325	Water	Copper	27.5	D	1.50	7.50	10.0	ug/L
Q1883-12	OU4-PCS-TC-32-042325	Water	Lead	26.9	D	1.05	3.75	5.00	ug/L
Q1883-12	OU4-PCS-TC-32-042325	Water	Nickel	42.9	D	1.35	3.75	5.00	ug/L
Q1883-12	OU4-PCS-TC-32-042325	Water	Mercury	0.086	J	0.076	0.16	0.20	ug/L
Q1883-12	OU4-PCS-TC-32-042325	Water	Vanadium	284	D	0.39	1.25	25.0	ug/L
Q1883-12	OU4-PCS-TC-32-042325	Water	Zinc	690	D	6.25	7.50	25.0	ug/L
Client ID :	**OU4-VSL-18-042325**								
Q1883-14	OU4-VSL-18-042325	Water	Antimony	15.2	D	0.55	1.25	10.0	ug/L
Q1883-14	OU4-VSL-18-042325	Water	Arsenic	4.50	JD	2.23	6.25	25.0	ug/L
Q1883-14	OU4-VSL-18-042325	Water	Barium	132	D	1.05	6.25	50.0	ug/L
Q1883-14	OU4-VSL-18-042325	Water	Chromium	26.7	D	1.05	3.75	10.0	ug/L
Q1883-14	OU4-VSL-18-042325	Water	Copper	169	D	1.50	7.50	10.0	ug/L
Q1883-14	OU4-VSL-18-042325	Water	Lead	8.70	D	1.05	3.75	5.00	ug/L
Q1883-14	OU4-VSL-18-042325	Water	Nickel	113	D	1.35	3.75	5.00	ug/L
Q1883-14	OU4-VSL-18-042325	Water	Vanadium	326	D	0.39	1.25	25.0	ug/L
Q1883-14	OU4-VSL-18-042325	Water	Zinc	1160	D	6.25	7.50	25.0	ug/L
Client ID :	**OU4-VSL-19-042325**								
Q1883-16	OU4-VSL-19-042325	Water	Arsenic	7.50	JD	2.23	6.25	25.0	ug/L
Q1883-16	OU4-VSL-19-042325	Water	Barium	119	D	1.05	6.25	50.0	ug/L
Q1883-16	OU4-VSL-19-042325	Water	Chromium	16.4	D	1.05	3.75	10.0	ug/L
Q1883-16	OU4-VSL-19-042325	Water	Copper	110	D	1.50	7.50	10.0	ug/L
Q1883-16	OU4-VSL-19-042325	Water	Lead	6.85	D	1.05	3.75	5.00	ug/L
Q1883-16	OU4-VSL-19-042325	Water	Nickel	63.2	D	1.35	3.75	5.00	ug/L

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

Hit Summary Sheet
SW-846

SDG No.:	Q1883	**Order ID:**	Q1883
Client:	Nobis Group	**Project ID:**	Raymark Superfund Site

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Q1883-16	OU4-VSL-19-042325	Water	Vanadium	323	D	0.39	1.25	25.0	ug/L
Q1883-16	OU4-VSL-19-042325	Water	Zinc	986	D	6.25	7.50	25.0	ug/L

SAMPLE DATA

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

Report of Analysis

Client:	Nobis Group	Date Collected:	04/23/25
Project:	Raymark Superfund Site	Date Received:	04/25/25
Client Sample ID:	OU4-PCS-TC-27-042325	SDG No.:	Q1883
Lab Sample ID:	Q1883-02	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-36-0	Antimony	1.25	UD	5	0.55	1.25	10.0	ug/L	04/29/25 12:05	04/29/25 15:18	SW6020	3010A
7440-38-2	Arsenic	3.50	JDN	25	2.23	6.25	25.0	ug/L	04/29/25 12:05	04/29/25 16:36	SW6020	3010A
7440-39-3	Barium	111	D	5	1.05	6.25	50.0	ug/L	04/29/25 12:05	04/29/25 15:18	SW6020	3010A
7440-41-7	Beryllium	1.70	JD	5	1.60	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:18	SW6020	3010A
7440-43-9	Cadmium	2.50	UD	5	1.70	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:18	SW6020	3010A
7440-47-3	Chromium	13.1	D	5	1.05	3.75	10.0	ug/L	04/29/25 12:05	04/29/25 15:18	SW6020	3010A
7440-50-8	Copper	136	D	5	1.50	7.50	10.0	ug/L	04/29/25 12:05	04/29/25 15:18	SW6020	3010A
7439-92-1	Lead	1.85	JD	5	1.05	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:18	SW6020	3010A
7439-97-6	Mercury	0.28	N	1	0.076	0.16	0.20	ug/L	04/29/25 10:35	04/29/25 14:14	SW7470A	
7440-02-0	Nickel	68.8	D	5	1.35	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:18	SW6020	3010A
7782-49-2	Selenium	113	UD	25	72.5	113	125	ug/L	04/29/25 12:05	04/29/25 16:36	SW6020	3010A
7440-22-4	Silver	2.50	UDN	5	0.30	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:18	SW6020	3010A
7440-28-0	Thallium	2.50	UD	5	0.30	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:18	SW6020	3010A
7440-62-2	Vanadium	270	D	5	0.39	1.25	25.0	ug/L	04/29/25 12:05	04/29/25 15:18	SW6020	3010A
7440-66-6	Zinc	745	D	5	6.25	7.50	25.0	ug/L	04/29/25 12:05	04/29/25 15:18	SW6020	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	SPLP Mercury				

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

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

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

Report of Analysis

Client:	Nobis Group	Date Collected:	04/23/25
Project:	Raymark Superfund Site	Date Received:	04/25/25
Client Sample ID:	OU4-PCS-TC-28-042325	SDG No.:	Q1883
Lab Sample ID:	Q1883-04	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-36-0	Antimony	1.25	UD	5	0.55	1.25	10.0	ug/L	04/29/25 12:05	04/29/25 15:21	SW6020	3010A
7440-38-2	Arsenic	3.75	JDN	25	2.23	6.25	25.0	ug/L	04/29/25 12:05	04/29/25 16:40	SW6020	3010A
7440-39-3	Barium	102	D	5	1.05	6.25	50.0	ug/L	04/29/25 12:05	04/29/25 15:21	SW6020	3010A
7440-41-7	Beryllium	3.75	UD	5	1.60	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:21	SW6020	3010A
7440-43-9	Cadmium	2.50	UD	5	1.70	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:21	SW6020	3010A
7440-47-3	Chromium	4.65	JD	5	1.05	3.75	10.0	ug/L	04/29/25 12:05	04/29/25 15:21	SW6020	3010A
7440-50-8	Copper	29.7	D	5	1.50	7.50	10.0	ug/L	04/29/25 12:05	04/29/25 15:21	SW6020	3010A
7439-92-1	Lead	1.50	JD	5	1.05	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:21	SW6020	3010A
7439-97-6	Mercury	0.16	UN	1	0.076	0.16	0.20	ug/L	04/29/25 10:35	04/29/25 14:17	SW7470A	
7440-02-0	Nickel	40.7	D	5	1.35	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:21	SW6020	3010A
7782-49-2	Selenium	113	UD	25	72.5	113	125	ug/L	04/29/25 12:05	04/29/25 16:40	SW6020	3010A
7440-22-4	Silver	2.50	UDN	5	0.30	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:21	SW6020	3010A
7440-28-0	Thallium	2.50	UD	5	0.30	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:21	SW6020	3010A
7440-62-2	Vanadium	339	D	5	0.39	1.25	25.0	ug/L	04/29/25 12:05	04/29/25 15:21	SW6020	3010A
7440-66-6	Zinc	554	D	5	6.25	7.50	25.0	ug/L	04/29/25 12:05	04/29/25 15:21	SW6020	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	SPLP Mercury				

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Alliance TECHNICAL GROUP
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Fax : 908 789 8922

Report of Analysis

Client:	Nobis Group	Date Collected:	04/23/25
Project:	Raymark Superfund Site	Date Received:	04/25/25
Client Sample ID:	OU4-PCS-TC-29-042325	SDG No.:	Q1883
Lab Sample ID:	Q1883-06	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-36-0	Antimony	1.25	UD	5	0.55	1.25	10.0	ug/L	04/29/25 12:05	04/29/25 15:25	SW6020	3010A
7440-38-2	Arsenic	4.00	JDN	25	2.23	6.25	25.0	ug/L	04/29/25 12:05	04/29/25 16:43	SW6020	3010A
7440-39-3	Barium	109	D	5	1.05	6.25	50.0	ug/L	04/29/25 12:05	04/29/25 15:25	SW6020	3010A
7440-41-7	Beryllium	3.75	UD	5	1.60	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:25	SW6020	3010A
7440-43-9	Cadmium	2.50	UD	5	1.70	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:25	SW6020	3010A
7440-47-3	Chromium	9.25	JD	5	1.05	3.75	10.0	ug/L	04/29/25 12:05	04/29/25 15:25	SW6020	3010A
7440-50-8	Copper	78.5	D	5	1.50	7.50	10.0	ug/L	04/29/25 12:05	04/29/25 15:25	SW6020	3010A
7439-92-1	Lead	6.55	D	5	1.05	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:25	SW6020	3010A
7439-97-6	Mercury	0.16	UN	1	0.076	0.16	0.20	ug/L	04/29/25 10:35	04/29/25 14:19	SW7470A	
7440-02-0	Nickel	65.4	D	5	1.35	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:25	SW6020	3010A
7782-49-2	Selenium	113	UD	25	72.5	113	125	ug/L	04/29/25 12:05	04/29/25 16:43	SW6020	3010A
7440-22-4	Silver	2.50	UDN	5	0.30	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:25	SW6020	3010A
7440-28-0	Thallium	2.50	UD	5	0.30	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:25	SW6020	3010A
7440-62-2	Vanadium	244	D	5	0.39	1.25	25.0	ug/L	04/29/25 12:05	04/29/25 15:25	SW6020	3010A
7440-66-6	Zinc	625	D	5	6.25	7.50	25.0	ug/L	04/29/25 12:05	04/29/25 15:25	SW6020	3010A

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Color After:	Colorless	Clarity After:	Clear	Artifacts:	
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Alliance TECHNICAL GROUP
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Fax : 908 789 8922

Report of Analysis

Client:	Nobis Group	Date Collected:	04/23/25
Project:	Raymark Superfund Site	Date Received:	04/25/25
Client Sample ID:	OU4-PCS-TC-30-042325	SDG No.:	Q1883
Lab Sample ID:	Q1883-08	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-36-0	Antimony	1.25	UD	5	0.55	1.25	10.0	ug/L	04/29/25 12:05	04/29/25 15:28	SW6020	3010A
7440-38-2	Arsenic	2.75	JDN	5	0.45	1.25	5.00	ug/L	04/29/25 12:05	04/29/25 15:28	SW6020	3010A
7440-39-3	Barium	118	D	5	1.05	6.25	50.0	ug/L	04/29/25 12:05	04/29/25 15:28	SW6020	3010A
7440-41-7	Beryllium	3.75	UD	5	1.60	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:28	SW6020	3010A
7440-43-9	Cadmium	2.50	UD	5	1.70	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:28	SW6020	3010A
7440-47-3	Chromium	12.4	D	5	1.05	3.75	10.0	ug/L	04/29/25 12:05	04/29/25 15:28	SW6020	3010A
7440-50-8	Copper	93.1	D	5	1.50	7.50	10.0	ug/L	04/29/25 12:05	04/29/25 15:28	SW6020	3010A
7439-92-1	Lead	4.15	JD	5	1.05	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:28	SW6020	3010A
7439-97-6	Mercury	0.16	UN	1	0.076	0.16	0.20	ug/L	04/29/25 10:35	04/29/25 14:21	SW7470A	
7440-02-0	Nickel	59.1	D	5	1.35	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:28	SW6020	3010A
7782-49-2	Selenium	113	UD	25	72.5	113	125	ug/L	04/29/25 12:05	04/29/25 16:46	SW6020	3010A
7440-22-4	Silver	2.50	UDN	5	0.30	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:28	SW6020	3010A
7440-28-0	Thallium	2.50	UD	5	0.30	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:28	SW6020	3010A
7440-62-2	Vanadium	297	D	5	0.39	1.25	25.0	ug/L	04/29/25 12:05	04/29/25 15:28	SW6020	3010A
7440-66-6	Zinc	784	D	5	6.25	7.50	25.0	ug/L	04/29/25 12:05	04/29/25 15:28	SW6020	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
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Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	Nobis Group	Date Collected:	04/23/25
Project:	Raymark Superfund Site	Date Received:	04/25/25
Client Sample ID:	OU4-PCS-TC-31-042325	SDG No.:	Q1883
Lab Sample ID:	Q1883-10	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-36-0	Antimony	1.25	UD	5	0.55	1.25	10.0	ug/L	04/29/25 12:05	04/29/25 15:31	SW6020	3010A
7440-38-2	Arsenic	3.50	JDN	25	2.23	6.25	25.0	ug/L	04/29/25 12:05	04/29/25 16:50	SW6020	3010A
7440-39-3	Barium	119	D	5	1.05	6.25	50.0	ug/L	04/29/25 12:05	04/29/25 15:31	SW6020	3010A
7440-41-7	Beryllium	3.75	UD	5	1.60	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:31	SW6020	3010A
7440-43-9	Cadmium	2.50	UD	5	1.70	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:31	SW6020	3010A
7440-47-3	Chromium	3.50	JD	5	1.05	3.75	10.0	ug/L	04/29/25 12:05	04/29/25 15:31	SW6020	3010A
7440-50-8	Copper	36.4	D	5	1.50	7.50	10.0	ug/L	04/29/25 12:05	04/29/25 15:31	SW6020	3010A
7439-92-1	Lead	3.50	JD	5	1.05	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:31	SW6020	3010A
7439-97-6	Mercury	0.16	UN	1	0.076	0.16	0.20	ug/L	04/29/25 10:35	04/29/25 14:24	SW7470A	
7440-02-0	Nickel	47.4	D	5	1.35	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:31	SW6020	3010A
7782-49-2	Selenium	113	UD	25	72.5	113	125	ug/L	04/29/25 12:05	04/29/25 16:50	SW6020	3010A
7440-22-4	Silver	2.50	UDN	5	0.30	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:31	SW6020	3010A
7440-28-0	Thallium	2.50	UD	5	0.30	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:31	SW6020	3010A
7440-62-2	Vanadium	264	D	5	0.39	1.25	25.0	ug/L	04/29/25 12:05	04/29/25 15:31	SW6020	3010A
7440-66-6	Zinc	633	D	5	6.25	7.50	25.0	ug/L	04/29/25 12:05	04/29/25 15:31	SW6020	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	SPLP Mercury				

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

Report of Analysis

Client:	Nobis Group	Date Collected:	04/23/25
Project:	Raymark Superfund Site	Date Received:	04/25/25
Client Sample ID:	OU4-PCS-TC-32-042325	SDG No.:	Q1883
Lab Sample ID:	Q1883-12	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-36-0	Antimony	1.25	UD	5	0.55	1.25	10.0	ug/L	04/29/25 12:05	04/29/25 15:34	SW6020	3010A
7440-38-2	Arsenic	4.00	JDN	25	2.23	6.25	25.0	ug/L	04/29/25 12:05	04/29/25 16:53	SW6020	3010A
7440-39-3	Barium	112	D	5	1.05	6.25	50.0	ug/L	04/29/25 12:05	04/29/25 15:34	SW6020	3010A
7440-41-7	Beryllium	3.75	UD	5	1.60	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:34	SW6020	3010A
7440-43-9	Cadmium	2.50	UD	5	1.70	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:34	SW6020	3010A
7440-47-3	Chromium	3.80	JD	5	1.05	3.75	10.0	ug/L	04/29/25 12:05	04/29/25 15:34	SW6020	3010A
7440-50-8	Copper	27.5	D	5	1.50	7.50	10.0	ug/L	04/29/25 12:05	04/29/25 15:34	SW6020	3010A
7439-92-1	Lead	26.9	D	5	1.05	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:34	SW6020	3010A
7439-97-6	Mercury	0.086	JN	1	0.076	0.16	0.20	ug/L	04/29/25 10:35	04/29/25 14:30	SW7470A	
7440-02-0	Nickel	42.9	D	5	1.35	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:34	SW6020	3010A
7782-49-2	Selenium	113	UD	25	72.5	113	125	ug/L	04/29/25 12:05	04/29/25 16:53	SW6020	3010A
7440-22-4	Silver	2.50	UDN	5	0.30	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:34	SW6020	3010A
7440-28-0	Thallium	2.50	UD	5	0.30	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:34	SW6020	3010A
7440-62-2	Vanadium	284	D	5	0.39	1.25	25.0	ug/L	04/29/25 12:05	04/29/25 15:34	SW6020	3010A
7440-66-6	Zinc	690	D	5	6.25	7.50	25.0	ug/L	04/29/25 12:05	04/29/25 15:34	SW6020	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	SPLP Mercury				

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

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

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Nobis Group	Date Collected:	04/23/25
Project:	Raymark Superfund Site	Date Received:	04/25/25
Client Sample ID:	OU4-VSL-18-042325	SDG No.:	Q1883
Lab Sample ID:	Q1883-14	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-36-0	Antimony	15.2	D	5	0.55	1.25	10.0	ug/L	04/29/25 12:05	04/29/25 15:55	SW6020	3010A
7440-38-2	Arsenic	4.50	JDN	25	2.23	6.25	25.0	ug/L	04/29/25 12:05	04/29/25 16:56	SW6020	3010A
7440-39-3	Barium	132	D	5	1.05	6.25	50.0	ug/L	04/29/25 12:05	04/29/25 15:55	SW6020	3010A
7440-41-7	Beryllium	3.75	UD	5	1.60	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:55	SW6020	3010A
7440-43-9	Cadmium	2.50	UD	5	1.70	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:55	SW6020	3010A
7440-47-3	Chromium	26.7	D	5	1.05	3.75	10.0	ug/L	04/29/25 12:05	04/29/25 15:55	SW6020	3010A
7440-50-8	Copper	169	D	5	1.50	7.50	10.0	ug/L	04/29/25 12:05	04/29/25 15:55	SW6020	3010A
7439-92-1	Lead	8.70	D	5	1.05	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:55	SW6020	3010A
7439-97-6	Mercury	0.16	UN	1	0.076	0.16	0.20	ug/L	04/29/25 10:35	04/29/25 14:33	SW7470A	
7440-02-0	Nickel	113	D	5	1.35	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:55	SW6020	3010A
7782-49-2	Selenium	113	UD	25	72.5	113	125	ug/L	04/29/25 12:05	04/29/25 16:56	SW6020	3010A
7440-22-4	Silver	2.50	UDN	5	0.30	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:55	SW6020	3010A
7440-28-0	Thallium	2.50	UD	5	0.30	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:55	SW6020	3010A
7440-62-2	Vanadium	326	D	5	0.39	1.25	25.0	ug/L	04/29/25 12:05	04/29/25 15:55	SW6020	3010A
7440-66-6	Zinc	1160	D	5	6.25	7.50	25.0	ug/L	04/29/25 12:05	04/29/25 15:55	SW6020	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	SPLP Mercury				

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

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Report of Analysis

Client:	Nobis Group	Date Collected:	04/23/25
Project:	Raymark Superfund Site	Date Received:	04/25/25
Client Sample ID:	OU4-VSL-19-042325	SDG No.:	Q1883
Lab Sample ID:	Q1883-16	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-36-0	Antimony	1.25	UD	5	0.55	1.25	10.0	ug/L	04/29/25 12:05	04/29/25 15:58	SW6020	3010A
7440-38-2	Arsenic	7.50	JDN	25	2.23	6.25	25.0	ug/L	04/29/25 12:05	04/29/25 17:09	SW6020	3010A
7440-39-3	Barium	119	D	5	1.05	6.25	50.0	ug/L	04/29/25 12:05	04/29/25 15:58	SW6020	3010A
7440-41-7	Beryllium	3.75	UD	5	1.60	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:58	SW6020	3010A
7440-43-9	Cadmium	2.50	UD	5	1.70	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:58	SW6020	3010A
7440-47-3	Chromium	16.4	D	5	1.05	3.75	10.0	ug/L	04/29/25 12:05	04/29/25 15:58	SW6020	3010A
7440-50-8	Copper	110	D	5	1.50	7.50	10.0	ug/L	04/29/25 12:05	04/29/25 15:58	SW6020	3010A
7439-92-1	Lead	6.85	D	5	1.05	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:58	SW6020	3010A
7439-97-6	Mercury	0.16	UN	1	0.076	0.16	0.20	ug/L	04/29/25 10:35	04/29/25 14:35	SW7470A	
7440-02-0	Nickel	63.2	D	5	1.35	3.75	5.00	ug/L	04/29/25 12:05	04/29/25 15:58	SW6020	3010A
7782-49-2	Selenium	113	UD	25	72.5	113	125	ug/L	04/29/25 12:05	04/29/25 17:09	SW6020	3010A
7440-22-4	Silver	2.50	UDN	5	0.30	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:58	SW6020	3010A
7440-28-0	Thallium	2.50	UD	5	0.30	2.50	5.00	ug/L	04/29/25 12:05	04/29/25 15:58	SW6020	3010A
7440-62-2	Vanadium	323	D	5	0.39	1.25	25.0	ug/L	04/29/25 12:05	04/29/25 15:58	SW6020	3010A
7440-66-6	Zinc	986	D	5	6.25	7.50	25.0	ug/L	04/29/25 12:05	04/29/25 15:58	SW6020	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	SPLP Mercury				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
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N =Spiked sample recovery not within control limits

METAL CALIBRATION DATA

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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
ICV106	Mercury	3.82	4.0	96	90 - 110	CV	04/29/2025	13:51	LB135594

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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
CCV43	Mercury	5.07	5.0	101	90 - 110	CV	04/29/2025	13:56	LB135594
CCV44	Mercury	4.91	5.0	98	90 - 110	CV	04/29/2025	14:26	LB135594
CCV45	Mercury	4.90	5.0	98	90 - 110	CV	04/29/2025	14:53	LB135594

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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	Antimony	203	200	101	90 - 110	P	04/29/2025	12:14	LB135595
	Arsenic	200	200	100	90 - 110	P	04/29/2025	12:14	LB135595
	Barium	102	100	102	90 - 110	P	04/29/2025	12:14	LB135595
	Beryllium	106	100	106	90 - 110	P	04/29/2025	12:14	LB135595
	Cadmium	103	100	104	90 - 110	P	04/29/2025	12:14	LB135595
	Chromium	101	100	101	90 - 110	P	04/29/2025	12:14	LB135595
	Copper	107	100	107	90 - 110	P	04/29/2025	12:14	LB135595
	Lead	194	200	97	90 - 110	P	04/29/2025	12:14	LB135595
	Nickel	105	110	96	90 - 110	P	04/29/2025	12:14	LB135595
	Selenium	211	200	105	90 - 110	P	04/29/2025	12:14	LB135595
	Silver	54.5	50.0	109	90 - 110	P	04/29/2025	12:14	LB135595
	Thallium	193	210	92	90 - 110	P	04/29/2025	12:14	LB135595
	Vanadium	100	100	100	90 - 110	P	04/29/2025	12:14	LB135595
	Zinc	201	200	100	90 - 110	P	04/29/2025	12:14	LB135595

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV	Antimony	2.00	2.0	100	80 - 120	P	04/29/2025	12:18	LB135595
	Arsenic	0.98	1.0	98	80 - 120	P	04/29/2025	12:18	LB135595
	Barium	9.98	10.0	100	80 - 120	P	04/29/2025	12:18	LB135595
	Beryllium	1.12	1.0	112	80 - 120	P	04/29/2025	12:18	LB135595
	Cadmium	1.06	1.0	106	80 - 120	P	04/29/2025	12:18	LB135595
	Chromium	2.02	2.0	101	80 - 120	P	04/29/2025	12:18	LB135595
	Copper	2.13	2.0	106	80 - 120	P	04/29/2025	12:18	LB135595
	Lead	0.96	1.0	96	80 - 120	P	04/29/2025	12:18	LB135595
	Nickel	1.07	1.0	107	80 - 120	P	04/29/2025	12:18	LB135595
	Selenium	5.22	5.0	104	80 - 120	P	04/29/2025	12:18	LB135595
	Silver	1.02	1.0	102	80 - 120	P	04/29/2025	12:18	LB135595
	Thallium	0.94	1.0	94	80 - 120	P	04/29/2025	12:18	LB135595
	Vanadium	5.14	5.0	103	80 - 120	P	04/29/2025	12:18	LB135595
	Zinc	5.15	5.0	103	80 - 120	P	04/29/2025	12:18	LB135595

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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	Antimony	519	500	104	90 - 110	P	04/29/2025	12:40	LB135595
	Arsenic	498	500	100	90 - 110	P	04/29/2025	12:40	LB135595
	Barium	2640	2500	105	90 - 110	P	04/29/2025	12:40	LB135595
	Beryllium	521	500	104	90 - 110	P	04/29/2025	12:40	LB135595
	Cadmium	515	500	103	90 - 110	P	04/29/2025	12:40	LB135595
	Chromium	510	500	102	90 - 110	P	04/29/2025	12:40	LB135595
	Copper	4670	5000	94	90 - 110	P	04/29/2025	12:40	LB135595
	Lead	2510	2500	100	90 - 110	P	04/29/2025	12:40	LB135595
	Nickel	461	500	92	90 - 110	P	04/29/2025	12:40	LB135595
	Selenium	487	500	97	90 - 110	P	04/29/2025	12:40	LB135595
	Silver	508	500	102	90 - 110	P	04/29/2025	12:40	LB135595
	Thallium	511	500	102	90 - 110	P	04/29/2025	12:40	LB135595
	Vanadium	512	500	102	90 - 110	P	04/29/2025	12:40	LB135595
	Zinc	4730	5000	95	90 - 110	P	04/29/2025	12:40	LB135595
CCV02	Antimony	516	500	103	90 - 110	P	04/29/2025	13:03	LB135595
	Arsenic	498	500	100	90 - 110	P	04/29/2025	13:03	LB135595
	Barium	2630	2500	105	90 - 110	P	04/29/2025	13:03	LB135595
	Beryllium	523	500	105	90 - 110	P	04/29/2025	13:03	LB135595
	Cadmium	514	500	103	90 - 110	P	04/29/2025	13:03	LB135595
	Chromium	511	500	102	90 - 110	P	04/29/2025	13:03	LB135595
	Copper	4690	5000	94	90 - 110	P	04/29/2025	13:03	LB135595
	Lead	2490	2500	100	90 - 110	P	04/29/2025	13:03	LB135595
	Nickel	455	500	91	90 - 110	P	04/29/2025	13:03	LB135595
	Selenium	483	500	97	90 - 110	P	04/29/2025	13:03	LB135595
	Silver	505	500	101	90 - 110	P	04/29/2025	13:03	LB135595
	Thallium	505	500	101	90 - 110	P	04/29/2025	13:03	LB135595
	Vanadium	510	500	102	90 - 110	P	04/29/2025	13:03	LB135595
	Zinc	4760	5000	95	90 - 110	P	04/29/2025	13:03	LB135595
CCV03	Antimony	509	500	102	90 - 110	P	04/29/2025	14:47	LB135595
	Arsenic	501	500	100	90 - 110	P	04/29/2025	14:47	LB135595
	Barium	2560	2500	102	90 - 110	P	04/29/2025	14:47	LB135595
	Beryllium	536	500	107	90 - 110	P	04/29/2025	14:47	LB135595
	Cadmium	502	500	100	90 - 110	P	04/29/2025	14:47	LB135595
	Chromium	513	500	103	90 - 110	P	04/29/2025	14:47	LB135595

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV03	Copper	4740	5000	95	90 - 110	P	04/29/2025	14:47	LB135595
	Lead	2500	2500	100	90 - 110	P	04/29/2025	14:47	LB135595
	Nickel	458	500	92	90 - 110	P	04/29/2025	14:47	LB135595
	Selenium	482	500	96	90 - 110	P	04/29/2025	14:47	LB135595
	Silver	496	500	99	90 - 110	P	04/29/2025	14:47	LB135595
	Thallium	501	500	100	90 - 110	P	04/29/2025	14:47	LB135595
	Vanadium	512	500	102	90 - 110	P	04/29/2025	14:47	LB135595
	Zinc	4790	5000	96	90 - 110	P	04/29/2025	14:47	LB135595
CCV04	Antimony	510	500	102	90 - 110	P	04/29/2025	15:41	LB135595
	Arsenic	498	500	100	90 - 110	P	04/29/2025	15:41	LB135595
	Barium	2590	2500	104	90 - 110	P	04/29/2025	15:41	LB135595
	Beryllium	538	500	108	90 - 110	P	04/29/2025	15:41	LB135595
	Cadmium	510	500	102	90 - 110	P	04/29/2025	15:41	LB135595
	Chromium	513	500	103	90 - 110	P	04/29/2025	15:41	LB135595
	Copper	4730	5000	95	90 - 110	P	04/29/2025	15:41	LB135595
	Lead	2510	2500	100	90 - 110	P	04/29/2025	15:41	LB135595
	Nickel	454	500	91	90 - 110	P	04/29/2025	15:41	LB135595
	Selenium	480	500	96	90 - 110	P	04/29/2025	15:41	LB135595
	Silver	499	500	100	90 - 110	P	04/29/2025	15:41	LB135595
	Thallium	505	500	101	90 - 110	P	04/29/2025	15:41	LB135595
	Vanadium	510	500	102	90 - 110	P	04/29/2025	15:41	LB135595
	Zinc	4800	5000	96	90 - 110	P	04/29/2025	15:41	LB135595
CCV05	Antimony	508	500	102	90 - 110	P	04/29/2025	16:20	LB135595
	Arsenic	503	500	101	90 - 110	P	04/29/2025	16:20	LB135595
	Barium	2560	2500	102	90 - 110	P	04/29/2025	16:20	LB135595
	Beryllium	522	500	104	90 - 110	P	04/29/2025	16:20	LB135595
	Cadmium	504	500	101	90 - 110	P	04/29/2025	16:20	LB135595
	Chromium	513	500	103	90 - 110	P	04/29/2025	16:20	LB135595
	Copper	4740	5000	95	90 - 110	P	04/29/2025	16:20	LB135595
	Lead	2460	2500	99	90 - 110	P	04/29/2025	16:20	LB135595
	Nickel	456	500	91	90 - 110	P	04/29/2025	16:20	LB135595
	Selenium	470	500	94	90 - 110	P	04/29/2025	16:20	LB135595
	Silver	495	500	99	90 - 110	P	04/29/2025	16:20	LB135595
	Thallium	501	500	100	90 - 110	P	04/29/2025	16:20	LB135595

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV05	Vanadium	518	500	104	90 - 110	P	04/29/2025	16:20	LB135595
	Zinc	4810	5000	96	90 - 110	P	04/29/2025	16:20	LB135595
CCV06	Antimony	515	500	103	90 - 110	P	04/29/2025	17:03	LB135595
	Arsenic	505	500	101	90 - 110	P	04/29/2025	17:03	LB135595
	Barium	2580	2500	103	90 - 110	P	04/29/2025	17:03	LB135595
	Beryllium	545	500	109	90 - 110	P	04/29/2025	17:03	LB135595
	Cadmium	515	500	103	90 - 110	P	04/29/2025	17:03	LB135595
	Chromium	519	500	104	90 - 110	P	04/29/2025	17:03	LB135595
	Copper	4690	5000	94	90 - 110	P	04/29/2025	17:03	LB135595
	Lead	2450	2500	98	90 - 110	P	04/29/2025	17:03	LB135595
	Nickel	450	500	90	90 - 110	P	04/29/2025	17:03	LB135595
	Selenium	474	500	95	90 - 110	P	04/29/2025	17:03	LB135595
	Silver	506	500	101	90 - 110	P	04/29/2025	17:03	LB135595
	Thallium	500	500	100	90 - 110	P	04/29/2025	17:03	LB135595
	Vanadium	523	500	105	90 - 110	P	04/29/2025	17:03	LB135595
	Zinc	4750	5000	95	90 - 110	P	04/29/2025	17:03	LB135595
CCV07	Antimony	520	500	104	90 - 110	P	04/29/2025	17:41	LB135595
	Arsenic	511	500	102	90 - 110	P	04/29/2025	17:41	LB135595
	Barium	2620	2500	105	90 - 110	P	04/29/2025	17:41	LB135595
	Beryllium	553	500	110	90 - 110	P	04/29/2025	17:41	LB135595
	Cadmium	522	500	104	90 - 110	P	04/29/2025	17:41	LB135595
	Chromium	515	500	103	90 - 110	P	04/29/2025	17:41	LB135595
	Copper	4710	5000	94	90 - 110	P	04/29/2025	17:41	LB135595
	Lead	2470	2500	99	90 - 110	P	04/29/2025	17:41	LB135595
	Nickel	454	500	91	90 - 110	P	04/29/2025	17:41	LB135595
	Selenium	484	500	97	90 - 110	P	04/29/2025	17:41	LB135595
	Silver	511	500	102	90 - 110	P	04/29/2025	17:41	LB135595
	Thallium	498	500	100	90 - 110	P	04/29/2025	17:41	LB135595
	Vanadium	520	500	104	90 - 110	P	04/29/2025	17:41	LB135595
	Zinc	4780	5000	96	90 - 110	P	04/29/2025	17:41	LB135595

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Metals

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CRDL STANDARD FOR AA & ICP

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRI	Antimony	1.98	2.0	99	70 - 130	P	04/29/2025	12:47	LB135595
	Arsenic	1.00	1.0	100	70 - 130	P	04/29/2025	12:47	LB135595
	Barium	9.97	10.0	100	70 - 130	P	04/29/2025	12:47	LB135595
	Beryllium	1.09	1.0	109	70 - 130	P	04/29/2025	12:47	LB135595
	Cadmium	1.03	1.0	103	70 - 130	P	04/29/2025	12:47	LB135595
	Chromium	2.02	2.0	101	70 - 130	P	04/29/2025	12:47	LB135595
	Copper	2.12	2.0	106	70 - 130	P	04/29/2025	12:47	LB135595
	Lead	0.97	1.0	97	70 - 130	P	04/29/2025	12:47	LB135595
	Nickel	1.01	1.0	101	70 - 130	P	04/29/2025	12:47	LB135595
	Selenium	5.00	5.0	100	70 - 130	P	04/29/2025	12:47	LB135595
	Silver	0.99	1.0	99	70 - 130	P	04/29/2025	12:47	LB135595
	Thallium	0.95	1.0	95	70 - 130	P	04/29/2025	12:47	LB135595
	Vanadium	5.06	5.0	101	70 - 130	P	04/29/2025	12:47	LB135595
	Zinc	5.08	5.0	102	50 - 150	P	04/29/2025	12:47	LB135595
CRA	Mercury	0.22	0.2	112	40 - 160	CV	04/29/2025	14:00	LB135594

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB106	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	04/29/2025	13:54	LB135594

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB43	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	04/29/2025	13:58	LB135594
CCB44	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	04/29/2025	14:28	LB135594
CCB45	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	04/29/2025	14:55	LB135594

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Antimony	2.00	+/-2.00	U	0.25	2.00	P	04/29/2025	12:29	LB135595
	Arsenic	1.00	+/-1.00	U	0.25	1.00	P	04/29/2025	12:29	LB135595
	Barium	10.0	+/-10.0	U	1.25	10.0	P	04/29/2025	12:29	LB135595
	Beryllium	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	12:29	LB135595
	Cadmium	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	12:29	LB135595
	Chromium	2.00	+/-2.00	U	0.75	2.00	P	04/29/2025	12:29	LB135595
	Copper	2.00	+/-2.00	U	1.50	2.00	P	04/29/2025	12:29	LB135595
	Lead	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	12:29	LB135595
	Nickel	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	12:29	LB135595
	Selenium	5.00	+/-5.00	U	4.50	5.00	P	04/29/2025	12:29	LB135595
	Silver	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	12:29	LB135595
	Thallium	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	12:29	LB135595
	Vanadium	5.00	+/-5.00	U	0.25	5.00	P	04/29/2025	12:29	LB135595
	Zinc	5.00	+/-5.00	U	1.50	5.00	P	04/29/2025	12:29	LB135595

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Antimony	2.00	+/-2.00	U	0.25	2.00	P	04/29/2025	12:44	LB135595
	Arsenic	1.00	+/-1.00	U	0.25	1.00	P	04/29/2025	12:44	LB135595
	Barium	10.0	+/-10.0	U	1.25	10.0	P	04/29/2025	12:44	LB135595
	Beryllium	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	12:44	LB135595
	Cadmium	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	12:44	LB135595
	Chromium	2.00	+/-2.00	U	0.75	2.00	P	04/29/2025	12:44	LB135595
	Copper	2.00	+/-2.00	U	1.50	2.00	P	04/29/2025	12:44	LB135595
	Lead	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	12:44	LB135595
	Nickel	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	12:44	LB135595
	Selenium	5.00	+/-5.00	U	4.50	5.00	P	04/29/2025	12:44	LB135595
	Silver	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	12:44	LB135595
	Thallium	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	12:44	LB135595
	Vanadium	5.00	+/-5.00	U	0.25	5.00	P	04/29/2025	12:44	LB135595
	Zinc	5.00	+/-5.00	U	1.50	5.00	P	04/29/2025	12:44	LB135595
CCB02	Antimony	2.00	+/-2.00	U	0.25	2.00	P	04/29/2025	13:07	LB135595
	Arsenic	1.00	+/-1.00	U	0.25	1.00	P	04/29/2025	13:07	LB135595
	Barium	10.0	+/-10.0	U	1.25	10.0	P	04/29/2025	13:07	LB135595
	Beryllium	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	13:07	LB135595
	Cadmium	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	13:07	LB135595
	Chromium	2.00	+/-2.00	U	0.75	2.00	P	04/29/2025	13:07	LB135595
	Copper	2.00	+/-2.00	U	1.50	2.00	P	04/29/2025	13:07	LB135595
	Lead	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	13:07	LB135595
	Nickel	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	13:07	LB135595
	Selenium	5.00	+/-5.00	U	4.50	5.00	P	04/29/2025	13:07	LB135595
	Silver	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	13:07	LB135595
	Thallium	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	13:07	LB135595
	Vanadium	5.00	+/-5.00	U	0.25	5.00	P	04/29/2025	13:07	LB135595
	Zinc	5.00	+/-5.00	U	1.50	5.00	P	04/29/2025	13:07	LB135595
CCB03	Antimony	2.00	+/-2.00	U	0.25	2.00	P	04/29/2025	14:59	LB135595
	Arsenic	1.00	+/-1.00	U	0.25	1.00	P	04/29/2025	14:59	LB135595
	Barium	10.0	+/-10.0	U	1.25	10.0	P	04/29/2025	14:59	LB135595
	Beryllium	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	14:59	LB135595
	Cadmium	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	14:59	LB135595
	Chromium	2.00	+/-2.00	U	0.75	2.00	P	04/29/2025	14:59	LB135595
	Copper	2.00	+/-2.00	U	1.50	2.00	P	04/29/2025	14:59	LB135595
	Lead	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	14:59	LB135595
	Nickel	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	14:59	LB135595
	Selenium	5.00	+/-5.00	U	4.50	5.00	P	04/29/2025	14:59	LB135595
	Silver	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	14:59	LB135595

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB03	Thallium	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	14:59	LB135595
	Vanadium	5.00	+/-5.00	U	0.25	5.00	P	04/29/2025	14:59	LB135595
	Zinc	5.00	+/-5.00	U	1.50	5.00	P	04/29/2025	14:59	LB135595
CCB04	Antimony	2.00	+/-2.00	U	0.25	2.00	P	04/29/2025	15:48	LB135595
	Arsenic	1.00	+/-1.00	U	0.25	1.00	P	04/29/2025	15:48	LB135595
	Barium	10.0	+/-10.0	U	1.25	10.0	P	04/29/2025	15:48	LB135595
	Beryllium	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	15:48	LB135595
	Cadmium	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	15:48	LB135595
	Chromium	2.00	+/-2.00	U	0.75	2.00	P	04/29/2025	15:48	LB135595
	Copper	2.00	+/-2.00	U	1.50	2.00	P	04/29/2025	15:48	LB135595
	Lead	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	15:48	LB135595
	Nickel	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	15:48	LB135595
	Selenium	5.00	+/-5.00	U	4.50	5.00	P	04/29/2025	15:48	LB135595
	Silver	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	15:48	LB135595
	Thallium	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	15:48	LB135595
	Vanadium	5.00	+/-5.00	U	0.25	5.00	P	04/29/2025	15:48	LB135595
	Zinc	5.00	+/-5.00	U	1.50	5.00	P	04/29/2025	15:48	LB135595
CCB05	Antimony	2.00	+/-2.00	U	0.25	2.00	P	04/29/2025	16:28	LB135595
	Arsenic	1.00	+/-1.00	U	0.25	1.00	P	04/29/2025	16:28	LB135595
	Barium	10.0	+/-10.0	U	1.25	10.0	P	04/29/2025	16:28	LB135595
	Beryllium	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	16:28	LB135595
	Cadmium	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	16:28	LB135595
	Chromium	2.00	+/-2.00	U	0.75	2.00	P	04/29/2025	16:28	LB135595
	Copper	2.00	+/-2.00	U	1.50	2.00	P	04/29/2025	16:28	LB135595
	Lead	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	16:28	LB135595
	Nickel	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	16:28	LB135595
	Selenium	5.00	+/-5.00	U	4.50	5.00	P	04/29/2025	16:28	LB135595
	Silver	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	16:28	LB135595
	Thallium	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	16:28	LB135595
	Vanadium	5.00	+/-5.00	U	0.25	5.00	P	04/29/2025	16:28	LB135595
	Zinc	5.00	+/-5.00	U	1.50	5.00	P	04/29/2025	16:28	LB135595
CCB06	Antimony	0.12	+/-2.00	J	0.25	2.00	P	04/29/2025	17:05	LB135595
	Arsenic	1.00	+/-1.00	U	0.25	1.00	P	04/29/2025	17:05	LB135595
	Barium	10.0	+/-10.0	U	1.25	10.0	P	04/29/2025	17:05	LB135595
	Beryllium	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	17:05	LB135595
	Cadmium	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	17:05	LB135595
	Chromium	2.00	+/-2.00	U	0.75	2.00	P	04/29/2025	17:05	LB135595
	Copper	2.00	+/-2.00	U	1.50	2.00	P	04/29/2025	17:05	LB135595
	Lead	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	17:05	LB135595

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Nickel	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	17:05	LB135595
	Selenium	5.00	+/-5.00	U	4.50	5.00	P	04/29/2025	17:05	LB135595
	Silver	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	17:05	LB135595
	Thallium	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	17:05	LB135595
	Vanadium	5.00	+/-5.00	U	0.25	5.00	P	04/29/2025	17:05	LB135595
	Zinc	5.00	+/-5.00	U	1.50	5.00	P	04/29/2025	17:05	LB135595
CCB07	Antimony	2.00	+/-2.00	U	0.25	2.00	P	04/29/2025	17:50	LB135595
	Arsenic	1.00	+/-1.00	U	0.25	1.00	P	04/29/2025	17:50	LB135595
	Barium	10.0	+/-10.0	U	1.25	10.0	P	04/29/2025	17:50	LB135595
	Beryllium	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	17:50	LB135595
	Cadmium	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	17:50	LB135595
	Chromium	2.00	+/-2.00	U	0.75	2.00	P	04/29/2025	17:50	LB135595
	Copper	2.00	+/-2.00	U	1.50	2.00	P	04/29/2025	17:50	LB135595
	Lead	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	17:50	LB135595
	Nickel	1.00	+/-1.00	U	0.75	1.00	P	04/29/2025	17:50	LB135595
	Selenium	5.00	+/-5.00	U	4.50	5.00	P	04/29/2025	17:50	LB135595
	Silver	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	17:50	LB135595
	Thallium	1.00	+/-1.00	U	0.50	1.00	P	04/29/2025	17:50	LB135595
	Vanadium	5.00	+/-5.00	U	0.25	5.00	P	04/29/2025	17:50	LB135595
	Zinc	5.00	+/-5.00	U	1.50	5.00	P	04/29/2025	17:50	LB135595

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Metals
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PREPARATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Instrument: CV1

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB167789BL		**WATER**		**Batch Number:**		**PB167789**		**Prep Date:**	**04/29/2025**	
	Mercury	0.20	<0.20	U	0.16	0.20	CV	04/29/2025	14:07	LB135594

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB167789TB		**WATER**		**Batch Number:**		**PB167789**		**Prep Date:**	**04/29/2025**	
	Mercury	0.20	<0.20	U	0.16	0.20	CV	04/29/2025	14:46	LB135594

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Metals
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PREPARATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Instrument: P8

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB167780BL		**WATER**		**Batch Number:**		**PB167780**		**Prep Date:**	**04/29/2025**	
	Antimony	2.00	<2.00	U	0.25	2.00	P	04/29/2025	15:04	LB135595
	Arsenic	1.00	<1.00	U	0.25	1.00	P	04/29/2025	15:04	LB135595
	Barium	10.0	<10.0	U	1.25	10.0	P	04/29/2025	15:04	LB135595
	Beryllium	1.00	<1.00	U	0.75	1.00	P	04/29/2025	15:04	LB135595
	Cadmium	1.00	<1.00	U	0.50	1.00	P	04/29/2025	15:04	LB135595
	Chromium	2.00	<2.00	U	0.75	2.00	P	04/29/2025	15:04	LB135595
	Copper	2.00	<2.00	U	1.50	2.00	P	04/29/2025	15:04	LB135595
	Lead	1.00	<1.00	U	0.75	1.00	P	04/29/2025	15:04	LB135595
	Nickel	1.00	<1.00	U	0.75	1.00	P	04/29/2025	15:04	LB135595
	Selenium	5.00	<5.00	U	4.50	5.00	P	04/29/2025	15:04	LB135595
	Silver	1.00	<1.00	U	0.50	1.00	P	04/29/2025	15:04	LB135595
	Thallium	1.00	<1.00	U	0.50	1.00	P	04/29/2025	15:04	LB135595
	Vanadium	5.00	<5.00	U	0.25	5.00	P	04/29/2025	15:04	LB135595
	Zinc	5.00	<5.00	U	1.50	5.00	P	04/29/2025	15:04	LB135595

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB167780TB		**WATER**		**Batch Number:**		**PB167780**		**Prep Date:**	**04/29/2025**	
	Antimony	2.00	<2.00	U	0.25	2.00	P	04/29/2025	15:15	LB135595
	Arsenic	1.00	<1.00	U	0.25	1.00	P	04/29/2025	15:15	LB135595
	Barium	10.0	<10.0	U	1.25	10.0	P	04/29/2025	15:15	LB135595
	Beryllium	1.00	<1.00	U	0.75	1.00	P	04/29/2025	15:15	LB135595
	Cadmium	1.00	<1.00	U	0.50	1.00	P	04/29/2025	15:15	LB135595
	Chromium	2.00	<2.00	U	0.75	2.00	P	04/29/2025	15:15	LB135595
	Copper	2.00	<2.00	U	1.50	2.00	P	04/29/2025	15:15	LB135595
	Lead	1.00	<1.00	U	0.75	1.00	P	04/29/2025	15:15	LB135595
	Nickel	1.00	<1.00	U	0.75	1.00	P	04/29/2025	15:15	LB135595
	Selenium	5.00	<5.00	U	4.50	5.00	P	04/29/2025	15:15	LB135595
	Silver	1.00	<1.00	U	0.50	1.00	P	04/29/2025	15:15	LB135595
	Thallium	1.00	<1.00	U	0.50	1.00	P	04/29/2025	15:15	LB135595
	Vanadium	5.00	<5.00	U	0.25	5.00	P	04/29/2025	15:15	LB135595
	Zinc	5.00	<5.00	U	1.50	5.00	P	04/29/2025	15:15	LB135595

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

ICS Source: EPA **Instrument ID:** P8

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Antimony	1.08	1.5	72	-2.5	5.5	04/29/2025	12:32	LB135595
	Arsenic	0.34	0.1	340	-1.9	2.1	04/29/2025	12:32	LB135595
	Barium	1.41	1.2	118	-18.8	21.2	04/29/2025	12:32	LB135595
	Beryllium	0.29			-2	2	04/29/2025	12:32	LB135595
	Cadmium	0.48	0.7	69	-1.3	2.7	04/29/2025	12:32	LB135595
	Chromium	19.5	21.0	93	17	25	04/29/2025	12:32	LB135595
	Copper	7.65	8.0	96	4	12	04/29/2025	12:32	LB135595
	Lead	4.51	4.0	113	2	6	04/29/2025	12:32	LB135595
	Nickel	5.16	6.0	86	4	8	04/29/2025	12:32	LB135595
	Selenium	0.28	0.3	93	-9.7	10	04/29/2025	12:32	LB135595
	Silver	0.040			-2	2	04/29/2025	12:32	LB135595
	Thallium	0.060			-2	2	04/29/2025	12:32	LB135595
	Vanadium	0.14	0.5	28	-9.5	10.5	04/29/2025	12:32	LB135595
	Zinc	10.9	11.0	100	1	21	04/29/2025	12:32	LB135595
ICSAB01	Antimony	20.7	22.0	94	18	26	04/29/2025	12:37	LB135595
	Arsenic	21.0	19.0	110	16.2	21.9	04/29/2025	12:37	LB135595
	Barium	21.6	22.0	98	2	42	04/29/2025	12:37	LB135595
	Beryllium	21.7	19.0	114	16.2	21.9	04/29/2025	12:37	LB135595
	Cadmium	20.2	20.0	101	17	23	04/29/2025	12:37	LB135595
	Chromium	39.5	40.0	99	34	46	04/29/2025	12:37	LB135595
	Copper	27.4	25.0	110	21	29	04/29/2025	12:37	LB135595
	Lead	22.9	25.0	92	21.3	28.8	04/29/2025	12:37	LB135595
	Nickel	24.5	24.0	102	20.4	27.6	04/29/2025	12:37	LB135595
	Selenium	21.0	19.0	110	9	29	04/29/2025	12:37	LB135595
	Silver	19.0	18.0	106	15.3	20.7	04/29/2025	12:37	LB135595
	Thallium	19.6	21.0	93	17.9	24.2	04/29/2025	12:37	LB135595
	Vanadium	20.4	19.0	107	9	29	04/29/2025	12:37	LB135595
	Zinc	30.0	29.0	103	19	39	04/29/2025	12:37	LB135595

METAL QC DATA

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metals
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MATRIX SPIKE SUMMARY

client: Nobis Group **level:** low **sdg no.:** Q1883

contract: NOBI03 **lab code:** CHEM **case no.:** Q1883 **sas no.:** Q1883

matrix: Water **sample id:** Q1883-16 **client id:** OU4-VSL-19-042325MS

Percent Solids for Sample: NA **Spiked ID:** Q1883-16MS **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	85 - 117	497	D	10.0	UD	500	99		P
Arsenic	ug/L	84 - 116	4.25	JD	7.50	JD	500	-1	N	P
Barium	ug/L	86 - 114	2360	D	119	D	2500	90		P
Beryllium	ug/L	83 - 121	506	D	5.00	UD	500	101		P
Cadmium	ug/L	87 - 115	488	D	5.00	UD	500	97		P
Chromium	ug/L	85 - 116	480	D	16.4	D	500	93		P
Copper	ug/L	85 - 118	5120	D	110	D	5000	100		P
Lead	ug/L	88 - 115	2330	D	6.85	D	2500	93		P
Nickel	ug/L	85 - 117	529	D	63.2	D	500	93		P
Mercury	ug/L	82 - 119	2.69		0.20	U	4.0	67	N	CV
Selenium	ug/L	80 - 120	461	D	125	UD	500	91		P
Silver	ug/L	85 - 116	80.4	D	5.00	UD	500	16	N	P
Thallium	ug/L	82 - 116	468	D	5.00	UD	500	94		P
Vanadium	ug/L	86 - 115	795	D	323	D	500	94		P
Zinc	ug/L	83 - 119	5680	D	986	D	5000	94		P

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metals
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MATRIX SPIKE DUPLICATE SUMMARY

client: Nobis Group **level:** low **sdg no.:** Q1883

contract: NOBI03 **lab code:** CHEM **case no.:** Q1883 **sas no.:** Q1883

matrix: Water **sample id:** Q1883-16 **client id:** OU4-VSL-19-042325MSD

Percent Solids for Sample: NA **Spiked ID:** Q1883-16MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	85 - 117	494	D	10.0	UD	500	99		P
Arsenic	ug/L	84 - 116	3.75	JD	7.50	JD	500	-1	N	P
Barium	ug/L	86 - 114	2330	D	119	D	2500	88		P
Beryllium	ug/L	83 - 121	507	D	5.00	UD	500	101		P
Cadmium	ug/L	87 - 115	480	D	5.00	UD	500	96		P
Chromium	ug/L	85 - 116	480	D	16.4	D	500	93		P
Copper	ug/L	85 - 118	5130	D	110	D	5000	100		P
Lead	ug/L	88 - 115	2330	D	6.85	D	2500	93		P
Nickel	ug/L	85 - 117	526	D	63.2	D	500	93		P
Mercury	ug/L	82 - 119	2.61		0.20	U	4.0	65	N	CV
Selenium	ug/L	80 - 120	473	D	125	UD	500	94		P
Silver	ug/L	85 - 116	80.1	D	5.00	UD	500	16	N	P
Thallium	ug/L	82 - 116	468	D	5.00	UD	500	94		P
Vanadium	ug/L	86 - 115	792	D	323	D	500	94		P
Zinc	ug/L	83 - 119	5660	D	986	D	5000	93		P

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Metals
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POST DIGEST SPIKE SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Matrix: Water **Level:** LOW **Client ID:** OU4-VSL-19-042325A

Sample ID: Q1883-16 **Spiked ID:** Q1883-16A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	84 - 116	4.50	JD	7.50	JD	500	-1		P
Mercury	ug/L	82 - 119	4.05		0.20	U	4.00	101		CV
Silver	ug/L	85 - 116	80.8	D	5.00	UD	500	16		P

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: Nobis Group **Level:** LOW **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Matrix: Water **Sample ID:** Q1883-16 **Client ID:** OU4-VSL-19-042325DUP

Percent Solids for Sample: NA **Duplicate ID** Q1883-16DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L	20	10.0	UD	10.0	UD			P
Arsenic	ug/L	20	7.50	JD	4.00	JD	61		P
Barium	ug/L	20	119	D	119	D	0		P
Beryllium	ug/L	20	5.00	UD	5.00	UD			P
Cadmium	ug/L	20	5.00	UD	5.00	UD			P
Chromium	ug/L	20	16.4	D	16.5	D	1		P
Copper	ug/L	20	110	D	111	D	1		P
Lead	ug/L	20	6.85	D	3.35	JD	69		P
Nickel	ug/L	20	63.2	D	63.4	D	0		P
Mercury	ug/L	20	0.20	U	0.20	U			CV
Selenium	ug/L	20	125	UD	125	UD			P
Silver	ug/L	20	5.00	UD	5.00	UD			P
Thallium	ug/L	20	5.00	UD	5.00	UD			P
Vanadium	ug/L	20	323	D	329	D	2		P
Zinc	ug/L	20	986	D	994	D	1		P

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

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: Nobis Group **Level:** LOW **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Matrix: Water **Sample ID:** Q1883-16MS **Client ID:** OU4-VSL-19-042325MSD

Percent Solids for Sample: NA **Duplicate ID** Q1883-16MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L	20	497	D	494	D	1		P
Arsenic	ug/L	20	4.25	JD	3.75	JD	13		P
Barium	ug/L	20	2360	D	2330	D	1		P
Beryllium	ug/L	20	506	D	507	D	0		P
Cadmium	ug/L	20	488	D	480	D	2		P
Chromium	ug/L	20	480	D	480	D	0		P
Copper	ug/L	20	5120	D	5130	D	0		P
Lead	ug/L	20	2330	D	2330	D	0		P
Nickel	ug/L	20	529	D	526	D	1		P
Mercury	ug/L	20	2.69		2.61		3		CV
Selenium	ug/L	20	461	D	473	D	3		P
Silver	ug/L	20	80.4	D	80.1	D	0		P
Thallium	ug/L	20	468	D	468	D	0		P
Vanadium	ug/L	20	795	D	792	D	0		P
Zinc	ug/L	20	5680	D	5660	D	0		P

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

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB167780BS							
Antimony	ug/L	500	522		104	85 - 117	P
Arsenic	ug/L	500	519		104	84 - 116	P
Barium	ug/L	2500	2600		104	86 - 114	P
Beryllium	ug/L	500	540		108	83 - 121	P
Cadmium	ug/L	500	531		106	87 - 115	P
Chromium	ug/L	500	520		104	85 - 116	P
Copper	ug/L	5000	5110		102	85 - 118	P
Lead	ug/L	2500	2490		100	88 - 115	P
Nickel	ug/L	500	517		103	85 - 117	P
Selenium	ug/L	500	499		100	80 - 120	P
Silver	ug/L	500	526		105	85 - 116	P
Thallium	ug/L	500	500		100	82 - 116	P
Vanadium	ug/L	500	518		104	86 - 115	P
Zinc	ug/L	5000	5070		101	83 - 119	P

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB167789BS							
Mercury	ug/L	4.0	4.51		113	82 - 119	CV

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FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: Nobis Group | Contract: NOBI03

Lab Code: CHEM | Case no.: Q1883 | Sas No.: Q1883 | SDG No.: Q1883

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

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

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 6Li	Q	Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q
S0	S0	1131	100		100		100		100		100	
S2	S2	1138	99		96		98		98		97	
S3	S3	1141	99		98		96		98		99	
S4	S4	1145	100		95		97		96		99	
S5	S5	1147	97		93		96		93		99	
S6	S6	1150	94		93		96		92		99	
S7	S7	1153	91		90		94		89		98	
S8	S8	1156	85		90		91		81		93	
ICV01	ICV01	1214	101		103		104		103		103	
LLICV	LLICV	1218	102		103		104		103		103	
ICB01	ICB01	1229	99		104		103		103		103	
ICSA01	ICSA01	1232	94		99		99		91		98	
ICSAB01	ICSAB01	1237	94		103		103		93		100	
CCV01	CCV01	1240	91		101		100		90		98	
CCB01	CCB01	1244	102		108		106		107		104	
CRI	CRI	1247	103		108		107		105		106	
ZZZZZZ	ZZZZZZ	1250										
ZZZZZZ	ZZZZZZ	1254										
ZZZZZZ	ZZZZZZ	1257										
ZZZZZZ	ZZZZZZ	1300										
CCV02	CCV02	1303	93		99		99		89		97	
CCB02	CCB02	1307	102		109		109		108		105	
CCV03	CCV03	1447	85		95		94		84		94	
CCB03	CCB03	1459	97		106		106		105		104	
PB167780BL	PB167780BL	1504	96		108		106		106		104	
PB167780BS	PB167780BS	1508	93		105		104		98		102	
PB167780TB	PB167780TB	1515	94		106		106		103		103	
Q1883-02	OU4-PCS-TC-	1518	96		109		128	*	101		105	
Q1883-04	OU4-PCS-TC-	1521	94		106		127	*	101		103	
Q1883-06	OU4-PCS-TC-	1525	92		106		126	*	100		104	
Q1883-08	OU4-PCS-TC-	1528	94		107		125	*	100		104	
Q1883-10	OU4-PCS-TC-	1531	93		107		129	*	100		104	
Q1883-12	OU4-PCS-TC-	1534	94		105		130	*	101		106	
CCV04	CCV04	1541	82		99		98		88		96	
CCB04	CCB04	1548	95		109		108		106		105	
Q1883-14	OU4-VSL-18-	1555	95		114		131	*	103		106	

Internal Standard %RI Limit: 30 - 120

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FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: Nobis Group | Contract: NOBI03

Lab Code: CHEM | Case no.: Q1883 | Sas No.: Q1883 | SDG No.: Q1883

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

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

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 6Li	Q	Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q
Q1883-16	OU4-VSL-19-	1558	91		112		136	*	104		105	
Q1883-16DUP	OU4-VSL-19-	1601	93		114		136	*	104		106	
Q1883-16L	OU4-VSL-19-	1604	92		112		113		107		104	
Q1883-16MS	OU4-VSL-19-	1608	94		112		134	*	104		106	
Q1883-16MSD	OU4-VSL-19-	1611	93		112		134	*	104		107	
Q1883-16A	OU4-VSL-19-	1614	92		113		134	*	103		108	
CCV05	CCV05	1620	84		98		99		88		96	
CCB05	CCB05	1628	94		110		107		106		104	
Q1883-02	OU4-PCS-TC-	1636	94		112		113		106		105	
Q1883-04	OU4-PCS-TC-	1640	93		113		115		106		104	
Q1883-06	OU4-PCS-TC-	1643	90		113		115		106		105	
Q1883-08	OU4-PCS-TC-	1646	88		112		113		105		103	
Q1883-10	OU4-PCS-TC-	1650	87		113		115		107		104	
Q1883-12	OU4-PCS-TC-	1653	89		112		113		105		102	
Q1883-14	OU4-VSL-18-	1656	86		111		112		104		101	
CCV06	CCV06	1703	80		99		98		88		94	
CCB06	CCB06	1705	94		108		106		105		102	
Q1883-16	OU4-VSL-19-	1709	92		109		112		102		101	
Q1883-16DUP	OU4-VSL-19-	1712	89		110		110		103		100	
Q1883-16L	OU4-VSL-19-	1715	87		108		106		103		101	
Q1883-16MS	OU4-VSL-19-	1719	87		110		112		103		101	
Q1883-16MSD	OU4-VSL-19-	1722	85		112		113		106		101	
Q1883-16A	OU4-VSL-19-	1725	87		111		114		103		101	
CCV07	CCV07	1741	79		100		97		87		94	
CCB07	CCB07	1750	90		111		107		105		102	

Internal Standard %RI Limit: 30 - 120

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FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: Nobis Group Contract: NOBI03

Lab Code: CHEM Case no.: Q1883 Sas No.: Q1883 SDG No.: Q1883

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

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

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q	Element 165Ho	Q
S0	S0	1131	100		100		100		100		100	
S2	S2	1138	98		98		98		99		98	
S3	S3	1141	94		97		96		97		96	
S4	S4	1145	94		95		94		97		97	
S5	S5	1147	91		94		90		96		95	
S6	S6	1150	92		92		89		95		95	
S7	S7	1153	94		92		86		94		94	
S8	S8	1156	94		95		81		95		95	
ICV01	ICV01	1214	104		104		103		104		103	
LLICV	LLICV	1218	102		103		102		103		101	
ICB01	ICB01	1229	99		100		99		99		99	
ICSA01	ICSA01	1232	100		99		91		100		97	
ICSAB01	ICSAB01	1237	102		102		94		101		99	
CCV01	CCV01	1240	106		103		91		100		100	
CCB01	CCB01	1244	106		107		106		106		104	
CRI	CRI	1247	107		107		106		105		105	
ZZZZZZ	ZZZZZZ	1250										
ZZZZZZ	ZZZZZZ	1254										
ZZZZZZ	ZZZZZZ	1257										
ZZZZZZ	ZZZZZZ	1300										
CCV02	CCV02	1303	104		101		90		99		99	
CCB02	CCB02	1307	108		107		107		105		106	
CCV03	CCV03	1447	98		94		85		94		94	
CCB03	CCB03	1459	105		104		105		104		103	
PB167780BL	PB167780BL	1504	108		106		106		105		104	
PB167780BS	PB167780BS	1508	106		102		96		101		102	
PB167780TB	PB167780TB	1515	105		104		104		102		102	
Q1883-02	OU4-PCS-TC-	1518	106		123	*	100		103		103	
Q1883-04	OU4-PCS-TC-	1521	103		123	*	100		102		101	
Q1883-06	OU4-PCS-TC-	1525	102		122	*	99		102		102	
Q1883-08	OU4-PCS-TC-	1528	102		120		99		101		101	
Q1883-10	OU4-PCS-TC-	1531	101		122	*	99		102		100	
Q1883-12	OU4-PCS-TC-	1534	101		123	*	98		100		101	
CCV04	CCV04	1541	99		96		87		95		96	
CCB04	CCB04	1548	107		105		107		105		102	
Q1883-14	OU4-VSL-18-	1555	110		127	*	103		104		104	

Internal Standard %RI Limit: 30 - 120

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FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: Nobis Group | Contract: NOBI03

Lab Code: CHEM | Case no.: Q1883 | Sas No.: Q1883 | SDG No.: Q1883

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

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

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q	Element 165Ho	Q
Q1883-16	OU4-VSL-19-	1558	109		131	*	103		105		105	
Q1883-16DUP	OU4-VSL-19-	1601	108		131	*	104		106		105	
Q1883-16L	OU4-VSL-19-	1604	109		111		105		104		103	
Q1883-16MS	OU4-VSL-19-	1608	108		129	*	102		103		105	
Q1883-16MSD	OU4-VSL-19-	1611	108		128	*	102		104		105	
Q1883-16A	OU4-VSL-19-	1614	107		129	*	103		105		104	
CCV05	CCV05	1620	99		95		87		95		95	
CCB05	CCB05	1628	106		103		106		103		102	
Q1883-02	OU4-PCS-TC-	1636	108		109		104		103		101	
Q1883-04	OU4-PCS-TC-	1640	109		110		106		103		102	
Q1883-06	OU4-PCS-TC-	1643	110		111		106		104		104	
Q1883-08	OU4-PCS-TC-	1646	110		109		105		103		101	
Q1883-10	OU4-PCS-TC-	1650	109		110		105		103		102	
Q1883-12	OU4-PCS-TC-	1653	105		106		102		99		98	
Q1883-14	OU4-VSL-18-	1656	108		109		104		101		100	
CCV06	CCV06	1703	100		94		86		93		94	
CCB06	CCB06	1705	105		101		103		100		99	
Q1883-16	OU4-VSL-19-	1709	106		107		102		100		99	
Q1883-16DUP	OU4-VSL-19-	1712	107		108		102		101		99	
Q1883-16L	OU4-VSL-19-	1715	107		104		104		98		99	
Q1883-16MS	OU4-VSL-19-	1719	108		108		103		100		100	
Q1883-16MSD	OU4-VSL-19-	1722	108		110		104		102		100	
Q1883-16A	OU4-VSL-19-	1725	108		109		104		102		100	
CCV07	CCV07	1741	101		94		87		93		92	
CCB07	CCB07	1750	106		102		103		99		97	

Internal Standard %RI Limit: 30 - 120

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FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: Nobis Group | Contract: NOBI03

Lab Code: CHEM | Case no.: Q1883 | Sas No.: Q1883 | SDG No.: Q1883

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

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

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 165Ho	Q	Element 209Bi	Q	Element	Q	Element	Q	Element	Q
S0	S0	1131	100		100							
S2	S2	1138	98		97							
S3	S3	1141	99		97							
S4	S4	1145	100		100							
S5	S5	1147	100		98							
S6	S6	1150	99		97							
S7	S7	1153	95		91							
S8	S8	1156	93		81							
ICV01	ICV01	1214	102		102							
LLICV	LLICV	1218	103		103							
ICB01	ICB01	1229	102		102							
ICSA01	ICSA01	1232	99		90							
ICSAB01	ICSAB01	1237	102		93							
CCV01	CCV01	1240	100		87							
CCB01	CCB01	1244	105		103							
CRI	CRI	1247	105		103							
ZZZZZZ	ZZZZZZ	1250										
ZZZZZZ	ZZZZZZ	1254										
ZZZZZZ	ZZZZZZ	1257										
ZZZZZZ	ZZZZZZ	1300										
CCV02	CCV02	1303	99		90							
CCB02	CCB02	1307	107		106							
CCV03	CCV03	1447	95		86							
CCB03	CCB03	1459	104		104							
PB167780BL	PB167780BL	1504	105		104							
PB167780BS	PB167780BS	1508	102		97							
PB167780TB	PB167780TB	1515	104		103							
Q1883-02	OU4-PCS-TC-2	1518	105		101							
Q1883-04	OU4-PCS-TC-2	1521	105		100							
Q1883-06	OU4-PCS-TC-2	1525	104		100							
Q1883-08	OU4-PCS-TC-3	1528	104		100							
Q1883-10	OU4-PCS-TC-3	1531	107		100							
Q1883-12	OU4-PCS-TC-3	1534	105		102							
CCV04	CCV04	1541	97		88							

Internal Standard %RI Limit: 30 -120

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FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: Nobis Group | Contract: NOBI03

Lab Code: CHEM | Case no.: Q1883 | Sas No.: Q1883 | SDG No.: Q1883

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

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

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 165Ho	Q	Element 209Bi	Q	Element	Q	Element	Q	Element	Q
CCB04	CCB04	1548	105		105							
Q1883-14	OU4-VSL-18-(	1555	107		101							
Q1883-16	OU4-VSL-19-(	1558	107		101							
Q1883-16DUP	OU4-VSL-19-(	1601	106		100							
Q1883-16L	OU4-VSL-19-(	1604	105		102							
Q1883-16MS	OU4-VSL-19-(	1608	107		101							
Q1883-16MSD	OU4-VSL-19-(	1611	108		100							
Q1883-16A	OU4-VSL-19-(	1614	107		102							
CCV05	CCV05	1620	98		88							
CCB05	CCB05	1628	105		104							
Q1883-02	OU4-PCS-TC-2	1636	105		102							
Q1883-04	OU4-PCS-TC-2	1640	105		102							
Q1883-06	OU4-PCS-TC-2	1643	104		102							
Q1883-08	OU4-PCS-TC-3	1646	104		98							
Q1883-10	OU4-PCS-TC-3	1650	105		102							
Q1883-12	OU4-PCS-TC-3	1653	102		100							
Q1883-14	OU4-VSL-18-(	1656	102		99							
CCV06	CCV06	1703	94		85							
CCB06	CCB06	1705	101		101							
Q1883-16	OU4-VSL-19-(	1709	102		99							
Q1883-16DUP	OU4-VSL-19-(	1712	102		99							
Q1883-16L	OU4-VSL-19-(	1715	100		97							
Q1883-16MS	OU4-VSL-19-(	1719	101		98							
Q1883-16MSD	OU4-VSL-19-(	1722	102		98							
Q1883-16A	OU4-VSL-19-(	1725	102		98							
CCV07	CCV07	1741	95		85							
CCB07	CCB07	1750	101		100							

Internal Standard %RI Limit: 30 -120

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FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: Nobis Group Contract: NOBI03

Lab Code: CHEM Case no.: Q1883 Sas No.: Q1883 SDG No.: Q1883

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

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

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
S0	S0	1131	100									
S2	S2	1138	98									
S3	S3	1141	95									
S4	S4	1145	96									
S5	S5	1147	94									
S6	S6	1150	90									
S7	S7	1153	89									
S8	S8	1156	82									
ICV01	ICV01	1214	102									
LLICV	LLICV	1218	102									
ICB01	ICB01	1229	98									
ICSA01	ICSA01	1232	91									
ICSAB01	ICSAB01	1237	91									
CCV01	CCV01	1240	89									
CCB01	CCB01	1244	104									
CRI	CRI	1247	105									
ZZZZZZ	ZZZZZZ	1250										
ZZZZZZ	ZZZZZZ	1254										
ZZZZZZ	ZZZZZZ	1257										
ZZZZZZ	ZZZZZZ	1300										
CCV02	CCV02	1303	88									
CCB02	CCB02	1307	105									
CCV03	CCV03	1447	85									
CCB03	CCB03	1459	104									
PB167780BL	PB167780BL	1504	105									
PB167780BS	PB167780BS	1508	97									
PB167780TB	PB167780TB	1515	103									
Q1883-02	OU4-PCS-TC-2	1518	98									
Q1883-04	OU4-PCS-TC-2	1521	98									
Q1883-06	OU4-PCS-TC-2	1525	98									
Q1883-08	OU4-PCS-TC-3	1528	96									
Q1883-10	OU4-PCS-TC-3	1531	98									
Q1883-12	OU4-PCS-TC-3	1534	98									
CCV04	CCV04	1541	87									

Internal Standard %RI Limit: 30 -120

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FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: Nobis Group | Contract: NOBI03

Lab Code: CHEM | Case no.: Q1883 | Sas No.: Q1883 | SDG No.: Q1883

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

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

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
CCB04	CCB04	1548	103									
Q1883-14	OU4-VSL-18-(	1555	100									
Q1883-16	OU4-VSL-19-(	1558	101									
Q1883-16DUP	OU4-VSL-19-(	1601	99									
Q1883-16L	OU4-VSL-19-(	1604	102									
Q1883-16MS	OU4-VSL-19-(	1608	100									
Q1883-16MSD	OU4-VSL-19-(	1611	100									
Q1883-16A	OU4-VSL-19-(	1614	99									
CCV05	CCV05	1620	86									
CCB05	CCB05	1628	101									
Q1883-02	OU4-PCS-TC-2	1636	101									
Q1883-04	OU4-PCS-TC-2	1640	101									
Q1883-06	OU4-PCS-TC-2	1643	102									
Q1883-08	OU4-PCS-TC-3	1646	100									
Q1883-10	OU4-PCS-TC-3	1650	101									
Q1883-12	OU4-PCS-TC-3	1653	98									
Q1883-14	OU4-VSL-18-(	1656	99									
CCV06	CCV06	1703	84									
CCB06	CCB06	1705	99									
Q1883-16	OU4-VSL-19-(	1709	97									
Q1883-16DUP	OU4-VSL-19-(	1712	97									
Q1883-16L	OU4-VSL-19-(	1715	98									
Q1883-16MS	OU4-VSL-19-(	1719	98									
Q1883-16MSD	OU4-VSL-19-(	1722	99									
Q1883-16A	OU4-VSL-19-(	1725	100									
CCV07	CCV07	1741	83									
CCB07	CCB07	1750	98									

Internal Standard %RI Limit: 30 -120

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Metals

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ICP SERIAL DILUTIONS

SAMPLE NO.

OU4-VSL-19-042325L

Lab Name: Chemtech Consulting Group **Contract:** NOBI03

Lab Code: CHEM **Lb No.:** lb135595 **Lab Sample ID :** Q1883-16L **SDG No.:** Q1883

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

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Antimony	10.0	UD	50.0	UD			P
Arsenic	7.50	JD	125	UD	100		P
Barium	119	D	122	JD	2		P
Beryllium	5.00	UD	25.0	UD			P
Cadmium	5.00	UD	25.0	UD			P
Chromium	16.4	D	16.5	JD	1		P
Copper	110	D	112	D	2		P
Lead	6.85	D	7.25	JD	6		P
Nickel	63.2	D	64.5	D	2		P
Mercury	0.20	U	1.00	U			CV
Selenium	125	UD	625	UD			P
Silver	5.00	UD	25.0	UD			P
Thallium	5.00	UD	25.0	UD			P
Vanadium	323	D	330	D	2		P
Zinc	986	D	1010	D	2		P

METAL PREPARATION & INSTRUMENT DATA

METAL PREPARATION & ANALYICAL SUMMARY

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Metals
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SAMPLE PREPARATION SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Method:**

Case No.: Q1883 **SAS No.:** Q1883

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB167780**						
PB167780BL	PB167780BL	MB	WATER	04/29/2025	50.0	50.0	
PB167780BS	PB167780BS	LCS	WATER	04/29/2025	50.0	50.0	
PB167780TB	PB167780TB	MB	WATER	04/29/2025	50.0	50.0	
Q1883-02	OU4-PCS-TC-27-042325	SAM	WATER	04/29/2025	50.0	50.0	
Q1883-04	OU4-PCS-TC-28-042325	SAM	WATER	04/29/2025	50.0	50.0	
Q1883-06	OU4-PCS-TC-29-042325	SAM	WATER	04/29/2025	50.0	50.0	
Q1883-08	OU4-PCS-TC-30-042325	SAM	WATER	04/29/2025	50.0	50.0	
Q1883-10	OU4-PCS-TC-31-042325	SAM	WATER	04/29/2025	50.0	50.0	
Q1883-12	OU4-PCS-TC-32-042325	SAM	WATER	04/29/2025	50.0	50.0	
Q1883-14	OU4-VSL-18-042325	SAM	WATER	04/29/2025	50.0	50.0	
Q1883-16	OU4-VSL-19-042325	SAM	WATER	04/29/2025	50.0	50.0	
Q1883-16DUP	OU4-VSL-19-042325DUP	DUP	WATER	04/29/2025	50.0	50.0	
Q1883-16MS	OU4-VSL-19-042325MS	MS	WATER	04/29/2025	50.0	50.0	
Q1883-16MSD	OU4-VSL-19-042325MSD	MSD	WATER	04/29/2025	50.0	50.0	

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Metals
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SAMPLE PREPARATION SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Method:**

Case No.: Q1883 **SAS No.:** Q1883

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB167789**						
PB167789BL	PB167789BL	MB	WATER	04/29/2025	30.0	30.0	
PB167789BS	PB167789BS	LCS	WATER	04/29/2025	30.0	30.0	
PB167789TB	PB167789TB	MB	WATER	04/29/2025	30.0	30.0	
Q1883-02	OU4-PCS-TC-27-042325	SAM	WATER	04/29/2025	30.0	30.0	
Q1883-04	OU4-PCS-TC-28-042325	SAM	WATER	04/29/2025	30.0	30.0	
Q1883-06	OU4-PCS-TC-29-042325	SAM	WATER	04/29/2025	30.0	30.0	
Q1883-08	OU4-PCS-TC-30-042325	SAM	WATER	04/29/2025	30.0	30.0	
Q1883-10	OU4-PCS-TC-31-042325	SAM	WATER	04/29/2025	30.0	30.0	
Q1883-12	OU4-PCS-TC-32-042325	SAM	WATER	04/29/2025	30.0	30.0	
Q1883-14	OU4-VSL-18-042325	SAM	WATER	04/29/2025	30.0	30.0	
Q1883-16	OU4-VSL-19-042325	SAM	WATER	04/29/2025	30.0	30.0	
Q1883-16DUP	OU4-VSL-19-042325DUP	DUP	WATER	04/29/2025	30.0	30.0	
Q1883-16MS	OU4-VSL-19-042325MS	MS	WATER	04/29/2025	30.0	30.0	
Q1883-16MSD	OU4-VSL-19-042325MSD	MSD	WATER	04/29/2025	30.0	30.0	

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metals
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ANALYSIS RUN LOG

Client: Nobis Group **Contract:** NOBI03

Lab code: CHEM **Case no.:** Q1883 **Sas no.:** Q1883 **Sdg no.:** Q1883

Instrument id number: **Method:** **Run number:** LB135594

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

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1316	HG
S0.2	S0.2	1	1321	HG
S2.5	S2.5	1	1323	HG
S5	S5	1	1325	HG
S7.5	S7.5	1	1333	HG
S10	S10	1	1346	HG
ICV106	ICV106	1	1351	HG
ICB106	ICB106	1	1354	HG
CCV43	CCV43	1	1356	HG
CCB43	CCB43	1	1358	HG
CRA	CRA	1	1400	HG
PB167789BL	PB167789BL	1	1407	HG
PB167789BS	PB167789BS	1	1412	HG
Q1883-02	OU4-PCS-TC-27-042325	1	1414	HG
Q1883-04	OU4-PCS-TC-28-042325	1	1417	HG
Q1883-06	OU4-PCS-TC-29-042325	1	1419	HG
Q1883-08	OU4-PCS-TC-30-042325	1	1421	HG
Q1883-10	OU4-PCS-TC-31-042325	1	1424	HG
CCV44	CCV44	1	1426	HG
CCB44	CCB44	1	1428	HG
Q1883-12	OU4-PCS-TC-32-042325	1	1430	HG
Q1883-14	OU4-VSL-18-042325	1	1433	HG
Q1883-16	OU4-VSL-19-042325	1	1435	HG
Q1883-16DUP	OU4-VSL-19-042325DUP	1	1437	HG
Q1883-16MS	OU4-VSL-19-042325MS	1	1439	HG
Q1883-16MSD	OU4-VSL-19-042325MSD	1	1442	HG
PB167789TB	PB167789TB	1	1446	HG
Q1883-16L	OU4-VSL-19-042325L	5	1448	HG
Q1883-16A	OU4-VSL-19-042325A	1	1451	HG
CCV45	CCV45	1	1453	HG
CCB45	CCB45	1	1455	HG

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metals
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ANALYSIS RUN LOG

Client: Nobis Group **Contract:** NOBI03

Lab code: CHEM **Case no.:** Q1883 **Sas no.:** Q1883 **Sdg no.:** Q1883

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

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

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1131	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
S2	S2	1	1138	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
S3	S3	1	1141	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
S4	S4	1	1145	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
S5	S5	1	1147	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
S6	S6	1	1150	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
S7	S7	1	1153	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
S8	S8	1	1156	,
ICV01	ICV01	1	1214	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
LLICV	LLICV	1	1218	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
ICB01	ICB01	1	1229	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA01	ICSA01	1	1232	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB01	ICSAB01	1	1237	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
CCV01	CCV01	1	1240	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
CCB01	CCB01	1	1244	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
CRI	CRI	1	1247	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
CCV02	CCV02	1	1303	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
CCB02	CCB02	1	1307	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
CCV03	CCV03	1	1447	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
CCB03	CCB03	1	1459	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
PB167780BL	PB167780BL	1	1504	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
PB167780BS	PB167780BS	1	1508	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
PB167780TB	PB167780TB	1	1515	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
Q1883-02	OU4-PCS-TC-27-042325	5	1518	Ag,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Tl,V,Zn
Q1883-04	OU4-PCS-TC-28-042325	5	1521	Ag,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Tl,V,Zn
Q1883-06	OU4-PCS-TC-29-042325	5	1525	Ag,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Tl,V,Zn
Q1883-08	OU4-PCS-TC-30-042325	5	1528	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Tl,V,Zn
Q1883-10	OU4-PCS-TC-31-042325	5	1531	Ag,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Tl,V,Zn
Q1883-12	OU4-PCS-TC-32-042325	5	1534	Ag,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Tl,V,Zn
CCV04	CCV04	1	1541	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
CCB04	CCB04	1	1548	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
Q1883-14	OU4-VSL-18-042325	5	1555	Ag,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Tl,V,Zn
Q1883-16	OU4-VSL-19-042325	5	1558	Ag,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Tl,V,Zn
Q1883-16DUP	OU4-VSL-19-042325DUP	5	1601	Ag,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Tl,V,Zn
Q1883-16L	OU4-VSL-19-042325L	25	1604	Ag,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Tl,V,Zn
Q1883-16MS	OU4-VSL-19-042325MS	5	1608	Ag,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Tl,V,Zn
Q1883-16MSD	OU4-VSL-19-042325MSD	5	1611	Ag,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Tl,V,Zn
Q1883-16A	OU4-VSL-19-042325A	5	1614	Ag
CCV05	CCV05	1	1620	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
CCB05	CCB05	1	1628	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
Q1883-02	OU4-PCS-TC-27-042325	25	1636	As,Se

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

metals
- 14 -
ANALYSIS RUN LOG

Client: Nobis Group **Contract:** NOBI03

Lab code: CHEM **Case no.:** Q1883 **Sas no.:** Q1883 **Sdg no.:** Q1883

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

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

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
Q1883-04	OU4-PCS-TC-28-042325	25	1640	As,Se
Q1883-06	OU4-PCS-TC-29-042325	25	1643	As,Se
Q1883-08	OU4-PCS-TC-30-042325	25	1646	Se
Q1883-10	OU4-PCS-TC-31-042325	25	1650	As,Se
Q1883-12	OU4-PCS-TC-32-042325	25	1653	As,Se
Q1883-14	OU4-VSL-18-042325	25	1656	As,Se
CCV06	CCV06	1	1703	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
CCB06	CCB06	1	1705	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
Q1883-16	OU4-VSL-19-042325	25	1709	As,Se
Q1883-16DUP	OU4-VSL-19-042325DUP	25	1712	As,Se
Q1883-16L	OU4-VSL-19-042325L	125	1715	As,Se
Q1883-16MS	OU4-VSL-19-042325MS	25	1719	As,Se
Q1883-16MSD	OU4-VSL-19-042325MSD	25	1722	As,Se
Q1883-16A	OU4-VSL-19-042325A	25	1725	As
CCV07	CCV07	1	1741	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn
CCB07	CCB07	1	1750	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn

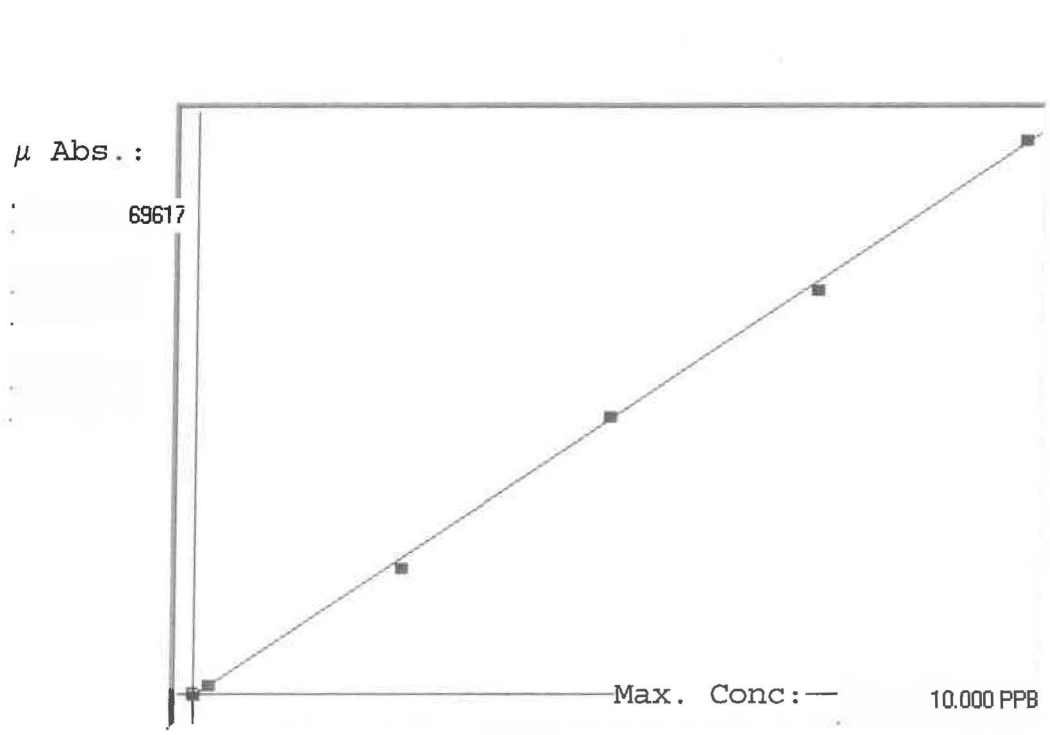
METAL
RAW DATA

Reviewed By:jaswal
On:5/1/2025 11:29:42 PM
Inst Id :CV1
LB :LB135594

LB135594

7470A

INSTRUMENT ID: CV1



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0.0	0.000	0.063	0.063	92	0.000	92	0			
0.2	0.200	0.238	0.038	1308	0.0 %	1308				
2.5	2.500	2.357	-0.143	16019	0.0 %	16019				
5.0	5.000	5.080	0.080	34930	0.0 %	34930				
7.5	7.500	7.388	-0.112	50965	0.0 %	50965				
10.0	10.000	10.074	0.074	69617	0.0 %	69617				

%RD
1
19
16
2
1
1

Reviewed By:jaswal
On:5/1/2025 11:29:42 PM
Inst Id :CV1
LB :LB135594

LB135594

Method: 7470A Operator: Admin Date of Analysis: 29 Apr 2025 13:14:34

Sample ID	Extended ID	µ Abs.	Conc.	Stnd Conc	Method	Units	Date	Type	Type
0.0 - 1	50	92	-	0.00000	7470A	PPB	29 Apr 2025 13:16:09	S	Std
0.2 - 1	51.2	1308	-	0.20000	7470A	PPB	29 Apr 2025 13:21:03	S	Std
2.5 - 1	52.5	16019	-	2.50000	7470A	PPB	29 Apr 2025 13:23:20	S	Std
5.0 - 1	53.0	34930	-	5.00000	7470A	PPB	29 Apr 2025 13:25:37	S	Std
7.5 - 1	57.5	50965	-	7.50000	7470A	PPB	29 Apr 2025 13:33:22	S	Std
10.0 - 1	510	69617	-	10.00000	7470A	PPB	29 Apr 2025 13:46:21	S	Std
ICV106 - 1	ICV106	26209	3.8238		-7470A	PPB	29 Apr 2025 13:51:49	U	SMPL
ICB106 - 1	ICB106	-314	0.0048		-7470A	PPB	29 Apr 2025 13:54:04	U	SMPL
CCV43 - 1	CCV43	34863	5.0699		-7470A	PPB	29 Apr 2025 13:56:22	U	SMPL
CCB43 - 1	CCB43	-376	-0.0042		-7470A	PPB	29 Apr 2025 13:58:37	U	SMPL
CRA - 1	CRA	1203	0.2232		-7470A	PPB	29 Apr 2025 14:00:54	U	SMPL
HighStd - 1	HighStd	69034	9.9901		-7470A	PPB	29 Apr 2025 14:03:09	U	SMPL
ChkStd - 1	ChkStd	43171	6.2661		-7470A	PPB	29 Apr 2025 14:05:25	U	SMPL
PB167789BL - 1	PBW	-525	-0.0256		-7470A	PPB	29 Apr 2025 14:07:48	U	SMPL
PB167789BS - 1	LCSW	30967	4.5089		-7470A	PPB	29 Apr 2025 14:12:40	U	SMPL
Q1883-02 - 1	OU4-PCS-TC-27-042325	1619	0.2831		-7470A	PPB	29 Apr 2025 14:14:57	U	SMPL
Q1883-04 - 1	OU4-PCS-TC-28-042325	-98	0.0359		-7470A	PPB	29 Apr 2025 14:17:15	U	SMPL
Q1883-06 - 1	OU4-PCS-TC-29-042325	5	0.0507		-7470A	PPB	29 Apr 2025 14:19:35	U	SMPL
Q1883-08 - 1	OU4-PCS-TC-30-042325	28	0.0540		-7470A	PPB	29 Apr 2025 14:21:54	U	SMPL
Q1883-10 - 1	OU4-PCS-TC-31-042325	53	0.0576		-7470A	PPB	29 Apr 2025 14:24:09	U	SMPL
CCV44 - 1	CCV44	33748	4.9093		-7470A	PPB	29 Apr 2025 14:26:24	U	SMPL
CCB44 - 1	CCB44	-229	0.0170		-7470A	PPB	29 Apr 2025 14:28:39	U	SMPL
Q1883-12 - 1	OU4-PCS-TC-32-042325	250	0.0860		-7470A	PPB	29 Apr 2025 14:30:57	U	SMPL
Q1883-14 - 1	OU4-VSL-18-042325	8	0.0511		-7470A	PPB	29 Apr 2025 14:33:12	U	SMPL
Q1883-16 - 1	OU4-VSL-19-042325	37	0.0553		-7470A	PPB	29 Apr 2025 14:35:28	U	SMPL
Q1883-16DUP - 1	OU4-VSL-19-042325DUP	59	0.0585		-7470A	PPB	29 Apr 2025 14:37:44	U	SMPL
Q1883-16MS - 1	OU4-VSL-19-042325MS	18318	2.6876		-7470A	PPB	29 Apr 2025 14:39:59	U	SMPL
Q1883-16MSD - 1	OU4-VSL-19-042325MSD	17810	2.6144		-7470A	PPB	29 Apr 2025 14:42:16	U	SMPL
~~PB167771TB - 1~~ PB167789TB	~~PB167771TB~~ PB167789TB	45	0.0565		-7470A	PPB	29 Apr 2025 14:46:39	U	SMPL
Q1883-16LX5 - 1		48	0.0569		-7470A	PPB	29 Apr 2025 14:48:56	U	SMPL
Q1883-16A - 1		27767	4.0481		-7470A	PPB	29 Apr 2025 14:51:13	U	SMPL
CCV45 - 1	CCV45	33701	4.9025		-7470A	PPB	29 Apr 2025 14:53:28	U	SMPL
CCB45 - 1	CCB45	-249	0.0141		-7470A	PPB	29 Apr 2025 14:55:45	U	SMPL

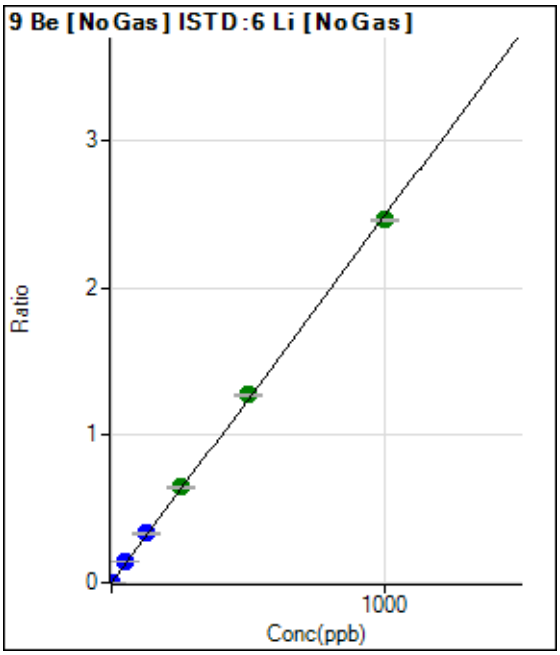
MB
05/07/25

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

Batch Folder: D:\Agilent\ICPMH\1\DATA\P8042925MS.b\
Analysis File: P8042925MS.batch.bin
DA Date-Time: 2025-04-29 13:11:38
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2025-04-29 11:31:50
2	006CALS.d	S02	2025-04-29 11:38:36
3	007CALB.d	S03	2025-04-29 11:41:58
4	008CALS.d	S04	2025-04-29 11:45:01
5	009CALS.d	S05	2025-04-29 11:47:58
6	010CALS.d	S06	2025-04-29 11:50:47
7	011CALS.d	S07	2025-04-29 11:53:32
8	012CALS.d	S08	2025-04-29 11:56:21

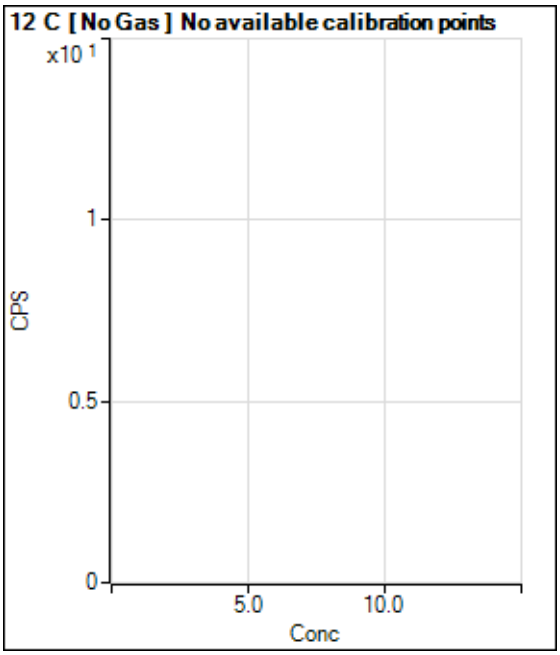
Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	134.62	0.0001	P	6.1
2	☐	1.000	1.213	7442.99	0.0031	P	2.0
3	☐	50.000	57.105	345873.92	0.1421	P	0.7
4	☐	125.000	134.557	826176.43	0.3348	P	1.7
5	☐	250.000	261.155	1545687.17	0.6497	A	2.2
6	☐	500.000	511.935	2947057.39	1.2736	A	1.7
7	☐	1000.000	989.694	5525741.32	2.4621	A	0.2
8	☐			773.52	0.0004	P	9.4

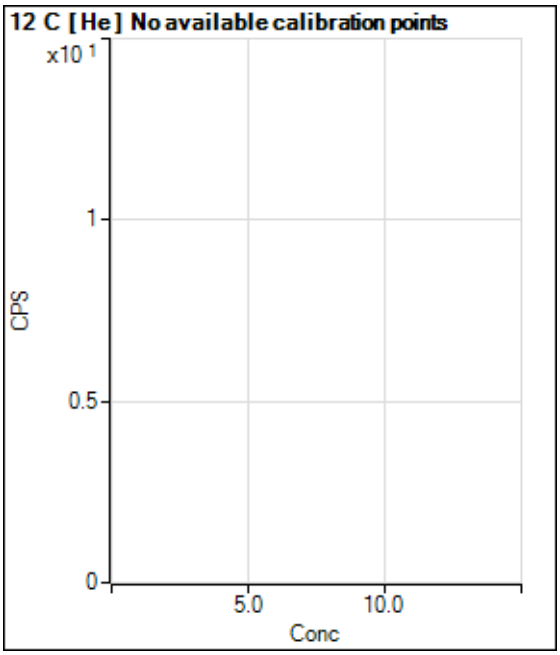
y = 0.0025 * x + 5.4774E-005
R = 0.9998
DL = 0.004049
BEC = 0.02202

Weight: <None>
Min Conc: 0

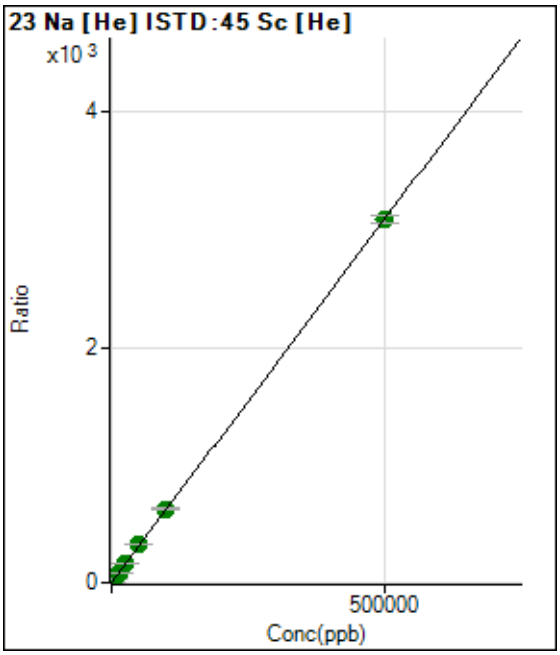


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			3115734.47		A	2.3
2	☐			3397353.14		A	2.1
3	☐			3412875.40		A	1.7
4	☐			3448090.78		A	0.9
5	☐			3504376.02		A	0.9
6	☐			3788816.71		A	0.8
7	☐			4430816.01		A	4.3
8	☐			3680717.38		A	1.5

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			22105.58		P	0.8
2	☐			23442.12		P	0.7
3	☐			23177.22		P	1.0
4	☐			23917.32		P	2.5
5	☐			25101.50		P	0.6
6	☐			28952.96		P	0.6
7	☐			35650.91		P	0.9
8	☐			36124.38		P	1.3

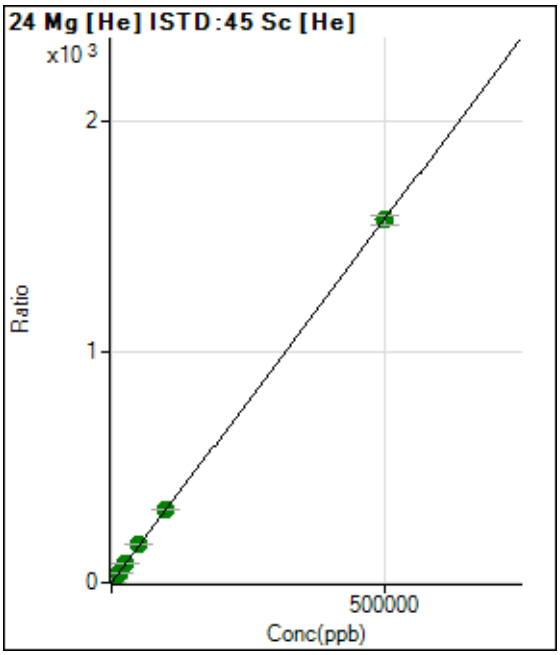


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	28384.26	0.2982	P	0.6
2	☐	500.000	601.161	374702.68	4.0093	P	0.5
3	☐	5000.000	5745.030	3210716.62	35.7632	A	0.7
4	☐	12500.000	13564.402	7510586.21	84.0335	A	0.7
5	☐	25000.000	27111.160	14556736.31	167.6598	A	0.6
6	☐	50000.000	52655.343	28461621.52	325.3483	A	1.4
7	☐	100000.00	101705.83	56155273.61	628.1450	A	0.6
8	☐	500000.00	499253.57	275761875.8	3,082.2725	A	2.1

y = 0.0062 * x + 0.2982
R = 1.0000
DL = 0.9166
BEC = 48.31

Weight: <None>
Min Conc: 0

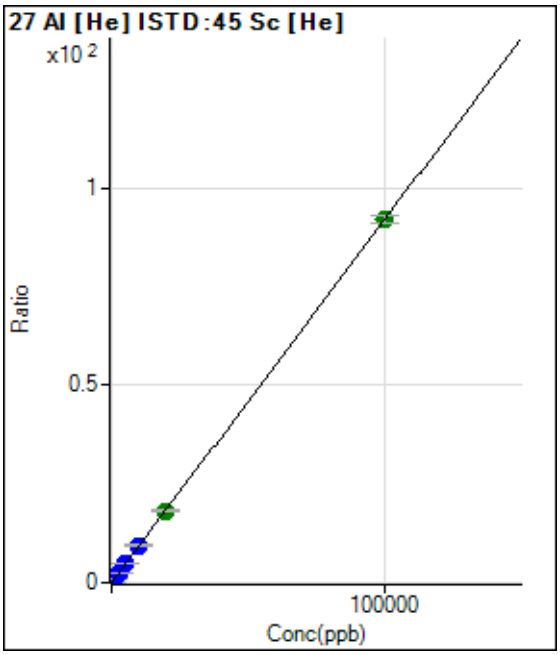
Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	370.01	0.0039	P	7.4
2	☐	500.000	604.031	177895.97	1.9036	P	1.1
3	☐	5000.000	5767.229	1628796.99	18.1420	A	0.1
4	☐	12500.000	13619.040	3828353.00	42.8361	A	0.3
5	☐	25000.000	26901.977	7346064.82	84.6112	A	1.4
6	☐	50000.000	52270.382	14380949.23	164.3955	A	1.9
7	☐	100000.00	100227.13	28180082.08	315.2206	A	0.8
8	☐	500000.00	499596.68	140576753.4	1,571.2472	A	2.3

y = 0.0031 * x + 0.0039
R = 1.0000
DL = 0.2736
BEC = 1.235

Weight: <None>
Min Conc: 0

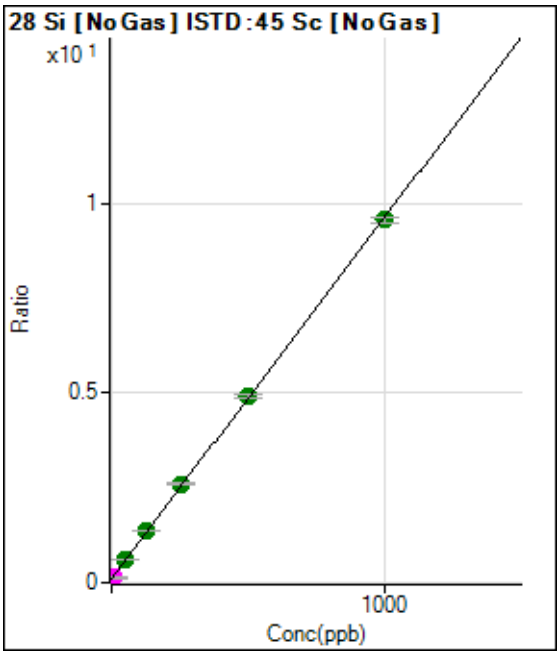


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1	☐	0.000	0.000	323.34	0.0034	P	11.7
2	☐	20.000	22.582	2255.75	0.0241	P	4.0
3	☐	1000.000	1111.582	91979.48	1.0245	P	0.7
4	☐	2500.000	2666.232	219195.58	2.4527	P	1.0
5	☐	5000.000	5284.715	421813.24	4.8582	P	0.8
6	☐	10000.000	10319.872	829611.26	9.4837	P	1.9
7	☐	20000.000	19792.903	1625765.98	18.1860	A	2.8
8	☐	100000.00	99989.924	8219159.81	91.8582	A	2.1

y = 9.1864E-004 * x + 0.0034
R = 1.0000
DL = 1.293
BEC = 3.698

Weight: <None>
Min Conc: 0

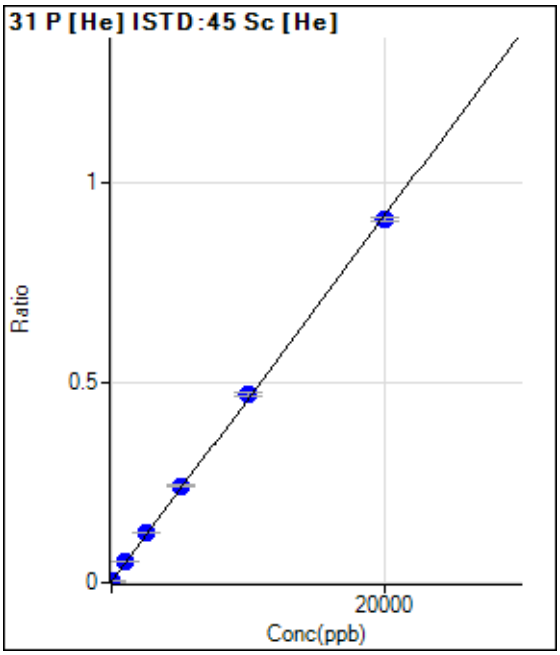
Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	490306.58	0.1065	M	12.7
2	☐	10.000	2.546	579207.74	0.1307	M	9.7
3	☐	50.000	54.000	2787900.03	0.6203	A	1.1
4	☐	125.000	131.640	5972009.70	1.3589	A	0.4
5	☐	250.000	262.875	11221594.14	2.6074	A	1.7
6	☐	500.000	504.906	20926334.83	4.9100	A	1.4
7	☐	1000.000	993.373	39537435.24	9.5570	A	1.8
8	☐			652393.68	0.1581	P	2.2

y = 0.0095 * x + 0.1065
R = 0.9998
DL = 4.273
BEC = 11.2

Weight: <None>
Min Conc: 0

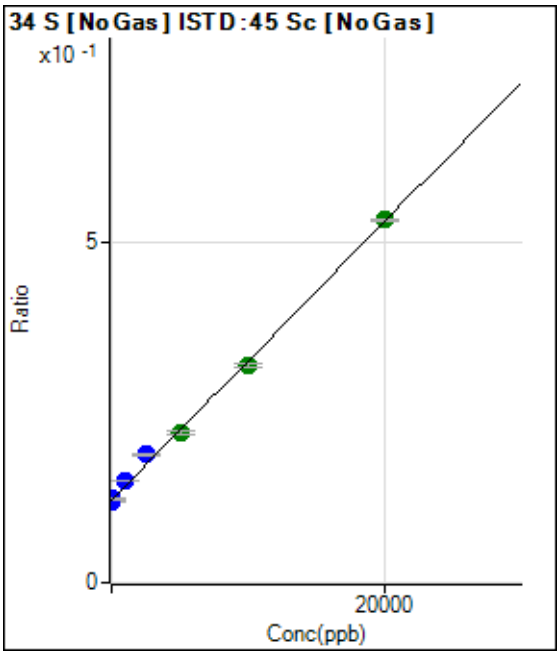


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-16.900	131.11	0.0014	P	28.3
2	☐	0.000	16.900	273.34	0.0029	P	7.7
3	☐	1000.000	1100.308	4701.92	0.0524	P	5.7
4	☐	2500.000	2675.524	11108.77	0.1243	P	1.7
5	☐	5000.000	5216.453	20865.06	0.2403	P	2.0
6	☐	10000.000	10278.353	41237.26	0.4714	P	1.7
7	☐	20000.000	19779.754	80919.44	0.9052	P	1.0
8	☐			112.22	0.0013	P	9.8

y = 4.5654E-005 * x + 0.0022
R = 0.9998
DL = 20.24
BEC = 47.13

Weight: <None>
Min Conc: 0

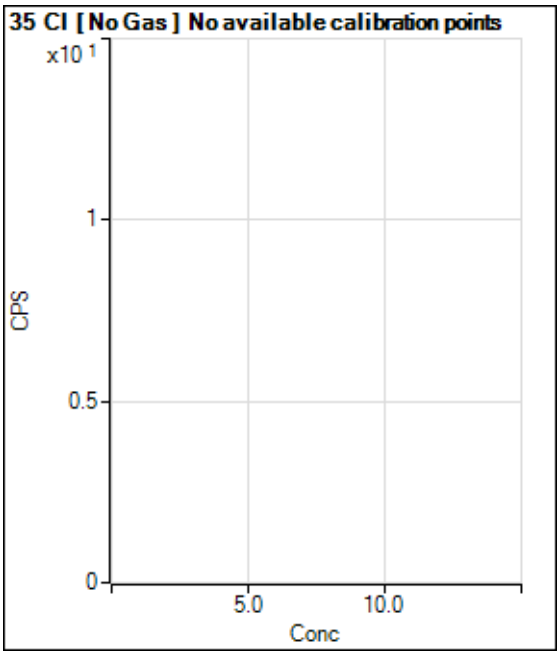
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On:4/29/2025 4:10:15 PM
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LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-85.857	552040.05	0.1199	P	1.3
2	☐	0.000	85.857	546680.49	0.1234	P	2.2
3	☐	1000.000	1382.211	674362.62	0.1500	P	0.9
4	☐	2500.000	3285.187	831040.99	0.1891	P	1.0
5	☐	5000.000	4773.656	945198.62	0.2197	A	2.6
6	☐	10000.000	9672.534	1364758.77	0.3202	A	2.0
7	☐	20000.000	20103.060	2210926.77	0.5344	A	0.6
8	☐			436190.60	0.1057	P	1.9

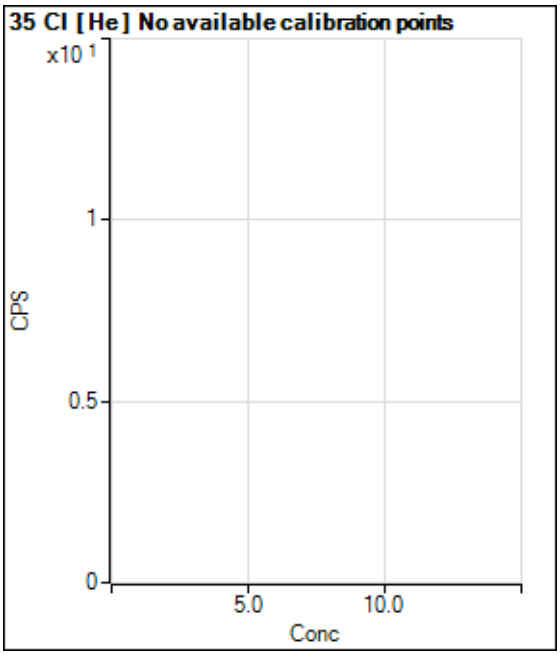
y = 2.0530E-005 * x + 0.1217
R = 0.9987
DL = 308.3
BEC = 5926

Weight: <None>
Min Conc: 0

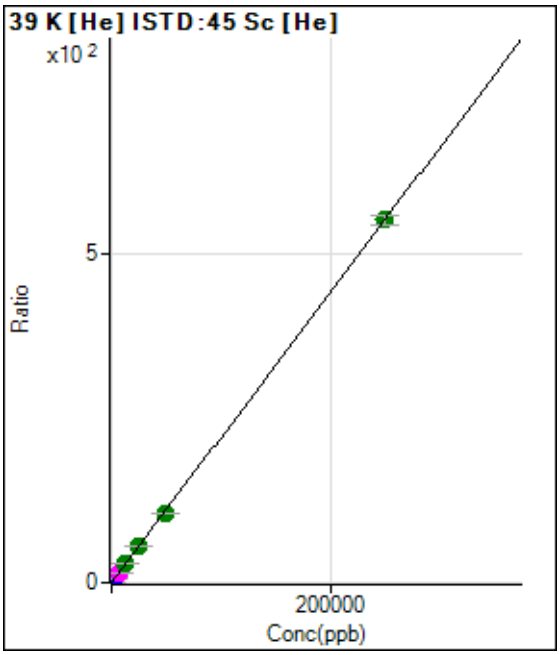


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			136950.44		P	0.4
2	☐			157315.54		P	1.1
3	☐			153823.93		P	0.8
4	☐			160574.02		P	1.4
5	☐			162573.68		P	0.6
6	☐			173609.85		P	1.9
7	☐			212138.70		P	2.3
8	☐			156759.37		P	1.4

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LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			550.02		P	7.0
2	☐			661.13		P	3.4
3	☐			657.80		P	9.7
4	☐			641.13		P	9.8
5	☐			625.58		P	13.0
6	☐			655.58		P	6.9
7	☐			915.60		P	3.7
8	☐			658.91		P	1.5

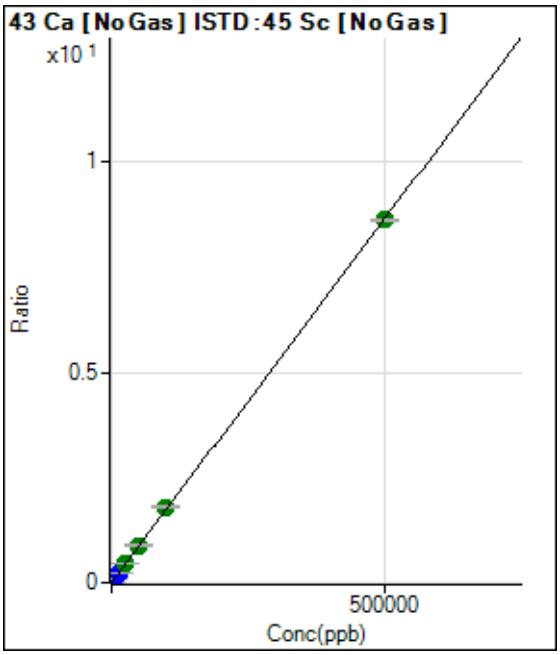


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14311.62	0.1504	P	1.7
2	☐	500.000	545.129	126472.85	1.3533	P	0.9
3	☐	2500.000	2655.054	539491.57	6.0091	P	0.3
4	☐	6250.000	6365.229	1268692.64	14.1961	M	1.3
5	☐	12500.000	12805.263	2466417.67	28.4070	A	0.8
6	☐	25000.000	24833.424	4806993.23	54.9488	A	1.2
7	☐	50000.000	48181.843	9518181.80	106.4703	A	0.4
8	☐	250000.00	250360.50	49434281.49	552.6056	A	2.9

y = 0.0022 * x + 0.1504
R = 1.0000
DL = 3.444
BEC = 68.15

Weight: <None>
Min Conc: 0

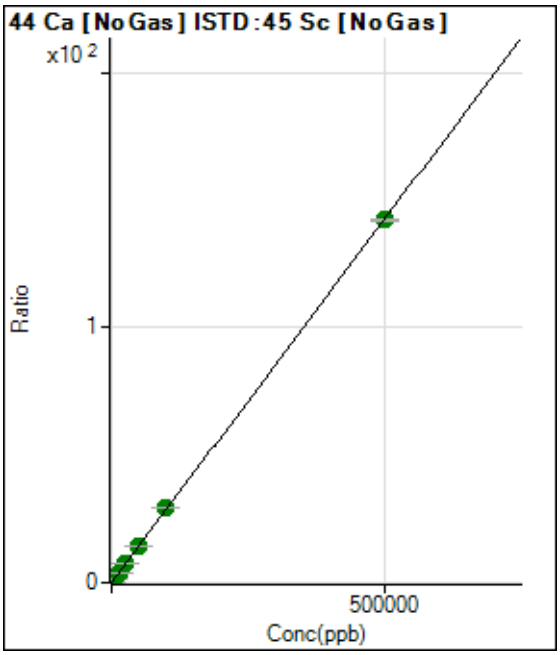
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1013.38	0.0002	P	6.9
2	☐	500.000	570.536	44704.80	0.0101	P	2.5
3	☐	5000.000	5369.275	418620.30	0.0931	P	1.2
4	☐	12500.000	13223.791	1006605.59	0.2290	P	1.0
5	☐	25000.000	26429.942	1969145.16	0.4576	A	1.9
6	☐	50000.000	51470.336	3797196.09	0.8909	A	0.8
7	☐	100000.00	104042.03	7450271.56	1.8006	A	1.5
8	☐	500000.00	498951.20	35633856.13	8.6342	A	0.4

y = 1.7304E-005 * x + 2.2005E-004
R = 1.0000
DL = 2.616
BEC = 12.72

Weight: <None>
Min Conc: 0

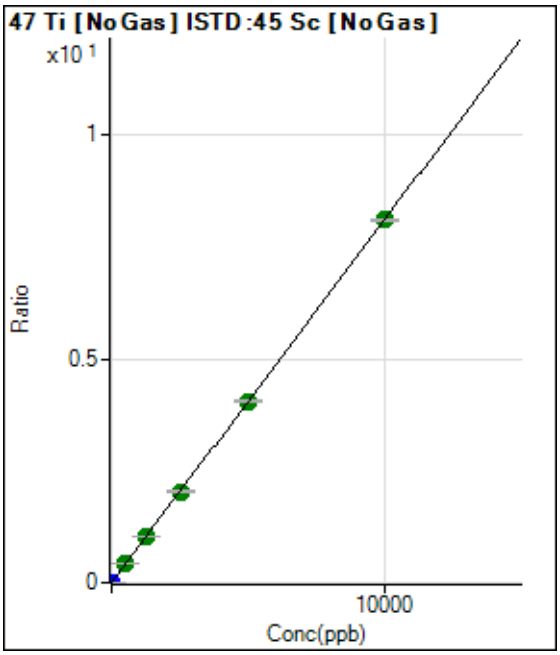


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	28026.38	0.0061	P	1.5
2	☐	500.000	560.744	734916.11	0.1659	P	2.2
3	☐	5000.000	5261.326	6768019.34	1.5057	A	0.6
4	☐	12500.000	12927.348	16220265.73	3.6908	A	0.4
5	☐	25000.000	25867.519	31755299.25	7.3791	A	1.8
6	☐	50000.000	50815.296	61764042.97	14.4899	A	1.0
7	☐	100000.00	103485.40	122068035.9	29.5025	A	0.5
8	☐	500000.00	499164.65	587202937.9	142.2828	A	0.2

y = 2.8503E-004 * x + 0.0061
R = 1.0000
DL = 0.9442
BEC = 21.35

Weight: <None>
Min Conc: 0

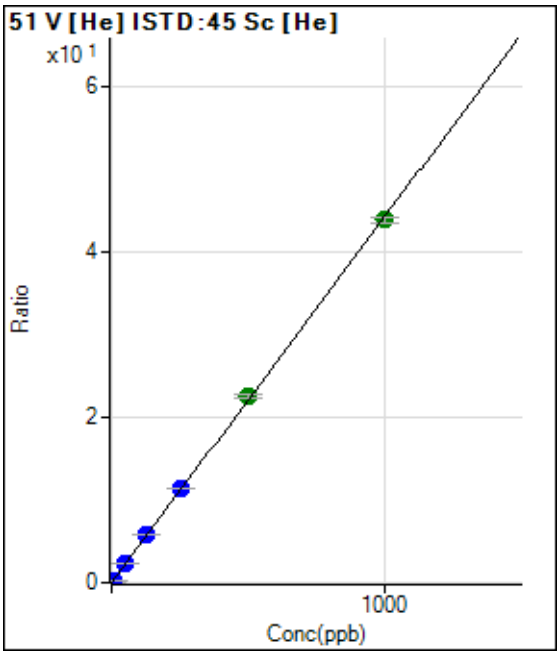
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	242.23	0.0001	P	8.5
2	☐	5.000	5.454	19833.78	0.0045	P	2.5
3	☐	500.000	524.615	1913384.28	0.4257	A	0.6
4	☐	1250.000	1259.220	4489937.23	1.0217	A	1.4
5	☐	2500.000	2504.597	8744932.79	2.0321	A	1.6
6	☐	5000.000	4994.971	17273807.10	4.0526	A	1.2
7	☐	10000.000	9998.982	33565878.67	8.1124	A	0.6
8	☐			3327.08	0.0008	P	1.9

y = 8.1132E-004 * x + 5.2611E-005
R = 1.0000
DL = 0.01646
BEC = 0.06485

Weight: <None>
Min Conc: 0

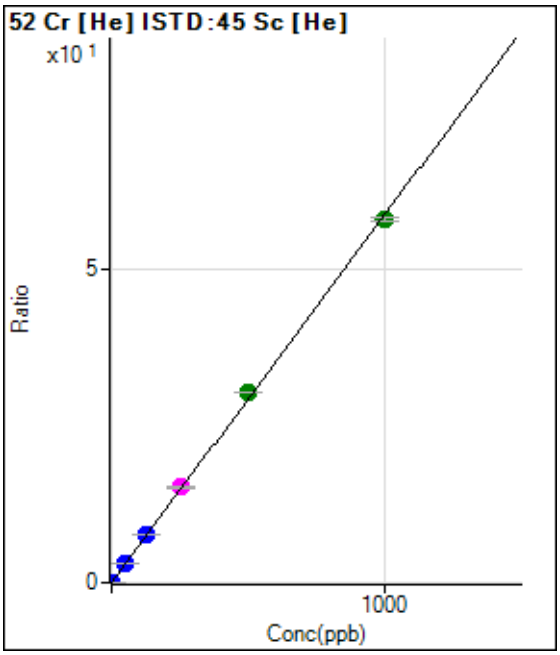


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0003	P	71.7
2	☐	5.000	5.597	23198.83	0.2482	P	1.4
3	☐	50.000	53.460	212648.08	2.3687	P	0.9
4	☐	125.000	129.317	512034.37	5.7292	P	0.5
5	☐	250.000	258.895	995837.00	11.4697	P	0.5
6	☐	500.000	509.699	1975318.23	22.5806	A	1.7
7	☐	1000.000	992.211	3929554.45	43.9565	A	1.3
8	☐			1050.05	0.0117	P	6.9

y = 0.0443 * x + 2.9351E-004
R = 0.9999
DL = 0.01424
BEC = 0.006625

Weight: <None>
Min Conc: 0

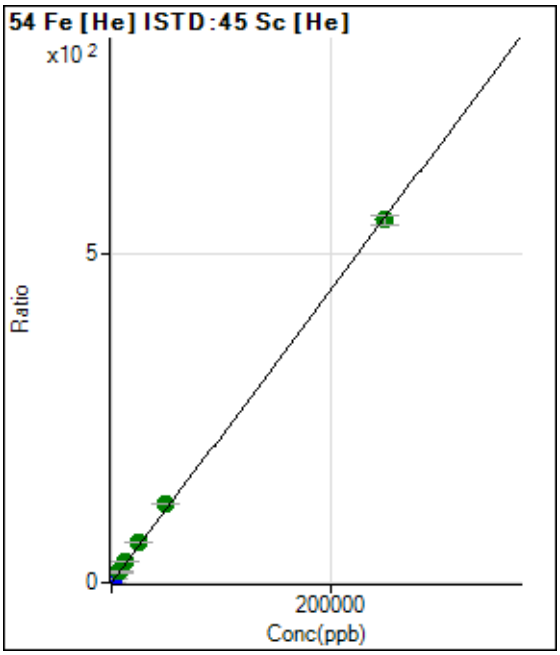
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1107.83	0.0116	P	2.3
2	☐	2.000	2.185	13049.37	0.1396	P	0.9
3	☐	50.000	53.550	282691.18	3.1487	P	0.3
4	☐	125.000	130.098	682153.27	7.6329	P	0.9
5	☐	250.000	260.198	1324409.33	15.2544	M	1.2
6	☐	500.000	519.523	2663629.46	30.4460	A	0.2
7	☐	1000.000	986.874	5169314.09	57.8240	A	1.1
8	☐			43924.99	0.4910	P	2.3

y = 0.0586 * x + 0.0116
R = 0.9997
DL = 0.01371
BEC = 0.1987

Weight: <None>
Min Conc: 0

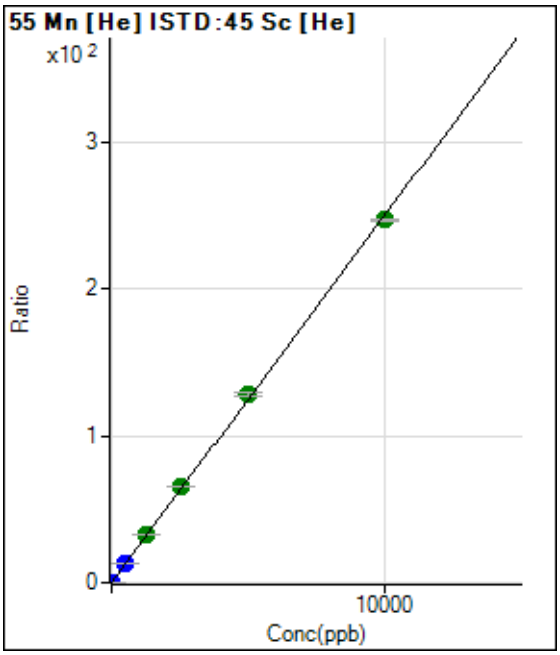


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	700.03	0.0074	P	4.8
2	☐	50.000	62.431	13601.03	0.1455	P	1.3
3	☐	2500.000	2955.192	587865.98	6.5479	P	0.3
4	☐	6250.000	7270.080	1438648.24	16.0979	A	1.5
5	☐	12500.000	14629.625	2811908.39	32.3864	A	0.4
6	☐	25000.000	27810.921	5385390.62	61.5600	A	1.1
7	☐	50000.000	53693.500	10624344.63	118.8447	A	0.9
8	☐	250000.00	248843.67	49272011.49	550.7615	A	2.8

y = 0.0022 * x + 0.0074
R = 0.9998
DL = 0.4834
BEC = 3.324

Weight: <None>
Min Conc: 0

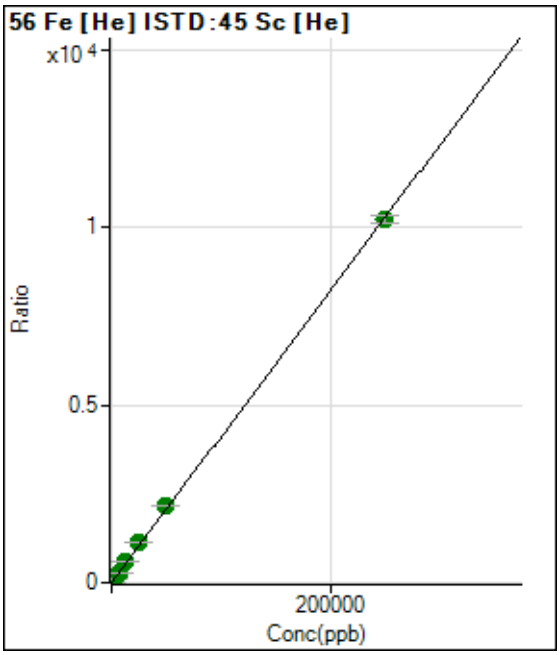
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2483.57	0.0261	P	3.5
2	☐	1.000	1.112	5033.16	0.0539	P	2.4
3	☐	500.000	535.030	1201535.86	13.3832	P	0.7
4	☐	1250.000	1322.782	2953604.37	33.0496	A	1.1
5	☐	2500.000	2621.455	5684604.22	65.4712	A	0.7
6	☐	5000.000	5144.955	11238399.83	128.4709	A	1.8
7	☐	10000.000	9886.310	22066822.17	246.8398	A	0.6
8	☐			11832.75	0.1323	P	3.7

y = 0.0250 * x + 0.0261
R = 0.9998
DL = 0.1111
BEC = 1.045

Weight: <None>
Min Conc: 0

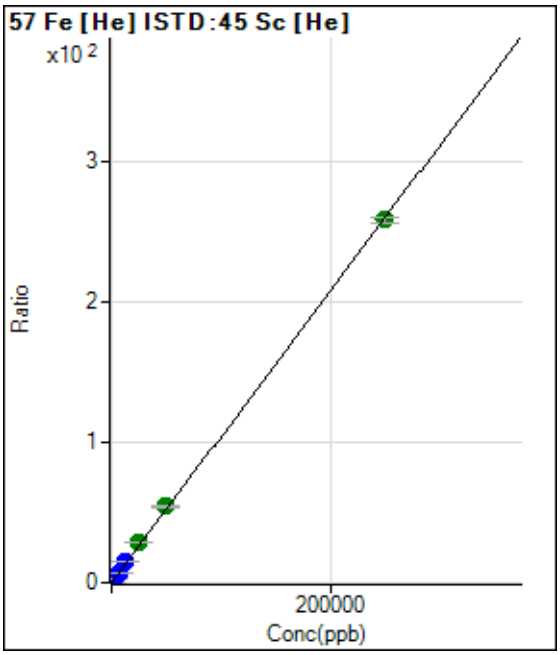


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8985.12	0.0944	P	2.4
2	☐	50.000	60.703	241337.75	2.5823	P	0.8
3	☐	2500.000	2961.888	10906266.09	121.4874	A	1.5
4	☐	6250.000	7151.164	26203006.00	293.1848	A	0.3
5	☐	12500.000	14194.268	50517962.58	581.8464	A	0.8
6	☐	25000.000	27711.834	99372957.41	1,135.8638	A	0.7
7	☐	50000.000	53219.589	195003961.5	2,181.2991	A	0.6
8	☐	250000.00	248973.03	912939701.9	10,204.253	A	2.1

y = 0.0410 * x + 0.0944
R = 0.9999
DL = 0.1687
BEC = 2.303

Weight: <None>
Min Conc: 0

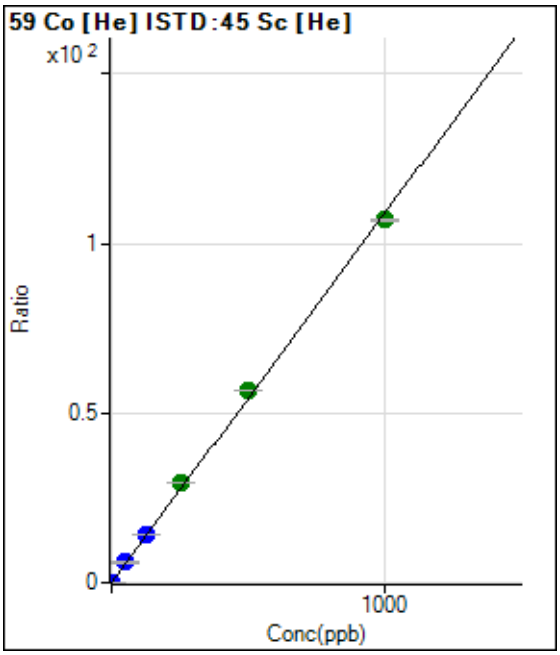
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	227.78	0.0024	P	8.5
2	☐	50.000	60.202	6058.01	0.0648	P	5.4
3	☐	2500.000	2895.127	269797.41	3.0052	P	0.5
4	☐	6250.000	6992.751	648409.49	7.2552	P	0.4
5	☐	12500.000	13920.122	1253752.40	14.4401	P	0.4
6	☐	25000.000	28026.432	2543284.32	29.0710	A	0.7
7	☐	50000.000	52397.210	4858543.40	54.3480	A	1.2
8	☐	250000.00	249124.38	23118072.43	258.3906	A	1.9

y = 0.0010 * x + 0.0024
R = 0.9999
DL = 0.5864
BEC = 2.306

Weight: <None>
Min Conc: 0

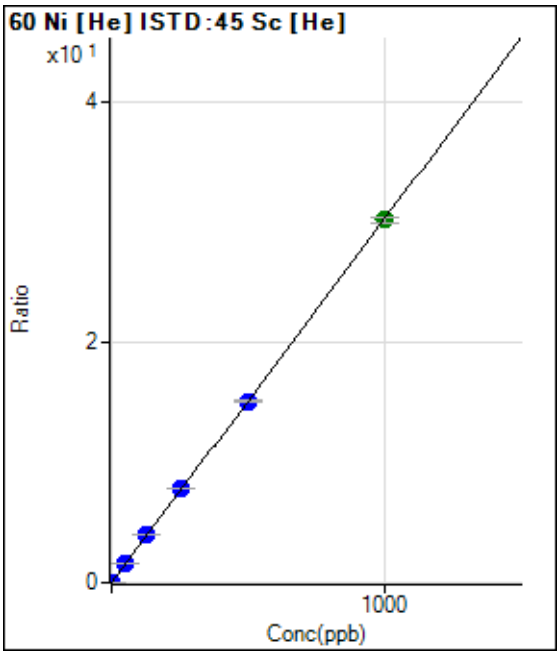


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	115.56	0.0012	P	2.6
2	☐	1.000	1.206	12366.56	0.1323	P	1.6
3	☐	50.000	54.861	535582.50	5.9657	P	0.7
4	☐	125.000	132.038	1283055.87	14.3564	P	0.4
5	☐	250.000	270.320	2551817.36	29.3905	A	1.2
6	☐	500.000	521.011	4955817.43	56.6456	A	0.8
7	☐	1000.000	983.292	9557079.30	106.9048	A	0.5
8	☐			19807.21	0.2214	P	2.8

y = 0.1087 * x + 0.0012
R = 0.9994
DL = 0.0008589
BEC = 0.01117

Weight: <None>
Min Conc: 0

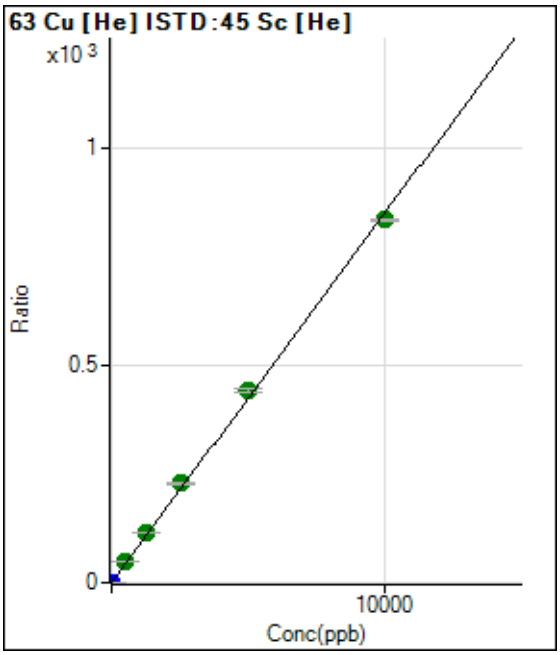
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Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	604.47	0.0063	P	9.6
2	☐	1.000	1.190	3955.03	0.0423	P	1.7
3	☐	50.000	54.125	147449.29	1.6424	P	0.2
4	☐	125.000	131.281	355213.55	3.9745	P	0.5
5	☐	250.000	258.799	679744.09	7.8290	P	0.2
6	☐	500.000	498.169	1317865.15	15.0643	P	0.8
7	☐	1000.000	997.724	2696585.60	30.1642	A	1.8
8	☐			12840.34	0.1435	P	2.2

y = 0.0302 * x + 0.0063
R = 0.9999
DL = 0.0605
BEC = 0.2099

Weight: <None>
Min Conc: 0

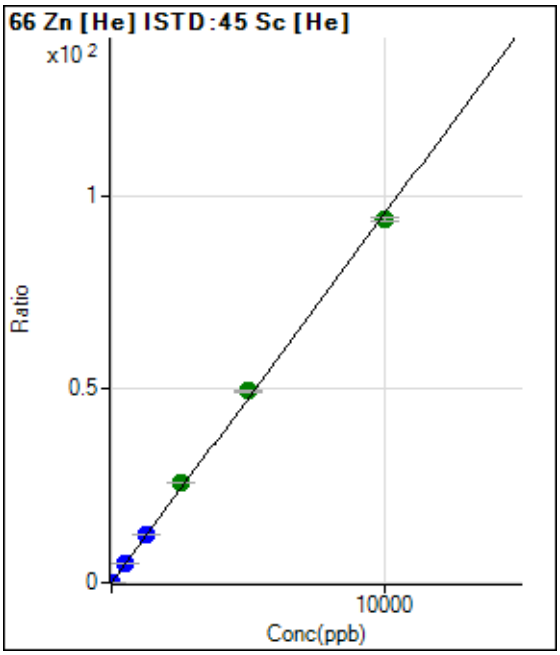


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2388.01	0.0251	P	3.7
2	☐	2.000	2.399	21347.25	0.2284	P	1.4
3	☐	500.000	573.088	4362855.39	48.5982	A	1.1
4	☐	1250.000	1365.383	10344303.46	115.7504	A	2.0
5	☐	2500.000	2689.746	19795525.40	227.9991	A	0.6
6	☐	5000.000	5212.309	38649659.98	441.8032	A	1.1
7	☐	10000.000	9828.332	74471565.56	833.0422	A	0.8
8	☐			20756.37	0.2320	P	2.8

y = 0.0848 * x + 0.0251
R = 0.9994
DL = 0.03307
BEC = 0.2961

Weight: <None>
Min Conc: 0

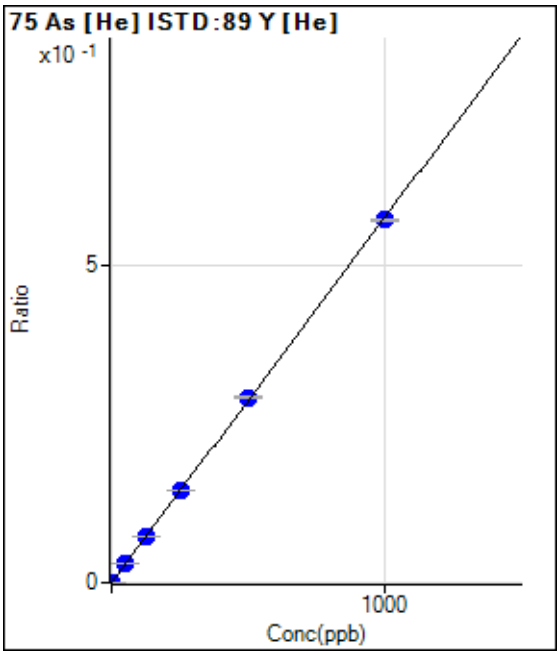
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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1490.09	0.0157	P	2.7
2	☐	2.000	5.714	6549.35	0.0701	P	0.6
3	☐	500.000	543.556	466163.99	5.1925	P	0.6
4	☐	1250.000	1317.468	1122790.08	12.5632	P	0.5
5	☐	2500.000	2700.246	2234221.89	25.7328	A	0.2
6	☐	5000.000	5201.867	4335433.79	49.5582	A	1.3
7	☐	10000.000	9838.393	8377962.72	93.7164	A	0.9
8	☐			49937.55	0.5582	P	2.7

y = 0.0095 * x + 0.0157
R = 0.9995
DL = 0.1319
BEC = 1.644

Weight: <None>
Min Conc: 0

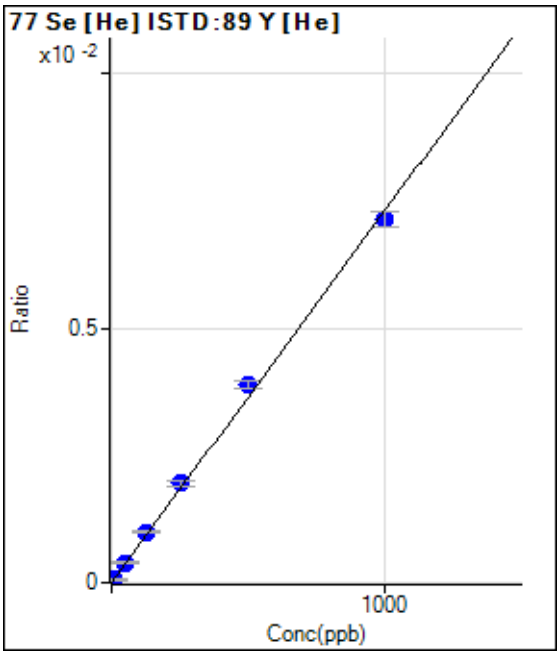


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10.00	0.0000	P	57.5
2	☐	1.000	1.203	685.58	0.0007	P	11.2
3	☐	50.000	51.902	28681.45	0.0299	P	0.8
4	☐	125.000	126.838	68824.67	0.0730	P	0.3
5	☐	250.000	253.485	135602.74	0.1458	P	0.3
6	☐	500.000	507.855	267792.96	0.2921	P	1.2
7	☐	1000.000	994.876	522485.88	0.5722	P	0.8
8	☐			273.34	0.0003	P	6.5

y = 5.7516E-004 * x + 1.0065E-005
R = 0.9999
DL = 0.03021
BEC = 0.0175

Weight: <None>
Min Conc: 0

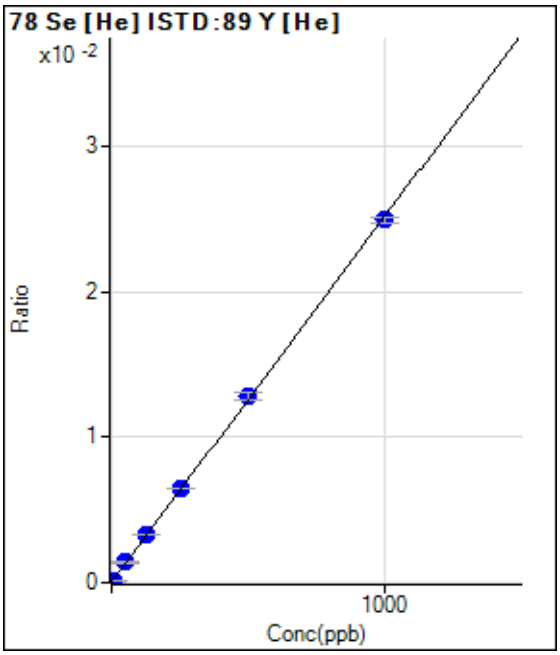
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	7.967	56.67	0.0001	P	30.0
3	☐	50.000	54.252	380.01	0.0004	P	6.7
4	☐	125.000	136.314	937.82	0.0010	P	3.5
5	☐	250.000	267.517	1814.58	0.0020	P	5.3
6	☐	500.000	534.564	3573.83	0.0039	P	3.4
7	☐	1000.000	976.697	6502.67	0.0071	P	4.3
8	☐			1.11	0.0000	P	173.2

y = 7.2929E-006 * x + 0.0000E+000
R = 0.9989
DL = 0
BEC = 0

Weight: <None>
Min Conc: 0

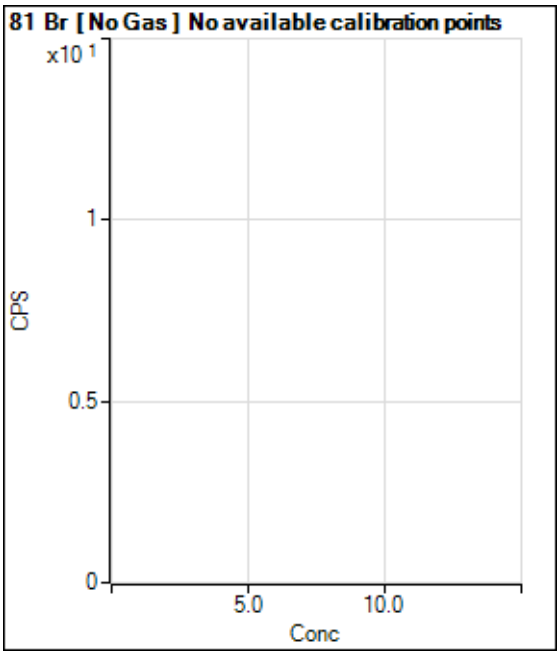


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	28.89	0.0000	P	35.1
2	☐	5.000	5.280	157.78	0.0002	P	28.9
3	☐	50.000	55.657	1371.20	0.0014	P	9.9
4	☐	125.000	131.124	3134.83	0.0033	P	1.1
5	☐	250.000	256.408	6018.01	0.0065	P	1.4
6	☐	500.000	510.906	11792.82	0.0129	P	3.7
7	☐	1000.000	991.895	22779.58	0.0249	P	1.3
8	☐			30.00	0.0000	P	59.7

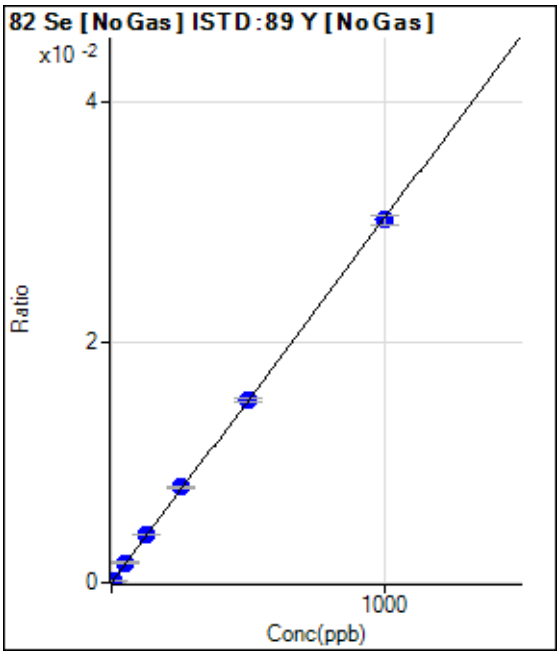
y = 2.5122E-005 * x + 2.9084E-005
R = 0.9999
DL = 1.221
BEC = 1.158

Weight: <None>
Min Conc: 0

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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			29055.69		P	1.4
2	☐			28464.51		P	1.1
3	☐			28543.60		P	1.2
4	☐			27261.11		P	1.1
5	☐			27002.78		P	0.7
6	☐			26952.69		P	1.9
7	☐			28219.61		P	1.8
8	☐			26741.13		P	0.4

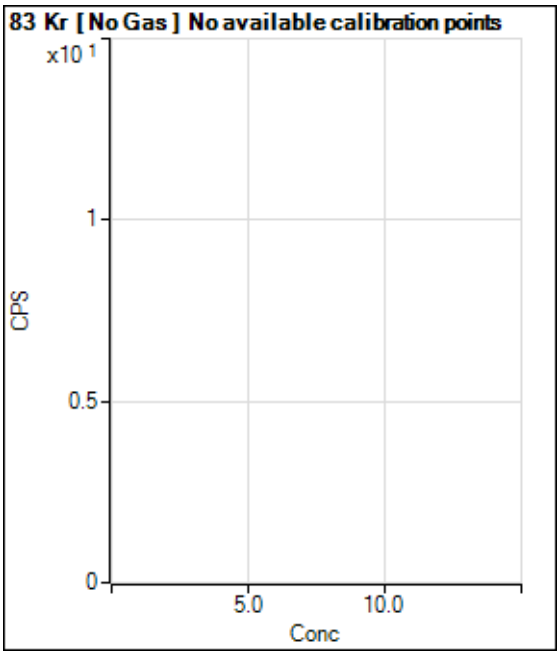


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-20.00	0.0000	P	-294.
2	☐	5.000	5.826	2211.35	0.0002	P	4.2
3	☐	50.000	54.976	20769.29	0.0017	P	2.8
4	☐	125.000	132.124	50228.23	0.0040	P	1.1
5	☐	250.000	262.181	98442.31	0.0080	P	1.7
6	☐	500.000	501.333	188567.62	0.0152	P	1.2
7	☐	1000.000	995.145	366825.44	0.0302	P	2.3
8	☐			305.57	0.0000	P	18.1

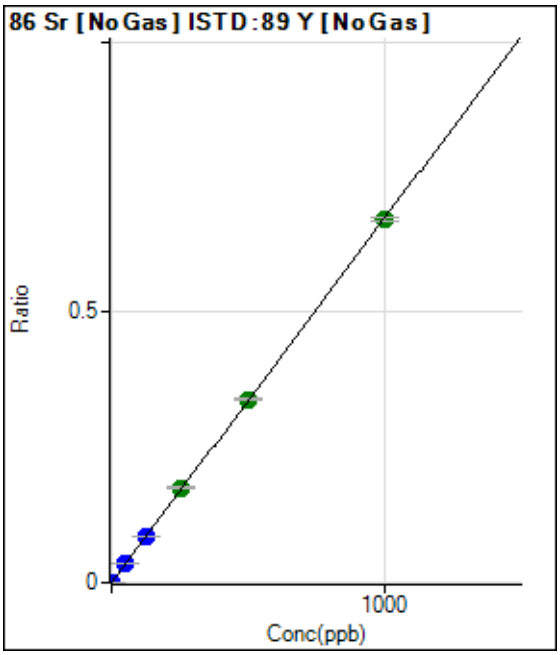
y = 3.0374E-005 * x - 1.5602E-006
R = 0.9999
DL = 0.454
BEC = -0.05137

Weight: <None>
Min Conc: 0

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LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			281.12		P	14.1
2	☐			261.12		P	6.0
3	☐			304.45		P	14.8
4	☐			248.90		P	15.1
5	☐			303.34		P	16.4
6	☐			277.79		P	4.9
7	☐			302.23		P	5.0
8	☐			350.01		P	14.4

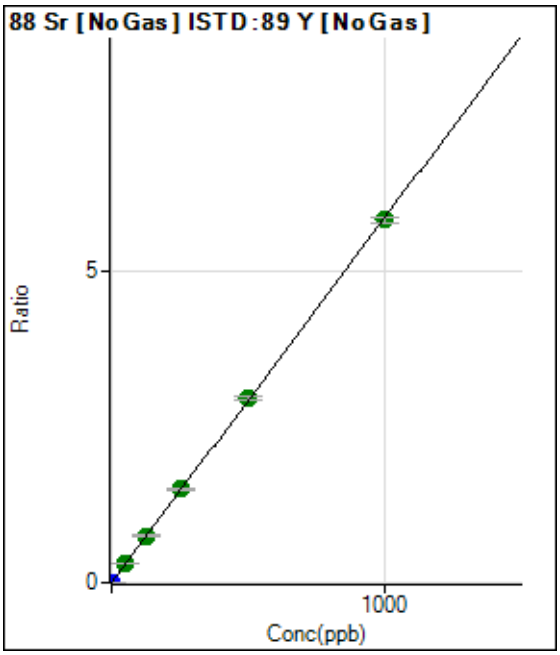


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	504.46	0.0000	P	6.1
2	☐	1.000	1.076	9626.71	0.0008	P	2.0
3	☐	50.000	51.499	432286.23	0.0347	P	0.9
4	☐	125.000	125.161	1056026.32	0.0843	P	0.7
5	☐	250.000	260.507	2169827.12	0.1755	A	1.9
6	☐	500.000	502.894	4195572.09	0.3388	A	0.8
7	☐	1000.000	995.831	8142615.37	0.6708	A	0.9
8	☐			26058.81	0.0022	P	2.0

y = 6.7355E-004 * x + 3.9038E-005
R = 0.9999
DL = 0.01054
BEC = 0.05796

Weight: <None>
Min Conc: 0

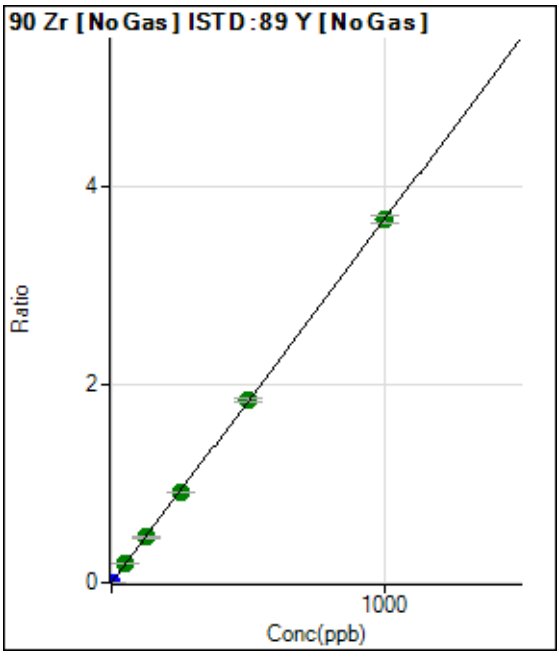
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	590.02	0.0000	P	5.2
2	☐	1.000	1.063	78931.35	0.0063	P	2.1
3	☐	50.000	53.310	3880420.81	0.3117	A	0.5
4	☐	125.000	128.630	9415954.93	0.7520	A	1.1
5	☐	250.000	255.886	18496788.75	1.4960	A	1.2
6	☐	500.000	505.868	36633841.95	2.9574	A	1.4
7	☐	1000.000	994.975	70606156.17	5.8169	A	1.8
8	☐			221817.56	0.0188	P	1.7

y = 0.0058 * x + 4.5685E-005
R = 1.0000
DL = 0.001214
BEC = 0.007815

Weight: <None>
Min Conc: 0

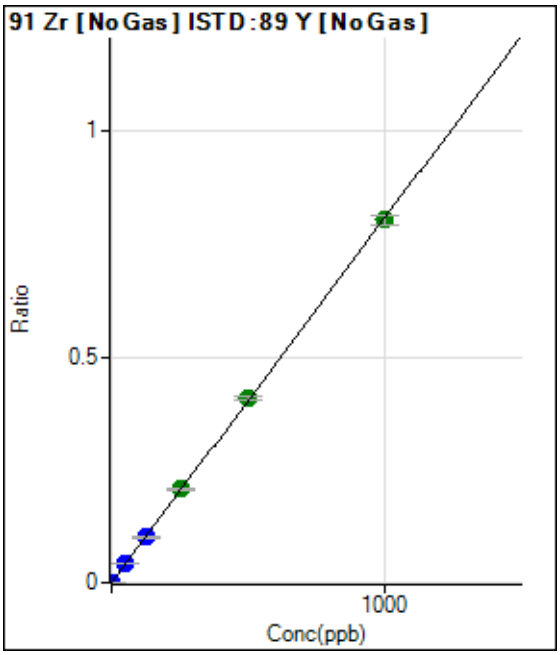


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1115.69	0.0001	P	16.9
2	☐	1.000	1.044	49293.43	0.0039	P	2.0
3	☐	50.000	52.514	2396256.54	0.1925	A	1.7
4	☐	125.000	125.617	5764066.16	0.4604	A	2.4
5	☐	250.000	249.833	11320138.86	0.9155	A	0.3
6	☐	500.000	501.521	22761754.38	1.8377	A	1.9
7	☐	1000.000	999.079	44435909.34	3.6608	A	2.1
8	☐			20175.82	0.0017	P	2.4

y = 0.0037 * x + 8.6343E-005
R = 1.0000
DL = 0.01193
BEC = 0.02356

Weight: <None>
Min Conc: 0

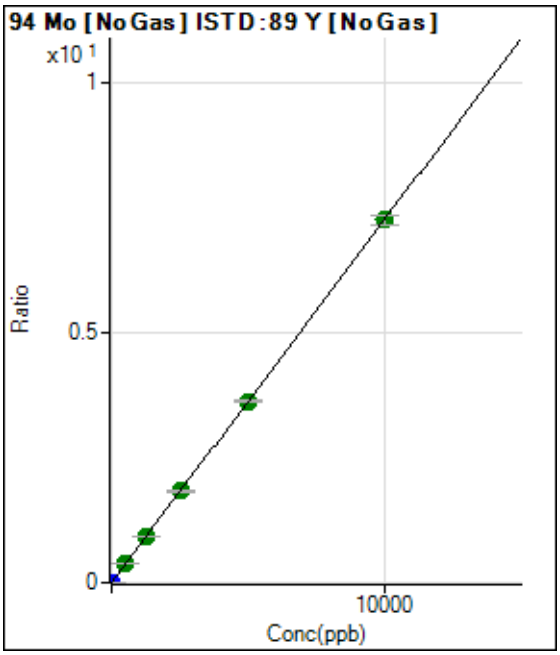
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	245.56	0.0000	P	8.9
2	☐	1.000	1.045	10874.32	0.0009	P	3.7
3	☐	50.000	51.038	512983.98	0.0412	P	0.9
4	☐	125.000	124.179	1254967.49	0.1002	P	2.1
5	☐	250.000	256.192	2556354.47	0.2068	A	2.1
6	☐	500.000	505.762	5055619.79	0.4082	A	1.8
7	☐	1000.000	995.621	9753037.49	0.8035	A	2.4
8	☐			4541.89	0.0004	P	0.2

y = 8.0701E-004 * x + 1.8999E-005
R = 1.0000
DL = 0.006269
BEC = 0.02354

Weight: <None>
Min Conc: 0

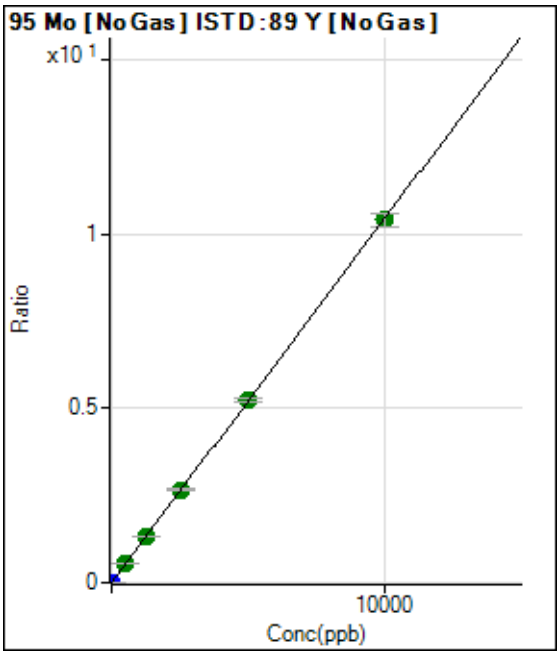


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	453.35	0.0000	P	2.0
2	☐	5.000	6.146	56738.40	0.0045	P	1.1
3	☐	500.000	518.395	4689056.28	0.3767	A	1.2
4	☐	1250.000	1268.911	11544239.27	0.9220	A	0.7
5	☐	2500.000	2519.634	22635161.89	1.8308	A	1.6
6	☐	5000.000	4991.390	44921868.78	3.6267	A	1.5
7	☐	10000.000	9996.112	88145993.13	7.2630	A	2.5
8	☐			17289.75	0.0015	P	2.8

y = 7.2658E-004 * x + 3.5097E-005
R = 1.0000
DL = 0.002846
BEC = 0.0483

Weight: <None>
Min Conc: 0

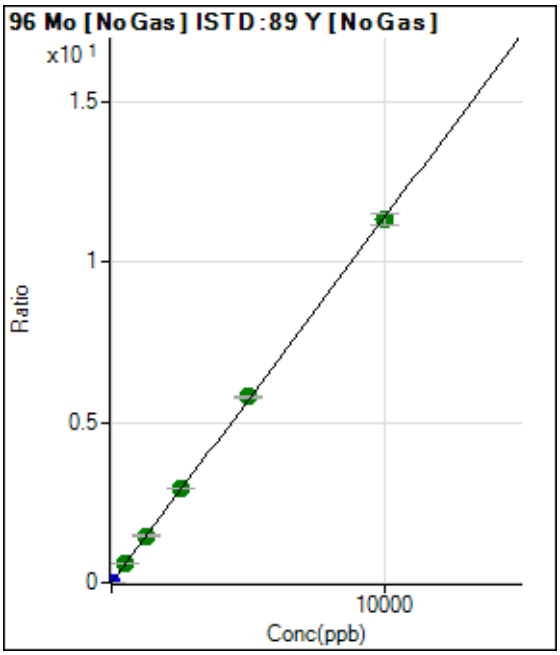
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	234.45	0.0000	P	24.0
2	☐	5.000	5.291	69957.07	0.0055	P	1.4
3	☐	500.000	524.868	6831090.73	0.5487	A	0.3
4	☐	1250.000	1283.169	16795093.64	1.3414	A	0.6
5	☐	2500.000	2551.080	32970392.56	2.6668	A	1.7
6	☐	5000.000	5027.486	65101589.03	5.2554	A	2.0
7	☐	10000.000	9968.098	126454170.3	10.4201	A	3.8
8	☐			16868.09	0.0014	P	3.0

y = 0.0010 * x + 1.8141E-005
R = 1.0000
DL = 0.01251
BEC = 0.01735

Weight: <None>
Min Conc: 0

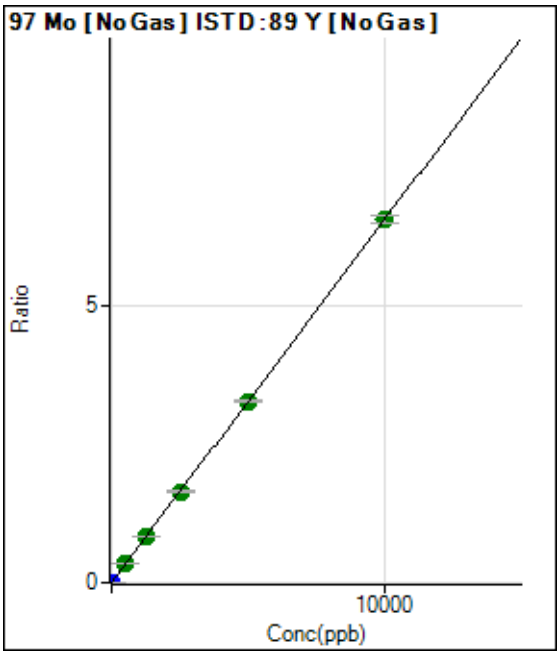


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	295.56	0.0000	P	13.5
2	☐	5.000	5.320	76753.79	0.0061	P	1.3
3	☐	500.000	526.939	7478302.25	0.6007	A	1.0
4	☐	1250.000	1282.637	18307912.37	1.4623	A	2.4
5	☐	2500.000	2573.491	36277438.62	2.9339	A	0.8
6	☐	5000.000	5084.122	71793770.60	5.7961	A	0.9
7	☐	10000.000	9934.139	137441615.7	11.3252	A	3.0
8	☐			31912.25	0.0027	P	2.7

y = 0.0011 * x + 2.2871E-005
R = 0.9999
DL = 0.008107
BEC = 0.02006

Weight: <None>
Min Conc: 0

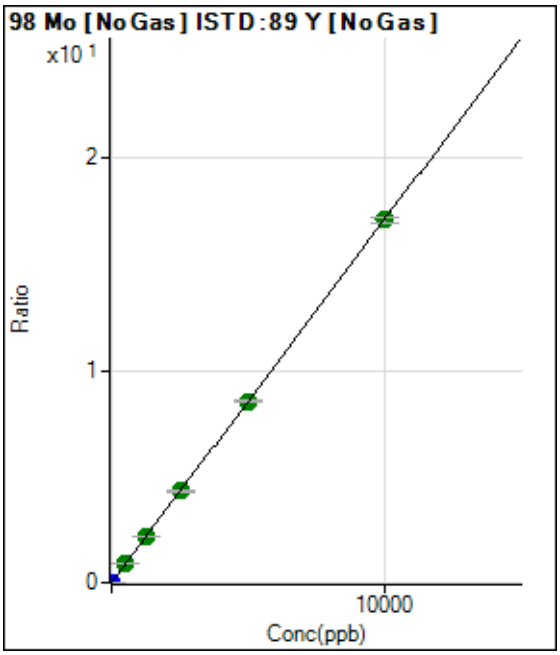
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	152.23	0.0000	P	10.2
2	☐	5.000	5.198	43221.52	0.0034	P	3.0
3	☐	500.000	526.257	4306202.43	0.3460	A	2.3
4	☐	1250.000	1257.954	10354270.95	0.8270	A	1.8
5	☐	2500.000	2515.509	20449750.81	1.6537	A	0.8
6	☐	5000.000	4994.019	40664362.17	3.2831	A	0.6
7	☐	10000.000	9996.806	79764164.37	6.5719	A	2.0
8	☐			10618.62	0.0009	P	7.4

y = 6.5740E-004 * x + 1.1786E-005
R = 1.0000
DL = 0.005474
BEC = 0.01793

Weight: <None>
Min Conc: 0

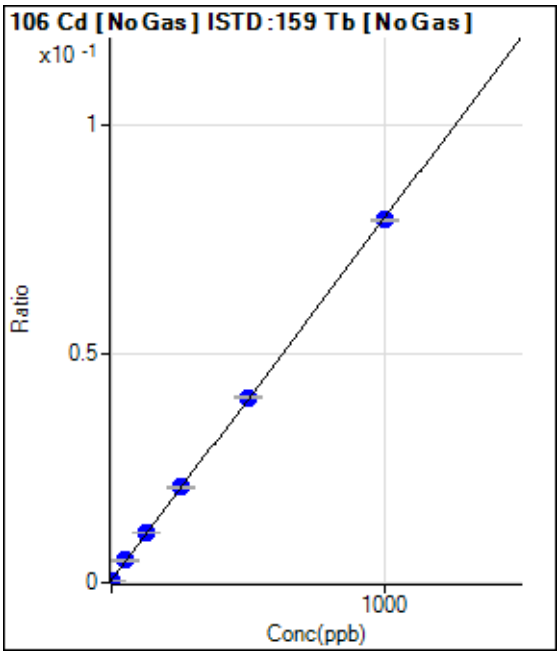


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	341.12	0.0000	P	10.0
2	☐	5.000	5.220	112819.74	0.0089	P	2.1
3	☐	500.000	516.509	10990161.37	0.8829	A	1.4
4	☐	1250.000	1257.065	26902997.38	2.1488	A	1.7
5	☐	2500.000	2517.958	53220974.76	4.3041	A	0.9
6	☐	5000.000	5002.188	105903809.5	8.5504	A	0.3
7	☐	10000.000	9992.708	207327001.3	17.0809	A	1.6
8	☐			26114.65	0.0022	P	6.5

y = 0.0017 * x + 2.6415E-005
R = 1.0000
DL = 0.004647
BEC = 0.01545

Weight: <None>
Min Conc: 0

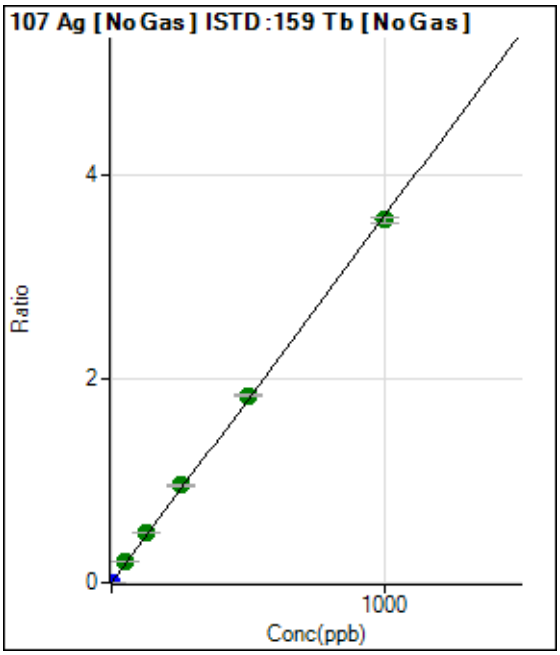
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4810.89	0.0005	P	2.3
2	☐	1.000	1.053	5416.67	0.0006	P	2.3
3	☐	50.000	54.550	43100.46	0.0049	P	1.0
4	☐	125.000	132.037	97882.55	0.0110	P	0.6
5	☐	250.000	257.803	185925.35	0.0210	P	2.3
6	☐	500.000	504.042	360584.51	0.0404	P	1.4
7	☐	1000.000	994.921	694508.10	0.0793	P	0.4
8	☐			4459.65	0.0005	P	1.2

y = 7.9186E-005 * x + 5.3614E-004
R = 0.9999
DL = 0.4612
BEC = 6.771

Weight: <None>
Min Conc: 0

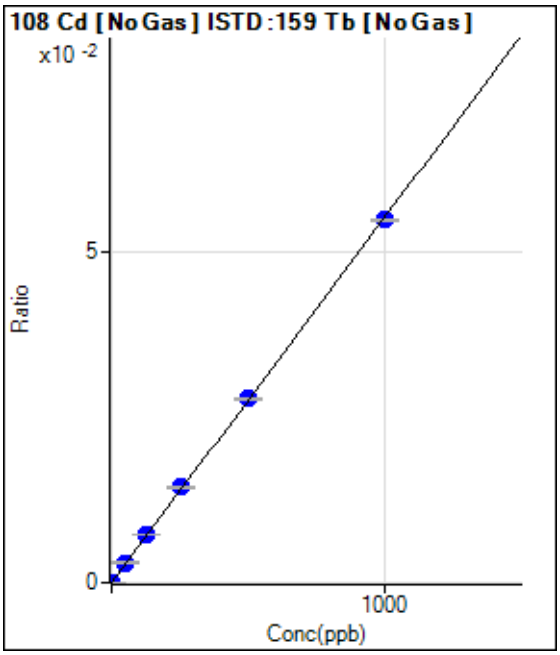


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	150.00	0.0000	P	21.4
2	☐	1.000	1.108	35053.41	0.0040	P	2.0
3	☐	50.000	57.367	1835385.47	0.2068	A	1.6
4	☐	125.000	136.774	4390987.64	0.4931	A	1.5
5	☐	250.000	266.142	8515001.19	0.9594	A	1.7
6	☐	500.000	509.314	16367347.26	1.8360	A	1.1
7	☐	1000.000	989.467	31228737.04	3.5669	A	1.9
8	☐			3127.06	0.0004	P	15.9

y = 0.0036 * x + 1.6715E-005
R = 0.9998
DL = 0.002971
BEC = 0.004637

Weight: <None>
Min Conc: 0

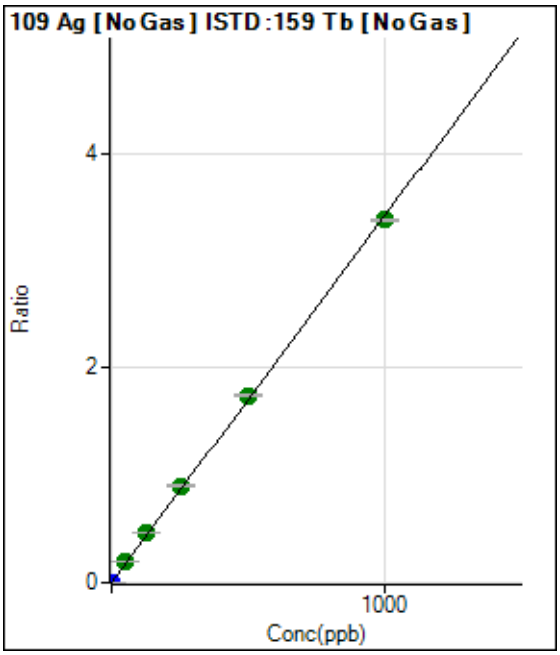
Reviewed By:mohan
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14.44	0.0000	P	13.5
2	☐	1.000	1.119	554.46	0.0001	P	3.5
3	☐	50.000	54.966	26944.12	0.0030	P	2.4
4	☐	125.000	131.279	64557.05	0.0072	P	0.4
5	☐	250.000	261.100	127956.46	0.0144	P	1.3
6	☐	500.000	504.350	248251.69	0.0278	P	0.9
7	☐	1000.000	994.017	480512.08	0.0549	P	0.7
8	☐			184.45	0.0000	P	9.6

y = 5.5207E-005 * x + 1.6098E-006
R = 0.9999
DL = 0.01177
BEC = 0.02916

Weight: <None>
Min Conc: 0

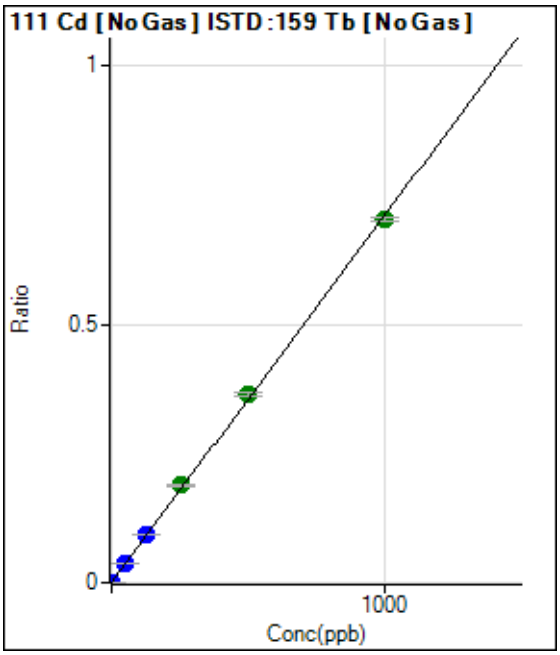


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	81.11	0.0000	P	10.5
2	☐	1.000	1.104	33045.24	0.0038	P	2.8
3	☐	50.000	56.559	1713799.50	0.1931	A	1.3
4	☐	125.000	135.397	4116801.36	0.4623	A	0.6
5	☐	250.000	264.215	8006635.09	0.9021	A	1.5
6	☐	500.000	509.620	15513060.33	1.7399	A	1.0
7	☐	1000.000	990.009	29595175.95	3.3801	A	0.8
8	☐			2894.78	0.0003	P	13.6

y = 0.0034 * x + 9.0400E-006
R = 0.9998
DL = 0.0008305
BEC = 0.002648

Weight: <None>
Min Conc: 0

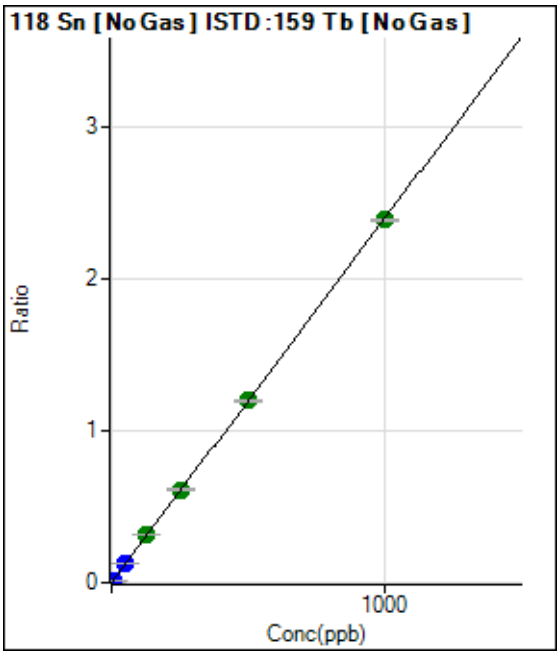
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On:4/29/2025 4:10:15 PM
Inst Id :P8
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3390.84	0.0004	P	1.9
2	☐	1.000	1.165	10537.69	0.0012	P	2.1
3	☐	50.000	53.664	341556.36	0.0385	P	1.0
4	☐	125.000	131.029	831965.34	0.0934	P	0.8
5	☐	250.000	264.661	1671367.38	0.1883	A	1.7
6	☐	500.000	513.278	3252825.28	0.3649	A	2.3
7	☐	1000.000	988.759	6150866.15	0.7025	A	1.1
8	☐			4078.25	0.0005	P	0.5

y = 7.1011E-004 * x + 3.7789E-004
R = 0.9997
DL = 0.03042
BEC = 0.5322

Weight: <None>
Min Conc: 0

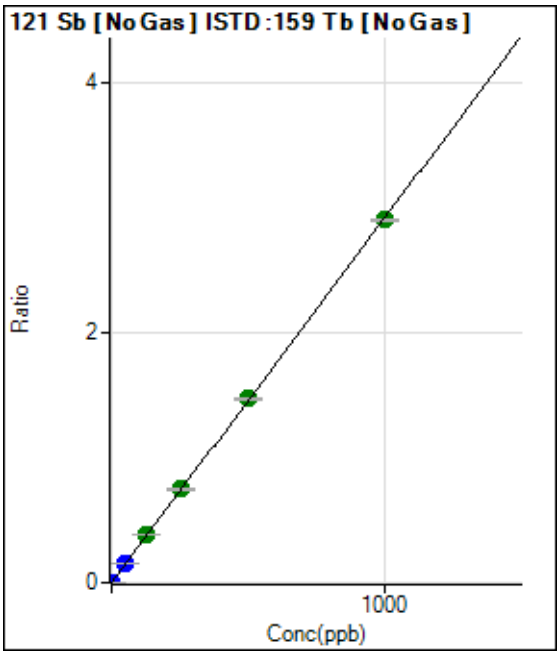


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3468.25	0.0004	P	1.3
2	☐	5.000	5.344	115211.89	0.0132	P	0.6
3	☐	50.000	51.371	1094587.06	0.1233	P	1.1
4	☐	125.000	131.107	2798129.23	0.3142	A	1.0
5	☐	250.000	256.011	5441935.41	0.6131	A	1.3
6	☐	500.000	501.258	10697963.94	1.2000	A	1.0
7	☐	1000.000	997.035	20896606.63	2.3866	A	0.6
8	☐			6566.09	0.0008	P	5.2

y = 0.0024 * x + 3.8652E-004
R = 1.0000
DL = 0.006202
BEC = 0.1615

Weight: <None>
Min Conc: 0

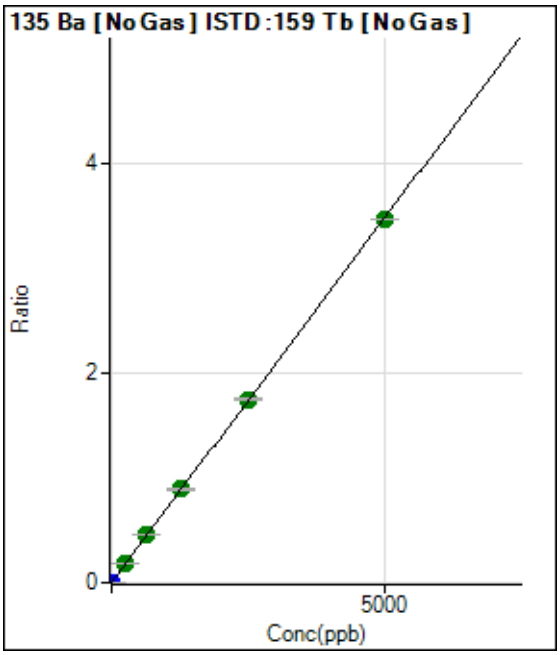
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LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	76.67	0.0000	P	34.4
2	☐	2.000	2.133	54393.15	0.0062	P	1.2
3	☐	50.000	51.631	1334939.85	0.1504	P	1.1
4	☐	125.000	131.106	3401202.52	0.3819	A	0.9
5	☐	250.000	255.988	6619021.71	0.7457	A	1.2
6	☐	500.000	504.082	13092320.91	1.4685	A	1.1
7	☐	1000.000	995.617	25395113.79	2.9004	A	0.6
8	☐			15286.41	0.0018	P	3.1

y = 0.0029 * x + 8.5427E-006
R = 1.0000
DL = 0.003029
BEC = 0.002932

Weight: <None>
Min Conc: 0

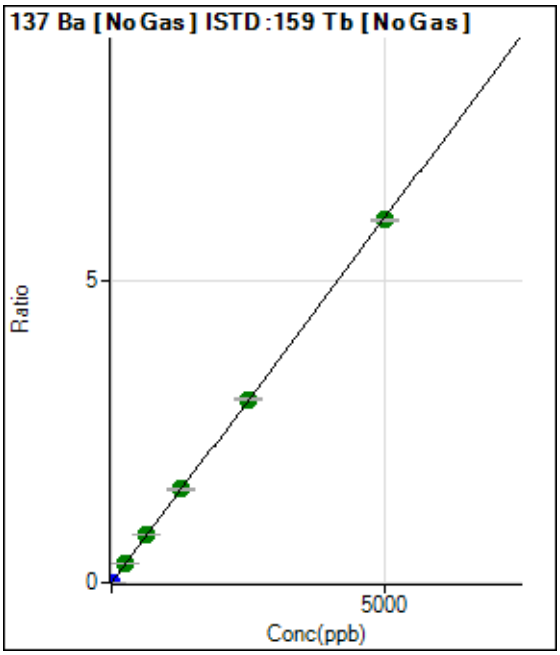


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	162.22	0.0000	P	4.1
2	☐	10.000	10.785	65849.05	0.0075	P	1.0
3	☐	250.000	268.932	1663356.16	0.1874	A	2.0
4	☐	625.000	654.816	4061807.93	0.4562	A	2.5
5	☐	1250.000	1287.419	7960750.02	0.8969	A	1.5
6	☐	2500.000	2518.210	15640669.63	1.7544	A	0.6
7	☐	5000.000	4976.865	30358660.10	3.4672	A	0.1
8	☐			11542.79	0.0014	P	2.5

y = 6.9667E-004 * x + 1.8078E-005
R = 1.0000
DL = 0.003205
BEC = 0.02595

Weight: <None>
Min Conc: 0

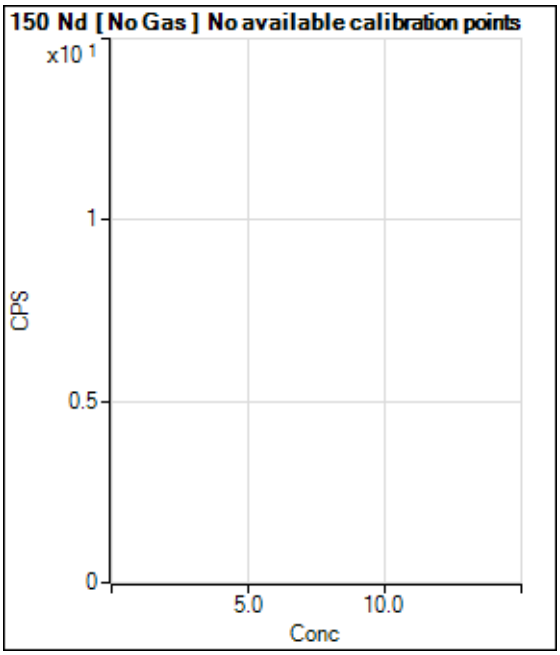
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	311.12	0.0000	P	5.9
2	☐	10.000	10.914	115186.16	0.0132	P	0.6
3	☐	250.000	270.212	2887628.64	0.3254	A	1.7
4	☐	625.000	652.870	6999602.05	0.7861	A	1.6
5	☐	1250.000	1284.483	13724522.58	1.5466	A	2.9
6	☐	2500.000	2519.046	27036678.76	3.0330	A	1.9
7	☐	5000.000	4977.360	52473525.89	5.9928	A	0.6
8	☐			20369.89	0.0024	P	3.5

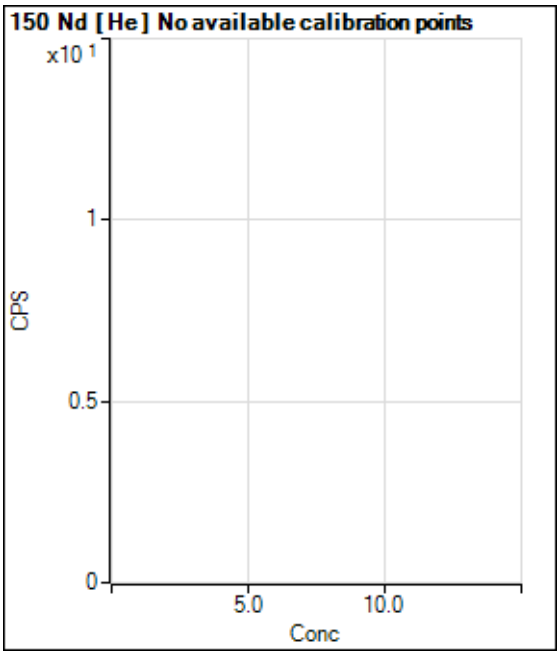
y = 0.0012 * x + 3.4672E-005
R = 1.0000
DL = 0.005096
BEC = 0.0288

Weight: <None>
Min Conc: 0

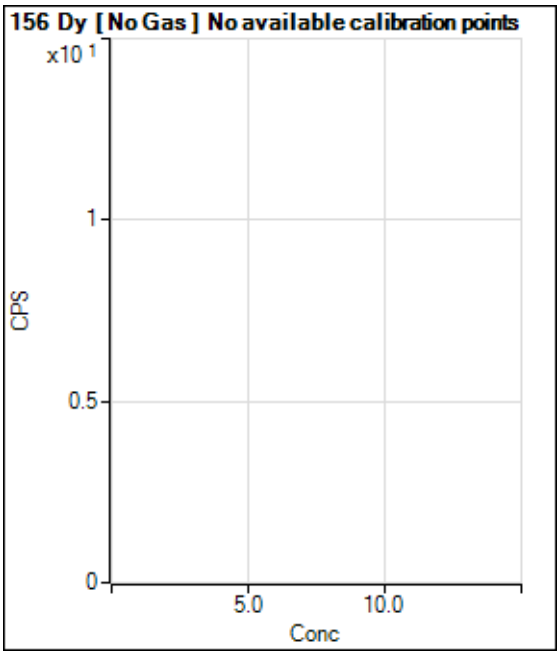


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			6.67		P	50.0
2	☐			14.45		P	26.7
3	☐			163.34		P	12.4
4	☐			282.23		P	7.2
5	☐			574.46		P	4.2
6	☐			1067.83		P	3.7
7	☐			2094.63		P	5.7
8	☐			441.12		P	9.4

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
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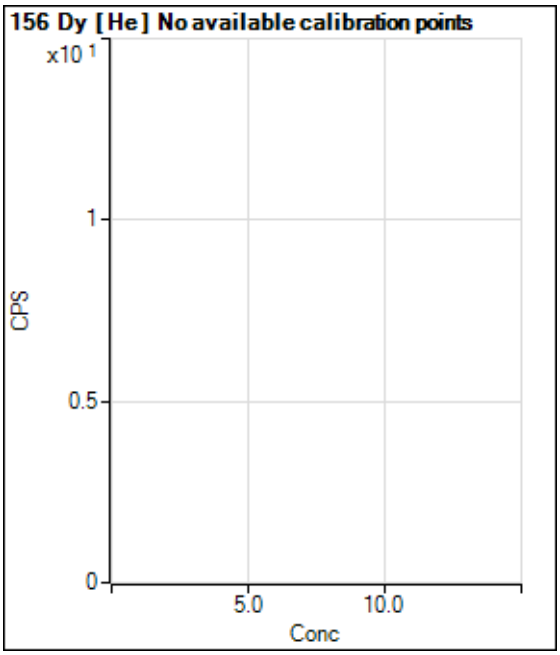


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			0.00		P	
2	☐			1.11		P	173.2
3	☐			4.44		P	173.2
4	☐			12.22		P	15.7
5	☐			31.11		P	27.0
6	☐			26.67		P	25.0
7	☐			110.00		P	16.0
8	☐			120.00		P	25.5

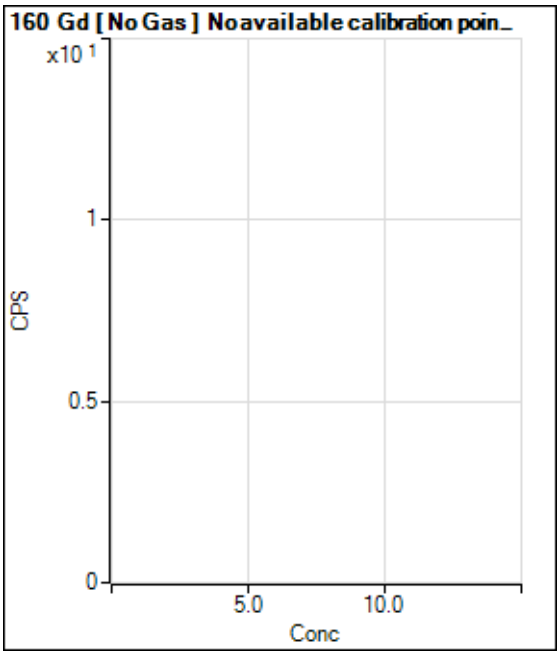


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			14.44		P	81.1
2	☐			17.78		P	28.6
3	☐			53.33		P	28.6
4	☐			92.22		P	11.6
5	☐			165.56		P	14.6
6	☐			281.12		P	6.7
7	☐			576.68		P	4.7
8	☐			860.04		P	5.7

Reviewed By:mohan
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Inst Id :P8
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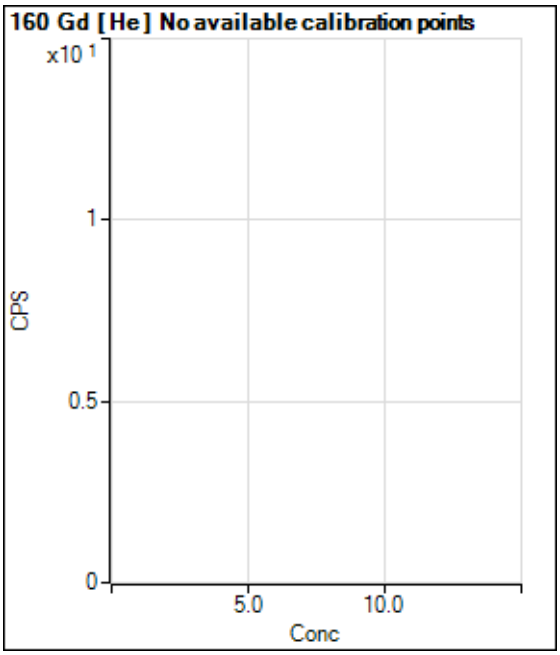


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			3.33		P	0.0
2	☐			7.78		P	24.7
3	☐			8.89		P	43.3
4	☐			14.45		P	26.7
5	☐			30.00		P	33.3
6	☐			56.67		P	35.8
7	☐			98.89		P	1.9
8	☐			263.34		P	7.9

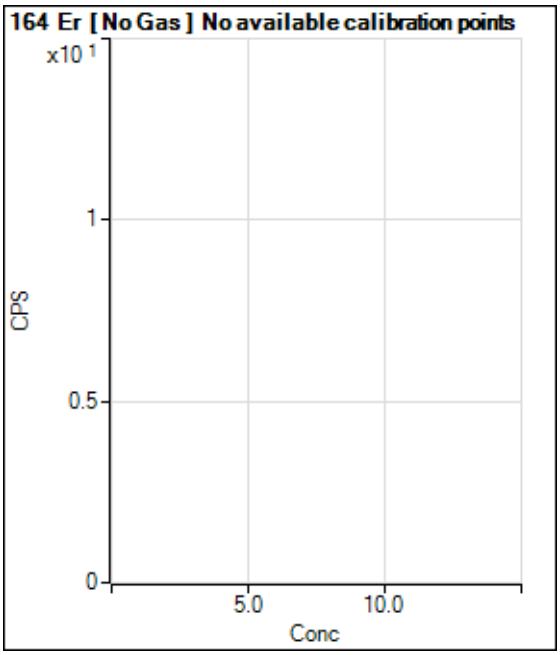


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1	☐			88.89		P	21.3
2	☐			104.44		P	13.3
3	☐			110.00		P	10.5
4	☐			136.67		P	21.3
5	☐			138.89		P	20.4
6	☐			216.67		P	17.7
7	☐			323.34		P	3.7
8	☐			828.92		P	4.7

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
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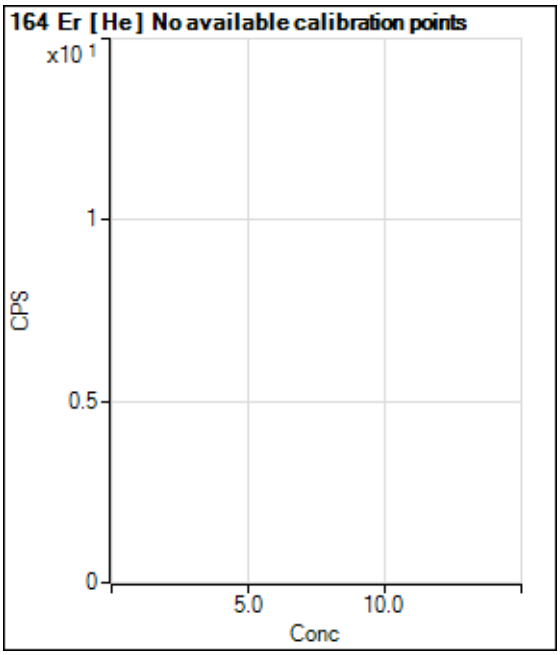


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1	☐			21.11		P	45.6
2	☐			18.89		P	40.7
3	☐			23.33		P	57.2
4	☐			23.33		P	37.8
5	☐			48.89		P	35.0
6	☐			74.45		P	5.2
7	☐			93.33		P	3.6
8	☐			334.46		P	14.2

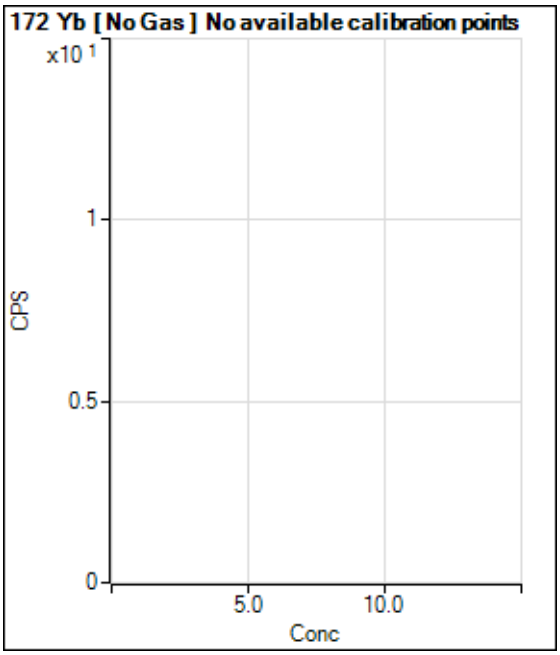


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			51.11		P	7.5
2	☐			50.00		P	0.0
3	☐			80.00		P	22.0
4	☐			95.56		P	26.2
5	☐			131.11		P	11.5
6	☐			224.45		P	19.1
7	☐			353.34		P	13.9
8	☐			987.83		P	7.1

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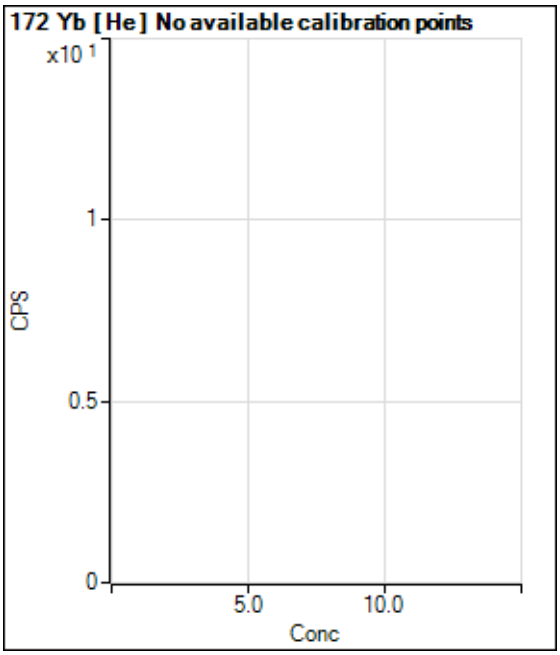


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			20.00		P	33.4
2	☐			22.22		P	22.9
3	☐			24.44		P	34.3
4	☐			41.11		P	18.7
5	☐			48.89		P	21.9
6	☐			67.78		P	5.7
7	☐			141.12		P	14.4
8	☐			386.68		P	8.2

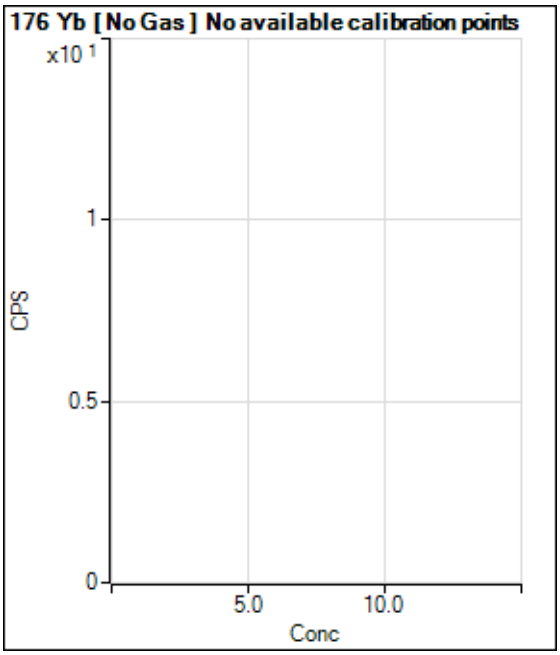


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			57.78		P	18.5
2	☐			43.33		P	20.4
3	☐			56.67		P	42.4
4	☐			95.56		P	22.4
5	☐			152.23		P	8.3
6	☐			233.34		P	19.2
7	☐			464.46		P	7.7
8	☐			1522.33		P	7.3

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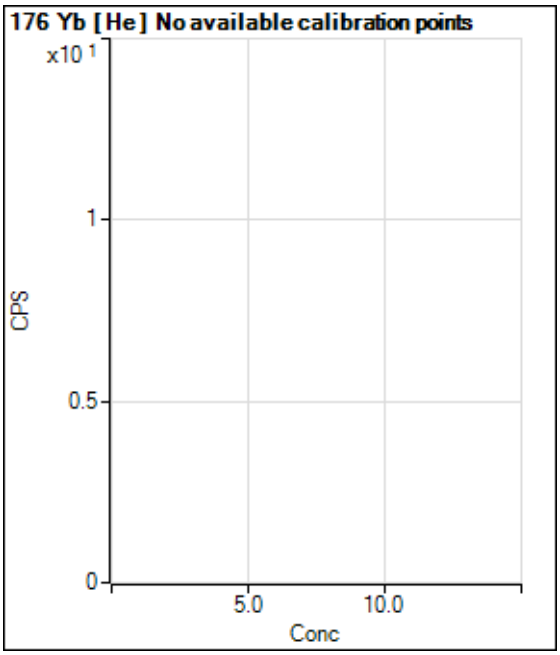


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			25.56		P	37.7
2	☐			12.22		P	41.7
3	☐			34.44		P	5.6
4	☐			44.44		P	11.5
5	☐			64.44		P	23.9
6	☐			97.78		P	30.7
7	☐			184.45		P	2.1
8	☐			750.03		P	5.0

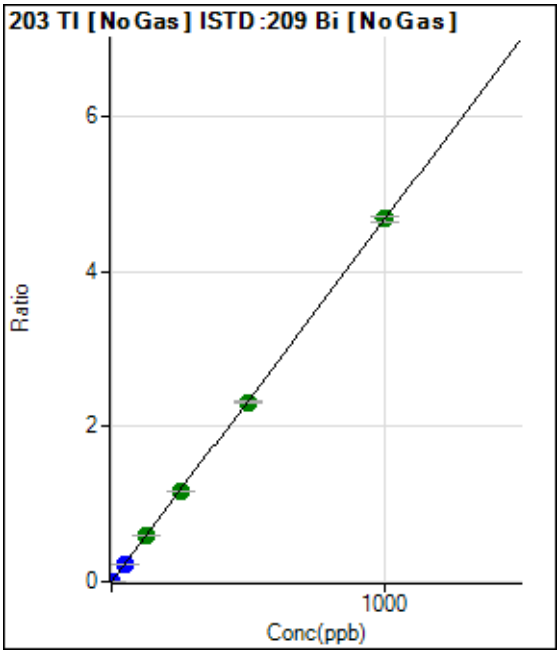


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1338.98		P	6.3
2	☐			1280.08		P	6.7
3	☐			6910.75		P	2.2
4	☐			15468.06		P	2.3
5	☐			29379.33		P	1.2
6	☐			56443.39		P	1.8
7	☐			111157.78		P	1.7
8	☐			2112.41		P	4.3

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			391.12		P	5.2
2	☐			350.01		P	17.2
3	☐			2495.82		P	4.0
4	☐			5803.54		P	2.7
5	☐			11014.68		P	0.9
6	☐			21485.29		P	0.4
7	☐			42105.80		P	1.2
8	☐			744.47		P	5.2

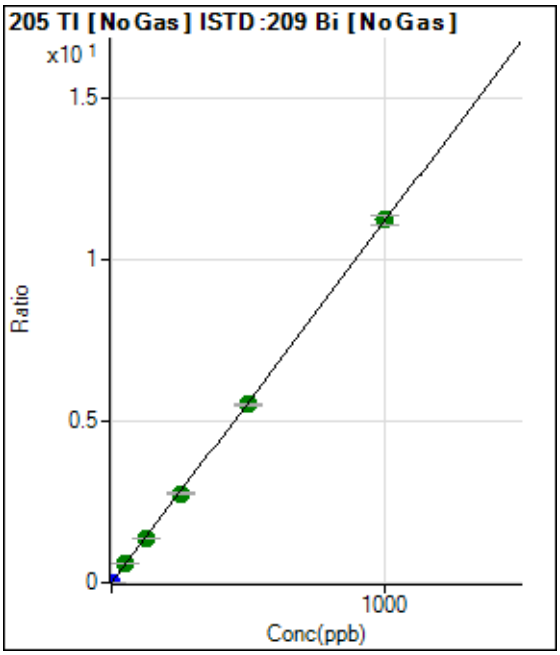


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	226.67	0.0000	P	3.9
2	☐	1.000	1.022	25088.73	0.0048	P	1.5
3	☐	50.000	49.458	1203997.16	0.2308	P	1.3
4	☐	125.000	126.409	3147865.51	0.5899	A	2.3
5	☐	250.000	250.387	6116279.77	1.1685	A	0.3
6	☐	500.000	495.583	11989466.77	2.3127	A	1.4
7	☐	1000.000	1001.963	22847830.21	4.6757	A	1.4
8	☐			2033.52	0.0005	P	10.1

y = 0.0047 * x + 4.2344E-005
R = 1.0000
DL = 0.001054
BEC = 0.009074

Weight: <None>
Min Conc: 0

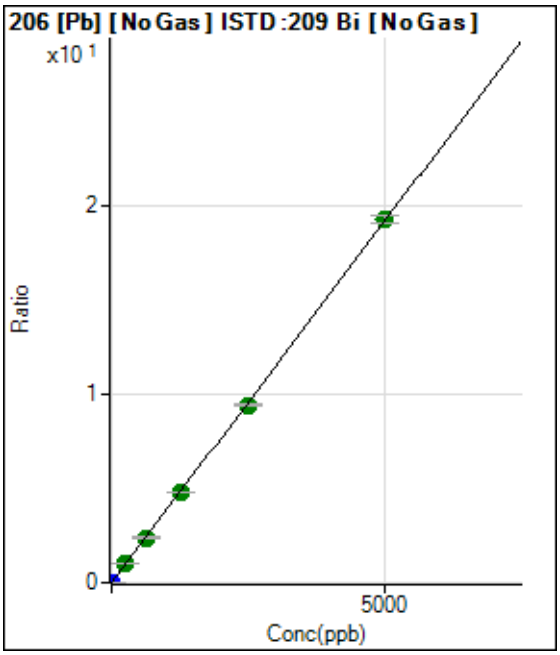
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On:4/29/2025 4:10:15 PM
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LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	630.02	0.0001	P	8.7
2	☐	1.000	1.005	59161.85	0.0113	P	0.2
3	☐	50.000	51.458	2999704.19	0.5751	A	0.9
4	☐	125.000	123.707	7377300.93	1.3825	A	1.8
5	☐	250.000	247.244	14462527.84	2.7629	A	1.0
6	☐	500.000	492.758	28551839.57	5.5064	A	0.6
7	☐	1000.000	1004.399	54842465.30	11.2236	A	2.7
8	☐			4764.28	0.0011	P	12.0

y = 0.0112 * x + 1.1761E-004
R = 1.0000
DL = 0.002743
BEC = 0.01052

Weight: <None>
Min Conc: 0

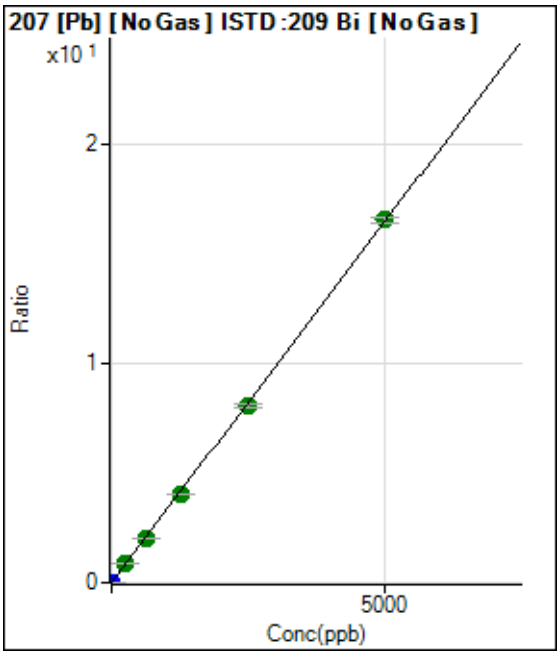


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	911.15	0.0002	P	7.9
2	☐	1.000	0.973	20313.78	0.0039	P	1.4
3	☐	250.000	257.246	5137689.13	0.9851	A	0.6
4	☐	625.000	618.257	12631321.06	2.3673	A	2.5
5	☐	1250.000	1243.667	24924284.07	4.7617	A	0.7
6	☐	2500.000	2459.490	48819888.16	9.4167	A	1.0
7	☐	5000.000	5022.318	93959933.04	19.2289	A	2.0
8	☐			94093.67	0.0217	P	2.2

y = 0.0038 * x + 1.7023E-004
R = 0.9999
DL = 0.01051
BEC = 0.04446

Weight: <None>
Min Conc: 0

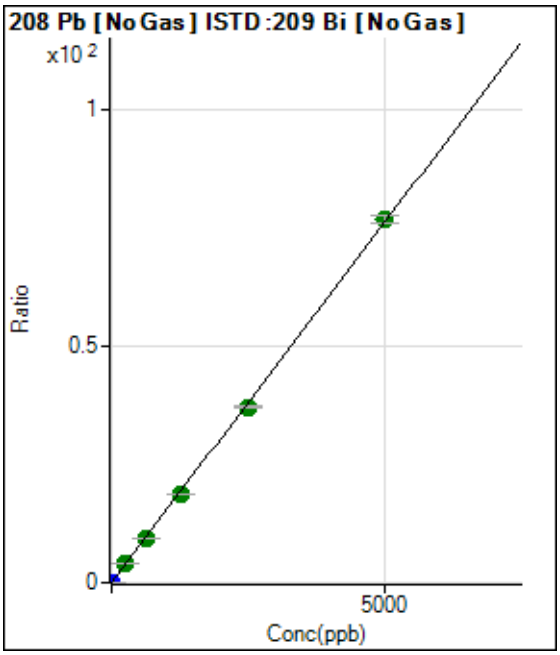
Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	737.81	0.0001	P	5.5
2	☐	1.000	1.000	17881.32	0.0034	P	0.5
3	☐	250.000	255.239	4384726.36	0.8407	A	0.5
4	☐	625.000	610.213	10724946.51	2.0097	A	1.0
5	☐	1250.000	1231.321	21225770.93	4.0551	A	0.3
6	☐	2500.000	2458.992	41975627.15	8.0980	A	2.5
7	☐	5000.000	5026.760	80891189.35	16.5541	A	1.9
8	☐			82114.68	0.0189	P	1.3

y = 0.0033 * x + 1.3775E-004
R = 0.9999
DL = 0.006945
BEC = 0.04183

Weight: <None>
Min Conc: 0

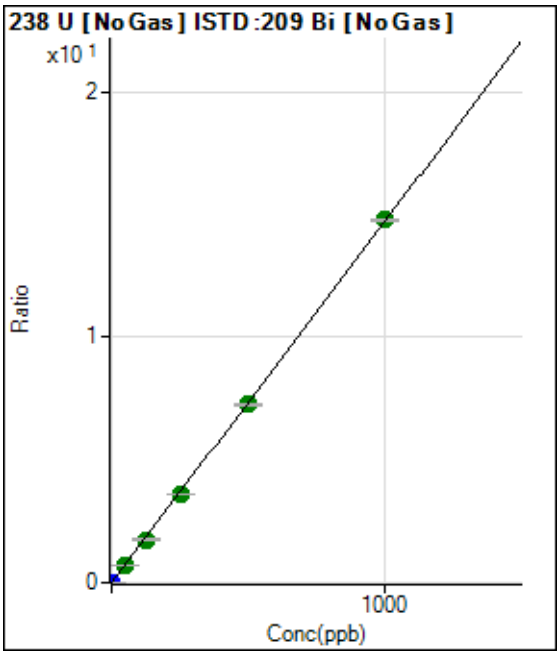


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3526.90	0.0007	P	2.5
2	☐	1.000	0.988	81876.38	0.0157	P	1.1
3	☐	250.000	254.356	20212906.64	3.8754	A	0.2
4	☐	625.000	609.298	49540385.52	9.2825	A	0.5
5	☐	1250.000	1231.821	98227749.23	18.7658	A	0.4
6	☐	2500.000	2441.357	192798794.9	37.1914	A	1.6
7	☐	5000.000	5035.611	374843279.4	76.7114	A	2.1
8	☐			376072.02	0.0867	P	1.6

y = 0.0152 * x + 6.5870E-004
R = 0.9999
DL = 0.003274
BEC = 0.04324

Weight: <None>
Min Conc: 0

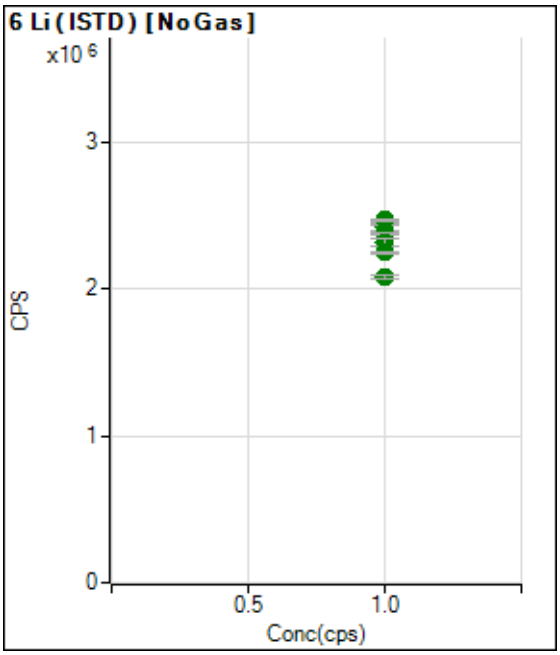
Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	431.13	0.0001	P	8.4
2	☐	1.000	0.997	76784.80	0.0147	P	1.2
3	☐	50.000	50.130	3841727.83	0.7366	A	1.5
4	☐	125.000	119.313	9356600.83	1.7530	A	1.1
5	☐	250.000	243.774	18746600.97	3.5816	A	1.1
6	☐	500.000	494.093	37633163.61	7.2593	A	1.6
7	☐	1000.000	1005.214	72169481.70	14.7688	A	0.7
8	☐			3501.65	0.0008	P	12.8

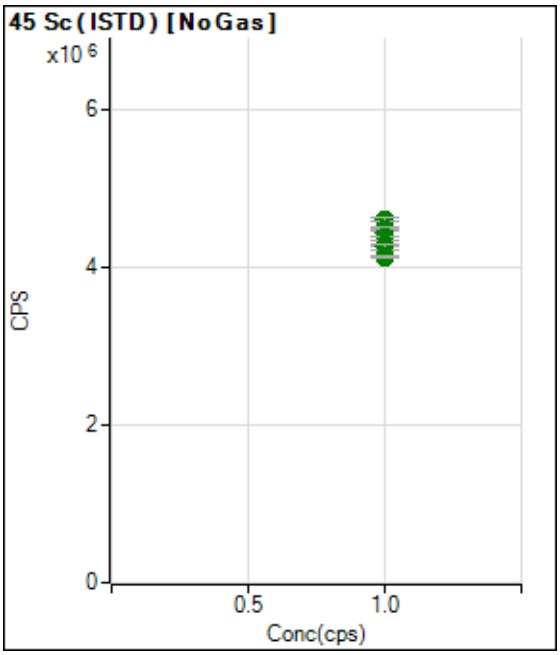
y = 0.0147 * x + 8.0557E-005
R = 0.9999
DL = 0.001375
BEC = 0.005483

Weight: <None>
Min Conc: 0

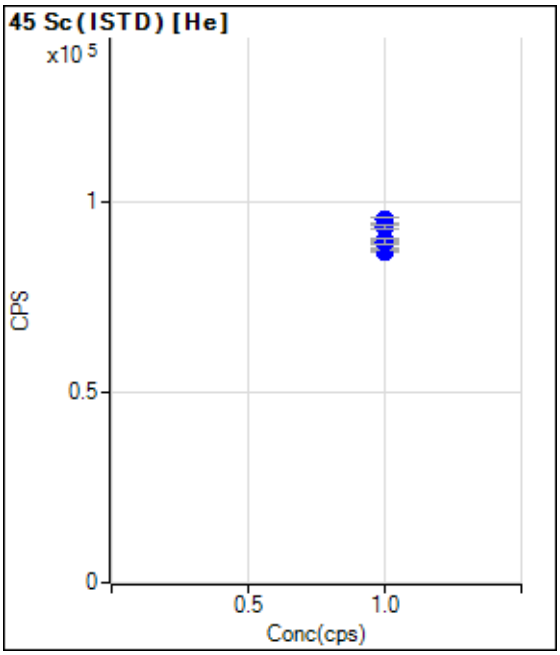


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2458834.89		A	1.1
2	☐	1.000		2423135.11		A	2.1
3	☐	1.000		2433763.29		A	0.4
4	☐	1.000		2467953.75		A	0.8
5	☐	1.000		2379119.80		A	0.4
6	☐	1.000		2314435.93		A	2.0
7	☐	1.000		2244354.35		A	0.7
8	☐	1.000		2079985.71		A	0.9

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
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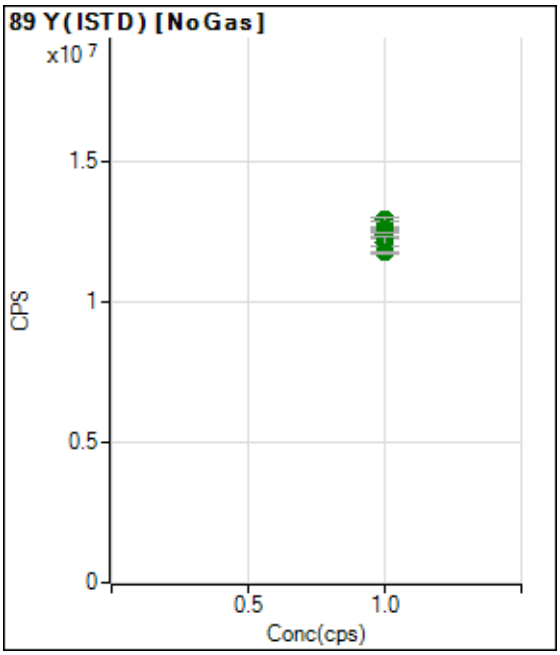


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4604905.59		A	1.2
2	☐	1.000		4430421.36		A	1.4
3	☐	1.000		4494910.87		A	0.5
4	☐	1.000		4394805.94		A	0.3
5	☐	1.000		4304193.20		A	1.6
6	☐	1.000		4262552.23		A	1.4
7	☐	1.000		4137451.46		A	1.1
8	☐	1.000		4126990.94		A	0.6

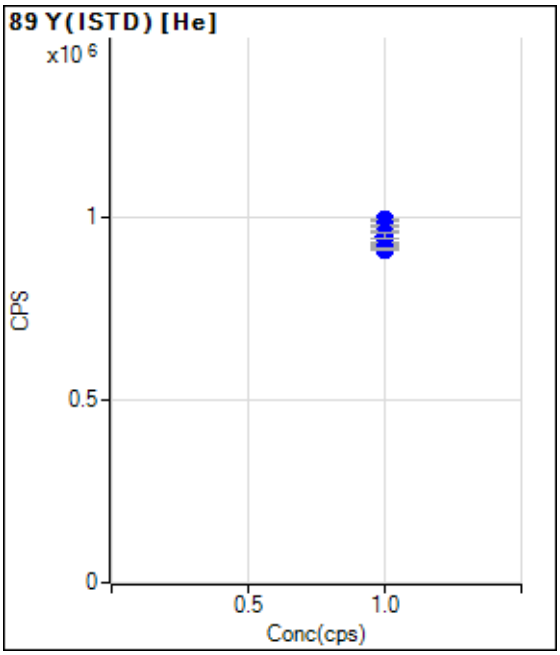


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		95183.50		P	1.3
2	☐	1.000		93458.91		P	0.9
3	☐	1.000		89780.29		P	0.9
4	☐	1.000		89373.36		P	0.7
5	☐	1.000		86824.44		P	0.4
6	☐	1.000		87486.26		P	0.8
7	☐	1.000		89397.93		P	0.2
8	☐	1.000		89491.42		P	2.0

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

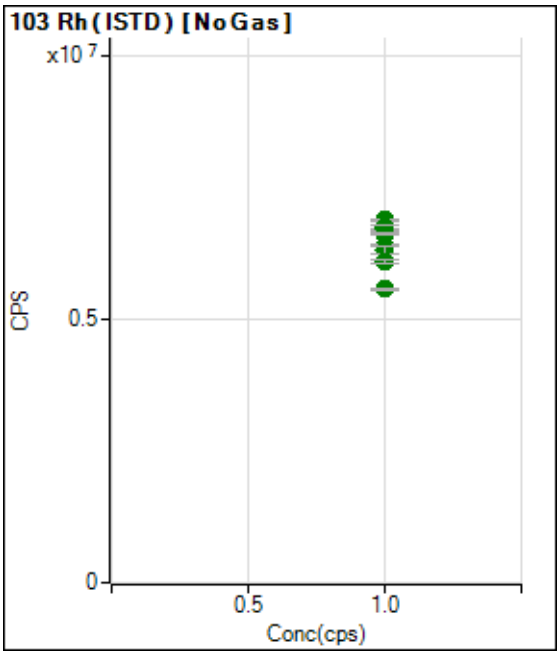


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		12918144.39		A	0.9
2	☐	1.000		12607185.92		A	0.6
3	☐	1.000		12449557.73		A	1.6
4	☐	1.000		12521074.81		A	0.6
5	☐	1.000		12365519.26		A	1.5
6	☐	1.000		12385726.90		A	1.2
7	☐	1.000		12140962.32		A	2.6
8	☐	1.000		11771524.41		A	0.6

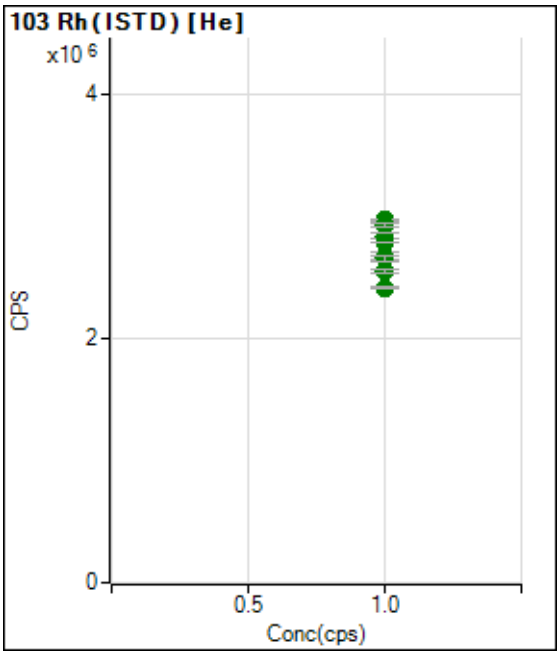


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		993238.10		P	0.4
2	☐	1.000		976610.77		P	0.7
3	☐	1.000		960483.58		P	0.5
4	☐	1.000		943296.14		P	0.4
5	☐	1.000		930028.60		P	0.2
6	☐	1.000		916791.82		P	0.4
7	☐	1.000		913098.00		P	0.7
8	☐	1.000		947999.53		P	1.7

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

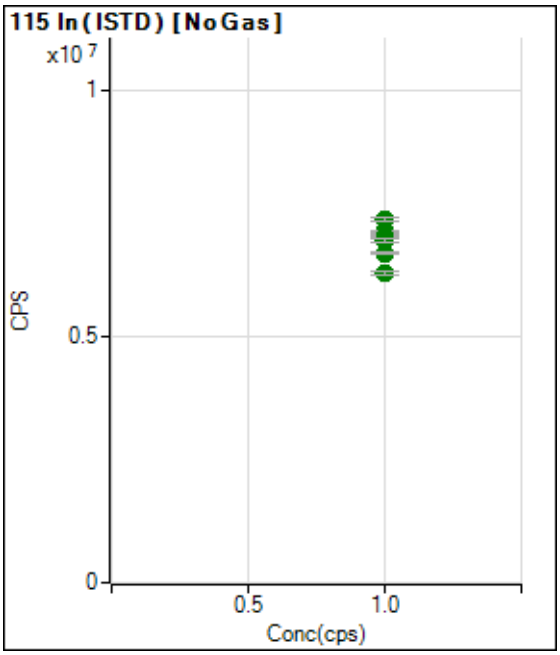


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		1.000		6894579.14		A	0.7
2		1.000		6746851.50		A	1.0
3		1.000		6735375.46		A	1.6
4		1.000		6628227.68		A	0.2
5		1.000		6412495.81		A	1.0
6		1.000		6316395.26		A	2.0
7		1.000		6109625.05		A	1.0
8		1.000		5573319.08		A	0.4

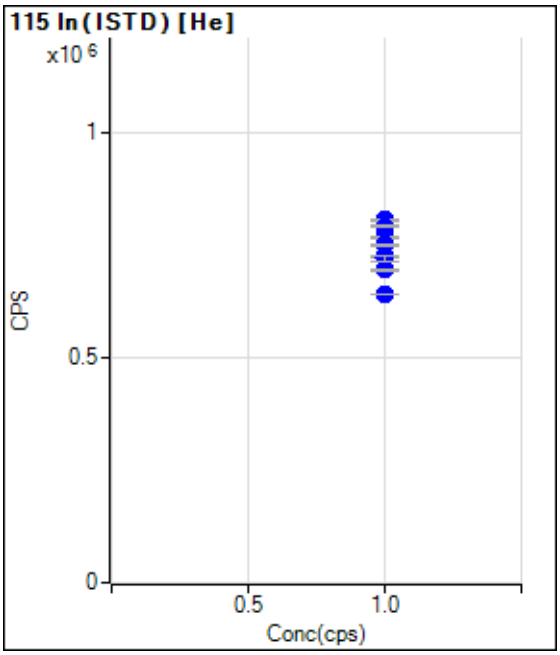


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		1.000		2965576.10		A	0.6
2		1.000		2917717.63		A	1.1
3		1.000		2835681.94		A	1.2
4		1.000		2777683.50		A	0.2
5		1.000		2667007.37		A	2.2
6		1.000		2648973.69		A	1.2
7		1.000		2542235.74		A	1.2
8		1.000		2409873.73		A	0.8

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

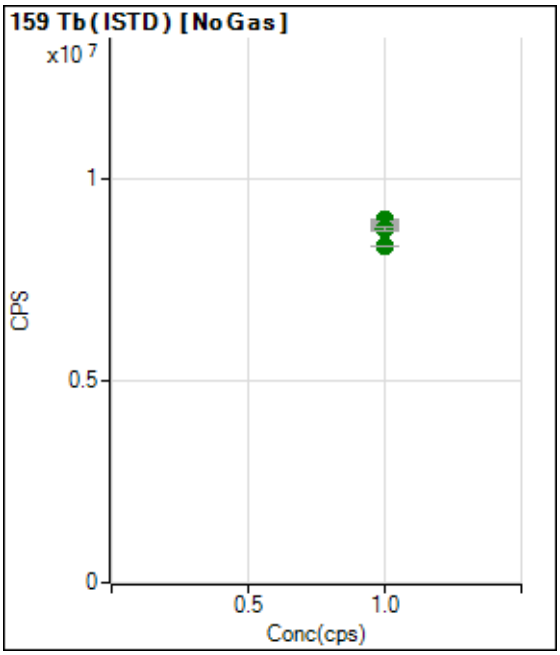


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1	☐	1.000		7370497.59		A	1.1
2	☐	1.000		7067175.54		A	0.3
3	☐	1.000		7139265.95		A	0.6
4	☐	1.000		7016598.36		A	0.6
5	☐	1.000		6952273.74		A	1.1
6	☐	1.000		6693648.43		A	0.5
7	☐	1.000		6283222.56		A	1.1
8	☐	1.000		6278398.88		A	1.0

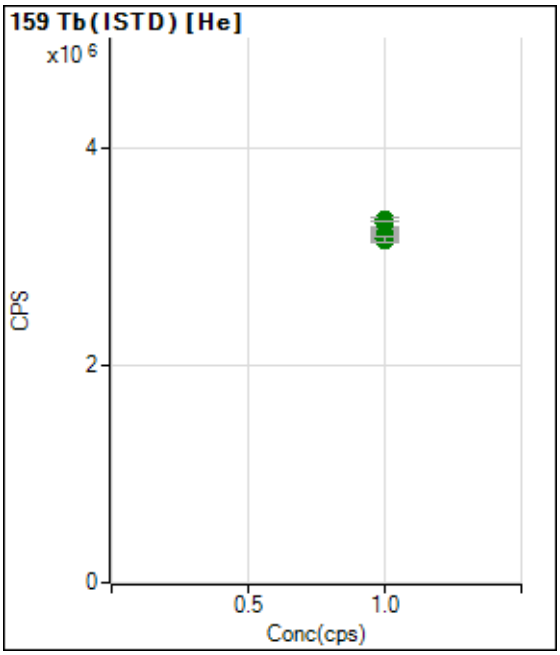


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2	☐	1.000		790623.80		P	0.6
3	☐	1.000		768391.81		P	0.5
4	☐	1.000		750024.55		P	0.4
5	☐	1.000		724851.17		P	0.5
6	☐	1.000		693965.74		P	0.6
7	☐	1.000		640930.63		P	0.5
8	☐	1.000		719645.23		P	1.8

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

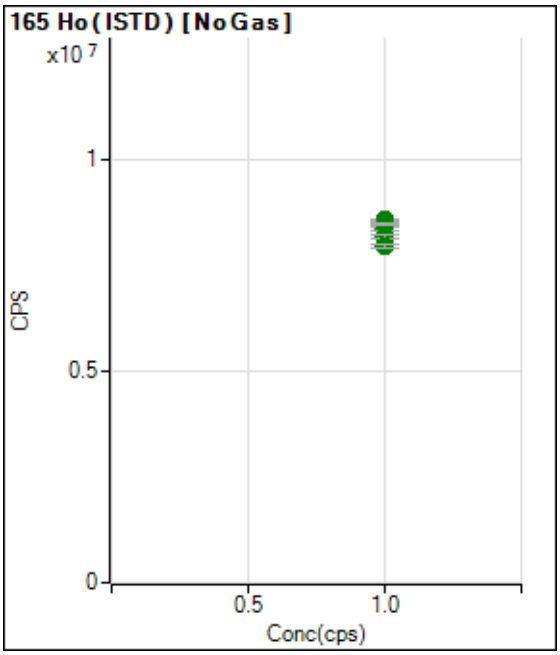


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		8973117.16		A	0.2
2	☐	1.000		8743130.91		A	0.6
3	☐	1.000		8876205.01		A	1.9
4	☐	1.000		8905773.06		A	1.7
5	☐	1.000		8877329.24		A	2.1
6	☐	1.000		8915286.60		A	1.0
7	☐	1.000		8755811.60		A	0.8
8	☐	1.000		8322977.52		A	0.5

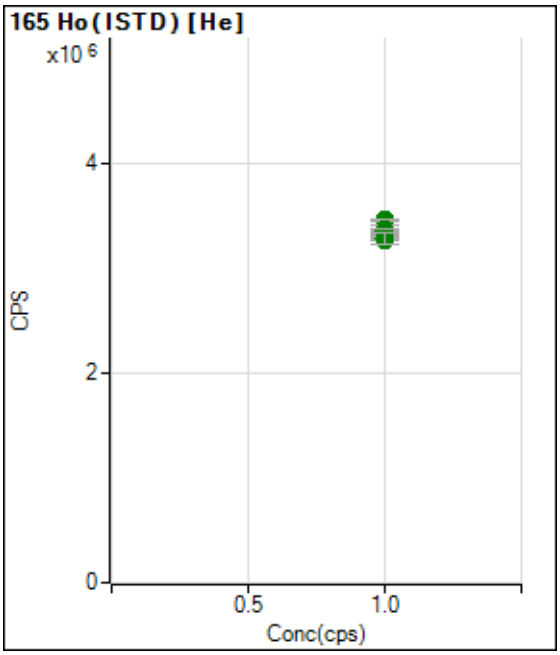


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3339979.71		A	1.2
2	☐	1.000		3309589.74		A	1.6
3	☐	1.000		3230007.80		A	0.7
4	☐	1.000		3243469.15		A	0.8
5	☐	1.000		3212908.91		A	1.0
6	☐	1.000		3184562.80		A	0.9
7	☐	1.000		3152043.88		A	0.6
8	☐	1.000		3163151.13		A	1.5

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
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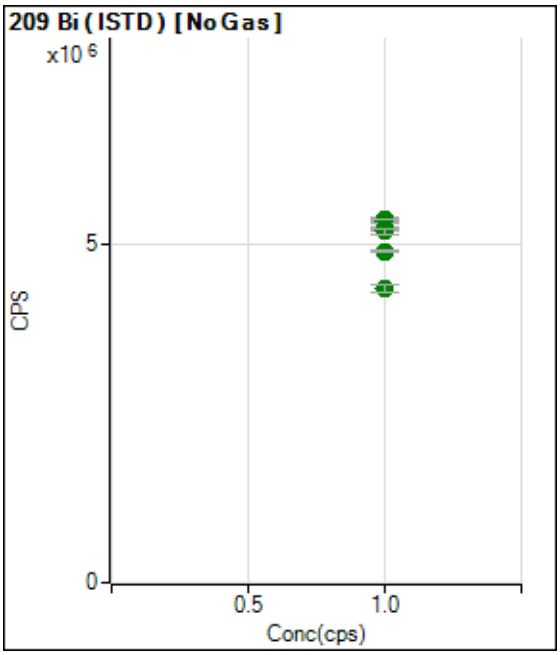


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		8573325.36		A	0.3
2	☐	1.000		8376440.71		A	1.2
3	☐	1.000		8465724.59		A	1.2
4	☐	1.000		8561332.17		A	1.0
5	☐	1.000		8554879.52		A	0.3
6	☐	1.000		8477258.35		A	0.9
7	☐	1.000		8168193.98		A	1.0
8	☐	1.000		7969466.76		A	1.2

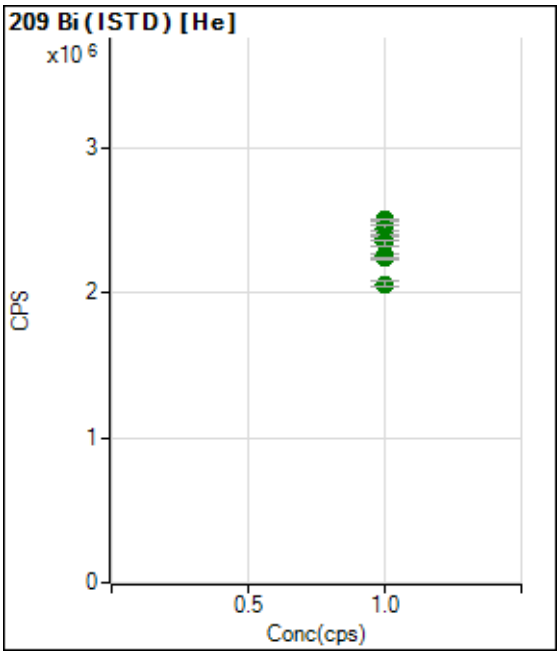


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3457331.03		A	0.6
2	☐	1.000		3380224.39		A	1.3
3	☐	1.000		3320604.15		A	1.3
4	☐	1.000		3348570.19		A	1.1
5	☐	1.000		3284836.93		A	1.5
6	☐	1.000		3275114.74		A	0.7
7	☐	1.000		3264253.42		A	0.4
8	☐	1.000		3281955.33		A	3.0

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		1.000		5354389.37		A	1.0
2		1.000		5213446.69		A	0.6
3		1.000		5215635.72		A	0.5
4		1.000		5337183.57		A	1.5
5		1.000		5234450.51		A	1.0
6		1.000		5184885.51		A	1.7
7		1.000		4886712.91		A	0.7
8		1.000		4337893.68		A	2.2



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		1.000		2505880.61		A	0.4
2		1.000		2450172.05		A	1.9
3		1.000		2378201.60		A	1.5
4		1.000		2394199.10		A	0.5
5		1.000		2348314.55		A	1.5
6		1.000		2257800.28		A	0.8
7		1.000		2239281.32		A	0.4
8		1.000		2064612.55		A	2.2

US EPA Tune Check Report

Reviewed By:moh
On:4/29/2025 4:10 PM
Inst Id :P8
LB :LB135595

Operator Name	Jaswal
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\P8042925MS.b
Acq. Date-Time	2025-04-29 10:47:31
Report Comment	---
Instrument Name	G8403A SG19224459

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		77185	771850.38			0.543	5.000
24		356049	3560487.28			0.514	5.000
25		48975	489753.39			0.174	5.000
26		59326	593255.31			0.395	5.000
59		328575	3285748.09			0.776	5.000
113		40161	401613.96			0.334	5.000
115		515923	5159232.53			0.333	5.000
206		120406	1204063.21			1.591	5.000
207		102768	1027677.46			0.941	5.000
208		252491	2524911.62			0.929	5.000
220		1	5.10			27.205	

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

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	77236	76696	77271	77804	76918
24	358779	356876	354067	355076	355446
25	48962	48874	48923	49089	49028
26	59382	58993	59438	59607	59208
59	326775	328493	329263	332457	325887
113	40083	40039	40217	40370	40098
115	517497	517349	513676	516543	514552
206	117438	119577	121209	122068	121740
207	101345	102257	103393	103102	103743
208	249605	250493	253775	253416	255167

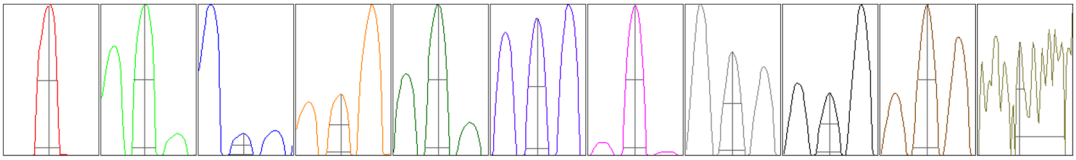
US EPA Tune Check Report

Reviewed By:moh
On:4/29/2025 4:10 PM
Inst Id :P8
LB :LB135595

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	129878.06	8.95	8.90 - 9.10	
24	597142.69	23.90	23.90 - 24.10	
25	84078.43	24.95	24.90 - 25.10	
26	96487.51	25.95	25.90 - 26.10	
59	577984.20	58.95	58.90 - 59.10	
113	77663.60	113.00	112.90 - 113.10	
115	984792.34	115.00	114.90 - 115.10	
206	222623.48	206.00	205.90 - 206.10	
207	191522.09	207.00	206.90 - 207.10	
208	463062.92	208.00	207.90 - 208.10	
220	0.90	219.85	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.63	0.782	0.900	
24	0.64	0.742	0.900	
25	0.62	0.741	0.900	
26	0.63	0.752	0.900	
59	0.60	0.777	0.900	
113	0.55	0.729	0.900	
115	0.55	0.733	0.900	
206	0.56	0.818	0.900	
207	0.56	0.785	0.900	
208	0.57	0.812	0.900	
220	0.23	1.530		

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

Tune Parameters

Plasma Parameters

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

US EPA Tune Check Report

Reviewed By:moh
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Inst Id :P8
LB :LB135595

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

Lens Parameters

Extract 1	-6.0 V	Omega Lens	9.2 V	Deflect	14.2 V
Extract 2	-205.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-90 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	140 V		

QP Parameters

Mass Gain	104	Axis Gain	0.9967	QP Bias	-4.0 V
Mass Offset	126	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	0.6 mm	Torch V	-0.3 mm		

EM

Discriminator	4.5 mV	Analog HV	2192 V	Pulse HV	953 V

[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		63752	637518.10			0.372	
89		54946	549460.72			0.493	
205		78606	786064.67			0.105	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	63964	63429	63600	63787	63980
89	55272	55147	54677	54673	54962
205	78582	78660	78686	78476	78630

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

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

Lens Parameters

Extract 1	-6.0 V	Omega Lens	9.2 V	Deflect	2.8 V

US EPA Tune Check Report

Reviewed By:moh
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LB :LB135595

Extract 2	-205.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-90 V	Cell Exit	-70 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	104	Axis Gain	0.9967	QP Bias	-13.0 V
Mass Offset	126	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	0.6 mm	Torch V	-0.3 mm		

EM

Discriminator	4.5 mV	Analog HV	2192 V	Pulse HV	953 V

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P8
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:31:50	DataFile Name :	004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.47	0.09	0.38	0.00	N/A	ppb
Antimony	121-1	0.00	0.00	0.00	0.00	N/A	ppb
Arsenic	75-2	0.01	-0.01	-0.01	0.00	N/A	ppb
Barium	135-1	0.00	0.00	0.00	0.00	N/A	ppb
Barium	137-1	0.00	0.00	0.00	0.00	N/A	ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	N/A	ppb
Bismuth	209-1				100		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	0.00	0.00	0.00	0.00	N/A	ppb
Cadmium	106-1	0.16	-0.15	0.00	0.00	N/A	ppb
Cadmium	111-1	0.01	-0.01	0.00	0.00	N/A	ppb
Calcium	43-1	0.99	-0.34	-0.65	0.00	N/A	ppb
Calcium	44-1	0.26	0.09	-0.35	0.00	N/A	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.00	0.00	-0.01	0.00	N/A	ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	N/A	ppb
Copper	63-2	0.00	0.01	-0.01	0.00	N/A	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				100		%
Indium	115-1				100		%
Indium	115-2				100		%
Iron	54-2	0.00	0.16	-0.16	0.00	N/A	ppb
Iron	56-2	-0.04	-0.02	0.06	0.00	N/A	ppb
Iron	57-2	0.05	-0.22	0.17	0.00	N/A	ppb
Krypton	83-1						cps
Lead	206-1	0.00	0.00	0.00	0.00	N/A	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P8
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:31:50	DataFile Name :	004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.00	0.00	0.00	0.00	N/A	ppb
Lead	208-1	0.00	0.00	0.00	0.00	N/A	ppb
Lithium	6-1				100		%
Magnesium	24-2	-0.02	-0.08	0.10	0.00	N/A	ppb
Manganese	55-2	-0.04	0.01	0.03	0.00	N/A	ppb
Molybdenum	94-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	96-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	N/A	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.00	-0.02	0.02	0.00	N/A	ppb
Phosphorus	31-2	-13.52	-10.54	-26.64	-16.90		ppb
Potassium	39-2	0.12	1.08	-1.20	0.00	N/A	ppb
Rhodium	103-1				100		%
Rhodium	103-2				100		%
Scandium	45-1				100		%
Scandium	45-2				100		%
Selenium	82-1	0.03	0.14	-0.16	0.00	N/A	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	0.44	-0.08	-0.36	0.00	N/A	ppb
Silicon	28-1	1.16	0.43	-1.59	0.00	N/A	ppb
Silver	107-1	0.00	0.00	0.00	0.00	N/A	ppb
Silver	109-1	0.00	0.00	0.00	0.00	N/A	ppb
Sodium	23-2	0.35	-0.12	-0.23	0.00	N/A	ppb
Strontium	86-1	0.00	0.00	0.00	0.00	N/A	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	N/A	ppb
Sulfur	34-1	-100.07	-5.34	-152.16	-85.86		ppb
Terbium	159-1				100		%
Terbium	159-2				100		%
Thallium	203-1	0.00	0.00	0.00	0.00	N/A	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	N/A	ppb
Tin	118-1	0.00	0.00	0.00	0.00	N/A	ppb
Titanium	47-1	0.01	0.00	-0.01	0.00	N/A	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	N/A	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P8
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:31:50	DataFile Name :	004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.01	0.00	0.00	N/A	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				100		%
Yttrium	89-2				100		%
Zinc	66-2	0.04	0.01	-0.05	0.00	N/A	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	N/A	ppb
Zirconium	91-1	0.00	0.00	0.00	0.00	N/A	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P8
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:38:36	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	21.95	23.81	21.99	22.58	4.69	ppb
Antimony	121-1	2.12	2.11	2.16	2.13	1.18	ppb
Arsenic	75-2	1.05	1.31	1.24	1.20	11.36	ppb
Barium	135-1	10.79	10.67	10.89	10.79	1.05	ppb
Barium	137-1	10.98	10.84	10.91	10.91	0.64	ppb
Beryllium	9-1	1.19	1.21	1.24	1.21	2.02	ppb
Bismuth	209-1				97		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	1.07	1.15	1.13	1.12	3.55	ppb
Cadmium	106-1	0.87	1.07	1.22	1.05	16.95	ppb
Cadmium	111-1	1.17	1.13	1.20	1.17	3.10	ppb
Calcium	43-1	553.98	582.11	575.52	570.54	2.58	ppb
Calcium	44-1	545.77	567.21	569.25	560.74	2.32	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.16	2.21	2.18	2.18	1.00	ppb
Cobalt	59-2	1.18	1.22	1.21	1.21	1.66	ppb
Copper	63-2	2.38	2.44	2.37	2.40	1.61	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				98		%
Indium	115-1				96		%
Indium	115-2				98		%
Iron	54-2	63.27	62.45	61.58	62.43	1.36	ppb
Iron	56-2	60.09	61.02	61.00	60.70	0.88	ppb
Iron	57-2	63.13	60.96	56.52	60.20	5.60	ppb
Krypton	83-1						cps
Lead	206-1	0.96	0.97	0.99	0.97	1.46	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P8
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:38:36	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1.00	1.00	0.99	1.00	0.53	ppb
Lead	208-1	0.98	0.99	1.00	0.99	1.19	ppb
Lithium	6-1				99		%
Magnesium	24-2	600.92	611.43	599.74	604.03	1.07	ppb
Manganese	55-2	1.17	1.10	1.07	1.11	4.65	ppb
Molybdenum	94-1	6.07	6.20	6.17	6.15	1.08	ppb
Molybdenum	95-1	5.21	5.36	5.31	5.29	1.39	ppb
Molybdenum	96-1	5.24	5.36	5.36	5.32	1.28	ppb
Molybdenum	97-1	5.04	5.34	5.21	5.20	2.98	ppb
Molybdenum	98-1	5.13	5.34	5.19	5.22	2.07	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.18	1.18	1.22	1.19	1.98	ppb
Phosphorus	31-2	16.87	11.99	21.84	16.90	29.16	ppb
Potassium	39-2	539.41	550.49	545.49	545.13	1.02	ppb
Rhodium	103-1				98		%
Rhodium	103-2				98		%
Scandium	45-1				96		%
Scandium	45-2				98		%
Selenium	82-1	5.55	5.92	6.01	5.83	4.20	ppb
Selenium	77-2	10.35	7.98	5.57	7.97	30.00	ppb
Selenium	78-2	5.26	7.15	3.43	5.28	35.26	ppb
Silicon	28-1	2.43	1.28	3.94	2.55	52.37	ppb
Silver	107-1	1.09	1.10	1.13	1.11	2.02	ppb
Silver	109-1	1.08	1.09	1.14	1.10	2.78	ppb
Sodium	23-2	597.28	602.54	603.66	601.16	0.57	ppb
Strontium	86-1	1.05	1.09	1.09	1.08	2.13	ppb
Strontium	88-1	1.04	1.08	1.07	1.06	2.12	ppb
Sulfur	34-1	-65.04	171.89	150.72	85.86	152.70	ppb
Terbium	159-1				97		%
Terbium	159-2				99		%
Thallium	203-1	1.01	1.04	1.02	1.02	1.49	ppb
Thallium	205-1	1.00	1.01	1.01	1.00	0.22	ppb
Tin	118-1	5.31	5.38	5.34	5.34	0.63	ppb
Titanium	47-1	5.32	5.45	5.59	5.45	2.51	ppb
Uranium	238-1	0.99	1.01	0.99	1.00	1.25	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P8
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:38:36	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	5.57	5.68	5.54	5.60	1.36	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				98		%
Yttrium	89-2				98		%
Zinc	66-2	5.76	5.68	5.70	5.71	0.76	ppb
Zirconium	90-1	1.02	1.06	1.05	1.04	2.06	ppb
Zirconium	91-1	1.01	1.04	1.09	1.05	3.77	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P8
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:41:58	DataFile Name :	007CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1104.45	1120.49	1109.81	1111.58	0.73	ppb
Antimony	121-1	52.20	51.57	51.12	51.63	1.05	ppb
Arsenic	75-2	51.60	51.74	52.37	51.90	0.80	ppb
Barium	135-1	267.31	264.56	274.92	268.93	2.00	ppb
Barium	137-1	274.44	265.52	270.68	270.21	1.66	ppb
Beryllium	9-1	56.78	57.52	57.02	57.10	0.66	ppb
Bismuth	209-1				97		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Cadmium	108-1	55.69	55.78	53.43	54.97	2.43	ppb
Cadmium	106-1	54.42	55.19	54.04	54.55	1.07	ppb
Cadmium	111-1	54.27	53.53	53.19	53.66	1.03	ppb
Calcium	43-1	5348.02	5441.63	5318.17	5369.28	1.20	ppb
Calcium	44-1	5273.98	5282.01	5227.99	5261.33	0.55	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	53.65	53.39	53.60	53.55	0.25	ppb
Cobalt	59-2	54.45	55.23	54.91	54.86	0.71	ppb
Copper	63-2	567.48	580.13	571.65	573.09	1.13	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				96		%
Indium	115-1				97		%
Indium	115-2				95		%
Iron	54-2	2949.85	2965.47	2950.25	2955.19	0.30	ppb
Iron	56-2	2945.99	3012.24	2927.43	2961.89	1.51	ppb
Iron	57-2	2887.66	2912.22	2885.50	2895.13	0.51	ppb
Krypton	83-1						cps
Lead	206-1	258.82	257.32	255.60	257.25	0.63	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P8
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:41:58	DataFile Name :	007CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	253.82	256.58	255.32	255.24	0.54	ppb
Lead	208-1	253.75	254.57	254.74	254.36	0.21	ppb
Lithium	6-1				99		%
Magnesium	24-2	5772.40	5763.52	5765.76	5767.23	0.08	ppb
Manganese	55-2	531.47	535.09	538.53	535.03	0.66	ppb
Molybdenum	94-1	524.28	518.89	512.02	518.40	1.19	ppb
Molybdenum	95-1	523.09	524.98	526.53	524.87	0.33	ppb
Molybdenum	96-1	530.87	528.65	521.30	526.94	0.95	ppb
Molybdenum	97-1	534.48	531.67	512.62	526.26	2.26	ppb
Molybdenum	98-1	523.19	517.85	508.48	516.51	1.44	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	54.07	54.24	54.06	54.12	0.19	ppb
Phosphorus	31-2	1024.21	1140.49	1136.23	1100.31	5.99	ppb
Potassium	39-2	2644.95	2662.17	2658.04	2655.05	0.34	ppb
Rhodium	103-1				98		%
Rhodium	103-2				96		%
Scandium	45-1				98		%
Scandium	45-2				94		%
Selenium	82-1	53.87	56.72	54.33	54.98	2.79	ppb
Selenium	77-2	54.43	57.79	50.54	54.25	6.69	ppb
Selenium	78-2	58.89	49.17	58.91	55.66	10.10	ppb
Silicon	28-1	54.70	53.32	53.97	54.00	1.28	ppb
Silver	107-1	58.19	57.50	56.41	57.37	1.57	ppb
Silver	109-1	57.41	56.32	55.95	56.56	1.34	ppb
Sodium	23-2	5736.55	5789.52	5709.02	5745.03	0.71	ppb
Strontium	86-1	51.76	51.76	50.97	51.50	0.89	ppb
Strontium	88-1	53.46	53.48	52.99	53.31	0.52	ppb
Sulfur	34-1	1454.18	1374.94	1317.52	1382.21	4.96	ppb
Terbium	159-1				99		%
Terbium	159-2				97		%
Thallium	203-1	48.74	49.89	49.74	49.46	1.27	ppb
Thallium	205-1	51.63	50.94	51.80	51.46	0.88	ppb
Tin	118-1	51.97	50.79	51.35	51.37	1.15	ppb
Titanium	47-1	526.49	520.90	526.46	524.61	0.61	ppb
Uranium	238-1	49.68	50.98	49.73	50.13	1.47	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P8
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:41:58	DataFile Name :	007CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	53.21	53.99	53.18	53.46	0.87	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				96		%
Yttrium	89-2				97		%
Zinc	66-2	541.21	547.51	541.95	543.56	0.63	ppb
Zirconium	90-1	52.40	53.48	51.66	52.51	1.75	ppb
Zirconium	91-1	51.01	51.52	50.58	51.04	0.92	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P8
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:45:01	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2660.90	2642.02	2695.77	2666.23	1.02	ppb
Antimony	121-1	132.52	130.28	130.51	131.11	0.94	ppb
Arsenic	75-2	127.17	126.84	126.51	126.84	0.26	ppb
Barium	135-1	671.89	653.18	639.37	654.82	2.49	ppb
Barium	137-1	658.61	659.03	640.96	652.87	1.58	ppb
Beryllium	9-1	132.34	134.39	136.93	134.56	1.71	ppb
Bismuth	209-1				100		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	131.84	131.15	130.85	131.28	0.38	ppb
Cadmium	106-1	132.91	132.00	131.20	132.04	0.65	ppb
Cadmium	111-1	130.75	132.21	130.13	131.03	0.81	ppb
Calcium	43-1	13137.77	13376.55	13157.06	13223.79	1.00	ppb
Calcium	44-1	12875.94	12933.18	12972.92	12927.35	0.38	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	130.09	128.97	131.23	130.10	0.87	ppb
Cobalt	59-2	132.05	131.55	132.51	132.04	0.36	ppb
Copper	63-2	1385.33	1334.24	1376.57	1365.38	2.00	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				97		%
Indium	115-1				95		%
Indium	115-2				93		%
Iron	54-2	7342.70	7148.93	7318.61	7270.08	1.45	ppb
Iron	56-2	7178.72	7139.61	7135.16	7151.16	0.34	ppb
Iron	57-2	6966.81	6987.70	7023.74	6992.75	0.41	ppb
Krypton	83-1						cps
Lead	206-1	626.98	627.50	600.29	618.26	2.52	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P8
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:45:01	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	614.73	612.75	603.16	610.21	1.01	ppb
Lead	208-1	608.60	612.62	606.67	609.30	0.50	ppb
Lithium	6-1				100		%
Magnesium	24-2	13597.23	13594.56	13665.33	13619.04	0.29	ppb
Manganese	55-2	1324.43	1307.92	1335.99	1322.78	1.07	ppb
Molybdenum	94-1	1276.57	1271.43	1258.73	1268.91	0.72	ppb
Molybdenum	95-1	1275.12	1290.88	1283.51	1283.17	0.61	ppb
Molybdenum	96-1	1254.92	1315.67	1277.32	1282.64	2.40	ppb
Molybdenum	97-1	1239.50	1282.86	1251.51	1257.95	1.78	ppb
Molybdenum	98-1	1250.01	1280.97	1240.22	1257.07	1.69	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	131.80	130.61	131.44	131.28	0.46	ppb
Phosphorus	31-2	2726.16	2631.68	2668.73	2675.52	1.78	ppb
Potassium	39-2	6417.87	6266.37	6411.45	6365.23	1.35	ppb
Rhodium	103-1				96		%
Rhodium	103-2				94		%
Scandium	45-1				95		%
Scandium	45-2				94		%
Selenium	82-1	130.78	133.76	131.83	132.12	1.15	ppb
Selenium	77-2	131.98	135.56	141.41	136.31	3.49	ppb
Selenium	78-2	129.56	131.43	132.37	131.12	1.09	ppb
Silicon	28-1	132.08	131.76	131.09	131.64	0.38	ppb
Silver	107-1	135.47	139.09	135.76	136.77	1.47	ppb
Silver	109-1	135.20	136.34	134.65	135.40	0.64	ppb
Sodium	23-2	13620.14	13616.49	13456.57	13564.40	0.69	ppb
Strontium	86-1	124.24	125.82	125.42	125.16	0.66	ppb
Strontium	88-1	128.85	129.90	127.14	128.63	1.08	ppb
Sulfur	34-1	3305.16	3365.04	3185.37	3285.19	2.78	ppb
Terbium	159-1				99		%
Terbium	159-2				97		%
Thallium	203-1	128.83	127.25	123.15	126.41	2.32	ppb
Thallium	205-1	123.49	126.05	121.58	123.71	1.81	ppb
Tin	118-1	129.56	131.64	132.13	131.11	1.04	ppb
Titanium	47-1	1257.85	1277.19	1242.62	1259.22	1.38	ppb
Uranium	238-1	117.75	120.26	119.93	119.31	1.14	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P8
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:45:01	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	130.01	128.61	129.34	129.32	0.54	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				97		%
Yttrium	89-2				95		%
Zinc	66-2	1316.06	1312.08	1324.27	1317.47	0.47	ppb
Zirconium	90-1	122.15	127.51	127.18	125.62	2.39	ppb
Zirconium	91-1	121.57	126.72	124.24	124.18	2.07	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P8
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:47:58	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	5329.95	5276.76	5247.44	5284.71	0.79	ppb
Antimony	121-1	259.09	255.99	252.88	255.99	1.21	ppb
Arsenic	75-2	253.05	254.37	253.04	253.49	0.30	ppb
Barium	135-1	1309.23	1281.21	1271.82	1287.42	1.51	ppb
Barium	137-1	1326.99	1268.74	1257.72	1284.48	2.90	ppb
Beryllium	9-1	257.81	257.96	267.69	261.16	2.17	ppb
Bismuth	209-1				98		%
Bismuth	209-2				94		%
Bromine	81-1						cps
Cadmium	108-1	264.75	260.42	258.13	261.10	1.29	ppb
Cadmium	106-1	263.52	258.50	251.39	257.80	2.36	ppb
Cadmium	111-1	267.32	267.20	259.47	264.66	1.70	ppb
Calcium	43-1	26136.85	27022.24	26130.74	26429.94	1.94	ppb
Calcium	44-1	25805.44	26352.43	25444.69	25867.52	1.77	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	257.97	258.78	263.84	260.20	1.22	ppb
Cobalt	59-2	267.15	273.52	270.29	270.32	1.18	ppb
Copper	63-2	2679.70	2679.66	2709.87	2689.75	0.65	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				95		%
Indium	115-1				94		%
Indium	115-2				90		%
Iron	54-2	14644.90	14564.29	14679.68	14629.62	0.40	ppb
Iron	56-2	14067.01	14255.16	14260.64	14194.27	0.78	ppb
Iron	57-2	13855.20	13960.90	13944.26	13920.12	0.41	ppb
Krypton	83-1						cps
Lead	206-1	1251.37	1234.68	1244.95	1243.67	0.68	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P8
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:47:58	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1235.43	1228.29	1230.24	1231.32	0.30	ppb
Lead	208-1	1234.32	1226.49	1234.65	1231.82	0.37	ppb
Lithium	6-1				97		%
Magnesium	24-2	26546.39	26864.92	27294.62	26901.98	1.40	ppb
Manganese	55-2	2619.12	2641.65	2603.59	2621.45	0.73	ppb
Molybdenum	94-1	2545.57	2540.34	2472.99	2519.63	1.61	ppb
Molybdenum	95-1	2600.55	2538.58	2514.10	2551.08	1.75	ppb
Molybdenum	96-1	2594.19	2552.24	2574.04	2573.49	0.82	ppb
Molybdenum	97-1	2515.43	2495.51	2535.58	2515.51	0.80	ppb
Molybdenum	98-1	2510.00	2544.34	2499.53	2517.96	0.93	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	258.43	258.59	259.38	258.80	0.20	ppb
Phosphorus	31-2	5201.65	5329.19	5118.52	5216.45	2.03	ppb
Potassium	39-2	12692.73	12907.15	12815.90	12805.26	0.84	ppb
Rhodium	103-1				93		%
Rhodium	103-2				90		%
Scandium	45-1				93		%
Scandium	45-2				91		%
Selenium	82-1	264.04	265.35	257.15	262.18	1.68	ppb
Selenium	77-2	256.24	283.61	262.71	267.52	5.35	ppb
Selenium	78-2	252.36	259.26	257.60	256.41	1.40	ppb
Silicon	28-1	267.69	262.76	258.18	262.87	1.81	ppb
Silver	107-1	270.51	266.38	261.53	266.14	1.69	ppb
Silver	109-1	266.01	266.95	259.68	264.21	1.50	ppb
Sodium	23-2	26952.10	27087.92	27293.46	27111.16	0.63	ppb
Strontium	86-1	263.54	263.25	254.73	260.51	1.92	ppb
Strontium	88-1	259.49	254.45	253.72	255.89	1.23	ppb
Sulfur	34-1	4776.21	5049.77	4494.99	4773.66	5.81	ppb
Terbium	159-1				99		%
Terbium	159-2				96		%
Thallium	203-1	250.55	249.56	251.05	250.39	0.30	ppb
Thallium	205-1	246.94	245.04	249.75	247.24	0.96	ppb
Tin	118-1	256.37	259.03	252.63	256.01	1.25	ppb
Titanium	47-1	2512.24	2541.41	2460.14	2504.60	1.64	ppb
Uranium	238-1	246.56	243.45	241.31	243.77	1.08	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P8
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:47:58	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	257.41	259.35	259.93	258.89	0.51	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				96		%
Yttrium	89-2				94		%
Zinc	66-2	2697.85	2697.13	2705.76	2700.25	0.18	ppb
Zirconium	90-1	250.57	249.63	249.30	249.83	0.26	ppb
Zirconium	91-1	262.41	252.75	253.42	256.19	2.11	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P8
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:50:47	DataFile Name :	010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10158.94	10268.46	10532.21	10319.87	1.86	ppb
Antimony	121-1	507.54	497.69	507.01	504.08	1.10	ppb
Arsenic	75-2	500.73	511.04	511.79	507.85	1.22	ppb
Barium	135-1	2504.08	2532.55	2518.01	2518.21	0.57	ppb
Barium	137-1	2526.61	2561.43	2469.09	2519.05	1.85	ppb
Beryllium	9-1	505.01	509.00	521.80	511.94	1.71	ppb
Bismuth	209-1				97		%
Bismuth	209-2				90		%
Bromine	81-1						cps
Cadmium	108-1	499.13	508.54	505.38	504.35	0.95	ppb
Cadmium	106-1	505.72	510.42	495.98	504.04	1.46	ppb
Cadmium	111-1	501.00	524.02	514.82	513.28	2.26	ppb
Calcium	43-1	51861.84	51040.35	51508.81	51470.34	0.80	ppb
Calcium	44-1	50909.92	50273.48	51262.49	50815.30	0.99	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	520.68	519.32	518.58	519.52	0.21	ppb
Cobalt	59-2	518.82	526.03	518.18	521.01	0.84	ppb
Copper	63-2	5201.00	5160.16	5275.76	5212.31	1.12	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				95		%
Indium	115-1				91		%
Indium	115-2				86		%
Iron	54-2	27490.07	27843.17	28099.52	27810.92	1.10	ppb
Iron	56-2	27535.46	27933.13	27666.91	27711.83	0.73	ppb
Iron	57-2	27797.07	28200.63	28081.59	28026.43	0.74	ppb
Krypton	83-1						cps
Lead	206-1	2446.05	2445.09	2487.34	2459.49	0.98	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P8
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:50:47	DataFile Name :	010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2456.65	2399.00	2521.33	2458.99	2.49	ppb
Lead	208-1	2434.34	2405.46	2484.27	2441.36	1.63	ppb
Lithium	6-1				94		%
Magnesium	24-2	51607.51	51808.13	53395.51	52270.38	1.87	ppb
Manganese	55-2	5082.75	5101.41	5250.71	5144.95	1.79	ppb
Molybdenum	94-1	4910.13	5053.08	5010.96	4991.39	1.47	ppb
Molybdenum	95-1	4912.54	5064.28	5105.64	5027.49	2.02	ppb
Molybdenum	96-1	5039.71	5081.05	5131.61	5084.12	0.91	ppb
Molybdenum	97-1	5002.34	4962.75	5016.97	4994.02	0.56	ppb
Molybdenum	98-1	4987.12	5018.76	5000.69	5002.19	0.32	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	495.04	496.56	502.90	498.17	0.84	ppb
Phosphorus	31-2	10120.71	10252.04	10462.30	10278.35	1.68	ppb
Potassium	39-2	24562.08	24801.62	25136.57	24833.42	1.16	ppb
Rhodium	103-1				92		%
Rhodium	103-2				89		%
Scandium	45-1				93		%
Scandium	45-2				92		%
Selenium	82-1	506.58	502.74	494.68	501.33	1.21	ppb
Selenium	77-2	522.56	555.73	525.40	534.56	3.44	ppb
Selenium	78-2	490.09	515.23	527.40	510.91	3.72	ppb
Silicon	28-1	512.27	504.56	497.88	504.91	1.43	ppb
Silver	107-1	509.85	514.55	503.55	509.31	1.08	ppb
Silver	109-1	505.31	508.13	515.42	509.62	1.02	ppb
Sodium	23-2	51918.64	52641.03	53406.36	52655.34	1.41	ppb
Strontium	86-1	504.16	505.88	498.63	502.89	0.75	ppb
Strontium	88-1	497.72	508.28	511.61	505.87	1.43	ppb
Sulfur	34-1	10002.87	9620.04	9394.69	9672.53	3.18	ppb
Terbium	159-1				99		%
Terbium	159-2				95		%
Thallium	203-1	490.59	492.42	503.74	495.58	1.44	ppb
Thallium	205-1	491.16	496.38	490.74	492.76	0.64	ppb
Tin	118-1	504.86	503.41	495.50	501.26	1.00	ppb
Titanium	47-1	5018.82	4926.79	5039.30	4994.97	1.20	ppb
Uranium	238-1	489.77	489.43	503.08	494.09	1.57	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P8
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:50:47	DataFile Name :	010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	504.28	505.02	519.80	509.70	1.72	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				96		%
Yttrium	89-2				92		%
Zinc	66-2	5126.09	5220.76	5258.75	5201.87	1.31	ppb
Zirconium	90-1	492.36	511.35	500.85	501.52	1.90	ppb
Zirconium	91-1	497.73	515.57	503.99	505.76	1.79	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P8
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:53:32	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	19279.73	20389.88	19709.10	19792.90	2.83	ppb
Antimony	121-1	999.37	998.48	989.00	995.62	0.58	ppb
Arsenic	75-2	997.89	1000.72	986.02	994.88	0.78	ppb
Barium	135-1	4973.54	4983.01	4974.04	4976.87	0.11	ppb
Barium	137-1	4951.43	5012.91	4967.74	4977.36	0.64	ppb
Beryllium	9-1	992.46	988.90	987.72	989.69	0.25	ppb
Bismuth	209-1				91		%
Bismuth	209-2				89		%
Bromine	81-1						cps
Cadmium	108-1	988.09	992.15	1001.82	994.02	0.71	ppb
Cadmium	106-1	993.32	991.59	999.85	994.92	0.44	ppb
Cadmium	111-1	985.11	980.58	1000.59	988.76	1.06	ppb
Calcium	43-1	102714.71	103628.86	105782.54	104042.04	1.51	ppb
Calcium	44-1	102987.76	103495.43	103973.01	103485.40	0.48	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	976.44	998.62	985.57	986.87	1.13	ppb
Cobalt	59-2	981.24	988.68	979.96	983.29	0.48	ppb
Copper	63-2	9734.82	9877.23	9872.95	9828.33	0.82	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				95		%
Holmium	165-2				94		%
Indium	115-1				85		%
Indium	115-2				80		%
Iron	54-2	53309.25	53526.09	54245.15	53693.50	0.91	ppb
Iron	56-2	53092.20	53584.62	52981.95	53219.59	0.60	ppb
Iron	57-2	51664.26	52916.16	52611.20	52397.21	1.25	ppb
Krypton	83-1						cps
Lead	206-1	4906.94	5104.19	5055.83	5022.32	2.05	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P8
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:53:32	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	4915.35	5092.01	5072.93	5026.76	1.93	ppb
Lead	208-1	4915.44	5116.19	5075.19	5035.61	2.11	ppb
Lithium	6-1				91		%
Magnesium	24-2	99774.02	101141.06	99766.33	100227.14	0.79	ppb
Manganese	55-2	9817.15	9924.21	9917.57	9886.31	0.61	ppb
Molybdenum	94-1	10186.34	9711.50	10090.49	9996.11	2.51	ppb
Molybdenum	95-1	10109.55	9539.62	10255.13	9968.10	3.79	ppb
Molybdenum	96-1	10108.87	9584.78	10108.77	9934.14	3.05	ppb
Molybdenum	97-1	10154.48	9765.41	10070.52	9996.81	2.05	ppb
Molybdenum	98-1	10109.81	9804.71	10063.61	9992.71	1.65	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	978.51	1015.20	999.47	997.72	1.84	ppb
Phosphorus	31-2	19731.93	19606.46	20000.87	19779.75	1.02	ppb
Potassium	39-2	47957.66	48291.67	48296.20	48181.84	0.40	ppb
Rhodium	103-1				89		%
Rhodium	103-2				86		%
Scandium	45-1				90		%
Scandium	45-2				94		%
Selenium	82-1	1014.95	969.51	1000.97	995.14	2.34	ppb
Selenium	77-2	1019.16	975.42	935.51	976.70	4.28	ppb
Selenium	78-2	995.31	978.07	1002.30	991.90	1.26	ppb
Silicon	28-1	1006.11	973.04	1000.97	993.37	1.79	ppb
Silver	107-1	991.51	970.19	1006.70	989.47	1.85	ppb
Silver	109-1	986.31	984.99	998.73	990.01	0.77	ppb
Sodium	23-2	102452.52	101335.33	101329.66	101705.84	0.64	ppb
Strontium	86-1	1005.84	988.25	993.41	995.83	0.91	ppb
Strontium	88-1	1003.41	974.26	1007.25	994.98	1.81	ppb
Sulfur	34-1	20072.76	19956.99	20279.43	20103.06	0.81	ppb
Terbium	159-1				98		%
Terbium	159-2				94		%
Thallium	203-1	986.59	1012.37	1006.93	1001.96	1.36	ppb
Thallium	205-1	973.78	1024.52	1014.89	1004.40	2.68	ppb
Tin	118-1	997.92	1002.56	990.62	997.03	0.60	ppb
Titanium	47-1	9934.13	10025.67	10037.14	9998.98	0.56	ppb
Uranium	238-1	997.68	1009.94	1008.02	1005.21	0.66	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P8
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:53:32	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	980.24	990.99	1005.40	992.21	1.27	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				94		%
Yttrium	89-2				92		%
Zinc	66-2	9738.39	9880.45	9896.34	9838.39	0.88	ppb
Zirconium	90-1	1004.00	976.28	1016.95	999.08	2.08	ppb
Zirconium	91-1	1000.20	969.89	1016.77	995.62	2.39	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P8
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:56:21	DataFile Name :	012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	99807.94	102205.67	97956.16	99989.92	2.13	ppb
Antimony	121-1	0.64	0.64	0.61	0.63	3.13	ppb
Arsenic	75-2	0.48	0.52	0.46	0.48	6.73	ppb
Barium	135-1	2.02	1.95	1.92	1.96	2.49	ppb
Barium	137-1	2.06	2.03	1.92	2.00	3.53	ppb
Beryllium	9-1	0.14	0.13	0.11	0.13	11.06	ppb
Bismuth	209-1				81		%
Bismuth	209-2				82		%
Bromine	81-1						cps
Cadmium	108-1	0.42	0.34	0.36	0.37	10.39	ppb
Cadmium	106-1	0.05	-0.09	0.04	0.00		ppb
Cadmium	111-1	0.16	0.16	0.15	0.16	2.26	ppb
Calcium	43-1	501056.36	498366.16	497431.09	498951.20	0.38	ppb
Calcium	44-1	500151.87	498443.00	498899.10	499164.66	0.18	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.37	8.20	7.98	8.18	2.36	ppb
Cobalt	59-2	2.04	2.07	1.96	2.03	2.77	ppb
Copper	63-2	2.52	2.44	2.36	2.44	3.18	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				93		%
Holmium	165-2				95		%
Indium	115-1				85		%
Indium	115-2				89		%
Iron	54-2	252069.89	253591.03	240870.09	248843.67	2.79	ppb
Iron	56-2	253720.15	249774.28	243424.68	248973.04	2.09	ppb
Iron	57-2	252672.74	250822.67	243877.75	249124.39	1.86	ppb
Krypton	83-1						cps
Lead	206-1	5.60	5.51	5.76	5.62	2.19	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P8
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:56:21	DataFile Name :	012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	5.66	5.67	5.79	5.71	1.29	ppb
Lead	208-1	5.64	5.57	5.74	5.65	1.57	ppb
Lithium	6-1				85		%
Magnesium	24-2	503390.92	508899.09	486500.05	499596.68	2.34	ppb
Manganese	55-2	4.41	4.31	4.04	4.25	4.55	ppb
Molybdenum	94-1	2.03	1.98	1.91	1.97	2.83	ppb
Molybdenum	95-1	1.39	1.35	1.31	1.35	2.99	ppb
Molybdenum	96-1	2.43	2.32	2.32	2.36	2.77	ppb
Molybdenum	97-1	1.44	1.38	1.24	1.35	7.47	ppb
Molybdenum	98-1	1.37	1.28	1.20	1.28	6.59	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	4.62	4.57	4.42	4.54	2.26	ppb
Phosphorus	31-2	-17.23	-22.56	-19.18	-19.66		ppb
Potassium	39-2	257367.77	250973.15	242740.59	250360.50	2.93	ppb
Rhodium	103-1				81		%
Rhodium	103-2				81		%
Scandium	45-1				90		%
Scandium	45-2				94		%
Selenium	82-1	1.04	0.74	0.93	0.91	17.04	ppb
Selenium	77-2	0.00	0.49	0.00	0.16	173.21	ppb
Selenium	78-2	0.96	-0.45	-0.20	0.10	718.00	ppb
Silicon	28-1	5.78	5.41	5.06	5.42	6.68	ppb
Silver	107-1	0.12	0.09	0.09	0.10	16.66	ppb
Silver	109-1	0.11	0.10	0.09	0.10	13.98	ppb
Sodium	23-2	506188.16	504509.66	487062.92	499253.58	2.12	ppb
Strontium	86-1	3.20	3.18	3.30	3.23	2.02	ppb
Strontium	88-1	3.18	3.19	3.28	3.22	1.73	ppb
Sulfur	34-1	-866.32	-793.76	-671.39	-777.15		ppb
Terbium	159-1				93		%
Terbium	159-2				95		%
Thallium	203-1	0.10	0.09	0.08	0.09	11.13	ppb
Thallium	205-1	0.10	0.09	0.08	0.09	13.46	ppb
Tin	118-1	0.18	0.17	0.15	0.17	10.20	ppb
Titanium	47-1	0.95	0.92	0.91	0.93	2.05	ppb
Uranium	238-1	0.06	0.05	0.04	0.05	14.28	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P8
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:56:21	DataFile Name :	012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.28	0.25	0.25	0.26	7.04	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				91		%
Yttrium	89-2				95		%
Zinc	66-2	58.11	57.65	55.14	56.97	2.81	ppb
Zirconium	90-1	0.46	0.43	0.44	0.44	2.50	ppb
Zirconium	91-1	0.45	0.46	0.45	0.45	0.24	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P8
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:14:58	DataFile Name :	015ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	488.19	509.26	507.46	501.64	2.33	ppb
Antimony	121-1	200.82	203.70	203.03	202.52	0.74	ppb
Arsenic	75-2	196.11	200.78	201.96	199.61	1.55	ppb
Barium	135-1	99.67	100.78	100.80	100.42	0.64	ppb
Barium	137-1	100.62	102.90	102.48	102.00	1.19	ppb
Beryllium	9-1	104.01	105.16	108.85	106.01	2.39	ppb
Bismuth	209-1				102		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	86.88	88.57	89.95	88.47	1.74	ppb
Cadmium	106-1	83.11	85.44	84.92	84.49	1.45	ppb
Cadmium	111-1	102.03	103.63	104.73	103.46	1.31	ppb
Calcium	43-1	1966.46	1969.78	1961.56	1965.93	0.21	ppb
Calcium	44-1	1987.40	1967.75	1969.84	1975.00	0.55	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	100.31	101.67	101.48	101.15	0.73	ppb
Cobalt	59-2	103.53	105.79	105.63	104.98	1.20	ppb
Copper	63-2	104.40	108.13	108.27	106.93	2.05	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				103		%
Indium	115-1				103		%
Indium	115-2				104		%
Iron	54-2	2183.56	2218.89	2223.10	2208.52	0.98	ppb
Iron	56-2	2139.29	2188.55	2182.12	2169.99	1.23	ppb
Iron	57-2	2082.78	2146.19	2153.27	2127.41	1.82	ppb
Krypton	83-1						cps
Lead	206-1	196.58	199.63	198.10	198.10	0.77	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P8
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:14:58	DataFile Name :	015ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	190.77	195.40	192.71	192.96	1.20	ppb
Lead	208-1	192.00	195.17	193.46	193.54	0.82	ppb
Lithium	6-1				101		%
Magnesium	24-2	1205.19	1214.32	1232.15	1217.22	1.13	ppb
Manganese	55-2	98.41	101.46	101.22	100.36	1.69	ppb
Molybdenum	94-1	0.09	0.09	0.11	0.10	10.39	ppb
Molybdenum	95-1	0.02	0.02	0.03	0.02	16.02	ppb
Molybdenum	96-1	0.04	0.05	0.05	0.05	12.35	ppb
Molybdenum	97-1	0.02	0.02	0.02	0.02	3.79	ppb
Molybdenum	98-1	0.02	0.02	0.02	0.02	12.01	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	102.68	106.38	106.46	105.17	2.05	ppb
Phosphorus	31-2	-23.07	-18.74	-33.71	-25.18		ppb
Potassium	39-2	1922.87	1963.02	1965.44	1950.45	1.23	ppb
Rhodium	103-1				103		%
Rhodium	103-2				103		%
Scandium	45-1				103		%
Scandium	45-2				104		%
Selenium	82-1	206.90	209.82	214.83	210.52	1.91	ppb
Selenium	77-2	200.83	239.99	206.71	215.84	9.78	ppb
Selenium	78-2	200.32	218.17	217.99	212.16	4.83	ppb
Silicon	28-1	-0.29	0.05	-0.22	-0.15		ppb
Silver	107-1	54.77	54.43	54.41	54.54	0.37	ppb
Silver	109-1	53.61	53.38	54.55	53.85	1.15	ppb
Sodium	23-2	2085.45	2107.18	2093.12	2095.25	0.53	ppb
Strontium	86-1	0.24	0.21	0.24	0.23	8.23	ppb
Strontium	88-1	0.23	0.23	0.24	0.23	3.61	ppb
Sulfur	34-1	-502.44	-596.93	-543.53	-547.63		ppb
Terbium	159-1				103		%
Terbium	159-2				104		%
Thallium	203-1	196.24	199.94	198.30	198.16	0.94	ppb
Thallium	205-1	191.73	192.98	192.77	192.50	0.35	ppb
Tin	118-1	0.01	0.02	0.01	0.02	19.95	ppb
Titanium	47-1	0.01	0.00	0.02	0.01	64.01	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P8
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:14:58	DataFile Name :	015ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	98.59	101.19	100.50	100.10	1.35	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				104		%
Yttrium	89-2				104		%
Zinc	66-2	196.12	204.31	202.14	200.86	2.11	ppb
Zirconium	90-1	0.03	0.03	0.03	0.03	5.04	ppb
Zirconium	91-1	0.10	0.09	0.10	0.10	8.30	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P8
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:18:19	DataFile Name :	016LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	21.55	22.49	23.10	22.38	3.50	ppb
Antimony	121-1	2.03	1.97	1.99	2.00	1.50	ppb
Arsenic	75-2	1.02	0.94	0.99	0.98	4.12	ppb
Barium	135-1	10.05	10.11	9.77	9.98	1.83	ppb
Barium	137-1	10.05	9.96	9.93	9.98	0.67	ppb
Beryllium	9-1	1.12	1.12	1.12	1.12	0.17	ppb
Bismuth	209-1				103		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	1.13	1.13	0.94	1.07	10.19	ppb
Cadmium	106-1	0.97	0.49	0.61	0.69	36.27	ppb
Cadmium	111-1	1.09	1.02	1.06	1.06	3.10	ppb
Calcium	43-1	508.30	516.06	505.87	510.07	1.04	ppb
Calcium	44-1	502.32	513.39	512.29	509.33	1.20	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.98	1.99	2.10	2.02	3.29	ppb
Cobalt	59-2	1.10	1.07	1.09	1.08	1.35	ppb
Copper	63-2	2.11	2.12	2.16	2.13	1.30	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				101		%
Indium	115-1				103		%
Indium	115-2				103		%
Iron	54-2	57.29	55.46	58.35	57.03	2.56	ppb
Iron	56-2	56.41	55.01	55.65	55.69	1.26	ppb
Iron	57-2	53.22	52.97	52.44	52.88	0.76	ppb
Krypton	83-1						cps
Lead	206-1	0.97	0.95	0.95	0.96	1.32	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P8
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:18:19	DataFile Name :	016LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.93	0.95	0.97	0.95	1.94	ppb
Lead	208-1	0.96	0.96	0.96	0.96	0.26	ppb
Lithium	6-1				102		%
Magnesium	24-2	553.54	541.26	545.94	546.91	1.13	ppb
Manganese	55-2	0.97	0.96	1.05	1.00	4.85	ppb
Molybdenum	94-1	5.74	5.76	5.72	5.74	0.37	ppb
Molybdenum	95-1	4.80	4.83	4.84	4.82	0.49	ppb
Molybdenum	96-1	4.93	4.88	4.85	4.89	0.83	ppb
Molybdenum	97-1	4.73	4.79	4.74	4.75	0.61	ppb
Molybdenum	98-1	4.81	4.78	4.78	4.79	0.37	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.03	1.10	1.07	1.07	3.32	ppb
Phosphorus	31-2	0.75	16.21	5.59	7.51	105.26	ppb
Potassium	39-2	505.39	500.07	497.86	501.11	0.77	ppb
Rhodium	103-1				103		%
Rhodium	103-2				102		%
Scandium	45-1				103		%
Scandium	45-2				102		%
Selenium	82-1	5.36	4.85	5.45	5.22	6.25	ppb
Selenium	77-2	6.70	3.59	7.07	5.79	32.98	ppb
Selenium	78-2	5.72	5.62	4.48	5.28	13.02	ppb
Silicon	28-1	1.79	1.64	1.56	1.67	7.10	ppb
Silver	107-1	1.03	1.03	1.01	1.02	1.13	ppb
Silver	109-1	1.02	1.01	1.04	1.02	1.27	ppb
Sodium	23-2	546.56	540.65	542.57	543.26	0.55	ppb
Strontium	86-1	1.00	0.96	0.98	0.98	2.00	ppb
Strontium	88-1	0.98	0.99	0.98	0.99	0.53	ppb
Sulfur	34-1	-562.23	-551.49	-549.74	-554.49		ppb
Terbium	159-1				103		%
Terbium	159-2				103		%
Thallium	203-1	0.92	0.92	0.95	0.93	1.80	ppb
Thallium	205-1	0.96	0.93	0.93	0.94	1.53	ppb
Tin	118-1	4.94	4.97	4.97	4.96	0.32	ppb
Titanium	47-1	4.96	5.02	5.01	4.99	0.64	ppb
Uranium	238-1	0.90	0.90	0.91	0.90	0.65	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P8
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:18:19	DataFile Name :	016LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	5.14	5.05	5.22	5.14	1.70	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				104		%
Yttrium	89-2				103		%
Zinc	66-2	4.92	5.36	5.17	5.15	4.23	ppb
Zirconium	90-1	0.96	0.96	0.97	0.96	0.54	ppb
Zirconium	91-1	0.94	0.99	1.00	0.98	3.00	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P8
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:29:07	DataFile Name :	019CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.12	0.67	0.65	0.81	32.75	ppb
Antimony	121-1	0.00	0.00	0.00	0.00	21.28	ppb
Arsenic	75-2	0.00	0.00	-0.01	0.00		ppb
Barium	135-1	-0.01	-0.01	-0.01	-0.01		ppb
Barium	137-1	-0.01	-0.01	-0.01	-0.01		ppb
Beryllium	9-1	0.00	0.00	0.00	0.00		ppb
Bismuth	209-1				102		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	-0.01	0.04	0.00	0.01	312.42	ppb
Cadmium	106-1	-0.88	-0.74	-0.91	-0.84		ppb
Cadmium	111-1	-0.07	-0.05	-0.07	-0.06		ppb
Calcium	43-1	-0.64	-1.12	-0.22	-0.66		ppb
Calcium	44-1	1.08	0.79	1.13	1.00	18.43	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.01	0.00	-0.01	-0.01		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.03	-0.02	-0.03	-0.03		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				99		%
Indium	115-1				102		%
Indium	115-2				99		%
Iron	54-2	1.32	1.58	1.71	1.54	13.04	ppb
Iron	56-2	1.28	1.33	1.43	1.35	5.66	ppb
Iron	57-2	0.65	1.08	1.30	1.01	32.94	ppb
Krypton	83-1						cps
Lead	206-1	0.14	0.13	0.13	0.13	6.12	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P8
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:29:07	DataFile Name :	019CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.14	0.14	0.12	0.13	7.69	ppb
Lead	208-1	0.14	0.13	0.12	0.13	7.72	ppb
Lithium	6-1				99		%
Magnesium	24-2	1.30	1.36	1.34	1.33	2.45	ppb
Manganese	55-2	-0.03	-0.04	0.09	0.01	944.29	ppb
Molybdenum	94-1	0.06	0.04	0.05	0.05	15.59	ppb
Molybdenum	95-1	0.06	0.04	0.04	0.05	19.74	ppb
Molybdenum	96-1	0.06	0.05	0.03	0.05	25.96	ppb
Molybdenum	97-1	0.05	0.05	0.04	0.05	16.23	ppb
Molybdenum	98-1	0.05	0.04	0.04	0.04	16.70	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.02	0.00	-0.02	-0.01		ppb
Phosphorus	31-2	-24.03	-11.06	-13.27	-16.12		ppb
Potassium	39-2	17.80	20.96	21.17	19.98	9.45	ppb
Rhodium	103-1				103		%
Rhodium	103-2				99		%
Scandium	45-1				104		%
Scandium	45-2				99		%
Selenium	82-1	0.11	-0.06	0.06	0.04	226.34	ppb
Selenium	77-2	0.00	0.00	0.46	0.15	173.21	ppb
Selenium	78-2	0.14	-0.33	-0.62	-0.27		ppb
Silicon	28-1	-0.62	-0.36	-0.41	-0.47		ppb
Silver	107-1	0.01	0.01	0.01	0.01	6.10	ppb
Silver	109-1	0.01	0.01	0.01	0.01	5.48	ppb
Sodium	23-2	13.73	16.45	15.94	15.38	9.41	ppb
Strontium	86-1	0.00	0.00	0.01	0.00	63.98	ppb
Strontium	88-1	0.00	0.00	0.00	0.00		ppb
Sulfur	34-1	-1228.82	-1189.73	-1128.13	-1182.23		ppb
Terbium	159-1				103		%
Terbium	159-2				99		%
Thallium	203-1	0.04	0.04	0.03	0.04	10.13	ppb
Thallium	205-1	0.04	0.04	0.03	0.04	5.28	ppb
Tin	118-1	-0.01	0.00	0.00	0.00		ppb
Titanium	47-1	0.04	0.02	0.02	0.03	34.86	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P8
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:29:07	DataFile Name :	019CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00		ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				100		%
Zinc	66-2	-0.02	-0.11	-0.04	-0.05		ppb
Zirconium	90-1	0.01	0.01	0.00	0.01	17.95	ppb
Zirconium	91-1	0.01	0.00	0.00	0.00	460.05	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P8
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:32:33	DataFile Name :	020ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	93432.30	94535.27	94007.15	93991.57	0.59	ppb
Antimony	121-1	1.09	1.07	1.08	1.08	0.90	ppb
Arsenic	75-2	0.30	0.36	0.38	0.34	12.03	ppb
Barium	135-1	1.41	1.44	1.43	1.43	1.08	ppb
Barium	137-1	1.42	1.38	1.42	1.41	1.64	ppb
Beryllium	9-1	0.29	0.30	0.29	0.29	1.35	ppb
Bismuth	209-1				90		%
Bismuth	209-2				91		%
Bromine	81-1						cps
Cadmium	108-1	12.76	13.03	13.20	13.00	1.72	ppb
Cadmium	106-1	-0.69	-0.15	-0.29	-0.38		ppb
Cadmium	111-1	0.50	0.44	0.49	0.48	6.47	ppb
Calcium	43-1	96663.88	102536.57	99407.65	99536.03	2.95	ppb
Calcium	44-1	98611.71	100595.34	98367.73	99191.59	1.23	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	19.71	19.47	19.44	19.54	0.76	ppb
Cobalt	59-2	1.18	1.18	1.11	1.15	3.57	ppb
Copper	63-2	7.71	7.67	7.55	7.65	1.09	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				97		%
Indium	115-1				94		%
Indium	115-2				94		%
Iron	54-2	105569.65	106243.92	105262.82	105692.13	0.47	ppb
Iron	56-2	106009.99	107375.19	107000.52	106795.23	0.66	ppb
Iron	57-2	105838.44	105895.95	104917.92	105550.77	0.52	ppb
Krypton	83-1						cps
Lead	206-1	5.09	4.75	4.51	4.79	6.05	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P8
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:32:33	DataFile Name :	020ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	4.69	4.36	4.16	4.40	6.09	ppb
Lead	208-1	4.82	4.48	4.24	4.51	6.54	ppb
Lithium	6-1				94		%
Magnesium	24-2	99249.29	97676.62	97227.75	98051.22	1.08	ppb
Manganese	55-2	7.50	7.50	7.39	7.47	0.84	ppb
Molybdenum	94-1	1586.17	1548.47	1579.70	1571.45	1.28	ppb
Molybdenum	95-1	1932.34	1923.11	1939.07	1931.51	0.41	ppb
Molybdenum	96-1	1917.68	1875.26	1917.42	1903.45	1.28	ppb
Molybdenum	97-1	1926.45	1893.48	1919.83	1913.26	0.91	ppb
Molybdenum	98-1	1904.33	1893.44	1912.42	1903.40	0.50	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	5.17	5.27	5.04	5.16	2.24	ppb
Phosphorus	31-2	107997.86	106667.71	105560.97	106742.18	1.14	ppb
Potassium	39-2	99044.48	97968.58	97575.30	98196.12	0.77	ppb
Rhodium	103-1				91		%
Rhodium	103-2				91		%
Scandium	45-1				99		%
Scandium	45-2				100		%
Selenium	82-1	0.33	0.31	0.20	0.28	25.70	ppb
Selenium	77-2	0.00	0.47	0.46	0.31	86.60	ppb
Selenium	78-2	-0.21	-0.34	0.19	-0.12		ppb
Silicon	28-1	7.57	8.17	7.75	7.83	3.88	ppb
Silver	107-1	0.03	0.04	0.04	0.04	22.36	ppb
Silver	109-1	0.03	0.04	0.04	0.04	16.72	ppb
Sodium	23-2	104426.25	106253.98	105374.65	105351.62	0.87	ppb
Strontium	86-1	32.69	32.09	32.80	32.53	1.18	ppb
Strontium	88-1	34.03	33.98	34.10	34.04	0.18	ppb
Sulfur	34-1	99388.86	103348.86	100070.23	100935.98	2.10	ppb
Terbium	159-1				98		%
Terbium	159-2				100		%
Thallium	203-1	0.05	0.06	0.08	0.06	26.42	ppb
Thallium	205-1	0.05	0.06	0.07	0.06	21.84	ppb
Tin	118-1	0.15	0.17	0.17	0.16	6.54	ppb
Titanium	47-1	1979.52	2031.18	1970.70	1993.80	1.64	ppb
Uranium	238-1	0.01	0.01	0.01	0.01	10.67	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P8
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:32:33	DataFile Name :	020ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.14	0.15	0.13	0.14	6.53	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				99		%
Zinc	66-2	10.65	10.79	11.40	10.95	3.65	ppb
Zirconium	90-1	0.03	0.05	0.06	0.05	24.53	ppb
Zirconium	91-1	0.04	0.05	0.05	0.05	21.56	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P8
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:37:29	DataFile Name :	021ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	93289.46	91892.11	93793.39	92991.65	1.06	ppb
Antimony	121-1	20.63	20.76	20.62	20.67	0.37	ppb
Arsenic	75-2	21.12	20.88	20.91	20.97	0.64	ppb
Barium	135-1	21.58	21.45	21.33	21.45	0.58	ppb
Barium	137-1	21.62	21.67	21.47	21.59	0.47	ppb
Beryllium	9-1	21.14	21.86	22.03	21.68	2.19	ppb
Bismuth	209-1				93		%
Bismuth	209-2				91		%
Bromine	81-1						cps
Cadmium	108-1	29.23	30.03	29.44	29.57	1.41	ppb
Cadmium	106-1	15.94	15.48	14.84	15.42	3.55	ppb
Cadmium	111-1	20.35	20.15	20.16	20.22	0.57	ppb
Calcium	43-1	100696.92	95883.94	98530.00	98370.29	2.45	ppb
Calcium	44-1	98421.37	96881.36	98505.84	97936.19	0.93	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	39.34	39.72	39.38	39.48	0.53	ppb
Cobalt	59-2	21.05	21.24	20.84	21.04	0.94	ppb
Copper	63-2	27.15	27.64	27.31	27.37	0.93	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				99		%
Indium	115-1				97		%
Indium	115-2				96		%
Iron	54-2	105742.02	106184.84	105085.96	105670.94	0.52	ppb
Iron	56-2	106638.88	105217.06	104388.81	105414.92	1.08	ppb
Iron	57-2	104551.07	103555.20	102968.84	103691.70	0.77	ppb
Krypton	83-1						cps
Lead	206-1	23.45	23.62	23.30	23.46	0.69	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P8
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:37:29	DataFile Name :	021ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	22.77	22.94	22.75	22.82	0.46	ppb
Lead	208-1	22.85	23.10	22.66	22.87	0.97	ppb
Lithium	6-1				94		%
Magnesium	24-2	97438.69	97949.18	98217.82	97868.56	0.40	ppb
Manganese	55-2	26.85	27.18	27.18	27.07	0.69	ppb
Molybdenum	94-1	1541.27	1485.01	1562.71	1529.66	2.62	ppb
Molybdenum	95-1	1891.82	1861.75	1961.25	1904.94	2.68	ppb
Molybdenum	96-1	1845.91	1842.69	1895.23	1861.28	1.58	ppb
Molybdenum	97-1	1871.37	1824.92	1880.98	1859.09	1.61	ppb
Molybdenum	98-1	1894.59	1768.22	1891.94	1851.58	3.90	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	24.41	24.91	24.28	24.53	1.35	ppb
Phosphorus	31-2	106778.14	106702.35	106135.94	106538.81	0.33	ppb
Potassium	39-2	97438.97	99112.16	97124.55	97891.89	1.09	ppb
Rhodium	103-1				93		%
Rhodium	103-2				94		%
Scandium	45-1				103		%
Scandium	45-2				102		%
Selenium	82-1	21.28	21.04	20.76	21.03	1.25	ppb
Selenium	77-2	20.75	21.34	23.18	21.75	5.82	ppb
Selenium	78-2	23.06	19.67	18.10	20.28	12.51	ppb
Silicon	28-1	7.76	7.96	9.68	8.47	12.44	ppb
Silver	107-1	18.91	19.12	18.98	19.00	0.57	ppb
Silver	109-1	18.97	18.98	18.99	18.98	0.06	ppb
Sodium	23-2	105297.64	103609.59	104858.63	104588.62	0.84	ppb
Strontium	86-1	31.91	31.41	32.23	31.85	1.30	ppb
Strontium	88-1	32.85	33.54	33.98	33.46	1.70	ppb
Sulfur	34-1	101415.23	98209.44	99801.22	99808.63	1.61	ppb
Terbium	159-1				100		%
Terbium	159-2				101		%
Thallium	203-1	19.48	19.70	19.74	19.64	0.70	ppb
Thallium	205-1	19.51	19.65	19.55	19.57	0.37	ppb
Tin	118-1	0.18	0.18	0.17	0.18	4.96	ppb
Titanium	47-1	1951.93	1914.99	1931.60	1932.84	0.96	ppb
Uranium	238-1	0.01	0.01	0.01	0.01	6.14	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P8
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:37:29	DataFile Name :	021ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	20.36	20.66	20.07	20.37	1.46	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				102		%
Zinc	66-2	29.73	30.17	30.05	29.98	0.76	ppb
Zirconium	90-1	0.03	0.04	0.05	0.04	15.55	ppb
Zirconium	91-1	0.04	0.04	0.05	0.05	17.94	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P8
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:40:43	DataFile Name :	022CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	52634.71	48904.69	53295.57	51611.66	4.59	ppb
Antimony	121-1	510.07	527.22	518.26	518.52	1.65	ppb
Arsenic	75-2	506.64	477.32	511.46	498.47	3.71	ppb
Barium	135-1	2607.17	2711.18	2695.02	2671.12	2.10	ppb
Barium	137-1	2577.32	2666.79	2662.73	2635.62	1.92	ppb
Beryllium	9-1	529.93	514.59	519.84	521.45	1.50	ppb
Bismuth	209-1				87		%
Bismuth	209-2				89		%
Bromine	81-1						cps
Cadmium	108-1	493.78	510.91	506.00	503.56	1.75	ppb
Cadmium	106-1	498.39	520.93	515.17	511.50	2.29	ppb
Cadmium	111-1	510.01	524.65	509.05	514.57	1.70	ppb
Calcium	43-1	246726.48	256900.84	255787.19	253138.17	2.20	ppb
Calcium	44-1	248812.11	257563.18	256675.80	254350.36	1.89	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	511.40	492.21	525.06	509.56	3.24	ppb
Cobalt	59-2	487.47	472.52	499.52	486.50	2.78	ppb
Copper	63-2	4631.64	4580.52	4807.16	4673.11	2.54	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				100		%
Indium	115-1				92		%
Indium	115-2				92		%
Iron	54-2	130033.48	126364.96	132769.13	129722.52	2.48	ppb
Iron	56-2	131133.91	122696.71	132788.96	128873.19	4.20	ppb
Iron	57-2	129732.87	122791.88	132310.87	128278.54	3.84	ppb
Krypton	83-1						cps
Lead	206-1	2593.50	2491.82	2595.51	2560.28	2.32	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P8
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:40:43	DataFile Name :	022CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2536.12	2486.59	2563.74	2528.82	1.55	ppb
Lead	208-1	2515.91	2474.52	2547.16	2512.53	1.45	ppb
Lithium	6-1				91		%
Magnesium	24-2	254511.07	239167.95	259029.60	250902.87	4.15	ppb
Manganese	55-2	4997.97	4810.76	5072.55	4960.43	2.72	ppb
Molybdenum	94-1	4961.32	5097.81	5074.41	5044.51	1.45	ppb
Molybdenum	95-1	5029.47	5141.85	5107.38	5092.90	1.13	ppb
Molybdenum	96-1	5050.62	5143.37	5078.47	5090.82	0.93	ppb
Molybdenum	97-1	4939.32	5010.04	4960.38	4969.91	0.73	ppb
Molybdenum	98-1	4955.02	5038.43	4998.79	4997.41	0.83	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	449.67	464.80	467.04	460.50	2.05	ppb
Phosphorus	31-2	10349.13	9982.48	10877.03	10402.88	4.32	ppb
Potassium	39-2	125198.65	120782.55	129049.07	125010.09	3.31	ppb
Rhodium	103-1				90		%
Rhodium	103-2				91		%
Scandium	45-1				101		%
Scandium	45-2				106		%
Selenium	82-1	483.97	488.93	487.80	486.90	0.53	ppb
Selenium	77-2	499.37	507.18	513.97	506.84	1.44	ppb
Selenium	78-2	480.18	492.95	507.07	493.40	2.73	ppb
Silicon	28-1	584.97	593.87	587.75	588.86	0.77	ppb
Silver	107-1	500.90	512.49	509.39	507.59	1.18	ppb
Silver	109-1	496.12	511.61	501.88	503.20	1.56	ppb
Sodium	23-2	254955.95	240786.76	260340.52	252027.74	4.01	ppb
Strontium	86-1	504.72	511.43	518.43	511.53	1.34	ppb
Strontium	88-1	510.20	507.62	513.98	510.60	0.63	ppb
Sulfur	34-1	10286.21	10255.95	9908.22	10150.13	2.07	ppb
Terbium	159-1				98		%
Terbium	159-2				100		%
Thallium	203-1	519.25	501.23	523.73	514.74	2.31	ppb
Thallium	205-1	513.60	504.47	514.36	510.81	1.08	ppb
Tin	118-1	499.34	525.81	510.39	511.84	2.60	ppb
Titanium	47-1	4944.69	4962.38	4973.48	4960.18	0.29	ppb
Uranium	238-1	501.01	509.15	518.15	509.44	1.68	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P8
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:40:43	DataFile Name :	022CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	515.79	494.08	525.53	511.80	3.15	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				100		%
Yttrium	89-2				103		%
Zinc	66-2	4721.34	4522.84	4949.24	4731.14	4.51	ppb
Zirconium	90-1	498.15	509.46	505.63	504.41	1.14	ppb
Zirconium	91-1	510.42	523.78	509.03	514.41	1.58	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P8
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:44:04	DataFile Name :	023CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.33	1.69	0.74	1.26	38.12	ppb
Antimony	121-1	0.10	0.08	0.08	0.09	14.76	ppb
Arsenic	75-2	0.00	0.01	0.00	0.01	50.05	ppb
Barium	135-1	0.05	0.03	0.03	0.03	33.31	ppb
Barium	137-1	0.04	0.03	0.03	0.04	21.91	ppb
Beryllium	9-1	0.04	0.03	0.03	0.03	20.29	ppb
Bismuth	209-1				103		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Cadmium	108-1	0.03	0.04	0.03	0.03	20.00	ppb
Cadmium	106-1	-0.27	-0.37	0.03	-0.20		ppb
Cadmium	111-1	0.00	-0.01	0.02	0.01	324.05	ppb
Calcium	43-1	3.47	3.20	1.14	2.60	48.86	ppb
Calcium	44-1	4.14	3.03	1.58	2.92	43.96	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.01	-0.01	-0.01	-0.01		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	38.00	ppb
Copper	63-2	0.03	0.01	0.02	0.02	42.36	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				104		%
Indium	115-1				106		%
Indium	115-2				106		%
Iron	54-2	1.96	2.00	1.31	1.76	21.97	ppb
Iron	56-2	2.07	1.95	1.94	1.98	3.55	ppb
Iron	57-2	2.12	1.83	2.20	2.05	9.48	ppb
Krypton	83-1						cps
Lead	206-1	0.15	0.13	0.12	0.13	9.65	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P8
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:44:04	DataFile Name :	023CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.14	0.13	0.12	0.13	8.46	ppb
Lead	208-1	0.14	0.13	0.12	0.13	8.55	ppb
Lithium	6-1				102		%
Magnesium	24-2	3.98	3.56	2.92	3.48	15.33	ppb
Manganese	55-2	0.00	-0.01	0.00	0.00		ppb
Molybdenum	94-1	0.23	0.19	0.16	0.19	19.89	ppb
Molybdenum	95-1	0.15	0.12	0.10	0.12	20.37	ppb
Molybdenum	96-1	0.15	0.12	0.11	0.13	17.88	ppb
Molybdenum	97-1	0.15	0.12	0.09	0.12	23.27	ppb
Molybdenum	98-1	0.14	0.11	0.10	0.12	21.18	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.00	-0.01	0.00	0.00		ppb
Phosphorus	31-2	-21.28	-20.40	-24.08	-21.92		ppb
Potassium	39-2	16.70	16.52	17.51	16.91	3.11	ppb
Rhodium	103-1				107		%
Rhodium	103-2				106		%
Scandium	45-1				108		%
Scandium	45-2				106		%
Selenium	82-1	-0.08	0.14	0.00	0.02	659.29	ppb
Selenium	77-2	0.00	0.43	0.00	0.14	173.21	ppb
Selenium	78-2	-0.28	-0.53	0.60	-0.07		ppb
Silicon	28-1	-0.76	-0.17	-1.16	-0.70		ppb
Silver	107-1	0.04	0.04	0.03	0.04	13.53	ppb
Silver	109-1	0.23	0.04	0.03	0.10	110.08	ppb
Sodium	23-2	20.75	20.04	18.39	19.73	6.13	ppb
Strontium	86-1	0.01	0.01	0.01	0.01	26.01	ppb
Strontium	88-1	0.01	0.01	0.01	0.01	23.27	ppb
Sulfur	34-1	-542.76	-511.60	-662.55	-572.30		ppb
Terbium	159-1				104		%
Terbium	159-2				106		%
Thallium	203-1	0.06	0.06	0.05	0.06	9.01	ppb
Thallium	205-1	0.06	0.05	0.05	0.05	9.38	ppb
Tin	118-1	0.01	0.01	0.01	0.01	14.68	ppb
Titanium	47-1	0.11	0.07	0.08	0.09	25.21	ppb
Uranium	238-1	0.01	0.00	0.00	0.01	55.79	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P8
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:44:04	DataFile Name :	023CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.01	0.01	0.00	0.01	67.40	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				107		%
Zinc	66-2	0.00	0.03	0.06	0.03	92.12	ppb
Zirconium	90-1	0.05	0.04	0.04	0.04	11.89	ppb
Zirconium	91-1	0.05	0.05	0.04	0.04	14.01	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P8
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:47:27	DataFile Name :	024LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	21.52	21.37	19.12	20.67	6.50	ppb
Antimony	121-1	1.95	1.98	2.01	1.98	1.57	ppb
Arsenic	75-2	0.88	1.12	1.01	1.00	11.58	ppb
Barium	135-1	9.79	9.80	9.97	9.86	1.04	ppb
Barium	137-1	10.01	9.93	9.96	9.97	0.37	ppb
Beryllium	9-1	1.06	1.11	1.09	1.09	2.26	ppb
Bismuth	209-1				103		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Cadmium	108-1	1.01	0.94	1.11	1.02	8.05	ppb
Cadmium	106-1	0.82	0.47	0.81	0.70	28.00	ppb
Cadmium	111-1	1.02	1.03	1.04	1.03	1.21	ppb
Calcium	43-1	502.77	491.25	510.96	501.66	1.97	ppb
Calcium	44-1	501.71	488.76	505.75	498.74	1.78	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.02	2.03	2.01	2.02	0.49	ppb
Cobalt	59-2	1.09	1.04	1.08	1.07	2.70	ppb
Copper	63-2	2.21	2.09	2.07	2.12	3.42	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				105		%
Indium	115-1				106		%
Indium	115-2				106		%
Iron	54-2	58.47	56.66	55.57	56.90	2.58	ppb
Iron	56-2	56.02	55.17	55.52	55.57	0.77	ppb
Iron	57-2	53.90	56.66	55.57	55.38	2.51	ppb
Krypton	83-1						cps
Lead	206-1	0.97	0.94	0.98	0.96	2.12	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P8
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:47:27	DataFile Name :	024LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.97	0.99	1.01	0.99	1.97	ppb
Lead	208-1	0.96	0.96	0.99	0.97	1.43	ppb
Lithium	6-1				103		%
Magnesium	24-2	554.45	543.16	543.03	546.88	1.20	ppb
Manganese	55-2	1.05	0.95	1.06	1.02	5.83	ppb
Molybdenum	94-1	5.64	5.71	5.70	5.68	0.59	ppb
Molybdenum	95-1	4.64	4.71	4.84	4.73	2.13	ppb
Molybdenum	96-1	4.85	4.99	4.93	4.92	1.43	ppb
Molybdenum	97-1	4.73	4.81	4.74	4.76	0.88	ppb
Molybdenum	98-1	4.66	4.71	4.71	4.70	0.58	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.05	0.98	0.99	1.01	3.67	ppb
Phosphorus	31-2	-3.16	8.91	-2.08	1.22	545.77	ppb
Potassium	39-2	506.37	500.80	510.48	505.88	0.96	ppb
Rhodium	103-1				105		%
Rhodium	103-2				106		%
Scandium	45-1				108		%
Scandium	45-2				107		%
Selenium	82-1	4.57	5.16	5.27	5.00	7.60	ppb
Selenium	77-2	7.32	6.45	2.58	5.45	46.31	ppb
Selenium	78-2	3.47	4.58	5.58	4.55	23.26	ppb
Silicon	28-1	2.23	0.75	1.34	1.44	51.86	ppb
Silver	107-1	0.99	0.98	1.01	0.99	1.41	ppb
Silver	109-1	1.00	0.99	1.02	1.00	1.49	ppb
Sodium	23-2	552.86	544.56	550.11	549.18	0.77	ppb
Strontium	86-1	0.91	0.95	0.95	0.93	2.47	ppb
Strontium	88-1	0.96	0.98	0.98	0.97	1.34	ppb
Sulfur	34-1	-487.32	-599.60	-469.22	-518.72		ppb
Terbium	159-1				106		%
Terbium	159-2				105		%
Thallium	203-1	0.95	0.93	0.97	0.95	1.97	ppb
Thallium	205-1	0.93	0.95	0.97	0.95	2.15	ppb
Tin	118-1	4.83	4.91	4.91	4.88	0.96	ppb
Titanium	47-1	4.84	4.79	4.89	4.84	0.95	ppb
Uranium	238-1	0.88	0.90	0.89	0.89	1.17	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P8
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:47:27	DataFile Name :	024LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	5.04	5.06	5.09	5.06	0.47	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				107		%
Zinc	66-2	5.08	5.03	5.14	5.08	1.08	ppb
Zirconium	90-1	0.98	0.98	0.96	0.97	1.15	ppb
Zirconium	91-1	0.96	1.00	0.98	0.98	2.00	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-02	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-TANK-041525	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:50:49	DataFile Name :	025AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	26.17	24.86	24.27	25.10	3.88	ppb
Antimony	121-1	0.07	0.07	0.07	0.07	2.81	ppb
Arsenic	75-2	0.19	0.16	0.20	0.19	11.39	ppb
Barium	135-1	23.74	23.67	23.58	23.66	0.33	ppb
Barium	137-1	23.99	23.47	23.85	23.77	1.13	ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	169.90	ppb
Bismuth	209-1				106		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Cadmium	108-1	0.00	0.02	0.01	0.01	91.00	ppb
Cadmium	106-1	-0.28	-0.51	-0.45	-0.41		ppb
Cadmium	111-1	-0.02	-0.04	-0.03	-0.03		ppb
Calcium	43-1	23727.28	23808.89	23420.28	23652.15	0.87	ppb
Calcium	44-1	23629.55	23358.07	23014.51	23334.04	1.32	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.27	0.21	0.21	0.23	14.58	ppb
Cobalt	59-2	0.03	0.03	0.03	0.03	7.79	ppb
Copper	63-2	19.69	19.53	19.69	19.63	0.47	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				109		%
Indium	115-1				109		%
Indium	115-2				109		%
Iron	54-2	30.27	29.64	28.96	29.63	2.21	ppb
Iron	56-2	29.48	29.52	29.55	29.52	0.14	ppb
Iron	57-2	31.44	29.93	30.67	30.68	2.46	ppb
Krypton	83-1						cps
Lead	206-1	0.22	0.22	0.20	0.21	4.17	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-02	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-TANK-041525	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:50:49	DataFile Name :	025AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.20	0.20	0.20	0.20	2.26	ppb
Lead	208-1	0.21	0.21	0.20	0.21	3.28	ppb
Lithium	6-1				105		%
Magnesium	24-2	6799.31	6685.23	6580.06	6688.20	1.64	ppb
Manganese	55-2	4.62	4.53	4.70	4.62	1.89	ppb
Molybdenum	94-1	0.19	0.17	0.19	0.18	6.77	ppb
Molybdenum	95-1	0.20	0.17	0.19	0.18	8.95	ppb
Molybdenum	96-1	0.19	0.19	0.19	0.19	1.50	ppb
Molybdenum	97-1	0.18	0.19	0.19	0.19	2.60	ppb
Molybdenum	98-1	0.18	0.19	0.20	0.19	3.14	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.21	1.18	1.14	1.17	3.06	ppb
Phosphorus	31-2	-9.87	-28.71	-17.56	-18.71		ppb
Potassium	39-2	2425.08	2416.60	2420.89	2420.85	0.18	ppb
Rhodium	103-1				107		%
Rhodium	103-2				106		%
Scandium	45-1				111		%
Scandium	45-2				112		%
Selenium	82-1	0.16	0.12	0.39	0.22	65.83	ppb
Selenium	77-2	0.42	0.84	0.00	0.42	100.01	ppb
Selenium	78-2	-0.18	-0.06	-0.43	-0.23		ppb
Silicon	28-1	668.25	655.67	654.35	659.42	1.16	ppb
Silver	107-1	0.01	0.01	0.01	0.01	15.38	ppb
Silver	109-1	0.01	0.01	0.01	0.01	7.73	ppb
Sodium	23-2	21099.47	20651.54	21003.31	20918.11	1.13	ppb
Strontium	86-1	89.03	87.19	88.65	88.29	1.10	ppb
Strontium	88-1	94.40	90.55	93.03	92.66	2.11	ppb
Sulfur	34-1	5043.69	4674.35	4658.22	4792.08	4.55	ppb
Terbium	159-1				108		%
Terbium	159-2				109		%
Thallium	203-1	0.03	0.03	0.02	0.03	8.17	ppb
Thallium	205-1	0.03	0.03	0.02	0.03	18.61	ppb
Tin	118-1	1.13	1.08	1.11	1.10	2.30	ppb
Titanium	47-1	0.35	0.34	0.35	0.35	2.00	ppb
Uranium	238-1	0.00	0.01	0.01	0.01	4.86	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-02	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-TANK-041525	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:50:49	DataFile Name :	025AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.11	0.11	0.11	0.11	1.27	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				111		%
Yttrium	89-2				110		%
Zinc	66-2	15.01	14.84	15.10	14.98	0.89	ppb
Zirconium	90-1	0.02	0.01	0.01	0.01	21.11	ppb
Zirconium	91-1	0.02	0.01	0.01	0.01	79.16	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-03	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-PUMP-04152	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:54:06	DataFile Name :	026AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	28.93	30.12	32.54	30.53	6.01	ppb
Antimony	121-1	0.15	0.15	0.14	0.15	4.00	ppb
Arsenic	75-2	0.36	0.40	0.34	0.37	7.31	ppb
Barium	135-1	24.61	25.19	24.76	24.85	1.20	ppb
Barium	137-1	24.93	25.22	24.94	25.03	0.66	ppb
Beryllium	9-1	0.00	0.00	0.00	0.00		ppb
Bismuth	209-1				106		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Cadmium	108-1	0.00	0.01	0.01	0.01	150.68	ppb
Cadmium	106-1	-0.33	-0.23	-0.49	-0.35		ppb
Cadmium	111-1	-0.02	-0.01	-0.04	-0.03		ppb
Calcium	43-1	24369.11	24188.25	24620.11	24392.49	0.89	ppb
Calcium	44-1	23784.10	23804.60	24179.24	23922.64	0.93	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.30	0.32	0.35	0.32	7.10	ppb
Cobalt	59-2	0.05	0.05	0.05	0.05	1.93	ppb
Copper	63-2	14.19	14.16	14.68	14.34	2.03	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				107		%
Indium	115-1				107		%
Indium	115-2				107		%
Iron	54-2	608.22	594.82	615.03	606.02	1.70	ppb
Iron	56-2	653.96	615.46	648.07	639.16	3.24	ppb
Iron	57-2	609.62	588.61	616.35	604.86	2.39	ppb
Krypton	83-1						cps
Lead	206-1	0.15	0.14	0.14	0.14	4.36	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-03	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-PUMP-04152	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:54:06	DataFile Name :	026AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.15	0.15	0.14	0.14	3.72	ppb
Lead	208-1	0.14	0.14	0.14	0.14	1.82	ppb
Lithium	6-1				105		%
Magnesium	24-2	6965.92	6572.95	7110.78	6883.22	4.04	ppb
Manganese	55-2	15.76	15.32	15.78	15.62	1.65	ppb
Molybdenum	94-1	0.21	0.21	0.21	0.21	0.77	ppb
Molybdenum	95-1	0.19	0.20	0.20	0.20	0.79	ppb
Molybdenum	96-1	0.21	0.21	0.21	0.21	1.13	ppb
Molybdenum	97-1	0.19	0.20	0.20	0.20	3.21	ppb
Molybdenum	98-1	0.19	0.19	0.20	0.19	2.58	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.70	0.71	0.70	0.70	0.78	ppb
Phosphorus	31-2	-10.08	-9.00	-21.43	-13.50		ppb
Potassium	39-2	2518.86	2437.41	2580.12	2512.13	2.85	ppb
Rhodium	103-1				107		%
Rhodium	103-2				106		%
Scandium	45-1				111		%
Scandium	45-2				110		%
Selenium	82-1	0.23	0.09	0.43	0.25	69.19	ppb
Selenium	77-2	0.00	0.83	0.00	0.28	173.21	ppb
Selenium	78-2	0.32	-0.44	-0.03	-0.05		ppb
Silicon	28-1	668.12	658.12	659.20	661.81	0.83	ppb
Silver	107-1	0.01	0.01	0.01	0.01	7.84	ppb
Silver	109-1	0.01	0.01	0.01	0.01	16.46	ppb
Sodium	23-2	22289.85	21326.62	22809.03	22141.83	3.40	ppb
Strontium	86-1	90.13	89.78	91.21	90.37	0.83	ppb
Strontium	88-1	92.80	94.43	93.87	93.70	0.88	ppb
Sulfur	34-1	5462.21	5458.88	5625.33	5515.48	1.73	ppb
Terbium	159-1				107		%
Terbium	159-2				108		%
Thallium	203-1	0.02	0.02	0.02	0.02	5.51	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	9.42	ppb
Tin	118-1	2.22	2.21	2.24	2.22	0.77	ppb
Titanium	47-1	0.39	0.37	0.41	0.39	4.93	ppb
Uranium	238-1	0.01	0.01	0.01	0.01	9.16	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-03	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-PUMP-04152	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:54:06	DataFile Name :	026AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.14	0.12	0.12	0.13	9.18	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				110		%
Yttrium	89-2				109		%
Zinc	66-2	43.51	41.50	43.34	42.78	2.61	ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	2.58	ppb
Zirconium	91-1	0.02	0.02	0.02	0.02	10.62	ppb

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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BL	Instrumnet Name :	P8
Client Sample ID :	PB167612BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:57:20	DataFile Name :	027CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.90	0.51	0.11	0.51	78.69	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	11.50	ppb
Arsenic	75-2	-0.01	-0.01	-0.02	-0.01		ppb
Barium	135-1	-0.01	0.00	0.00	0.00		ppb
Barium	137-1	-0.01	-0.01	-0.01	-0.01		ppb
Beryllium	9-1	-0.01	-0.01	0.00	0.00		ppb
Bismuth	209-1				103		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Cadmium	108-1	0.02	0.00	-0.02	0.00	1321.80	ppb
Cadmium	106-1	-0.23	-0.15	-0.22	-0.20		ppb
Cadmium	111-1	-0.01	-0.01	-0.01	-0.01		ppb
Calcium	43-1	-0.99	-2.87	-1.45	-1.77		ppb
Calcium	44-1	-0.12	-1.00	-0.86	-0.66		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.01	-0.01	-0.01	-0.01		ppb
Cobalt	59-2	-0.01	-0.01	0.00	0.00		ppb
Copper	63-2	-0.06	-0.07	-0.07	-0.07		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				102		%
Indium	115-1				105		%
Indium	115-2				105		%
Iron	54-2	0.63	0.53	0.19	0.45	51.09	ppb
Iron	56-2	0.06	0.04	0.13	0.08	62.73	ppb
Iron	57-2	0.27	0.40	0.11	0.26	56.20	ppb
Krypton	83-1						cps
Lead	206-1	0.02	0.02	0.02	0.02	11.85	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BL	Instrumnet Name :	P8
Client Sample ID :	PB167612BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:57:20	DataFile Name :	027CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.03	0.02	0.03	0.02	21.99	ppb
Lead	208-1	0.02	0.02	0.02	0.02	11.29	ppb
Lithium	6-1				101		%
Magnesium	24-2	0.59	0.51	0.83	0.64	25.92	ppb
Manganese	55-2	-0.03	-0.03	-0.06	-0.04		ppb
Molybdenum	94-1	0.03	0.03	0.03	0.03	5.86	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	21.11	ppb
Molybdenum	96-1	0.01	0.00	0.00	0.01	52.71	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00	113.27	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	43.51	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.00	0.01	0.01	0.01	39.06	ppb
Phosphorus	31-2	-20.39	-24.70	-29.81	-24.97		ppb
Potassium	39-2	10.69	10.32	8.75	9.92	10.36	ppb
Rhodium	103-1				105		%
Rhodium	103-2				104		%
Scandium	45-1				106		%
Scandium	45-2				106		%
Selenium	82-1	-0.04	-0.08	0.19	0.02	600.68	ppb
Selenium	77-2	0.44	0.00	0.00	0.15	173.21	ppb
Selenium	78-2	-0.39	-0.40	-0.91	-0.57		ppb
Silicon	28-1	0.20	-0.70	-0.66	-0.39		ppb
Silver	107-1	0.00	0.01	0.01	0.01	18.56	ppb
Silver	109-1	0.00	0.00	0.00	0.00	12.71	ppb
Sodium	23-2	8.53	7.15	6.70	7.46	12.76	ppb
Strontium	86-1	0.00	0.01	0.00	0.00	102.60	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	48.44	ppb
Sulfur	34-1	-42.57	-129.40	-67.23	-79.73		ppb
Terbium	159-1				103		%
Terbium	159-2				104		%
Thallium	203-1	0.02	0.01	0.01	0.01	3.88	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	6.46	ppb
Tin	118-1	0.00	0.00	0.00	0.00	928.07	ppb
Titanium	47-1	-0.01	0.00	-0.01	-0.01		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BL	Instrumnet Name :	P8
Client Sample ID :	PB167612BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:57:20	DataFile Name :	027CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00		ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				106		%
Zinc	66-2	-0.02	0.05	-0.01	0.01	765.16	ppb
Zirconium	90-1	0.01	0.01	0.01	0.01	19.53	ppb
Zirconium	91-1	0.01	0.02	0.01	0.01	32.39	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BS	Instrumnet Name :	P8
Client Sample ID :	PB167612BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:00:45	DataFile Name :	028LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10199.23	10210.45	10210.18	10206.62	0.06	ppb
Antimony	121-1	516.93	516.06	523.26	518.75	0.76	ppb
Arsenic	75-2	514.65	511.64	503.69	509.99	1.11	ppb
Barium	135-1	2558.83	2602.59	2568.01	2576.48	0.90	ppb
Barium	137-1	2620.13	2627.16	2531.30	2592.86	2.06	ppb
Beryllium	9-1	512.92	526.56	528.84	522.77	1.65	ppb
Bismuth	209-1				98		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	525.67	530.86	514.36	523.63	1.61	ppb
Cadmium	106-1	525.94	525.47	510.43	520.61	1.69	ppb
Cadmium	111-1	528.31	546.41	528.08	534.27	1.97	ppb
Calcium	43-1	51291.59	50860.73	51564.66	51238.99	0.69	ppb
Calcium	44-1	51524.21	50355.29	51337.56	51072.35	1.23	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	511.93	510.29	507.34	509.85	0.46	ppb
Cobalt	59-2	506.01	514.73	512.50	511.08	0.89	ppb
Copper	63-2	4947.43	5066.94	5041.75	5018.71	1.26	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				100		%
Indium	115-1				98		%
Indium	115-2				93		%
Iron	54-2	27552.26	27522.82	27336.40	27470.49	0.43	ppb
Iron	56-2	26854.82	27353.07	27341.06	27182.98	1.05	ppb
Iron	57-2	27019.30	27862.73	27597.78	27493.27	1.57	ppb
Krypton	83-1						cps
Lead	206-1	2380.06	2458.28	2481.88	2440.07	2.18	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BS	Instrumnet Name :	P8
Client Sample ID :	PB167612BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:00:45	DataFile Name :	028LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2407.69	2462.71	2477.52	2449.30	1.50	ppb
Lead	208-1	2412.84	2451.77	2479.64	2448.08	1.37	ppb
Lithium	6-1				99		%
Magnesium	24-2	52199.10	51876.20	53148.40	52407.90	1.26	ppb
Manganese	55-2	5055.60	5090.75	5028.27	5058.20	0.62	ppb
Molybdenum	94-1	5038.44	5163.27	4972.20	5057.97	1.92	ppb
Molybdenum	95-1	4961.35	5238.63	4980.94	5060.30	3.06	ppb
Molybdenum	96-1	4956.32	5222.50	5033.23	5070.68	2.70	ppb
Molybdenum	97-1	4959.31	5034.71	4958.66	4984.23	0.88	ppb
Molybdenum	98-1	5008.16	5131.05	4970.02	5036.41	1.67	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	513.99	528.76	516.84	519.86	1.51	ppb
Phosphorus	31-2	10259.20	10217.53	10280.17	10252.30	0.31	ppb
Potassium	39-2	25554.69	25568.22	25522.86	25548.59	0.09	ppb
Rhodium	103-1				97		%
Rhodium	103-2				97		%
Scandium	45-1				104		%
Scandium	45-2				105		%
Selenium	82-1	495.13	513.85	497.41	502.13	2.03	ppb
Selenium	77-2	528.21	490.75	542.27	520.41	5.12	ppb
Selenium	78-2	517.80	519.41	502.77	513.33	1.79	ppb
Silicon	28-1	572.46	555.08	567.05	564.86	1.57	ppb
Silver	107-1	528.47	540.80	518.64	529.30	2.10	ppb
Silver	109-1	522.17	532.87	534.84	529.96	1.29	ppb
Sodium	23-2	52770.06	53174.06	53481.90	53142.01	0.67	ppb
Strontium	86-1	503.95	509.29	503.88	505.71	0.61	ppb
Strontium	88-1	497.01	505.67	504.41	502.37	0.93	ppb
Sulfur	34-1	10417.14	9896.80	9995.89	10103.28	2.73	ppb
Terbium	159-1				102		%
Terbium	159-2				102		%
Thallium	203-1	480.14	493.42	497.95	490.51	1.89	ppb
Thallium	205-1	491.38	490.92	503.55	495.28	1.45	ppb
Tin	118-1	523.31	522.14	515.92	520.46	0.76	ppb
Titanium	47-1	4978.22	4895.91	4961.27	4945.14	0.88	ppb
Uranium	238-1	491.63	495.46	491.64	492.91	0.45	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BS	Instrumnet Name :	P8
Client Sample ID :	PB167612BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:00:45	DataFile Name :	028LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	507.31	513.41	521.49	514.07	1.38	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				102		%
Yttrium	89-2				102		%
Zinc	66-2	5006.47	4995.90	4966.41	4989.59	0.42	ppb
Zirconium	90-1	505.63	513.47	496.50	505.20	1.68	ppb
Zirconium	91-1	507.34	522.05	498.85	509.41	2.30	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P8
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:03:26	DataFile Name :	029AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	51534.24	52532.27	51922.18	51996.23	0.97	ppb
Antimony	121-1	505.76	523.29	519.84	516.30	1.80	ppb
Arsenic	75-2	496.90	497.47	500.33	498.23	0.37	ppb
Barium	135-1	2620.63	2670.73	2658.66	2650.01	0.99	ppb
Barium	137-1	2597.63	2667.30	2624.76	2629.90	1.34	ppb
Beryllium	9-1	529.08	519.93	519.97	522.99	1.01	ppb
Bismuth	209-1				90		%
Bismuth	209-2				88		%
Bromine	81-1						cps
Cadmium	108-1	497.66	512.89	507.75	506.10	1.53	ppb
Cadmium	106-1	498.26	517.66	512.63	509.52	1.98	ppb
Cadmium	111-1	508.14	521.33	512.53	514.00	1.31	ppb
Calcium	43-1	250090.82	258030.89	250220.49	252780.73	1.80	ppb
Calcium	44-1	252227.87	255290.13	250931.17	252816.39	0.89	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	507.02	513.89	511.50	510.80	0.68	ppb
Cobalt	59-2	489.56	491.20	490.37	490.38	0.17	ppb
Copper	63-2	4750.95	4665.84	4642.67	4686.49	1.22	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				99		%
Indium	115-1				90		%
Indium	115-2				90		%
Iron	54-2	130846.72	129582.12	130097.88	130175.57	0.49	ppb
Iron	56-2	130388.38	131352.00	132293.24	131344.54	0.73	ppb
Iron	57-2	127666.89	131031.07	130530.40	129742.79	1.40	ppb
Krypton	83-1						cps
Lead	206-1	2480.23	2550.44	2551.44	2527.37	1.62	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P8
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:03:26	DataFile Name :	029AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2433.71	2478.09	2534.86	2482.22	2.04	ppb
Lead	208-1	2453.08	2474.54	2532.03	2486.55	1.64	ppb
Lithium	6-1				93		%
Magnesium	24-2	252321.02	255508.11	254970.24	254266.46	0.67	ppb
Manganese	55-2	4982.77	5045.99	5009.73	5012.83	0.63	ppb
Molybdenum	94-1	5074.55	4950.86	4925.74	4983.72	1.60	ppb
Molybdenum	95-1	5072.12	5026.06	5024.30	5040.83	0.54	ppb
Molybdenum	96-1	5075.18	5044.90	5132.42	5084.17	0.87	ppb
Molybdenum	97-1	4967.66	4953.92	5004.82	4975.47	0.53	ppb
Molybdenum	98-1	5010.79	4957.47	4937.14	4968.47	0.77	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	454.13	455.27	454.16	454.52	0.14	ppb
Phosphorus	31-2	10347.77	10361.78	10430.10	10379.88	0.42	ppb
Potassium	39-2	127670.07	124986.76	125048.97	125901.93	1.22	ppb
Rhodium	103-1				89		%
Rhodium	103-2				90		%
Scandium	45-1				99		%
Scandium	45-2				104		%
Selenium	82-1	487.63	479.73	482.95	483.44	0.82	ppb
Selenium	77-2	488.99	507.54	490.00	495.51	2.11	ppb
Selenium	78-2	518.18	492.94	502.16	504.43	2.53	ppb
Silicon	28-1	589.62	593.74	586.85	590.07	0.59	ppb
Silver	107-1	494.12	511.49	510.64	505.41	1.94	ppb
Silver	109-1	497.35	501.70	504.51	501.19	0.72	ppb
Sodium	23-2	258704.70	258315.45	260812.57	259277.57	0.52	ppb
Strontium	86-1	504.53	503.48	505.42	504.48	0.19	ppb
Strontium	88-1	512.84	509.38	512.87	511.69	0.39	ppb
Sulfur	34-1	10395.53	10028.28	9944.00	10122.60	2.37	ppb
Terbium	159-1				97		%
Terbium	159-2				99		%
Thallium	203-1	507.13	511.61	513.15	510.63	0.61	ppb
Thallium	205-1	501.71	505.80	508.65	505.39	0.69	ppb
Tin	118-1	503.93	513.27	507.18	508.13	0.93	ppb
Titanium	47-1	4915.49	5052.39	5011.10	4992.99	1.41	ppb
Uranium	238-1	511.59	504.46	517.09	511.05	1.24	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P8
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:03:26	DataFile Name :	029AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	514.07	503.49	512.92	510.16	1.14	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				101		%
Zinc	66-2	4776.74	4707.13	4783.70	4755.85	0.89	ppb
Zirconium	90-1	509.17	501.63	495.10	501.96	1.40	ppb
Zirconium	91-1	510.49	503.10	505.10	506.23	0.75	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P8
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:07:44	DataFile Name :	030AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.40	0.59	-0.19	0.27	152.55	ppb
Antimony	121-1	0.09	0.08	0.07	0.08	12.16	ppb
Arsenic	75-2	0.01	0.01	0.01	0.01	0.92	ppb
Barium	135-1	0.04	0.02	0.02	0.03	42.54	ppb
Barium	137-1	0.02	0.02	0.02	0.02	16.46	ppb
Beryllium	9-1	0.05	0.04	0.03	0.04	19.81	ppb
Bismuth	209-1				106		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Cadmium	108-1	0.03	0.05	0.02	0.03	45.67	ppb
Cadmium	106-1	-0.75	-0.24	-0.37	-0.46		ppb
Cadmium	111-1	-0.04	0.00	-0.01	-0.02		ppb
Calcium	43-1	1.34	1.37	0.29	1.00	61.20	ppb
Calcium	44-1	0.48	0.94	0.18	0.53	72.32	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.02	0.01	0.01	0.00	2859.88	ppb
Cobalt	59-2	0.01	0.00	0.00	0.00	39.87	ppb
Copper	63-2	-0.01	0.02	-0.01	0.00	17056.54	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				106		%
Indium	115-1				108		%
Indium	115-2				106		%
Iron	54-2	1.09	1.42	1.12	1.21	15.13	ppb
Iron	56-2	1.12	1.13	1.01	1.09	6.10	ppb
Iron	57-2	1.42	1.52	1.14	1.36	14.46	ppb
Krypton	83-1						cps
Lead	206-1	0.10	0.11	0.08	0.10	15.57	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P8
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:07:44	DataFile Name :	030AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.12	0.11	0.11	0.11	4.45	ppb
Lead	208-1	0.11	0.11	0.10	0.10	7.95	ppb
Lithium	6-1				102		%
Magnesium	24-2	2.62	2.07	2.51	2.40	12.05	ppb
Manganese	55-2	-0.01	0.08	0.12	0.07	100.86	ppb
Molybdenum	94-1	0.19	0.16	0.16	0.17	11.52	ppb
Molybdenum	95-1	0.10	0.09	0.08	0.09	12.33	ppb
Molybdenum	96-1	0.12	0.09	0.09	0.10	18.06	ppb
Molybdenum	97-1	0.10	0.08	0.07	0.08	18.98	ppb
Molybdenum	98-1	0.11	0.08	0.08	0.09	17.08	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.03	0.01	0.01	0.00		ppb
Phosphorus	31-2	-21.07	-19.38	-23.37	-21.27		ppb
Potassium	39-2	11.67	11.30	12.01	11.66	3.08	ppb
Rhodium	103-1				108		%
Rhodium	103-2				107		%
Scandium	45-1				109		%
Scandium	45-2				108		%
Selenium	82-1	0.08	0.28	0.18	0.18	55.36	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.29	-0.41	-0.66	-0.45		ppb
Silicon	28-1	-0.90	-0.64	-0.96	-0.83		ppb
Silver	107-1	0.03	0.03	0.03	0.03	7.91	ppb
Silver	109-1	0.03	0.03	0.03	0.03	13.23	ppb
Sodium	23-2	16.20	16.39	16.37	16.32	0.63	ppb
Strontium	86-1	0.01	0.00	0.01	0.01	84.63	ppb
Strontium	88-1	0.01	0.01	0.00	0.01	14.03	ppb
Sulfur	34-1	-408.12	-284.45	-413.69	-368.75		ppb
Terbium	159-1				105		%
Terbium	159-2				105		%
Thallium	203-1	0.03	0.03	0.03	0.03	4.92	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	10.84	ppb
Tin	118-1	0.00	0.01	0.06	0.02	141.56	ppb
Titanium	47-1	0.06	0.06	0.06	0.06	4.63	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	38.10	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P8
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:07:44	DataFile Name :	030AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	106.04	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				109		%
Yttrium	89-2				107		%
Zinc	66-2	-0.02	0.19	0.01	0.06	181.05	ppb
Zirconium	90-1	0.06	0.05	0.05	0.05	6.25	ppb
Zirconium	91-1	0.07	0.06	0.05	0.06	13.20	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P8
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 14:47:22	DataFile Name :	031CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	52614.73	51375.43	51750.76	51913.64	1.22	ppb
Antimony	121-1	506.57	514.34	506.24	509.05	0.90	ppb
Arsenic	75-2	497.79	502.56	501.43	500.59	0.50	ppb
Barium	135-1	2595.96	2618.58	2553.62	2589.39	1.27	ppb
Barium	137-1	2579.79	2559.02	2527.14	2555.32	1.04	ppb
Beryllium	9-1	520.91	549.41	536.84	535.72	2.67	ppb
Bismuth	209-1				86		%
Bismuth	209-2				85		%
Bromine	81-1						cps
Cadmium	108-1	501.45	502.83	489.41	497.90	1.48	ppb
Cadmium	106-1	499.88	503.16	493.11	498.72	1.03	ppb
Cadmium	111-1	503.33	510.89	492.92	502.38	1.80	ppb
Calcium	43-1	243649.51	253498.22	252671.48	249939.73	2.19	ppb
Calcium	44-1	243774.86	253258.32	249798.70	248943.96	1.93	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	524.91	506.32	508.78	513.34	1.97	ppb
Cobalt	59-2	501.22	493.69	491.92	495.61	1.00	ppb
Copper	63-2	4810.03	4678.47	4731.99	4740.16	1.40	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				95		%
Holmium	165-2				94		%
Indium	115-1				86		%
Indium	115-2				85		%
Iron	54-2	135588.78	131518.72	132595.37	133234.29	1.58	ppb
Iron	56-2	135241.57	129697.62	133433.48	132790.89	2.13	ppb
Iron	57-2	133642.64	132896.68	132463.41	133000.91	0.45	ppb
Krypton	83-1						cps
Lead	206-1	2515.87	2476.07	2562.40	2518.11	1.72	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P8
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 14:47:22	DataFile Name :	031CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2484.26	2487.94	2559.33	2510.51	1.69	ppb
Lead	208-1	2476.35	2488.33	2540.11	2501.59	1.35	ppb
Lithium	6-1				85		%
Magnesium	24-2	259523.12	251241.37	258006.06	256256.85	1.72	ppb
Manganese	55-2	5127.19	4917.08	4997.45	5013.90	2.11	ppb
Molybdenum	94-1	4959.60	4903.18	4985.14	4949.30	0.85	ppb
Molybdenum	95-1	5017.66	4973.58	4978.55	4989.93	0.48	ppb
Molybdenum	96-1	5062.00	4913.13	5008.54	4994.56	1.51	ppb
Molybdenum	97-1	4933.31	4842.60	4908.37	4894.76	0.96	ppb
Molybdenum	98-1	4920.37	4873.55	4930.06	4907.99	0.62	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	460.73	458.85	455.60	458.39	0.57	ppb
Phosphorus	31-2	10441.29	10410.14	10289.52	10380.32	0.77	ppb
Potassium	39-2	133537.18	129182.19	129913.59	130877.65	1.78	ppb
Rhodium	103-1				84		%
Rhodium	103-2				85		%
Scandium	45-1				95		%
Scandium	45-2				98		%
Selenium	82-1	485.78	481.33	480.10	482.40	0.62	ppb
Selenium	77-2	534.00	515.12	527.91	525.68	1.83	ppb
Selenium	78-2	490.32	478.63	509.35	492.77	3.15	ppb
Silicon	28-1	586.47	584.82	584.55	585.28	0.18	ppb
Silver	107-1	502.10	501.10	483.61	495.60	2.10	ppb
Silver	109-1	498.58	502.33	483.12	494.68	2.06	ppb
Sodium	23-2	267435.83	258078.62	262394.49	262636.31	1.78	ppb
Strontium	86-1	504.32	500.17	502.63	502.38	0.42	ppb
Strontium	88-1	507.57	502.84	503.59	504.67	0.50	ppb
Sulfur	34-1	10552.77	10575.32	10525.75	10551.28	0.24	ppb
Terbium	159-1				94		%
Terbium	159-2				94		%
Thallium	203-1	510.51	491.91	519.15	507.19	2.75	ppb
Thallium	205-1	497.82	495.29	508.64	500.59	1.42	ppb
Tin	118-1	501.94	501.83	498.34	500.70	0.41	ppb
Titanium	47-1	4947.45	4959.10	4956.88	4954.48	0.12	ppb
Uranium	238-1	510.43	523.53	519.84	517.93	1.30	ppb

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P8
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 14:47:22	DataFile Name :	031CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	513.42	512.44	509.18	511.68	0.43	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				94		%
Yttrium	89-2				94		%
Zinc	66-2	4851.81	4754.58	4771.51	4792.63	1.08	ppb
Zirconium	90-1	502.26	498.84	497.89	499.67	0.46	ppb
Zirconium	91-1	506.91	499.60	502.68	503.06	0.73	ppb

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P8
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 14:59:35	DataFile Name :	034CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.17	0.45	0.46	0.36	44.85	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	2.40	ppb
Arsenic	75-2	-0.01	0.00	0.00	0.00		ppb
Barium	135-1	-0.01	0.00	0.00	0.00		ppb
Barium	137-1	-0.01	-0.01	-0.01	-0.01		ppb
Beryllium	9-1	-0.01	-0.01	0.00	-0.01		ppb
Bismuth	209-1				104		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Cadmium	108-1	-0.01	-0.02	0.04	0.01	585.69	ppb
Cadmium	106-1	-0.42	-0.76	-0.72	-0.63		ppb
Cadmium	111-1	-0.03	-0.06	-0.06	-0.05		ppb
Calcium	43-1	-2.52	-1.89	-2.64	-2.35		ppb
Calcium	44-1	-2.50	-3.25	-2.68	-2.81		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.02	0.00	-0.03	-0.01		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.07	-0.08	-0.07	-0.07		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				103		%
Indium	115-1				104		%
Indium	115-2				103		%
Iron	54-2	0.02	0.11	-0.19	-0.02		ppb
Iron	56-2	-0.03	-0.02	0.07	0.01	943.16	ppb
Iron	57-2	0.04	0.24	-0.05	0.08	184.48	ppb
Krypton	83-1						cps
Lead	206-1	0.02	0.01	0.01	0.01	29.23	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P8
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 14:59:35	DataFile Name :	034CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.02	0.02	0.02	0.02	11.15	ppb
Lead	208-1	0.02	0.02	0.02	0.02	5.45	ppb
Lithium	6-1				97		%
Magnesium	24-2	0.16	0.22	0.23	0.20	20.06	ppb
Manganese	55-2	-0.07	-0.02	0.03	-0.02		ppb
Molybdenum	94-1	0.03	0.11	0.03	0.06	73.86	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	34.35	ppb
Molybdenum	96-1	0.01	0.00	0.00	0.00	65.13	ppb
Molybdenum	97-1	0.01	0.00	0.00	0.00	629.41	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	19.65	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.01	-0.01	0.01	0.00		ppb
Phosphorus	31-2	-18.28	-26.62	-25.14	-23.34		ppb
Potassium	39-2	3.49	3.30	5.87	4.22	34.07	ppb
Rhodium	103-1				105		%
Rhodium	103-2				105		%
Scandium	45-1				106		%
Scandium	45-2				105		%
Selenium	82-1	0.11	-0.19	0.18	0.03	637.66	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.01	-0.14	0.00	-0.05		ppb
Silicon	28-1	-0.74	-1.01	-0.61	-0.79		ppb
Silver	107-1	0.00	0.00	0.00	0.00	29.41	ppb
Silver	109-1	0.00	0.00	0.00	0.00	14.73	ppb
Sodium	23-2	6.69	6.91	5.72	6.44	9.79	ppb
Strontium	86-1	0.00	0.00	0.00	0.00	322.81	ppb
Strontium	88-1	0.00	0.00	0.00	0.00		ppb
Sulfur	34-1	-152.50	-274.90	-166.12	-197.84		ppb
Terbium	159-1				104		%
Terbium	159-2				104		%
Thallium	203-1	0.00	0.00	0.00	0.00	63.02	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	12.96	ppb
Tin	118-1	-0.01	0.01	0.00	0.00	3328.27	ppb
Titanium	47-1	0.00	-0.01	-0.01	-0.01		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

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LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P8
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 14:59:35	DataFile Name :	034CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00		ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				104		%
Zinc	66-2	0.06	0.03	-0.09	0.00	2544.50	ppb
Zirconium	90-1	0.02	0.01	0.02	0.02	18.41	ppb
Zirconium	91-1	0.02	0.02	0.02	0.02	21.23	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167780BL	Instrumnet Name :	P8
Client Sample ID :	PB167780BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:04:37	DataFile Name :	035CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.05	1.42	-0.64	0.24	435.29	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	14.06	ppb
Arsenic	75-2	-0.02	-0.02	-0.02	-0.02		ppb
Barium	135-1	0.00	0.00	-0.01	-0.01		ppb
Barium	137-1	-0.01	-0.01	-0.01	-0.01		ppb
Beryllium	9-1	-0.01	-0.01	-0.01	-0.01		ppb
Bismuth	209-1				104		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Cadmium	108-1	-0.02	0.00	-0.02	-0.01		ppb
Cadmium	106-1	-0.61	-0.46	-0.19	-0.42		ppb
Cadmium	111-1	-0.05	-0.04	-0.01	-0.03		ppb
Calcium	43-1	-1.85	-0.58	-0.93	-1.12		ppb
Calcium	44-1	-2.61	-3.17	-2.93	-2.90		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.01	0.00	-0.01	-0.01		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.09	-0.09	-0.07	-0.08		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				104		%
Indium	115-1				105		%
Indium	115-2				105		%
Iron	54-2	0.07	0.55	0.38	0.33	72.90	ppb
Iron	56-2	-0.06	-0.08	0.01	-0.04		ppb
Iron	57-2	-0.27	-0.41	0.09	-0.20		ppb
Krypton	83-1						cps
Lead	206-1	0.01	0.01	0.01	0.01	28.72	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167780BL	Instrumnet Name :	P8
Client Sample ID :	PB167780BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:04:37	DataFile Name :	035CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.02	0.02	0.01	0.01	15.73	ppb
Lead	208-1	0.01	0.01	0.01	0.01	9.77	ppb
Lithium	6-1				96		%
Magnesium	24-2	0.37	0.28	0.22	0.29	25.94	ppb
Manganese	55-2	-0.02	-0.07	-0.07	-0.06		ppb
Molybdenum	94-1	0.03	0.03	0.04	0.03	14.70	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00		ppb
Molybdenum	96-1	0.01	0.01	0.00	0.00	89.94	ppb
Molybdenum	97-1	0.00	-0.01	0.00	0.00		ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00		ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.02	-0.01	-0.03	-0.02		ppb
Phosphorus	31-2	-32.17	-29.49	-26.39	-29.35		ppb
Potassium	39-2	2.24	1.82	1.85	1.97	11.87	ppb
Rhodium	103-1				106		%
Rhodium	103-2				106		%
Scandium	45-1				108		%
Scandium	45-2				108		%
Selenium	82-1	0.00	0.32	0.10	0.14	115.58	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.40	-0.65	-0.27	-0.44		ppb
Silicon	28-1	-0.79	-0.89	-1.23	-0.97		ppb
Silver	107-1	0.00	0.00	0.00	0.00	117.93	ppb
Silver	109-1	0.00	0.00	0.00	0.00	21.10	ppb
Sodium	23-2	5.76	5.32	5.50	5.52	4.00	ppb
Strontium	86-1	0.00	0.00	0.01	0.00	258.54	ppb
Strontium	88-1	0.00	0.00	0.00	0.00		ppb
Sulfur	34-1	-167.79	-322.51	-366.60	-285.63		ppb
Terbium	159-1				104		%
Terbium	159-2				105		%
Thallium	203-1	0.00	0.00	0.00	0.00	29.05	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	138.61	ppb
Tin	118-1	0.00	-0.01	0.00	0.00		ppb
Titanium	47-1	-0.01	-0.01	0.01	0.00		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167780BL	Instrumnet Name :	P8
Client Sample ID :	PB167780BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:04:37	DataFile Name :	035CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00		ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				106		%
Zinc	66-2	-0.01	-0.06	-0.05	-0.04		ppb
Zirconium	90-1	0.01	0.01	0.02	0.01	11.91	ppb
Zirconium	91-1	0.01	0.02	0.01	0.01	45.68	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167780BS	Instrumnet Name :	P8
Client Sample ID :	PB167780BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:08:52	DataFile Name :	036LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10203.15	10200.82	10262.61	10222.19	0.34	ppb
Antimony	121-1	516.40	519.98	529.62	522.00	1.31	ppb
Arsenic	75-2	511.86	524.61	519.28	518.58	1.24	ppb
Barium	135-1	2560.85	2599.24	2690.19	2616.76	2.54	ppb
Barium	137-1	2542.92	2602.79	2655.18	2600.30	2.16	ppb
Beryllium	9-1	547.08	537.36	534.47	539.64	1.22	ppb
Bismuth	209-1				97		%
Bismuth	209-2				97		%
Bromine	81-1						cps
Cadmium	108-1	511.22	521.17	527.09	519.83	1.54	ppb
Cadmium	106-1	513.08	524.78	530.32	522.73	1.68	ppb
Cadmium	111-1	521.25	525.12	545.93	530.77	2.50	ppb
Calcium	43-1	52041.07	52068.64	52199.37	52103.03	0.16	ppb
Calcium	44-1	52328.53	51711.04	51815.82	51951.80	0.64	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	522.95	514.35	522.92	520.07	0.95	ppb
Cobalt	59-2	516.23	502.60	510.17	509.67	1.34	ppb
Copper	63-2	5106.63	5041.01	5175.69	5107.78	1.32	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				102		%
Indium	115-1				97		%
Indium	115-2				93		%
Iron	54-2	27170.91	27352.12	27800.94	27441.32	1.18	ppb
Iron	56-2	27482.57	26698.92	27322.26	27167.92	1.52	ppb
Iron	57-2	27926.63	26704.72	27557.79	27396.38	2.29	ppb
Krypton	83-1						cps
Lead	206-1	2433.60	2513.98	2556.45	2501.34	2.49	ppb

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167780BS	Instrumnet Name :	P8
Client Sample ID :	PB167780BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:08:52	DataFile Name :	036LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2444.56	2490.98	2520.56	2485.37	1.54	ppb
Lead	208-1	2445.07	2501.39	2509.38	2485.28	1.41	ppb
Lithium	6-1				93		%
Magnesium	24-2	53413.85	52455.57	52860.14	52909.85	0.91	ppb
Manganese	55-2	5128.95	5028.26	5183.70	5113.64	1.54	ppb
Molybdenum	94-1	4860.26	4966.07	4985.83	4937.39	1.37	ppb
Molybdenum	95-1	4920.63	5029.17	5063.62	5004.47	1.49	ppb
Molybdenum	96-1	4963.18	5085.00	5046.68	5031.62	1.24	ppb
Molybdenum	97-1	4911.75	4999.27	4941.97	4950.99	0.90	ppb
Molybdenum	98-1	4934.96	5036.06	5015.93	4995.65	1.07	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	519.00	512.65	518.35	516.67	0.68	ppb
Phosphorus	31-2	10532.68	10283.60	10429.35	10415.21	1.20	ppb
Potassium	39-2	25252.86	25899.72	25254.70	25469.09	1.46	ppb
Rhodium	103-1				98		%
Rhodium	103-2				96		%
Scandium	45-1				105		%
Scandium	45-2				106		%
Selenium	82-1	497.68	499.36	501.20	499.41	0.35	ppb
Selenium	77-2	525.67	525.30	523.25	524.74	0.25	ppb
Selenium	78-2	515.37	517.01	528.10	520.16	1.33	ppb
Silicon	28-1	504.47	509.85	507.85	507.39	0.54	ppb
Silver	107-1	519.44	528.00	531.31	526.25	1.16	ppb
Silver	109-1	526.19	524.08	533.80	528.03	0.97	ppb
Sodium	23-2	54649.90	53087.83	53815.47	53851.06	1.45	ppb
Strontium	86-1	512.73	514.98	508.31	512.01	0.66	ppb
Strontium	88-1	506.74	504.61	507.02	506.12	0.26	ppb
Sulfur	34-1	10425.92	10480.62	10257.04	10387.86	1.12	ppb
Terbium	159-1				102		%
Terbium	159-2				101		%
Thallium	203-1	493.85	503.31	518.71	505.29	2.48	ppb
Thallium	205-1	492.14	499.64	507.06	499.62	1.49	ppb
Tin	118-1	518.04	513.52	527.74	519.77	1.40	ppb
Titanium	47-1	4954.54	4986.79	5009.32	4983.55	0.55	ppb
Uranium	238-1	488.70	500.18	490.26	493.05	1.26	ppb

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167780BS	Instrumnet Name :	P8
Client Sample ID :	PB167780BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:08:52	DataFile Name :	036LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	520.19	512.93	520.52	517.88	0.83	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				104		%
Yttrium	89-2				102		%
Zinc	66-2	5141.60	4991.50	5077.69	5070.26	1.49	ppb
Zirconium	90-1	490.50	498.98	502.79	497.42	1.26	ppb
Zirconium	91-1	492.38	502.22	503.93	499.51	1.25	ppb

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167780TB	Instrumnet Name :	P8
Client Sample ID :	PB167780TB	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:15:14	DataFile Name :	037CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.29	0.28	0.21	0.26	17.58	ppb
Antimony	121-1	0.03	0.03	0.03	0.03	10.57	ppb
Arsenic	75-2	-0.01	0.01	-0.01	0.00		ppb
Barium	135-1	0.00	0.01	0.01	0.01	57.61	ppb
Barium	137-1	0.00	0.00	0.01	0.00	101.83	ppb
Beryllium	9-1	0.01	0.01	0.00	0.01	45.45	ppb
Bismuth	209-1				103		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Cadmium	108-1	0.00	0.00	0.01	0.00	172.89	ppb
Cadmium	106-1	-0.48	-0.48	-0.70	-0.55		ppb
Cadmium	111-1	-0.03	-0.03	-0.05	-0.04		ppb
Calcium	43-1	-1.65	-2.22	-2.61	-2.16		ppb
Calcium	44-1	-2.21	-3.03	-2.96	-2.73		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.01	0.00	-0.01	-0.01		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.04	-0.04	-0.05	-0.04		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				102		%
Indium	115-1				104		%
Indium	115-2				102		%
Iron	54-2	0.30	0.40	0.25	0.32	24.66	ppb
Iron	56-2	0.24	0.29	0.34	0.29	16.42	ppb
Iron	57-2	0.08	0.28	-0.03	0.11	143.28	ppb
Krypton	83-1						cps
Lead	206-1	0.05	0.05	0.04	0.04	12.58	ppb

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167780TB	Instrumnet Name :	P8
Client Sample ID :	PB167780TB	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:15:14	DataFile Name :	037CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.06	0.05	0.04	0.05	13.76	ppb
Lead	208-1	0.05	0.05	0.04	0.05	11.22	ppb
Lithium	6-1				94		%
Magnesium	24-2	0.90	0.48	0.48	0.62	39.07	ppb
Manganese	55-2	-0.09	0.01	0.04	-0.01		ppb
Molybdenum	94-1	0.10	0.09	0.08	0.09	12.55	ppb
Molybdenum	95-1	0.05	0.03	0.03	0.04	18.48	ppb
Molybdenum	96-1	0.06	0.04	0.04	0.05	25.10	ppb
Molybdenum	97-1	0.04	0.04	0.04	0.04	8.68	ppb
Molybdenum	98-1	0.04	0.04	0.03	0.04	7.14	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.01	0.00	-0.03	-0.01		ppb
Phosphorus	31-2	-23.27	-34.65	-31.13	-29.68		ppb
Potassium	39-2	0.30	4.14	4.97	3.14	79.46	ppb
Rhodium	103-1				103		%
Rhodium	103-2				104		%
Scandium	45-1				106		%
Scandium	45-2				105		%
Selenium	82-1	0.16	0.22	0.23	0.20	20.56	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	0.00	-0.51	-0.51	-0.34		ppb
Silicon	28-1	-0.89	-1.26	-1.31	-1.15		ppb
Silver	107-1	0.01	0.01	0.01	0.01	1.83	ppb
Silver	109-1	0.01	0.01	0.01	0.01	17.50	ppb
Sodium	23-2	9.47	9.54	11.02	10.01	8.77	ppb
Strontium	86-1	0.01	0.01	0.00	0.01	27.47	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	106.20	ppb
Sulfur	34-1	-554.22	-627.13	-626.67	-602.68		ppb
Terbium	159-1				103		%
Terbium	159-2				102		%
Thallium	203-1	0.01	0.01	0.01	0.01	13.48	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	17.17	ppb
Tin	118-1	0.05	0.00	0.01	0.02	132.39	ppb
Titanium	47-1	0.02	0.01	0.03	0.02	36.89	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167780TB	Instrumnet Name :	P8
Client Sample ID :	PB167780TB	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:15:14	DataFile Name :	037CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00		ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				104		%
Zinc	66-2	0.08	0.02	0.03	0.04	68.61	ppb
Zirconium	90-1	0.03	0.03	0.03	0.03	8.24	ppb
Zirconium	91-1	0.02	0.03	0.03	0.03	11.78	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-02DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-27-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:18:37	DataFile Name :	038AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	13581.11	13570.97	13639.63	13597.23	0.27	ppb
Antimony	121-1	0.02	0.02	0.02	0.02	4.61	ppb
Arsenic	75-2	0.66	0.57	0.60	0.61	7.48	ppb
Barium	135-1	21.26	22.08	21.71	21.69	1.88	ppb
Barium	137-1	21.58	22.42	22.78	22.26	2.77	ppb
Beryllium	9-1	0.32	0.35	0.36	0.34	5.30	ppb
Bismuth	209-1				101		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	0.15	0.13	0.16	0.15	10.20	ppb
Cadmium	106-1	0.42	0.41	0.78	0.54	38.67	ppb
Cadmium	111-1	0.11	0.12	0.14	0.12	11.42	ppb
Calcium	43-1	44235.27	44817.35	45295.24	44782.62	1.19	ppb
Calcium	44-1	44312.27	44501.94	44520.05	44444.75	0.26	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.70	2.58	2.58	2.62	2.61	ppb
Cobalt	59-2	33.28	33.03	33.86	33.39	1.28	ppb
Copper	63-2	27.33	26.91	27.33	27.19	0.90	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				103		%
Indium	115-1				102		%
Indium	115-2				99		%
Iron	54-2	67557.61	66230.81	67881.67	67223.36	1.30	ppb
Iron	56-2	67855.17	67909.09	68058.01	67940.75	0.15	ppb
Iron	57-2	68572.73	67771.31	67657.76	68000.60	0.73	ppb
Krypton	83-1						cps
Lead	206-1	0.37	0.39	0.39	0.38	3.31	ppb

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-02DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-27-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:18:37	DataFile Name :	038AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.38	0.37	0.37	0.37	1.12	ppb
Lead	208-1	0.37	0.38	0.37	0.37	1.23	ppb
Lithium	6-1				96		%
Magnesium	24-2	15677.66	15484.94	16008.28	15723.63	1.68	ppb
Manganese	55-2	1752.77	1753.53	1751.14	1752.48	0.07	ppb
Molybdenum	94-1	0.25	0.25	0.24	0.25	1.84	ppb
Molybdenum	95-1	0.03	0.03	0.03	0.03	4.26	ppb
Molybdenum	96-1	0.28	0.27	0.26	0.27	3.53	ppb
Molybdenum	97-1	0.03	0.02	0.02	0.03	20.39	ppb
Molybdenum	98-1	0.01	0.01	0.02	0.01	18.79	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	13.60	13.61	14.04	13.75	1.85	ppb
Phosphorus	31-2	54.77	42.51	52.99	50.09	13.23	ppb
Potassium	39-2	410.93	406.78	406.96	408.22	0.57	ppb
Rhodium	103-1				101		%
Rhodium	103-2				100		%
Scandium	45-1				109		%
Scandium	45-2				106		%
Selenium	82-1	0.42	0.45	0.53	0.47	12.25	ppb
Selenium	77-2	25.45	24.55	24.31	24.77	2.43	ppb
Selenium	78-2	4.49	4.13	4.71	4.44	6.51	ppb
Silicon	28-1	3395.64	3427.02	3413.86	3412.18	0.46	ppb
Silver	107-1	0.01	0.01	0.01	0.01	1.13	ppb
Silver	109-1	0.01	0.01	0.01	0.01	13.06	ppb
Sodium	23-2	5586.26	5531.67	5627.96	5581.96	0.87	ppb
Strontium	86-1	69.37	71.66	70.74	70.59	1.63	ppb
Strontium	88-1	72.48	72.59	73.88	72.98	1.06	ppb
Sulfur	34-1	85351.43	85965.64	86524.69	85947.25	0.68	ppb
Terbium	159-1				105		%
Terbium	159-2				103		%
Thallium	203-1	0.03	0.02	0.02	0.02	15.43	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	2.14	ppb
Tin	118-1	0.15	0.09	0.09	0.11	27.83	ppb
Titanium	47-1	0.86	0.79	0.90	0.85	6.45	ppb
Uranium	238-1	0.90	0.94	0.93	0.93	2.11	ppb

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-02DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-27-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:18:37	DataFile Name :	038AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	54.56	53.77	53.66	53.99	0.91	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				128		%
Yttrium	89-2				123		%
Zinc	66-2	149.46	148.02	149.68	149.06	0.60	ppb
Zirconium	90-1	0.11	0.12	0.11	0.11	3.61	ppb
Zirconium	91-1	0.11	0.11	0.12	0.11	5.46	ppb

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-04DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-28-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:21:54	DataFile Name :	039AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	7805.43	7868.67	7785.35	7819.82	0.56	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	11.71	ppb
Arsenic	75-2	0.55	0.58	0.57	0.57	2.10	ppb
Barium	135-1	19.82	21.06	20.34	20.41	3.04	ppb
Barium	137-1	20.03	20.59	20.64	20.42	1.67	ppb
Beryllium	9-1	0.31	0.32	0.31	0.31	1.62	ppb
Bismuth	209-1				100		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	0.11	0.07	0.08	0.08	22.90	ppb
Cadmium	106-1	0.41	0.67	0.48	0.52	26.26	ppb
Cadmium	111-1	0.08	0.09	0.08	0.08	9.33	ppb
Calcium	43-1	46938.88	47022.88	47043.21	47001.66	0.12	ppb
Calcium	44-1	47196.38	47121.98	46825.19	47047.85	0.42	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.93	0.95	0.91	0.93	2.15	ppb
Cobalt	59-2	31.42	31.68	31.45	31.52	0.45	ppb
Copper	63-2	5.92	6.03	5.87	5.94	1.42	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				101		%
Indium	115-1				102		%
Indium	115-2				99		%
Iron	54-2	88451.50	88727.22	88946.36	88708.36	0.28	ppb
Iron	56-2	89244.10	89318.33	88548.66	89037.03	0.48	ppb
Iron	57-2	87509.47	89352.38	87485.18	88115.68	1.22	ppb
Krypton	83-1						cps
Lead	206-1	0.30	0.31	0.32	0.31	3.61	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-04DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-28-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:21:54	DataFile Name :	039AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.29	0.30	0.30	0.30	2.29	ppb
Lead	208-1	0.30	0.30	0.31	0.30	1.64	ppb
Lithium	6-1				94		%
Magnesium	24-2	15876.65	15924.13	15961.68	15920.82	0.27	ppb
Manganese	55-2	1743.99	1737.34	1739.14	1740.15	0.20	ppb
Molybdenum	94-1	0.18	0.18	0.17	0.18	1.19	ppb
Molybdenum	95-1	0.03	0.03	0.03	0.03	11.93	ppb
Molybdenum	96-1	0.32	0.32	0.33	0.32	2.36	ppb
Molybdenum	97-1	0.03	0.03	0.03	0.03	8.60	ppb
Molybdenum	98-1	0.01	0.01	0.02	0.01	11.83	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	8.10	8.09	8.22	8.14	0.86	ppb
Phosphorus	31-2	-0.29	-4.58	-10.86	-5.25		ppb
Potassium	39-2	353.16	351.33	355.51	353.33	0.59	ppb
Rhodium	103-1				101		%
Rhodium	103-2				100		%
Scandium	45-1				106		%
Scandium	45-2				103		%
Selenium	82-1	0.25	0.49	0.23	0.32	44.77	ppb
Selenium	77-2	20.99	25.66	16.06	20.90	22.97	ppb
Selenium	78-2	3.19	4.10	4.15	3.82	14.12	ppb
Silicon	28-1	3014.24	2975.01	2994.12	2994.46	0.66	ppb
Silver	107-1	0.01	0.00	0.01	0.01	2.95	ppb
Silver	109-1	0.00	0.00	0.00	0.00	14.16	ppb
Sodium	23-2	4837.76	4968.57	4811.36	4872.57	1.73	ppb
Strontium	86-1	75.71	74.63	74.38	74.91	0.94	ppb
Strontium	88-1	79.19	78.03	76.01	77.74	2.07	ppb
Sulfur	34-1	85957.39	85040.54	84748.43	85248.79	0.74	ppb
Terbium	159-1				103		%
Terbium	159-2				102		%
Thallium	203-1	0.02	0.02	0.02	0.02	4.81	ppb
Thallium	205-1	0.02	0.01	0.01	0.01	15.08	ppb
Tin	118-1	0.02	0.03	0.04	0.03	26.02	ppb
Titanium	47-1	0.90	2.83	0.89	1.54	72.46	ppb
Uranium	238-1	0.82	0.83	0.81	0.82	1.33	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-04DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-28-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:21:54	DataFile Name :	039AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	67.84	68.43	67.30	67.86	0.84	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				127		%
Yttrium	89-2				123		%
Zinc	66-2	109.04	117.69	105.69	110.81	5.59	ppb
Zirconium	90-1	0.07	0.07	0.07	0.07	2.71	ppb
Zirconium	91-1	0.07	0.07	0.07	0.07	3.01	ppb

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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-06DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-29-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:25:08	DataFile Name :	040AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	8442.83	8533.41	8372.68	8449.64	0.95	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	4.76	ppb
Arsenic	75-2	0.61	0.56	0.68	0.62	9.51	ppb
Barium	135-1	21.71	21.46	21.22	21.46	1.13	ppb
Barium	137-1	22.12	21.44	21.84	21.80	1.57	ppb
Beryllium	9-1	0.31	0.29	0.30	0.30	3.31	ppb
Bismuth	209-1				100		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	0.08	0.13	0.12	0.11	27.08	ppb
Cadmium	106-1	0.53	0.39	0.31	0.41	27.69	ppb
Cadmium	111-1	0.11	0.09	0.10	0.10	12.18	ppb
Calcium	43-1	63561.28	63230.81	63306.14	63366.08	0.27	ppb
Calcium	44-1	62394.09	62118.86	62800.49	62437.81	0.55	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.80	1.90	1.84	1.85	2.76	ppb
Cobalt	59-2	29.03	28.91	28.64	28.86	0.70	ppb
Copper	63-2	15.76	15.72	15.62	15.70	0.46	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				102		%
Indium	115-1				102		%
Indium	115-2				98		%
Iron	54-2	75317.93	74856.29	74419.60	74864.60	0.60	ppb
Iron	56-2	74855.70	74337.24	74540.92	74577.96	0.35	ppb
Iron	57-2	73110.68	76098.13	72577.47	73928.76	2.57	ppb
Krypton	83-1						cps
Lead	206-1	1.35	1.30	1.28	1.31	2.77	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-06DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-29-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:25:08	DataFile Name :	040AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1.35	1.31	1.31	1.33	1.77	ppb
Lead	208-1	1.33	1.30	1.30	1.31	1.50	ppb
Lithium	6-1				92		%
Magnesium	24-2	15243.14	15241.25	15027.96	15170.79	0.82	ppb
Manganese	55-2	1472.73	1441.29	1455.06	1456.36	1.08	ppb
Molybdenum	94-1	0.15	0.15	0.15	0.15	1.44	ppb
Molybdenum	95-1	0.04	0.03	0.04	0.04	10.37	ppb
Molybdenum	96-1	0.29	0.28	0.27	0.28	3.13	ppb
Molybdenum	97-1	0.03	0.02	0.03	0.03	21.05	ppb
Molybdenum	98-1	0.02	0.02	0.02	0.02	9.92	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	13.20	13.26	12.78	13.08	1.98	ppb
Phosphorus	31-2	5.13	-1.61	-1.45	0.69	558.71	ppb
Potassium	39-2	467.56	463.13	468.01	466.23	0.58	ppb
Rhodium	103-1				100		%
Rhodium	103-2				99		%
Scandium	45-1				106		%
Scandium	45-2				102		%
Selenium	82-1	0.33	0.46	0.60	0.47	28.85	ppb
Selenium	77-2	27.85	27.46	21.37	25.56	14.21	ppb
Selenium	78-2	4.85	3.43	4.39	4.22	17.18	ppb
Silicon	28-1	3332.84	3358.67	3321.12	3337.54	0.58	ppb
Silver	107-1	0.01	0.00	0.00	0.00	27.37	ppb
Silver	109-1	0.00	0.01	0.00	0.00	22.71	ppb
Sodium	23-2	8621.65	8613.82	8637.83	8624.44	0.14	ppb
Strontium	86-1	91.07	91.55	91.00	91.21	0.33	ppb
Strontium	88-1	94.99	94.72	94.27	94.66	0.39	ppb
Sulfur	34-1	90762.99	91735.32	91064.90	91187.74	0.55	ppb
Terbium	159-1				104		%
Terbium	159-2				102		%
Thallium	203-1	0.01	0.01	0.01	0.01	8.29	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	4.24	ppb
Tin	118-1	0.05	0.05	0.03	0.04	21.14	ppb
Titanium	47-1	0.77	0.72	0.70	0.73	4.84	ppb
Uranium	238-1	0.90	0.89	0.88	0.89	0.90	ppb

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-06DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-29-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:25:08	DataFile Name :	040AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	48.41	48.76	49.23	48.80	0.84	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				126		%
Yttrium	89-2				122		%
Zinc	66-2	124.06	125.44	125.37	124.96	0.62	ppb
Zirconium	90-1	0.06	0.06	0.06	0.06	5.83	ppb
Zirconium	91-1	0.06	0.06	0.06	0.06	5.35	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-08DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-30-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:28:25	DataFile Name :	041AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	11471.38	11442.99	11510.38	11474.91	0.29	ppb
Antimony	121-1	0.02	0.01	0.01	0.01	16.44	ppb
Arsenic	75-2	0.54	0.57	0.54	0.55	3.06	ppb
Barium	135-1	23.14	23.20	23.33	23.22	0.42	ppb
Barium	137-1	23.24	23.78	23.75	23.59	1.30	ppb
Beryllium	9-1	0.32	0.30	0.32	0.31	3.30	ppb
Bismuth	209-1				100		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	0.14	0.04	0.07	0.08	59.30	ppb
Cadmium	106-1	0.40	0.33	0.40	0.38	10.14	ppb
Cadmium	111-1	0.11	0.13	0.13	0.12	10.81	ppb
Calcium	43-1	54716.26	56165.84	55905.84	55595.98	1.39	ppb
Calcium	44-1	54942.89	55575.10	55375.53	55297.84	0.58	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.47	2.47	2.47	2.47	0.07	ppb
Cobalt	59-2	32.05	32.15	32.41	32.20	0.59	ppb
Copper	63-2	18.84	18.49	18.48	18.61	1.11	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				101		%
Indium	115-1				101		%
Indium	115-2				97		%
Iron	54-2	68249.56	67463.00	67987.63	67900.06	0.59	ppb
Iron	56-2	68817.71	69137.48	69013.11	68989.44	0.23	ppb
Iron	57-2	68322.39	68109.20	67425.24	67952.27	0.69	ppb
Krypton	83-1						cps
Lead	206-1	0.84	0.88	0.84	0.86	2.72	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-08DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-30-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:28:25	DataFile Name :	041AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.82	0.84	0.83	0.83	1.03	ppb
Lead	208-1	0.83	0.84	0.82	0.83	1.19	ppb
Lithium	6-1				94		%
Magnesium	24-2	14930.21	14554.24	14743.38	14742.61	1.28	ppb
Manganese	55-2	1476.72	1498.22	1497.94	1490.96	0.83	ppb
Molybdenum	94-1	0.23	0.24	0.23	0.23	2.55	ppb
Molybdenum	95-1	0.03	0.03	0.03	0.03	6.41	ppb
Molybdenum	96-1	0.27	0.26	0.27	0.26	2.53	ppb
Molybdenum	97-1	0.02	0.03	0.03	0.03	11.76	ppb
Molybdenum	98-1	0.01	0.01	0.02	0.01	12.91	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	11.87	11.62	11.93	11.81	1.37	ppb
Phosphorus	31-2	69.50	58.40	71.27	66.39	10.51	ppb
Potassium	39-2	502.10	492.41	499.51	498.01	1.01	ppb
Rhodium	103-1				100		%
Rhodium	103-2				99		%
Scandium	45-1				107		%
Scandium	45-2				102		%
Selenium	82-1	0.68	0.24	0.45	0.46	47.50	ppb
Selenium	77-2	19.21	22.34	21.30	20.95	7.62	ppb
Selenium	78-2	4.08	2.87	3.04	3.33	19.77	ppb
Silicon	28-1	3604.26	3649.14	3622.32	3625.24	0.62	ppb
Silver	107-1	0.00	0.00	0.00	0.00	16.05	ppb
Silver	109-1	0.00	0.00	0.00	0.00	31.11	ppb
Sodium	23-2	5900.60	5818.98	5853.63	5857.74	0.70	ppb
Strontium	86-1	73.95	74.78	73.76	74.16	0.73	ppb
Strontium	88-1	77.69	77.72	77.37	77.59	0.25	ppb
Sulfur	34-1	87625.63	88185.63	86759.53	87523.60	0.82	ppb
Terbium	159-1				104		%
Terbium	159-2				101		%
Thallium	203-1	0.02	0.02	0.02	0.02	2.85	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	10.47	ppb
Tin	118-1	0.22	0.18	0.20	0.20	7.82	ppb
Titanium	47-1	1.04	0.98	0.98	1.00	3.34	ppb
Uranium	238-1	0.95	0.96	0.95	0.95	0.58	ppb

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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-08DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-30-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:28:25	DataFile Name :	041AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	60.28	58.28	59.71	59.42	1.73	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				125		%
Yttrium	89-2				120		%
Zinc	66-2	157.70	156.06	156.68	156.81	0.53	ppb
Zirconium	90-1	0.10	0.11	0.11	0.11	2.35	ppb
Zirconium	91-1	0.10	0.11	0.12	0.11	7.40	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-10DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-31-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:31:40	DataFile Name :	042AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	6023.34	6024.18	6038.13	6028.55	0.14	ppb
Antimony	121-1	0.01	0.01	0.02	0.01	5.64	ppb
Arsenic	75-2	0.65	0.60	0.62	0.62	4.19	ppb
Barium	135-1	23.34	23.70	23.94	23.66	1.27	ppb
Barium	137-1	23.55	23.91	23.83	23.76	0.80	ppb
Beryllium	9-1	0.27	0.29	0.27	0.28	3.22	ppb
Bismuth	209-1				100		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	0.09	0.06	0.09	0.08	22.06	ppb
Cadmium	106-1	0.77	0.39	0.58	0.58	32.26	ppb
Cadmium	111-1	0.13	0.10	0.11	0.12	11.64	ppb
Calcium	43-1	70158.43	69731.93	71306.39	70398.92	1.16	ppb
Calcium	44-1	70439.60	69922.23	70918.74	70426.86	0.71	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.73	0.70	0.68	0.70	3.39	ppb
Cobalt	59-2	25.50	25.44	25.44	25.46	0.13	ppb
Copper	63-2	7.27	7.29	7.24	7.27	0.37	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				107		%
Holmium	165-2				100		%
Indium	115-1				102		%
Indium	115-2				97		%
Iron	54-2	82245.29	79527.53	79436.59	80403.14	1.98	ppb
Iron	56-2	79751.40	80692.48	79916.63	80120.17	0.63	ppb
Iron	57-2	79442.77	80382.25	79471.25	79765.42	0.67	ppb
Krypton	83-1						cps
Lead	206-1	0.73	0.70	0.70	0.71	2.91	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-10DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-31-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:31:40	DataFile Name :	042AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.71	0.69	0.69	0.70	1.01	ppb
Lead	208-1	0.70	0.69	0.70	0.70	0.79	ppb
Lithium	6-1				93		%
Magnesium	24-2	13575.23	13402.54	13414.51	13464.09	0.72	ppb
Manganese	55-2	1750.96	1717.93	1719.21	1729.37	1.08	ppb
Molybdenum	94-1	0.14	0.10	0.12	0.12	13.49	ppb
Molybdenum	95-1	0.04	0.03	0.03	0.03	8.22	ppb
Molybdenum	96-1	0.29	0.30	0.28	0.29	3.05	ppb
Molybdenum	97-1	0.04	0.03	0.04	0.03	14.34	ppb
Molybdenum	98-1	0.02	0.02	0.02	0.02	10.28	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	9.63	9.55	9.23	9.47	2.21	ppb
Phosphorus	31-2	-11.35	-10.60	-9.10	-10.35		ppb
Potassium	39-2	470.48	468.13	469.60	469.41	0.25	ppb
Rhodium	103-1				100		%
Rhodium	103-2				99		%
Scandium	45-1				107		%
Scandium	45-2				101		%
Selenium	82-1	0.57	0.65	0.32	0.51	34.11	ppb
Selenium	77-2	23.64	22.72	18.82	21.73	11.76	ppb
Selenium	78-2	4.94	3.90	4.09	4.31	12.91	ppb
Silicon	28-1	3019.54	2975.28	3021.01	3005.27	0.86	ppb
Silver	107-1	0.00	0.00	0.00	0.00	113.72	ppb
Silver	109-1	0.00	0.00	0.00	0.00	50.01	ppb
Sodium	23-2	6333.13	6228.46	6219.38	6260.32	1.01	ppb
Strontium	86-1	98.33	99.78	99.84	99.32	0.86	ppb
Strontium	88-1	104.02	103.61	103.14	103.59	0.42	ppb
Sulfur	34-1	92414.84	91873.71	91589.69	91959.42	0.46	ppb
Terbium	159-1				104		%
Terbium	159-2				102		%
Thallium	203-1	0.01	0.01	0.01	0.01	10.56	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	12.29	ppb
Tin	118-1	0.11	0.12	0.13	0.12	9.14	ppb
Titanium	47-1	0.64	0.64	0.65	0.64	1.23	ppb
Uranium	238-1	1.05	1.04	1.05	1.05	0.94	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-10DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-31-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:31:40	DataFile Name :	042AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	52.61	52.68	52.91	52.73	0.30	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				129		%
Yttrium	89-2				122		%
Zinc	66-2	126.89	127.33	125.70	126.64	0.67	ppb
Zirconium	90-1	0.04	0.04	0.04	0.04	9.13	ppb
Zirconium	91-1	0.04	0.04	0.04	0.04	7.50	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-12DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-32-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:34:56	DataFile Name :	043AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	5520.02	5506.90	5532.54	5519.82	0.23	ppb
Antimony	121-1	0.02	0.02	0.02	0.02	3.56	ppb
Arsenic	75-2	0.63	0.60	0.63	0.62	3.10	ppb
Barium	135-1	22.26	21.83	21.76	21.95	1.23	ppb
Barium	137-1	22.58	22.12	22.34	22.35	1.02	ppb
Beryllium	9-1	0.28	0.27	0.29	0.28	4.28	ppb
Bismuth	209-1				102		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	0.13	0.07	0.07	0.09	34.77	ppb
Cadmium	106-1	1.20	0.67	0.36	0.74	56.97	ppb
Cadmium	111-1	0.15	0.11	0.08	0.11	28.75	ppb
Calcium	43-1	66548.29	67193.80	67243.35	66995.15	0.58	ppb
Calcium	44-1	65300.36	66778.16	66873.85	66317.46	1.33	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.77	0.77	0.75	0.76	1.81	ppb
Cobalt	59-2	24.01	24.05	24.06	24.04	0.10	ppb
Copper	63-2	5.47	5.46	5.53	5.49	0.69	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				101		%
Indium	115-1				103		%
Indium	115-2				97		%
Iron	54-2	83119.89	83155.11	83109.24	83128.08	0.03	ppb
Iron	56-2	83061.18	82459.12	82675.00	82731.77	0.37	ppb
Iron	57-2	83563.73	81990.45	82252.66	82602.28	1.02	ppb
Krypton	83-1						cps
Lead	206-1	5.36	5.42	5.45	5.41	0.83	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-12DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-32-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:34:56	DataFile Name :	043AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	5.42	5.41	5.51	5.45	1.09	ppb
Lead	208-1	5.36	5.36	5.43	5.38	0.77	ppb
Lithium	6-1				94		%
Magnesium	24-2	12417.93	12536.74	12510.77	12488.48	0.50	ppb
Manganese	55-2	1557.43	1534.74	1546.37	1546.18	0.73	ppb
Molybdenum	94-1	0.11	0.14	0.14	0.13	12.36	ppb
Molybdenum	95-1	0.04	0.05	0.05	0.05	10.68	ppb
Molybdenum	96-1	0.29	0.30	0.30	0.30	2.63	ppb
Molybdenum	97-1	0.05	0.04	0.04	0.04	11.85	ppb
Molybdenum	98-1	0.04	0.04	0.03	0.04	10.25	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	8.40	8.60	8.69	8.57	1.73	ppb
Phosphorus	31-2	-12.84	-14.43	-10.48	-12.58		ppb
Potassium	39-2	424.95	423.46	424.57	424.33	0.18	ppb
Rhodium	103-1				101		%
Rhodium	103-2				98		%
Scandium	45-1				105		%
Scandium	45-2				101		%
Selenium	82-1	0.36	0.59	0.45	0.47	24.85	ppb
Selenium	77-2	16.50	27.06	25.01	22.86	24.51	ppb
Selenium	78-2	4.07	2.77	5.13	3.99	29.59	ppb
Silicon	28-1	2958.27	2940.92	2951.33	2950.17	0.30	ppb
Silver	107-1	0.00	0.00	0.00	0.00	29.56	ppb
Silver	109-1	0.00	0.00	0.00	0.00	134.72	ppb
Sodium	23-2	6159.76	6179.84	6154.63	6164.74	0.22	ppb
Strontium	86-1	93.97	95.59	98.17	95.91	2.21	ppb
Strontium	88-1	99.07	99.10	102.13	100.10	1.76	ppb
Sulfur	34-1	88413.22	89088.38	88175.01	88558.87	0.53	ppb
Terbium	159-1				106		%
Terbium	159-2				100		%
Thallium	203-1	0.01	0.01	0.01	0.01	8.41	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	8.76	ppb
Tin	118-1	0.06	0.07	0.05	0.06	12.58	ppb
Titanium	47-1	0.67	0.67	0.65	0.66	1.28	ppb
Uranium	238-1	1.16	1.16	1.20	1.17	1.89	ppb

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-12DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-32-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:34:56	DataFile Name :	043AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	56.73	56.93	56.62	56.76	0.28	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				130		%
Yttrium	89-2				123		%
Zinc	66-2	137.98	136.89	139.35	138.07	0.89	ppb
Zirconium	90-1	0.03	0.03	0.04	0.04	13.13	ppb
Zirconium	91-1	0.03	0.03	0.04	0.03	13.49	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P8
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:41:14	DataFile Name :	044CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	51405.71	51522.98	51354.12	51427.60	0.17	ppb
Antimony	121-1	512.34	510.04	507.98	510.12	0.43	ppb
Arsenic	75-2	493.92	497.77	502.98	498.22	0.91	ppb
Barium	135-1	2576.30	2609.00	2605.00	2596.77	0.69	ppb
Barium	137-1	2562.78	2613.53	2601.34	2592.55	1.02	ppb
Beryllium	9-1	537.35	533.76	542.77	537.96	0.84	ppb
Bismuth	209-1				88		%
Bismuth	209-2				87		%
Bromine	81-1						cps
Cadmium	108-1	496.56	498.65	499.91	498.37	0.34	ppb
Cadmium	106-1	503.95	504.80	499.90	502.88	0.52	ppb
Cadmium	111-1	501.09	521.21	506.39	509.56	2.05	ppb
Calcium	43-1	247328.29	244782.93	248442.06	246851.10	0.76	ppb
Calcium	44-1	246308.21	246253.06	250432.04	247664.44	0.97	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	522.11	502.03	514.35	512.83	1.97	ppb
Cobalt	59-2	485.27	486.74	490.11	487.37	0.51	ppb
Copper	63-2	4731.76	4690.69	4768.95	4730.47	0.83	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				97		%
Holmium	165-2				96		%
Indium	115-1				90		%
Indium	115-2				85		%
Iron	54-2	133605.97	131232.29	133584.22	132807.49	1.03	ppb
Iron	56-2	133711.85	131792.36	134178.69	133227.63	0.95	ppb
Iron	57-2	132369.56	131773.65	133572.61	132571.94	0.69	ppb
Krypton	83-1						cps
Lead	206-1	2495.79	2529.91	2530.76	2518.82	0.79	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P8
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:41:14	DataFile Name :	044CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2488.35	2545.01	2541.48	2524.95	1.26	ppb
Lead	208-1	2482.60	2515.79	2536.11	2511.50	1.08	ppb
Lithium	6-1				82		%
Magnesium	24-2	254922.06	254710.36	257816.27	255816.23	0.68	ppb
Manganese	55-2	5072.67	4929.60	5045.60	5015.96	1.52	ppb
Molybdenum	94-1	4881.60	5009.46	4869.76	4920.28	1.57	ppb
Molybdenum	95-1	4834.15	5035.18	4941.77	4937.03	2.04	ppb
Molybdenum	96-1	4910.15	5077.60	4991.95	4993.24	1.68	ppb
Molybdenum	97-1	4890.44	4910.45	4853.92	4884.94	0.59	ppb
Molybdenum	98-1	4876.26	4905.53	4899.60	4893.80	0.32	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	454.44	449.23	459.82	454.49	1.16	ppb
Phosphorus	31-2	10086.46	10053.58	10174.07	10104.70	0.62	ppb
Potassium	39-2	127474.41	127375.29	130494.84	128448.18	1.38	ppb
Rhodium	103-1				88		%
Rhodium	103-2				87		%
Scandium	45-1				99		%
Scandium	45-2				99		%
Selenium	82-1	477.29	484.15	478.30	479.91	0.77	ppb
Selenium	77-2	498.02	506.15	486.96	497.04	1.94	ppb
Selenium	78-2	484.39	480.65	486.67	483.90	0.63	ppb
Silicon	28-1	564.43	556.05	561.45	560.64	0.76	ppb
Silver	107-1	498.08	500.81	497.04	498.64	0.39	ppb
Silver	109-1	493.14	497.33	492.95	494.47	0.50	ppb
Sodium	23-2	261659.75	262001.97	262600.24	262087.32	0.18	ppb
Strontium	86-1	506.24	500.96	500.69	502.63	0.62	ppb
Strontium	88-1	498.75	503.06	505.30	502.37	0.66	ppb
Sulfur	34-1	9831.87	9570.15	9889.62	9763.88	1.74	ppb
Terbium	159-1				96		%
Terbium	159-2				95		%
Thallium	203-1	501.12	509.99	507.25	506.12	0.90	ppb
Thallium	205-1	505.93	505.19	504.08	505.07	0.18	ppb
Tin	118-1	506.94	505.66	502.28	504.96	0.48	ppb
Titanium	47-1	4856.25	4916.39	4828.07	4866.90	0.93	ppb
Uranium	238-1	509.83	521.69	527.33	519.62	1.72	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P8
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:41:14	DataFile Name :	044CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	509.69	509.37	509.72	509.59	0.04	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				98		%
Yttrium	89-2				96		%
Zinc	66-2	4803.15	4783.94	4815.16	4800.75	0.33	ppb
Zirconium	90-1	491.94	502.86	501.31	498.71	1.18	ppb
Zirconium	91-1	496.59	503.81	500.64	500.35	0.72	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P8
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:48:27	DataFile Name :	045CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.82	1.43	0.09	0.78	86.30	ppb
Antimony	121-1	0.03	0.03	0.03	0.03	10.53	ppb
Arsenic	75-2	0.00	-0.01	-0.01	0.00		ppb
Barium	135-1	0.02	0.01	0.00	0.01	64.80	ppb
Barium	137-1	0.01	0.00	0.00	0.00	186.95	ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	20.56	ppb
Bismuth	209-1				105		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Cadmium	108-1	0.00	0.02	0.00	0.01	294.61	ppb
Cadmium	106-1	-0.50	-0.63	-0.74	-0.62		ppb
Cadmium	111-1	-0.03	-0.04	-0.05	-0.04		ppb
Calcium	43-1	-0.38	-1.34	-0.97	-0.90		ppb
Calcium	44-1	-1.52	-1.51	-1.59	-1.54		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.01	0.00	-0.02	-0.01		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	62.66	ppb
Copper	63-2	-0.06	-0.06	-0.06	-0.06		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				102		%
Indium	115-1				106		%
Indium	115-2				103		%
Iron	54-2	1.52	1.35	0.63	1.17	40.69	ppb
Iron	56-2	1.07	1.05	1.00	1.04	3.35	ppb
Iron	57-2	0.99	0.66	0.64	0.77	25.90	ppb
Krypton	83-1						cps
Lead	206-1	0.05	0.04	0.03	0.04	21.02	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P8
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:48:27	DataFile Name :	045CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.05	0.04	0.04	0.04	13.41	ppb
Lead	208-1	0.04	0.04	0.04	0.04	9.57	ppb
Lithium	6-1				95		%
Magnesium	24-2	1.78	1.98	1.66	1.81	8.99	ppb
Manganese	55-2	-0.01	-0.01	0.01	-0.01		ppb
Molybdenum	94-1	0.09	0.09	0.09	0.09	3.64	ppb
Molybdenum	95-1	0.03	0.04	0.04	0.04	11.11	ppb
Molybdenum	96-1	0.04	0.04	0.04	0.04	5.96	ppb
Molybdenum	97-1	0.04	0.04	0.02	0.03	23.83	ppb
Molybdenum	98-1	0.04	0.03	0.03	0.03	14.38	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.02	-0.02	0.00	0.00		ppb
Phosphorus	31-2	-32.00	-24.91	-29.33	-28.75		ppb
Potassium	39-2	8.24	4.90	7.26	6.80	25.28	ppb
Rhodium	103-1				106		%
Rhodium	103-2				107		%
Scandium	45-1				109		%
Scandium	45-2				107		%
Selenium	82-1	0.24	0.24	-0.08	0.13	135.64	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.52	0.88	-0.26	0.03	2235.75	ppb
Silicon	28-1	-1.63	-1.50	-1.58	-1.57		ppb
Silver	107-1	0.01	0.01	0.01	0.01	16.27	ppb
Silver	109-1	0.01	0.01	0.01	0.01	3.26	ppb
Sodium	23-2	20.58	19.33	18.35	19.42	5.74	ppb
Strontium	86-1	0.00	0.00	0.00	0.00	246.35	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	24.53	ppb
Sulfur	34-1	-407.81	-387.67	-351.50	-382.33		ppb
Terbium	159-1				105		%
Terbium	159-2				105		%
Thallium	203-1	0.01	0.01	0.01	0.01	17.26	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	3.75	ppb
Tin	118-1	0.00	0.01	0.00	0.00	71.42	ppb
Titanium	47-1	0.04	0.03	0.04	0.04	4.02	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P8
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:48:27	DataFile Name :	045CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00		ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				108		%
Yttrium	89-2				105		%
Zinc	66-2	0.00	-0.12	0.04	-0.03		ppb
Zirconium	90-1	0.03	0.03	0.03	0.03	4.68	ppb
Zirconium	91-1	0.03	0.03	0.03	0.03	14.49	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-14DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-18-042325DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:55:03	DataFile Name :	046AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	15706.36	15184.97	15534.64	15475.33	1.72	ppb
Antimony	121-1	2.98	3.06	3.07	3.04	1.55	ppb
Arsenic	75-2	0.79	0.73	0.81	0.78	5.70	ppb
Barium	135-1	25.45	26.07	26.59	26.04	2.19	ppb
Barium	137-1	25.84	26.80	26.35	26.33	1.82	ppb
Beryllium	9-1	0.20	0.21	0.20	0.21	2.00	ppb
Bismuth	209-1				101		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	0.13	0.28	0.21	0.21	34.39	ppb
Cadmium	106-1	0.54	0.51	0.74	0.60	20.26	ppb
Cadmium	111-1	0.16	0.15	0.16	0.16	3.54	ppb
Calcium	43-1	24521.50	24833.96	25108.15	24821.20	1.18	ppb
Calcium	44-1	23933.17	23952.15	24274.64	24053.32	0.80	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	5.43	5.26	5.33	5.34	1.65	ppb
Cobalt	59-2	27.15	26.56	26.85	26.85	1.09	ppb
Copper	63-2	34.15	33.29	34.11	33.85	1.44	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				107		%
Holmium	165-2				104		%
Indium	115-1				106		%
Indium	115-2				103		%
Iron	54-2	61378.95	59963.59	60778.72	60707.09	1.17	ppb
Iron	56-2	61650.83	60177.76	61941.09	61256.56	1.54	ppb
Iron	57-2	60719.28	59004.52	61526.04	60416.61	2.13	ppb
Krypton	83-1						cps
Lead	206-1	1.75	1.75	1.83	1.78	2.47	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-14DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-18-042325DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:55:03	DataFile Name :	046AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1.75	1.70	1.75	1.73	1.82	ppb
Lead	208-1	1.74	1.72	1.76	1.74	1.26	ppb
Lithium	6-1				95		%
Magnesium	24-2	17082.56	16629.30	16869.58	16860.48	1.34	ppb
Manganese	55-2	771.55	723.29	762.45	752.43	3.41	ppb
Molybdenum	94-1	0.36	0.43	0.42	0.40	9.54	ppb
Molybdenum	95-1	0.06	0.07	0.07	0.07	4.90	ppb
Molybdenum	96-1	0.30	0.31	0.31	0.31	3.02	ppb
Molybdenum	97-1	0.06	0.06	0.07	0.06	8.86	ppb
Molybdenum	98-1	0.06	0.06	0.06	0.06	1.85	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	22.96	22.15	22.65	22.59	1.82	ppb
Phosphorus	31-2	121.01	131.65	115.43	122.70	6.72	ppb
Potassium	39-2	593.45	573.66	583.50	583.54	1.70	ppb
Rhodium	103-1				103		%
Rhodium	103-2				103		%
Scandium	45-1				114		%
Scandium	45-2				110		%
Selenium	82-1	0.59	0.47	0.55	0.54	11.37	ppb
Selenium	77-2	28.13	24.93	24.88	25.98	7.15	ppb
Selenium	78-2	3.72	4.30	4.29	4.10	8.04	ppb
Silicon	28-1	3415.17	3454.30	3469.74	3446.40	0.82	ppb
Silver	107-1	0.03	0.03	0.03	0.03	3.78	ppb
Silver	109-1	0.02	0.02	0.03	0.02	8.02	ppb
Sodium	23-2	7174.52	6907.84	7042.89	7041.75	1.89	ppb
Strontium	86-1	56.12	57.64	57.89	57.22	1.68	ppb
Strontium	88-1	59.17	60.62	60.61	60.13	1.39	ppb
Sulfur	34-1	76315.69	78654.98	77826.14	77598.94	1.53	ppb
Terbium	159-1				106		%
Terbium	159-2				104		%
Thallium	203-1	0.04	0.04	0.05	0.04	7.74	ppb
Thallium	205-1	0.04	0.04	0.04	0.04	7.48	ppb
Tin	118-1	0.09	0.09	0.11	0.10	10.63	ppb
Titanium	47-1	1.85	1.79	1.83	1.82	1.45	ppb
Uranium	238-1	1.06	1.09	1.08	1.07	1.27	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-14DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-18-042325DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:55:03	DataFile Name :	046AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	65.77	64.46	65.24	65.15	1.01	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				131		%
Yttrium	89-2				127		%
Zinc	66-2	233.67	226.01	233.88	231.18	1.94	ppb
Zirconium	90-1	0.16	0.19	0.19	0.18	8.42	ppb
Zirconium	91-1	0.18	0.18	0.20	0.18	4.73	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:58:18	DataFile Name :	047AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	12750.34	12505.64	13046.10	12767.36	2.12	ppb
Antimony	121-1	0.04	0.04	0.04	0.04	1.93	ppb
Arsenic	75-2	0.67	0.71	0.82	0.73	10.66	ppb
Barium	135-1	22.97	23.54	23.41	23.30	1.28	ppb
Barium	137-1	23.21	23.84	24.37	23.81	2.45	ppb
Beryllium	9-1	0.26	0.25	0.26	0.26	2.54	ppb
Bismuth	209-1				101		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	0.24	0.18	0.20	0.21	14.24	ppb
Cadmium	106-1	0.98	0.95	0.68	0.87	19.00	ppb
Cadmium	111-1	0.16	0.16	0.14	0.15	8.65	ppb
Calcium	43-1	27389.38	27595.61	27104.75	27363.25	0.90	ppb
Calcium	44-1	27258.38	27365.73	27165.87	27263.33	0.37	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3.17	3.38	3.29	3.28	3.25	ppb
Cobalt	59-2	26.81	26.75	26.79	26.79	0.11	ppb
Copper	63-2	21.98	22.00	22.15	22.04	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				107		%
Holmium	165-2				105		%
Indium	115-1				105		%
Indium	115-2				102		%
Iron	54-2	82982.92	82907.71	81740.04	82543.55	0.84	ppb
Iron	56-2	81621.02	82468.00	83163.32	82417.44	0.94	ppb
Iron	57-2	82094.37	80577.73	82428.27	81700.12	1.21	ppb
Krypton	83-1						cps
Lead	206-1	1.42	1.36	1.39	1.39	2.11	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:58:18	DataFile Name :	047AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1.35	1.40	1.38	1.37	1.78	ppb
Lead	208-1	1.37	1.37	1.37	1.37	0.12	ppb
Lithium	6-1				91		%
Magnesium	24-2	15913.39	16067.48	15984.85	15988.57	0.48	ppb
Manganese	55-2	988.06	974.75	976.10	979.64	0.75	ppb
Molybdenum	94-1	0.27	0.28	0.28	0.28	1.10	ppb
Molybdenum	95-1	0.02	0.03	0.02	0.02	8.72	ppb
Molybdenum	96-1	0.33	0.30	0.33	0.32	4.90	ppb
Molybdenum	97-1	0.03	0.03	0.02	0.03	17.99	ppb
Molybdenum	98-1	0.01	0.02	0.01	0.01	17.54	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	12.79	12.53	12.58	12.64	1.11	ppb
Phosphorus	31-2	70.39	80.46	71.89	74.25	7.32	ppb
Potassium	39-2	491.28	493.58	493.96	492.94	0.29	ppb
Rhodium	103-1				104		%
Rhodium	103-2				103		%
Scandium	45-1				112		%
Scandium	45-2				109		%
Selenium	82-1	0.54	0.53	0.68	0.58	14.30	ppb
Selenium	77-2	28.91	31.43	23.95	28.10	13.54	ppb
Selenium	78-2	5.31	5.40	4.77	5.16	6.61	ppb
Silicon	28-1	3520.26	3471.83	3482.04	3491.38	0.73	ppb
Silver	107-1	0.00	0.00	0.00	0.00	33.06	ppb
Silver	109-1	0.00	0.00	0.00	0.00	36.43	ppb
Sodium	23-2	5555.96	5534.79	5458.77	5516.51	0.93	ppb
Strontium	86-1	60.47	60.55	62.15	61.06	1.55	ppb
Strontium	88-1	63.12	63.41	64.77	63.77	1.38	ppb
Sulfur	34-1	76870.60	77390.60	76844.90	77035.37	0.40	ppb
Terbium	159-1				105		%
Terbium	159-2				105		%
Thallium	203-1	0.01	0.01	0.01	0.01	6.78	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	7.10	ppb
Tin	118-1	0.05	0.05	0.06	0.05	14.02	ppb
Titanium	47-1	0.99	0.98	0.95	0.97	2.35	ppb
Uranium	238-1	1.06	1.06	1.07	1.06	0.43	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:58:18	DataFile Name :	047AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	64.06	65.27	64.62	64.65	0.93	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				136		%
Yttrium	89-2				131		%
Zinc	66-2	197.32	198.47	195.94	197.25	0.64	ppb
Zirconium	90-1	0.13	0.13	0.13	0.13	3.01	ppb
Zirconium	91-1	0.13	0.15	0.13	0.13	10.01	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DUPDLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DUF	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:01:35	DataFile Name :	048AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	13133.86	12948.99	12596.86	12893.24	2.12	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	18.31	ppb
Arsenic	75-2	0.72	0.66	0.65	0.68	5.71	ppb
Barium	135-1	24.83	23.78	23.61	24.07	2.73	ppb
Barium	137-1	23.52	23.85	23.98	23.78	0.99	ppb
Beryllium	9-1	0.25	0.25	0.24	0.25	1.23	ppb
Bismuth	209-1				100		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	0.16	0.10	0.15	0.14	21.99	ppb
Cadmium	106-1	1.04	0.61	0.64	0.76	31.99	ppb
Cadmium	111-1	0.17	0.13	0.14	0.15	12.77	ppb
Calcium	43-1	28265.73	26830.01	27382.83	27492.86	2.63	ppb
Calcium	44-1	27470.57	27285.11	27435.67	27397.12	0.36	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3.36	3.35	3.20	3.30	2.79	ppb
Cobalt	59-2	27.29	27.29	26.68	27.09	1.29	ppb
Copper	63-2	22.21	22.50	22.00	22.23	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				106		%
Holmium	165-2				105		%
Indium	115-1				106		%
Indium	115-2				102		%
Iron	54-2	83130.18	85645.91	84082.09	84286.06	1.51	ppb
Iron	56-2	85034.80	85035.13	82521.58	84197.17	1.72	ppb
Iron	57-2	85225.35	83537.77	82107.40	83623.51	1.87	ppb
Krypton	83-1						cps
Lead	206-1	0.69	0.69	0.71	0.69	1.46	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DUPDLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DUF	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:01:35	DataFile Name :	048AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.65	0.69	0.68	0.67	3.17	ppb
Lead	208-1	0.66	0.68	0.68	0.67	1.32	ppb
Lithium	6-1				93		%
Magnesium	24-2	16309.57	16385.40	15957.10	16217.36	1.41	ppb
Manganese	55-2	1002.60	1013.65	987.80	1001.35	1.30	ppb
Molybdenum	94-1	0.28	0.27	0.27	0.27	2.02	ppb
Molybdenum	95-1	0.03	0.02	0.02	0.03	7.71	ppb
Molybdenum	96-1	0.32	0.33	0.32	0.33	1.56	ppb
Molybdenum	97-1	0.03	0.02	0.03	0.03	10.86	ppb
Molybdenum	98-1	0.01	0.01	0.01	0.01	7.23	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	12.66	12.94	12.43	12.67	1.99	ppb
Phosphorus	31-2	72.63	71.49	77.20	73.77	4.10	ppb
Potassium	39-2	504.82	504.57	497.70	502.36	0.80	ppb
Rhodium	103-1				104		%
Rhodium	103-2				104		%
Scandium	45-1				114		%
Scandium	45-2				108		%
Selenium	82-1	0.63	0.57	0.39	0.53	23.13	ppb
Selenium	77-2	27.24	21.05	22.43	23.57	13.79	ppb
Selenium	78-2	5.13	5.26	4.84	5.08	4.16	ppb
Silicon	28-1	3495.16	3508.81	3557.73	3520.57	0.93	ppb
Silver	107-1	0.00	0.00	0.00	0.00	21.75	ppb
Silver	109-1	0.00	0.00	0.00	0.00	35.68	ppb
Sodium	23-2	5663.56	5630.13	5469.24	5587.64	1.86	ppb
Strontium	86-1	61.05	61.40	61.95	61.47	0.74	ppb
Strontium	88-1	63.70	64.45	64.92	64.36	0.95	ppb
Sulfur	34-1	77374.16	77670.35	79853.06	78299.19	1.73	ppb
Terbium	159-1				106		%
Terbium	159-2				106		%
Thallium	203-1	0.01	0.01	0.01	0.01	19.52	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	2.74	ppb
Tin	118-1	0.06	0.05	0.05	0.05	2.82	ppb
Titanium	47-1	0.97	1.02	0.98	0.99	2.59	ppb
Uranium	238-1	1.08	1.08	1.10	1.09	0.92	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DUPDLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DUF	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:01:35	DataFile Name :	048AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	65.92	66.70	64.70	65.77	1.53	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				136		%
Yttrium	89-2				131		%
Zinc	66-2	198.81	201.69	196.12	198.87	1.40	ppb
Zirconium	90-1	0.13	0.13	0.13	0.13	0.99	ppb
Zirconium	91-1	0.13	0.13	0.13	0.13	1.45	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16LDLX25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325LDL	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:04:59	DataFile Name :	049AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2546.56	2610.93	2579.57	2579.02	1.25	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	8.19	ppb
Arsenic	75-2	0.16	0.24	0.15	0.18	26.33	ppb
Barium	135-1	4.77	4.82	4.71	4.77	1.22	ppb
Barium	137-1	4.92	4.81	4.87	4.87	1.13	ppb
Beryllium	9-1	0.05	0.04	0.04	0.04	8.46	ppb
Bismuth	209-1				102		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	0.05	0.04	0.04	0.04	8.81	ppb
Cadmium	106-1	-0.35	-0.28	-0.19	-0.27		ppb
Cadmium	111-1	-0.01	-0.01	0.00	-0.01		ppb
Calcium	43-1	5585.84	5620.56	5499.76	5568.72	1.12	ppb
Calcium	44-1	5633.45	5651.29	5598.39	5627.71	0.48	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.64	0.65	0.68	0.66	3.19	ppb
Cobalt	59-2	5.47	5.55	5.52	5.51	0.77	ppb
Copper	63-2	4.43	4.49	4.52	4.48	0.95	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				103		%
Indium	115-1				106		%
Indium	115-2				103		%
Iron	54-2	17053.09	17067.47	17024.55	17048.37	0.13	ppb
Iron	56-2	16952.98	17131.82	16802.09	16962.30	0.97	ppb
Iron	57-2	17301.84	17162.81	16884.01	17116.22	1.24	ppb
Krypton	83-1						cps
Lead	206-1	0.30	0.29	0.27	0.29	4.74	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16LDLX25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325LDL	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:04:59	DataFile Name :	049AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.28	0.29	0.28	0.28	2.91	ppb
Lead	208-1	0.29	0.29	0.28	0.29	1.89	ppb
Lithium	6-1				92		%
Magnesium	24-2	3283.61	3325.47	3279.49	3296.19	0.77	ppb
Manganese	55-2	191.46	191.02	188.87	190.45	0.73	ppb
Molybdenum	94-1	0.10	0.09	0.10	0.09	4.95	ppb
Molybdenum	95-1	0.01	0.00	0.01	0.01	25.37	ppb
Molybdenum	96-1	0.08	0.08	0.08	0.08	3.71	ppb
Molybdenum	97-1	0.01	0.00	0.00	0.00	203.40	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	3.74	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.57	2.67	2.51	2.58	3.06	ppb
Phosphorus	31-2	-9.16	-10.95	-7.71	-9.27		ppb
Potassium	39-2	106.06	105.44	106.78	106.09	0.63	ppb
Rhodium	103-1				107		%
Rhodium	103-2				105		%
Scandium	45-1				112		%
Scandium	45-2				109		%
Selenium	82-1	0.05	0.20	0.17	0.14	56.05	ppb
Selenium	77-2	6.64	7.48	7.91	7.35	8.79	ppb
Selenium	78-2	1.49	1.38	1.62	1.50	8.30	ppb
Silicon	28-1	723.21	732.17	705.95	720.44	1.85	ppb
Silver	107-1	0.00	0.00	0.00	0.00	40.68	ppb
Silver	109-1	0.00	0.00	0.00	0.00	48.12	ppb
Sodium	23-2	1137.32	1131.37	1123.72	1130.80	0.60	ppb
Strontium	86-1	14.93	14.82	14.78	14.84	0.51	ppb
Strontium	88-1	14.97	15.00	14.76	14.91	0.88	ppb
Sulfur	34-1	15058.90	15296.28	15076.09	15143.76	0.87	ppb
Terbium	159-1				104		%
Terbium	159-2				104		%
Thallium	203-1	0.00	0.00	0.01	0.00	32.19	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	38.81	ppb
Tin	118-1	0.01	0.03	0.02	0.02	42.84	ppb
Titanium	47-1	0.17	0.22	0.21	0.20	12.66	ppb
Uranium	238-1	0.21	0.21	0.21	0.21	0.44	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16LDLX25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325LDL	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:04:59	DataFile Name :	049AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	13.17	13.22	13.20	13.20	0.18	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				113		%
Yttrium	89-2				111		%
Zinc	66-2	39.64	41.00	40.13	40.26	1.72	ppb
Zirconium	90-1	0.04	0.04	0.04	0.04	1.43	ppb
Zirconium	91-1	0.04	0.04	0.05	0.04	14.33	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:08:19	DataFile Name :	050AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	13881.32	14287.87	13723.08	13964.09	2.09	ppb
Antimony	121-1	99.63	97.96	100.75	99.45	1.41	ppb
Arsenic	75-2	0.65	0.72	0.64	0.67	6.92	ppb
Barium	135-1	478.66	479.15	480.93	479.58	0.25	ppb
Barium	137-1	472.42	469.82	473.47	471.90	0.40	ppb
Beryllium	9-1	99.85	100.36	103.28	101.17	1.83	ppb
Bismuth	209-1				101		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	94.29	93.59	95.84	94.57	1.22	ppb
Cadmium	106-1	101.21	100.71	100.69	100.87	0.29	ppb
Cadmium	111-1	97.56	96.61	98.61	97.59	1.02	ppb
Calcium	43-1	36097.55	36150.78	36243.06	36163.80	0.20	ppb
Calcium	44-1	35139.41	35376.14	35623.97	35379.84	0.68	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	96.12	96.26	95.52	95.97	0.41	ppb
Cobalt	59-2	121.55	121.22	120.14	120.97	0.61	ppb
Copper	63-2	1029.93	1030.37	1010.70	1023.67	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				107		%
Holmium	165-2				105		%
Indium	115-1				103		%
Indium	115-2				100		%
Iron	54-2	84026.59	81105.92	82202.38	82444.96	1.79	ppb
Iron	56-2	80876.91	82511.06	82323.96	81903.97	1.09	ppb
Iron	57-2	80391.97	82618.58	79943.61	80984.72	1.77	ppb
Krypton	83-1						cps
Lead	206-1	465.97	466.16	472.92	468.35	0.85	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:08:19	DataFile Name :	050AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	464.12	472.91	476.75	471.26	1.37	ppb
Lead	208-1	461.03	464.46	473.22	466.24	1.35	ppb
Lithium	6-1				94		%
Magnesium	24-2	25442.23	25553.35	25234.12	25409.90	0.64	ppb
Manganese	55-2	1890.61	1896.29	1903.07	1896.66	0.33	ppb
Molybdenum	94-1	363.86	363.44	355.50	360.93	1.30	ppb
Molybdenum	95-1	277.98	276.56	275.41	276.65	0.47	ppb
Molybdenum	96-1	289.70	292.16	281.83	287.89	1.87	ppb
Molybdenum	97-1	273.22	280.99	268.92	274.38	2.23	ppb
Molybdenum	98-1	272.54	272.76	269.61	271.64	0.65	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	106.10	106.08	105.44	105.87	0.35	ppb
Phosphorus	31-2	54.17	64.36	62.41	60.31	8.97	ppb
Potassium	39-2	4815.97	4836.30	4824.15	4825.48	0.21	ppb
Rhodium	103-1				104		%
Rhodium	103-2				102		%
Scandium	45-1				112		%
Scandium	45-2				108		%
Selenium	82-1	77.83	79.84	78.90	78.86	1.28	ppb
Selenium	77-2	97.95	102.42	111.08	103.81	6.43	ppb
Selenium	78-2	83.21	86.29	85.11	84.87	1.83	ppb
Silicon	28-1	3281.26	3325.42	3281.14	3295.94	0.77	ppb
Silver	107-1	15.95	16.06	16.20	16.07	0.79	ppb
Silver	109-1	15.69	15.94	16.08	15.90	1.25	ppb
Sodium	23-2	15579.69	15976.20	15486.28	15680.72	1.66	ppb
Strontium	86-1	154.72	156.01	154.26	154.99	0.59	ppb
Strontium	88-1	152.48	156.44	152.98	153.97	1.40	ppb
Sulfur	34-1	74304.07	74570.77	74767.51	74547.45	0.31	ppb
Terbium	159-1				106		%
Terbium	159-2				103		%
Thallium	203-1	94.60	94.82	96.46	95.29	1.07	ppb
Thallium	205-1	92.61	93.57	94.71	93.63	1.12	ppb
Tin	118-1	89.15	88.38	89.20	88.91	0.52	ppb
Titanium	47-1	1.24	1.27	1.20	1.24	2.85	ppb
Uranium	238-1	87.37	89.20	92.63	89.73	2.98	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:08:19	DataFile Name :	050AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	158.59	159.58	158.66	158.94	0.35	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				134		%
Yttrium	89-2				129		%
Zinc	66-2	1139.21	1143.73	1123.62	1135.52	0.93	ppb
Zirconium	90-1	76.57	77.88	76.71	77.05	0.94	ppb
Zirconium	91-1	72.68	75.03	73.14	73.62	1.69	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDDLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:11:16	DataFile Name :	051AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	13865.80	13671.94	13550.36	13696.03	1.16	ppb
Antimony	121-1	97.85	100.81	97.87	98.84	1.72	ppb
Arsenic	75-2	0.68	0.63	0.65	0.65	4.28	ppb
Barium	135-1	470.71	474.77	469.13	471.54	0.62	ppb
Barium	137-1	468.55	460.90	466.03	465.16	0.84	ppb
Beryllium	9-1	101.12	101.11	102.17	101.47	0.60	ppb
Bismuth	209-1				100		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	94.74	92.84	92.40	93.33	1.33	ppb
Cadmium	106-1	95.71	96.07	99.18	96.99	1.96	ppb
Cadmium	111-1	96.50	95.66	95.88	96.01	0.46	ppb
Calcium	43-1	34408.26	35655.82	35386.88	35150.32	1.87	ppb
Calcium	44-1	34971.16	35476.02	35313.17	35253.45	0.73	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	95.30	95.53	96.97	95.93	0.94	ppb
Cobalt	59-2	119.17	120.25	120.64	120.02	0.64	ppb
Copper	63-2	1006.25	1041.86	1028.51	1025.54	1.75	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				105		%
Indium	115-2				100		%
Iron	54-2	82107.32	80929.57	82408.37	81815.09	0.96	ppb
Iron	56-2	81782.98	82850.71	81652.49	82095.40	0.80	ppb
Iron	57-2	79649.37	81371.29	80562.24	80527.63	1.07	ppb
Krypton	83-1						cps
Lead	206-1	473.40	462.65	464.13	466.73	1.25	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDDLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:11:16	DataFile Name :	051AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	474.80	464.83	467.74	469.13	1.09	ppb
Lead	208-1	469.76	462.38	466.21	466.12	0.79	ppb
Lithium	6-1				93		%
Magnesium	24-2	25326.95	25397.35	25239.00	25321.10	0.31	ppb
Manganese	55-2	1908.04	1875.80	1906.63	1896.82	0.96	ppb
Molybdenum	94-1	368.28	356.04	361.84	362.05	1.69	ppb
Molybdenum	95-1	273.03	268.79	275.24	272.35	1.20	ppb
Molybdenum	96-1	288.34	281.83	287.02	285.73	1.20	ppb
Molybdenum	97-1	273.41	269.18	273.07	271.89	0.86	ppb
Molybdenum	98-1	271.06	269.13	272.08	270.76	0.55	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	105.05	105.35	105.15	105.19	0.15	ppb
Phosphorus	31-2	55.23	60.68	72.10	62.67	13.73	ppb
Potassium	39-2	4737.94	4783.19	4774.08	4765.07	0.50	ppb
Rhodium	103-1				104		%
Rhodium	103-2				102		%
Scandium	45-1				112		%
Scandium	45-2				108		%
Selenium	82-1	77.59	76.61	79.38	77.86	1.80	ppb
Selenium	77-2	103.92	99.05	104.69	102.55	2.98	ppb
Selenium	78-2	83.63	80.95	83.75	82.78	1.91	ppb
Silicon	28-1	3260.87	3302.38	3300.58	3287.94	0.71	ppb
Silver	107-1	15.97	15.92	16.12	16.01	0.65	ppb
Silver	109-1	15.82	15.69	16.03	15.85	1.06	ppb
Sodium	23-2	15792.88	15489.67	15383.15	15555.23	1.37	ppb
Strontium	86-1	152.56	152.76	153.51	152.94	0.33	ppb
Strontium	88-1	153.75	152.73	152.57	153.02	0.42	ppb
Sulfur	34-1	72373.86	72987.61	72627.35	72662.94	0.42	ppb
Terbium	159-1				107		%
Terbium	159-2				104		%
Thallium	203-1	96.77	94.63	95.03	95.48	1.19	ppb
Thallium	205-1	94.50	93.91	92.28	93.56	1.23	ppb
Tin	118-1	89.29	87.99	87.77	88.35	0.93	ppb
Titanium	47-1	1.27	1.27	1.28	1.27	0.72	ppb
Uranium	238-1	90.20	90.91	90.14	90.42	0.47	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDDLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:11:16	DataFile Name :	051AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	157.37	159.08	158.45	158.30	0.55	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				134		%
Yttrium	89-2				128		%
Zinc	66-2	1126.68	1135.85	1132.17	1131.57	0.41	ppb
Zirconium	90-1	76.09	74.95	76.99	76.01	1.35	ppb
Zirconium	91-1	73.28	72.76	74.06	73.37	0.89	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16ADLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325ADL	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:14:17	DataFile Name :	052AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	14283.92	14181.86	14058.99	14174.93	0.79	ppb
Antimony	121-1	102.55	101.42	100.48	101.48	1.02	ppb
Arsenic	75-2	0.67	0.74	0.72	0.71	5.16	ppb
Barium	135-1	480.36	483.58	482.57	482.17	0.34	ppb
Barium	137-1	469.36	470.94	467.37	469.22	0.38	ppb
Beryllium	9-1	103.70	102.07	104.29	103.35	1.11	ppb
Bismuth	209-1				102		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	94.92	95.96	94.51	95.13	0.79	ppb
Cadmium	106-1	99.67	99.42	99.81	99.63	0.20	ppb
Cadmium	111-1	97.71	97.07	97.31	97.36	0.33	ppb
Calcium	43-1	36491.66	36163.69	35344.10	35999.82	1.64	ppb
Calcium	44-1	35814.01	35495.71	35219.99	35509.90	0.84	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	97.08	96.35	97.97	97.13	0.83	ppb
Cobalt	59-2	123.31	126.30	130.87	126.82	3.00	ppb
Copper	63-2	1039.78	1040.95	1059.98	1046.91	1.08	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				104		%
Indium	115-1				104		%
Indium	115-2				100		%
Iron	54-2	84144.60	83578.73	85447.56	84390.30	1.14	ppb
Iron	56-2	83133.40	81904.64	83981.45	83006.50	1.26	ppb
Iron	57-2	82459.10	82394.20	84402.99	83085.43	1.37	ppb
Krypton	83-1						cps
Lead	206-1	474.49	467.71	472.29	471.50	0.73	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16ADLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325ADL	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:14:17	DataFile Name :	052AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	481.61	476.79	483.19	480.53	0.69	ppb
Lead	208-1	473.68	469.71	474.95	472.78	0.58	ppb
Lithium	6-1				92		%
Magnesium	24-2	26129.71	26050.78	25993.49	26057.99	0.26	ppb
Manganese	55-2	1911.67	1907.20	1966.43	1928.43	1.71	ppb
Molybdenum	94-1	366.22	368.65	364.56	366.48	0.56	ppb
Molybdenum	95-1	280.41	285.30	281.42	282.37	0.91	ppb
Molybdenum	96-1	288.63	296.50	293.91	293.01	1.37	ppb
Molybdenum	97-1	276.46	283.44	278.89	279.59	1.27	ppb
Molybdenum	98-1	269.24	278.45	273.60	273.76	1.68	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	108.31	105.73	109.00	107.68	1.60	ppb
Phosphorus	31-2	72.02	86.05	58.69	72.25	18.94	ppb
Potassium	39-2	4886.51	4903.32	4950.96	4913.60	0.68	ppb
Rhodium	103-1				103		%
Rhodium	103-2				103		%
Scandium	45-1				113		%
Scandium	45-2				107		%
Selenium	82-1	78.58	80.81	78.93	79.44	1.51	ppb
Selenium	77-2	98.62	102.37	106.47	102.48	3.83	ppb
Selenium	78-2	83.17	87.89	83.77	84.94	3.03	ppb
Silicon	28-1	3352.48	3256.85	3189.18	3266.17	2.51	ppb
Silver	107-1	16.18	16.15	16.14	16.16	0.12	ppb
Silver	109-1	16.06	16.11	16.16	16.11	0.31	ppb
Sodium	23-2	15930.24	15952.56	16140.23	16007.68	0.72	ppb
Strontium	86-1	155.54	158.12	156.38	156.68	0.84	ppb
Strontium	88-1	154.45	156.68	153.26	154.80	1.12	ppb
Sulfur	34-1	75510.25	75724.17	72778.48	74670.97	2.20	ppb
Terbium	159-1				108		%
Terbium	159-2				105		%
Thallium	203-1	95.41	94.49	96.36	95.42	0.98	ppb
Thallium	205-1	93.81	94.04	93.50	93.78	0.29	ppb
Tin	118-1	91.53	90.03	87.49	89.68	2.27	ppb
Titanium	47-1	1.19	1.19	1.20	1.20	0.50	ppb
Uranium	238-1	90.38	91.28	92.86	91.51	1.38	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16ADLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325ADL	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:14:17	DataFile Name :	052AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	161.80	160.36	162.44	161.53	0.66	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				134		%
Yttrium	89-2				129		%
Zinc	66-2	1155.87	1148.79	1168.42	1157.69	0.86	ppb
Zirconium	90-1	77.02	78.69	77.65	77.79	1.08	ppb
Zirconium	91-1	73.94	75.55	73.98	74.49	1.23	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV05	Instrumnet Name :	P8
Client Sample ID :	CCV05	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 16:20:59	DataFile Name :	053CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	50990.90	50701.01	50766.34	50819.42	0.30	ppb
Antimony	121-1	512.48	514.47	498.25	508.40	1.74	ppb
Arsenic	75-2	500.77	504.95	502.71	502.81	0.42	ppb
Barium	135-1	2546.02	2601.07	2518.26	2555.12	1.65	ppb
Barium	137-1	2543.27	2571.50	2555.63	2556.80	0.55	ppb
Beryllium	9-1	516.22	528.96	519.49	521.56	1.27	ppb
Bismuth	209-1				88		%
Bismuth	209-2				86		%
Bromine	81-1						cps
Cadmium	108-1	497.22	506.25	492.09	498.52	1.44	ppb
Cadmium	106-1	492.36	505.68	495.68	497.91	1.39	ppb
Cadmium	111-1	506.03	506.56	498.25	503.61	0.92	ppb
Calcium	43-1	247896.23	253546.78	250380.63	250607.88	1.13	ppb
Calcium	44-1	245114.14	252463.69	246504.30	248027.38	1.57	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	506.57	512.99	519.88	513.14	1.30	ppb
Cobalt	59-2	492.60	497.23	493.78	494.54	0.49	ppb
Copper	63-2	4660.20	4754.80	4803.11	4739.37	1.53	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				95		%
Indium	115-1				90		%
Indium	115-2				84		%
Iron	54-2	131122.73	134047.92	134648.55	133273.07	1.42	ppb
Iron	56-2	131610.65	132203.91	133703.36	132505.97	0.81	ppb
Iron	57-2	131281.32	132551.23	133001.90	132278.15	0.67	ppb
Krypton	83-1						cps
Lead	206-1	2446.63	2532.98	2538.92	2506.18	2.06	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV05	Instrumnet Name :	P8
Client Sample ID :	CCV05	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 16:20:59	DataFile Name :	053CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2431.89	2506.34	2450.87	2463.03	1.57	ppb
Lead	208-1	2440.60	2496.44	2457.42	2464.82	1.16	ppb
Lithium	6-1				84		%
Magnesium	24-2	254627.23	253589.29	259505.65	255907.39	1.23	ppb
Manganese	55-2	4883.85	4906.78	5017.60	4936.08	1.45	ppb
Molybdenum	94-1	4805.28	4933.12	4902.40	4880.27	1.37	ppb
Molybdenum	95-1	4847.66	4941.60	4817.45	4868.90	1.33	ppb
Molybdenum	96-1	4919.67	4979.77	4774.01	4891.15	2.16	ppb
Molybdenum	97-1	4814.45	4905.90	4766.42	4828.92	1.47	ppb
Molybdenum	98-1	4789.29	4919.59	4797.59	4835.49	1.51	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	451.68	453.01	461.92	455.54	1.22	ppb
Phosphorus	31-2	10180.72	10107.04	10482.88	10256.88	1.94	ppb
Potassium	39-2	130978.21	132786.26	133143.28	132302.58	0.88	ppb
Rhodium	103-1				88		%
Rhodium	103-2				87		%
Scandium	45-1				98		%
Scandium	45-2				99		%
Selenium	82-1	466.98	476.57	466.90	470.15	1.18	ppb
Selenium	77-2	525.45	510.06	467.62	501.05	5.98	ppb
Selenium	78-2	502.35	501.72	496.37	500.15	0.66	ppb
Silicon	28-1	570.43	572.48	572.88	571.93	0.23	ppb
Silver	107-1	498.42	499.00	487.90	495.11	1.26	ppb
Silver	109-1	496.91	501.87	481.86	493.55	2.11	ppb
Sodium	23-2	263280.57	265069.06	266058.01	264802.55	0.53	ppb
Strontium	86-1	497.46	506.43	494.39	499.42	1.25	ppb
Strontium	88-1	494.31	500.54	494.82	496.56	0.70	ppb
Sulfur	34-1	10293.88	10034.91	9778.03	10035.61	2.57	ppb
Terbium	159-1				96		%
Terbium	159-2				95		%
Thallium	203-1	495.90	510.20	513.86	506.65	1.87	ppb
Thallium	205-1	499.36	502.82	500.68	500.95	0.35	ppb
Tin	118-1	506.27	514.83	497.36	506.15	1.73	ppb
Titanium	47-1	4931.70	4959.44	5019.14	4970.09	0.90	ppb
Uranium	238-1	507.25	511.15	503.34	507.24	0.77	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV05	Instrumnet Name :	P8
Client Sample ID :	CCV05	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 16:20:59	DataFile Name :	053CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	512.28	518.11	522.99	517.79	1.04	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				95		%
Zinc	66-2	4741.62	4816.38	4871.28	4809.76	1.35	ppb
Zirconium	90-1	490.53	497.73	497.85	495.37	0.85	ppb
Zirconium	91-1	492.42	495.33	496.55	494.77	0.43	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB05	Instrumnet Name :	P8
Client Sample ID :	CCB05	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 16:28:02	DataFile Name :	055CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.04	0.30	0.11	0.15	88.02	ppb
Antimony	121-1	0.02	0.02	0.02	0.02	5.14	ppb
Arsenic	75-2	-0.01	-0.01	-0.02	-0.01		ppb
Barium	135-1	0.00	0.00	0.00	0.00		ppb
Barium	137-1	0.00	0.00	0.00	0.00		ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	10.77	ppb
Bismuth	209-1				104		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	-0.02	-0.01	0.03	0.00	2694.20	ppb
Cadmium	106-1	-0.64	-0.65	-0.62	-0.64		ppb
Cadmium	111-1	-0.05	-0.05	-0.05	-0.05		ppb
Calcium	43-1	-0.78	-2.75	-2.55	-2.03		ppb
Calcium	44-1	-2.66	-3.40	-3.02	-3.03		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.03	-0.02	-0.01	-0.02		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.04	-0.05	-0.04	-0.04		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				102		%
Indium	115-1				106		%
Indium	115-2				101		%
Iron	54-2	0.68	0.99	0.51	0.73	33.58	ppb
Iron	56-2	0.38	0.37	0.35	0.37	4.38	ppb
Iron	57-2	0.47	0.16	0.21	0.28	58.69	ppb
Krypton	83-1						cps
Lead	206-1	0.04	0.03	0.03	0.03	12.70	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB05	Instrumnet Name :	P8
Client Sample ID :	CCB05	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 16:28:02	DataFile Name :	055CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.04	0.05	0.04	0.04	12.59	ppb
Lead	208-1	0.04	0.03	0.04	0.04	1.53	ppb
Lithium	6-1				94		%
Magnesium	24-2	0.51	0.39	0.81	0.57	37.95	ppb
Manganese	55-2	0.05	-0.03	-0.03	-0.01		ppb
Molybdenum	94-1	0.07	0.07	0.07	0.07	2.27	ppb
Molybdenum	95-1	0.02	0.02	0.02	0.02	8.55	ppb
Molybdenum	96-1	0.03	0.02	0.02	0.02	15.35	ppb
Molybdenum	97-1	0.02	0.01	0.01	0.01	38.58	ppb
Molybdenum	98-1	0.02	0.01	0.01	0.01	21.19	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.03	-0.01	-0.02	-0.02		ppb
Phosphorus	31-2	-29.76	-25.58	-26.16	-27.17		ppb
Potassium	39-2	10.62	10.33	10.44	10.46	1.41	ppb
Rhodium	103-1				106		%
Rhodium	103-2				106		%
Scandium	45-1				110		%
Scandium	45-2				106		%
Selenium	82-1	0.11	0.15	0.04	0.10	59.68	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.39	0.01	-0.12	-0.17		ppb
Silicon	28-1	-1.30	-1.31	-1.19	-1.27		ppb
Silver	107-1	0.01	0.01	0.01	0.01	10.71	ppb
Silver	109-1	0.01	0.01	0.01	0.01	19.50	ppb
Sodium	23-2	26.03	22.76	24.59	24.46	6.71	ppb
Strontium	86-1	0.01	0.00	0.00	0.00	71.00	ppb
Strontium	88-1	0.00	0.00	0.00	0.00		ppb
Sulfur	34-1	-350.87	-478.88	-399.87	-409.87		ppb
Terbium	159-1				104		%
Terbium	159-2				103		%
Thallium	203-1	0.02	0.02	0.02	0.02	12.00	ppb
Thallium	205-1	0.02	0.01	0.01	0.02	14.60	ppb
Tin	118-1	0.01	0.00	0.00	0.00	141.75	ppb
Titanium	47-1	0.02	0.01	0.03	0.02	38.84	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB05	Instrumnet Name :	P8
Client Sample ID :	CCB05	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 16:28:02	DataFile Name :	055CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	1903.45	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				103		%
Zinc	66-2	-0.04	0.09	-0.14	-0.03		ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	2.12	ppb
Zirconium	91-1	0.02	0.02	0.03	0.02	18.80	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-02DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-27-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:36:57	DataFile Name :	056AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2788.26	2784.33	2796.07	2789.55	0.21	ppb
Antimony	121-1	0.02	0.03	0.03	0.03	7.29	ppb
Arsenic	75-2	0.12	0.15	0.16	0.14	15.37	ppb
Barium	135-1	4.45	4.47	4.60	4.51	1.75	ppb
Barium	137-1	4.42	4.53	4.59	4.51	1.94	ppb
Beryllium	9-1	0.07	0.06	0.07	0.07	4.67	ppb
Bismuth	209-1				102		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	0.02	0.02	0.04	0.03	51.97	ppb
Cadmium	106-1	-0.11	-0.06	-0.15	-0.11		ppb
Cadmium	111-1	0.01	0.01	0.00	0.01	143.96	ppb
Calcium	43-1	9109.69	9215.27	9273.37	9199.44	0.90	ppb
Calcium	44-1	9235.14	9342.94	9374.41	9317.50	0.78	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.54	0.49	0.52	0.52	4.65	ppb
Cobalt	59-2	7.07	6.97	7.04	7.02	0.77	ppb
Copper	63-2	5.58	5.63	5.72	5.64	1.25	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				105		%
Holmium	165-2				101		%
Indium	115-1				106		%
Indium	115-2				101		%
Iron	54-2	14271.28	14314.39	14323.76	14303.14	0.20	ppb
Iron	56-2	14346.08	14060.13	14303.67	14236.63	1.08	ppb
Iron	57-2	14195.96	14041.57	14598.14	14278.55	2.01	ppb
Krypton	83-1						cps
Lead	206-1	0.09	0.09	0.09	0.09	1.56	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-02DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-27-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:36:57	DataFile Name :	056AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.10	0.09	0.08	0.09	8.84	ppb
Lead	208-1	0.09	0.09	0.09	0.09	2.06	ppb
Lithium	6-1				94		%
Magnesium	24-2	3371.80	3350.06	3377.24	3366.37	0.43	ppb
Manganese	55-2	350.57	348.13	349.84	349.51	0.36	ppb
Molybdenum	94-1	0.11	0.10	0.10	0.10	5.96	ppb
Molybdenum	95-1	0.01	0.01	0.01	0.01	20.32	ppb
Molybdenum	96-1	0.07	0.07	0.07	0.07	4.42	ppb
Molybdenum	97-1	0.00	0.01	0.00	0.00	64.29	ppb
Molybdenum	98-1	0.01	0.00	0.00	0.00	38.34	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.94	2.81	2.96	2.90	2.81	ppb
Phosphorus	31-2	-15.78	-14.14	-11.65	-13.86		ppb
Potassium	39-2	95.83	93.37	97.16	95.45	2.01	ppb
Rhodium	103-1				106		%
Rhodium	103-2				104		%
Scandium	45-1				112		%
Scandium	45-2				108		%
Selenium	82-1	0.01	0.02	0.11	0.05	121.72	ppb
Selenium	77-2	5.52	6.33	9.27	7.04	28.06	ppb
Selenium	78-2	0.81	1.17	1.04	1.01	17.86	ppb
Silicon	28-1	690.88	702.30	713.73	702.30	1.63	ppb
Silver	107-1	0.00	0.00	0.00	0.00	19.10	ppb
Silver	109-1	0.00	0.00	0.00	0.00	25.71	ppb
Sodium	23-2	1215.74	1202.29	1221.95	1213.33	0.83	ppb
Strontium	86-1	16.37	16.58	16.73	16.56	1.09	ppb
Strontium	88-1	17.22	17.91	17.59	17.57	1.96	ppb
Sulfur	34-1	17515.33	17584.82	17924.71	17674.95	1.24	ppb
Terbium	159-1				105		%
Terbium	159-2				103		%
Thallium	203-1	0.01	0.01	0.01	0.01	5.09	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	3.95	ppb
Tin	118-1	0.03	0.03	0.05	0.04	42.30	ppb
Titanium	47-1	0.19	0.20	0.20	0.20	2.16	ppb
Uranium	238-1	0.17	0.17	0.18	0.17	2.35	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-02DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-27-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:36:57	DataFile Name :	056AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	11.05	10.98	11.17	11.07	0.90	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				113		%
Yttrium	89-2				109		%
Zinc	66-2	31.46	30.47	31.14	31.03	1.63	ppb
Zirconium	90-1	0.04	0.05	0.05	0.04	11.41	ppb
Zirconium	91-1	0.04	0.04	0.04	0.04	9.72	ppb

Reviewed By:mohan
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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-04DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-28-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:40:14	DataFile Name :	057AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1600.85	1608.98	1608.96	1606.27	0.29	ppb
Antimony	121-1	0.05	0.05	0.05	0.05	4.19	ppb
Arsenic	75-2	0.12	0.14	0.18	0.15	23.90	ppb
Barium	135-1	4.11	4.13	4.21	4.15	1.26	ppb
Barium	137-1	4.13	4.20	4.29	4.21	1.85	ppb
Beryllium	9-1	0.06	0.06	0.06	0.06	5.28	ppb
Bismuth	209-1				102		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	0.05	0.02	0.04	0.04	44.14	ppb
Cadmium	106-1	-0.22	0.04	-0.09	-0.09		ppb
Cadmium	111-1	-0.01	0.01	0.00	0.00	917.77	ppb
Calcium	43-1	9473.29	9616.03	9498.96	9529.43	0.80	ppb
Calcium	44-1	9462.50	9712.26	9720.21	9631.66	1.52	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.17	0.18	0.18	0.18	4.46	ppb
Cobalt	59-2	6.27	6.49	6.43	6.40	1.75	ppb
Copper	63-2	1.18	1.15	1.14	1.16	1.89	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				105		%
Holmium	165-2				102		%
Indium	115-1				106		%
Indium	115-2				102		%
Iron	54-2	18109.56	18325.64	18326.26	18253.82	0.68	ppb
Iron	56-2	17970.25	18097.90	18150.93	18073.02	0.51	ppb
Iron	57-2	18367.33	18549.83	18378.10	18431.76	0.56	ppb
Krypton	83-1						cps
Lead	206-1	0.07	0.08	0.08	0.08	5.70	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-04DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-28-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:40:14	DataFile Name :	057AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.08	0.08	0.08	0.08	3.66	ppb
Lead	208-1	0.08	0.08	0.08	0.08	1.49	ppb
Lithium	6-1				93		%
Magnesium	24-2	3301.63	3301.43	3313.28	3305.45	0.21	ppb
Manganese	55-2	337.87	340.69	343.79	340.78	0.87	ppb
Molybdenum	94-1	0.06	0.09	0.09	0.08	16.80	ppb
Molybdenum	95-1	0.01	0.00	0.01	0.01	35.48	ppb
Molybdenum	96-1	0.07	0.08	0.08	0.08	6.44	ppb
Molybdenum	97-1	0.00	0.00	0.01	0.00	139.61	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	30.29	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.60	1.69	1.66	1.65	2.68	ppb
Phosphorus	31-2	-17.87	-21.72	-20.48	-20.02		ppb
Potassium	39-2	80.77	80.76	81.26	80.93	0.35	ppb
Rhodium	103-1				106		%
Rhodium	103-2				106		%
Scandium	45-1				113		%
Scandium	45-2				109		%
Selenium	82-1	0.12	0.12	0.15	0.13	14.76	ppb
Selenium	77-2	5.89	3.77	3.34	4.33	31.53	ppb
Selenium	78-2	0.67	1.15	1.02	0.95	26.01	ppb
Silicon	28-1	603.92	612.50	606.21	607.55	0.73	ppb
Silver	107-1	0.00	0.00	0.00	0.00	135.10	ppb
Silver	109-1	0.00	0.00	0.00	0.00	67.36	ppb
Sodium	23-2	1015.65	1024.37	1019.51	1019.85	0.43	ppb
Strontium	86-1	17.39	17.37	17.43	17.40	0.19	ppb
Strontium	88-1	18.22	18.80	18.32	18.45	1.69	ppb
Sulfur	34-1	16746.12	16841.18	16753.16	16780.15	0.32	ppb
Terbium	159-1				104		%
Terbium	159-2				103		%
Thallium	203-1	0.01	0.01	0.01	0.01	30.73	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	10.23	ppb
Tin	118-1	0.02	0.01	0.01	0.01	41.62	ppb
Titanium	47-1	0.19	0.17	0.18	0.18	3.63	ppb
Uranium	238-1	0.16	0.16	0.15	0.15	2.52	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-04DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-28-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:40:14	DataFile Name :	057AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	13.49	13.66	13.77	13.64	1.04	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				115		%
Yttrium	89-2				110		%
Zinc	66-2	21.71	21.70	21.54	21.65	0.45	ppb
Zirconium	90-1	0.03	0.03	0.03	0.03	6.15	ppb
Zirconium	91-1	0.03	0.02	0.03	0.03	17.51	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-06DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-29-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:43:33	DataFile Name :	058AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1714.98	1642.20	1757.57	1704.92	3.42	ppb
Antimony	121-1	0.03	0.03	0.03	0.03	6.96	ppb
Arsenic	75-2	0.17	0.10	0.21	0.16	34.76	ppb
Barium	135-1	4.32	4.46	4.46	4.42	1.85	ppb
Barium	137-1	4.35	4.53	4.42	4.44	2.09	ppb
Beryllium	9-1	0.06	0.06	0.06	0.06	5.59	ppb
Bismuth	209-1				102		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	0.03	0.04	0.00	0.02	79.98	ppb
Cadmium	106-1	-0.27	-0.01	0.11	-0.06		ppb
Cadmium	111-1	-0.01	0.01	0.03	0.01	177.44	ppb
Calcium	43-1	12683.44	12394.24	12253.34	12443.67	1.76	ppb
Calcium	44-1	12674.28	12355.41	12389.76	12473.15	1.40	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.37	0.32	0.35	0.34	7.25	ppb
Cobalt	59-2	5.70	5.58	5.79	5.69	1.84	ppb
Copper	63-2	3.10	2.98	3.12	3.06	2.46	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				104		%
Indium	115-1				107		%
Indium	115-2				103		%
Iron	54-2	15009.50	14480.16	15133.95	14874.54	2.33	ppb
Iron	56-2	14843.14	14338.36	14963.99	14715.16	2.26	ppb
Iron	57-2	15097.67	14580.09	15227.40	14968.38	2.29	ppb
Krypton	83-1						cps
Lead	206-1	0.25	0.26	0.27	0.26	3.47	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-06DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-29-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:43:33	DataFile Name :	058AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.27	0.27	0.26	0.27	4.02	ppb
Lead	208-1	0.27	0.27	0.27	0.27	0.40	ppb
Lithium	6-1				90		%
Magnesium	24-2	3116.12	3004.46	3182.65	3101.08	2.90	ppb
Manganese	55-2	274.35	268.19	278.01	273.52	1.81	ppb
Molybdenum	94-1	0.08	0.06	0.07	0.07	16.55	ppb
Molybdenum	95-1	0.01	0.01	0.00	0.01	74.32	ppb
Molybdenum	96-1	0.06	0.07	0.08	0.07	9.54	ppb
Molybdenum	97-1	0.00	0.01	0.00	0.00	170.02	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	20.77	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.52	2.57	2.73	2.61	4.22	ppb
Phosphorus	31-2	-22.64	-22.67	-21.38	-22.23		ppb
Potassium	39-2	100.58	98.12	103.70	100.80	2.77	ppb
Rhodium	103-1				106		%
Rhodium	103-2				106		%
Scandium	45-1				113		%
Scandium	45-2				110		%
Selenium	82-1	0.21	0.24	0.12	0.19	34.49	ppb
Selenium	77-2	3.32	5.31	6.75	5.13	33.62	ppb
Selenium	78-2	0.05	1.21	0.56	0.61	96.72	ppb
Silicon	28-1	685.38	683.59	649.22	672.73	3.03	ppb
Silver	107-1	0.00	0.00	0.00	0.00	44.37	ppb
Silver	109-1	0.00	0.00	0.00	0.00	28.05	ppb
Sodium	23-2	1833.00	1742.59	1850.82	1808.80	3.21	ppb
Strontium	86-1	20.46	21.11	20.66	20.74	1.60	ppb
Strontium	88-1	21.87	22.13	22.06	22.02	0.59	ppb
Sulfur	34-1	18202.53	18296.96	17423.82	17974.44	2.67	ppb
Terbium	159-1				105		%
Terbium	159-2				104		%
Thallium	203-1	0.01	0.01	0.01	0.01	17.30	ppb
Thallium	205-1	0.00	0.01	0.01	0.01	7.92	ppb
Tin	118-1	0.01	0.01	0.01	0.01	22.92	ppb
Titanium	47-1	0.14	0.15	0.13	0.14	7.38	ppb
Uranium	238-1	0.16	0.17	0.17	0.16	1.74	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-06DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-29-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:43:33	DataFile Name :	058AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	9.67	9.46	9.93	9.69	2.40	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				115		%
Yttrium	89-2				111		%
Zinc	66-2	24.25	23.89	24.77	24.30	1.83	ppb
Zirconium	90-1	0.03	0.03	0.03	0.03	7.98	ppb
Zirconium	91-1	0.03	0.03	0.03	0.03	4.38	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-08DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-30-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:46:49	DataFile Name :	059AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2331.30	2347.57	2358.36	2345.74	0.58	ppb
Antimony	121-1	0.02	0.02	0.02	0.02	1.92	ppb
Arsenic	75-2	0.09	0.12	0.16	0.12	29.31	ppb
Barium	135-1	4.85	4.93	4.75	4.84	1.90	ppb
Barium	137-1	4.81	4.93	4.87	4.87	1.21	ppb
Beryllium	9-1	0.07	0.06	0.07	0.06	10.97	ppb
Bismuth	209-1				98		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	0.04	0.03	0.00	0.02	99.54	ppb
Cadmium	106-1	-0.37	-0.19	-0.58	-0.38		ppb
Cadmium	111-1	-0.01	0.01	-0.02	-0.01		ppb
Calcium	43-1	11344.66	11097.66	11031.93	11158.08	1.48	ppb
Calcium	44-1	11357.50	11166.22	11081.12	11201.61	1.26	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.45	0.49	0.50	0.48	5.51	ppb
Cobalt	59-2	6.51	6.61	6.49	6.54	0.99	ppb
Copper	63-2	3.69	3.80	3.75	3.75	1.44	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				104		%
Holmium	165-2				101		%
Indium	115-1				105		%
Indium	115-2				102		%
Iron	54-2	13986.27	13998.65	13767.49	13917.47	0.93	ppb
Iron	56-2	13854.94	14074.83	13626.42	13852.06	1.62	ppb
Iron	57-2	13902.13	14368.30	13746.23	14005.55	2.31	ppb
Krypton	83-1						cps
Lead	206-1	0.18	0.19	0.19	0.19	2.80	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-08DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-30-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:46:49	DataFile Name :	059AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.18	0.18	0.18	0.18	1.56	ppb
Lead	208-1	0.18	0.19	0.18	0.18	2.65	ppb
Lithium	6-1				88		%
Magnesium	24-2	3044.15	3105.77	3073.13	3074.35	1.00	ppb
Manganese	55-2	285.06	290.67	285.07	286.93	1.13	ppb
Molybdenum	94-1	0.08	0.09	0.08	0.08	10.68	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	39.24	ppb
Molybdenum	96-1	0.07	0.07	0.07	0.07	1.40	ppb
Molybdenum	97-1	0.01	0.00	0.01	0.01	36.84	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	64.49	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.43	2.39	2.24	2.35	4.17	ppb
Phosphorus	31-2	-15.34	-4.27	-3.12	-7.58		ppb
Potassium	39-2	108.35	108.98	111.19	109.51	1.36	ppb
Rhodium	103-1				105		%
Rhodium	103-2				105		%
Scandium	45-1				112		%
Scandium	45-2				110		%
Selenium	82-1	0.26	0.03	0.16	0.15	77.10	ppb
Selenium	77-2	7.51	4.24	4.64	5.46	32.69	ppb
Selenium	78-2	0.42	1.18	0.07	0.55	102.51	ppb
Silicon	28-1	749.05	729.62	728.38	735.69	1.58	ppb
Silver	107-1	0.00	0.00	0.00	0.00	23.12	ppb
Silver	109-1	0.00	0.00	0.00	0.00	37.82	ppb
Sodium	23-2	1226.63	1250.58	1235.64	1237.62	0.98	ppb
Strontium	86-1	17.13	17.45	17.26	17.28	0.94	ppb
Strontium	88-1	18.27	18.28	17.65	18.07	1.99	ppb
Sulfur	34-1	17956.17	17217.57	16933.93	17369.22	3.04	ppb
Terbium	159-1				103		%
Terbium	159-2				103		%
Thallium	203-1	0.01	0.01	0.01	0.01	4.53	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	7.47	ppb
Tin	118-1	0.04	0.05	0.04	0.04	11.94	ppb
Titanium	47-1	0.21	0.22	0.21	0.21	0.96	ppb
Uranium	238-1	0.18	0.18	0.18	0.18	1.59	ppb

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-08DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-30-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:46:49	DataFile Name :	059AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	11.91	11.98	11.91	11.93	0.33	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				113		%
Yttrium	89-2				109		%
Zinc	66-2	30.55	31.18	31.00	30.91	1.05	ppb
Zirconium	90-1	0.04	0.04	0.04	0.04	0.86	ppb
Zirconium	91-1	0.03	0.04	0.04	0.04	20.01	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-10DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-31-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:50:07	DataFile Name :	060AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1238.10	1221.73	1216.95	1225.59	0.90	ppb
Antimony	121-1	0.00	0.01	0.01	0.01	32.02	ppb
Arsenic	75-2	0.14	0.16	0.11	0.14	20.10	ppb
Barium	135-1	4.75	4.88	4.74	4.79	1.66	ppb
Barium	137-1	4.76	4.81	4.83	4.80	0.75	ppb
Beryllium	9-1	0.05	0.06	0.05	0.05	8.00	ppb
Bismuth	209-1				102		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	0.03	0.02	0.02	0.02	27.61	ppb
Cadmium	106-1	-0.31	0.02	-0.04	-0.11		ppb
Cadmium	111-1	-0.01	0.01	0.01	0.01	160.47	ppb
Calcium	43-1	14505.14	14638.74	14187.46	14443.78	1.60	ppb
Calcium	44-1	14211.74	14397.53	14101.59	14236.95	1.05	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.16	0.16	0.13	0.15	11.68	ppb
Cobalt	59-2	5.08	5.06	5.06	5.06	0.25	ppb
Copper	63-2	1.38	1.34	1.38	1.37	1.64	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				105		%
Holmium	165-2				102		%
Indium	115-1				108		%
Indium	115-2				102		%
Iron	54-2	16625.95	16403.50	16008.91	16346.12	1.91	ppb
Iron	56-2	16146.92	16175.02	15947.17	16089.70	0.77	ppb
Iron	57-2	16898.16	16065.63	16360.19	16441.33	2.57	ppb
Krypton	83-1						cps
Lead	206-1	0.14	0.15	0.14	0.14	2.43	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-10DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-31-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:50:07	DataFile Name :	060AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.16	0.15	0.14	0.15	4.88	ppb
Lead	208-1	0.14	0.15	0.15	0.15	0.47	ppb
Lithium	6-1				87		%
Magnesium	24-2	2789.23	2801.30	2807.29	2799.27	0.33	ppb
Manganese	55-2	329.26	331.36	334.18	331.60	0.74	ppb
Molybdenum	94-1	0.05	0.05	0.05	0.05	6.07	ppb
Molybdenum	95-1	0.01	0.01	0.01	0.01	25.96	ppb
Molybdenum	96-1	0.08	0.07	0.07	0.07	9.22	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00	45.58	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	20.46	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.90	1.88	1.90	1.89	0.48	ppb
Phosphorus	31-2	-19.75	-24.79	-26.09	-23.54		ppb
Potassium	39-2	102.62	98.64	104.27	101.84	2.84	ppb
Rhodium	103-1				107		%
Rhodium	103-2				105		%
Scandium	45-1				113		%
Scandium	45-2				109		%
Selenium	82-1	0.44	0.23	0.12	0.26	62.27	ppb
Selenium	77-2	3.77	6.74	5.83	5.45	27.91	ppb
Selenium	78-2	0.30	0.80	1.02	0.71	51.91	ppb
Silicon	28-1	612.32	606.86	613.99	611.05	0.61	ppb
Silver	107-1	0.00	0.00	0.00	0.00	121.31	ppb
Silver	109-1	0.00	0.00	0.00	0.00	48.94	ppb
Sodium	23-2	1304.00	1296.25	1284.61	1294.96	0.75	ppb
Strontium	86-1	23.24	23.48	22.99	23.24	1.05	ppb
Strontium	88-1	24.75	24.51	24.43	24.56	0.68	ppb
Sulfur	34-1	18768.14	18264.98	18356.72	18463.28	1.45	ppb
Terbium	159-1				104		%
Terbium	159-2				103		%
Thallium	203-1	0.00	0.00	0.01	0.00	46.24	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	30.07	ppb
Tin	118-1	0.03	0.02	0.02	0.02	11.39	ppb
Titanium	47-1	0.14	0.16	0.16	0.15	8.51	ppb
Uranium	238-1	0.19	0.20	0.19	0.19	3.58	ppb

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-10DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-31-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:50:07	DataFile Name :	060AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	10.61	10.54	10.79	10.65	1.24	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				115		%
Yttrium	89-2				110		%
Zinc	66-2	24.82	25.55	25.63	25.34	1.77	ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	11.35	ppb
Zirconium	91-1	0.02	0.02	0.02	0.02	13.72	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-12DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-32-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:53:22	DataFile Name :	061AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1177.21	1148.28	1130.43	1151.97	2.05	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	7.75	ppb
Arsenic	75-2	0.16	0.12	0.19	0.16	22.30	ppb
Barium	135-1	4.56	4.53	4.51	4.53	0.53	ppb
Barium	137-1	4.59	4.56	4.62	4.59	0.63	ppb
Beryllium	9-1	0.05	0.05	0.06	0.05	9.36	ppb
Bismuth	209-1				100		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	0.04	0.03	0.01	0.03	53.05	ppb
Cadmium	106-1	-0.57	-0.30	-0.02	-0.29		ppb
Cadmium	111-1	-0.03	-0.01	0.01	-0.01		ppb
Calcium	43-1	12990.07	13217.33	13322.83	13176.74	1.29	ppb
Calcium	44-1	13206.90	13329.38	13478.71	13338.33	1.02	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.15	0.16	0.16	0.15	1.98	ppb
Cobalt	59-2	4.99	4.83	4.77	4.87	2.33	ppb
Copper	63-2	1.09	1.08	1.00	1.06	4.49	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				98		%
Indium	115-1				106		%
Indium	115-2				99		%
Iron	54-2	17144.08	16771.07	16719.41	16878.19	1.37	ppb
Iron	56-2	17212.66	16872.95	16582.03	16889.22	1.87	ppb
Iron	57-2	17373.40	16914.00	16867.91	17051.77	1.64	ppb
Krypton	83-1						cps
Lead	206-1	1.09	1.09	1.08	1.08	0.50	ppb

Reviewed By:mohan
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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-12DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-32-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:53:22	DataFile Name :	061AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1.13	1.09	1.08	1.10	2.49	ppb
Lead	208-1	1.09	1.08	1.07	1.08	0.86	ppb
Lithium	6-1				89		%
Magnesium	24-2	2697.32	2581.78	2571.00	2616.70	2.68	ppb
Manganese	55-2	305.62	296.56	294.16	298.78	2.02	ppb
Molybdenum	94-1	0.06	0.05	0.05	0.05	8.20	ppb
Molybdenum	95-1	0.01	0.01	0.01	0.01	18.00	ppb
Molybdenum	96-1	0.08	0.07	0.08	0.08	1.83	ppb
Molybdenum	97-1	0.01	0.01	0.01	0.01	7.34	ppb
Molybdenum	98-1	0.01	0.00	0.01	0.01	22.99	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.71	1.79	1.78	1.76	2.32	ppb
Phosphorus	31-2	-30.78	-27.58	-23.42	-27.26		ppb
Potassium	39-2	96.56	94.38	91.88	94.27	2.48	ppb
Rhodium	103-1				105		%
Rhodium	103-2				102		%
Scandium	45-1				112		%
Scandium	45-2				105		%
Selenium	82-1	0.31	0.21	0.08	0.20	57.71	ppb
Selenium	77-2	6.73	5.54	6.85	6.37	11.40	ppb
Selenium	78-2	1.58	1.07	1.45	1.37	19.48	ppb
Silicon	28-1	581.01	588.20	589.38	586.20	0.77	ppb
Silver	107-1	0.00	0.00	0.00	0.00	85.28	ppb
Silver	109-1	0.00	0.00	0.00	0.00		ppb
Sodium	23-2	1325.07	1296.61	1269.53	1297.07	2.14	ppb
Strontium	86-1	22.50	22.76	22.47	22.58	0.70	ppb
Strontium	88-1	24.33	24.00	23.57	23.97	1.59	ppb
Sulfur	34-1	17027.45	17301.10	17371.19	17233.25	1.05	ppb
Terbium	159-1				102		%
Terbium	159-2				99		%
Thallium	203-1	0.01	0.00	0.00	0.00	101.63	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	19.50	ppb
Tin	118-1	0.01	0.02	0.01	0.01	57.29	ppb
Titanium	47-1	0.14	0.14	0.15	0.14	3.80	ppb
Uranium	238-1	0.22	0.22	0.21	0.22	2.02	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-12DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-32-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:53:22	DataFile Name :	061AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	11.63	11.51	11.26	11.47	1.67	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				113		%
Yttrium	89-2				106		%
Zinc	66-2	28.35	27.70	27.54	27.86	1.54	ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	4.80	ppb
Zirconium	91-1	0.01	0.01	0.01	0.01	8.15	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-14DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-18-042325DL2	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:56:41	DataFile Name :	062AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	3219.94	3204.14	3138.34	3187.47	1.36	ppb
Antimony	121-1	0.63	0.64	0.66	0.65	2.39	ppb
Arsenic	75-2	0.19	0.15	0.21	0.18	16.69	ppb
Barium	135-1	5.35	5.43	5.31	5.36	1.19	ppb
Barium	137-1	5.40	5.39	5.43	5.41	0.42	ppb
Beryllium	9-1	0.03	0.04	0.03	0.03	8.29	ppb
Bismuth	209-1				99		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	0.07	0.05	0.06	0.06	16.17	ppb
Cadmium	106-1	-0.05	-0.09	-0.22	-0.12		ppb
Cadmium	111-1	0.02	0.01	0.00	0.01	74.01	ppb
Calcium	43-1	4965.98	5029.89	4916.62	4970.83	1.14	ppb
Calcium	44-1	4916.01	5157.02	5069.03	5047.35	2.42	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.15	1.12	1.08	1.12	3.11	ppb
Cobalt	59-2	5.69	5.57	5.43	5.56	2.30	ppb
Copper	63-2	7.10	6.98	6.97	7.02	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				102		%
Holmium	165-2				100		%
Indium	115-1				105		%
Indium	115-2				101		%
Iron	54-2	13032.88	12957.86	12680.76	12890.50	1.44	ppb
Iron	56-2	12673.87	12675.30	12327.43	12558.86	1.60	ppb
Iron	57-2	12118.12	11956.65	11860.24	11978.33	1.09	ppb
Krypton	83-1						cps
Lead	206-1	0.36	0.34	0.37	0.36	4.58	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-14DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-18-042325DL2	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:56:41	DataFile Name :	062AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.34	0.34	0.34	0.34	1.28	ppb
Lead	208-1	0.35	0.34	0.35	0.35	1.95	ppb
Lithium	6-1				86		%
Magnesium	24-2	3538.25	3701.80	3589.47	3609.84	2.32	ppb
Manganese	55-2	149.80	147.16	144.39	147.12	1.84	ppb
Molybdenum	94-1	0.12	0.12	0.13	0.12	7.07	ppb
Molybdenum	95-1	0.02	0.02	0.01	0.01	36.04	ppb
Molybdenum	96-1	0.08	0.07	0.07	0.07	3.35	ppb
Molybdenum	97-1	0.01	0.01	0.00	0.01	57.19	ppb
Molybdenum	98-1	0.01	0.01	0.01	0.01	17.91	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	4.75	4.66	4.43	4.61	3.53	ppb
Phosphorus	31-2	5.79	9.69	13.66	9.71	40.55	ppb
Potassium	39-2	129.42	129.69	130.13	129.75	0.28	ppb
Rhodium	103-1				104		%
Rhodium	103-2				104		%
Scandium	45-1				111		%
Scandium	45-2				108		%
Selenium	82-1	0.21	0.12	0.13	0.15	34.01	ppb
Selenium	77-2	8.90	2.95	6.31	6.05	49.29	ppb
Selenium	78-2	0.07	0.19	0.92	0.39	116.74	ppb
Silicon	28-1	723.24	715.62	723.53	720.80	0.62	ppb
Silver	107-1	0.01	0.00	0.00	0.00	26.26	ppb
Silver	109-1	0.00	0.00	0.00	0.00	19.98	ppb
Sodium	23-2	1535.89	1517.05	1488.77	1513.91	1.57	ppb
Strontium	86-1	13.41	13.26	13.09	13.25	1.23	ppb
Strontium	88-1	13.48	13.28	13.27	13.35	0.90	ppb
Sulfur	34-1	15957.04	15780.62	15433.20	15723.62	1.70	ppb
Terbium	159-1				101		%
Terbium	159-2				101		%
Thallium	203-1	0.01	0.01	0.02	0.01	18.00	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	7.21	ppb
Tin	118-1	0.01	0.02	0.02	0.02	17.34	ppb
Titanium	47-1	0.40	0.36	0.39	0.38	5.17	ppb
Uranium	238-1	0.20	0.20	0.21	0.20	2.51	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-14DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-18-042325DL2	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:56:41	DataFile Name :	062AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	13.82	13.52	13.30	13.55	1.92	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				112		%
Yttrium	89-2				109		%
Zinc	66-2	47.87	47.70	46.43	47.34	1.67	ppb
Zirconium	90-1	0.06	0.06	0.07	0.06	9.79	ppb
Zirconium	91-1	0.05	0.05	0.05	0.05	7.40	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV06	Instrumnet Name :	P8
Client Sample ID :	CCV06	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:03:03	DataFile Name :	063CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	52426.18	52613.53	51560.39	52200.03	1.08	ppb
Antimony	121-1	511.95	518.26	515.58	515.26	0.61	ppb
Arsenic	75-2	505.52	508.23	500.13	504.63	0.82	ppb
Barium	135-1	2568.92	2614.66	2562.96	2582.18	1.10	ppb
Barium	137-1	2598.23	2579.30	2565.00	2580.84	0.65	ppb
Beryllium	9-1	549.18	542.04	544.34	545.19	0.67	ppb
Bismuth	209-1				85		%
Bismuth	209-2				84		%
Bromine	81-1						cps
Cadmium	108-1	509.05	501.97	507.10	506.04	0.72	ppb
Cadmium	106-1	505.88	504.29	503.31	504.49	0.26	ppb
Cadmium	111-1	533.28	505.72	506.44	515.15	3.05	ppb
Calcium	43-1	244546.23	255543.67	248548.75	249546.22	2.23	ppb
Calcium	44-1	245018.80	249156.60	248477.95	247551.12	0.90	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	516.07	525.25	515.17	518.83	1.07	ppb
Cobalt	59-2	499.03	490.73	492.87	494.21	0.87	ppb
Copper	63-2	4697.50	4683.05	4675.40	4685.32	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				94		%
Holmium	165-2				94		%
Indium	115-1				90		%
Indium	115-2				83		%
Iron	54-2	134091.03	134012.47	132302.40	133468.63	0.76	ppb
Iron	56-2	133838.50	134301.95	134148.13	134096.19	0.18	ppb
Iron	57-2	135795.49	132259.34	132974.70	133676.51	1.40	ppb
Krypton	83-1						cps
Lead	206-1	2509.24	2512.31	2426.33	2482.63	1.96	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV06	Instrumnet Name :	P8
Client Sample ID :	CCV06	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:03:03	DataFile Name :	063CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2459.61	2442.67	2410.58	2437.62	1.02	ppb
Lead	208-1	2467.08	2453.67	2438.13	2452.96	0.59	ppb
Lithium	6-1				80		%
Magnesium	24-2	266068.75	264348.01	260782.26	263733.01	1.02	ppb
Manganese	55-2	4974.11	5047.38	5001.53	5007.67	0.74	ppb
Molybdenum	94-1	4959.28	4873.15	4922.56	4918.33	0.88	ppb
Molybdenum	95-1	5015.70	4916.58	4861.66	4931.32	1.58	ppb
Molybdenum	96-1	5011.19	4955.96	4946.63	4971.26	0.70	ppb
Molybdenum	97-1	4950.05	4879.62	4942.28	4923.98	0.78	ppb
Molybdenum	98-1	4985.36	4812.00	4920.43	4905.93	1.79	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	452.65	450.44	447.43	450.17	0.58	ppb
Phosphorus	31-2	10415.10	10420.73	10407.97	10414.60	0.06	ppb
Potassium	39-2	133909.86	132595.48	131706.95	132737.43	0.83	ppb
Rhodium	103-1				88		%
Rhodium	103-2				86		%
Scandium	45-1				99		%
Scandium	45-2				100		%
Selenium	82-1	482.50	472.77	467.46	474.24	1.61	ppb
Selenium	77-2	481.62	493.24	502.08	492.31	2.08	ppb
Selenium	78-2	505.07	480.28	502.79	496.04	2.76	ppb
Silicon	28-1	567.91	572.01	574.72	571.55	0.60	ppb
Silver	107-1	512.55	502.98	501.25	505.59	1.20	ppb
Silver	109-1	513.94	492.98	493.12	500.02	2.41	ppb
Sodium	23-2	275449.26	270303.37	270710.79	272154.47	1.05	ppb
Strontium	86-1	506.33	499.60	504.48	503.47	0.69	ppb
Strontium	88-1	498.83	496.68	504.35	499.95	0.79	ppb
Sulfur	34-1	10492.25	10253.37	10457.12	10400.91	1.24	ppb
Terbium	159-1				94		%
Terbium	159-2				93		%
Thallium	203-1	505.83	502.82	489.17	499.27	1.78	ppb
Thallium	205-1	501.23	501.24	498.52	500.33	0.31	ppb
Tin	118-1	518.52	514.72	516.88	516.71	0.37	ppb
Titanium	47-1	4887.72	5021.88	4948.48	4952.69	1.36	ppb
Uranium	238-1	499.75	496.19	501.05	499.00	0.50	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV06	Instrumnet Name :	P8
Client Sample ID :	CCV06	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:03:03	DataFile Name :	063CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	530.48	519.71	519.39	523.19	1.21	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				98		%
Yttrium	89-2				94		%
Zinc	66-2	4848.96	4682.08	4713.89	4748.31	1.87	ppb
Zirconium	90-1	502.79	490.30	493.28	495.46	1.32	ppb
Zirconium	91-1	501.94	494.29	485.19	493.81	1.70	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB06	Instrumnet Name :	P8
Client Sample ID :	CCB06	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:05:48	DataFile Name :	064CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.28	1.83	0.93	1.35	33.58	ppb
Antimony	121-1	0.14	0.12	0.10	0.12	18.25	ppb
Arsenic	75-2	0.01	-0.01	0.00	0.00		ppb
Barium	135-1	0.08	0.07	0.04	0.07	30.97	ppb
Barium	137-1	0.08	0.06	0.04	0.06	29.47	ppb
Beryllium	9-1	0.07	0.05	0.04	0.05	24.98	ppb
Bismuth	209-1				101		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	0.04	0.04	0.02	0.03	23.68	ppb
Cadmium	106-1	-0.65	-0.26	-0.85	-0.59		ppb
Cadmium	111-1	-0.02	0.00	-0.05	-0.02		ppb
Calcium	43-1	7.24	4.09	4.48	5.27	32.60	ppb
Calcium	44-1	6.96	3.46	2.32	4.25	56.91	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.01	0.00	0.02	0.01	149.40	ppb
Cobalt	59-2	0.00	0.01	0.01	0.01	59.96	ppb
Copper	63-2	0.10	0.12	0.09	0.10	14.43	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				99		%
Indium	115-1				105		%
Indium	115-2				99		%
Iron	54-2	2.71	2.37	2.46	2.51	6.96	ppb
Iron	56-2	2.66	2.72	2.44	2.61	5.56	ppb
Iron	57-2	3.23	2.30	2.60	2.71	17.44	ppb
Krypton	83-1						cps
Lead	206-1	0.17	0.12	0.10	0.13	23.91	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB06	Instrumnet Name :	P8
Client Sample ID :	CCB06	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:05:48	DataFile Name :	064CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.17	0.12	0.11	0.13	26.44	ppb
Lead	208-1	0.16	0.12	0.10	0.13	23.07	ppb
Lithium	6-1				94		%
Magnesium	24-2	5.46	5.14	4.33	4.98	11.76	ppb
Manganese	55-2	0.26	0.26	0.16	0.23	24.90	ppb
Molybdenum	94-1	0.32	0.24	0.23	0.26	18.83	ppb
Molybdenum	95-1	0.23	0.17	0.13	0.18	30.00	ppb
Molybdenum	96-1	0.25	0.18	0.15	0.19	26.42	ppb
Molybdenum	97-1	0.24	0.17	0.14	0.18	27.98	ppb
Molybdenum	98-1	0.21	0.16	0.13	0.17	24.52	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.01	0.01	0.00	0.01	71.35	ppb
Phosphorus	31-2	-29.59	-23.71	-28.20	-27.17		ppb
Potassium	39-2	24.05	21.86	20.82	22.24	7.42	ppb
Rhodium	103-1				105		%
Rhodium	103-2				103		%
Scandium	45-1				108		%
Scandium	45-2				105		%
Selenium	82-1	0.20	0.08	0.15	0.14	44.68	ppb
Selenium	77-2	0.46	0.00	0.00	0.15	173.21	ppb
Selenium	78-2	-0.36	0.82	0.03	0.16	367.57	ppb
Silicon	28-1	-1.24	-1.27	-1.00	-1.17		ppb
Silver	107-1	0.06	0.05	0.04	0.05	19.49	ppb
Silver	109-1	0.06	0.05	0.04	0.05	23.47	ppb
Sodium	23-2	51.08	48.90	45.29	48.42	6.04	ppb
Strontium	86-1	0.03	0.02	0.01	0.02	29.87	ppb
Strontium	88-1	0.02	0.01	0.01	0.02	27.52	ppb
Sulfur	34-1	-344.15	-417.89	-344.96	-369.00		ppb
Terbium	159-1				102		%
Terbium	159-2				100		%
Thallium	203-1	0.04	0.03	0.03	0.03	15.35	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	15.67	ppb
Tin	118-1	0.05	0.03	0.03	0.03	39.75	ppb
Titanium	47-1	0.23	0.17	0.12	0.17	30.14	ppb
Uranium	238-1	0.01	0.01	0.01	0.01	33.05	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB06	Instrumnet Name :	P8
Client Sample ID :	CCB06	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:05:48	DataFile Name :	064CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.01	0.01	0.00	17.55	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				101		%
Zinc	66-2	0.36	0.14	0.15	0.21	57.67	ppb
Zirconium	90-1	0.07	0.06	0.05	0.06	16.76	ppb
Zirconium	91-1	0.07	0.06	0.05	0.06	16.51	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DL2	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:09:13	DataFile Name :	065AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2614.04	2608.95	2665.92	2629.64	1.20	ppb
Antimony	121-1	13.08	13.31	13.40	13.26	1.23	ppb
Arsenic	75-2	0.34	0.28	0.28	0.30	11.49	ppb
Barium	135-1	7.35	7.51	7.31	7.39	1.41	ppb
Barium	137-1	7.28	7.31	7.51	7.37	1.65	ppb
Beryllium	9-1	0.07	0.06	0.07	0.07	5.39	ppb
Bismuth	209-1				99		%
Bismuth	209-2				97		%
Bromine	81-1						cps
Cadmium	108-1	0.04	0.13	0.09	0.09	49.40	ppb
Cadmium	106-1	-0.23	-0.13	0.00	-0.12		ppb
Cadmium	111-1	0.03	0.03	0.04	0.03	19.44	ppb
Calcium	43-1	5607.33	5697.43	5715.79	5673.52	1.02	ppb
Calcium	44-1	5766.88	5651.32	5815.15	5744.45	1.47	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.13	1.10	1.16	1.13	2.77	ppb
Cobalt	59-2	5.51	5.50	5.51	5.51	0.11	ppb
Copper	63-2	4.55	4.49	4.64	4.56	1.64	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				99		%
Indium	115-1				105		%
Indium	115-2				100		%
Iron	54-2	17187.80	17432.42	17406.80	17342.34	0.78	ppb
Iron	56-2	17374.26	16752.41	17220.88	17115.85	1.89	ppb
Iron	57-2	17621.30	16815.83	17358.66	17265.26	2.38	ppb
Krypton	83-1						cps
Lead	206-1	0.56	0.60	0.61	0.59	3.76	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DL2	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:09:13	DataFile Name :	065AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.60	0.60	0.61	0.60	1.31	ppb
Lead	208-1	0.58	0.59	0.60	0.59	1.54	ppb
Lithium	6-1				92		%
Magnesium	24-2	3370.17	3431.56	3442.73	3414.82	1.14	ppb
Manganese	55-2	192.57	191.12	192.31	192.00	0.40	ppb
Molybdenum	94-1	1.23	1.22	1.03	1.16	9.42	ppb
Molybdenum	95-1	0.14	0.12	0.12	0.13	8.17	ppb
Molybdenum	96-1	0.29	0.29	0.28	0.29	1.81	ppb
Molybdenum	97-1	0.12	0.12	0.11	0.12	3.78	ppb
Molybdenum	98-1	0.11	0.12	0.11	0.11	2.52	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	6.86	6.91	6.84	6.87	0.53	ppb
Phosphorus	31-2	193.70	195.51	201.48	196.90	2.07	ppb
Potassium	39-2	391.29	387.16	389.36	389.27	0.53	ppb
Rhodium	103-1				102		%
Rhodium	103-2				102		%
Scandium	45-1				109		%
Scandium	45-2				106		%
Selenium	82-1	0.16	0.21	0.19	0.19	14.92	ppb
Selenium	77-2	6.05	12.54	7.69	8.76	38.54	ppb
Selenium	78-2	0.72	1.23	1.69	1.22	39.96	ppb
Silicon	28-1	707.29	709.23	718.81	711.78	0.87	ppb
Silver	107-1	0.05	0.05	0.04	0.05	4.82	ppb
Silver	109-1	0.05	0.05	0.05	0.05	4.33	ppb
Sodium	23-2	8047.52	8195.57	8137.07	8126.72	0.92	ppb
Strontium	86-1	14.54	14.95	14.80	14.76	1.43	ppb
Strontium	88-1	14.61	15.00	14.93	14.85	1.38	ppb
Sulfur	34-1	15731.11	15934.88	15757.58	15807.86	0.70	ppb
Terbium	159-1				101		%
Terbium	159-2				100		%
Thallium	203-1	0.08	0.08	0.08	0.08	5.40	ppb
Thallium	205-1	0.08	0.07	0.08	0.08	5.92	ppb
Tin	118-1	0.08	0.08	0.07	0.08	6.19	ppb
Titanium	47-1	0.60	0.64	0.64	0.63	3.99	ppb
Uranium	238-1	0.21	0.21	0.21	0.21	1.30	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DL2	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:09:13	DataFile Name :	065AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	13.10	13.14	13.35	13.20	1.03	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				112		%
Yttrium	89-2				107		%
Zinc	66-2	64.44	64.54	64.97	64.65	0.44	ppb
Zirconium	90-1	0.59	0.61	0.52	0.58	8.86	ppb
Zirconium	91-1	0.58	0.63	0.50	0.57	11.84	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DUPDL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DUF	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:12:29	DataFile Name :	066AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2646.42	2618.33	2632.31	2632.35	0.53	ppb
Antimony	121-1	0.04	0.04	0.04	0.04	9.22	ppb
Arsenic	75-2	0.19	0.15	0.14	0.16	17.87	ppb
Barium	135-1	4.95	4.83	5.12	4.96	2.97	ppb
Barium	137-1	4.84	4.85	4.94	4.87	1.09	ppb
Beryllium	9-1	0.05	0.06	0.06	0.06	6.82	ppb
Bismuth	209-1				99		%
Bismuth	209-2				97		%
Bromine	81-1						cps
Cadmium	108-1	0.02	0.03	0.03	0.03	11.66	ppb
Cadmium	106-1	-0.06	-0.30	-0.07	-0.15		ppb
Cadmium	111-1	0.01	0.00	0.01	0.01	143.66	ppb
Calcium	43-1	5500.51	5625.56	5628.13	5584.73	1.31	ppb
Calcium	44-1	5528.89	5557.81	5681.44	5589.38	1.45	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.68	0.70	0.64	0.67	4.69	ppb
Cobalt	59-2	5.43	5.56	5.58	5.52	1.41	ppb
Copper	63-2	4.50	4.51	4.57	4.53	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				102		%
Holmium	165-2				99		%
Indium	115-1				103		%
Indium	115-2				99		%
Iron	54-2	17094.40	17040.44	17097.09	17077.31	0.19	ppb
Iron	56-2	17182.21	16925.65	17067.22	17058.36	0.75	ppb
Iron	57-2	17483.59	17173.58	17495.82	17384.33	1.05	ppb
Krypton	83-1						cps
Lead	206-1	0.17	0.15	0.16	0.16	3.76	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DUPDL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DUF	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:12:29	DataFile Name :	066AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.16	0.16	0.16	0.16	1.00	ppb
Lead	208-1	0.16	0.15	0.16	0.16	1.06	ppb
Lithium	6-1				89		%
Magnesium	24-2	3374.84	3384.49	3399.43	3386.25	0.37	ppb
Manganese	55-2	190.93	190.68	189.60	190.40	0.37	ppb
Molybdenum	94-1	0.15	0.16	0.13	0.15	8.87	ppb
Molybdenum	95-1	0.01	0.01	0.01	0.01	6.33	ppb
Molybdenum	96-1	0.09	0.09	0.08	0.09	5.28	ppb
Molybdenum	97-1	0.00	0.02	0.01	0.01	65.85	ppb
Molybdenum	98-1	0.01	0.01	0.01	0.01	24.10	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.57	2.60	2.60	2.59	0.65	ppb
Phosphorus	31-2	7.88	-0.90	-14.75	-2.59		ppb
Potassium	39-2	115.06	111.23	111.76	112.68	1.84	ppb
Rhodium	103-1				103		%
Rhodium	103-2				102		%
Scandium	45-1				110		%
Scandium	45-2				107		%
Selenium	82-1	0.16	0.28	0.25	0.23	27.53	ppb
Selenium	77-2	5.13	5.55	7.26	5.98	18.86	ppb
Selenium	78-2	0.95	0.70	1.57	1.08	41.54	ppb
Silicon	28-1	713.53	709.11	724.69	715.77	1.12	ppb
Silver	107-1	0.00	0.01	0.01	0.01	8.95	ppb
Silver	109-1	0.01	0.01	0.01	0.01	3.87	ppb
Sodium	23-2	1193.65	1172.08	1191.48	1185.73	1.00	ppb
Strontium	86-1	14.71	15.20	15.04	14.98	1.65	ppb
Strontium	88-1	14.81	15.31	15.12	15.08	1.69	ppb
Sulfur	34-1	16426.96	15852.23	15874.88	16051.36	2.03	ppb
Terbium	159-1				100		%
Terbium	159-2				101		%
Thallium	203-1	0.01	0.01	0.01	0.01	7.78	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	4.06	ppb
Tin	118-1	0.01	0.02	0.05	0.03	75.77	ppb
Titanium	47-1	0.22	0.23	0.23	0.22	1.98	ppb
Uranium	238-1	0.21	0.21	0.21	0.21	1.02	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DUPDL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DUF	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:12:29	DataFile Name :	066AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	13.20	13.10	13.10	13.13	0.41	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				110		%
Yttrium	89-2				108		%
Zinc	66-2	40.10	39.59	40.40	40.03	1.03	ppb
Zirconium	90-1	0.08	0.08	0.06	0.07	9.99	ppb
Zirconium	91-1	0.08	0.06	0.06	0.07	16.62	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16LDL2X125	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325LDL	Dilution Factor :	125
Date & Time Acquired :	2025-04-29 17:15:49	DataFile Name :	067AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	531.58	526.18	538.92	532.23	1.20	ppb
Antimony	121-1	0.02	0.03	0.02	0.02	13.11	ppb
Arsenic	75-2	0.02	0.01	0.03	0.02	68.87	ppb
Barium	135-1	0.98	1.01	1.00	1.00	1.39	ppb
Barium	137-1	0.99	1.03	1.02	1.01	1.60	ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	25.58	ppb
Bismuth	209-1				97		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	0.00	0.01	0.02	0.01	117.50	ppb
Cadmium	106-1	-0.81	-0.84	-0.42	-0.69		ppb
Cadmium	111-1	-0.06	-0.06	-0.03	-0.05		ppb
Calcium	43-1	1123.04	1164.30	1149.44	1145.59	1.82	ppb
Calcium	44-1	1155.50	1174.84	1183.75	1171.36	1.23	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.12	0.12	0.12	0.12	1.76	ppb
Cobalt	59-2	1.09	1.09	1.13	1.10	2.20	ppb
Copper	63-2	0.88	0.87	0.88	0.87	0.59	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				99		%
Indium	115-1				104		%
Indium	115-2				99		%
Iron	54-2	3362.70	3275.31	3353.76	3330.59	1.44	ppb
Iron	56-2	3484.63	3454.89	3392.47	3444.00	1.37	ppb
Iron	57-2	3293.41	3277.06	3225.61	3265.36	1.08	ppb
Krypton	83-1						cps
Lead	206-1	0.07	0.08	0.08	0.08	4.85	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16LDL2X125	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325LDL	Dilution Factor :	125
Date & Time Acquired :	2025-04-29 17:15:49	DataFile Name :	067AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.07	0.09	0.08	0.08	11.50	ppb
Lead	208-1	0.08	0.08	0.08	0.08	2.16	ppb
Lithium	6-1				87		%
Magnesium	24-2	679.22	681.51	677.68	679.47	0.28	ppb
Manganese	55-2	38.67	37.66	38.79	38.38	1.62	ppb
Molybdenum	94-1	0.07	0.08	0.07	0.07	10.47	ppb
Molybdenum	95-1	0.01	0.01	0.01	0.01	18.35	ppb
Molybdenum	96-1	0.03	0.02	0.02	0.03	18.69	ppb
Molybdenum	97-1	0.00	0.01	0.00	0.00	48.23	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	110.73	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.50	0.54	0.50	0.51	4.28	ppb
Phosphorus	31-2	-26.97	-20.17	-22.76	-23.30		ppb
Potassium	39-2	29.90	32.48	32.45	31.61	4.68	ppb
Rhodium	103-1				103		%
Rhodium	103-2				104		%
Scandium	45-1				108		%
Scandium	45-2				107		%
Selenium	82-1	0.21	0.16	0.03	0.13	70.21	ppb
Selenium	77-2	0.89	1.80	2.63	1.77	49.06	ppb
Selenium	78-2	0.39	0.54	0.11	0.35	61.67	ppb
Silicon	28-1	141.63	145.46	145.03	144.04	1.46	ppb
Silver	107-1	0.00	0.00	0.00	0.00	14.67	ppb
Silver	109-1	0.00	0.00	0.00	0.00	1.99	ppb
Sodium	23-2	261.86	255.36	255.58	257.60	1.43	ppb
Strontium	86-1	3.14	3.11	3.06	3.10	1.30	ppb
Strontium	88-1	3.12	3.18	3.09	3.13	1.36	ppb
Sulfur	34-1	2850.59	3925.67	3719.92	3498.72	16.31	ppb
Terbium	159-1				101		%
Terbium	159-2				98		%
Thallium	203-1	0.01	0.01	0.00	0.01	38.08	ppb
Thallium	205-1	0.00	0.01	0.01	0.01	40.41	ppb
Tin	118-1	0.00	0.00	0.00	0.00	72.54	ppb
Titanium	47-1	0.05	0.05	0.05	0.05	3.10	ppb
Uranium	238-1	0.04	0.04	0.04	0.04	1.13	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16LDL2X125	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325LDL	Dilution Factor :	125
Date & Time Acquired :	2025-04-29 17:15:49	DataFile Name :	067AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	2.61	2.65	2.65	2.64	0.81	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				104		%
Zinc	66-2	8.25	7.98	8.13	8.12	1.64	ppb
Zirconium	90-1	0.03	0.03	0.03	0.03	8.38	ppb
Zirconium	91-1	0.03	0.03	0.02	0.03	21.16	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:19:10	DataFile Name :	068AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2772.49	2797.18	2781.87	2783.84	0.45	ppb
Antimony	121-1	19.48	19.05	19.72	19.42	1.74	ppb
Arsenic	75-2	0.18	0.15	0.19	0.17	11.49	ppb
Barium	135-1	91.50	91.75	94.04	92.43	1.51	ppb
Barium	137-1	92.78	91.96	94.19	92.98	1.21	ppb
Beryllium	9-1	20.68	20.65	21.03	20.78	1.01	ppb
Bismuth	209-1				98		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	19.05	19.53	20.10	19.56	2.71	ppb
Cadmium	106-1	20.40	20.54	20.63	20.52	0.57	ppb
Cadmium	111-1	20.23	20.02	20.65	20.30	1.57	ppb
Calcium	43-1	7121.65	7370.44	7180.71	7224.27	1.80	ppb
Calcium	44-1	7243.40	7254.36	7217.61	7238.46	0.26	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	19.37	19.53	19.52	19.47	0.47	ppb
Cobalt	59-2	24.73	24.56	24.90	24.73	0.68	ppb
Copper	63-2	212.46	212.24	219.02	214.57	1.80	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				100		%
Indium	115-1				105		%
Indium	115-2				100		%
Iron	54-2	16915.21	16762.31	16617.58	16765.03	0.89	ppb
Iron	56-2	16683.10	16814.58	16668.78	16722.16	0.48	ppb
Iron	57-2	17051.18	16521.00	16853.92	16808.70	1.59	ppb
Krypton	83-1						cps
Lead	206-1	93.54	96.41	95.91	95.28	1.61	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:19:10	DataFile Name :	068AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	89.11	88.99	89.60	89.23	0.36	ppb
Lead	208-1	93.09	93.61	94.08	93.59	0.53	ppb
Lithium	6-1				87		%
Magnesium	24-2	5237.05	5433.95	5393.31	5354.77	1.94	ppb
Manganese	55-2	365.75	367.59	367.42	366.92	0.28	ppb
Molybdenum	94-1	80.30	81.87	81.77	81.31	1.08	ppb
Molybdenum	95-1	60.67	62.14	61.96	61.59	1.30	ppb
Molybdenum	96-1	63.06	64.14	63.94	63.71	0.90	ppb
Molybdenum	97-1	59.88	62.12	61.62	61.21	1.92	ppb
Molybdenum	98-1	62.84	66.26	64.55	64.55	2.66	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	21.45	21.74	21.52	21.57	0.70	ppb
Phosphorus	31-2	-12.47	-8.81	-12.89	-11.39		ppb
Potassium	39-2	989.00	997.29	1010.21	998.83	1.07	ppb
Rhodium	103-1				103		%
Rhodium	103-2				103		%
Scandium	45-1				110		%
Scandium	45-2				108		%
Selenium	82-1	18.24	18.72	18.39	18.45	1.34	ppb
Selenium	77-2	28.03	27.31	25.88	27.07	4.04	ppb
Selenium	78-2	19.19	17.30	17.19	17.89	6.27	ppb
Silicon	28-1	648.72	684.55	673.83	669.04	2.75	ppb
Silver	107-1	3.24	3.32	3.40	3.32	2.52	ppb
Silver	109-1	3.20	3.25	3.39	3.28	2.90	ppb
Sodium	23-2	3253.66	3285.60	3383.74	3307.66	2.05	ppb
Strontium	86-1	33.93	35.13	34.75	34.60	1.78	ppb
Strontium	88-1	36.35	37.04	36.83	36.74	0.96	ppb
Sulfur	34-1	14465.41	15186.16	14894.22	14848.60	2.44	ppb
Terbium	159-1				101		%
Terbium	159-2				100		%
Thallium	203-1	17.63	17.62	17.76	17.67	0.42	ppb
Thallium	205-1	17.62	17.49	17.81	17.64	0.93	ppb
Tin	118-1	17.34	17.36	17.65	17.45	1.01	ppb
Titanium	47-1	0.28	0.28	0.26	0.27	5.27	ppb
Uranium	238-1	16.91	16.57	16.96	16.81	1.28	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:19:10	DataFile Name :	068AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	32.07	31.98	31.91	31.98	0.26	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				112		%
Yttrium	89-2				108		%
Zinc	66-2	229.52	229.55	234.47	231.18	1.23	ppb
Zirconium	90-1	16.76	17.02	17.25	17.01	1.46	ppb
Zirconium	91-1	16.60	17.34	17.14	17.03	2.23	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDDL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:22:22	DataFile Name :	069AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2825.32	2880.01	2853.79	2853.04	0.96	ppb
Antimony	121-1	19.46	19.91	19.79	19.72	1.19	ppb
Arsenic	75-2	0.13	0.12	0.18	0.15	23.64	ppb
Barium	135-1	93.02	93.81	94.02	93.62	0.56	ppb
Barium	137-1	92.36	94.49	94.29	93.71	1.26	ppb
Beryllium	9-1	20.87	22.27	21.34	21.50	3.30	ppb
Bismuth	209-1				98		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	20.00	20.10	20.54	20.22	1.41	ppb
Cadmium	106-1	20.50	21.70	21.25	21.15	2.87	ppb
Cadmium	111-1	20.15	20.76	20.84	20.58	1.82	ppb
Calcium	43-1	7258.29	7156.84	7269.40	7228.18	0.86	ppb
Calcium	44-1	7247.43	7236.41	7196.63	7226.82	0.37	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	19.61	19.67	19.92	19.73	0.82	ppb
Cobalt	59-2	25.11	25.31	25.22	25.21	0.41	ppb
Copper	63-2	218.83	221.06	217.68	219.19	0.78	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				105		%
Indium	115-2				101		%
Iron	54-2	17171.74	17390.68	17182.23	17248.21	0.72	ppb
Iron	56-2	17051.49	17327.56	16955.70	17111.58	1.13	ppb
Iron	57-2	16860.69	17273.14	16990.00	17041.28	1.24	ppb
Krypton	83-1						cps
Lead	206-1	98.60	95.89	93.10	95.86	2.87	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDDL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:22:22	DataFile Name :	069AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	90.99	91.72	88.76	90.49	1.70	ppb
Lead	208-1	95.01	94.47	91.82	93.77	1.82	ppb
Lithium	6-1				85		%
Magnesium	24-2	5417.46	5586.03	5519.32	5507.60	1.54	ppb
Manganese	55-2	370.75	378.62	372.69	374.02	1.10	ppb
Molybdenum	94-1	81.16	83.31	81.26	81.91	1.48	ppb
Molybdenum	95-1	62.24	63.01	61.13	62.13	1.53	ppb
Molybdenum	96-1	63.44	65.07	62.80	63.77	1.84	ppb
Molybdenum	97-1	61.08	62.79	61.06	61.65	1.61	ppb
Molybdenum	98-1	64.56	66.02	63.11	64.56	2.25	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	21.88	22.33	22.34	22.19	1.19	ppb
Phosphorus	31-2	-4.98	-8.03	-10.94	-7.99		ppb
Potassium	39-2	1011.56	1029.59	1001.60	1014.25	1.40	ppb
Rhodium	103-1				106		%
Rhodium	103-2				104		%
Scandium	45-1				112		%
Scandium	45-2				108		%
Selenium	82-1	18.62	19.21	18.95	18.93	1.56	ppb
Selenium	77-2	26.79	22.52	27.62	25.65	10.66	ppb
Selenium	78-2	21.08	17.13	21.44	19.88	12.04	ppb
Silicon	28-1	663.90	657.20	687.44	669.51	2.37	ppb
Silver	107-1	3.39	3.46	3.50	3.45	1.64	ppb
Silver	109-1	3.28	3.41	3.43	3.37	2.46	ppb
Sodium	23-2	3408.52	3421.30	3403.21	3411.01	0.27	ppb
Strontium	86-1	35.04	35.53	34.74	35.10	1.14	ppb
Strontium	88-1	37.23	37.83	36.96	37.34	1.19	ppb
Sulfur	34-1	14655.92	14374.86	15054.94	14695.24	2.33	ppb
Terbium	159-1				101		%
Terbium	159-2				102		%
Thallium	203-1	18.06	18.04	17.67	17.92	1.24	ppb
Thallium	205-1	17.94	18.12	17.89	17.98	0.67	ppb
Tin	118-1	17.38	17.98	17.70	17.69	1.71	ppb
Titanium	47-1	0.33	0.26	0.24	0.28	16.86	ppb
Uranium	238-1	17.02	16.95	16.74	16.90	0.85	ppb

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDDL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:22:22	DataFile Name :	069AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	32.29	32.28	32.68	32.42	0.70	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				113		%
Yttrium	89-2				110		%
Zinc	66-2	233.49	236.74	234.72	234.98	0.70	ppb
Zirconium	90-1	17.07	17.49	17.22	17.26	1.23	ppb
Zirconium	91-1	17.09	17.67	16.88	17.21	2.39	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16ADL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325ADL	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:25:31	DataFile Name :	070AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2939.36	2851.79	2841.00	2877.38	1.87	ppb
Antimony	121-1	19.74	19.89	20.08	19.91	0.85	ppb
Arsenic	75-2	0.16	0.17	0.20	0.18	12.09	ppb
Barium	135-1	92.70	94.62	95.87	94.40	1.69	ppb
Barium	137-1	93.18	95.40	97.12	95.23	2.07	ppb
Beryllium	9-1	20.89	21.90	20.97	21.25	2.66	ppb
Bismuth	209-1				98		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	19.97	19.70	20.39	20.02	1.74	ppb
Cadmium	106-1	21.49	21.12	21.50	21.37	1.02	ppb
Cadmium	111-1	20.27	21.05	21.12	20.81	2.25	ppb
Calcium	43-1	7277.24	7460.14	7345.31	7360.90	1.26	ppb
Calcium	44-1	7376.38	7455.10	7453.22	7428.24	0.60	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	20.22	19.88	20.07	20.06	0.87	ppb
Cobalt	59-2	26.04	25.29	25.04	25.46	2.04	ppb
Copper	63-2	228.14	225.63	214.24	222.67	3.33	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				100		%
Indium	115-1				105		%
Indium	115-2				101		%
Iron	54-2	17644.89	17523.82	17275.38	17481.37	1.08	ppb
Iron	56-2	17371.75	16984.45	16816.74	17057.64	1.67	ppb
Iron	57-2	17772.13	17163.19	17163.66	17366.33	2.02	ppb
Krypton	83-1						cps
Lead	206-1	98.65	96.84	99.79	98.43	1.51	ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16ADL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325ADL	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:25:31	DataFile Name :	070AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	92.22	90.58	92.23	91.68	1.04	ppb
Lead	208-1	96.15	94.62	95.95	95.57	0.87	ppb
Lithium	6-1				87		%
Magnesium	24-2	5684.46	5541.47	5463.30	5563.08	2.02	ppb
Manganese	55-2	384.78	375.75	374.20	378.24	1.51	ppb
Molybdenum	94-1	81.88	82.66	82.61	82.39	0.53	ppb
Molybdenum	95-1	62.90	62.23	62.59	62.57	0.54	ppb
Molybdenum	96-1	64.36	65.18	64.39	64.64	0.72	ppb
Molybdenum	97-1	62.50	61.77	62.09	62.12	0.58	ppb
Molybdenum	98-1	65.81	65.76	65.11	65.56	0.60	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	22.89	21.87	21.72	22.16	2.88	ppb
Phosphorus	31-2	-4.50	-14.18	-13.52	-10.73		ppb
Potassium	39-2	1037.36	1021.28	1003.15	1020.60	1.68	ppb
Rhodium	103-1				103		%
Rhodium	103-2				104		%
Scandium	45-1				111		%
Scandium	45-2				108		%
Selenium	82-1	18.81	18.63	18.60	18.68	0.59	ppb
Selenium	77-2	25.00	25.65	24.95	25.20	1.54	ppb
Selenium	78-2	19.01	22.52	17.75	19.76	12.51	ppb
Silicon	28-1	681.70	694.94	683.51	686.72	1.05	ppb
Silver	107-1	3.44	3.46	3.57	3.49	2.05	ppb
Silver	109-1	3.38	3.45	3.52	3.45	1.96	ppb
Sodium	23-2	3471.31	3419.23	3455.59	3448.71	0.77	ppb
Strontium	86-1	35.17	35.29	35.28	35.25	0.19	ppb
Strontium	88-1	37.21	36.92	37.09	37.07	0.39	ppb
Sulfur	34-1	15137.08	15421.96	14882.15	15147.06	1.78	ppb
Terbium	159-1				101		%
Terbium	159-2				102		%
Thallium	203-1	18.32	17.89	18.15	18.12	1.18	ppb
Thallium	205-1	18.04	17.92	18.29	18.08	1.03	ppb
Tin	118-1	17.48	18.02	18.45	17.98	2.68	ppb
Titanium	47-1	0.27	0.28	0.25	0.27	4.92	ppb
Uranium	238-1	17.05	16.88	17.11	17.01	0.70	ppb

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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16ADL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325ADL	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:25:31	DataFile Name :	070AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	33.37	32.61	32.42	32.80	1.53	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				114		%
Yttrium	89-2				109		%
Zinc	66-2	241.85	235.42	235.18	237.48	1.59	ppb
Zirconium	90-1	17.27	17.35	17.30	17.31	0.22	ppb
Zirconium	91-1	17.37	17.46	17.49	17.44	0.36	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV07	Instrumnet Name :	P8
Client Sample ID :	CCV07	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:41:48	DataFile Name :	071CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	52493.79	51692.77	52260.69	52149.08	0.79	ppb
Antimony	121-1	510.88	519.61	529.46	519.98	1.79	ppb
Arsenic	75-2	517.14	506.40	508.54	510.69	1.11	ppb
Barium	135-1	2561.56	2600.16	2701.84	2621.19	2.76	ppb
Barium	137-1	2574.71	2582.67	2691.93	2616.44	2.50	ppb
Beryllium	9-1	559.57	548.22	549.74	552.51	1.12	ppb
Bismuth	209-1				85		%
Bismuth	209-2				83		%
Bromine	81-1						cps
Cadmium	108-1	494.66	504.92	516.81	505.46	2.19	ppb
Cadmium	106-1	501.24	501.96	521.54	508.25	2.27	ppb
Cadmium	111-1	515.34	517.55	533.63	522.17	1.91	ppb
Calcium	43-1	251177.37	254959.65	248048.45	251395.16	1.38	ppb
Calcium	44-1	248792.21	250739.59	248557.37	249363.05	0.48	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	516.61	514.29	512.98	514.63	0.36	ppb
Cobalt	59-2	501.71	490.66	493.31	495.23	1.17	ppb
Copper	63-2	4761.01	4672.20	4708.25	4713.82	0.95	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				95		%
Holmium	165-2				92		%
Indium	115-1				89		%
Indium	115-2				83		%
Iron	54-2	136459.88	132992.88	132442.73	133965.16	1.63	ppb
Iron	56-2	136286.29	132188.96	136024.46	134833.24	1.70	ppb
Iron	57-2	136250.65	131341.66	134075.36	133889.22	1.84	ppb
Krypton	83-1						cps
Lead	206-1	2492.38	2465.77	2534.76	2497.64	1.39	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV07	Instrumnet Name :	P8
Client Sample ID :	CCV07	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:41:48	DataFile Name :	071CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2460.41	2421.45	2553.26	2478.37	2.73	ppb
Lead	208-1	2453.00	2422.14	2536.95	2470.70	2.40	ppb
Lithium	6-1				79		%
Magnesium	24-2	267804.29	260350.08	263447.38	263867.25	1.42	ppb
Manganese	55-2	5106.22	4946.32	5001.01	5017.85	1.62	ppb
Molybdenum	94-1	4875.99	4958.97	5083.11	4972.69	2.10	ppb
Molybdenum	95-1	4945.92	5011.52	5165.76	5041.07	2.24	ppb
Molybdenum	96-1	5002.14	5045.99	5070.37	5039.50	0.69	ppb
Molybdenum	97-1	4856.31	4964.66	4859.38	4893.45	1.26	ppb
Molybdenum	98-1	4879.03	4895.81	4981.08	4918.64	1.11	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	457.62	450.39	454.80	454.27	0.80	ppb
Phosphorus	31-2	10366.64	10277.30	10294.07	10312.67	0.46	ppb
Potassium	39-2	135742.42	135497.30	133717.13	134985.62	0.82	ppb
Rhodium	103-1				87		%
Rhodium	103-2				87		%
Scandium	45-1				100		%
Scandium	45-2				101		%
Selenium	82-1	480.46	481.89	488.69	483.68	0.91	ppb
Selenium	77-2	500.83	530.05	515.19	515.36	2.84	ppb
Selenium	78-2	498.67	488.19	493.52	493.46	1.06	ppb
Silicon	28-1	572.43	569.74	556.67	566.28	1.49	ppb
Silver	107-1	503.86	506.45	522.47	510.93	1.97	ppb
Silver	109-1	496.48	502.55	514.59	504.54	1.83	ppb
Sodium	23-2	278461.23	271525.93	274783.70	274923.62	1.26	ppb
Strontium	86-1	495.00	502.19	510.90	502.70	1.58	ppb
Strontium	88-1	499.59	509.02	513.22	507.28	1.38	ppb
Sulfur	34-1	10548.51	10533.89	10281.53	10454.64	1.44	ppb
Terbium	159-1				94		%
Terbium	159-2				93		%
Thallium	203-1	496.56	499.85	513.73	503.38	1.81	ppb
Thallium	205-1	493.99	493.44	505.13	497.52	1.33	ppb
Tin	118-1	510.47	513.28	520.96	514.91	1.05	ppb
Titanium	47-1	4898.60	5047.68	4820.95	4922.41	2.34	ppb
Uranium	238-1	498.03	495.66	523.28	505.66	3.03	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV07	Instrumnet Name :	P8
Client Sample ID :	CCV07	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:41:48	DataFile Name :	071CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	520.19	518.22	522.35	520.25	0.40	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				97		%
Yttrium	89-2				94		%
Zinc	66-2	4824.82	4738.05	4781.95	4781.61	0.91	ppb
Zirconium	90-1	492.28	502.13	511.54	501.98	1.92	ppb
Zirconium	91-1	501.26	508.41	525.23	511.63	2.41	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB07	Instrumnet Name :	P8
Client Sample ID :	CCB07	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:50:52	DataFile Name :	072CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.13	0.61	0.42	0.30	129.39	ppb
Antimony	121-1	0.03	0.03	0.02	0.03	8.86	ppb
Arsenic	75-2	-0.01	-0.01	-0.01	-0.01		ppb
Barium	135-1	0.01	0.02	0.01	0.01	24.00	ppb
Barium	137-1	0.01	0.01	0.00	0.01	35.43	ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	16.22	ppb
Bismuth	209-1				100		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	-0.01	0.00	-0.01	-0.01		ppb
Cadmium	106-1	-0.92	-0.96	-0.47	-0.78		ppb
Cadmium	111-1	-0.07	-0.07	-0.03	-0.06		ppb
Calcium	43-1	-0.15	-0.20	0.39	0.01	2361.58	ppb
Calcium	44-1	-1.97	-1.80	-1.52	-1.76		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.02	0.00	0.00	0.01	195.21	ppb
Cobalt	59-2	0.00	0.00	0.01	0.00	650.06	ppb
Copper	63-2	0.02	0.03	0.01	0.02	62.60	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				101		%
Holmium	165-2				97		%
Indium	115-1				105		%
Indium	115-2				98		%
Iron	54-2	0.96	1.03	0.98	0.99	3.75	ppb
Iron	56-2	1.08	0.94	0.84	0.95	12.27	ppb
Iron	57-2	0.88	0.79	0.72	0.80	10.56	ppb
Krypton	83-1						cps
Lead	206-1	0.03	0.04	0.04	0.03	12.37	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB07	Instrumnet Name :	P8
Client Sample ID :	CCB07	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:50:52	DataFile Name :	072CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.04	0.04	0.04	0.04	2.57	ppb
Lead	208-1	0.03	0.04	0.03	0.03	4.84	ppb
Lithium	6-1				90		%
Magnesium	24-2	2.41	2.16	1.94	2.17	10.83	ppb
Manganese	55-2	0.13	0.06	0.13	0.11	35.49	ppb
Molybdenum	94-1	0.07	0.08	0.07	0.07	6.99	ppb
Molybdenum	95-1	0.04	0.03	0.03	0.03	11.62	ppb
Molybdenum	96-1	0.04	0.04	0.03	0.04	5.09	ppb
Molybdenum	97-1	0.03	0.03	0.03	0.03	6.95	ppb
Molybdenum	98-1	0.03	0.03	0.03	0.03	5.18	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.02	-0.01	-0.01	-0.02		ppb
Phosphorus	31-2	-25.47	-31.49	-26.61	-27.86		ppb
Potassium	39-2	21.98	17.99	17.59	19.19	12.64	ppb
Rhodium	103-1				105		%
Rhodium	103-2				103		%
Scandium	45-1				111		%
Scandium	45-2				106		%
Selenium	82-1	-0.02	-0.08	0.11	0.00	19244.31	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	0.62	-0.25	-0.01	0.12	374.50	ppb
Silicon	28-1	-0.67	-1.12	-1.31	-1.03		ppb
Silver	107-1	0.01	0.01	0.01	0.01	5.21	ppb
Silver	109-1	0.01	0.01	0.01	0.01	13.18	ppb
Sodium	23-2	34.69	30.30	31.20	32.07	7.23	ppb
Strontium	86-1	0.01	0.00	0.00	0.00	173.89	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	10.09	ppb
Sulfur	34-1	-226.26	-241.40	-208.07	-225.24		ppb
Terbium	159-1				102		%
Terbium	159-2				99		%
Thallium	203-1	0.01	0.01	0.01	0.01	28.44	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	17.66	ppb
Tin	118-1	0.00	0.01	0.01	0.01	35.58	ppb
Titanium	47-1	0.04	0.03	0.03	0.03	23.49	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB07	Instrumnet Name :	P8
Client Sample ID :	CCB07	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:50:52	DataFile Name :	072CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	34.69	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				102		%
Zinc	66-2	0.16	-0.09	0.18	0.08	175.46	ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	7.57	ppb
Zirconium	91-1	0.03	0.02	0.02	0.02	21.23	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P8
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:31:50	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	283	327	360	323	11.89	cps
Antimony	121-1	47	87	97	77	34.51	cps
Arsenic	75-2	17	7	7	10	57.72	cps
Barium	135-1	160	157	170	162	4.28	cps
Barium	137-1	330	293	310	311	5.90	cps
Beryllium	9-1	138	139	127	135	5.12	cps
Bismuth	209-1	5314512	5413838	5334819	5354389	0.98	cps
Bismuth	209-2	2496634	2516440	2504568	2505881	0.40	cps
Bromine	81-1	29217	28586	29364	29056	1.42	cps
Cadmium	108-1	13	17	13	14	13.35	cps
Cadmium	106-1	4918	4698	4818	4811	2.29	cps
Cadmium	111-1	3456	3327	3390	3391	1.91	cps
Calcium	43-1	1097	973	970	1013	7.12	cps
Calcium	44-1	28482	27777	27820	28026	1.41	cps
Carbon	12-1	3191878	3049585	3105741	3115734	2.30	cps
Carbon	12-2	22057	22294	21967	22106	0.76	cps
Chlorine	35-1	136886	137583	136382	136950	0.44	cps
Chlorine	35-2	507	563	580	550	6.99	cps
Chromium	52-2	1127	1107	1090	1108	1.66	cps
Cobalt	59-2	113	113	120	116	3.33	cps
Copper	63-2	2394	2444	2327	2388	2.45	cps
Dysprosium	156-1	27	3	13	14	81.07	cps
Dysprosium	156-2	3	3	3	3	0.00	cps
Erbium	164-1	53	47	53	51	7.52	cps
Erbium	164-2	13	27	20	20	33.35	cps
Gadolinium	160-1	73	110	83	89	21.33	cps
Gadolinium	160-2	27	10	27	21	45.58	cps
Holmium	165-1	8569211	8600342	8550423	8573325	0.29	cps
Holmium	165-2	3459585	3435498	3476911	3457331	0.60	cps
Indium	115-1	7376131	7283417	7451945	7370498	1.15	cps
Indium	115-2	808837	801714	806310	805620	0.45	cps
Iron	54-2	703	723	673	700	3.60	cps
Iron	56-2	8849	8776	9330	8985	3.35	cps
Iron	57-2	233	203	247	228	9.74	cps
Krypton	83-1	253	263	327	281	14.15	cps
Lead	206-1	897	853	983	911	7.27	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P8
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:31:50	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	710	793	710	738	6.52	cps
Lead	208-1	3430	3537	3614	3527	2.61	cps
Lithium	6-1	2454929	2434292	2487283	2458835	1.09	cps
Magnesium	24-2	367	340	403	370	8.59	cps
Manganese	55-2	2397	2467	2587	2484	3.87	cps
Molybdenum	94-1	453	447	460	453	1.47	cps
Molybdenum	95-1	237	290	177	234	24.19	cps
Molybdenum	96-1	330	250	307	296	13.92	cps
Molybdenum	97-1	153	137	167	152	9.87	cps
Molybdenum	98-1	333	313	377	341	9.49	cps
Neodymium	150-1	3	10	7	7	50.03	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	597	543	673	604	10.81	cps
Phosphorus	31-2	147	157	90	131	27.42	cps
Potassium	39-2	14397	14327	14210	14312	0.66	cps
Rhodium	103-1	6843195	6929100	6911443	6894579	0.66	cps
Rhodium	103-2	2960757	2951323	2984648	2965576	0.58	cps
Scandium	45-1	4623918	4543541	4647258	4604906	1.18	cps
Scandium	45-2	95572	93783	96196	95184	1.32	cps
Selenium	82-1	-10	33	-83	-20	-294.92	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	40	27	20	29	35.25	cps
Silicon	28-1	543585	502565	424770	490307	12.31	cps
Silver	107-1	113	163	173	150	21.43	cps
Silver	109-1	90	80	73	81	10.34	cps
Sodium	23-2	28705	27897	28551	28384	1.51	cps
Strontium	86-1	543	477	493	504	6.88	cps
Strontium	88-1	563	617	590	590	4.52	cps
Sulfur	34-1	553025	552248	550847	552040	0.20	cps
Terbium	159-1	8966650	8963277	8989424	8973117	0.16	cps
Terbium	159-2	3295563	3349725	3374652	3339980	1.21	cps
Thallium	203-1	233	220	227	227	2.94	cps
Thallium	205-1	567	687	637	630	9.57	cps
Tin	118-1	3510	3464	3430	3468	1.16	cps
Titanium	47-1	263	240	223	242	8.30	cps
Uranium	238-1	467	403	423	431	7.51	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P8
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:31:50	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	13	50	20	28	70.32	cps
Ytterbium	172-1	70	50	53	58	18.55	cps
Ytterbium	172-2	20	37	20	26	37.66	cps
Ytterbium	176-1	1403	1243	1370	1339	6.31	cps
Ytterbium	176-2	413	373	387	391	5.21	cps
Yttrium	89-1	13051563	12886221	12816650	12918144	0.93	cps
Yttrium	89-2	995063	989106	995546	993238	0.36	cps
Zinc	66-2	1533	1473	1463	1490	2.54	cps
Zirconium	90-1	1120	1304	923	1116	17.04	cps
Zirconium	91-1	273	233	230	246	9.82	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P8
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:38:36	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2204	2340	2224	2256	3.27	cps
Antimony	121-1	53852	54304	55023	54393	1.09	cps
Arsenic	75-2	597	747	713	686	11.49	cps
Barium	135-1	65564	65595	66388	65849	0.71	cps
Barium	137-1	115323	115253	114983	115186	0.16	cps
Beryllium	9-1	7459	7434	7437	7443	0.18	cps
Bismuth	209-1	5195544	5193668	5251129	5213447	0.63	cps
Bismuth	209-2	2446036	2406239	2498241	2450172	1.88	cps
Bromine	81-1	28205	28369	28820	28465	1.12	cps
Cadmium	108-1	530	573	560	554	4.00	cps
Cadmium	106-1	5261	5464	5524	5417	2.55	cps
Cadmium	111-1	10500	10379	10734	10538	1.71	cps
Calcium	43-1	44168	45251	44696	44705	1.21	cps
Calcium	44-1	728060	737506	739183	734916	0.82	cps
Carbon	12-1	3456832	3415328	3319899	3397353	2.07	cps
Carbon	12-2	23582	23279	23466	23442	0.65	cps
Chlorine	35-1	155360	157783	158803	157316	1.12	cps
Chlorine	35-2	667	680	637	661	3.36	cps
Chromium	52-2	12949	13059	13139	13049	0.73	cps
Cobalt	59-2	12145	12405	12549	12367	1.65	cps
Copper	63-2	21233	21506	21303	21347	0.67	cps
Dysprosium	156-1	13	17	23	18	28.64	cps
Dysprosium	156-2	10	7	7	8	24.71	cps
Erbium	164-1	50	50	50	50	0.00	cps
Erbium	164-2	17	27	23	22	22.91	cps
Gadolinium	160-1	120	93	100	104	13.29	cps
Gadolinium	160-2	10	23	23	19	40.75	cps
Holmium	165-1	8266961	8473781	8388581	8376441	1.24	cps
Holmium	165-2	3397151	3328953	3414569	3380224	1.34	cps
Indium	115-1	7073885	7087594	7040048	7067176	0.35	cps
Indium	115-2	786405	790239	795228	790624	0.56	cps
Iron	54-2	13787	13483	13533	13601	1.20	cps
Iron	56-2	239181	240384	244448	241338	1.14	cps
Iron	57-2	6348	6078	5748	6058	4.96	cps
Krypton	83-1	267	243	273	261	6.03	cps
Lead	206-1	19995	20176	20770	20314	2.00	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P8
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:38:36	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	17859	17879	17906	17881	0.13	cps
Lead	208-1	80598	81705	83326	81876	1.68	cps
Lithium	6-1	2467679	2433666	2368060	2423135	2.09	cps
Magnesium	24-2	177143	178475	178070	177896	0.38	cps
Manganese	55-2	5168	4968	4964	5033	2.31	cps
Molybdenum	94-1	56280	56792	57143	56738	0.77	cps
Molybdenum	95-1	69178	70276	70417	69957	0.97	cps
Molybdenum	96-1	75923	76791	77548	76754	1.06	cps
Molybdenum	97-1	42047	44103	43515	43222	2.45	cps
Molybdenum	98-1	111360	114558	112542	112820	1.43	cps
Neodymium	150-1	17	17	10	14	26.66	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	3921	3881	4064	3955	2.44	cps
Phosphorus	31-2	273	250	297	273	8.54	cps
Potassium	39-2	125402	126445	127571	126473	0.86	cps
Rhodium	103-1	6707552	6822566	6710437	6746852	0.97	cps
Rhodium	103-2	2897239	2901318	2954596	2917718	1.10	cps
Scandium	45-1	4503977	4396275	4391012	4430421	1.44	cps
Scandium	45-2	93538	92626	94213	93459	0.85	cps
Selenium	82-1	2114	2230	2290	2211	4.06	cps
Selenium	77-2	73	57	40	57	29.41	cps
Selenium	78-2	157	203	113	158	28.53	cps
Silicon	28-1	583735	521725	632163	579208	9.56	cps
Silver	107-1	34456	34904	35800	35053	1.95	cps
Silver	109-1	32235	32869	34032	33045	2.76	cps
Sodium	23-2	372780	372152	379176	374703	1.04	cps
Strontium	86-1	9443	9697	9740	9627	1.67	cps
Strontium	88-1	77366	79625	79803	78931	1.72	cps
Sulfur	34-1	541920	550344	547777	546680	0.79	cps
Terbium	159-1	8698108	8804400	8726884	8743131	0.63	cps
Terbium	159-2	3249522	3341312	3337936	3309590	1.57	cps
Thallium	203-1	24737	25415	25114	25089	1.35	cps
Thallium	205-1	58829	58943	59713	59162	0.81	cps
Tin	118-1	113973	116772	114890	115212	1.24	cps
Titanium	47-1	19670	19680	20151	19834	1.38	cps
Uranium	238-1	75731	77545	77078	76785	1.23	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P8
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:38:36	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	23099	23349	23149	23199	0.57	cps
Ytterbium	172-1	50	47	33	43	20.36	cps
Ytterbium	172-2	7	17	13	12	41.65	cps
Ytterbium	176-1	1270	1200	1370	1280	6.68	cps
Ytterbium	176-2	293	413	343	350	17.22	cps
Yttrium	89-1	12657130	12513268	12651160	12607186	0.65	cps
Yttrium	89-2	971265	974356	984211	976611	0.69	cps
Zinc	66-2	6598	6462	6588	6549	1.16	cps
Zirconium	90-1	48451	49859	49571	49293	1.51	cps
Zirconium	91-1	10517	10788	11318	10874	3.75	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P8
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:41:58	DataFile Name :	007CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	92079	91760	92099	91979	0.21	cps
Antimony	121-1	1320346	1343550	1340925	1334940	0.95	cps
Arsenic	75-2	28666	28489	28890	28681	0.70	cps
Barium	135-1	1616993	1648367	1724709	1663356	3.33	cps
Barium	137-1	2869079	2859114	2934694	2887629	1.42	cps
Beryllium	9-1	343000	349965	344657	345874	1.05	cps
Bismuth	209-1	5194488	5205551	5246868	5215636	0.53	cps
Bismuth	209-2	2382141	2412240	2340224	2378202	1.52	cps
Bromine	81-1	28279	28917	28436	28544	1.16	cps
Cadmium	108-1	26709	27551	26572	26944	1.97	cps
Cadmium	106-1	42071	43873	43358	43100	2.15	cps
Cadmium	111-1	337866	343332	343472	341556	0.94	cps
Calcium	43-1	414690	425144	416027	418620	1.36	cps
Calcium	44-1	6747282	6808959	6747818	6768019	0.52	cps
Carbon	12-1	3478579	3390798	3369249	3412875	1.70	cps
Carbon	12-2	23372	23222	22938	23177	0.95	cps
Chlorine	35-1	152790	153561	155121	153824	0.77	cps
Chlorine	35-2	730	610	633	658	9.67	cps
Chromium	52-2	285334	278956	283783	282691	1.18	cps
Cobalt	59-2	535557	533609	537581	535583	0.37	cps
Copper	63-2	4352789	4371120	4364657	4362855	0.21	cps
Dysprosium	156-1	70	40	50	53	28.64	cps
Dysprosium	156-2	7	7	13	9	43.25	cps
Erbium	164-1	73	67	100	80	22.05	cps
Erbium	164-2	23	33	17	24	34.31	cps
Gadolinium	160-1	97	117	117	110	10.50	cps
Gadolinium	160-2	23	37	10	23	57.15	cps
Holmium	165-1	8392456	8426213	8578505	8465725	1.17	cps
Holmium	165-2	3372029	3299879	3289904	3320604	1.35	cps
Indium	115-1	7175688	7147652	7094458	7139266	0.58	cps
Indium	115-2	772851	765327	766997	768392	0.51	cps
Iron	54-2	591207	583823	588568	587866	0.64	cps
Iron	56-2	10929862	10977818	10811119	10906266	0.79	cps
Iron	57-2	271124	268593	269676	269797	0.47	cps
Krypton	83-1	350	260	303	304	14.78	cps
Lead	206-1	5148319	5129236	5135512	5137689	0.19	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P8
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:41:58	DataFile Name :	007CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	4342620	4399283	4412276	4384726	0.84	cps
Lead	208-1	20083302	20190552	20364866	20212907	0.70	cps
Lithium	6-1	2427573	2444819	2428898	2433763	0.39	cps
Magnesium	24-2	1642451	1610921	1633020	1628797	0.99	cps
Manganese	55-2	1202496	1189275	1212836	1201536	0.98	cps
Molybdenum	94-1	4676979	4676429	4713761	4689056	0.46	cps
Molybdenum	95-1	6713184	6806542	6973546	6831091	1.93	cps
Molybdenum	96-1	7430133	7475138	7529636	7478302	0.67	cps
Molybdenum	97-1	4313716	4335169	4269722	4306202	0.77	cps
Molybdenum	98-1	10979418	10978940	11012126	10990161	0.17	cps
Neodymium	150-1	187	150	153	163	12.41	cps
Neodymium	150-2	0	0	13	4	173.21	cps
Nickel	60-2	148415	146249	147684	147449	0.75	cps
Phosphorus	31-2	4424	4818	4864	4702	5.14	cps
Potassium	39-2	541522	535321	541632	539492	0.67	cps
Rhodium	103-1	6793995	6800199	6611932	6735375	1.59	cps
Rhodium	103-2	2858050	2795793	2853202	2835682	1.22	cps
Scandium	45-1	4470392	4504426	4509914	4494911	0.48	cps
Scandium	45-2	90452	88852	90036	89780	0.92	cps
Selenium	82-1	20068	21350	20889	20769	3.13	cps
Selenium	77-2	383	403	353	380	6.62	cps
Selenium	78-2	1457	1210	1447	1371	10.18	cps
Silicon	28-1	2802657	2764897	2796147	2787900	0.72	cps
Silver	107-1	1821369	1853737	1831050	1835385	0.91	cps
Silver	109-1	1701706	1719635	1720057	1713800	0.61	cps
Sodium	23-2	3230126	3202050	3199974	3210717	0.52	cps
Strontium	86-1	428496	432914	435449	432286	0.81	cps
Strontium	88-1	3837656	3878290	3925316	3880421	1.13	cps
Sulfur	34-1	677308	675137	670643	674363	0.50	cps
Terbium	159-1	8682024	8942497	9004093	8876205	1.93	cps
Terbium	159-2	3252752	3206254	3231018	3230008	0.72	cps
Thallium	203-1	1181601	1212226	1218164	1203997	1.63	cps
Thallium	205-1	2997512	2963916	3037685	2999704	1.23	cps
Tin	118-1	1083197	1090498	1110066	1094587	1.27	cps
Titanium	47-1	1909745	1903861	1926546	1913384	0.62	cps
Uranium	238-1	3792272	3899270	3833642	3841728	1.40	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P8
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:41:58	DataFile Name :	007CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	213235	212565	212145	212648	0.26	cps
Ytterbium	172-1	50	37	83	57	42.41	cps
Ytterbium	172-2	37	33	33	34	5.60	cps
Ytterbium	176-1	6765	6899	7069	6911	2.20	cps
Ytterbium	176-2	2410	2474	2604	2496	3.95	cps
Yttrium	89-1	12276596	12402662	12669416	12449558	1.61	cps
Yttrium	89-2	965637	957095	958719	960484	0.47	cps
Zinc	66-2	467650	464712	466131	466164	0.32	cps
Zirconium	90-1	2358026	2431581	2399162	2396257	1.54	cps
Zirconium	91-1	505574	515941	517437	512984	1.26	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P8
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:45:01	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	219004	218692	219890	219196	0.28	cps
Antimony	121-1	3389113	3367024	3447470	3401203	1.22	cps
Arsenic	75-2	68911	68639	68924	68825	0.23	cps
Barium	135-1	4109237	4037063	4039124	4061808	1.01	cps
Barium	137-1	6961401	7039503	6997903	6999602	0.56	cps
Beryllium	9-1	816210	829264	833055	826176	1.07	cps
Bismuth	209-1	5298915	5283006	5429630	5337184	1.51	cps
Bismuth	209-2	2406958	2381219	2394421	2394199	0.54	cps
Bromine	81-1	27056	27106	27621	27261	1.15	cps
Cadmium	108-1	63907	64246	65518	64557	1.32	cps
Cadmium	106-1	97095	97488	99065	97883	1.07	cps
Cadmium	111-1	818363	836214	841319	831965	1.45	cps
Calcium	43-1	999402	1015081	1005333	1006606	0.79	cps
Calcium	44-1	16144842	16177154	16338801	16220266	0.64	cps
Carbon	12-1	3474218	3412884	3457171	3448091	0.92	cps
Carbon	12-2	24581	23419	23753	23917	2.50	cps
Chlorine	35-1	157941	162251	161530	160574	1.44	cps
Chlorine	35-2	713	597	613	641	9.84	cps
Chromium	52-2	682881	680860	682719	682153	0.16	cps
Cobalt	59-2	1284538	1287050	1277581	1283056	0.38	cps
Copper	63-2	10507408	10177672	10347830	10344303	1.59	cps
Dysprosium	156-1	97	100	80	92	11.62	cps
Dysprosium	156-2	17	10	17	14	26.66	cps
Erbium	164-1	70	97	120	96	26.18	cps
Erbium	164-2	50	37	37	41	18.72	cps
Gadolinium	160-1	117	123	170	137	21.26	cps
Gadolinium	160-2	33	17	20	23	37.78	cps
Holmium	165-1	8663466	8496628	8523902	8561332	1.05	cps
Holmium	165-2	3310500	3349050	3386160	3348570	1.13	cps
Indium	115-1	6973478	7027109	7049208	7016598	0.56	cps
Indium	115-2	747846	753740	748488	750025	0.43	cps
Iron	54-2	1454650	1424352	1436943	1438648	1.06	cps
Iron	56-2	26332157	26338005	25938856	26203006	0.87	cps
Iron	57-2	646710	652345	646174	648409	0.53	cps
Krypton	83-1	290	240	217	249	15.05	cps
Lead	206-1	12720950	12693172	12479841	12631321	1.04	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P8
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:45:01	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	10727955	10661294	10785590	10724947	0.58	cps
Lead	208-1	49130503	49307159	50183495	49540386	1.14	cps
Lithium	6-1	2478770	2479980	2445111	2467954	0.80	cps
Magnesium	24-2	3826386	3847440	3811233	3828353	0.47	cps
Manganese	55-2	2960624	2940402	2959787	2953604	0.39	cps
Molybdenum	94-1	11617740	11491103	11523874	11544239	0.57	cps
Molybdenum	95-1	16695133	16784695	16905453	16795094	0.63	cps
Molybdenum	96-1	17919030	18656789	18347918	18307912	2.02	cps
Molybdenum	97-1	10206085	10490137	10366590	10354271	1.38	cps
Molybdenum	98-1	26762040	27235581	26711371	26902997	1.07	cps
Neodymium	150-1	300	260	287	282	7.22	cps
Neodymium	150-2	13	13	10	12	15.73	cps
Nickel	60-2	356991	355808	352842	355214	0.60	cps
Phosphorus	31-2	11328	11004	10994	11109	1.71	cps
Potassium	39-2	1280514	1257733	1267831	1268693	0.90	cps
Rhodium	103-1	6620569	6642067	6622046	6628228	0.18	cps
Rhodium	103-2	2775717	2773687	2783646	2777683	0.19	cps
Scandium	45-1	4391826	4381174	4411418	4394806	0.35	cps
Scandium	45-2	89470	89979	88671	89373	0.74	cps
Selenium	82-1	49732	50518	50435	50228	0.86	cps
Selenium	77-2	907	930	977	938	3.80	cps
Selenium	78-2	3094	3134	3177	3135	1.33	cps
Silicon	28-1	5986219	5958487	5971323	5972010	0.23	cps
Silver	107-1	4287151	4448198	4437615	4390988	2.05	cps
Silver	109-1	4052130	4129608	4168666	4116801	1.44	cps
Sodium	23-2	7549219	7590222	7392318	7510586	1.39	cps
Strontium	86-1	1048586	1054577	1064916	1056026	0.78	cps
Strontium	88-1	9435307	9446621	9365937	9415955	0.46	cps
Sulfur	34-1	832297	835665	825161	831041	0.65	cps
Terbium	159-1	8778471	8871327	9067521	8905773	1.66	cps
Terbium	159-2	3215141	3257971	3257295	3243469	0.76	cps
Thallium	203-1	3185830	3137259	3120508	3147866	1.08	cps
Thallium	205-1	7312870	7441829	7377204	7377301	0.87	cps
Tin	118-1	2725265	2798330	2870792	2798129	2.60	cps
Titanium	47-1	4482157	4540007	4447648	4489937	1.04	cps
Uranium	238-1	9167671	9334902	9567229	9356601	2.14	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P8
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:45:01	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	515337	512678	508088	512034	0.72	cps
Ytterbium	172-1	120	80	87	96	22.43	cps
Ytterbium	172-2	50	40	43	44	11.46	cps
Ytterbium	176-1	15212	15326	15866	15468	2.26	cps
Ytterbium	176-2	5711	5981	5718	5804	2.65	cps
Yttrium	89-1	12524912	12438451	12599861	12521075	0.65	cps
Yttrium	89-2	942044	940771	947073	943296	0.35	cps
Zinc	66-2	1122826	1125810	1119734	1122790	0.27	cps
Zirconium	90-1	5606980	5812546	5872673	5764066	2.42	cps
Zirconium	91-1	1229064	1272266	1263572	1254967	1.82	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P8
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:47:58	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	426361	422322	416757	421813	1.14	cps
Antimony	121-1	6575360	6594161	6687544	6619022	0.91	cps
Arsenic	75-2	135016	136305	135487	135603	0.48	cps
Barium	135-1	7946002	7892652	8043596	7960750	0.96	cps
Barium	137-1	13918876	13507599	13747093	13724523	1.51	cps
Beryllium	9-1	1525980	1533362	1577719	1545687	1.81	cps
Bismuth	209-1	5176038	5257969	5269344	5234451	0.97	cps
Bismuth	209-2	2362746	2374377	2307821	2348315	1.51	cps
Bromine	81-1	26792	27113	27103	27003	0.68	cps
Cadmium	108-1	127345	127140	129384	127956	0.97	cps
Cadmium	106-1	186458	185738	185580	185925	0.25	cps
Cadmium	111-1	1656957	1681072	1676073	1671367	0.76	cps
Calcium	43-1	1944673	1983630	1979133	1969145	1.08	cps
Calcium	44-1	31636539	31874530	31754829	31755299	0.37	cps
Carbon	12-1	3476539	3498245	3538344	3504376	0.89	cps
Carbon	12-2	25275	25011	25018	25101	0.60	cps
Chlorine	35-1	161473	162672	163576	162574	0.65	cps
Chlorine	35-2	657	533	687	626	12.99	cps
Chromium	52-2	1316036	1320849	1336343	1324409	0.80	cps
Cobalt	59-2	2527508	2589055	2538889	2551817	1.28	cps
Copper	63-2	19765860	19775572	19845144	19795525	0.22	cps
Dysprosium	156-1	153	150	193	166	14.57	cps
Dysprosium	156-2	40	20	30	30	33.33	cps
Erbium	164-1	117	130	147	131	11.46	cps
Erbium	164-2	37	57	53	49	21.91	cps
Gadolinium	160-1	110	167	140	139	20.41	cps
Gadolinium	160-2	30	53	63	49	34.99	cps
Holmium	165-1	8548164	8583372	8533103	8554880	0.30	cps
Holmium	165-2	3327827	3295021	3231663	3284837	1.49	cps
Indium	115-1	6867943	7009105	6979773	6952274	1.07	cps
Indium	115-2	720682	726834	727038	724851	0.50	cps
Iron	54-2	2821132	2807027	2807566	2811908	0.28	cps
Iron	56-2	50177028	50873783	50503078	50517963	0.69	cps
Iron	57-2	1250687	1260865	1249705	1253752	0.49	cps
Krypton	83-1	247	340	323	303	16.41	cps
Lead	206-1	24799625	24856164	25117064	24924284	0.68	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P8
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:47:58	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	21059368	21269077	21348867	21225771	0.70	cps
Lead	208-1	97329341	98243050	99110857	98227749	0.91	cps
Lithium	6-1	2379130	2389251	2368978	2379120	0.43	cps
Magnesium	24-2	7265354	7356248	7416592	7346065	1.04	cps
Manganese	55-2	5692072	5743939	5617802	5684604	1.12	cps
Molybdenum	94-1	22530038	22840606	22534841	22635162	0.79	cps
Molybdenum	95-1	33113759	32837858	32959561	32970393	0.42	cps
Molybdenum	96-1	36024976	36005172	36802168	36277439	1.25	cps
Molybdenum	97-1	20143233	20301007	20905012	20449751	1.97	cps
Molybdenum	98-1	52262039	53817986	53582899	53220975	1.58	cps
Neodymium	150-1	547	590	587	574	4.20	cps
Neodymium	150-2	40	23	30	31	26.97	cps
Nickel	60-2	680279	681055	677898	679744	0.24	cps
Phosphorus	31-2	20852	21369	20374	20865	2.38	cps
Potassium	39-2	2450299	2492733	2456221	2466418	0.93	cps
Rhodium	103-1	6366088	6382546	6488854	6412496	1.04	cps
Rhodium	103-2	2711587	2688361	2601074	2667007	2.18	cps
Scandium	45-1	4297625	4240153	4374802	4304193	1.57	cps
Scandium	45-2	87018	87062	86394	86824	0.43	cps
Selenium	82-1	97672	99717	97938	98442	1.13	cps
Selenium	77-2	1733	1927	1783	1815	5.53	cps
Selenium	78-2	5908	6095	6051	6018	1.62	cps
Silicon	28-1	11402448	11050917	11211417	11221594	1.57	cps
Silver	107-1	8495176	8491118	8558710	8515001	0.45	cps
Silver	109-1	7912101	8059210	8048594	8006635	1.02	cps
Sodium	23-2	14503917	14584256	14582036	14556736	0.31	cps
Strontium	86-1	2162679	2194559	2152243	2169827	1.02	cps
Strontium	88-1	18479423	18408100	18602844	18496789	0.53	cps
Sulfur	34-1	944237	955424	935936	945199	1.03	cps
Terbium	159-1	8711635	8842352	9078001	8877329	2.09	cps
Terbium	159-2	3175159	3225926	3237642	3212909	1.03	cps
Thallium	203-1	6051948	6123447	6173445	6116280	1.00	cps
Thallium	205-1	14283585	14397876	14706123	14462528	1.51	cps
Tin	118-1	5348520	5485014	5492272	5441935	1.49	cps
Titanium	47-1	8759744	8742923	8732132	8744933	0.16	cps
Uranium	238-1	18750172	18807347	18682284	18746601	0.33	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P8
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:47:58	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	992324	1000329	994858	995837	0.41	cps
Ytterbium	172-1	143	167	147	152	8.29	cps
Ytterbium	172-2	73	47	73	64	23.88	cps
Ytterbium	176-1	29109	29262	29767	29379	1.17	cps
Ytterbium	176-2	11105	11038	10901	11015	0.94	cps
Yttrium	89-1	12181006	12374373	12541179	12365519	1.46	cps
Yttrium	89-2	927617	931589	930880	930029	0.23	cps
Zinc	66-2	2237217	2237752	2227696	2234222	0.25	cps
Zirconium	90-1	11184355	11319437	11456625	11320139	1.20	cps
Zirconium	91-1	2579756	2524255	2565053	2556354	1.12	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P8
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:50:47	DataFile Name :	010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	820835	828829	839170	829611	1.11	cps
Antimony	121-1	13123745	12838425	13314793	13092321	1.83	cps
Arsenic	75-2	265301	268385	269693	267793	0.84	cps
Barium	135-1	15484562	15623514	15813933	15640670	1.06	cps
Barium	137-1	27001734	27309028	26799275	27036679	0.95	cps
Beryllium	9-1	2919857	2982192	2939123	2947057	1.08	cps
Bismuth	209-1	5181257	5273664	5099736	5184886	1.68	cps
Bismuth	209-2	2235974	2269533	2267894	2257800	0.84	cps
Bromine	81-1	27470	26926	26462	26953	1.87	cps
Cadmium	108-1	244602	248621	251532	248252	1.40	cps
Cadmium	106-1	360212	362655	358886	360585	0.53	cps
Cadmium	111-1	3161110	3298398	3298967	3252825	2.44	cps
Calcium	43-1	3763183	3788955	3839450	3797196	1.02	cps
Calcium	44-1	60858584	61483322	62950222	61764043	1.74	cps
Carbon	12-1	3760787	3786234	3819429	3788817	0.78	cps
Carbon	12-2	28812	28905	29142	28953	0.59	cps
Chlorine	35-1	169951	174893	175986	173610	1.85	cps
Chlorine	35-2	700	610	657	656	6.87	cps
Chromium	52-2	2682858	2673099	2634931	2663629	0.95	cps
Cobalt	59-2	4959540	5023300	4884612	4955817	1.40	cps
Copper	63-2	38760488	38416710	38771782	38649660	0.52	cps
Dysprosium	156-1	260	287	297	281	6.74	cps
Dysprosium	156-2	47	43	80	57	35.78	cps
Erbium	164-1	273	207	193	224	19.10	cps
Erbium	164-2	70	70	63	68	5.68	cps
Gadolinium	160-1	173	230	247	217	17.74	cps
Gadolinium	160-2	77	70	77	74	5.17	cps
Holmium	165-1	8407773	8558669	8465333	8477258	0.90	cps
Holmium	165-2	3269198	3254254	3301892	3275115	0.74	cps
Indium	115-1	6713111	6714410	6653424	6693648	0.52	cps
Indium	115-2	689550	696654	695694	693966	0.56	cps
Iron	54-2	5350114	5413267	5392791	5385391	0.60	cps
Iron	56-2	99233195	100562982	98322695	99372957	1.13	cps
Iron	57-2	2535099	2569263	2525491	2543284	0.90	cps
Krypton	83-1	290	263	280	278	4.85	cps
Lead	206-1	48523641	49369693	48566331	48819888	0.98	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P8
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:50:47	DataFile Name :	010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	41917958	41664312	42344612	41975627	0.82	cps
Lead	208-1	192144814	193251503	193000068	192798795	0.30	cps
Lithium	6-1	2324073	2355092	2264143	2314436	2.00	cps
Magnesium	24-2	14270876	14311658	14560314	14380949	1.09	cps
Manganese	55-2	11159027	11188507	11367665	11238400	1.00	cps
Molybdenum	94-1	43736898	45322278	45706431	44921869	2.32	cps
Molybdenum	95-1	62955056	65349489	67000222	65101589	3.12	cps
Molybdenum	96-1	70435177	71505126	73441009	71793771	2.12	cps
Molybdenum	97-1	40315444	40273689	41403953	40664362	1.58	cps
Molybdenum	98-1	104506508	105898665	107306255	105903810	1.32	cps
Neodymium	150-1	1023	1100	1080	1068	3.72	cps
Neodymium	150-2	27	20	33	27	24.99	cps
Nickel	60-2	1316195	1318874	1318526	1317865	0.11	cps
Phosphorus	31-2	40814	41299	41599	41237	0.96	cps
Potassium	39-2	4778627	4820153	4822199	4806993	0.51	cps
Rhodium	103-1	6348535	6175891	6424759	6316395	2.02	cps
Rhodium	103-2	2683320	2644341	2619260	2648974	1.22	cps
Scandium	45-1	4192252	4288881	4306523	4262552	1.44	cps
Scandium	45-2	87923	87833	86703	87486	0.78	cps
Selenium	82-1	188615	188484	188605	188568	0.04	cps
Selenium	77-2	3510	3701	3510	3574	3.07	cps
Selenium	78-2	11368	11845	12165	11793	3.40	cps
Silicon	28-1	20877564	21044258	20857183	20926335	0.49	cps
Silver	107-1	16313482	16424868	16363692	16367347	0.34	cps
Silver	109-1	15313151	15362315	15863714	15513060	1.96	cps
Sodium	23-2	28205800	28568560	28610504	28461622	0.78	cps
Strontium	86-1	4163453	4206616	4216647	4195572	0.67	cps
Strontium	88-1	35672559	36681329	37547637	36633842	2.56	cps
Sulfur	34-1	1370930	1368820	1354527	1364759	0.65	cps
Terbium	159-1	8876078	8855044	9014737	8915287	0.97	cps
Terbium	159-2	3191272	3210871	3151545	3184563	0.95	cps
Thallium	203-1	11861761	12118398	11988241	11989467	1.07	cps
Thallium	205-1	28437256	29252374	27965889	28551840	2.28	cps
Tin	118-1	10728152	10671929	10693811	10697964	0.26	cps
Titanium	47-1	17070438	17143672	17607311	17273807	1.69	cps
Uranium	238-1	37283596	37922163	37693732	37633164	0.86	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P8
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:50:47	DataFile Name :	010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1964253	1965110	1996592	1975318	0.93	cps
Ytterbium	172-1	283	220	197	233	19.22	cps
Ytterbium	172-2	67	100	127	98	30.74	cps
Ytterbium	176-1	55342	57287	56701	56443	1.77	cps
Ytterbium	176-2	21434	21581	21441	21485	0.39	cps
Yttrium	89-1	12259309	12344291	12553580	12385727	1.22	cps
Yttrium	89-2	921147	913064	916164	916792	0.44	cps
Zinc	66-2	4293859	4368649	4343794	4335434	0.88	cps
Zirconium	90-1	22117265	23129605	23038393	22761754	2.46	cps
Zirconium	91-1	4924422	5136326	5106111	5055620	2.27	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P8
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:53:32	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1586755	1674960	1615582	1625766	2.77	cps
Antimony	121-1	25291572	25684598	25209171	25395114	1.00	cps
Arsenic	75-2	519569	527408	520481	522486	0.82	cps
Barium	135-1	30100979	30654257	30320745	30358660	0.92	cps
Barium	137-1	51790189	53295498	52334891	52473526	1.45	cps
Beryllium	9-1	5507354	5512975	5556895	5525741	0.49	cps
Bismuth	209-1	4905130	4846243	4908766	4886713	0.72	cps
Bismuth	209-2	2238760	2247577	2231506	2239281	0.36	cps
Bromine	81-1	28025	27828	28806	28220	1.83	cps
Cadmium	108-1	473906	483680	483951	480512	1.19	cps
Cadmium	106-1	687978	698086	697460	694508	0.82	cps
Cadmium	111-1	6080332	6151943	6220323	6150866	1.14	cps
Calcium	43-1	7266108	7489015	7595691	7450272	2.26	cps
Calcium	44-1	120012785	123207698	122983625	122068036	1.46	cps
Carbon	12-1	4229625	4456478	4606345	4430816	4.28	cps
Carbon	12-2	35469	35469	36014	35651	0.88	cps
Chlorine	35-1	207475	211722	217219	212139	2.30	cps
Chlorine	35-2	920	880	947	916	3.66	cps
Chromium	52-2	5124728	5231306	5151909	5169314	1.07	cps
Cobalt	59-2	9555824	9610252	9505162	9557079	0.55	cps
Copper	63-2	73908624	74849289	74656784	74471566	0.67	cps
Dysprosium	156-1	547	600	583	577	4.73	cps
Dysprosium	156-2	100	100	97	99	1.94	cps
Erbium	164-1	323	410	327	353	13.90	cps
Erbium	164-2	163	137	123	141	14.43	cps
Gadolinium	160-1	327	333	310	323	3.72	cps
Gadolinium	160-2	97	93	90	93	3.57	cps
Holmium	165-1	8078378	8186113	8240091	8168194	1.01	cps
Holmium	165-2	3273853	3249248	3269659	3264253	0.40	cps
Indium	115-1	6317992	6329133	6202542	6283223	1.12	cps
Indium	115-2	637760	643585	641446	640931	0.46	cps
Iron	54-2	10569169	10592274	10711591	10624345	0.72	cps
Iron	56-2	194919110	196358277	193734497	195003962	0.67	cps
Iron	57-2	4800053	4907148	4868430	4858543	1.12	cps
Krypton	83-1	287	303	317	302	4.97	cps
Lead	206-1	92153285	94706785	95019729	93959933	1.67	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P8
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:53:32	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	79400372	81266629	82006567	80891189	1.66	cps
Lead	208-1	367300268	377711211	379518359	374843279	1.76	cps
Lithium	6-1	2230620	2240950	2261493	2244354	0.70	cps
Magnesium	24-2	28107791	28439517	27992938	28180082	0.82	cps
Manganese	55-2	21955662	22153495	22091310	22066822	0.46	cps
Molybdenum	94-1	87410089	87710702	89317189	88145993	1.16	cps
Molybdenum	95-1	124808948	123956061	130597501	126454170	2.86	cps
Molybdenum	96-1	136105548	135824525	140394775	137441616	1.86	cps
Molybdenum	97-1	78839872	79799742	80652879	79764164	1.14	cps
Molybdenum	98-1	204092224	208324717	209564064	207327001	1.38	cps
Neodymium	150-1	1980	2217	2087	2095	5.66	cps
Neodymium	150-2	90	117	123	110	16.04	cps
Nickel	60-2	2649901	2744072	2695784	2696586	1.75	cps
Phosphorus	31-2	80884	80220	81655	80919	0.89	cps
Potassium	39-2	9492616	9540727	9521203	9518182	0.25	cps
Rhodium	103-1	6100258	6176952	6051666	6109625	1.03	cps
Rhodium	103-2	2508992	2548408	2569307	2542236	1.20	cps
Scandium	45-1	4087539	4175776	4149040	4137451	1.09	cps
Scandium	45-2	89574	89406	89214	89398	0.20	cps
Selenium	82-1	364069	366030	370377	366825	0.88	cps
Selenium	77-2	6728	6518	6261	6503	3.60	cps
Selenium	78-2	22662	22541	23136	22780	1.38	cps
Silicon	28-1	39559916	39100024	39952366	39537435	1.08	cps
Silver	107-1	31050543	30882481	31753187	31228737	1.48	cps
Silver	109-1	29254171	29695500	29835856	29595176	1.03	cps
Sodium	23-2	56678086	55955294	55832441	56155274	0.81	cps
Strontium	86-1	8001594	8274409	8151844	8142615	1.68	cps
Strontium	88-1	69280797	70799857	71737814	70606156	1.76	cps
Sulfur	34-1	2181726	2218897	2232157	2210927	1.18	cps
Terbium	159-1	8687337	8830203	8749894	8755812	0.82	cps
Terbium	159-2	3157950	3166399	3131782	3152044	0.57	cps
Thallium	203-1	22582937	22894910	23065643	22847830	1.07	cps
Thallium	205-1	53375343	55482298	55669756	54842465	2.32	cps
Tin	118-1	20751317	21190558	20747945	20896607	1.22	cps
Titanium	47-1	32944648	33965916	33787072	33565879	1.62	cps
Uranium	238-1	71899771	71909709	72698966	72169482	0.64	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P8
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:53:32	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	3889824	3925138	3973702	3929554	1.07	cps
Ytterbium	172-1	457	503	433	464	7.67	cps
Ytterbium	172-2	187	180	187	184	2.09	cps
Ytterbium	176-1	109056	111873	112545	111158	1.67	cps
Ytterbium	176-2	41739	42679	41900	42106	1.19	cps
Yttrium	89-1	11810174	12430227	12182486	12140962	2.57	cps
Yttrium	89-2	905244	916301	917749	913098	0.75	cps
Zinc	66-2	8309204	8414593	8410091	8377963	0.71	cps
Zirconium	90-1	43447003	44465778	45394948	44435909	2.19	cps
Zirconium	91-1	9533067	9729523	9996523	9753037	2.39	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P8
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:56:21	DataFile Name :	012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	8060555	8369152	8227773	8219160	1.88	cps
Antimony	121-1	15552	15496	14811	15286	2.70	cps
Arsenic	75-2	267	290	263	273	5.32	cps
Barium	135-1	11799	11478	11352	11543	2.00	cps
Barium	137-1	20843	20599	19668	20370	3.04	cps
Beryllium	9-1	854	762	704	774	9.80	cps
Bismuth	209-1	4376937	4406313	4230431	4337894	2.17	cps
Bismuth	209-2	2014370	2080511	2098956	2064613	2.15	cps
Bromine	81-1	26629	26832	26762	26741	0.39	cps
Cadmium	108-1	203	170	180	184	9.28	cps
Cadmium	106-1	4471	4401	4507	4460	1.22	cps
Cadmium	111-1	4071	4092	4073	4078	0.28	cps
Calcium	43-1	36012914	35577733	35310921	35633856	0.99	cps
Calcium	44-1	592130591	586123511	583354711	587202938	0.76	cps
Carbon	12-1	3626497	3676095	3739560	3680717	1.54	cps
Carbon	12-2	36545	35593	36235	36124	1.34	cps
Chlorine	35-1	154255	157405	158618	156759	1.44	cps
Chlorine	35-2	650	657	670	659	1.55	cps
Chromium	52-2	44121	43830	43824	43925	0.39	cps
Cobalt	59-2	19614	20184	19624	19807	1.65	cps
Copper	63-2	20966	20702	20602	20756	0.91	cps
Dysprosium	156-1	803	893	883	860	5.74	cps
Dysprosium	156-2	270	280	240	263	7.90	cps
Erbium	164-1	1030	907	1027	988	7.11	cps
Erbium	164-2	423	370	367	387	8.22	cps
Gadolinium	160-1	810	803	873	829	4.66	cps
Gadolinium	160-2	367	280	357	334	14.18	cps
Holmium	165-1	7996336	8044731	7867333	7969467	1.15	cps
Holmium	165-2	3194332	3264469	3387065	3281955	2.97	cps
Indium	115-1	6290344	6211671	6333181	6278399	0.98	cps
Indium	115-2	710580	713519	734837	719645	1.84	cps
Iron	54-2	49045139	50028311	48742584	49272011	1.36	cps
Iron	56-2	914159320	912476493	912183293	912939702	0.12	cps
Iron	57-2	23038640	23188477	23127100	23118072	0.33	cps
Krypton	83-1	310	407	333	350	14.41	cps
Lead	206-1	94628	93719	93934	94094	0.51	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P8
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:56:21	DataFile Name :	012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	82246	82822	81276	82115	0.95	cps
Lead	208-1	378971	376451	372794	376072	0.83	cps
Lithium	6-1	2095152	2059856	2084949	2079986	0.87	cps
Magnesium	24-2	139177308	142659825	139893128	140576753	1.31	cps
Manganese	55-2	11982	11912	11605	11833	1.69	cps
Molybdenum	94-1	17812	17384	16673	17290	3.33	cps
Molybdenum	95-1	17438	16910	16256	16868	3.51	cps
Molybdenum	96-1	33063	31436	31238	31912	3.14	cps
Molybdenum	97-1	11308	10868	9680	10619	7.93	cps
Molybdenum	98-1	27925	26178	24241	26115	7.06	cps
Neodymium	150-1	440	483	400	441	9.45	cps
Neodymium	150-2	127	87	147	120	25.46	cps
Nickel	60-2	12846	12866	12809	12840	0.22	cps
Phosphorus	31-2	120	100	117	112	9.55	cps
Potassium	39-2	49938844	49376636	48987364	49434281	0.97	cps
Rhodium	103-1	5559960	5559161	5600836	5573319	0.43	cps
Rhodium	103-2	2391706	2409926	2427989	2409874	0.75	cps
Scandium	45-1	4153432	4125391	4102150	4126991	0.62	cps
Scandium	45-2	87910	89134	91430	89491	2.00	cps
Selenium	82-1	357	247	313	306	18.13	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	50	17	23	30	58.79	cps
Silicon	28-1	671006	651691	634484	652394	2.80	cps
Silver	107-1	3681	2914	2787	3127	15.46	cps
Silver	109-1	3307	2820	2557	2895	13.15	cps
Sodium	23-2	274725729	277628436	274931463	275761876	0.59	cps
Strontium	86-1	25981	25727	26468	26059	1.45	cps
Strontium	88-1	220219	220507	224726	221818	1.14	cps
Sulfur	34-1	431416	434649	442506	436191	1.31	cps
Terbium	159-1	8283527	8324162	8361243	8322978	0.47	cps
Terbium	159-2	3166253	3113114	3210086	3163151	1.54	cps
Thallium	203-1	2234	2104	1763	2034	11.94	cps
Thallium	205-1	5428	4718	4147	4764	13.47	cps
Tin	118-1	6805	6682	6211	6566	4.77	cps
Titanium	47-1	3420	3304	3257	3327	2.53	cps
Uranium	238-1	3934	3634	2937	3502	14.61	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P8
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:56:21	DataFile Name :	012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1113	997	1040	1050	5.62	cps
Ytterbium	172-1	1540	1403	1623	1522	7.30	cps
Ytterbium	172-2	793	733	723	750	5.05	cps
Ytterbium	176-1	2057	2064	2217	2112	4.29	cps
Ytterbium	176-2	743	783	707	744	5.15	cps
Yttrium	89-1	11822609	11798859	11693105	11771524	0.59	cps
Yttrium	89-2	938572	938468	966958	948000	1.73	cps
Zinc	66-2	50031	50336	49446	49938	0.91	cps
Zirconium	90-1	20746	19744	20038	20176	2.55	cps
Zirconium	91-1	4557	4564	4504	4542	0.72	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P8
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:14:58	DataFile Name :	015ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	45243	46053	45986	45761	0.98	cps
Antimony	121-1	5405596	5452101	5441225	5432974	0.45	cps
Arsenic	75-2	117844	119004	118681	118510	0.51	cps
Barium	135-1	641785	645214	646226	644408	0.36	cps
Barium	137-1	1119669	1138565	1135425	1131220	0.90	cps
Beryllium	9-1	649462	657340	661532	656111	0.93	cps
Bismuth	209-1	5452047	5469755	5424704	5448835	0.42	cps
Bismuth	209-2	2602948	2503046	2561357	2555784	1.96	cps
Bromine	81-1	31262	30871	31408	31180	0.89	cps
Cadmium	108-1	44334	44940	45702	44992	1.52	cps
Cadmium	106-1	65762	67089	66797	66549	1.05	cps
Cadmium	111-1	672963	679567	687640	680057	1.08	cps
Calcium	43-1	162163	164051	162662	162959	0.60	cps
Calcium	44-1	2711011	2711194	2702281	2708162	0.19	cps
Carbon	12-1	3642405	3707572	3696950	3682309	0.95	cps
Carbon	12-2	26521	25849	26100	26157	1.30	cps
Chlorine	35-1	194468	200202	201198	198622	1.83	cps
Chlorine	35-2	830	867	810	836	3.44	cps
Chromium	52-2	589521	583199	583330	585350	0.62	cps
Cobalt	59-2	1127064	1124132	1124768	1125321	0.14	cps
Copper	63-2	888474	898088	901136	895900	0.74	cps
Dysprosium	156-1	20	30	27	26	19.92	cps
Dysprosium	156-2	7	10	0	6	91.64	cps
Erbium	164-1	50	83	50	61	31.49	cps
Erbium	164-2	27	23	17	22	22.91	cps
Gadolinium	160-1	97	103	107	102	4.98	cps
Gadolinium	160-2	20	10	40	23	65.47	cps
Holmium	165-1	8768832	8884006	8692631	8781823	1.10	cps
Holmium	165-2	3601243	3560088	3511564	3557632	1.26	cps
Indium	115-1	7479321	7713223	7618458	7603667	1.55	cps
Indium	115-2	848213	833955	836343	839504	0.91	cps
Iron	54-2	484619	480665	482569	482618	0.41	cps
Iron	56-2	8788315	8775314	8767619	8777083	0.12	cps
Iron	57-2	216533	217779	218947	217753	0.55	cps
Krypton	83-1	227	287	260	258	11.66	cps
Lead	206-1	4104306	4181561	4115323	4133730	1.01	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P8
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:14:58	DataFile Name :	015ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3426019	3520399	3443390	3463269	1.45	cps
Lead	208-1	15949667	16266073	15990463	16068734	1.07	cps
Lithium	6-1	2509642	2512178	2442461	2488094	1.59	cps
Magnesium	24-2	379900	373614	379878	377798	0.96	cps
Manganese	55-2	248592	250094	250019	249569	0.34	cps
Molybdenum	94-1	1383	1333	1487	1401	5.58	cps
Molybdenum	95-1	527	597	627	583	8.80	cps
Molybdenum	96-1	953	1080	1120	1051	8.28	cps
Molybdenum	97-1	337	340	343	340	0.98	cps
Molybdenum	98-1	793	917	880	863	7.34	cps
Neodymium	150-1	67	83	47	66	28.00	cps
Neodymium	150-2	0	3	10	4	114.60	cps
Nickel	60-2	311395	314863	315751	314003	0.73	cps
Phosphorus	31-2	110	127	60	99	35.09	cps
Potassium	39-2	439897	438028	439456	439127	0.22	cps
Rhodium	103-1	7117211	7142497	7043211	7100973	0.73	cps
Rhodium	103-2	3033884	3037279	3054029	3041731	0.35	cps
Scandium	45-1	4734946	4782033	4761304	4759428	0.50	cps
Scandium	45-2	100125	97729	97931	98595	1.35	cps
Selenium	82-1	84075	86335	86084	85498	1.45	cps
Selenium	77-2	1530	1803	1540	1625	9.54	cps
Selenium	78-2	5288	5678	5625	5530	3.83	cps
Silicon	28-1	491142	511741	497273	500052	2.12	cps
Silver	107-1	1824617	1802744	1804743	1810701	0.67	cps
Silver	109-1	1691273	1674593	1713401	1693089	1.15	cps
Sodium	23-2	1318850	1300401	1294588	1304613	0.97	cps
Strontium	86-1	2707	2434	2654	2598	5.58	cps
Strontium	88-1	18426	18830	19370	18875	2.51	cps
Sulfur	34-1	527191	523157	526108	525485	0.40	cps
Terbium	159-1	9240015	9187703	9199779	9209165	0.30	cps
Terbium	159-2	3614748	3365363	3433339	3471150	3.71	cps
Thallium	203-1	4992832	5103696	5020020	5038850	1.15	cps
Thallium	205-1	11681511	11795997	11686083	11721197	0.55	cps
Tin	118-1	3887	3964	3841	3897	1.60	cps
Titanium	47-1	280	267	310	286	7.77	cps
Uranium	238-1	227	253	327	269	19.26	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P8
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:14:58	DataFile Name :	015ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	437356	438146	436060	437188	0.24	cps
Ytterbium	172-1	33	53	40	42	24.12	cps
Ytterbium	172-2	17	30	17	21	36.45	cps
Ytterbium	176-1	1210	1227	1210	1216	0.79	cps
Ytterbium	176-2	320	297	323	313	4.64	cps
Yttrium	89-1	13381687	13550335	13195293	13375772	1.33	cps
Yttrium	89-2	1044695	1030439	1021614	1032250	1.13	cps
Zinc	66-2	188590	191694	190064	190116	0.82	cps
Zirconium	90-1	2474	2574	2577	2541	2.31	cps
Zirconium	91-1	1307	1207	1340	1285	5.40	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P8
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:18:19	DataFile Name :	016LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2264	2357	2387	2336	2.75	cps
Antimony	121-1	54180	53156	53886	53741	0.98	cps
Arsenic	75-2	610	560	600	590	4.48	cps
Barium	135-1	64218	65253	63481	64317	1.38	cps
Barium	137-1	111075	111047	111478	111200	0.22	cps
Beryllium	9-1	7123	7214	7131	7156	0.71	cps
Bismuth	209-1	5441786	5525828	5503567	5490394	0.79	cps
Bismuth	209-2	2550065	2584537	2553669	2562757	0.74	cps
Bromine	81-1	30176	30654	30450	30426	0.79	cps
Cadmium	108-1	587	593	500	560	9.30	cps
Cadmium	106-1	5605	5308	5434	5449	2.73	cps
Cadmium	111-1	10514	10189	10516	10406	1.81	cps
Calcium	43-1	42670	42971	42489	42710	0.57	cps
Calcium	44-1	706426	715782	720197	714135	0.98	cps
Carbon	12-1	3219275	3178638	3126067	3174660	1.47	cps
Carbon	12-2	21856	21583	21573	21670	0.74	cps
Chlorine	35-1	146711	147749	148378	147613	0.57	cps
Chlorine	35-2	687	573	510	590	15.17	cps
Chromium	52-2	12429	12566	13039	12678	2.53	cps
Cobalt	59-2	11765	11501	11555	11607	1.20	cps
Copper	63-2	19891	20031	20178	20033	0.72	cps
Dysprosium	156-1	20	27	23	23	14.29	cps
Dysprosium	156-2	3	7	0	3	100.05	cps
Erbium	164-1	90	67	67	74	18.09	cps
Erbium	164-2	27	20	17	21	24.12	cps
Gadolinium	160-1	97	93	63	84	21.74	cps
Gadolinium	160-2	13	27	20	20	33.35	cps
Holmium	165-1	8980960	8801340	8800697	8860999	1.17	cps
Holmium	165-2	3497728	3491910	3518527	3502722	0.40	cps
Indium	115-1	7568333	7609906	7573473	7583904	0.30	cps
Indium	115-2	834242	829387	830822	831483	0.30	cps
Iron	54-2	13093	12749	13233	13025	1.91	cps
Iron	56-2	234850	230155	230257	231754	1.16	cps
Iron	57-2	5621	5618	5504	5581	1.19	cps
Krypton	83-1	300	353	257	303	15.96	cps
Lead	206-1	21204	21124	20940	21089	0.64	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P8
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:18:19	DataFile Name :	016LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	17475	18113	18343	17977	2.50	cps
Lead	208-1	83292	84171	84124	83862	0.59	cps
Lithium	6-1	2509872	2534338	2506491	2516901	0.60	cps
Magnesium	24-2	170289	167176	166836	168100	1.13	cps
Manganese	55-2	4921	4911	5074	4969	1.84	cps
Molybdenum	94-1	55932	56755	56146	56278	0.76	cps
Molybdenum	95-1	66893	68122	68126	67714	1.05	cps
Molybdenum	96-1	74971	75196	74384	74850	0.56	cps
Molybdenum	97-1	41475	42482	41977	41978	1.20	cps
Molybdenum	98-1	109696	110385	109904	109995	0.32	cps
Neodymium	150-1	7	7	17	10	57.72	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	3657	3881	3754	3764	2.98	cps
Phosphorus	31-2	213	283	233	243	14.82	cps
Potassium	39-2	123520	122858	121086	122488	1.03	cps
Rhodium	103-1	7078438	7225587	7041959	7115328	1.37	cps
Rhodium	103-2	2984403	3018551	3039240	3014065	0.92	cps
Scandium	45-1	4732799	4696225	4734876	4721300	0.46	cps
Scandium	45-2	97599	97985	96947	97510	0.54	cps
Selenium	82-1	2144	1960	2200	2101	5.97	cps
Selenium	77-2	50	27	53	43	33.52	cps
Selenium	78-2	177	173	147	166	9.93	cps
Silicon	28-1	584898	573678	574644	577740	1.08	cps
Silver	107-1	34132	34526	34065	34241	0.73	cps
Silver	109-1	31947	31907	32953	32269	1.84	cps
Sodium	23-2	358405	356248	353626	356093	0.67	cps
Strontium	86-1	9460	9223	9400	9361	1.32	cps
Strontium	88-1	77135	78636	77554	77775	1.00	cps
Sulfur	34-1	521141	518150	522585	520625	0.43	cps
Terbium	159-1	9149063	9236352	9301303	9228906	0.83	cps
Terbium	159-2	3427317	3467464	3470074	3454952	0.69	cps
Thallium	203-1	23715	23969	24670	24118	2.05	cps
Thallium	205-1	58829	58197	57969	58332	0.76	cps
Tin	118-1	111731	113331	114248	113103	1.13	cps
Titanium	47-1	19283	19363	19483	19377	0.52	cps
Uranium	238-1	72347	73109	73752	73069	0.96	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P8
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:18:19	DataFile Name :	016LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	22261	21930	22444	22212	1.17	cps
Ytterbium	172-1	33	53	53	47	24.75	cps
Ytterbium	172-2	30	37	40	36	14.32	cps
Ytterbium	176-1	1387	1253	1303	1315	5.12	cps
Ytterbium	176-2	380	360	337	359	6.04	cps
Yttrium	89-1	13291245	13454218	13406818	13384094	0.63	cps
Yttrium	89-2	1022821	1017511	1034798	1025043	0.86	cps
Zinc	66-2	6105	6535	6288	6309	3.42	cps
Zirconium	90-1	48076	48461	48795	48444	0.74	cps
Zirconium	91-1	10374	11018	11041	10811	3.50	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P8
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:29:07	DataFile Name :	019CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	433	373	370	392	9.09	cps
Antimony	121-1	207	160	197	188	13.09	cps
Arsenic	75-2	10	10	3	8	49.52	cps
Barium	135-1	110	117	130	119	8.57	cps
Barium	137-1	197	163	237	199	18.46	cps
Beryllium	9-1	112	120	112	115	3.87	cps
Bismuth	209-1	5532102	5443839	5463286	5479742	0.85	cps
Bismuth	209-2	2507190	2412142	2456192	2458508	1.93	cps
Bromine	81-1	32658	31926	33059	32548	1.76	cps
Cadmium	108-1	10	33	13	19	66.81	cps
Cadmium	106-1	4344	4371	4281	4332	1.07	cps
Cadmium	111-1	3087	3120	3044	3084	1.23	cps
Calcium	43-1	1010	970	1030	1003	3.05	cps
Calcium	44-1	30897	30509	30522	30643	0.72	cps
Carbon	12-1	3175161	3123870	3133624	3144218	0.87	cps
Carbon	12-2	22020	21976	21716	21904	0.75	cps
Chlorine	35-1	3167355	2840289	2589037	2865561	10.12	cps
Chlorine	35-2	9436	9156	8162	8918	7.51	cps
Chromium	52-2	1103	1070	1020	1064	3.94	cps
Cobalt	59-2	97	63	100	87	23.40	cps
Copper	63-2	2247	2144	2107	2166	3.35	cps
Dysprosium	156-1	10	13	10	11	17.30	cps
Dysprosium	156-2	0	0	3	1	173.21	cps
Erbium	164-1	53	90	67	70	26.51	cps
Erbium	164-2	27	13	30	23	37.81	cps
Gadolinium	160-1	67	117	97	93	26.96	cps
Gadolinium	160-2	20	27	23	23	14.29	cps
Holmium	165-1	8865970	8588275	8788392	8747546	1.64	cps
Holmium	165-2	3501589	3368815	3358988	3409797	2.34	cps
Indium	115-1	7579564	7539396	7461977	7526979	0.79	cps
Indium	115-2	824683	772671	792273	796543	3.30	cps
Iron	54-2	1007	1010	1033	1017	1.43	cps
Iron	56-2	14394	13874	14190	14153	1.85	cps
Iron	57-2	300	327	347	324	7.22	cps
Krypton	83-1	247	297	327	290	13.94	cps
Lead	206-1	3937	3711	3547	3732	5.25	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P8
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:29:07	DataFile Name :	019CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3244	3330	2974	3183	5.85	cps
Lead	208-1	15094	14697	13396	14395	6.17	cps
Lithium	6-1	2395073	2499063	2432633	2442256	2.16	cps
Magnesium	24-2	780	760	750	763	2.00	cps
Manganese	55-2	2494	2330	2630	2485	6.05	cps
Molybdenum	94-1	1017	890	923	943	6.96	cps
Molybdenum	95-1	1013	820	807	880	13.14	cps
Molybdenum	96-1	1173	983	840	999	16.74	cps
Molybdenum	97-1	590	580	487	552	10.32	cps
Molybdenum	98-1	1513	1273	1240	1342	11.11	cps
Neodymium	150-1	0	17	13	10	88.20	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	573	587	527	562	5.60	cps
Phosphorus	31-2	103	153	143	133	19.85	cps
Potassium	39-2	18582	18305	18272	18386	0.93	cps
Rhodium	103-1	7047503	7068219	7144600	7086774	0.72	cps
Rhodium	103-2	3054327	2849807	2880769	2928301	3.76	cps
Scandium	45-1	4832179	4833919	4762469	4809522	0.85	cps
Scandium	45-2	97975	93095	92704	94591	3.10	cps
Selenium	82-1	23	-43	3	-6	-616.44	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	33	20	13	22	45.83	cps
Silicon	28-1	486012	498186	488830	491009	1.30	cps
Silver	107-1	410	393	427	410	4.07	cps
Silver	109-1	310	293	320	308	4.38	cps
Sodium	23-2	37522	37217	36770	37170	1.02	cps
Strontium	86-1	547	530	587	554	5.25	cps
Strontium	88-1	480	523	527	510	5.11	cps
Sulfur	34-1	465956	470003	469078	468346	0.45	cps
Terbium	159-1	9311584	9152308	9217948	9227280	0.87	cps
Terbium	159-2	3453486	3191035	3287552	3310691	4.01	cps
Thallium	203-1	1287	1197	1080	1188	8.72	cps
Thallium	205-1	3000	2990	2777	2923	4.32	cps
Tin	118-1	3484	3480	3597	3521	1.89	cps
Titanium	47-1	397	340	327	354	10.49	cps
Uranium	238-1	223	267	223	238	10.52	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P8
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:29:07	DataFile Name :	019CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	17	30	13	20	44.10	cps
Ytterbium	172-1	67	27	80	58	48.03	cps
Ytterbium	172-2	30	13	23	22	37.76	cps
Ytterbium	176-1	1207	1130	1153	1163	3.38	cps
Ytterbium	176-2	293	327	237	286	15.93	cps
Yttrium	89-1	13120426	13237151	13493214	13283597	1.44	cps
Yttrium	89-2	1023898	959546	983999	989148	3.28	cps
Zinc	66-2	1517	1363	1417	1432	5.43	cps
Zirconium	90-1	1460	1417	1400	1426	2.17	cps
Zirconium	91-1	340	200	263	268	26.18	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P8
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:32:33	DataFile Name :	020ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	8153176	8287910	8315793	8252293	1.05	cps
Antimony	121-1	27832	27424	27681	27646	0.75	cps
Arsenic	75-2	177	210	223	203	11.82	cps
Barium	135-1	8776	8990	8890	8885	1.20	cps
Barium	137-1	15252	14908	15322	15161	1.46	cps
Beryllium	9-1	1780	1820	1807	1802	1.12	cps
Bismuth	209-1	4826522	4794723	4878296	4833180	0.87	cps
Bismuth	209-2	2244744	2313093	2290281	2282706	1.52	cps
Bromine	81-1	32782	33406	33406	33198	1.09	cps
Cadmium	108-1	6188	6338	6405	6310	1.76	cps
Cadmium	106-1	4217	4611	4497	4442	4.56	cps
Cadmium	111-1	6423	6086	6380	6296	2.91	cps
Calcium	43-1	7663829	8031894	7911613	7869112	2.38	cps
Calcium	44-1	128790358	129805111	128965341	129186937	0.42	cps
Carbon	12-1	48367414	50988531	51773924	50376623	3.54	cps
Carbon	12-2	355813	355691	358568	356691	0.46	cps
Chlorine	35-1	104928348	112920768	115795755	111214957	5.06	cps
Chlorine	35-2	526234	532553	532465	530417	0.68	cps
Chromium	52-2	110799	109975	110785	110520	0.43	cps
Cobalt	59-2	12275	12322	11692	12096	2.90	cps
Copper	63-2	64489	64432	64054	64325	0.37	cps
Dysprosium	156-1	110	130	120	120	8.33	cps
Dysprosium	156-2	43	10	20	24	69.97	cps
Erbium	164-1	153	143	180	159	11.93	cps
Erbium	164-2	63	40	50	51	22.90	cps
Gadolinium	160-1	130	153	183	156	17.19	cps
Gadolinium	160-2	57	47	33	46	25.70	cps
Holmium	165-1	8408343	8455801	8500504	8454882	0.55	cps
Holmium	165-2	3349919	3390963	3338097	3359659	0.83	cps
Indium	115-1	6828711	6843923	7033573	6902069	1.65	cps
Indium	115-2	759462	754369	755733	756521	0.35	cps
Iron	54-2	22194782	22440751	22433652	22356395	0.63	cps
Iron	56-2	412712927	419978154	422279687	418323589	1.19	cps
Iron	57-2	10427404	10481748	10478417	10462523	0.29	cps
Krypton	83-1	277	273	333	294	11.45	cps
Lead	206-1	94867	88080	85114	89354	5.60	cps

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LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P8
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:32:33	DataFile Name :	020ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	75187	69569	67444	70733	5.66	cps
Lead	208-1	357777	330261	317953	335331	6.08	cps
Lithium	6-1	2296341	2296758	2329843	2307647	0.83	cps
Magnesium	24-2	29649928	29316258	29444197	29470128	0.57	cps
Manganese	55-2	20275	20355	20285	20305	0.21	cps
Molybdenum	94-1	14533830	14531323	14606280	14557144	0.29	cps
Molybdenum	95-1	25472706	25963851	25794196	25743585	0.97	cps
Molybdenum	96-1	27569415	27611280	27816587	27665760	0.48	cps
Molybdenum	97-1	15970747	16076823	16060701	16036090	0.36	cps
Molybdenum	98-1	41049134	41800866	41598681	41482894	0.94	cps
Neodymium	150-1	97	103	130	110	16.03	cps
Neodymium	150-2	43	43	33	40	14.43	cps
Nickel	60-2	15459	15812	15285	15519	1.73	cps
Phosphorus	31-2	468540	464931	464250	465907	0.49	cps
Potassium	39-2	20774336	20644700	20746959	20721999	0.33	cps
Rhodium	103-1	6238439	6306321	6332529	6292430	0.77	cps
Rhodium	103-2	2771552	2687118	2643659	2700776	2.41	cps
Scandium	45-1	4581112	4526180	4598712	4568668	0.83	cps
Scandium	45-2	94988	95431	96290	95569	0.69	cps
Selenium	82-1	107	103	57	89	31.45	cps
Selenium	77-2	0	3	3	2	86.60	cps
Selenium	78-2	23	20	33	26	27.15	cps
Silicon	28-1	818054	833789	829085	826976	0.98	cps
Silver	107-1	983	1437	1407	1276	19.88	cps
Silver	109-1	957	1210	1307	1158	15.61	cps
Sodium	23-2	61261166	62623731	62664716	62183204	1.28	cps
Strontium	86-1	278165	279626	281619	279804	0.62	cps
Strontium	88-1	2509687	2565891	2537339	2537639	1.11	cps
Sulfur	34-1	9904894	10154098	10007275	10022089	1.25	cps
Terbium	159-1	8763675	8788371	8766739	8772929	0.15	cps
Terbium	159-2	3409781	3287661	3346111	3347851	1.82	cps
Thallium	203-1	1297	1513	2047	1619	23.84	cps
Thallium	205-1	3134	3777	4608	3840	19.24	cps
Tin	118-1	6578	7015	6938	6844	3.41	cps
Titanium	47-1	7357577	7459066	7352928	7389857	0.81	cps
Uranium	238-1	1247	1163	1370	1260	8.25	cps

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P8
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:32:33	DataFile Name :	020ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	637	650	583	623	5.66	cps
Ytterbium	172-1	50	80	90	73	28.39	cps
Ytterbium	172-2	30	33	40	34	14.78	cps
Ytterbium	176-1	1130	1210	1237	1192	4.66	cps
Ytterbium	176-2	287	277	287	283	2.04	cps
Yttrium	89-1	12610470	12915266	12725270	12750335	1.21	cps
Yttrium	89-2	975511	978473	983761	979248	0.43	cps
Zinc	66-2	11118	11305	11962	11461	3.87	cps
Zirconium	90-1	2650	3324	3711	3228	16.62	cps
Zirconium	91-1	597	757	800	718	14.92	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P8
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:37:29	DataFile Name :	021ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	8361606	8119348	8402388	8294447	1.84	cps
Antimony	121-1	536545	545334	546240	542706	0.99	cps
Arsenic	75-2	12322	12099	12105	12175	1.04	cps
Barium	135-1	134344	134904	135247	134832	0.34	cps
Barium	137-1	232621	235506	235307	234478	0.69	cps
Beryllium	9-1	124555	125890	125071	125172	0.54	cps
Bismuth	209-1	4926571	4967615	5001075	4965087	0.75	cps
Bismuth	209-2	2287995	2273836	2303737	2288523	0.65	cps
Bromine	81-1	34917	34272	33838	34342	1.58	cps
Cadmium	108-1	14418	14962	14788	14722	1.89	cps
Cadmium	106-1	16049	15883	15559	15830	1.58	cps
Cadmium	111-1	132372	132388	133568	132776	0.52	cps
Calcium	43-1	8268700	7927635	8128360	8108232	2.11	cps
Calcium	44-1	133133155	131950941	133866185	132983427	0.73	cps
Carbon	12-1	50689874	52735831	52761524	52062410	2.28	cps
Carbon	12-2	364304	363585	365831	364573	0.31	cps
Chlorine	35-1	112545485	117890475	120949915	117128625	3.63	cps
Chlorine	35-2	544766	543904	551525	546732	0.76	cps
Chromium	52-2	225958	224893	226093	225648	0.29	cps
Cobalt	59-2	223352	222192	221073	222206	0.51	cps
Copper	63-2	226923	227758	228161	227614	0.28	cps
Dysprosium	156-1	103	97	110	103	6.45	cps
Dysprosium	156-2	53	47	57	52	9.75	cps
Erbium	164-1	130	173	167	157	14.90	cps
Erbium	164-2	47	97	50	64	43.38	cps
Gadolinium	160-1	180	177	193	183	4.81	cps
Gadolinium	160-2	70	87	87	81	11.87	cps
Holmium	165-1	8537162	8929976	8699813	8722317	2.26	cps
Holmium	165-2	3451512	3365268	3429513	3415431	1.31	cps
Indium	115-1	7184568	7048192	7149437	7127399	0.99	cps
Indium	115-2	773198	771222	776062	773494	0.31	cps
Iron	54-2	22834245	22604092	22680747	22706362	0.52	cps
Iron	56-2	426426420	414763314	417211394	419467043	1.47	cps
Iron	57-2	10580074	10330415	10414530	10441673	1.22	cps
Krypton	83-1	333	323	363	340	6.12	cps
Lead	206-1	443103	450148	447012	446755	0.79	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P8
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:37:29	DataFile Name :	021ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	370036	375935	375392	373788	0.87	cps
Lead	208-1	1718421	1751162	1729369	1732984	0.96	cps
Lithium	6-1	2366318	2312993	2279553	2319621	1.89	cps
Magnesium	24-2	29898891	29628520	30122249	29883220	0.83	cps
Manganese	55-2	67951	67763	68708	68140	0.73	cps
Molybdenum	94-1	14665789	14679458	14820021	14721756	0.58	cps
Molybdenum	95-1	25898303	26476690	26758692	26377895	1.66	cps
Molybdenum	96-1	27558823	28579528	28200269	28112873	1.84	cps
Molybdenum	97-1	16111066	16321514	16139524	16190701	0.71	cps
Molybdenum	98-1	42410598	41119460	42209405	41913154	1.66	cps
Neodymium	150-1	133	160	117	137	15.99	cps
Neodymium	150-2	37	37	27	33	17.32	cps
Nickel	60-2	72600	73026	72199	72608	0.57	cps
Phosphorus	31-2	475821	468728	472713	472421	0.75	cps
Potassium	39-2	20992386	21049243	20913785	20985138	0.32	cps
Rhodium	103-1	6440053	6502218	6351750	6431340	1.18	cps
Rhodium	103-2	2774387	2776172	2790490	2780350	0.32	cps
Scandium	45-1	4744743	4777345	4766777	4762955	0.35	cps
Scandium	45-2	97565	96179	97514	97086	0.81	cps
Selenium	82-1	8446	8673	8209	8443	2.75	cps
Selenium	77-2	153	157	170	160	5.51	cps
Selenium	78-2	617	527	487	543	12.26	cps
Silicon	28-1	855630	870862	946627	891040	5.47	cps
Silver	107-1	608579	621624	622120	617441	1.24	cps
Silver	109-1	578248	584166	589505	583973	0.96	cps
Sodium	23-2	63448282	61544604	63150934	62714607	1.63	cps
Strontium	86-1	281956	288337	283877	284723	1.15	cps
Strontium	88-1	2515795	2668103	2593743	2592547	2.94	cps
Sulfur	34-1	10456071	10213496	10346677	10338748	1.18	cps
Terbium	159-1	8925942	9015589	9090114	9010548	0.91	cps
Terbium	159-2	3342316	3409324	3359706	3370449	1.03	cps
Thallium	203-1	448129	456842	460853	455275	1.43	cps
Thallium	205-1	1074898	1091597	1093300	1086598	0.94	cps
Tin	118-1	7392	7332	7152	7292	1.71	cps
Titanium	47-1	7514194	7422630	7470457	7469094	0.61	cps
Uranium	238-1	1377	1420	1313	1370	3.92	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P8
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:37:29	DataFile Name :	021ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	88049	88079	86730	87619	0.88	cps
Ytterbium	172-1	83	53	97	78	28.54	cps
Ytterbium	172-2	37	47	40	41	12.39	cps
Ytterbium	176-1	1090	1080	1277	1149	9.64	cps
Ytterbium	176-2	323	293	373	330	12.25	cps
Yttrium	89-1	13095723	13604446	13051825	13250665	2.32	cps
Yttrium	89-2	1013419	1006730	1005838	1008662	0.41	cps
Zinc	66-2	29150	29140	29431	29240	0.56	cps
Zirconium	90-1	2780	3164	3370	3105	9.64	cps
Zirconium	91-1	653	750	823	742	11.49	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P8
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:40:43	DataFile Name :	022CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4844925	4698986	4777027	4773646	1.53	cps
Antimony	121-1	13143559	13296507	13299937	13246668	0.67	cps
Arsenic	75-2	293974	290755	292523	292417	0.55	cps
Barium	135-1	16066451	16351901	16539703	16319351	1.46	cps
Barium	137-1	27448678	27797200	28241993	27829290	1.43	cps
Beryllium	9-1	2881770	2891071	2917599	2896813	0.64	cps
Bismuth	209-1	4642353	4742089	4662132	4682192	1.13	cps
Bismuth	209-2	2218242	2309087	2200401	2242577	2.60	cps
Bromine	81-1	31769	32668	32407	32282	1.43	cps
Cadmium	108-1	241142	244202	246097	243814	1.03	cps
Cadmium	106-1	353831	361757	364089	359892	1.49	cps
Cadmium	111-1	3206807	3228587	3187690	3207695	0.64	cps
Calcium	43-1	19824458	20600246	20563258	20329321	2.15	cps
Calcium	44-1	329312608	340205688	339898302	336472199	1.84	cps
Carbon	12-1	4319487	4369176	4380921	4356528	0.75	cps
Carbon	12-2	35483	35917	36362	35921	1.22	cps
Chlorine	35-1	4903795	4724646	4463821	4697421	4.71	cps
Chlorine	35-2	17194	16283	15135	16204	6.37	cps
Chromium	52-2	3002825	3016920	3002094	3007280	0.28	cps
Cobalt	59-2	5310191	5372928	5298661	5327260	0.75	cps
Copper	63-2	39334664	40606135	39753938	39898246	1.62	cps
Dysprosium	156-1	650	690	650	663	3.48	cps
Dysprosium	156-2	180	180	143	168	12.62	cps
Erbium	164-1	577	603	583	588	2.36	cps
Erbium	164-2	203	233	273	237	14.84	cps
Gadolinium	160-1	500	527	560	529	5.68	cps
Gadolinium	160-2	233	240	210	228	6.92	cps
Holmium	165-1	8624879	8528788	8583684	8579117	0.56	cps
Holmium	165-2	3427536	3581146	3400568	3469750	2.81	cps
Indium	115-1	6699425	6859277	6712494	6757065	1.31	cps
Indium	115-2	729838	770841	718727	739802	3.71	cps
Iron	54-2	28836073	29251252	28670151	28919159	1.04	cps
Iron	56-2	538500579	525945979	530988619	531811725	1.19	cps
Iron	57-2	13481952	13320159	13389066	13397059	0.61	cps
Krypton	83-1	383	320	380	361	9.87	cps
Lead	206-1	46097519	45241776	46329716	45889670	1.25	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P8
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:40:43	DataFile Name :	022CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	38773016	38832532	39362225	38989258	0.83	cps
Lead	208-1	177928551	178760943	180905986	179198493	0.86	cps
Lithium	6-1	2185892	2258342	2256047	2233427	1.84	cps
Magnesium	24-2	80199439	78669122	79481522	79450028	0.96	cps
Manganese	55-2	12504276	12563710	12357821	12475269	0.85	cps
Molybdenum	94-1	46739864	47896956	47612039	47416287	1.27	cps
Molybdenum	95-1	68168169	69504586	68944496	68872417	0.97	cps
Molybdenum	96-1	74655774	75823002	74764054	75080943	0.86	cps
Molybdenum	97-1	42101829	42590151	42110477	42267485	0.66	cps
Molybdenum	98-1	109818348	111367495	110340475	110508773	0.71	cps
Neodymium	150-1	1283	1393	1467	1381	6.68	cps
Neodymium	150-2	113	50	107	90	38.67	cps
Nickel	60-2	1362472	1470042	1377928	1403481	4.14	cps
Phosphorus	31-2	47554	47889	48658	48034	1.18	cps
Potassium	39-2	27695289	27890456	27797532	27794426	0.35	cps
Rhodium	103-1	6162822	6203854	6201386	6189354	0.37	cps
Rhodium	103-2	2637235	2835997	2652025	2708419	4.09	cps
Scandium	45-1	4643117	4633742	4645559	4640806	0.13	cps
Scandium	45-2	100193	104586	97564	100781	3.52	cps
Selenium	82-1	190582	192017	191315	191305	0.38	cps
Selenium	77-2	3674	3917	3727	3773	3.39	cps
Selenium	78-2	12199	13146	12696	12680	3.74	cps
Silicon	28-1	26334222	26673442	26470780	26492815	0.64	cps
Silver	107-1	15971976	15993819	16176069	16047288	0.70	cps
Silver	109-1	14983061	15121959	15094681	15066567	0.49	cps
Sodium	23-2	157722584	155490091	156827051	156679909	0.72	cps
Strontium	86-1	4408300	4454902	4509740	4457647	1.14	cps
Strontium	88-1	38674068	38375591	38803026	38617562	0.57	cps
Sulfur	34-1	1545378	1539380	1510141	1531633	1.23	cps
Terbium	159-1	8845453	8657256	8809187	8770632	1.14	cps
Terbium	159-2	3286931	3470001	3249138	3335357	3.54	cps
Thallium	203-1	11248976	11091886	11394397	11245086	1.35	cps
Thallium	205-1	26643647	26732435	26796769	26724283	0.29	cps
Tin	118-1	10574177	10897690	10763806	10745224	1.51	cps
Titanium	47-1	18627059	18655971	18745384	18676138	0.33	cps
Uranium	238-1	34172533	35473815	35492053	35046134	2.16	cps

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P8
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:40:43	DataFile Name :	022CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2289473	2289266	2271505	2283415	0.45	cps
Ytterbium	172-1	913	1023	890	942	7.56	cps
Ytterbium	172-2	463	443	410	439	6.14	cps
Ytterbium	176-1	55449	57109	57370	56643	1.84	cps
Ytterbium	176-2	22092	22035	22179	22102	0.33	cps
Yttrium	89-1	12965857	12931105	12913457	12936806	0.21	cps
Yttrium	89-2	1008794	1059054	994355	1020734	3.33	cps
Zinc	66-2	4506862	4506742	4600367	4537990	1.19	cps
Zirconium	90-1	23667054	24139324	23925140	23910506	0.99	cps
Zirconium	91-1	5341022	5466209	5304975	5370736	1.58	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P8
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:44:04	DataFile Name :	023CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	470	500	413	461	9.54	cps
Antimony	121-1	2770	2330	2127	2409	13.65	cps
Arsenic	75-2	13	17	13	14	13.35	cps
Barium	135-1	480	357	353	397	18.20	cps
Barium	137-1	813	670	680	721	11.10	cps
Beryllium	9-1	391	312	341	348	11.42	cps
Bismuth	209-1	5368416	5504251	5596423	5489697	2.09	cps
Bismuth	209-2	2634388	2614735	2602260	2617128	0.62	cps
Bromine	81-1	32087	32133	31519	31913	1.07	cps
Cadmium	108-1	30	37	30	32	11.95	cps
Cadmium	106-1	4784	4821	5024	4876	2.65	cps
Cadmium	111-1	3495	3552	3683	3577	2.69	cps
Calcium	43-1	1390	1350	1213	1318	7.03	cps
Calcium	44-1	36059	34077	33075	34403	4.41	cps
Carbon	12-1	3489977	3429915	3388180	3436024	1.49	cps
Carbon	12-2	23212	22434	22334	22660	2.12	cps
Chlorine	35-1	1930450	1814351	1739370	1828057	5.27	cps
Chlorine	35-2	6855	6622	6211	6563	4.96	cps
Chromium	52-2	1130	1120	1127	1126	0.45	cps
Cobalt	59-2	147	143	163	151	7.09	cps
Copper	63-2	2817	2640	2744	2734	3.25	cps
Dysprosium	156-1	7	13	20	13	49.99	cps
Dysprosium	156-2	3	0	3	2	86.60	cps
Erbium	164-1	47	70	57	58	20.26	cps
Erbium	164-2	17	13	7	12	41.65	cps
Gadolinium	160-1	87	80	93	87	7.69	cps
Gadolinium	160-2	33	20	23	26	27.15	cps
Holmium	165-1	9019364	9010989	9041715	9024023	0.18	cps
Holmium	165-2	3599008	3630465	3595018	3608164	0.54	cps
Indium	115-1	7744744	7803670	7930392	7826269	1.21	cps
Indium	115-2	850681	853893	849421	851332	0.27	cps
Iron	54-2	1190	1190	1040	1140	7.60	cps
Iron	56-2	18205	17598	17631	17811	1.92	cps
Iron	57-2	467	433	473	458	4.68	cps
Krypton	83-1	320	317	290	309	5.32	cps
Lead	206-1	3904	3621	3547	3691	5.11	cps

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P8
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:44:04	DataFile Name :	023CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3277	3194	3004	3158	4.44	cps
Lead	208-1	15294	14417	14070	14593	4.32	cps
Lithium	6-1	2475316	2494869	2560485	2510223	1.78	cps
Magnesium	24-2	1667	1523	1323	1505	11.46	cps
Manganese	55-2	2650	2610	2647	2636	0.84	cps
Molybdenum	94-1	2817	2324	2040	2394	16.42	cps
Molybdenum	95-1	2397	1923	1673	1998	18.39	cps
Molybdenum	96-1	2714	2194	2000	2302	16.03	cps
Molybdenum	97-1	1487	1193	983	1221	20.70	cps
Molybdenum	98-1	3754	2917	2600	3090	19.29	cps
Neodymium	150-1	10	10	13	11	17.30	cps
Neodymium	150-2	3	3	3	3	0.00	cps
Nickel	60-2	637	613	653	634	3.17	cps
Phosphorus	31-2	120	123	107	117	7.56	cps
Potassium	39-2	19036	18879	19156	19024	0.73	cps
Rhodium	103-1	7333823	7373917	7494875	7400872	1.13	cps
Rhodium	103-2	3184985	3115972	3153970	3151643	1.10	cps
Scandium	45-1	4962253	4902886	5059261	4974800	1.59	cps
Scandium	45-2	101674	101045	101347	101355	0.31	cps
Selenium	82-1	-57	37	-23	-14	-327.42	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	23	17	47	29	54.53	cps
Silicon	28-1	492686	514332	483235	496751	3.21	cps
Silver	107-1	1610	1460	1270	1447	11.78	cps
Silver	109-1	7283	1350	1167	3267	106.52	cps
Sodium	23-2	43344	42632	41729	42569	1.90	cps
Strontium	86-1	657	603	653	638	4.69	cps
Strontium	88-1	1297	1157	1037	1163	11.19	cps
Sulfur	34-1	548391	544967	546669	546676	0.31	cps
Terbium	159-1	9288030	9513362	9329317	9376903	1.28	cps
Terbium	159-2	3504618	3550367	3528743	3527910	0.65	cps
Thallium	203-1	1750	1740	1570	1687	6.00	cps
Thallium	205-1	4157	4021	3704	3961	5.87	cps
Tin	118-1	3844	3887	3801	3844	1.13	cps
Titanium	47-1	720	547	590	619	14.58	cps
Uranium	238-1	1080	780	680	847	24.59	cps

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Inst Id :P8
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LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P8
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:44:04	DataFile Name :	023CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	73	63	37	58	32.80	cps
Ytterbium	172-1	63	67	53	61	11.36	cps
Ytterbium	172-2	27	27	7	20	57.73	cps
Ytterbium	176-1	1010	1203	1273	1162	11.74	cps
Ytterbium	176-2	283	377	370	343	15.17	cps
Yttrium	89-1	13821694	13637241	13706532	13721822	0.68	cps
Yttrium	89-2	1059600	1062577	1056434	1059537	0.29	cps
Zinc	66-2	1593	1613	1643	1617	1.56	cps
Zirconium	90-1	3584	3280	3050	3305	8.10	cps
Zirconium	91-1	787	767	660	738	9.23	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P8
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:47:27	DataFile Name :	024LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2347	2370	2140	2286	5.54	cps
Antimony	121-1	53735	54913	55392	54680	1.56	cps
Arsenic	75-2	550	693	627	623	11.51	cps
Barium	135-1	64727	65032	65893	65217	0.93	cps
Barium	137-1	114365	113887	113760	114004	0.28	cps
Beryllium	9-1	6909	7092	6967	6989	1.34	cps
Bismuth	209-1	5554383	5571758	5491527	5539223	0.76	cps
Bismuth	209-2	2668271	2588992	2601785	2619683	1.62	cps
Bromine	81-1	31639	31846	31733	31739	0.33	cps
Cadmium	108-1	543	510	593	549	7.64	cps
Cadmium	106-1	5688	5448	5678	5605	2.42	cps
Cadmium	111-1	10410	10545	10568	10507	0.81	cps
Calcium	43-1	44074	44331	44853	44419	0.89	cps
Calcium	44-1	736646	739116	743631	739798	0.48	cps
Carbon	12-1	3322393	3266304	3268798	3285832	0.96	cps
Carbon	12-2	22237	22761	22728	22575	1.30	cps
Chlorine	35-1	1170384	1123164	1080704	1124750	3.99	cps
Chlorine	35-2	4361	4251	4111	4241	2.96	cps
Chromium	52-2	13143	13436	13213	13264	1.16	cps
Cobalt	59-2	12155	11745	12142	12014	1.94	cps
Copper	63-2	21480	20822	20488	20930	2.41	cps
Dysprosium	156-1	17	20	7	14	48.02	cps
Dysprosium	156-2	0	7	0	2	173.21	cps
Erbium	164-1	60	70	77	69	12.18	cps
Erbium	164-2	20	33	30	28	24.98	cps
Gadolinium	160-1	80	123	123	109	22.98	cps
Gadolinium	160-2	10	20	33	21	55.45	cps
Holmium	165-1	8944210	9008932	9080615	9011252	0.76	cps
Holmium	165-2	3640089	3619641	3599470	3619733	0.56	cps
Indium	115-1	7667381	7835349	7857057	7786596	1.33	cps
Indium	115-2	854026	853815	850682	852841	0.22	cps
Iron	54-2	13853	13663	13306	13608	2.04	cps
Iron	56-2	242126	242423	241942	242164	0.10	cps
Iron	57-2	5905	6295	6128	6109	3.20	cps
Krypton	83-1	280	273	263	272	3.08	cps
Lead	206-1	21615	21010	21515	21380	1.51	cps

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P8
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:47:27	DataFile Name :	024LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	18560	18944	19054	18853	1.38	cps
Lead	208-1	85136	85320	86149	85535	0.63	cps
Lithium	6-1	2560651	2515224	2512877	2529584	1.06	cps
Magnesium	24-2	177020	176222	174748	175996	0.66	cps
Manganese	55-2	5308	5134	5361	5268	2.25	cps
Molybdenum	94-1	57729	57742	57960	57810	0.22	cps
Molybdenum	95-1	67955	68290	70457	68901	1.97	cps
Molybdenum	96-1	77441	78849	78229	78173	0.90	cps
Molybdenum	97-1	43565	43822	43431	43606	0.46	cps
Molybdenum	98-1	111631	111594	112095	111773	0.25	cps
Neodymium	150-1	23	10	27	20	44.10	cps
Neodymium	150-2	0	3	0	1	173.21	cps
Nickel	60-2	3854	3714	3691	3753	2.35	cps
Phosphorus	31-2	203	263	210	226	14.58	cps
Potassium	39-2	128412	129219	130349	129326	0.75	cps
Rhodium	103-1	7126960	7287977	7292913	7235950	1.30	cps
Rhodium	103-2	3126141	3179000	3140388	3148510	0.87	cps
Scandium	45-1	4940976	5083428	4949621	4991342	1.60	cps
Scandium	45-2	101291	102925	102089	102102	0.80	cps
Selenium	82-1	1914	2144	2200	2086	7.28	cps
Selenium	77-2	57	50	20	42	46.26	cps
Selenium	78-2	123	153	180	152	18.62	cps
Silicon	28-1	631372	577692	590547	599870	4.67	cps
Silver	107-1	33868	33658	34460	33995	1.22	cps
Silver	109-1	32325	32254	33036	32538	1.33	cps
Sodium	23-2	375902	376689	377132	376574	0.17	cps
Strontium	86-1	9083	9337	9427	9282	1.92	cps
Strontium	88-1	78630	79739	79883	79417	0.86	cps
Sulfur	34-1	551663	555850	554468	553994	0.39	cps
Terbium	159-1	9466562	9496553	9459218	9474111	0.21	cps
Terbium	159-2	3476862	3549802	3514108	3513591	1.04	cps
Thallium	203-1	24957	24446	25047	24817	1.31	cps
Thallium	205-1	58310	59502	60135	59316	1.56	cps
Tin	118-1	113066	115199	114863	114376	1.00	cps
Titanium	47-1	19674	20034	19877	19862	0.91	cps
Uranium	238-1	72468	74409	72532	73137	1.51	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P8
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:47:27	DataFile Name :	024LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	22635	23102	23029	22922	1.10	cps
Ytterbium	172-1	63	80	50	64	23.32	cps
Ytterbium	172-2	33	13	23	23	42.86	cps
Ytterbium	176-1	1297	1263	1477	1346	8.53	cps
Ytterbium	176-2	377	350	363	363	3.67	cps
Yttrium	89-1	13955622	13810625	13876233	13880827	0.52	cps
Yttrium	89-2	1060869	1063508	1062866	1062415	0.13	cps
Zinc	66-2	6488	6542	6595	6542	0.82	cps
Zirconium	90-1	51167	50668	49909	50581	1.25	cps
Zirconium	91-1	11064	11385	11195	11215	1.44	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-02	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-TANK-041525	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:50:49	DataFile Name :	025AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2904	2807	2727	2813	3.15	cps
Antimony	121-1	2140	2064	2070	2091	2.03	cps
Arsenic	75-2	130	113	140	128	10.54	cps
Barium	135-1	159954	161760	160081	160599	0.63	cps
Barium	137-1	279373	277272	279767	278804	0.48	cps
Beryllium	9-1	145	167	140	151	9.72	cps
Bismuth	209-1	5789075	5667527	5611610	5689404	1.59	cps
Bismuth	209-2	2656169	2663048	2679310	2666175	0.45	cps
Bromine	81-1	58652	63319	64956	62309	5.25	cps
Cadmium	108-1	17	27	20	21	24.12	cps
Cadmium	106-1	4964	4861	4874	4900	1.15	cps
Cadmium	111-1	3523	3451	3485	3486	1.04	cps
Calcium	43-1	2071812	2115869	2094343	2094008	1.05	cps
Calcium	44-1	33998040	34204860	33912604	34038502	0.44	cps
Carbon	12-1	5517979	6029187	6422782	5989983	7.57	cps
Carbon	12-2	47600	48169	49232	48334	1.71	cps
Chlorine	35-1	4872159	5321485	5537715	5243786	6.47	cps
Chlorine	35-2	25045	26411	25943	25800	2.69	cps
Chromium	52-2	2907	2587	2540	2678	7.45	cps
Cobalt	59-2	513	463	497	491	5.18	cps
Copper	63-2	179237	179776	179766	179593	0.17	cps
Dysprosium	156-1	90	113	80	94	18.11	cps
Dysprosium	156-2	27	23	23	24	7.89	cps
Erbium	164-1	103	107	130	113	12.82	cps
Erbium	164-2	37	27	50	38	30.98	cps
Gadolinium	160-1	153	120	163	146	15.59	cps
Gadolinium	160-2	47	53	33	44	22.92	cps
Holmium	165-1	9380404	9314525	9403050	9365993	0.49	cps
Holmium	165-2	3742237	3760155	3764292	3755561	0.31	cps
Indium	115-1	8062229	8017726	7985737	8021897	0.48	cps
Indium	115-2	875234	875341	872326	874300	0.20	cps
Iron	54-2	7869	7806	7585	7753	1.92	cps
Iron	56-2	137821	139564	138595	138660	0.63	cps
Iron	57-2	3704	3577	3631	3637	1.75	cps
Krypton	83-1	320	287	293	300	5.88	cps
Lead	206-1	5795	5631	5271	5566	4.81	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-02	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-TANK-041525	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:50:49	DataFile Name :	025AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	4681	4441	4548	4556	2.64	cps
Lead	208-1	22575	21471	20730	21592	4.30	cps
Lithium	6-1	2586881	2561184	2595885	2581317	0.70	cps
Magnesium	24-2	2263244	2249990	2197088	2236774	1.56	cps
Manganese	55-2	14958	14891	15235	15028	1.21	cps
Molybdenum	94-1	2470	2287	2457	2405	4.25	cps
Molybdenum	95-1	3227	2787	3010	3008	7.32	cps
Molybdenum	96-1	3430	3417	3427	3425	0.20	cps
Molybdenum	97-1	1873	1957	1953	1928	2.45	cps
Molybdenum	98-1	4868	5151	5124	5048	3.10	cps
Neodymium	150-1	97	100	90	96	5.33	cps
Neodymium	150-2	10	20	13	14	35.26	cps
Nickel	60-2	4541	4481	4324	4449	2.52	cps
Phosphorus	31-2	180	90	143	138	32.85	cps
Potassium	39-2	582179	586643	583009	583943	0.41	cps
Rhodium	103-1	7323326	7425307	7343781	7364138	0.73	cps
Rhodium	103-2	3198130	3137990	3115552	3150557	1.36	cps
Scandium	45-1	5043317	5132915	5164956	5113729	1.23	cps
Scandium	45-2	105819	106994	106148	106320	0.57	cps
Selenium	82-1	47	30	147	74	84.77	cps
Selenium	77-2	3	7	0	3	100.05	cps
Selenium	78-2	27	30	20	26	19.92	cps
Silicon	28-1	32599786	32564535	32703048	32622456	0.22	cps
Silver	107-1	663	607	533	601	10.84	cps
Silver	109-1	517	467	517	500	5.77	cps
Sodium	23-2	13814536	13672094	13794487	13760372	0.56	cps
Strontium	86-1	857527	854289	849157	853657	0.49	cps
Strontium	88-1	7887812	7696505	7730531	7771616	1.31	cps
Sulfur	34-1	1135768	1117025	1122288	1125027	0.86	cps
Terbium	159-1	9660724	9799438	9732130	9730764	0.71	cps
Terbium	159-2	3694020	3603507	3604000	3633842	1.43	cps
Thallium	203-1	987	937	850	924	7.48	cps
Thallium	205-1	2774	2297	2074	2381	15.02	cps
Tin	118-1	29769	29031	29632	29477	1.33	cps
Titanium	47-1	1687	1677	1743	1702	2.11	cps
Uranium	238-1	873	880	887	880	0.76	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-02	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-TANK-041525	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:50:49	DataFile Name :	025AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	540	533	533	536	0.72	cps
Ytterbium	172-1	117	97	97	103	11.17	cps
Ytterbium	172-2	43	50	67	53	22.54	cps
Ytterbium	176-1	1330	1327	1387	1348	2.50	cps
Ytterbium	176-2	323	363	397	361	10.17	cps
Yttrium	89-1	14291158	14537616	14212080	14346951	1.18	cps
Yttrium	89-2	1091068	1092313	1095658	1093013	0.22	cps
Zinc	66-2	16780	16793	16927	16833	0.48	cps
Zirconium	90-1	2020	1800	1804	1875	6.73	cps
Zirconium	91-1	537	370	330	412	26.59	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-03	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-PUMP-04152	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:54:06	DataFile Name :	026AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3130	3330	3404	3288	4.30	cps
Antimony	121-1	4351	4337	4057	4248	3.90	cps
Arsenic	75-2	237	263	220	240	9.11	cps
Barium	135-1	165608	168770	166295	166891	1.00	cps
Barium	137-1	289875	292120	289593	290530	0.48	cps
Beryllium	9-1	115	145	140	133	12.06	cps
Bismuth	209-1	5593238	5721685	5686622	5667181	1.17	cps
Bismuth	209-2	2655203	2693305	2609236	2652581	1.59	cps
Bromine	81-1	60751	64856	65502	63703	4.04	cps
Cadmium	108-1	13	20	23	19	26.96	cps
Cadmium	106-1	4918	4974	4788	4893	1.96	cps
Cadmium	111-1	3496	3535	3372	3468	2.46	cps
Calcium	43-1	2155106	2146096	2148457	2149886	0.22	cps
Calcium	44-1	34658926	34801908	34767598	34742811	0.21	cps
Carbon	12-1	6131010	6628392	6822340	6527247	5.46	cps
Carbon	12-2	49717	50416	51088	50407	1.36	cps
Chlorine	35-1	5259020	5624965	5818818	5567601	5.11	cps
Chlorine	35-2	26424	26678	27329	26810	1.74	cps
Chromium	52-2	3074	3237	3277	3196	3.37	cps
Cobalt	59-2	667	670	633	657	3.09	cps
Copper	63-2	128212	131351	129794	129786	1.21	cps
Dysprosium	156-1	107	83	103	98	12.91	cps
Dysprosium	156-2	37	43	17	32	43.06	cps
Erbium	164-1	137	130	167	144	13.52	cps
Erbium	164-2	53	30	33	39	32.45	cps
Gadolinium	160-1	177	143	167	162	10.54	cps
Gadolinium	160-2	53	60	53	56	6.93	cps
Holmium	165-1	9357520	9226625	9385235	9323127	0.91	cps
Holmium	165-2	3669884	3772013	3627011	3689636	2.02	cps
Indium	115-1	7909909	7874518	7913285	7899237	0.27	cps
Indium	115-2	864503	883415	845933	864617	2.17	cps
Iron	54-2	141345	141930	139951	141075	0.72	cps
Iron	56-2	2808821	2714422	2725798	2749680	1.87	cps
Iron	57-2	66280	65707	65617	65868	0.55	cps
Krypton	83-1	270	327	247	281	14.63	cps
Lead	206-1	4087	3934	3947	3990	2.13	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-03	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-PUMP-04152	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:54:06	DataFile Name :	026AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3484	3537	3357	3459	2.67	cps
Lead	208-1	15964	15954	15834	15917	0.45	cps
Lithium	6-1	2584659	2558961	2577856	2573825	0.52	cps
Magnesium	24-2	2288236	2216663	2287306	2264068	1.81	cps
Manganese	55-2	43800	43804	42945	43516	1.14	cps
Molybdenum	94-1	2690	2667	2657	2671	0.64	cps
Molybdenum	95-1	3157	3174	3144	3158	0.48	cps
Molybdenum	96-1	3671	3737	3647	3685	1.27	cps
Molybdenum	97-1	1963	2077	1997	2012	2.89	cps
Molybdenum	98-1	4964	5078	5111	5051	1.52	cps
Neodymium	150-1	80	70	90	80	12.50	cps
Neodymium	150-2	23	40	27	30	29.40	cps
Nickel	60-2	2884	2970	2800	2885	2.95	cps
Phosphorus	31-2	177	187	120	161	22.32	cps
Potassium	39-2	596143	592748	597587	595493	0.42	cps
Rhodium	103-1	7278871	7306955	7465678	7350501	1.37	cps
Rhodium	103-2	3149735	3215073	3047221	3137343	2.70	cps
Scandium	45-1	5107975	5124634	5040328	5090979	0.88	cps
Scandium	45-2	104429	107210	102260	104633	2.37	cps
Selenium	82-1	77	17	163	86	86.19	cps
Selenium	77-2	0	7	0	2	173.21	cps
Selenium	78-2	40	20	30	30	33.33	cps
Silicon	28-1	33011270	32631353	32146533	32596385	1.33	cps
Silver	107-1	387	423	407	406	4.53	cps
Silver	109-1	380	350	297	342	12.33	cps
Sodium	23-2	14400463	14146408	14429154	14325341	1.09	cps
Strontium	86-1	868138	862567	862215	864307	0.38	cps
Strontium	88-1	7754495	7870524	7698074	7774364	1.13	cps
Sulfur	34-1	1194219	1197763	1195283	1195755	0.15	cps
Terbium	159-1	9647361	9608358	9631368	9629029	0.20	cps
Terbium	159-2	3615168	3647067	3529692	3597309	1.69	cps
Thallium	203-1	680	717	743	713	4.46	cps
Thallium	205-1	1984	1894	1787	1888	5.22	cps
Tin	118-1	55023	54454	55371	54950	0.84	cps
Titanium	47-1	1873	1807	1933	1871	3.39	cps
Uranium	238-1	913	887	967	922	4.42	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-03	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-PUMP-04152	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:54:06	DataFile Name :	026AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	687	623	570	627	9.32	cps
Ytterbium	172-1	130	113	113	119	8.09	cps
Ytterbium	172-2	53	40	40	44	17.32	cps
Ytterbium	176-1	1297	1473	1360	1377	6.50	cps
Ytterbium	176-2	300	270	327	299	9.48	cps
Yttrium	89-1	14291602	14255583	14026328	14191171	1.01	cps
Yttrium	89-2	1080365	1102655	1056429	1079816	2.14	cps
Zinc	66-2	44908	44048	43807	44254	1.31	cps
Zirconium	90-1	2224	2184	2197	2201	0.93	cps
Zirconium	91-1	493	450	460	468	4.85	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BL	Instrumnet Name :	P8
Client Sample ID :	PB167612BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:57:20	DataFile Name :	027CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	427	390	353	390	9.40	cps
Antimony	121-1	257	283	243	261	7.80	cps
Arsenic	75-2	3	7	0	3	100.05	cps
Barium	135-1	117	140	157	138	14.58	cps
Barium	137-1	230	213	213	219	4.40	cps
Beryllium	9-1	102	105	116	107	6.82	cps
Bismuth	209-1	5514727	5511482	5545979	5524063	0.34	cps
Bismuth	209-2	2564038	2601391	2611857	2592429	0.97	cps
Bromine	81-1	32080	32481	32464	32342	0.70	cps
Cadmium	108-1	27	13	7	16	65.47	cps
Cadmium	106-1	4721	4844	4834	4800	1.43	cps
Cadmium	111-1	3363	3438	3439	3413	1.29	cps
Calcium	43-1	990	843	947	927	8.13	cps
Calcium	44-1	29524	28705	28368	28866	2.06	cps
Carbon	12-1	3857108	3714675	3620930	3730904	3.19	cps
Carbon	12-2	25105	24180	24307	24530	2.04	cps
Chlorine	35-1	1027725	960162	890411	959432	7.16	cps
Chlorine	35-2	3550	3274	3300	3375	4.52	cps
Chromium	52-2	1103	1110	1127	1113	1.08	cps
Cobalt	59-2	63	63	77	68	11.36	cps
Copper	63-2	2020	1930	1913	1955	2.94	cps
Dysprosium	156-1	10	17	3	10	66.70	cps
Dysprosium	156-2	3	0	0	1	173.21	cps
Erbium	164-1	73	83	50	69	24.83	cps
Erbium	164-2	13	17	23	18	28.64	cps
Gadolinium	160-1	83	140	73	99	36.36	cps
Gadolinium	160-2	20	13	23	19	26.96	cps
Holmium	165-1	8916000	9054425	9013542	8994655	0.79	cps
Holmium	165-2	3541229	3494126	3594169	3543175	1.41	cps
Indium	115-1	7825814	7706334	7648322	7726823	1.17	cps
Indium	115-2	841992	840428	846840	843087	0.40	cps
Iron	54-2	883	860	787	843	5.98	cps
Iron	56-2	9763	9700	10090	9851	2.13	cps
Iron	57-2	270	283	253	269	5.59	cps
Krypton	83-1	310	313	237	287	15.12	cps
Lead	206-1	1417	1320	1413	1383	3.97	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BL	Instrumnet Name :	P8
Client Sample ID :	PB167612BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:57:20	DataFile Name :	027CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1247	1073	1223	1181	7.96	cps
Lead	208-1	5674	5281	5664	5539	4.05	cps
Lithium	6-1	2464111	2516455	2498844	2493137	1.07	cps
Magnesium	24-2	580	553	657	597	8.99	cps
Manganese	55-2	2567	2564	2487	2539	1.78	cps
Molybdenum	94-1	750	773	783	769	2.22	cps
Molybdenum	95-1	287	307	300	298	3.42	cps
Molybdenum	96-1	460	387	370	406	11.81	cps
Molybdenum	97-1	203	170	167	180	11.27	cps
Molybdenum	98-1	450	403	470	441	7.75	cps
Neodymium	150-1	17	0	13	10	88.20	cps
Neodymium	150-2	0	3	0	1	173.21	cps
Nickel	60-2	653	667	670	663	1.33	cps
Phosphorus	31-2	123	103	80	102	21.22	cps
Potassium	39-2	17574	17471	17164	17403	1.23	cps
Rhodium	103-1	7220964	7298804	7202159	7240643	0.71	cps
Rhodium	103-2	3055815	3075943	3118422	3083393	1.04	cps
Scandium	45-1	4878536	4948134	4855224	4893964	0.99	cps
Scandium	45-2	101025	100897	101146	101023	0.12	cps
Selenium	82-1	-40	-53	60	-11	-557.54	cps
Selenium	77-2	3	0	0	1	173.21	cps
Selenium	78-2	20	20	7	16	49.47	cps
Silicon	28-1	529184	493912	486655	503250	4.52	cps
Silver	107-1	313	323	383	340	11.13	cps
Silver	109-1	223	203	240	222	8.26	cps
Sodium	23-2	35446	34544	34347	34779	1.69	cps
Strontium	86-1	573	590	533	566	5.15	cps
Strontium	88-1	820	730	707	752	7.96	cps
Sulfur	34-1	589237	588822	583963	587341	0.50	cps
Terbium	159-1	9110531	9243696	9319526	9224584	1.15	cps
Terbium	159-2	3464362	3434398	3497720	3465493	0.91	cps
Thallium	203-1	623	600	600	608	2.22	cps
Thallium	205-1	1497	1410	1517	1475	3.85	cps
Tin	118-1	3447	3571	3711	3576	3.69	cps
Titanium	47-1	220	253	210	228	9.96	cps
Uranium	238-1	173	217	187	192	11.55	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BL	Instrumnet Name :	P8
Client Sample ID :	PB167612BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:57:20	DataFile Name :	027CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	40	10	20	23	65.47	cps
Ytterbium	172-1	40	53	53	49	15.74	cps
Ytterbium	172-2	33	23	30	29	17.63	cps
Ytterbium	176-1	1203	1230	1240	1225	1.55	cps
Ytterbium	176-2	287	330	320	312	7.27	cps
Yttrium	89-1	13746251	13740709	13762156	13749705	0.08	cps
Yttrium	89-2	1040205	1051524	1051922	1047884	0.63	cps
Zinc	66-2	1560	1630	1570	1587	2.39	cps
Zirconium	90-1	1687	1874	1927	1829	6.89	cps
Zirconium	91-1	400	447	357	401	11.22	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BS	Instrumnet Name :	P8
Client Sample ID :	PB167612BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:00:45	DataFile Name :	028LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	937894	935302	944314	939170	0.49	cps
Antimony	121-1	13598602	13719423	14247182	13855069	2.49	cps
Arsenic	75-2	295378	296876	295270	295841	0.30	cps
Barium	135-1	16097805	16546623	16721392	16455273	1.95	cps
Barium	137-1	28487295	28866387	28485324	28613002	0.77	cps
Beryllium	9-1	3129772	3218216	3141240	3163076	1.52	cps
Bismuth	209-1	5272432	5275266	5219466	5255722	0.60	cps
Bismuth	209-2	2405817	2396668	2399290	2400592	0.20	cps
Bromine	81-1	31041	31255	30570	30955	1.13	cps
Cadmium	108-1	262080	267469	265421	264990	1.03	cps
Cadmium	106-1	380921	384623	382784	382776	0.48	cps
Cadmium	111-1	3391157	3544369	3508396	3481307	2.30	cps
Calcium	43-1	4211609	4271226	4271128	4251321	0.81	cps
Calcium	44-1	69698266	69666982	70054422	69806557	0.31	cps
Carbon	12-1	4105254	4240502	4329506	4225088	2.67	cps
Carbon	12-2	31978	32112	32476	32189	0.80	cps
Chlorine	35-1	671404	666750	663471	667208	0.60	cps
Chlorine	35-2	2624	2537	2634	2598	2.05	cps
Chromium	52-2	3002079	2980912	2992304	2991765	0.35	cps
Cobalt	59-2	5505042	5578301	5607770	5563704	0.95	cps
Copper	63-2	41962702	42810369	43009109	42594060	1.30	cps
Dysprosium	156-1	337	313	287	312	8.01	cps
Dysprosium	156-2	30	67	53	50	37.12	cps
Erbium	164-1	217	193	260	223	15.15	cps
Erbium	164-2	97	63	80	80	20.84	cps
Gadolinium	160-1	157	233	197	196	19.61	cps
Gadolinium	160-2	67	50	67	61	15.75	cps
Holmium	165-1	8721833	8923438	8875227	8840166	1.19	cps
Holmium	165-2	3485630	3454837	3470224	3470230	0.44	cps
Indium	115-1	7124741	7241726	7256796	7207754	1.00	cps
Indium	115-2	740942	748452	757309	748901	1.09	cps
Iron	54-2	6102729	6072683	6089829	6088414	0.25	cps
Iron	56-2	110145755	111756145	112786392	111562764	1.19	cps
Iron	57-2	2804471	2880846	2881023	2855446	1.55	cps
Krypton	83-1	327	303	297	309	5.10	cps
Lead	206-1	48045458	49651083	49597574	49098038	1.86	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BS	Instrumnet Name :	P8
Client Sample ID :	PB167612BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:00:45	DataFile Name :	028LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	41805409	42783791	42585807	42391669	1.22	cps
Lead	208-1	193798862	197031232	197163240	195997778	0.97	cps
Lithium	6-1	2452749	2456713	2387623	2432362	1.59	cps
Magnesium	24-2	16427844	16263211	16823023	16504693	1.74	cps
Manganese	55-2	12632245	12670968	12636401	12646538	0.17	cps
Molybdenum	94-1	48429044	48644901	48713553	48595833	0.31	cps
Molybdenum	95-1	68608686	71006787	70207247	69940907	1.75	cps
Molybdenum	96-1	74747651	77200546	77370836	76439677	1.92	cps
Molybdenum	97-1	43129524	42917159	43955156	43333947	1.27	cps
Molybdenum	98-1	113247105	113725525	114550878	113841169	0.58	cps
Neodymium	150-1	1170	1243	1313	1242	5.77	cps
Neodymium	150-2	60	53	70	61	13.73	cps
Nickel	60-2	1555273	1593758	1572909	1573980	1.22	cps
Phosphorus	31-2	47083	46712	47451	47082	0.78	cps
Potassium	39-2	5657726	5638865	5683273	5659954	0.39	cps
Rhodium	103-1	6659603	6621421	6799087	6693370	1.40	cps
Rhodium	103-2	2835017	2898605	2892846	2875489	1.22	cps
Scandium	45-1	4743957	4851856	4785528	4793780	1.14	cps
Scandium	45-2	100065	99679	100642	100129	0.48	cps
Selenium	82-1	198932	202360	203699	201664	1.22	cps
Selenium	77-2	3844	3611	4031	3828	5.50	cps
Selenium	78-2	13009	13193	12903	13035	1.13	cps
Silicon	28-1	26341337	26138454	26326019	26268603	0.43	cps
Silver	107-1	17203052	17790798	17474041	17489297	1.68	cps
Silver	109-1	16099010	16602940	17067030	16589660	2.92	cps
Sodium	23-2	32626926	32749595	33257270	32877930	1.02	cps
Strontium	86-1	4490807	4448425	4576752	4505328	1.45	cps
Strontium	88-1	38438724	38333138	39762503	38844788	2.05	cps
Sulfur	34-1	1591692	1576065	1564253	1577337	0.87	cps
Terbium	159-1	9030168	9125853	9346416	9167479	1.77	cps
Terbium	159-2	3448832	3398813	3396422	3414689	0.87	cps
Thallium	203-1	11813579	12146838	12128601	12029673	1.56	cps
Thallium	205-1	28950760	28939146	29369544	29086483	0.84	cps
Tin	118-1	11313044	11407494	11544093	11421543	1.02	cps
Titanium	47-1	19160679	19272456	19262768	19231968	0.32	cps
Uranium	238-1	38083964	38401006	37702069	38062347	0.92	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BS	Instrumnet Name :	P8
Client Sample ID :	PB167612BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:00:45	DataFile Name :	028LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2248966	2267202	2325143	2280437	1.74	cps
Ytterbium	172-1	280	243	257	260	7.14	cps
Ytterbium	172-2	103	147	87	112	27.60	cps
Ytterbium	176-1	57344	57581	57561	57496	0.23	cps
Ytterbium	176-2	22319	22486	22589	22465	0.61	cps
Yttrium	89-1	13228812	12966531	13483806	13226383	1.96	cps
Yttrium	89-2	997852	1008801	1019182	1008612	1.06	cps
Zinc	66-2	4772836	4744376	4761952	4759722	0.30	cps
Zirconium	90-1	24509625	24396107	24530931	24478888	0.30	cps
Zirconium	91-1	5416461	5463075	5428530	5436022	0.45	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P8
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:03:26	DataFile Name :	029AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4680519	4791903	4720709	4731044	1.19	cps
Antimony	121-1	12891878	13214391	13304895	13137055	1.65	cps
Arsenic	75-2	285351	286577	287805	286578	0.43	cps
Barium	135-1	15974988	16128729	16273040	16125586	0.92	cps
Barium	137-1	27366225	27838408	27764960	27656531	0.92	cps
Beryllium	9-1	2956395	2961776	2970540	2962904	0.24	cps
Bismuth	209-1	4803948	4853318	4743731	4800332	1.14	cps
Bismuth	209-2	2195726	2217683	2234049	2215820	0.87	cps
Bromine	81-1	30941	31582	31759	31428	1.37	cps
Cadmium	108-1	240414	245466	246290	244057	1.30	cps
Cadmium	106-1	349924	359976	361352	357084	1.75	cps
Cadmium	111-1	3160576	3212339	3200906	3191274	0.85	cps
Calcium	43-1	19633022	20359529	19936121	19976224	1.83	cps
Calcium	44-1	326162135	331803802	329324222	329096720	0.86	cps
Carbon	12-1	4110483	4293726	4320346	4241518	2.69	cps
Carbon	12-2	35426	35734	35770	35643	0.53	cps
Chlorine	35-1	549654	556210	553825	553230	0.60	cps
Chlorine	35-2	2194	2300	2440	2311	5.35	cps
Chromium	52-2	2937461	2990206	2966537	2964735	0.89	cps
Cobalt	59-2	5261991	5302560	5276196	5280249	0.39	cps
Copper	63-2	39811009	39267869	38944633	39341171	1.11	cps
Dysprosium	156-1	597	753	720	690	11.96	cps
Dysprosium	156-2	143	180	177	167	12.16	cps
Erbium	164-1	680	643	593	639	6.81	cps
Erbium	164-2	223	250	287	253	12.55	cps
Gadolinium	160-1	493	457	510	487	5.61	cps
Gadolinium	160-2	230	223	183	212	11.89	cps
Holmium	165-1	8473708	8556777	8476793	8502426	0.55	cps
Holmium	165-2	3424027	3461524	3403283	3429611	0.86	cps
Indium	115-1	6674613	6629775	6638401	6647596	0.36	cps
Indium	115-2	726796	719652	723224	723224	0.49	cps
Iron	54-2	28630328	28476922	28496416	28534555	0.29	cps
Iron	56-2	528314739	534533432	536596499	533148223	0.81	cps
Iron	57-2	13090727	13494102	13398416	13327748	1.58	cps
Krypton	83-1	317	370	417	368	13.61	cps
Lead	206-1	45618726	47392239	46340343	46450436	1.92	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P8
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:03:26	DataFile Name :	029AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	38502446	39607431	39600024	39236634	1.62	cps
Lead	208-1	179523911	182954966	182978921	181819266	1.09	cps
Lithium	6-1	2246125	2289809	2296372	2277435	1.20	cps
Magnesium	24-2	78451406	79787772	79358460	79199213	0.86	cps
Manganese	55-2	12300376	12510579	12379908	12396954	0.86	cps
Molybdenum	94-1	46412599	46634511	46294474	46447195	0.37	cps
Molybdenum	95-1	66741692	68111951	67936386	67596676	1.10	cps
Molybdenum	96-1	72831417	74560234	75684697	74358783	1.93	cps
Molybdenum	97-1	41108701	42220114	42558818	41962544	1.81	cps
Molybdenum	98-1	107816055	109856452	109161968	108944825	0.95	cps
Neodymium	150-1	1323	1357	1350	1343	1.31	cps
Neodymium	150-2	80	93	90	88	7.90	cps
Nickel	60-2	1357672	1367000	1359192	1361288	0.37	cps
Phosphorus	31-2	46916	47183	47337	47145	0.45	cps
Potassium	39-2	27865920	27399185	27322833	27529313	1.07	cps
Rhodium	103-1	6061833	6238595	6141637	6147355	1.44	cps
Rhodium	103-2	2677054	2656663	2681237	2671651	0.49	cps
Scandium	45-1	4536426	4559541	4604073	4566680	0.75	cps
Scandium	45-2	98860	99290	98964	99038	0.23	cps
Selenium	82-1	186423	188883	189728	188345	0.91	cps
Selenium	77-2	3560	3707	3574	3614	2.24	cps
Selenium	78-2	13026	12432	12646	12701	2.37	cps
Silicon	28-1	25929843	26240610	26195165	26121872	0.64	cps
Silver	107-1	15585690	15983089	16172358	15913713	1.88	cps
Silver	109-1	14857765	14848334	15133284	14946461	1.08	cps
Sodium	23-2	157911768	158359844	159365568	158545727	0.47	cps
Strontium	86-1	4278129	4396824	4403932	4359629	1.62	cps
Strontium	88-1	37740809	38606050	38784023	38376961	1.45	cps
Sulfur	34-1	1520049	1493417	1500036	1504501	0.92	cps
Terbium	159-1	8749949	8668425	8785688	8734687	0.69	cps
Terbium	159-2	3317352	3310253	3308939	3312181	0.14	cps
Thallium	203-1	11368714	11587160	11359547	11438474	1.13	cps
Thallium	205-1	26932945	27431373	26963139	27109152	1.03	cps
Tin	118-1	10556111	10651591	10667652	10625118	0.57	cps
Titanium	47-1	18091568	18690172	18718511	18500084	1.91	cps
Uranium	238-1	36108512	35971444	36038936	36039631	0.19	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P8
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:03:26	DataFile Name :	029AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2251459	2214721	2248773	2238318	0.91	cps
Ytterbium	172-1	893	947	910	917	2.98	cps
Ytterbium	172-2	453	423	423	433	4.00	cps
Ytterbium	176-1	55613	57494	57484	56864	1.91	cps
Ytterbium	176-2	22145	21841	22212	22066	0.90	cps
Yttrium	89-1	12587789	12963949	12935051	12828930	1.63	cps
Yttrium	89-2	998407	1001556	1000094	1000019	0.16	cps
Zinc	66-2	4499049	4452788	4510347	4487394	0.68	cps
Zirconium	90-1	23484935	23828572	23466168	23593225	0.86	cps
Zirconium	91-1	5186041	5263710	5272871	5240874	0.91	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P8
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:07:44	DataFile Name :	030AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	390	393	337	373	8.52	cps
Antimony	121-1	2560	2270	1944	2258	13.67	cps
Arsenic	75-2	17	17	17	17	0.00	cps
Barium	135-1	420	287	300	336	21.88	cps
Barium	137-1	613	567	513	564	8.86	cps
Beryllium	9-1	423	376	325	375	13.11	cps
Bismuth	209-1	5674993	5609831	5692211	5659012	0.77	cps
Bismuth	209-2	2602810	2627055	2675444	2635103	1.40	cps
Bromine	81-1	31225	31766	31362	31451	0.89	cps
Cadmium	108-1	33	40	23	32	26.04	cps
Cadmium	106-1	4554	4958	4644	4719	4.49	cps
Cadmium	111-1	3355	3592	3415	3454	3.58	cps
Calcium	43-1	1230	1197	1133	1187	4.14	cps
Calcium	44-1	31478	31201	30893	31191	0.94	cps
Carbon	12-1	3519389	3448143	3414725	3460752	1.54	cps
Carbon	12-2	23549	23258	23445	23418	0.63	cps
Chlorine	35-1	400415	392578	389436	394143	1.43	cps
Chlorine	35-2	1613	1613	1600	1609	0.48	cps
Chromium	52-2	1100	1247	1247	1198	7.07	cps
Cobalt	59-2	197	163	160	173	11.70	cps
Copper	63-2	2554	2647	2527	2576	2.45	cps
Dysprosium	156-1	23	13	13	17	34.65	cps
Dysprosium	156-2	7	0	3	3	100.05	cps
Erbium	164-1	67	60	53	60	11.12	cps
Erbium	164-2	7	27	13	16	65.47	cps
Gadolinium	160-1	73	80	77	77	4.35	cps
Gadolinium	160-2	17	23	13	18	28.64	cps
Holmium	165-1	9241134	9132903	9216212	9196750	0.62	cps
Holmium	165-2	3701950	3666651	3639406	3669336	0.85	cps
Indium	115-1	7835718	7961328	7995124	7930723	1.06	cps
Indium	115-2	854892	856095	850455	853814	0.35	cps
Iron	54-2	1013	1050	1027	1030	1.80	cps
Iron	56-2	14544	14080	14197	14274	1.69	cps
Iron	57-2	400	397	373	390	3.73	cps
Krypton	83-1	263	243	260	256	4.19	cps
Lead	206-1	3157	3397	2777	3110	10.05	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P8
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:07:44	DataFile Name :	030AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2957	2847	2780	2861	3.12	cps
Lead	208-1	13306	12959	12009	12758	5.26	cps
Lithium	6-1	2505062	2561810	2466657	2511176	1.91	cps
Magnesium	24-2	1257	1040	1230	1176	10.05	cps
Manganese	55-2	2684	2817	3037	2846	6.27	cps
Molybdenum	94-1	2420	2154	2070	2215	8.26	cps
Molybdenum	95-1	1697	1627	1390	1571	10.23	cps
Molybdenum	96-1	2214	1823	1687	1908	14.33	cps
Molybdenum	97-1	1040	893	770	901	15.00	cps
Molybdenum	98-1	2914	2314	2320	2516	13.70	cps
Neodymium	150-1	13	20	13	16	24.76	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	573	667	707	649	10.54	cps
Phosphorus	31-2	123	127	113	121	5.73	cps
Potassium	39-2	18252	17524	18479	18085	2.76	cps
Rhodium	103-1	7376541	7468250	7575097	7473296	1.33	cps
Rhodium	103-2	3170266	3152588	3195925	3172926	0.69	cps
Scandium	45-1	5057408	4909468	5034237	5000371	1.59	cps
Scandium	45-2	103630	99962	104463	102685	2.33	cps
Selenium	82-1	13	100	53	56	78.08	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	23	20	13	19	26.96	cps
Silicon	28-1	495275	493042	490371	492896	0.50	cps
Silver	107-1	1210	1150	1013	1125	8.96	cps
Silver	109-1	1180	953	937	1023	13.28	cps
Sodium	23-2	41268	39921	41709	40966	2.27	cps
Strontium	86-1	653	567	600	607	7.21	cps
Strontium	88-1	1100	1127	1003	1077	6.03	cps
Sulfur	34-1	572887	568593	569686	570389	0.39	cps
Terbium	159-1	9557986	9581921	9169933	9436613	2.45	cps
Terbium	159-2	3553780	3455530	3492027	3500445	1.42	cps
Thallium	203-1	1133	1090	1053	1092	3.67	cps
Thallium	205-1	2784	2490	2387	2554	8.06	cps
Tin	118-1	3661	3934	4786	4127	14.23	cps
Titanium	47-1	527	493	503	508	3.37	cps
Uranium	238-1	847	687	650	728	14.37	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P8
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:07:44	DataFile Name :	030AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	37	40	30	36	14.32	cps
Ytterbium	172-1	20	70	27	39	69.81	cps
Ytterbium	172-2	20	43	37	33	36.05	cps
Ytterbium	176-1	1183	1253	1220	1219	2.87	cps
Ytterbium	176-2	287	303	323	304	6.03	cps
Yttrium	89-1	13908831	14205748	13999519	14038033	1.08	cps
Yttrium	89-2	1064141	1064990	1058554	1062562	0.33	cps
Zinc	66-2	1607	1743	1647	1666	4.22	cps
Zirconium	90-1	4141	4037	3821	4000	4.08	cps
Zirconium	91-1	1013	917	850	927	8.86	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P8
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 14:47:22	DataFile Name :	031CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4443385	4410485	4425160	4426343	0.37	cps
Antimony	121-1	12286551	12527978	12673321	12495950	1.56	cps
Arsenic	75-2	268875	270626	270722	270074	0.38	cps
Barium	135-1	15057687	15253198	15288316	15199734	0.82	cps
Barium	137-1	25860998	25761474	26147794	25923422	0.77	cps
Beryllium	9-1	2736721	2830300	2821089	2796037	1.84	cps
Bismuth	209-1	4570018	4623825	4552292	4582045	0.81	cps
Bismuth	209-2	2143130	2128007	2146276	2139138	0.46	cps
Bromine	81-1	30069	30259	30109	30146	0.33	cps
Cadmium	108-1	230504	232116	232204	231608	0.41	cps
Cadmium	106-1	334032	337616	340165	337271	0.91	cps
Cadmium	111-1	2978987	3036459	3011186	3008877	0.96	cps
Calcium	43-1	18389043	19115942	19215857	18906948	2.39	cps
Calcium	44-1	303063949	314583355	312928682	310191995	2.01	cps
Carbon	12-1	3929560	3967545	4096598	3997901	2.19	cps
Carbon	12-2	34019	33057	33993	33690	1.63	cps
Chlorine	35-1	217085	220947	224274	220769	1.63	cps
Chlorine	35-2	1047	1043	937	1009	6.20	cps
Chromium	52-2	2827759	2772730	2775216	2791902	1.11	cps
Cobalt	59-2	5009326	5015685	4977891	5000968	0.40	cps
Copper	63-2	37478190	37056079	37331935	37288735	0.57	cps
Dysprosium	156-1	717	663	740	707	5.56	cps
Dysprosium	156-2	190	127	177	164	20.30	cps
Erbium	164-1	517	613	630	587	10.43	cps
Erbium	164-2	230	250	213	231	7.94	cps
Gadolinium	160-1	510	463	490	488	4.80	cps
Gadolinium	160-2	203	227	183	204	10.61	cps
Holmium	165-1	8044290	8294712	8061757	8133586	1.72	cps
Holmium	165-2	3227600	3194277	3307138	3243005	1.79	cps
Indium	115-1	6323933	6411463	6375364	6370253	0.69	cps
Indium	115-2	684131	678069	684175	682125	0.51	cps
Iron	54-2	27586464	27200925	27315295	27367562	0.72	cps
Iron	56-2	509533712	496727926	509017486	505093041	1.44	cps
Iron	57-2	12742051	12880479	12787786	12803439	0.55	cps
Krypton	83-1	313	310	327	317	2.78	cps
Lead	206-1	44020866	43834603	44661089	44172186	0.98	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P8
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 14:47:22	DataFile Name :	031CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	37388368	37884579	38368789	37880579	1.29	cps
Lead	208-1	172401576	175275141	176154284	174610334	1.12	cps
Lithium	6-1	2111804	2070738	2112316	2098286	1.14	cps
Magnesium	24-2	75029571	73836506	75525109	74797062	1.16	cps
Manganese	55-2	11768827	11473296	11614742	11618955	1.27	cps
Molybdenum	94-1	43163541	43702568	44622759	43829623	1.68	cps
Molybdenum	95-1	62826266	63777637	64113806	63572570	1.05	cps
Molybdenum	96-1	69122801	68709442	70342716	69391653	1.22	cps
Molybdenum	97-1	38846540	39052793	39752101	39217145	1.21	cps
Molybdenum	98-1	100741115	102191232	103817475	102249941	1.51	cps
Neodymium	150-1	1223	1230	1197	1217	1.45	cps
Neodymium	150-2	87	83	97	89	7.81	cps
Nickel	60-2	1280746	1296624	1282365	1286578	0.68	cps
Phosphorus	31-2	44017	44612	43923	44184	0.85	cps
Potassium	39-2	27101010	26651208	26696177	26816132	0.92	cps
Rhodium	103-1	5738339	5800365	5910791	5816498	1.50	cps
Rhodium	103-2	2489056	2510690	2531798	2510515	0.85	cps
Scandium	45-1	4361315	4357581	4394689	4371195	0.47	cps
Scandium	45-2	91924	93445	93076	92815	0.85	cps
Selenium	82-1	176719	179325	179632	178559	0.90	cps
Selenium	77-2	3657	3517	3614	3596	1.99	cps
Selenium	78-2	11595	11285	12039	11639	3.26	cps
Silicon	28-1	24798175	24708440	24907675	24804764	0.40	cps
Silver	107-1	15069904	15103353	14981513	15051590	0.42	cps
Silver	109-1	14172730	14339778	14174860	14229122	0.67	cps
Sodium	23-2	151787594	148900128	150791881	150493201	0.97	cps
Strontium	86-1	4069187	4133127	4171126	4124480	1.25	cps
Strontium	88-1	35543067	36061752	36270334	35958384	1.04	cps
Sulfur	34-1	1475452	1476207	1484305	1478655	0.33	cps
Terbium	159-1	8325867	8361116	8593556	8426846	1.73	cps
Terbium	159-2	3066817	3133370	3178498	3126228	1.80	cps
Thallium	203-1	10887298	10614065	11028654	10843339	1.94	cps
Thallium	205-1	25422877	25591601	25874733	25629737	0.89	cps
Tin	118-1	10004974	10045101	10252476	10100850	1.32	cps
Titanium	47-1	17506324	17532499	17673900	17570908	0.51	cps
Uranium	238-1	34272278	35565679	34768389	34868782	1.87	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P8
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 14:47:22	DataFile Name :	031CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2090856	2121377	2099580	2103938	0.75	cps
Ytterbium	172-1	897	857	797	850	5.92	cps
Ytterbium	172-2	433	323	440	399	16.43	cps
Ytterbium	176-1	53551	53287	54050	53629	0.72	cps
Ytterbium	176-2	20833	21234	21311	21126	1.21	cps
Yttrium	89-1	11977918	12267056	12319424	12188133	1.51	cps
Yttrium	89-2	939075	936229	938662	937989	0.16	cps
Zinc	66-2	4249133	4232868	4231160	4237720	0.23	cps
Zirconium	90-1	22043951	22422566	22475392	22313970	1.05	cps
Zirconium	91-1	4900154	4946138	4997841	4948044	0.99	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P8
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 14:59:35	DataFile Name :	034CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	360	380	380	373	3.09	cps
Antimony	121-1	347	363	350	353	2.50	cps
Arsenic	75-2	7	10	10	9	21.63	cps
Barium	135-1	123	157	163	148	14.50	cps
Barium	137-1	170	213	250	211	18.97	cps
Beryllium	9-1	87	90	103	93	9.46	cps
Bismuth	209-1	5602033	5579107	5597166	5592768	0.22	cps
Bismuth	209-2	2564494	2652404	2612370	2609756	1.69	cps
Bromine	81-1	30901	31673	30690	31088	1.66	cps
Cadmium	108-1	10	7	37	18	92.48	cps
Cadmium	106-1	4651	4457	4461	4523	2.45	cps
Cadmium	111-1	3302	3152	3127	3194	2.96	cps
Calcium	43-1	860	927	850	879	4.74	cps
Calcium	44-1	26187	25520	25944	25883	1.31	cps
Carbon	12-1	3318140	3327506	3298821	3314822	0.44	cps
Carbon	12-2	22220	22354	22691	22422	1.08	cps
Chlorine	35-1	159481	159386	158598	159155	0.30	cps
Chlorine	35-2	627	677	643	649	3.92	cps
Chromium	52-2	1083	1180	1010	1091	7.81	cps
Cobalt	59-2	83	110	90	94	14.70	cps
Copper	63-2	1923	1813	1910	1882	3.19	cps
Dysprosium	156-1	13	7	7	9	43.25	cps
Dysprosium	156-2	7	3	3	4	43.40	cps
Erbium	164-1	63	60	83	69	18.32	cps
Erbium	164-2	27	23	20	23	14.29	cps
Gadolinium	160-1	73	37	63	58	32.80	cps
Gadolinium	160-2	13	30	20	21	39.75	cps
Holmium	165-1	8965809	9091543	8801303	8952885	1.63	cps
Holmium	165-2	3545385	3529352	3590031	3554923	0.88	cps
Indium	115-1	7636925	7687456	7615639	7646673	0.48	cps
Indium	115-2	834131	832374	834407	833637	0.13	cps
Iron	54-2	750	757	690	732	5.01	cps
Iron	56-2	9423	9313	9693	9477	2.06	cps
Iron	57-2	247	263	233	248	6.07	cps
Krypton	83-1	270	373	277	307	18.86	cps
Lead	206-1	1313	1147	1227	1229	6.78	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P8
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 14:59:35	DataFile Name :	034CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1133	1213	1153	1167	3.57	cps
Lead	208-1	5247	5200	5090	5179	1.55	cps
Lithium	6-1	2408720	2355916	2392026	2385554	1.13	cps
Magnesium	24-2	443	457	460	453	1.95	cps
Manganese	55-2	2454	2554	2667	2558	4.17	cps
Molybdenum	94-1	800	1582	823	1068	41.63	cps
Molybdenum	95-1	263	283	283	277	4.17	cps
Molybdenum	96-1	403	333	387	374	9.77	cps
Molybdenum	97-1	213	153	137	168	24.03	cps
Molybdenum	98-1	407	410	393	403	2.19	cps
Neodymium	150-1	10	10	3	8	49.52	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	623	607	657	629	4.05	cps
Phosphorus	31-2	133	93	100	109	19.69	cps
Potassium	39-2	15999	15709	16266	15991	1.74	cps
Rhodium	103-1	7194269	7231165	7203845	7209760	0.27	cps
Rhodium	103-2	3103545	3109006	3086567	3099706	0.38	cps
Scandium	45-1	4872655	4944330	4874859	4897281	0.83	cps
Scandium	45-2	101213	99642	99582	100146	0.92	cps
Selenium	82-1	23	-103	53	-9	-935.73	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	30	27	30	29	6.65	cps
Silicon	28-1	484727	479084	491111	484974	1.24	cps
Silver	107-1	247	273	320	280	13.26	cps
Silver	109-1	210	200	237	216	8.79	cps
Sodium	23-2	34364	33963	33215	33847	1.72	cps
Strontium	86-1	570	510	557	546	5.77	cps
Strontium	88-1	553	530	580	554	4.51	cps
Sulfur	34-1	577529	573601	576427	575852	0.35	cps
Terbium	159-1	9243533	9369771	9305400	9306235	0.68	cps
Terbium	159-2	3436004	3495640	3446789	3459477	0.92	cps
Thallium	203-1	257	337	323	306	14.03	cps
Thallium	205-1	820	837	867	841	2.81	cps
Tin	118-1	3404	3891	3520	3605	7.05	cps
Titanium	47-1	240	207	237	228	8.06	cps
Uranium	238-1	210	190	237	212	11.03	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P8
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 14:59:35	DataFile Name :	034CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	17	40	17	24	55.10	cps
Ytterbium	172-1	50	60	67	59	14.25	cps
Ytterbium	172-2	27	17	27	23	24.74	cps
Ytterbium	176-1	1230	1147	1150	1176	4.01	cps
Ytterbium	176-2	340	377	410	376	9.32	cps
Yttrium	89-1	13571946	13839588	13657520	13689685	1.00	cps
Yttrium	89-2	1040607	1040410	1030202	1037073	0.57	cps
Zinc	66-2	1647	1590	1477	1571	5.51	cps
Zirconium	90-1	2130	1867	2020	2006	6.59	cps
Zirconium	91-1	423	523	477	474	10.55	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167780BL	Instrumnet Name :	P8
Client Sample ID :	PB167780BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:04:37	DataFile Name :	035CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	343	487	287	372	27.69	cps
Antimony	121-1	303	260	253	272	9.97	cps
Arsenic	75-2	0	0	0	0	0.00	cps
Barium	135-1	140	143	87	123	25.78	cps
Barium	137-1	257	207	200	221	14.01	cps
Beryllium	9-1	85	83	86	84	1.30	cps
Bismuth	209-1	5487228	5644249	5510877	5547451	1.53	cps
Bismuth	209-2	2608663	2632416	2618954	2620011	0.45	cps
Bromine	81-1	31372	31910	30867	31383	1.66	cps
Cadmium	108-1	7	13	7	9	43.25	cps
Cadmium	106-1	4567	4731	4831	4710	2.82	cps
Cadmium	111-1	3213	3322	3407	3314	2.94	cps
Calcium	43-1	917	1053	1033	1001	7.37	cps
Calcium	44-1	26040	26000	26618	26220	1.32	cps
Carbon	12-1	3390583	3389766	3316670	3365673	1.26	cps
Carbon	12-2	22304	22421	22531	22418	0.51	cps
Chlorine	35-1	194026	196556	200857	197146	1.75	cps
Chlorine	35-2	823	800	833	819	2.09	cps
Chromium	52-2	1103	1223	1150	1159	5.22	cps
Cobalt	59-2	70	127	90	96	30.08	cps
Copper	63-2	1807	1823	1953	1861	4.31	cps
Dysprosium	156-1	23	17	23	21	18.21	cps
Dysprosium	156-2	7	0	7	4	86.60	cps
Erbium	164-1	57	53	53	54	3.54	cps
Erbium	164-2	13	33	23	23	42.86	cps
Gadolinium	160-1	33	83	103	73	49.17	cps
Gadolinium	160-2	10	20	23	18	39.03	cps
Holmium	165-1	8899323	9068016	8965386	8977575	0.95	cps
Holmium	165-2	3601631	3606877	3614137	3607548	0.17	cps
Indium	115-1	7811071	7831782	7627744	7756865	1.45	cps
Indium	115-2	840902	841524	845217	842547	0.28	cps
Iron	54-2	770	887	837	831	7.04	cps
Iron	56-2	9433	9410	9690	9511	1.63	cps
Iron	57-2	217	203	253	224	11.54	cps
Krypton	83-1	347	233	257	279	21.46	cps
Lead	206-1	1057	1183	1150	1130	5.81	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167780BL	Instrumnet Name :	P8
Client Sample ID :	PB167780BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:04:37	DataFile Name :	035CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1030	1077	973	1027	5.04	cps
Lead	208-1	4624	4710	4467	4600	2.68	cps
Lithium	6-1	2410911	2304385	2376105	2363800	2.30	cps
Magnesium	24-2	517	493	467	492	5.08	cps
Manganese	55-2	2620	2514	2474	2536	2.99	cps
Molybdenum	94-1	760	813	867	813	6.56	cps
Molybdenum	95-1	220	230	273	241	11.76	cps
Molybdenum	96-1	403	437	313	384	16.60	cps
Molybdenum	97-1	147	117	193	152	25.38	cps
Molybdenum	98-1	360	360	360	360	0.00	cps
Neodymium	150-1	7	10	7	8	24.71	cps
Neodymium	150-2	3	3	3	3	0.00	cps
Nickel	60-2	583	637	567	596	6.14	cps
Phosphorus	31-2	70	83	97	83	16.00	cps
Potassium	39-2	15919	15969	15769	15885	0.66	cps
Rhodium	103-1	7327549	7349117	7233789	7303485	0.84	cps
Rhodium	103-2	3139933	3149875	3161882	3150563	0.35	cps
Scandium	45-1	4874592	5016469	5067499	4986187	2.00	cps
Scandium	45-2	102485	103425	102082	102664	0.67	cps
Selenium	82-1	-20	113	20	38	181.14	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	20	13	23	19	26.96	cps
Silicon	28-1	482456	492079	480357	484964	1.29	cps
Silver	107-1	220	147	203	190	20.23	cps
Silver	109-1	133	160	153	149	9.32	cps
Sodium	23-2	34203	34237	33906	34115	0.53	cps
Strontium	86-1	510	547	607	554	8.80	cps
Strontium	88-1	600	587	507	564	8.94	cps
Sulfur	34-1	576229	577066	578349	577215	0.19	cps
Terbium	159-1	9365292	9461884	9275990	9367722	0.99	cps
Terbium	159-2	3520239	3449070	3532685	3500664	1.29	cps
Thallium	203-1	320	297	337	318	6.32	cps
Thallium	205-1	753	653	680	696	7.44	cps
Tin	118-1	3511	3347	3671	3509	4.61	cps
Titanium	47-1	227	233	290	250	13.92	cps
Uranium	238-1	200	207	133	180	22.53	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167780BL	Instrumnet Name :	P8
Client Sample ID :	PB167780BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:04:37	DataFile Name :	035CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	23	17	20	20	16.65	cps
Ytterbium	172-1	47	43	50	47	7.15	cps
Ytterbium	172-2	23	17	17	19	20.36	cps
Ytterbium	176-1	1117	1147	1133	1132	1.33	cps
Ytterbium	176-2	353	333	393	360	8.49	cps
Yttrium	89-1	13576683	13885624	13760659	13740988	1.13	cps
Yttrium	89-2	1055901	1048017	1050282	1051400	0.39	cps
Zinc	66-2	1597	1557	1553	1569	1.54	cps
Zirconium	90-1	1853	1873	2017	1915	4.65	cps
Zirconium	91-1	343	440	343	376	14.86	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167780BS	Instrumnet Name :	P8
Client Sample ID :	PB167780BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:08:52	DataFile Name :	036LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	950747	953305	948244	950765	0.27	cps
Antimony	121-1	13863095	13979454	14060185	13967578	0.71	cps
Arsenic	75-2	299548	301713	301907	301056	0.43	cps
Barium	135-1	16440800	16711496	17079571	16743956	1.91	cps
Barium	137-1	28214675	28920776	29133343	28756265	1.67	cps
Beryllium	9-1	3043500	3101063	3044248	3062937	1.08	cps
Bismuth	209-1	5180788	5205942	5137145	5174625	0.67	cps
Bismuth	209-2	2387680	2441669	2429271	2419540	1.17	cps
Bromine	81-1	31181	31535	31422	31380	0.58	cps
Cadmium	108-1	260101	265544	265200	263615	1.16	cps
Cadmium	106-1	379345	388445	387584	385124	1.30	cps
Cadmium	111-1	3414464	3444792	3536266	3465174	1.83	cps
Calcium	43-1	4342716	4376687	4370555	4363319	0.41	cps
Calcium	44-1	71938466	71608109	71473196	71673257	0.33	cps
Carbon	12-1	4007042	4067814	4191879	4088912	2.30	cps
Carbon	12-2	30923	30592	30341	30619	0.95	cps
Chlorine	35-1	247596	255298	259316	254070	2.34	cps
Chlorine	35-2	1010	1057	1163	1077	7.30	cps
Chromium	52-2	3107491	3065329	3081180	3084667	0.69	cps
Cobalt	59-2	5691022	5556943	5576947	5608304	1.29	cps
Copper	63-2	43889543	43452113	44109054	43816903	0.76	cps
Dysprosium	156-1	393	423	397	404	4.07	cps
Dysprosium	156-2	63	43	50	52	19.50	cps
Erbium	164-1	223	203	220	216	4.97	cps
Erbium	164-2	70	83	67	73	12.02	cps
Gadolinium	160-1	233	210	193	212	9.47	cps
Gadolinium	160-2	63	73	93	77	19.93	cps
Holmium	165-1	8561185	8714891	8937231	8737769	2.16	cps
Holmium	165-2	3544831	3505209	3574533	3541525	0.98	cps
Indium	115-1	7103432	7068257	7240807	7137499	1.28	cps
Indium	115-2	749493	750825	748803	749707	0.14	cps
Iron	54-2	6098403	6156991	6187324	6147573	0.74	cps
Iron	56-2	114221088	111288342	112599992	112703141	1.30	cps
Iron	57-2	2937234	2816926	2874071	2876077	2.09	cps
Krypton	83-1	333	253	357	314	17.23	cps
Lead	206-1	48272264	50108833	50281931	49554343	2.25	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167780BS	Instrumnet Name :	P8
Client Sample ID :	PB167780BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:08:52	DataFile Name :	036LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	41707879	42706259	42642202	42352113	1.32	cps
Lead	208-1	192974255	198377786	196380988	195911010	1.39	cps
Lithium	6-1	2236223	2319701	2289528	2281817	1.85	cps
Magnesium	24-2	17033956	16777194	16715626	16842259	1.00	cps
Manganese	55-2	12986137	12768415	13014354	12922969	1.04	cps
Molybdenum	94-1	47075808	48314218	49201016	48197014	2.21	cps
Molybdenum	95-1	68569094	70392772	71889802	70283890	2.37	cps
Molybdenum	96-1	75427106	77621499	78139456	77062687	1.87	cps
Molybdenum	97-1	43044564	44006043	44124486	43725031	1.35	cps
Molybdenum	98-1	112450252	115263605	116446502	114720119	1.79	cps
Neodymium	150-1	1070	1213	1217	1167	7.18	cps
Neodymium	150-2	53	87	37	59	43.23	cps
Nickel	60-2	1591330	1576456	1575987	1581258	0.55	cps
Phosphorus	31-2	48976	47962	48090	48342	1.14	cps
Potassium	39-2	5665521	5827217	5618289	5703676	1.92	cps
Rhodium	103-1	6684437	6732039	6783046	6733174	0.73	cps
Rhodium	103-2	2877741	2862934	2814486	2851720	1.16	cps
Scandium	45-1	4821204	4856347	4837400	4838317	0.36	cps
Scandium	45-2	101398	101694	100545	101212	0.59	cps
Selenium	82-1	201496	203070	206739	203768	1.32	cps
Selenium	77-2	3901	3831	3857	3863	0.91	cps
Selenium	78-2	13203	13016	13440	13220	1.61	cps
Silicon	28-1	23651830	24072797	23887130	23870585	0.88	cps
Silver	107-1	17255601	17565468	17454173	17425081	0.90	cps
Silver	109-1	16555506	16513098	16608676	16559093	0.29	cps
Sodium	23-2	34238017	33357335	33432193	33675848	1.45	cps
Strontium	86-1	4604221	4644960	4650457	4633213	0.55	cps
Strontium	88-1	39492127	39501340	40258324	39750597	1.11	cps
Sulfur	34-1	1618480	1635731	1607144	1620452	0.89	cps
Terbium	159-1	9215300	9228664	9113070	9185678	0.69	cps
Terbium	159-2	3397371	3396514	3369013	3387633	0.48	cps
Thallium	203-1	11939689	12227308	12435062	12200686	2.04	cps
Thallium	205-1	28491669	29066472	29108356	28888832	1.19	cps
Tin	118-1	11428862	11345609	11513479	11429317	0.73	cps
Titanium	47-1	19380018	19648357	19660125	19562834	0.81	cps
Uranium	238-1	37198952	38257441	37003041	37486478	1.80	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167780BS	Instrumnet Name :	P8
Client Sample ID :	PB167780BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:08:52	DataFile Name :	036LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2336761	2310840	2318585	2322062	0.57	cps
Ytterbium	172-1	277	297	250	274	8.53	cps
Ytterbium	172-2	107	133	100	113	15.57	cps
Ytterbium	176-1	56199	57521	58589	57436	2.08	cps
Ytterbium	176-2	22930	22583	22793	22769	0.77	cps
Yttrium	89-1	13330586	13389779	13581486	13433950	0.98	cps
Yttrium	89-2	1017451	999894	1010806	1009384	0.88	cps
Zinc	66-2	4966883	4836001	4863909	4888931	1.41	cps
Zirconium	90-1	23959119	24481449	25021567	24487378	2.17	cps
Zirconium	91-1	5297204	5427044	5523584	5415944	2.10	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167780TB	Instrumnet Name :	P8
Client Sample ID :	PB167780TB	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:15:14	DataFile Name :	037CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	370	363	360	364	1.40	cps
Antimony	121-1	967	990	830	929	9.30	cps
Arsenic	75-2	3	13	7	8	65.47	cps
Barium	135-1	180	203	227	203	11.48	cps
Barium	137-1	320	347	397	354	10.98	cps
Beryllium	9-1	170	160	145	159	7.98	cps
Bismuth	209-1	5447063	5481618	5628222	5518968	1.74	cps
Bismuth	209-2	2540187	2581716	2590597	2570833	1.05	cps
Bromine	81-1	29852	31208	30400	30487	2.24	cps
Cadmium	108-1	13	17	20	17	20.01	cps
Cadmium	106-1	4504	4634	4447	4529	2.11	cps
Cadmium	111-1	3210	3299	3166	3225	2.10	cps
Calcium	43-1	927	893	857	892	3.92	cps
Calcium	44-1	26411	25690	25690	25930	1.61	cps
Carbon	12-1	3418211	3375824	3343984	3379339	1.10	cps
Carbon	12-2	22708	23195	21900	22601	2.89	cps
Chlorine	35-1	185696	189531	188622	187949	1.07	cps
Chlorine	35-2	800	700	743	748	6.71	cps
Chromium	52-2	1110	1153	1097	1120	2.65	cps
Cobalt	59-2	117	100	77	98	20.55	cps
Copper	63-2	2154	2180	2074	2136	2.60	cps
Dysprosium	156-1	10	10	13	11	17.30	cps
Dysprosium	156-2	0	0	7	2	173.21	cps
Erbium	164-1	60	100	67	76	28.36	cps
Erbium	164-2	10	30	27	22	48.22	cps
Gadolinium	160-1	110	63	43	72	47.37	cps
Gadolinium	160-2	23	20	27	23	14.29	cps
Holmium	165-1	8824353	8896844	8990842	8904013	0.94	cps
Holmium	165-2	3527505	3557761	3541174	3542146	0.43	cps
Indium	115-1	7624436	7631349	7667117	7640967	0.30	cps
Indium	115-2	819103	822133	821390	820875	0.19	cps
Iron	54-2	810	820	793	808	1.67	cps
Iron	56-2	10531	10587	10861	10660	1.66	cps
Iron	57-2	250	267	237	251	5.99	cps
Krypton	83-1	247	263	253	254	3.30	cps
Lead	206-1	1887	1887	1743	1839	4.50	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167780TB	Instrumnet Name :	P8
Client Sample ID :	PB167780TB	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:15:14	DataFile Name :	037CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1780	1627	1590	1666	6.05	cps
Lead	208-1	7701	7471	7104	7425	4.05	cps
Lithium	6-1	2292397	2293701	2347308	2311135	1.36	cps
Magnesium	24-2	677	537	540	584	13.67	cps
Manganese	55-2	2407	2630	2717	2585	6.19	cps
Molybdenum	94-1	1467	1387	1263	1372	7.46	cps
Molybdenum	95-1	913	733	747	798	12.57	cps
Molybdenum	96-1	1220	957	890	1022	17.07	cps
Molybdenum	97-1	490	537	493	507	5.14	cps
Molybdenum	98-1	1250	1263	1170	1228	4.11	cps
Neodymium	150-1	13	13	13	13	0.00	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	607	627	547	593	7.02	cps
Phosphorus	31-2	110	57	73	80	34.10	cps
Potassium	39-2	15248	15862	16193	15768	3.04	cps
Rhodium	103-1	7077065	7112762	7131097	7106974	0.39	cps
Rhodium	103-2	3025867	3082139	3138288	3082098	1.82	cps
Scandium	45-1	4840895	4918535	4900303	4886577	0.83	cps
Scandium	45-2	100955	99444	100353	100251	0.76	cps
Selenium	82-1	43	70	77	63	27.84	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	30	17	17	21	36.45	cps
Silicon	28-1	474820	465010	461014	466948	1.52	cps
Silver	107-1	537	557	563	552	2.51	cps
Silver	109-1	497	497	387	460	13.81	cps
Sodium	23-2	36004	35510	36753	36089	1.73	cps
Strontium	86-1	600	593	580	591	1.72	cps
Strontium	88-1	700	617	683	667	6.61	cps
Sulfur	34-1	533840	535040	533103	533994	0.18	cps
Terbium	159-1	9045036	9305944	9252907	9201296	1.50	cps
Terbium	159-2	3455347	3398923	3404470	3419580	0.91	cps
Thallium	203-1	567	490	557	538	7.75	cps
Thallium	205-1	1150	1363	1267	1260	8.48	cps
Tin	118-1	4499	3647	3721	3956	11.94	cps
Titanium	47-1	340	310	370	340	8.82	cps
Uranium	238-1	383	390	350	374	5.72	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167780TB	Instrumnet Name :	P8
Client Sample ID :	PB167780TB	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:15:14	DataFile Name :	037CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	27	23	37	29	24.03	cps
Ytterbium	172-1	57	60	47	54	12.74	cps
Ytterbium	172-2	20	13	20	18	21.66	cps
Ytterbium	176-1	1087	1177	1140	1135	3.99	cps
Ytterbium	176-2	287	270	283	280	3.15	cps
Yttrium	89-1	13732551	13636912	13898057	13755840	0.96	cps
Yttrium	89-2	1033236	1028456	1031033	1030908	0.23	cps
Zinc	66-2	1657	1577	1603	1612	2.53	cps
Zirconium	90-1	2500	2710	2607	2606	4.03	cps
Zirconium	91-1	507	553	577	546	6.53	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-02DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-27-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:18:37	DataFile Name :	038AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1251825	1269642	1261300	1260923	0.71	cps
Antimony	121-1	613	557	573	581	5.01	cps
Arsenic	75-2	477	417	433	442	7.00	cps
Barium	135-1	141039	143329	142554	142307	0.82	cps
Barium	137-1	247377	251527	258535	252480	2.23	cps
Beryllium	9-1	2082	2186	2179	2149	2.71	cps
Bismuth	209-1	5393120	5364702	5406958	5388260	0.40	cps
Bismuth	209-2	2465538	2451269	2479987	2465598	0.58	cps
Bromine	81-1	31632	30797	31091	31174	1.36	cps
Cadmium	108-1	93	83	100	92	9.10	cps
Cadmium	106-1	5418	5294	5628	5447	3.10	cps
Cadmium	111-1	4327	4318	4470	4371	1.95	cps
Calcium	43-1	3867303	3881802	3905060	3884722	0.49	cps
Calcium	44-1	63824052	63502042	63234417	63520171	0.46	cps
Carbon	12-1	3953025	4103759	4191210	4082665	2.95	cps
Carbon	12-2	29105	29406	29797	29436	1.18	cps
Chlorine	35-1	204992	211049	213805	209949	2.15	cps
Chlorine	35-2	890	853	957	900	5.82	cps
Chromium	52-2	17030	16593	16373	16665	2.01	cps
Cobalt	59-2	363053	365783	370627	366488	1.05	cps
Copper	63-2	234873	234744	235645	235087	0.21	cps
Dysprosium	156-1	131342	133304	134428	133024	1.17	cps
Dysprosium	156-2	49959	49588	49598	49715	0.43	cps
Erbium	164-1	154506	154982	155487	154992	0.32	cps
Erbium	164-2	57112	58421	57052	57528	1.34	cps
Gadolinium	160-1	130814	132622	133110	132182	0.92	cps
Gadolinium	160-2	59458	58796	59207	59154	0.57	cps
Holmium	165-1	8926138	9082378	9028878	9012465	0.88	cps
Holmium	165-2	3537184	3569084	3532677	3546315	0.56	cps
Indium	115-1	7366624	7526854	7714981	7536153	2.31	cps
Indium	115-2	800405	800148	797498	799351	0.20	cps
Iron	54-2	14999317	14925182	15120202	15014900	0.66	cps
Iron	56-2	278976223	283383229	280718756	281026069	0.79	cps
Iron	57-2	7134558	7156879	7062223	7117886	0.70	cps
Krypton	83-1	563	593	520	559	6.60	cps
Lead	206-1	8523	8963	8953	8813	2.85	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-02DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-27-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:18:37	DataFile Name :	038AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	7466	7352	7335	7384	0.96	cps
Lead	208-1	34145	34578	34161	34295	0.72	cps
Lithium	6-1	2432998	2355843	2321266	2370036	2.41	cps
Magnesium	24-2	4946341	4958779	5067043	4990721	1.33	cps
Manganese	55-2	4392008	4459784	4402182	4417991	0.83	cps
Molybdenum	94-1	3604	3564	3467	3545	1.98	cps
Molybdenum	95-1	883	853	827	854	3.32	cps
Molybdenum	96-1	5625	5548	5241	5471	3.71	cps
Molybdenum	97-1	537	437	433	469	12.52	cps
Molybdenum	98-1	843	767	917	842	8.91	cps
Neodymium	150-1	132443	134977	136587	134669	1.55	cps
Neodymium	150-2	36075	35958	36115	36049	0.23	cps
Nickel	60-2	41868	42523	43359	42584	1.76	cps
Phosphorus	31-2	467	417	460	448	6.06	cps
Potassium	39-2	106042	106701	105505	106083	0.56	cps
Rhodium	103-1	7062797	6955725	6936851	6985124	0.97	cps
Rhodium	103-2	2980938	2958097	2964730	2967921	0.40	cps
Scandium	45-1	5050812	5003922	4980807	5011847	0.71	cps
Scandium	45-2	100310	101814	100636	100920	0.78	cps
Selenium	82-1	187	200	240	209	13.29	cps
Selenium	77-2	227	220	217	221	2.30	cps
Selenium	78-2	173	163	180	172	4.87	cps
Silicon	28-1	163702284	163676234	162296541	163225020	0.49	cps
Silver	107-1	403	400	403	402	0.48	cps
Silver	109-1	367	300	360	342	10.73	cps
Sodium	23-2	3489093	3507090	3526330	3507504	0.53	cps
Strontium	86-1	778855	797229	785537	787207	1.18	cps
Strontium	88-1	7058103	7004085	7115342	7059177	0.79	cps
Sulfur	34-1	9464848	9440078	9453637	9452854	0.13	cps
Terbium	159-1	9508829	9307232	9412854	9409638	1.07	cps
Terbium	159-2	3423266	3429890	3436113	3429757	0.19	cps
Thallium	203-1	910	847	730	829	11.02	cps
Thallium	205-1	1960	2000	1967	1976	1.09	cps
Tin	118-1	6976	5601	5768	6115	12.27	cps
Titanium	47-1	3781	3464	3884	3709	5.90	cps
Uranium	238-1	72096	74661	74557	73771	1.97	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-02DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-27-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:18:37	DataFile Name :	038AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	242471	242540	239265	241425	0.78	cps
Ytterbium	172-1	60866	61797	61445	61369	0.77	cps
Ytterbium	172-2	28020	27325	27218	27521	1.58	cps
Ytterbium	176-1	38566	38870	39007	38815	0.58	cps
Ytterbium	176-2	17996	17779	17902	17892	0.61	cps
Yttrium	89-1	16654857	16503610	16473118	16543862	0.59	cps
Yttrium	89-2	1221289	1228988	1222065	1224114	0.35	cps
Zinc	66-2	144361	145128	145036	144842	0.29	cps
Zirconium	90-1	8229	8649	8316	8398	2.64	cps
Zirconium	91-1	1797	1793	1927	1839	4.14	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-04DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-28-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:21:54	DataFile Name :	039AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	704480	707250	705841	705857	0.20	cps
Antimony	121-1	427	477	403	436	8.60	cps
Arsenic	75-2	400	413	413	409	1.88	cps
Barium	135-1	130454	134488	131325	132089	1.61	cps
Barium	137-1	227840	227353	230310	228501	0.69	cps
Beryllium	9-1	1900	1979	1907	1929	2.28	cps
Bismuth	209-1	5383172	5287247	5350005	5340141	0.91	cps
Bismuth	209-2	2479370	2439789	2434377	2451179	1.00	cps
Bromine	81-1	31479	31008	31686	31391	1.11	cps
Cadmium	108-1	70	50	53	58	18.55	cps
Cadmium	106-1	5364	5398	5314	5359	0.78	cps
Cadmium	111-1	4093	4067	4029	4063	0.78	cps
Calcium	43-1	3955890	4004947	3981788	3980875	0.62	cps
Calcium	44-1	65529276	66119079	65294672	65647676	0.65	cps
Carbon	12-1	3946517	3992786	4144107	4027803	2.57	cps
Carbon	12-2	28478	29112	29423	29004	1.66	cps
Chlorine	35-1	207686	212754	213218	211219	1.45	cps
Chlorine	35-2	767	807	873	816	6.61	cps
Chromium	52-2	6492	6588	6415	6498	1.34	cps
Cobalt	59-2	335579	336977	337460	336672	0.29	cps
Copper	63-2	51717	52443	51523	51894	0.93	cps
Dysprosium	156-1	121688	124733	123908	123443	1.28	cps
Dysprosium	156-2	46838	46397	47243	46826	0.90	cps
Erbium	164-1	147683	146197	148688	147522	0.85	cps
Erbium	164-2	55237	55010	55160	55136	0.21	cps
Gadolinium	160-1	124569	124700	125217	124829	0.27	cps
Gadolinium	160-2	55933	56298	55665	55966	0.57	cps
Holmium	165-1	9109046	8983109	8978261	9023472	0.82	cps
Holmium	165-2	3567773	3491153	3458402	3505776	1.60	cps
Indium	115-1	7649029	7540702	7404754	7531495	1.63	cps
Indium	115-2	798115	797479	797498	797697	0.05	cps
Iron	54-2	19225317	19205508	19420147	19283657	0.62	cps
Iron	56-2	359200061	358012461	358009981	358407501	0.19	cps
Iron	57-2	8913406	9063485	8951159	8976017	0.87	cps
Krypton	83-1	603	550	587	580	4.70	cps
Lead	206-1	7142	7132	7542	7272	3.22	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-04DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-28-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:21:54	DataFile Name :	039AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5921	6038	6075	6011	1.33	cps
Lead	208-1	28052	27889	28686	28209	1.49	cps
Lithium	6-1	2281244	2333463	2317062	2310589	1.16	cps
Magnesium	24-2	4903851	4898179	4952369	4918133	0.61	cps
Manganese	55-2	4278178	4244258	4285556	4269330	0.52	cps
Molybdenum	94-1	2620	2720	2670	2670	1.87	cps
Molybdenum	95-1	863	783	773	807	6.12	cps
Molybdenum	96-1	6205	6318	6578	6367	3.01	cps
Molybdenum	97-1	513	507	473	498	4.30	cps
Molybdenum	98-1	760	850	867	826	6.95	cps
Neodymium	150-1	121016	122540	122789	122115	0.79	cps
Neodymium	150-2	33351	32549	32887	32929	1.22	cps
Nickel	60-2	24678	24545	25136	24786	1.25	cps
Phosphorus	31-2	210	190	163	188	12.47	cps
Potassium	39-2	91296	90525	92219	91347	0.93	cps
Rhodium	103-1	6958210	6978926	6928231	6955122	0.37	cps
Rhodium	103-2	2917070	2993207	2983248	2964508	1.40	cps
Scandium	45-1	4869006	4920584	4890016	4893202	0.53	cps
Scandium	45-2	98202	97796	98645	98215	0.43	cps
Selenium	82-1	97	220	90	136	54.00	cps
Selenium	77-2	187	227	143	186	22.46	cps
Selenium	78-2	133	160	163	152	10.80	cps
Silicon	28-1	140142671	139790601	139811335	139914869	0.14	cps
Silver	107-1	330	317	330	326	2.37	cps
Silver	109-1	237	197	203	212	10.10	cps
Sodium	23-2	2962021	3028745	2959317	2983361	1.32	cps
Strontium	86-1	820990	829299	825975	825422	0.51	cps
Strontium	88-1	7449278	7520250	7321267	7430265	1.36	cps
Sulfur	34-1	9184730	9189404	9102992	9159042	0.53	cps
Terbium	159-1	9434975	9156297	9255373	9282215	1.52	cps
Terbium	159-2	3437683	3390346	3420346	3416125	0.70	cps
Thallium	203-1	677	670	713	687	3.40	cps
Thallium	205-1	1670	1483	1393	1516	9.31	cps
Tin	118-1	4127	4304	4354	4262	2.80	cps
Titanium	47-1	3794	11543	3807	6381	70.05	cps
Uranium	238-1	64921	65089	64265	64758	0.67	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-04DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-28-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:21:54	DataFile Name :	039AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	295179	296504	294119	295267	0.40	cps
Ytterbium	172-1	57474	58418	57919	57937	0.82	cps
Ytterbium	172-2	25785	26049	25578	25804	0.91	cps
Ytterbium	176-1	36099	36464	36263	36275	0.50	cps
Ytterbium	176-2	16721	16751	16617	16696	0.42	cps
Yttrium	89-1	16088192	16484400	16474795	16349129	1.38	cps
Yttrium	89-2	1219419	1211286	1223938	1218214	0.53	cps
Zinc	66-2	103524	111146	100835	105169	5.09	cps
Zirconium	90-1	5541	5791	5558	5630	2.48	cps
Zirconium	91-1	1153	1220	1233	1202	3.57	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-06DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-29-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:25:08	DataFile Name :	040AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	747976	754681	750284	750980	0.45	cps
Antimony	121-1	443	487	470	467	4.68	cps
Arsenic	75-2	440	403	487	443	9.42	cps
Barium	135-1	139978	140463	140465	140302	0.20	cps
Barium	137-1	246523	242557	249889	246323	1.49	cps
Beryllium	9-1	1868	1747	1839	1818	3.48	cps
Bismuth	209-1	5226639	5435083	5431662	5364461	2.23	cps
Bismuth	209-2	2438788	2447524	2446637	2444316	0.20	cps
Bromine	81-1	32130	30533	30881	31181	2.69	cps
Cadmium	108-1	53	83	77	71	22.15	cps
Cadmium	106-1	5344	5321	5318	5328	0.27	cps
Cadmium	111-1	4224	4130	4235	4196	1.38	cps
Calcium	43-1	5365282	5320681	5323405	5336456	0.47	cps
Calcium	44-1	86764395	86111329	86996849	86624191	0.53	cps
Carbon	12-1	3939521	4093419	4116793	4049911	2.38	cps
Carbon	12-2	28748	28825	28962	28845	0.38	cps
Chlorine	35-1	198097	200581	202213	200297	1.03	cps
Chlorine	35-2	760	840	867	822	6.75	cps
Chromium	52-2	11281	11835	11672	11596	2.45	cps
Cobalt	59-2	304391	302609	303703	303567	0.30	cps
Copper	63-2	131209	130611	131546	131122	0.36	cps
Dysprosium	156-1	132769	133852	136452	134358	1.41	cps
Dysprosium	156-2	50424	51703	50047	50725	1.71	cps
Erbium	164-1	158678	157635	158849	158387	0.41	cps
Erbium	164-2	58240	58715	58605	58520	0.43	cps
Gadolinium	160-1	135505	136204	137262	136324	0.65	cps
Gadolinium	160-2	60202	60838	60634	60558	0.54	cps
Holmium	165-1	8947792	8947351	8929407	8941516	0.12	cps
Holmium	165-2	3548747	3515627	3530183	3531519	0.47	cps
Indium	115-1	7456481	7531391	7552070	7513314	0.67	cps
Indium	115-2	781952	788263	788232	786149	0.46	cps
Iron	54-2	16069866	15943577	16060595	16024679	0.44	cps
Iron	56-2	295751309	293191802	297890622	295611244	0.80	cps
Iron	57-2	7309950	7595399	7339995	7415115	2.12	cps
Krypton	83-1	530	540	523	531	1.58	cps
Lead	206-1	27944	27917	27609	27823	0.67	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-06DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-29-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:25:08	DataFile Name :	040AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	23996	24196	24239	24144	0.54	cps
Lead	208-1	109610	111615	110782	110669	0.91	cps
Lithium	6-1	2272271	2255139	2269454	2265621	0.41	cps
Magnesium	24-2	4621651	4613036	4608754	4614480	0.14	cps
Manganese	55-2	3546742	3465047	3544483	3518758	1.32	cps
Molybdenum	94-1	2350	2417	2384	2384	1.40	cps
Molybdenum	95-1	910	847	970	909	6.79	cps
Molybdenum	96-1	5691	5641	5388	5573	2.92	cps
Molybdenum	97-1	510	423	543	492	12.58	cps
Molybdenum	98-1	973	997	1083	1018	5.70	cps
Neodymium	150-1	132826	133038	133658	133174	0.32	cps
Neodymium	150-2	35854	35169	36179	35734	1.44	cps
Nickel	60-2	39060	39171	38285	38838	1.24	cps
Phosphorus	31-2	230	200	203	211	7.79	cps
Potassium	39-2	113952	112813	115358	114041	1.12	cps
Rhodium	103-1	6926510	6886121	6903622	6905418	0.29	cps
Rhodium	103-2	2975827	2897379	2940664	2937957	1.34	cps
Scandium	45-1	4877076	4861806	4858508	4865797	0.20	cps
Scandium	45-2	96397	96229	97504	96710	0.72	cps
Selenium	82-1	140	203	273	206	32.45	cps
Selenium	77-2	247	243	190	227	14.03	cps
Selenium	78-2	183	140	170	164	13.50	cps
Silicon	28-1	155157571	155866071	154024914	155016185	0.60	cps
Silver	107-1	353	280	297	310	12.40	cps
Silver	109-1	193	250	203	216	14.03	cps
Sodium	23-2	5159269	5145642	5228275	5177728	0.86	cps
Strontium	86-1	999416	1010866	1000513	1003598	0.63	cps
Strontium	88-1	9043131	9072618	8991165	9035638	0.46	cps
Sulfur	34-1	9681122	9747862	9674378	9701121	0.42	cps
Terbium	159-1	9245908	9385818	9490243	9373990	1.31	cps
Terbium	159-2	3426989	3423357	3358356	3402901	1.13	cps
Thallium	203-1	490	533	487	503	5.17	cps
Thallium	205-1	1197	1197	1210	1201	0.64	cps
Tin	118-1	4638	4664	4391	4564	3.30	cps
Titanium	47-1	3304	3110	3017	3144	4.65	cps
Uranium	238-1	69603	71758	71044	70801	1.55	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-06DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-29-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:25:08	DataFile Name :	040AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	206775	207911	212688	209124	1.50	cps
Ytterbium	172-1	55877	56872	55794	56181	1.07	cps
Ytterbium	172-2	25401	25374	25615	25463	0.52	cps
Ytterbium	176-1	35508	34970	36056	35511	1.53	cps
Ytterbium	176-2	15896	16177	16297	16123	1.27	cps
Yttrium	89-1	16283368	16382511	16313746	16326541	0.31	cps
Yttrium	89-2	1214691	1215052	1219063	1216269	0.20	cps
Zinc	66-2	115404	116471	117952	116609	1.10	cps
Zirconium	90-1	4881	4734	5121	4912	3.98	cps
Zirconium	91-1	1150	1113	1067	1110	3.76	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-08DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-30-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:28:25	DataFile Name :	041AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1022853	1033128	1024057	1026680	0.55	cps
Antimony	121-1	543	457	410	470	14.40	cps
Arsenic	75-2	383	400	383	389	2.47	cps
Barium	135-1	151328	149259	150765	150450	0.71	cps
Barium	137-1	262651	264452	265272	264125	0.51	cps
Beryllium	9-1	1975	1885	1961	1940	2.50	cps
Bismuth	209-1	5335268	5329268	5386221	5350252	0.58	cps
Bismuth	209-2	2389887	2438161	2414279	2414109	1.00	cps
Bromine	81-1	30871	30557	30647	30691	0.53	cps
Cadmium	108-1	87	37	50	58	44.81	cps
Cadmium	106-1	5324	5188	5258	5257	1.30	cps
Cadmium	111-1	4256	4326	4365	4316	1.28	cps
Calcium	43-1	4675023	4748817	4752044	4725295	0.92	cps
Calcium	44-1	77336247	77410231	77543657	77430045	0.14	cps
Carbon	12-1	4015978	4140018	4200552	4118849	2.28	cps
Carbon	12-2	28735	28942	29323	29000	1.03	cps
Chlorine	35-1	190487	191723	192131	191447	0.45	cps
Chlorine	35-2	740	757	883	793	9.88	cps
Chromium	52-2	15141	15338	15128	15203	0.77	cps
Cobalt	59-2	338208	343548	341309	341021	0.79	cps
Copper	63-2	157411	156431	154109	155984	1.09	cps
Dysprosium	156-1	119885	122777	122142	121601	1.25	cps
Dysprosium	156-2	44009	44989	44591	44529	1.11	cps
Erbium	164-1	140672	141288	142052	141337	0.49	cps
Erbium	164-2	52215	52744	51737	52232	0.96	cps
Gadolinium	160-1	118544	118430	120915	119297	1.18	cps
Gadolinium	160-2	53969	53386	54052	53802	0.67	cps
Holmium	165-1	8889093	8949977	8909094	8916055	0.35	cps
Holmium	165-2	3518158	3520282	3481954	3506798	0.61	cps
Indium	115-1	7396974	7478652	7457972	7444533	0.57	cps
Indium	115-2	778147	787437	784447	783344	0.61	cps
Iron	54-2	14657644	14670576	14569072	14632431	0.38	cps
Iron	56-2	273685383	278408116	273854936	275316145	0.97	cps
Iron	57-2	6876161	6940740	6770852	6862584	1.25	cps
Krypton	83-1	463	533	487	494	7.21	cps
Lead	206-1	18093	18907	18293	18431	2.30	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-08DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-30-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:28:25	DataFile Name :	041AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	15142	15423	15473	15346	1.16	cps
Lead	208-1	71130	71928	71066	71375	0.67	cps
Lithium	6-1	2313160	2334006	2305470	2317545	0.64	cps
Magnesium	24-2	4556565	4497584	4489593	4514581	0.81	cps
Manganese	55-2	3579746	3677414	3623114	3626758	1.35	cps
Molybdenum	94-1	3284	3387	3307	3326	1.63	cps
Molybdenum	95-1	753	810	780	781	3.63	cps
Molybdenum	96-1	5291	5054	5334	5227	2.88	cps
Molybdenum	97-1	443	493	510	482	7.19	cps
Molybdenum	98-1	813	797	903	838	6.85	cps
Neodymium	150-1	121019	121329	121396	121248	0.17	cps
Neodymium	150-2	32823	32209	32048	32360	1.26	cps
Nickel	60-2	35434	35137	35514	35362	0.56	cps
Phosphorus	31-2	517	473	523	504	5.38	cps
Potassium	39-2	122097	121530	121274	121634	0.35	cps
Rhodium	103-1	6944307	6831638	6907897	6894614	0.83	cps
Rhodium	103-2	2943167	2949835	2920063	2937688	0.53	cps
Scandium	45-1	4936429	4884964	4911012	4910801	0.52	cps
Scandium	45-2	97031	98249	96817	97366	0.79	cps
Selenium	82-1	307	93	197	199	53.64	cps
Selenium	77-2	167	193	187	182	7.62	cps
Selenium	78-2	157	120	127	134	14.53	cps
Silicon	28-1	169792427	170107847	169761604	169887293	0.11	cps
Silver	107-1	243	260	233	246	5.48	cps
Silver	109-1	180	170	133	161	15.25	cps
Sodium	23-2	3563338	3558558	3527380	3549759	0.55	cps
Strontium	86-1	806608	810381	808472	808487	0.23	cps
Strontium	88-1	7349336	7305864	7355927	7337042	0.37	cps
Sulfur	34-1	9480983	9438299	9344843	9421375	0.74	cps
Terbium	159-1	9377060	9223895	9265418	9288791	0.85	cps
Terbium	159-2	3352991	3381495	3368429	3367638	0.42	cps
Thallium	203-1	603	623	627	618	2.04	cps
Thallium	205-1	1313	1443	1477	1411	6.12	cps
Tin	118-1	8471	7646	7972	8030	5.18	cps
Titanium	47-1	4411	4144	4151	4235	3.59	cps
Uranium	238-1	75043	75643	75643	75443	0.46	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-08DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-30-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:28:25	DataFile Name :	041AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	259145	253699	256137	256327	1.06	cps
Ytterbium	172-1	56865	57611	57196	57224	0.65	cps
Ytterbium	172-2	25932	25555	26042	25843	0.99	cps
Ytterbium	176-1	36113	36096	36417	36208	0.50	cps
Ytterbium	176-2	16197	16557	16427	16394	1.11	cps
Yttrium	89-1	16180542	16077024	16261181	16172916	0.57	cps
Yttrium	89-2	1189665	1186442	1201705	1192604	0.67	cps
Zinc	66-2	147252	147566	145987	146935	0.57	cps
Zirconium	90-1	7502	7746	7672	7640	1.63	cps
Zirconium	91-1	1627	1793	1827	1749	6.13	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-10DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-31-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:31:40	DataFile Name :	042AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	530913	531193	532699	531602	0.18	cps
Antimony	121-1	477	463	510	483	4.97	cps
Arsenic	75-2	467	427	443	446	4.51	cps
Barium	135-1	151500	152987	155468	153318	1.31	cps
Barium	137-1	264203	266776	267523	266167	0.65	cps
Beryllium	9-1	1671	1773	1685	1710	3.25	cps
Bismuth	209-1	5255096	5421870	5397049	5358005	1.68	cps
Bismuth	209-2	2484715	2429832	2440312	2451620	1.19	cps
Bromine	81-1	31131	30877	30096	30701	1.76	cps
Cadmium	108-1	63	47	63	58	16.65	cps
Cadmium	106-1	5558	5251	5424	5411	2.84	cps
Cadmium	111-1	4376	4176	4269	4274	2.34	cps
Calcium	43-1	5955207	5957512	6042482	5985067	0.83	cps
Calcium	44-1	98497045	98409799	99000545	98635796	0.32	cps
Carbon	12-1	3823096	3954809	3993207	3923704	2.27	cps
Carbon	12-2	28010	27292	27619	27640	1.30	cps
Chlorine	35-1	206680	209547	213120	209783	1.54	cps
Chlorine	35-2	910	897	857	888	3.13	cps
Chromium	52-2	5211	5068	4948	5075	2.60	cps
Cobalt	59-2	265920	265417	265567	265635	0.10	cps
Copper	63-2	61489	61710	61302	61500	0.33	cps
Dysprosium	156-1	130103	130294	130886	130428	0.31	cps
Dysprosium	156-2	48400	48424	47795	48206	0.74	cps
Erbium	164-1	157561	158115	161224	158967	1.24	cps
Erbium	164-2	57450	58096	58474	58007	0.89	cps
Gadolinium	160-1	129686	128956	131574	130072	1.04	cps
Gadolinium	160-2	58096	57761	57507	57788	0.51	cps
Holmium	165-1	9184438	9045848	9301779	9177355	1.40	cps
Holmium	165-2	3472589	3448151	3477539	3466093	0.45	cps
Indium	115-1	7573711	7540511	7543979	7552733	0.24	cps
Indium	115-2	784325	780854	784997	783392	0.28	cps
Iron	54-2	17455575	16885301	16874794	17071890	1.95	cps
Iron	56-2	313436922	317257802	314371455	315022060	0.63	cps
Iron	57-2	7901285	7997808	7911294	7936796	0.67	cps
Krypton	83-1	600	527	613	580	8.05	cps
Lead	206-1	15670	15519	15286	15492	1.25	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-10DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-31-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:31:40	DataFile Name :	042AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	12933	13110	13087	13043	0.74	cps
Lead	208-1	59556	60542	60783	60294	1.08	cps
Lithium	6-1	2301808	2305710	2281254	2296257	0.57	cps
Magnesium	24-2	4094350	4043831	4049554	4062579	0.68	cps
Manganese	55-2	4194160	4116667	4121896	4144241	1.05	cps
Molybdenum	94-1	2217	1840	2027	2028	9.29	cps
Molybdenum	95-1	933	843	880	886	5.11	cps
Molybdenum	96-1	5945	6055	5701	5900	3.07	cps
Molybdenum	97-1	593	520	623	579	9.18	cps
Molybdenum	98-1	1113	1003	1107	1074	5.74	cps
Neodymium	150-1	124178	125052	126625	125285	0.99	cps
Neodymium	150-2	33789	32088	33853	33243	3.01	cps
Nickel	60-2	28515	28288	27393	28065	2.11	cps
Phosphorus	31-2	157	160	167	161	3.16	cps
Potassium	39-2	113972	113519	113888	113793	0.21	cps
Rhodium	103-1	6962867	6931881	6846497	6913748	0.87	cps
Rhodium	103-2	2909666	2955734	2908826	2924742	0.92	cps
Scandium	45-1	4904388	4936289	4896163	4912280	0.43	cps
Scandium	45-2	95890	95927	95977	95932	0.05	cps
Selenium	82-1	263	303	133	233	38.09	cps
Selenium	77-2	210	200	167	192	11.80	cps
Selenium	78-2	187	153	160	167	10.58	cps
Silicon	28-1	141408095	140249348	141239368	140965603	0.44	cps
Silver	107-1	177	203	153	178	14.07	cps
Silver	109-1	100	100	120	107	10.83	cps
Sodium	23-2	3777464	3716944	3713504	3735971	0.96	cps
Strontium	86-1	1100588	1124041	1118610	1114413	1.10	cps
Strontium	88-1	10100493	10125458	10025282	10083744	0.52	cps
Sulfur	34-1	9901657	9911223	9802109	9871663	0.61	cps
Terbium	159-1	9307830	9255591	9313234	9292218	0.34	cps
Terbium	159-2	3491954	3391678	3341713	3408448	2.24	cps
Thallium	203-1	430	423	467	440	5.30	cps
Thallium	205-1	1067	1117	1210	1131	6.43	cps
Tin	118-1	6021	6218	6512	6250	3.95	cps
Titanium	47-1	2794	2830	2850	2825	1.02	cps
Uranium	238-1	81855	83086	84046	82996	1.32	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-10DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-31-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:31:40	DataFile Name :	042AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	223523	223893	225001	224139	0.34	cps
Ytterbium	172-1	61509	64078	63257	62948	2.08	cps
Ytterbium	172-2	28100	27919	27495	27838	1.11	cps
Ytterbium	176-1	39382	39415	39870	39556	0.69	cps
Ytterbium	176-2	17655	17805	17812	17758	0.50	cps
Yttrium	89-1	16607819	16715267	16624414	16649166	0.35	cps
Yttrium	89-2	1218079	1207284	1214097	1213153	0.45	cps
Zinc	66-2	117388	117835	116399	117207	0.63	cps
Zirconium	90-1	3681	3631	4011	3774	5.47	cps
Zirconium	91-1	890	817	840	849	4.41	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-12DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-32-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:34:56	DataFile Name :	043AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	486133	486048	486297	486160	0.03	cps
Antimony	121-1	533	513	530	526	2.04	cps
Arsenic	75-2	457	430	453	447	3.25	cps
Barium	135-1	144632	144965	145138	144912	0.18	cps
Barium	137-1	253548	253978	257551	255025	0.86	cps
Beryllium	9-1	1765	1640	1789	1731	4.62	cps
Bismuth	209-1	5429571	5459103	5430333	5439669	0.31	cps
Bismuth	209-2	2472774	2418663	2440487	2443975	1.11	cps
Bromine	81-1	30183	29925	30857	30322	1.59	cps
Cadmium	108-1	80	53	53	62	24.75	cps
Cadmium	106-1	5878	5615	5398	5630	4.27	cps
Cadmium	111-1	4509	4330	4188	4342	3.70	cps
Calcium	43-1	5616755	5609938	5659400	5628697	0.48	cps
Calcium	44-1	90794502	91845175	92719339	91786339	1.05	cps
Carbon	12-1	4041566	4158437	4182637	4127547	1.83	cps
Carbon	12-2	29095	29900	28574	29190	2.29	cps
Chlorine	35-1	207050	210897	214063	210670	1.67	cps
Chlorine	35-2	913	893	1020	942	7.23	cps
Chromium	52-2	5444	5444	5294	5394	1.61	cps
Cobalt	59-2	250230	251172	250199	250533	0.22	cps
Copper	63-2	46830	46844	47225	46966	0.48	cps
Dysprosium	156-1	135091	138091	137010	136731	1.11	cps
Dysprosium	156-2	50552	50502	51335	50796	0.92	cps
Erbium	164-1	167420	166154	169849	167808	1.12	cps
Erbium	164-2	61354	60976	61411	61247	0.39	cps
Gadolinium	160-1	137669	137541	139204	138138	0.67	cps
Gadolinium	160-2	60336	61280	61066	60894	0.81	cps
Holmium	165-1	9077970	9052276	8905476	9011907	1.03	cps
Holmium	165-2	3492538	3488844	3531956	3504446	0.68	cps
Indium	115-1	7392390	7718512	7694971	7601958	2.39	cps
Indium	115-2	775507	779028	781674	778736	0.40	cps
Iron	54-2	17625080	17671466	17588932	17628493	0.23	cps
Iron	56-2	326146415	324497089	324005822	324883108	0.35	cps
Iron	57-2	8303549	8165202	8157558	8208770	1.00	cps
Krypton	83-1	657	577	563	599	8.43	cps
Lead	206-1	112416	114140	114296	113617	0.92	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-12DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-32-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:34:56	DataFile Name :	043AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	97634	97943	99371	98316	0.94	cps
Lead	208-1	446939	449199	452851	449663	0.66	cps
Lithium	6-1	2372109	2263924	2285208	2307080	2.48	cps
Magnesium	24-2	3741916	3786050	3762638	3763535	0.59	cps
Manganese	55-2	3727464	3681300	3693876	3700880	0.64	cps
Molybdenum	94-1	1967	2270	2234	2157	7.68	cps
Molybdenum	95-1	1053	1217	1140	1137	7.19	cps
Molybdenum	96-1	6001	6195	6031	6076	1.71	cps
Molybdenum	97-1	720	607	660	662	8.56	cps
Molybdenum	98-1	1600	1460	1333	1465	9.11	cps
Neodymium	150-1	131571	134435	134842	133616	1.33	cps
Neodymium	150-2	35811	35470	34935	35405	1.25	cps
Nickel	60-2	24945	25573	25733	25417	1.64	cps
Phosphorus	31-2	150	143	160	151	5.55	cps
Potassium	39-2	104242	104155	103961	104120	0.14	cps
Rhodium	103-1	6953900	7073589	6952579	6993356	0.99	cps
Rhodium	103-2	2877969	2910524	2971574	2920022	1.63	cps
Scandium	45-1	4876543	4823842	4862789	4854391	0.56	cps
Scandium	45-2	95803	96014	95618	95812	0.21	cps
Selenium	82-1	160	277	197	211	28.26	cps
Selenium	77-2	147	240	223	203	24.48	cps
Selenium	78-2	160	120	193	158	23.27	cps
Silicon	28-1	137762771	135477915	137053458	136764715	0.86	cps
Silver	107-1	183	190	177	183	3.64	cps
Silver	109-1	80	100	127	102	22.91	cps
Sodium	23-2	3671487	3691488	3661396	3674790	0.42	cps
Strontium	86-1	1076940	1087755	1079799	1081498	0.52	cps
Strontium	88-1	9849544	9783511	9745564	9792873	0.54	cps
Sulfur	34-1	9444814	9409608	9394394	9416272	0.27	cps
Terbium	159-1	9315791	9522827	9561449	9466689	1.40	cps
Terbium	159-2	3318100	3340929	3381440	3346823	0.96	cps
Thallium	203-1	497	460	467	474	4.12	cps
Thallium	205-1	1050	1133	1107	1097	3.88	cps
Tin	118-1	4964	5271	4938	5058	3.66	cps
Titanium	47-1	2907	2857	2834	2866	1.31	cps
Uranium	238-1	93350	93124	96003	94159	1.70	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-12DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-32-042325	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:34:56	DataFile Name :	043AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	240790	242180	239873	240947	0.48	cps
Ytterbium	172-1	65230	67009	66640	66293	1.42	cps
Ytterbium	172-2	30057	29700	29920	29893	0.60	cps
Ytterbium	176-1	41234	41425	42358	41672	1.44	cps
Ytterbium	176-2	19117	19414	18697	19076	1.89	cps
Yttrium	89-1	17005425	16885395	16320341	16737054	2.19	cps
Yttrium	89-2	1219105	1215933	1224547	1219862	0.36	cps
Zinc	66-2	127396	126683	128399	127493	0.68	cps
Zirconium	90-1	3561	3424	3834	3606	5.79	cps
Zirconium	91-1	737	730	807	758	5.60	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P8
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:41:14	DataFile Name :	044CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4454737	4517175	4437131	4469681	0.94	cps
Antimony	121-1	12758424	12850776	12902167	12837122	0.57	cps
Arsenic	75-2	269890	273314	276463	273222	1.20	cps
Barium	135-1	15342617	15720534	15822932	15628694	1.62	cps
Barium	137-1	26376381	27215898	27307252	26966510	1.90	cps
Beryllium	9-1	2682846	2709028	2722347	2704740	0.74	cps
Bismuth	209-1	4718264	4731496	4723209	4724323	0.14	cps
Bismuth	209-2	2185086	2178580	2182161	2181943	0.15	cps
Bromine	81-1	29835	28957	29909	29567	1.79	cps
Cadmium	108-1	234349	238113	240638	237700	1.33	cps
Cadmium	106-1	345706	350359	349801	348622	0.73	cps
Cadmium	111-1	3044906	3204341	3138456	3129234	2.56	cps
Calcium	43-1	19463740	19539769	19568461	19523990	0.28	cps
Calcium	44-1	319288362	323795962	324917135	322667153	0.92	cps
Carbon	12-1	3943840	4090090	4067253	4033728	1.95	cps
Carbon	12-2	33217	33642	33405	33421	0.64	cps
Chlorine	35-1	212111	211196	214844	212717	0.89	cps
Chlorine	35-2	950	930	893	924	3.11	cps
Chromium	52-2	2886177	2807712	2834908	2842932	1.40	cps
Cobalt	59-2	4976620	5050209	5011407	5012745	0.73	cps
Copper	63-2	37831849	37942654	38016637	37930380	0.25	cps
Dysprosium	156-1	690	810	707	736	8.84	cps
Dysprosium	156-2	187	170	187	181	5.31	cps
Erbium	164-1	600	633	653	629	4.28	cps
Erbium	164-2	223	253	220	232	7.91	cps
Gadolinium	160-1	457	497	553	502	9.67	cps
Gadolinium	160-2	240	203	197	213	10.94	cps
Holmium	165-1	8283086	8425717	8286998	8331934	0.98	cps
Holmium	165-2	3296554	3306473	3310131	3304386	0.21	cps
Indium	115-1	6499325	6752286	6622751	6624787	1.91	cps
Indium	115-2	679858	684889	687712	684153	0.58	cps
Iron	54-2	27893415	27718646	27806555	27806205	0.31	cps
Iron	56-2	516935179	515480032	517208859	516541357	0.18	cps
Iron	57-2	12950481	13043126	13029608	13007739	0.38	cps
Krypton	83-1	293	313	323	310	4.93	cps
Lead	206-1	45086163	45830664	45765798	45560875	0.91	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P8
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:41:14	DataFile Name :	044CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	38664766	39656100	39531610	39284159	1.37	cps
Lead	208-1	178443341	181336030	182480363	180753245	1.15	cps
Lithium	6-1	2006906	2040126	2016140	2021058	0.85	cps
Magnesium	24-2	75625324	76447226	76258164	76110238	0.57	cps
Manganese	55-2	11948001	11747025	11849164	11848063	0.85	cps
Molybdenum	94-1	44816121	46130841	45173219	45373394	1.50	cps
Molybdenum	95-1	63850049	66709076	65951571	65503565	2.26	cps
Molybdenum	96-1	70728716	73364774	72656164	72249884	1.89	cps
Molybdenum	97-1	40622169	40913354	40738923	40758149	0.36	cps
Molybdenum	98-1	105316865	106273428	106923318	106171204	0.76	cps
Neodymium	150-1	1313	1177	1173	1221	6.54	cps
Neodymium	150-2	107	60	113	93	31.14	cps
Nickel	60-2	1296281	1296435	1307742	1300153	0.51	cps
Phosphorus	31-2	43639	44006	43886	43844	0.43	cps
Potassium	39-2	26547290	26837241	27095762	26826765	1.02	cps
Rhodium	103-1	6052135	6020540	6057853	6043509	0.33	cps
Rhodium	103-2	2570199	2588630	2600462	2586430	0.59	cps
Scandium	45-1	4547541	4612774	4551513	4570609	0.80	cps
Scandium	45-2	94327	95431	94048	94602	0.77	cps
Selenium	82-1	183156	186360	185457	184991	0.89	cps
Selenium	77-2	3450	3524	3394	3456	1.89	cps
Selenium	78-2	11588	11555	11712	11618	0.71	cps
Silicon	28-1	24903366	24892870	24796262	24864166	0.24	cps
Silver	107-1	15348259	15614295	15621533	15528029	1.00	cps
Silver	109-1	14392237	14685691	14673801	14583910	1.14	cps
Sodium	23-2	152390794	154376631	152487014	153084813	0.73	cps
Strontium	86-1	4308787	4276917	4305980	4297228	0.41	cps
Strontium	88-1	36842497	37274228	37715025	37277250	1.17	cps
Sulfur	34-1	1471150	1467468	1477831	1472149	0.36	cps
Terbium	159-1	8548153	8648933	8718652	8638579	0.99	cps
Terbium	159-2	3172275	3172969	3194721	3179988	0.40	cps
Thallium	203-1	11033795	11260410	11180389	11158198	1.03	cps
Thallium	205-1	26675143	26710860	26605595	26663866	0.20	cps
Tin	118-1	10374416	10470091	10483987	10442831	0.57	cps
Titanium	47-1	17917348	18399414	17828926	18048563	1.70	cps
Uranium	238-1	35342449	36266227	36593587	36067421	1.80	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P8
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:41:14	DataFile Name :	044CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2129923	2153486	2123766	2135725	0.73	cps
Ytterbium	172-1	897	903	920	907	1.33	cps
Ytterbium	172-2	450	343	423	406	13.69	cps
Ytterbium	176-1	54642	55730	56520	55631	1.69	cps
Ytterbium	176-2	21538	21287	20880	21235	1.56	cps
Yttrium	89-1	12635223	12673922	12766864	12692003	0.53	cps
Yttrium	89-2	950010	954628	955621	953420	0.31	cps
Zinc	66-2	4316455	4349537	4314471	4326821	0.46	cps
Zirconium	90-1	22776077	23352972	23451517	23193522	1.57	cps
Zirconium	91-1	5063876	5153226	5158332	5125145	1.04	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P8
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:48:27	DataFile Name :	045CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	420	480	357	419	14.72	cps
Antimony	121-1	1003	883	843	910	9.15	cps
Arsenic	75-2	13	7	7	9	43.25	cps
Barium	135-1	293	230	203	242	19.08	cps
Barium	137-1	433	287	370	363	20.25	cps
Beryllium	9-1	177	189	208	191	8.23	cps
Bismuth	209-1	5559464	5581413	5697410	5612763	1.32	cps
Bismuth	209-2	2555520	2602041	2588652	2582071	0.93	cps
Bromine	81-1	30597	31435	31509	31180	1.63	cps
Cadmium	108-1	13	27	13	18	43.33	cps
Cadmium	106-1	4678	4461	4577	4572	2.37	cps
Cadmium	111-1	3325	3181	3288	3265	2.30	cps
Calcium	43-1	1067	987	1017	1023	3.95	cps
Calcium	44-1	28241	28351	28178	28257	0.31	cps
Carbon	12-1	3433656	3412867	3428593	3425039	0.32	cps
Carbon	12-2	23031	22431	22604	22689	1.36	cps
Chlorine	35-1	152359	154626	153622	153536	0.74	cps
Chlorine	35-2	537	640	667	614	11.18	cps
Chromium	52-2	1217	1163	1067	1149	6.62	cps
Cobalt	59-2	137	127	140	134	5.16	cps
Copper	63-2	2037	2034	2094	2055	1.64	cps
Dysprosium	156-1	17	7	13	12	41.65	cps
Dysprosium	156-2	3	0	3	2	86.60	cps
Erbium	164-1	33	107	33	58	73.29	cps
Erbium	164-2	20	7	30	19	61.96	cps
Gadolinium	160-1	77	60	63	67	13.23	cps
Gadolinium	160-2	37	17	13	22	56.80	cps
Holmium	165-1	8904374	9116319	9110331	9043675	1.33	cps
Holmium	165-2	3547694	3525879	3495105	3522893	0.75	cps
Indium	115-1	7719215	7871395	7939636	7843415	1.44	cps
Indium	115-2	831826	825603	829176	828868	0.38	cps
Iron	54-2	1087	1053	897	1012	10.02	cps
Iron	56-2	13997	13990	13880	13956	0.47	cps
Iron	57-2	347	313	313	324	5.93	cps
Krypton	83-1	260	240	307	269	12.72	cps
Lead	206-1	1930	1890	1637	1819	8.75	cps

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P8
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:48:27	DataFile Name :	045CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1620	1523	1453	1532	5.46	cps
Lead	208-1	7321	7171	6857	7116	3.32	cps
Lithium	6-1	2310927	2349364	2382093	2347461	1.52	cps
Magnesium	24-2	960	1030	933	974	5.12	cps
Manganese	55-2	2614	2634	2690	2646	1.50	cps
Molybdenum	94-1	1430	1410	1343	1395	3.25	cps
Molybdenum	95-1	733	800	840	791	6.81	cps
Molybdenum	96-1	997	950	1010	986	3.20	cps
Molybdenum	97-1	533	507	387	476	16.43	cps
Molybdenum	98-1	1343	1137	1120	1200	10.37	cps
Neodymium	150-1	3	17	13	11	62.48	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	690	597	637	641	7.30	cps
Phosphorus	31-2	70	103	83	86	19.61	cps
Potassium	39-2	17077	16416	17060	16851	2.24	cps
Rhodium	103-1	7367991	7347518	7224509	7313339	1.06	cps
Rhodium	103-2	3164665	3177214	3200528	3180802	0.57	cps
Scandium	45-1	4995290	5013606	5001564	5003487	0.19	cps
Scandium	45-2	101311	101848	102522	101893	0.60	cps
Selenium	82-1	80	80	-53	36	216.48	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	17	53	23	31	62.77	cps
Silicon	28-1	454869	462523	457593	458328	0.85	cps
Silver	107-1	420	490	527	479	11.32	cps
Silver	109-1	430	440	457	442	3.05	cps
Sodium	23-2	43080	42525	42187	42598	1.06	cps
Strontium	86-1	520	577	583	560	6.21	cps
Strontium	88-1	773	787	833	798	3.95	cps
Sulfur	34-1	565881	570030	572374	569428	0.58	cps
Terbium	159-1	9415120	9174122	9585547	9391596	2.20	cps
Terbium	159-2	3502447	3515421	3518250	3512039	0.24	cps
Thallium	203-1	477	433	527	479	9.75	cps
Thallium	205-1	1133	1143	1197	1158	2.94	cps
Tin	118-1	3677	3737	3807	3741	1.74	cps
Titanium	47-1	413	403	407	408	1.25	cps
Uranium	238-1	417	417	423	419	0.92	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P8
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 15:48:27	DataFile Name :	045CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	20	17	30	22	31.22	cps
Ytterbium	172-1	33	43	57	44	26.35	cps
Ytterbium	172-2	7	30	20	19	61.96	cps
Ytterbium	176-1	1060	1217	1073	1117	7.78	cps
Ytterbium	176-2	310	370	350	343	8.90	cps
Yttrium	89-1	14015621	14058531	13796316	13956823	1.01	cps
Yttrium	89-2	1038928	1042941	1033394	1038421	0.46	cps
Zinc	66-2	1583	1477	1647	1569	5.48	cps
Zirconium	90-1	2767	2787	2857	2804	1.69	cps
Zirconium	91-1	580	557	637	591	6.96	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-14DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-18-042325DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:55:03	DataFile Name :	046AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1497812	1487261	1493802	1492958	0.36	cps
Antimony	121-1	83479	84260	84227	83989	0.53	cps
Arsenic	75-2	583	543	607	578	5.54	cps
Barium	135-1	170374	171717	174620	172237	1.26	cps
Barium	137-1	299056	305106	299112	301091	1.15	cps
Beryllium	9-1	1305	1362	1327	1331	2.15	cps
Bismuth	209-1	5375667	5507515	5374690	5419290	1.41	cps
Bismuth	209-2	2493609	2541981	2513226	2516272	0.97	cps
Bromine	81-1	32023	32037	32177	32079	0.27	cps
Cadmium	108-1	87	160	127	124	29.50	cps
Cadmium	106-1	5558	5448	5598	5534	1.40	cps
Cadmium	111-1	4690	4598	4657	4648	1.00	cps
Calcium	43-1	2232658	2258709	2305475	2265614	1.63	cps
Calcium	44-1	35906571	35897133	36727965	36177223	1.32	cps
Carbon	12-1	3685122	3798012	3814919	3766018	1.87	cps
Carbon	12-2	26761	27242	27522	27175	1.42	cps
Chlorine	35-1	662994	724561	766122	717892	7.23	cps
Chlorine	35-2	3097	3227	3387	3237	4.49	cps
Chromium	52-2	34244	34077	33883	34068	0.53	cps
Cobalt	59-2	306439	307968	305639	306682	0.39	cps
Copper	63-2	303038	303451	305211	303900	0.38	cps
Dysprosium	156-1	144121	147379	145822	145774	1.12	cps
Dysprosium	156-2	53657	54226	53048	53644	1.10	cps
Erbium	164-1	159628	162271	160519	160806	0.84	cps
Erbium	164-2	59583	60051	60363	59999	0.65	cps
Gadolinium	160-1	142054	141973	142549	142192	0.22	cps
Gadolinium	160-2	63858	64267	64709	64278	0.66	cps
Holmium	165-1	9208902	9126071	9158487	9164487	0.46	cps
Holmium	165-2	3601022	3607025	3608946	3605664	0.11	cps
Indium	115-1	7669441	7940454	7931214	7847036	1.96	cps
Indium	115-2	820808	827522	830509	826279	0.60	cps
Iron	54-2	14099636	14147004	14078274	14108305	0.25	cps
Iron	56-2	262248996	262905176	265682416	263612196	0.69	cps
Iron	57-2	6536320	6523494	6678433	6579415	1.31	cps
Krypton	83-1	523	553	597	558	6.61	cps
Lead	206-1	36899	37882	38494	37758	2.13	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-14DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-18-042325DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:55:03	DataFile Name :	046AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	31712	31552	31799	31688	0.40	cps
Lead	208-1	145706	147762	147776	147081	0.81	cps
Lithium	6-1	2325388	2349771	2359338	2344832	0.75	cps
Magnesium	24-2	5576247	5575087	5552682	5568005	0.24	cps
Manganese	55-2	2001798	1927512	1994730	1974680	2.08	cps
Molybdenum	94-1	5081	5861	5748	5563	7.58	cps
Molybdenum	95-1	1470	1547	1550	1522	2.97	cps
Molybdenum	96-1	6161	6395	6292	6283	1.86	cps
Molybdenum	97-1	830	907	933	890	6.03	cps
Molybdenum	98-1	2260	2280	2280	2274	0.51	cps
Neodymium	150-1	153469	152613	155897	153993	1.11	cps
Neodymium	150-2	40992	42805	40952	41583	2.54	cps
Nickel	60-2	72691	72028	72306	72342	0.46	cps
Phosphorus	31-2	797	870	777	814	6.03	cps
Potassium	39-2	151516	150960	150482	150986	0.34	cps
Rhodium	103-1	6987163	7194965	7105602	7095910	1.47	cps
Rhodium	103-2	3101322	3042548	3003306	3049059	1.62	cps
Scandium	45-1	5258918	5253375	5303619	5271971	0.52	cps
Scandium	45-2	103785	106591	104651	105009	1.37	cps
Selenium	82-1	280	213	253	249	13.48	cps
Selenium	77-2	257	230	230	239	6.45	cps
Selenium	78-2	153	173	173	167	6.93	cps
Silicon	28-1	171424151	173198997	175634644	173419264	1.22	cps
Silver	107-1	1027	1023	1070	1040	2.50	cps
Silver	109-1	813	887	920	873	6.25	cps
Sodium	23-2	4627525	4577180	4581103	4595269	0.61	cps
Strontium	86-1	646896	651766	657986	652216	0.85	cps
Strontium	88-1	5914950	5944203	5973924	5944359	0.50	cps
Sulfur	34-1	8879272	9122209	9119209	9040230	1.54	cps
Terbium	159-1	9599926	9444640	9418384	9487650	1.03	cps
Terbium	159-2	3427737	3496060	3467847	3463881	0.99	cps
Thallium	203-1	1243	1323	1407	1325	6.17	cps
Thallium	205-1	3057	3004	3294	3118	4.95	cps
Tin	118-1	5851	5728	6135	5905	3.53	cps
Titanium	47-1	8156	7926	8152	8078	1.63	cps
Uranium	238-1	84093	88241	85730	86021	2.43	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-14DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-18-042325DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:55:03	DataFile Name :	046AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	302427	304409	302480	303106	0.37	cps
Ytterbium	172-1	58465	59426	60025	59305	1.33	cps
Ytterbium	172-2	26737	26577	27101	26805	1.00	cps
Ytterbium	176-1	36236	36992	37667	36965	1.94	cps
Ytterbium	176-2	16721	16881	16661	16754	0.68	cps
Yttrium	89-1	17096656	16771746	16856810	16908404	1.00	cps
Yttrium	89-2	1251281	1264989	1267345	1261205	0.69	cps
Zinc	66-2	232591	231108	234741	232813	0.78	cps
Zirconium	90-1	11788	13016	13397	12734	6.60	cps
Zirconium	91-1	2804	2757	2974	2845	4.01	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:58:18	DataFile Name :	047AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1215586	1183699	1242889	1214058	2.44	cps
Antimony	121-1	1277	1270	1237	1261	1.70	cps
Arsenic	75-2	517	540	623	560	10.01	cps
Barium	135-1	151331	153628	153832	152930	0.91	cps
Barium	137-1	264323	268955	276832	270037	2.34	cps
Beryllium	9-1	1572	1523	1623	1573	3.20	cps
Bismuth	209-1	5386182	5413251	5444698	5414711	0.54	cps
Bismuth	209-2	2519046	2522752	2551324	2531041	0.70	cps
Bromine	81-1	32247	32859	32224	32443	1.11	cps
Cadmium	108-1	140	110	117	122	12.89	cps
Cadmium	106-1	5798	5718	5558	5691	2.15	cps
Cadmium	111-1	4664	4579	4482	4575	1.99	cps
Calcium	43-1	2441080	2454838	2435995	2443971	0.40	cps
Calcium	44-1	40028988	40111145	40227999	40122711	0.25	cps
Carbon	12-1	3823831	3937803	4003878	3921837	2.32	cps
Carbon	12-2	28334	28023	27840	28066	0.89	cps
Chlorine	35-1	256574	255400	252079	254684	0.92	cps
Chlorine	35-2	1033	1103	1020	1052	4.25	cps
Chromium	52-2	20451	21586	21179	21072	2.73	cps
Cobalt	59-2	302542	299740	302129	301470	0.50	cps
Copper	63-2	195885	194668	197247	195933	0.66	cps
Dysprosium	156-1	158163	158865	161169	159399	0.99	cps
Dysprosium	156-2	59351	60362	60265	59993	0.93	cps
Erbium	164-1	178823	181896	183285	181335	1.26	cps
Erbium	164-2	67989	68887	68606	68494	0.67	cps
Gadolinium	160-1	155562	156358	156565	156162	0.34	cps
Gadolinium	160-2	71128	71141	70559	70943	0.47	cps
Holmium	165-1	9051707	9253495	9301082	9202094	1.44	cps
Holmium	165-2	3593578	3623538	3638630	3618582	0.63	cps
Indium	115-1	7744082	7742965	7675090	7720712	0.51	cps
Indium	115-2	827697	819892	820587	822725	0.53	cps
Iron	54-2	19055907	18901885	18757133	18904975	0.79	cps
Iron	56-2	347081528	348164181	353387755	349544488	0.96	cps
Iron	57-2	8834344	8608856	8863954	8769051	1.59	cps
Krypton	83-1	587	617	570	591	4.00	cps
Lead	206-1	30255	29193	29911	29786	1.82	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:58:18	DataFile Name :	047AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	24654	25639	25462	25251	2.08	cps
Lead	208-1	115918	116766	117374	116686	0.63	cps
Lithium	6-1	2203274	2229504	2288881	2240553	1.96	cps
Magnesium	24-2	5192933	5205550	5212533	5203672	0.19	cps
Manganese	55-2	2561958	2509317	2529160	2533478	1.05	cps
Molybdenum	94-1	4094	4197	4117	4136	1.31	cps
Molybdenum	95-1	717	797	767	760	5.32	cps
Molybdenum	96-1	7045	6515	6855	6805	3.95	cps
Molybdenum	97-1	587	527	467	527	11.39	cps
Molybdenum	98-1	820	933	790	848	8.92	cps
Neodymium	150-1	165054	162895	166593	164847	1.13	cps
Neodymium	150-2	44898	44774	45196	44956	0.48	cps
Nickel	60-2	40782	39672	40080	40178	1.40	cps
Phosphorus	31-2	557	600	563	573	4.07	cps
Potassium	39-2	128075	127678	128597	128117	0.36	cps
Rhodium	103-1	7081079	7265193	7120878	7155717	1.35	cps
Rhodium	103-2	3088195	3059630	3033551	3060459	0.89	cps
Scandium	45-1	5148072	5138416	5191271	5159253	0.55	cps
Scandium	45-2	103751	103006	103677	103478	0.40	cps
Selenium	82-1	260	257	330	282	14.67	cps
Selenium	77-2	277	297	227	267	13.52	cps
Selenium	78-2	213	213	193	207	5.59	cps
Silicon	28-1	172957777	170265977	172521524	171915093	0.84	cps
Silver	107-1	213	253	217	228	9.74	cps
Silver	109-1	193	140	150	161	17.60	cps
Sodium	23-2	3589373	3550133	3524616	3554707	0.92	cps
Strontium	86-1	716417	724119	728025	722854	0.82	cps
Strontium	88-1	6485367	6576448	6580469	6547428	0.82	cps
Sulfur	34-1	8750765	8789208	8821457	8787143	0.40	cps
Terbium	159-1	9446870	9358638	9422174	9409227	0.48	cps
Terbium	159-2	3502994	3476388	3532466	3503949	0.80	cps
Thallium	203-1	593	560	557	570	3.56	cps
Thallium	205-1	1340	1410	1317	1356	3.58	cps
Tin	118-1	4768	4754	5068	4863	3.64	cps
Titanium	47-1	4424	4347	4271	4347	1.76	cps
Uranium	238-1	84254	85136	85884	85091	0.96	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 15:58:18	DataFile Name :	047AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	294489	297864	296812	296388	0.58	cps
Ytterbium	172-1	67367	67246	67544	67386	0.22	cps
Ytterbium	172-2	29837	30392	30846	30358	1.66	cps
Ytterbium	176-1	42020	42956	41214	42064	2.07	cps
Ytterbium	176-2	19141	19501	19431	19358	0.99	cps
Yttrium	89-1	17572420	17738814	17375269	17562168	1.04	cps
Yttrium	89-2	1312221	1294277	1297645	1301381	0.73	cps
Zinc	66-2	196601	196321	195101	196007	0.41	cps
Zirconium	90-1	9613	10130	9950	9898	2.65	cps
Zirconium	91-1	2134	2474	2087	2231	9.46	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DUPDLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DUF	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:01:35	DataFile Name :	048AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1243506	1215746	1203171	1220808	1.69	cps
Antimony	121-1	467	367	370	401	14.16	cps
Arsenic	75-2	557	510	500	522	5.79	cps
Barium	135-1	163316	157440	156630	159129	2.29	cps
Barium	137-1	267432	272892	274888	271737	1.42	cps
Beryllium	9-1	1503	1534	1519	1519	1.00	cps
Bismuth	209-1	5354265	5319261	5314551	5329359	0.41	cps
Bismuth	209-2	2459686	2537171	2474764	2490540	1.65	cps
Bromine	81-1	33119	32585	32611	32772	0.92	cps
Cadmium	108-1	100	70	93	88	17.95	cps
Cadmium	106-1	5835	5545	5578	5652	2.81	cps
Cadmium	111-1	4701	4486	4556	4581	2.40	cps
Calcium	43-1	2526133	2470064	2485778	2493992	1.16	cps
Calcium	44-1	40452195	41388862	41036697	40959251	1.16	cps
Carbon	12-1	3856671	3939248	3991861	3929260	1.73	cps
Carbon	12-2	28498	28327	27997	28274	0.90	cps
Chlorine	35-1	219264	224873	225493	223210	1.54	cps
Chlorine	35-2	953	1037	1083	1024	6.43	cps
Chromium	52-2	21476	21242	20668	21129	1.97	cps
Cobalt	59-2	305789	303273	301641	303567	0.69	cps
Copper	63-2	196524	197376	196403	196768	0.27	cps
Dysprosium	156-1	158691	162444	163837	161657	1.65	cps
Dysprosium	156-2	59900	59913	59528	59781	0.37	cps
Erbium	164-1	181927	185494	185414	184279	1.11	cps
Erbium	164-2	68471	69685	68974	69043	0.88	cps
Gadolinium	160-1	162260	158419	160607	160429	1.20	cps
Gadolinium	160-2	71832	72234	71329	71798	0.63	cps
Holmium	165-1	9032955	9213971	9082635	9109854	1.03	cps
Holmium	165-2	3643045	3568955	3652447	3621482	1.26	cps
Indium	115-1	7778316	7674971	7882998	7778762	1.34	cps
Indium	115-2	823793	825619	821458	823623	0.25	cps
Iron	54-2	18958096	19368326	19343889	19223437	1.20	cps
Iron	56-2	359104475	356100381	351557635	355587497	1.07	cps
Iron	57-2	9108029	8852963	8852029	8937674	1.65	cps
Krypton	83-1	630	610	603	614	2.26	cps
Lead	206-1	14959	15042	15259	15087	1.03	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DUPDLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DUF	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:01:35	DataFile Name :	048AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	12189	12846	12576	12537	2.64	cps
Lead	208-1	57634	58268	58598	58167	0.84	cps
Lithium	6-1	2250872	2276319	2305981	2277724	1.21	cps
Magnesium	24-2	5285508	5265640	5216790	5255979	0.67	cps
Manganese	55-2	2581691	2588263	2565987	2578647	0.44	cps
Molybdenum	94-1	4161	4084	4021	4088	1.72	cps
Molybdenum	95-1	833	763	777	791	4.70	cps
Molybdenum	96-1	6912	7069	6908	6963	1.31	cps
Molybdenum	97-1	527	463	507	499	6.49	cps
Molybdenum	98-1	857	877	917	883	3.46	cps
Neodymium	150-1	165894	165130	167816	166280	0.83	cps
Neodymium	150-2	45417	44634	44276	44776	1.30	cps
Nickel	60-2	40073	40598	39719	40130	1.10	cps
Phosphorus	31-2	563	553	590	569	3.33	cps
Potassium	39-2	130272	129125	129784	129727	0.44	cps
Rhodium	103-1	7118653	7138987	7211979	7156539	0.69	cps
Rhodium	103-2	3113469	3036142	3091293	3080301	1.29	cps
Scandium	45-1	5162346	5317752	5243593	5241230	1.48	cps
Scandium	45-2	103036	102173	103942	103050	0.86	cps
Selenium	82-1	310	277	183	257	25.58	cps
Selenium	77-2	260	200	213	224	14.04	cps
Selenium	78-2	207	210	197	204	3.39	cps
Silicon	28-1	172204721	178079477	178036024	176106741	1.92	cps
Silver	107-1	237	227	210	224	6.00	cps
Silver	109-1	120	140	113	124	11.15	cps
Sodium	23-2	3633068	3581576	3540344	3584996	1.30	cps
Strontium	86-1	724883	727003	735549	729145	0.77	cps
Strontium	88-1	6559176	6618501	6684717	6620798	0.95	cps
Sulfur	34-1	8828397	9126501	9234198	9063032	2.32	cps
Terbium	159-1	9432110	9492618	9510932	9478554	0.44	cps
Terbium	159-2	3533451	3535513	3511242	3526736	0.38	cps
Thallium	203-1	593	480	500	524	11.53	cps
Thallium	205-1	1277	1257	1233	1256	1.73	cps
Tin	118-1	4898	4868	4881	4882	0.31	cps
Titanium	47-1	4324	4667	4447	4480	3.88	cps
Uranium	238-1	85260	85018	86106	85461	0.67	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DUPDLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DUF	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:01:35	DataFile Name :	048AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	300908	301919	297945	300258	0.69	cps
Ytterbium	172-1	67725	68060	67786	67857	0.26	cps
Ytterbium	172-2	30823	30986	30876	30895	0.27	cps
Ytterbium	176-1	41321	42154	42187	41887	1.17	cps
Ytterbium	176-2	19738	19685	19648	19690	0.23	cps
Yttrium	89-1	17610396	17562420	17611234	17594683	0.16	cps
Yttrium	89-2	1308801	1302912	1304237	1305316	0.24	cps
Zinc	66-2	196708	197861	195776	196782	0.53	cps
Zirconium	90-1	9657	9774	9663	9698	0.68	cps
Zirconium	91-1	2120	2167	2147	2145	1.09	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16LDLX25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325LDL	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:04:59	DataFile Name :	049AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	243263	247167	246115	245515	0.82	cps
Antimony	121-1	403	460	433	432	6.56	cps
Arsenic	75-2	113	160	103	126	24.09	cps
Barium	135-1	30982	31249	30842	31024	0.67	cps
Barium	137-1	55248	53910	55159	54772	1.37	cps
Beryllium	9-1	386	348	373	369	5.33	cps
Bismuth	209-1	5401583	5370195	5532845	5434874	1.59	cps
Bismuth	209-2	2549293	2577185	2578849	2568442	0.65	cps
Bromine	81-1	32775	32945	32511	32744	0.67	cps
Cadmium	108-1	40	37	37	38	5.09	cps
Cadmium	106-1	4711	4754	4874	4780	1.77	cps
Cadmium	111-1	3440	3446	3530	3472	1.45	cps
Calcium	43-1	495129	499937	498981	498016	0.51	cps
Calcium	44-1	8237516	8292324	8378966	8302935	0.86	cps
Carbon	12-1	3691300	3742839	3728262	3720800	0.71	cps
Carbon	12-2	24664	24854	24878	24799	0.47	cps
Chlorine	35-1	179168	178992	178817	178992	0.10	cps
Chlorine	35-2	637	730	803	723	11.55	cps
Chromium	52-2	5114	5121	5351	5195	2.59	cps
Cobalt	59-2	61827	62192	62403	62140	0.47	cps
Copper	63-2	41608	41701	42296	41868	0.89	cps
Dysprosium	156-1	31755	31417	32593	31921	1.90	cps
Dysprosium	156-2	11829	12419	12172	12140	2.44	cps
Erbium	164-1	37058	36717	36894	36890	0.46	cps
Erbium	164-2	13607	13727	14131	13822	1.99	cps
Gadolinium	160-1	31531	31868	31861	31753	0.61	cps
Gadolinium	160-2	14515	14495	14828	14613	1.28	cps
Holmium	165-1	8860553	9099991	8926321	8962288	1.38	cps
Holmium	165-2	3579539	3588018	3530645	3566067	0.87	cps
Indium	115-1	7788318	7737830	7901803	7809317	1.08	cps
Indium	115-2	834866	832025	830720	832537	0.25	cps
Iron	54-2	3919810	3887941	3908542	3905431	0.41	cps
Iron	56-2	72156587	72263951	71428382	71949640	0.63	cps
Iron	57-2	1863600	1832052	1816413	1837355	1.31	cps
Krypton	83-1	477	333	377	396	18.58	cps
Lead	206-1	7082	6975	6722	6926	2.67	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16LDLX25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325LDL	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:04:59	DataFile Name :	049AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5688	5931	5885	5835	2.21	cps
Lead	208-1	27385	26971	27168	27175	0.76	cps
Lithium	6-1	2238226	2253209	2290540	2260658	1.19	cps
Magnesium	24-2	1072716	1076647	1070082	1073148	0.31	cps
Manganese	55-2	499021	493415	491718	494718	0.77	cps
Molybdenum	94-1	1533	1470	1560	1521	3.04	cps
Molybdenum	95-1	383	340	377	367	6.36	cps
Molybdenum	96-1	1697	1720	1647	1688	2.22	cps
Molybdenum	97-1	220	157	190	189	16.77	cps
Molybdenum	98-1	453	463	470	462	1.81	cps
Neodymium	150-1	33375	33682	32840	33299	1.28	cps
Neodymium	150-2	9330	8796	8876	9001	3.20	cps
Nickel	60-2	8739	8946	8523	8736	2.42	cps
Phosphorus	31-2	180	170	187	179	4.69	cps
Potassium	39-2	39915	39417	40032	39788	0.82	cps
Rhodium	103-1	7336726	7348943	7351359	7345676	0.11	cps
Rhodium	103-2	3121100	3143346	3085167	3116538	0.94	cps
Scandium	45-1	5110796	5128620	5230989	5156802	1.26	cps
Scandium	45-2	103836	102905	103711	103484	0.49	cps
Selenium	82-1	0	67	53	40	88.19	cps
Selenium	77-2	53	60	63	59	8.65	cps
Selenium	78-2	73	70	77	73	4.55	cps
Silicon	28-1	35708334	36269826	35688763	35888974	0.92	cps
Silver	107-1	170	183	193	182	6.43	cps
Silver	109-1	150	107	130	129	16.83	cps
Sodium	23-2	759982	749383	750358	753241	0.78	cps
Strontium	86-1	145720	147377	147835	146977	0.76	cps
Strontium	88-1	1264367	1290104	1277012	1277161	1.01	cps
Sulfur	34-1	2201812	2234484	2255438	2230578	1.21	cps
Terbium	159-1	9267141	9248374	9351058	9288858	0.59	cps
Terbium	159-2	3476114	3466789	3509965	3484289	0.65	cps
Thallium	203-1	323	313	390	342	12.18	cps
Thallium	205-1	873	763	777	804	7.46	cps
Tin	118-1	3841	4214	4057	4037	4.64	cps
Titanium	47-1	967	1167	1147	1093	10.07	cps
Uranium	238-1	17222	17222	17596	17346	1.24	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16LDLX25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325LDL	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:04:59	DataFile Name :	049AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	60614	60289	60684	60529	0.35	cps
Ytterbium	172-1	13270	14228	13500	13666	3.66	cps
Ytterbium	172-2	5995	6295	6295	6195	2.80	cps
Ytterbium	176-1	9373	9337	9283	9331	0.49	cps
Ytterbium	176-2	4127	4437	4071	4212	4.69	cps
Yttrium	89-1	14436664	14703353	14790884	14643634	1.26	cps
Yttrium	89-2	1100647	1100040	1097218	1099302	0.17	cps
Zinc	66-2	40825	41798	41260	41294	1.18	cps
Zirconium	90-1	3444	3567	3581	3531	2.14	cps
Zirconium	91-1	710	797	877	794	10.49	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:08:19	DataFile Name :	050AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1314689	1349824	1302837	1322450	1.85	cps
Antimony	121-1	2742044	2732856	2801219	2758706	1.34	cps
Arsenic	75-2	490	547	477	504	7.37	cps
Barium	135-1	3150417	3196686	3197959	3181687	0.85	cps
Barium	137-1	5373738	5417062	5441112	5410637	0.63	cps
Beryllium	9-1	573078	579497	583634	578736	0.92	cps
Bismuth	209-1	5438972	5395446	5340858	5391759	0.91	cps
Bismuth	209-2	2502242	2490908	2501699	2498283	0.26	cps
Bromine	81-1	32765	33480	33169	33138	1.08	cps
Cadmium	108-1	49191	49492	50512	49732	1.39	cps
Cadmium	106-1	80774	81499	81213	81162	0.45	cps
Cadmium	111-1	658021	660584	671909	663504	1.11	cps
Calcium	43-1	3207592	3199700	3254302	3220532	0.92	cps
Calcium	44-1	51444991	51587891	52701099	51911327	1.32	cps
Carbon	12-1	3752742	3836865	3949060	3846222	2.56	cps
Carbon	12-2	28504	28104	27770	28126	1.31	cps
Chlorine	35-1	14730701	16405614	17351661	16162659	8.21	cps
Chlorine	35-2	80626	80804	82081	81170	0.98	cps
Chromium	52-2	581589	580989	579324	580634	0.20	cps
Cobalt	59-2	1362237	1355145	1349616	1355666	0.47	cps
Copper	63-2	8999903	8981398	8853184	8944828	0.89	cps
Dysprosium	156-1	148148	150830	152043	150341	1.33	cps
Dysprosium	156-2	56496	56432	56652	56527	0.20	cps
Erbium	164-1	171403	170813	173506	171907	0.82	cps
Erbium	164-2	64230	63246	64559	64012	1.07	cps
Gadolinium	160-1	146849	149680	149356	148628	1.04	cps
Gadolinium	160-2	66759	68277	66873	67303	1.26	cps
Holmium	165-1	9205688	9081570	9153289	9146849	0.68	cps
Holmium	165-2	3630964	3587630	3643599	3620731	0.81	cps
Indium	115-1	7653657	7590611	7639401	7627890	0.43	cps
Indium	115-2	811809	811562	801250	808207	0.75	cps
Iron	54-2	19168853	18456664	18797893	18807803	1.89	cps
Iron	56-2	341658962	347696928	348609608	345988499	1.09	cps
Iron	57-2	8594340	8810447	8566999	8657262	1.54	cps
Krypton	83-1	653	643	587	628	5.73	cps
Lead	206-1	9704272	9630420	9671379	9668690	0.38	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:08:19	DataFile Name :	050AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	8313792	8403463	8386054	8367770	0.57	cps
Lead	208-1	38202328	38178824	38504972	38295375	0.47	cps
Lithium	6-1	2306513	2320557	2271154	2299408	1.11	cps
Magnesium	24-2	8247669	8263128	8199916	8236904	0.40	cps
Manganese	55-2	4867535	4870031	4911376	4882980	0.50	cps
Molybdenum	94-1	4543095	4512992	4530834	4528973	0.33	cps
Molybdenum	95-1	4993141	4940467	5049562	4994390	1.09	cps
Molybdenum	96-1	5675088	5691883	5635396	5667456	0.51	cps
Molybdenum	97-1	3086366	3156819	3100798	3114661	1.19	cps
Molybdenum	98-1	8005087	7967447	8083202	8018579	0.74	cps
Neodymium	150-1	151036	155749	157937	154907	2.28	cps
Neodymium	150-2	42524	42099	41210	41944	1.60	cps
Nickel	60-2	331208	330323	329945	330492	0.20	cps
Phosphorus	31-2	477	523	517	506	4.99	cps
Potassium	39-2	1110833	1112688	1115373	1112965	0.21	cps
Rhodium	103-1	7149779	7108174	7177916	7145289	0.49	cps
Rhodium	103-2	3010272	3032991	2994747	3012670	0.64	cps
Scandium	45-1	5133280	5113112	5187131	5144508	0.74	cps
Scandium	45-2	103070	102814	103318	103067	0.24	cps
Selenium	82-1	40590	41413	42005	41336	1.72	cps
Selenium	77-2	913	960	1027	967	5.89	cps
Selenium	78-2	2710	2824	2747	2760	2.10	cps
Silicon	28-1	160789208	162305384	162470008	161854866	0.57	cps
Silver	107-1	543285	554400	557627	551771	1.36	cps
Silver	109-1	506082	521291	524034	517135	1.87	cps
Sodium	23-2	9943563	10170544	9907943	10007350	1.42	cps
Strontium	86-1	1791246	1796251	1822914	1803471	0.94	cps
Strontium	88-1	15317783	15629608	15686596	15544662	1.28	cps
Sulfur	34-1	8455143	8449920	8593196	8499420	0.96	cps
Terbium	159-1	9446979	9575901	9544169	9522350	0.71	cps
Terbium	159-2	3437755	3464252	3429361	3443790	0.53	cps
Thallium	203-1	2401168	2387705	2404274	2397716	0.37	cps
Thallium	205-1	5629331	5641762	5653181	5641425	0.21	cps
Tin	118-1	2019294	2029164	2041102	2029853	0.54	cps
Titanium	47-1	5421	5551	5334	5436	2.01	cps
Uranium	238-1	6981835	7071681	7269323	7107613	2.07	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:08:19	DataFile Name :	050AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	724160	726868	726236	725755	0.20	cps
Ytterbium	172-1	62929	62748	63676	63117	0.78	cps
Ytterbium	172-2	28190	28344	28120	28218	0.41	cps
Ytterbium	176-1	49743	50606	50439	50263	0.91	cps
Ytterbium	176-2	22563	22603	22469	22545	0.30	cps
Yttrium	89-1	17182230	17088055	17538638	17269641	1.38	cps
Yttrium	89-2	1278677	1285301	1267449	1277142	0.71	cps
Zinc	66-2	1119902	1121544	1107259	1116235	0.70	cps
Zirconium	90-1	4821754	4877781	4931234	4876923	1.12	cps
Zirconium	91-1	1008096	1034965	1035594	1026218	1.53	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDDLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:11:16	DataFile Name :	051AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1317752	1293222	1273396	1294790	1.72	cps
Antimony	121-1	2708049	2834556	2743323	2761976	2.36	cps
Arsenic	75-2	513	473	490	492	4.08	cps
Barium	135-1	3115495	3192707	3144698	3150967	1.24	cps
Barium	137-1	5359528	5356508	5398783	5371607	0.44	cps
Beryllium	9-1	573180	576069	579386	576211	0.54	cps
Bismuth	209-1	5324460	5370448	5403850	5366253	0.74	cps
Bismuth	209-2	2539615	2473088	2482564	2498422	1.44	cps
Bromine	81-1	32110	32357	31435	31968	1.49	cps
Cadmium	108-1	49706	49485	49097	49429	0.62	cps
Cadmium	106-1	77094	78605	80717	78805	2.31	cps
Cadmium	111-1	654604	659270	658701	657525	0.39	cps
Calcium	43-1	3088191	3178273	3161762	3142742	1.53	cps
Calcium	44-1	51712139	52100089	51983628	51931952	0.38	cps
Carbon	12-1	3894036	3954421	4044192	3964216	1.91	cps
Carbon	12-2	28284	28277	28281	28281	0.01	cps
Chlorine	35-1	16362009	17744448	18179135	17428531	5.44	cps
Chlorine	35-2	83375	84102	84431	83969	0.64	cps
Chromium	52-2	578585	577279	582138	579334	0.43	cps
Cobalt	59-2	1340095	1345894	1341537	1342508	0.22	cps
Copper	63-2	8823385	9092567	8917804	8944585	1.53	cps
Dysprosium	156-1	148649	149641	150018	149436	0.47	cps
Dysprosium	156-2	56114	56194	56338	56215	0.20	cps
Erbium	164-1	168013	171491	170619	170041	1.06	cps
Erbium	164-2	63634	64458	64220	64104	0.66	cps
Gadolinium	160-1	147647	149861	149480	148996	0.79	cps
Gadolinium	160-2	67057	66072	67201	66777	0.92	cps
Holmium	165-1	9226717	9208516	9243357	9226197	0.19	cps
Holmium	165-2	3621285	3582513	3664102	3622633	1.13	cps
Indium	115-1	7680177	7797512	7684826	7720838	0.86	cps
Indium	115-2	804313	807226	802993	804844	0.27	cps
Iron	54-2	18795675	18438946	18653855	18629492	0.96	cps
Iron	56-2	346678848	349552995	342259235	346163693	1.06	cps
Iron	57-2	8544341	8687999	8545725	8592688	0.96	cps
Krypton	83-1	680	547	593	607	11.15	cps
Lead	206-1	9651411	9513781	9603606	9589599	0.73	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDDLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:11:16	DataFile Name :	051AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	8326124	8221707	8324509	8290780	0.72	cps
Lead	208-1	38106459	37831871	38382437	38106922	0.72	cps
Lithium	6-1	2277999	2289663	2279021	2282228	0.28	cps
Magnesium	24-2	8238633	8222677	8118313	8193208	0.80	cps
Manganese	55-2	4929339	4823282	4870663	4874428	1.09	cps
Molybdenum	94-1	4611614	4518168	4556892	4562225	1.03	cps
Molybdenum	95-1	4918465	4907096	4986631	4937397	0.87	cps
Molybdenum	96-1	5664791	5611198	5671091	5649027	0.58	cps
Molybdenum	97-1	3097515	3090462	3111313	3099763	0.34	cps
Molybdenum	98-1	7984766	8034083	8060457	8026435	0.48	cps
Neodymium	150-1	155209	154158	157371	155579	1.05	cps
Neodymium	150-2	41748	41481	41089	41439	0.80	cps
Nickel	60-2	329058	328463	325713	327745	0.54	cps
Phosphorus	31-2	483	507	557	516	7.27	cps
Potassium	39-2	1096858	1101978	1092761	1097199	0.42	cps
Rhodium	103-1	7136588	7178072	7146442	7153701	0.30	cps
Rhodium	103-2	3036474	2993837	3022944	3017752	0.72	cps
Scandium	45-1	5184745	5149350	5161518	5165204	0.35	cps
Scandium	45-2	103425	102939	102270	102878	0.56	cps
Selenium	82-1	40587	40607	41757	40984	1.63	cps
Selenium	77-2	967	923	970	953	2.73	cps
Selenium	78-2	2717	2637	2710	2688	1.65	cps
Silicon	28-1	161395494	162327061	162622344	162114966	0.39	cps
Silver	107-1	547046	554237	559395	553559	1.12	cps
Silver	109-1	513280	517157	526503	518980	1.31	cps
Sodium	23-2	10113995	9873749	9742339	9910028	1.90	cps
Strontium	86-1	1771332	1797495	1792616	1787148	0.78	cps
Strontium	88-1	15490383	15593112	15459144	15514213	0.45	cps
Sulfur	34-1	8334456	8342440	8323979	8333625	0.11	cps
Terbium	159-1	9499944	9652111	9621268	9591108	0.84	cps
Terbium	159-2	3441277	3466169	3502301	3469916	0.88	cps
Thallium	203-1	2404658	2371887	2396615	2391053	0.71	cps
Thallium	205-1	5623281	5636295	5572973	5610849	0.60	cps
Tin	118-1	2033789	2036329	2024789	2031635	0.30	cps
Titanium	47-1	5618	5561	5648	5609	0.79	cps
Uranium	238-1	7056903	7173190	7156949	7129014	0.88	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDDLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:11:16	DataFile Name :	051AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	721060	725487	717908	721485	0.53	cps
Ytterbium	172-1	62480	63572	63729	63260	1.08	cps
Ytterbium	172-2	28264	28163	29079	28502	1.76	cps
Ytterbium	176-1	49854	50108	51209	50390	1.43	cps
Ytterbium	176-2	22392	22753	22336	22494	1.01	cps
Yttrium	89-1	17232098	17463113	17330549	17341920	0.67	cps
Yttrium	89-2	1275576	1278312	1270578	1274822	0.31	cps
Zinc	66-2	1111424	1115188	1104360	1110324	0.50	cps
Zirconium	90-1	4805448	4796989	4890260	4830899	1.07	cps
Zirconium	91-1	1019408	1025703	1036098	1027070	0.82	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16ADLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325ADL	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:14:17	DataFile Name :	052AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1343153	1343139	1310306	1332199	1.42	cps
Antimony	121-1	2836155	2866400	2852504	2851686	0.53	cps
Arsenic	75-2	500	557	547	534	5.66	cps
Barium	135-1	3177218	3268609	3276156	3240661	1.70	cps
Barium	137-1	5365336	5501363	5483636	5450112	1.36	cps
Beryllium	9-1	574929	586999	586272	582733	1.16	cps
Bismuth	209-1	5350200	5558096	5431643	5446646	1.92	cps
Bismuth	209-2	2454600	2505633	2509234	2489822	1.23	cps
Bromine	81-1	32020	32976	31632	32209	2.15	cps
Cadmium	108-1	49763	51412	50857	50677	1.66	cps
Cadmium	106-1	80017	81579	82236	81277	1.40	cps
Cadmium	111-1	662277	672383	677034	670565	1.13	cps
Calcium	43-1	3214577	3261790	3251984	3242783	0.77	cps
Calcium	44-1	51978891	52747744	53390509	52705715	1.34	cps
Carbon	12-1	3817521	3904633	4002689	3908281	2.37	cps
Carbon	12-2	28030	28531	27746	28102	1.41	cps
Chlorine	35-1	16875727	18287053	18982201	18048327	5.95	cps
Chlorine	35-2	85263	86339	85557	85720	0.65	cps
Chromium	52-2	583150	582941	583281	583124	0.03	cps
Cobalt	59-2	1372023	1415358	1443257	1410213	2.55	cps
Copper	63-2	9021101	9096164	9114895	9077387	0.55	cps
Dysprosium	156-1	149637	153537	153328	152167	1.44	cps
Dysprosium	156-2	57630	56469	56546	56881	1.14	cps
Erbium	164-1	172480	175332	175708	174507	1.01	cps
Erbium	164-2	64663	65322	64512	64832	0.66	cps
Gadolinium	160-1	149427	153118	152869	151804	1.36	cps
Gadolinium	160-2	68223	68816	68163	68401	0.53	cps
Holmium	165-1	9059953	9251474	9112939	9141456	1.08	cps
Holmium	165-2	3592599	3624776	3616150	3611175	0.46	cps
Indium	115-1	7680858	7614517	7663659	7653011	0.45	cps
Indium	115-2	806597	810894	807083	808191	0.29	cps
Iron	54-2	19058760	19066588	19182545	19102631	0.36	cps
Iron	56-2	348684421	345998635	349123141	347935399	0.49	cps
Iron	57-2	8752401	8808338	8879419	8813386	0.72	cps
Krypton	83-1	530	597	627	584	8.47	cps
Lead	206-1	9720364	9953762	9822603	9832243	1.19	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16ADLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325ADL	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:14:17	DataFile Name :	052AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	8486211	8727820	8643711	8619247	1.42	cps
Lead	208-1	38609712	39774269	39303079	39229020	1.49	cps
Lithium	6-1	2228189	2311198	2259333	2266240	1.85	cps
Magnesium	24-2	8410059	8444889	8292160	8382369	0.95	cps
Manganese	55-2	4886572	4910191	4981981	4926248	1.01	cps
Molybdenum	94-1	4600404	4609010	4665348	4624921	0.76	cps
Molybdenum	95-1	5067344	5131354	5181002	5126567	1.11	cps
Molybdenum	96-1	5688511	5815912	5901170	5801864	1.84	cps
Molybdenum	97-1	3141964	3205981	3228961	3192302	1.41	cps
Molybdenum	98-1	7956050	8189176	8236415	8127214	1.85	cps
Neodymium	150-1	155159	157849	159768	157592	1.47	cps
Neodymium	150-2	42490	42718	42417	42542	0.37	cps
Nickel	60-2	335681	330044	334816	333514	0.91	cps
Phosphorus	31-2	557	627	490	558	12.25	cps
Potassium	39-2	1118832	1130694	1123353	1124293	0.53	cps
Rhodium	103-1	7010243	7230505	7100509	7113752	1.56	cps
Rhodium	103-2	3070237	3075330	3059700	3068423	0.26	cps
Scandium	45-1	5088916	5210471	5315226	5204871	2.18	cps
Scandium	45-2	102334	103069	101428	102277	0.80	cps
Selenium	82-1	41235	42202	42192	41876	1.33	cps
Selenium	77-2	913	957	1003	958	4.70	cps
Selenium	78-2	2690	2867	2757	2771	3.22	cps
Silicon	28-1	162847784	161997014	161832128	162225642	0.34	cps
Silver	107-1	553723	565094	567012	561943	1.28	cps
Silver	109-1	520598	533790	537626	530671	1.68	cps
Sodium	23-2	10094043	10180756	10136168	10136989	0.43	cps
Strontium	86-1	1811649	1832978	1855562	1833397	1.20	cps
Strontium	88-1	15609449	15759872	15779513	15716278	0.59	cps
Sulfur	34-1	8508087	8734196	8588356	8610213	1.33	cps
Terbium	159-1	9493688	9701722	9744406	9646605	1.39	cps
Terbium	159-2	3511589	3508012	3477337	3498979	0.54	cps
Thallium	203-1	2382279	2450923	2442635	2425279	1.54	cps
Thallium	205-1	5608846	5841106	5675436	5708463	2.10	cps
Tin	118-1	2083211	2094042	2044215	2073823	1.26	cps
Titanium	47-1	5201	5321	5474	5332	2.57	cps
Uranium	238-1	7104713	7453991	7411139	7323281	2.60	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16ADLX5	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325ADL	Dilution Factor :	5
Date & Time Acquired :	2025-04-29 16:14:17	DataFile Name :	052AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	733552	732269	729935	731918	0.25	cps
Ytterbium	172-1	63417	64998	65189	64535	1.51	cps
Ytterbium	172-2	28765	29256	29079	29033	0.86	cps
Ytterbium	176-1	49686	51329	51303	50773	1.85	cps
Ytterbium	176-2	22132	22650	22623	22468	1.30	cps
Yttrium	89-1	17286504	17204763	17610708	17367325	1.24	cps
Yttrium	89-2	1269960	1281511	1292228	1281233	0.87	cps
Zinc	66-2	1128141	1129296	1130284	1129240	0.09	cps
Zirconium	90-1	4880016	4962126	5012219	4951454	1.35	cps
Zirconium	91-1	1031874	1049273	1051766	1044305	1.04	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV05	Instrumnet Name :	P8
Client Sample ID :	CCV05	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 16:20:59	DataFile Name :	053CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4460925	4409624	4378701	4416417	0.94	cps
Antimony	121-1	12814559	12871194	12754745	12813499	0.45	cps
Arsenic	75-2	272380	274609	273327	273439	0.41	cps
Barium	135-1	15225106	15562598	15416888	15401531	1.10	cps
Barium	137-1	26284050	26589977	27039319	26637782	1.43	cps
Beryllium	9-1	2695006	2651946	2694843	2680598	0.93	cps
Bismuth	209-1	4731398	4700322	4704955	4712225	0.36	cps
Bismuth	209-2	2205315	2118064	2138367	2153915	2.12	cps
Bromine	81-1	29464	29444	29197	29369	0.51	cps
Cadmium	108-1	235634	240042	238747	238141	0.95	cps
Cadmium	106-1	339259	348497	349632	345796	1.65	cps
Cadmium	111-1	3087594	3092501	3112433	3097509	0.42	cps
Calcium	43-1	19434015	19710337	19569117	19571156	0.71	cps
Calcium	44-1	316528582	323285495	317356175	319056751	1.16	cps
Carbon	12-1	4010304	4120154	4179118	4103192	2.09	cps
Carbon	12-2	33996	33418	34761	34058	1.98	cps
Chlorine	35-1	657212	643039	632797	644349	1.90	cps
Chlorine	35-2	2467	2464	2520	2484	1.28	cps
Chromium	52-2	2826967	2846035	2860364	2844455	0.59	cps
Cobalt	59-2	5099995	5117769	5040166	5085977	0.80	cps
Copper	63-2	37614989	38154075	38222226	37997097	0.88	cps
Dysprosium	156-1	730	793	767	763	4.17	cps
Dysprosium	156-2	170	217	173	187	13.95	cps
Erbium	164-1	543	633	643	607	9.08	cps
Erbium	164-2	237	180	213	210	13.56	cps
Gadolinium	160-1	427	540	447	471	12.84	cps
Gadolinium	160-2	230	233	213	226	4.75	cps
Holmium	165-1	8198051	8454864	8427737	8360217	1.69	cps
Holmium	165-2	3297810	3271322	3245923	3271685	0.79	cps
Indium	115-1	6619771	6555235	6658578	6611195	0.79	cps
Indium	115-2	677789	678932	682647	679789	0.37	cps
Iron	54-2	27636003	28087279	27979231	27900838	0.84	cps
Iron	56-2	513663366	512961046	514478112	513700841	0.15	cps
Iron	57-2	12966477	13015334	12951318	12977710	0.26	cps
Krypton	83-1	333	290	307	310	7.05	cps
Lead	206-1	44321126	45584003	45735991	45213707	1.72	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV05	Instrumnet Name :	P8
Client Sample ID :	CCV05	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 16:20:59	DataFile Name :	053CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	37892634	38796219	37974976	38221276	1.31	cps
Lead	208-1	175913296	178756037	176135402	176934912	0.89	cps
Lithium	6-1	2098512	2015253	2085168	2066311	2.16	cps
Magnesium	24-2	76258087	75503057	76624029	76128391	0.75	cps
Manganese	55-2	11613036	11599291	11762887	11658405	0.78	cps
Molybdenum	94-1	44902364	45580231	46115761	45532785	1.34	cps
Molybdenum	95-1	65170581	65688876	65197052	65352170	0.45	cps
Molybdenum	96-1	72129879	72192671	70461654	71594734	1.37	cps
Molybdenum	97-1	40704306	41012589	40567382	40761426	0.56	cps
Molybdenum	98-1	105283358	106935665	106170202	106129742	0.78	cps
Neodymium	150-1	1213	1387	1360	1320	7.07	cps
Neodymium	150-2	130	90	117	112	18.15	cps
Nickel	60-2	1300710	1296891	1311440	1303014	0.58	cps
Phosphorus	31-2	44465	43886	45133	44495	1.40	cps
Potassium	39-2	27536660	27753313	27597195	27629056	0.40	cps
Rhodium	103-1	5989918	6097651	6021444	6036338	0.92	cps
Rhodium	103-2	2589925	2556915	2560940	2569260	0.70	cps
Scandium	45-1	4530194	4492216	4516426	4512945	0.43	cps
Scandium	45-2	95226	94669	93884	94593	0.71	cps
Selenium	82-1	182398	184058	183583	183346	0.47	cps
Selenium	77-2	3624	3517	3224	3455	6.00	cps
Selenium	78-2	11962	11945	11815	11907	0.67	cps
Silicon	28-1	25067032	24944570	25096026	25035876	0.32	cps
Silver	107-1	15422340	15448496	15455441	15442092	0.11	cps
Silver	109-1	14562527	14715609	14456879	14578338	0.89	cps
Sodium	23-2	154796578	154936454	154225148	154652727	0.24	cps
Strontium	86-1	4309584	4338100	4311577	4319754	0.37	cps
Strontium	88-1	37165585	37211930	37452615	37276710	0.41	cps
Sulfur	34-1	1508507	1471977	1456092	1478858	1.82	cps
Terbium	159-1	8583565	8588153	8787501	8653073	1.35	cps
Terbium	159-2	3201674	3151673	3179520	3177622	0.79	cps
Thallium	203-1	10949200	11190924	11282223	11140782	1.54	cps
Thallium	205-1	26402088	26410065	26323573	26378575	0.18	cps
Tin	118-1	10403628	10585039	10463258	10483975	0.88	cps
Titanium	47-1	18126287	18075445	18391624	18197785	0.93	cps
Uranium	238-1	35261190	35298989	34793994	35118058	0.80	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV05	Instrumnet Name :	P8
Client Sample ID :	CCV05	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 16:20:59	DataFile Name :	053CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2161142	2172968	2175223	2169778	0.35	cps
Ytterbium	172-1	877	887	883	882	0.58	cps
Ytterbium	172-2	327	410	460	399	16.89	cps
Ytterbium	176-1	54408	54776	55623	54936	1.13	cps
Ytterbium	176-2	20903	20666	20860	20810	0.61	cps
Yttrium	89-1	12860596	12716454	12946482	12841178	0.91	cps
Yttrium	89-2	945661	945508	945283	945484	0.02	cps
Zinc	66-2	4301810	4344052	4357127	4334330	0.67	cps
Zirconium	90-1	23115872	23192048	23617491	23308470	1.16	cps
Zirconium	91-1	5110845	5083507	5188142	5127498	1.06	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB05	Instrumnet Name :	P8
Client Sample ID :	CCB05	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 16:28:02	DataFile Name :	055CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	347	373	353	358	3.88	cps
Antimony	121-1	703	677	663	681	2.99	cps
Arsenic	75-2	7	7	0	4	86.60	cps
Barium	135-1	173	160	170	168	4.14	cps
Barium	137-1	303	297	287	296	2.84	cps
Beryllium	9-1	180	191	177	183	4.04	cps
Bismuth	209-1	5608736	5587276	5470224	5555412	1.34	cps
Bismuth	209-2	2519608	2537313	2528498	2528473	0.35	cps
Bromine	81-1	31218	32013	31432	31554	1.30	cps
Cadmium	108-1	7	10	30	16	81.11	cps
Cadmium	106-1	4451	4491	4607	4516	1.80	cps
Cadmium	111-1	3168	3170	3234	3191	1.19	cps
Calcium	43-1	1027	880	890	932	8.79	cps
Calcium	44-1	26491	26114	26441	26349	0.78	cps
Carbon	12-1	3508924	3433342	3448672	3463646	1.15	cps
Carbon	12-2	22814	22694	23599	23036	2.13	cps
Chlorine	35-1	303069	296024	289185	296092	2.34	cps
Chlorine	35-2	1293	1227	1160	1227	5.44	cps
Chromium	52-2	1010	1087	1107	1068	4.78	cps
Cobalt	59-2	77	113	117	102	21.71	cps
Copper	63-2	2217	2077	2177	2157	3.34	cps
Dysprosium	156-1	13	13	7	11	34.61	cps
Dysprosium	156-2	3	0	0	1	173.21	cps
Erbium	164-1	67	47	57	57	17.65	cps
Erbium	164-2	20	23	37	27	33.08	cps
Gadolinium	160-1	53	107	97	86	33.14	cps
Gadolinium	160-2	10	23	3	12	83.33	cps
Holmium	165-1	8981218	9044838	8960262	8995439	0.49	cps
Holmium	165-2	3500961	3536888	3520707	3519519	0.51	cps
Indium	115-1	7746387	7798292	7894049	7812909	0.96	cps
Indium	115-2	817516	817208	815545	816756	0.13	cps
Iron	54-2	893	970	857	907	6.38	cps
Iron	56-2	11088	11128	10968	11061	0.75	cps
Iron	57-2	290	260	263	271	6.07	cps
Krypton	83-1	283	293	293	290	1.99	cps
Lead	206-1	1793	1617	1603	1671	6.35	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB05	Instrumnet Name :	P8
Client Sample ID :	CCB05	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 16:28:02	DataFile Name :	055CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1497	1610	1397	1501	7.11	cps
Lead	208-1	6704	6644	6594	6647	0.83	cps
Lithium	6-1	2284895	2334642	2312012	2310516	1.08	cps
Magnesium	24-2	553	520	650	574	11.75	cps
Manganese	55-2	2747	2567	2557	2624	4.08	cps
Molybdenum	94-1	1170	1180	1147	1166	1.47	cps
Molybdenum	95-1	517	473	500	497	4.40	cps
Molybdenum	96-1	760	687	640	696	8.70	cps
Molybdenum	97-1	343	277	247	289	17.13	cps
Molybdenum	98-1	783	643	677	701	10.43	cps
Neodymium	150-1	3	17	30	17	80.01	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	547	620	577	581	6.34	cps
Phosphorus	31-2	80	100	97	92	11.62	cps
Potassium	39-2	17534	17594	17507	17545	0.25	cps
Rhodium	103-1	7376958	7155532	7396544	7309678	1.83	cps
Rhodium	103-2	3147232	3146847	3097384	3130488	0.92	cps
Scandium	45-1	4971235	5104130	5059261	5044875	1.34	cps
Scandium	45-2	100881	101602	100962	101148	0.39	cps
Selenium	82-1	27	43	-7	21	120.60	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	20	30	27	26	19.92	cps
Silicon	28-1	467846	480292	481615	476585	1.59	cps
Silver	107-1	510	463	460	478	5.85	cps
Silver	109-1	430	417	330	392	13.84	cps
Sodium	23-2	46293	44571	45431	45432	1.89	cps
Strontium	86-1	607	577	550	578	4.91	cps
Strontium	88-1	667	590	590	616	7.19	cps
Sulfur	34-1	568968	570764	573953	571228	0.44	cps
Terbium	159-1	9168301	9259018	9467686	9298335	1.65	cps
Terbium	159-2	3433942	3422573	3428978	3428497	0.17	cps
Thallium	203-1	777	673	767	739	7.71	cps
Thallium	205-1	1837	1587	1533	1652	9.80	cps
Tin	118-1	3751	3587	3681	3673	2.23	cps
Titanium	47-1	357	317	377	350	8.73	cps
Uranium	238-1	250	283	260	264	6.47	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB05	Instrumnet Name :	P8
Client Sample ID :	CCB05	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 16:28:02	DataFile Name :	055CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	23	33	33	30	19.25	cps
Ytterbium	172-1	63	60	90	71	23.12	cps
Ytterbium	172-2	30	10	17	19	53.91	cps
Ytterbium	176-1	1150	1167	1177	1165	1.16	cps
Ytterbium	176-2	253	333	227	271	20.48	cps
Yttrium	89-1	13896281	13835954	13805115	13845783	0.33	cps
Yttrium	89-2	1032648	1022907	1025087	1026881	0.50	cps
Zinc	66-2	1540	1677	1447	1555	7.44	cps
Zirconium	90-1	2437	2434	2380	2417	1.32	cps
Zirconium	91-1	467	530	557	518	8.93	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-02DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-27-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:36:57	DataFile Name :	056AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	262812	266388	264636	264612	0.68	cps
Antimony	121-1	750	843	810	801	5.90	cps
Arsenic	75-2	83	103	110	99	14.04	cps
Barium	135-1	29559	29395	29933	29629	0.93	cps
Barium	137-1	50765	51437	51729	51310	0.96	cps
Beryllium	9-1	528	494	498	507	3.70	cps
Bismuth	209-1	5421734	5467996	5509411	5466380	0.80	cps
Bismuth	209-2	2510196	2526172	2555542	2530637	0.91	cps
Bromine	81-1	32384	32261	32027	32224	0.56	cps
Cadmium	108-1	27	23	37	29	24.03	cps
Cadmium	106-1	4998	4981	4874	4951	1.35	cps
Cadmium	111-1	3636	3637	3490	3588	2.37	cps
Calcium	43-1	813761	831312	816326	820466	1.16	cps
Calcium	44-1	13600978	13895316	13605026	13700440	1.23	cps
Carbon	12-1	3613158	3676871	3667315	3652448	0.94	cps
Carbon	12-2	25222	25088	24724	25011	1.03	cps
Chlorine	35-1	228251	228040	228016	228102	0.06	cps
Chlorine	35-2	910	883	880	891	1.85	cps
Chromium	52-2	4431	4207	4344	4327	2.60	cps
Cobalt	59-2	78900	78890	78857	78883	0.03	cps
Copper	63-2	50991	52276	52426	51898	1.52	cps
Dysprosium	156-1	27031	27685	27088	27268	1.33	cps
Dysprosium	156-2	10387	10451	9717	10185	3.99	cps
Erbium	164-1	30839	31183	31644	31222	1.29	cps
Erbium	164-2	11485	11535	11318	11446	0.99	cps
Gadolinium	160-1	26921	26847	26947	26905	0.19	cps
Gadolinium	160-2	11835	12242	12012	12030	1.70	cps
Holmium	165-1	8889332	8849551	9148312	8962399	1.81	cps
Holmium	165-2	3499963	3522074	3503824	3508621	0.34	cps
Indium	115-1	7793044	7897687	7818200	7836310	0.70	cps
Indium	115-2	815606	816868	816674	816383	0.08	cps
Iron	54-2	3237320	3295924	3262644	3265296	0.90	cps
Iron	56-2	60258512	59945661	60328559	60177577	0.34	cps
Iron	57-2	1508975	1515011	1558128	1527371	1.76	cps
Krypton	83-1	397	333	377	369	8.78	cps
Lead	206-1	2830	2820	2817	2823	0.25	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-02DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-27-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:36:57	DataFile Name :	056AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2510	2294	2294	2366	5.29	cps
Lead	208-1	11135	11009	11019	11054	0.64	cps
Lithium	6-1	2326337	2329790	2294275	2316801	0.85	cps
Magnesium	24-2	1087013	1096249	1093264	1092175	0.43	cps
Manganese	55-2	899472	906671	901314	902486	0.41	cps
Molybdenum	94-1	1657	1543	1517	1572	4.73	cps
Molybdenum	95-1	387	410	437	411	6.09	cps
Molybdenum	96-1	1507	1480	1550	1512	2.34	cps
Molybdenum	97-1	217	227	180	208	11.83	cps
Molybdenum	98-1	557	467	490	504	9.26	cps
Neodymium	150-1	27094	27104	26950	27050	0.32	cps
Neodymium	150-2	7245	7442	7525	7404	1.94	cps
Nickel	60-2	9767	9497	9857	9707	1.93	cps
Phosphorus	31-2	147	157	167	157	6.38	cps
Potassium	39-2	37078	37071	37532	37227	0.71	cps
Rhodium	103-1	7196529	7253845	7406242	7285538	1.49	cps
Rhodium	103-2	3118002	3066842	3076223	3087022	0.88	cps
Scandium	45-1	5155062	5205993	5080158	5147071	1.23	cps
Scandium	45-2	102469	104009	102892	103123	0.77	cps
Selenium	82-1	-20	-13	27	-2	-1135.01	cps
Selenium	77-2	43	50	73	56	28.35	cps
Selenium	78-2	53	63	60	59	8.65	cps
Silicon	28-1	34431967	35337823	35035710	34935167	1.32	cps
Silver	107-1	257	227	227	237	7.32	cps
Silver	109-1	143	163	180	162	11.31	cps
Sodium	23-2	799580	802968	806825	803124	0.45	cps
Strontium	86-1	163410	165301	163575	164095	0.64	cps
Strontium	88-1	1486946	1544617	1488358	1506640	2.18	cps
Sulfur	34-1	2480854	2512792	2487505	2493717	0.68	cps
Terbium	159-1	9479218	9380342	9295682	9385081	0.98	cps
Terbium	159-2	3494782	3474070	3385729	3451527	1.68	cps
Thallium	203-1	513	523	500	512	2.28	cps
Thallium	205-1	1307	1267	1307	1293	1.79	cps
Tin	118-1	4244	4271	4778	4431	6.79	cps
Titanium	47-1	1080	1127	1080	1096	2.46	cps
Uranium	238-1	14004	14485	14895	14462	3.08	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-02DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-27-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:36:57	DataFile Name :	056AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	50211	50606	50960	50592	0.74	cps
Ytterbium	172-1	12379	12429	12563	12457	0.76	cps
Ytterbium	172-2	5384	5665	5611	5553	2.68	cps
Ytterbium	176-1	8456	9023	8780	8753	3.25	cps
Ytterbium	176-2	3757	3867	3971	3865	2.76	cps
Yttrium	89-1	14766624	14749388	14463917	14659976	1.16	cps
Yttrium	89-2	1076898	1083569	1084725	1081731	0.39	cps
Zinc	66-2	32310	31816	32126	32084	0.78	cps
Zirconium	90-1	3377	3857	3771	3668	6.98	cps
Zirconium	91-1	810	723	790	774	5.86	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-04DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-28-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:40:14	DataFile Name :	057AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	154444	153197	154205	153949	0.43	cps
Antimony	121-1	1383	1447	1487	1439	3.62	cps
Arsenic	75-2	83	97	127	102	21.71	cps
Barium	135-1	26944	27418	27404	27255	0.99	cps
Barium	137-1	46877	48222	48313	47804	1.68	cps
Beryllium	9-1	469	494	451	471	4.65	cps
Bismuth	209-1	5455038	5464028	5542578	5487215	0.88	cps
Bismuth	209-2	2517775	2541271	2530741	2529929	0.47	cps
Bromine	81-1	33136	32872	32959	32989	0.41	cps
Cadmium	108-1	43	27	33	34	24.35	cps
Cadmium	106-1	4851	5114	4914	4960	2.77	cps
Cadmium	111-1	3475	3631	3540	3549	2.21	cps
Calcium	43-1	854443	866739	861265	860816	0.72	cps
Calcium	44-1	14070869	14432088	14529293	14344083	1.68	cps
Carbon	12-1	3682455	3695273	3661228	3679652	0.47	cps
Carbon	12-2	25626	24851	24748	25075	1.91	cps
Chlorine	35-1	214823	214652	213833	214436	0.25	cps
Chlorine	35-2	750	813	837	800	5.61	cps
Chromium	52-2	2257	2320	2310	2296	1.48	cps
Cobalt	59-2	71585	73093	72888	72522	1.13	cps
Copper	63-2	13106	12669	12646	12807	2.03	cps
Dysprosium	156-1	25281	25932	25351	25521	1.40	cps
Dysprosium	156-2	9927	9597	9770	9765	1.69	cps
Erbium	164-1	29857	29767	29974	29866	0.35	cps
Erbium	164-2	11372	11231	10975	11193	1.80	cps
Gadolinium	160-1	25294	26086	25832	25737	1.57	cps
Gadolinium	160-2	11342	11939	11328	11536	3.02	cps
Holmium	165-1	8986121	8889094	9148239	9007818	1.45	cps
Holmium	165-2	3505431	3534912	3554769	3531704	0.70	cps
Indium	115-1	7823976	7864852	7734471	7807766	0.85	cps
Indium	115-2	821743	824179	824780	823567	0.20	cps
Iron	54-2	4200407	4194939	4222720	4206022	0.35	cps
Iron	56-2	77180434	76712259	77443921	77112204	0.48	cps
Iron	57-2	1996317	1989788	1984358	1990155	0.30	cps
Krypton	83-1	373	310	353	346	9.37	cps
Lead	206-1	2484	2520	2700	2568	4.52	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-04DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-28-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:40:14	DataFile Name :	057AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2114	2207	2150	2157	2.18	cps
Lead	208-1	9975	10122	10078	10058	0.75	cps
Lithium	6-1	2238153	2319493	2279585	2279077	1.78	cps
Magnesium	24-2	1088398	1074101	1085056	1082518	0.69	cps
Manganese	55-2	886530	882236	896099	888289	0.80	cps
Molybdenum	94-1	1223	1467	1470	1387	10.20	cps
Molybdenum	95-1	387	327	387	367	9.45	cps
Molybdenum	96-1	1603	1627	1757	1662	4.97	cps
Molybdenum	97-1	207	163	230	200	16.91	cps
Molybdenum	98-1	450	490	493	478	5.05	cps
Neodymium	150-1	25511	25287	25761	25520	0.93	cps
Neodymium	150-2	6765	6919	6825	6836	1.13	cps
Nickel	60-2	5738	5935	5881	5851	1.74	cps
Phosphorus	31-2	140	120	127	129	7.90	cps
Potassium	39-2	34431	33980	34317	34243	0.69	cps
Rhodium	103-1	7249448	7352193	7290706	7297449	0.71	cps
Rhodium	103-2	3157611	3133212	3098784	3129869	0.94	cps
Scandium	45-1	5205306	5201937	5232701	5213315	0.32	cps
Scandium	45-2	104779	103409	104090	104092	0.66	cps
Selenium	82-1	33	30	47	37	24.05	cps
Selenium	77-2	47	30	27	34	31.11	cps
Selenium	78-2	50	63	60	58	12.01	cps
Silicon	28-1	30461012	30866250	30735654	30687639	0.67	cps
Silver	107-1	213	203	140	186	21.43	cps
Silver	109-1	123	120	90	111	16.52	cps
Sodium	23-2	688184	684754	686142	686360	0.25	cps
Strontium	86-1	175909	174758	175549	175405	0.34	cps
Strontium	88-1	1594564	1637136	1596607	1609436	1.49	cps
Sulfur	34-1	2422832	2431417	2436340	2430196	0.28	cps
Terbium	159-1	9352472	9477478	9293215	9374389	1.00	cps
Terbium	159-2	3435128	3437318	3418649	3430365	0.30	cps
Thallium	203-1	390	497	400	429	13.74	cps
Thallium	205-1	1110	1040	1050	1067	3.55	cps
Tin	118-1	3961	3804	3894	3886	2.02	cps
Titanium	47-1	1060	1010	1020	1030	2.57	cps
Uranium	238-1	13080	12940	12676	12899	1.59	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-04DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-28-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:40:14	DataFile Name :	057AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	62646	62609	63534	62930	0.83	cps
Ytterbium	172-1	11705	11932	11865	11834	0.99	cps
Ytterbium	172-2	5381	5451	5111	5314	3.38	cps
Ytterbium	176-1	8186	8369	8093	8216	1.71	cps
Ytterbium	176-2	3607	3537	3460	3535	2.08	cps
Yttrium	89-1	14965847	14889418	14900734	14918666	0.28	cps
Yttrium	89-2	1086800	1092145	1095532	1091493	0.40	cps
Zinc	66-2	23306	22995	22982	23094	0.79	cps
Zirconium	90-1	2984	3067	3190	3080	3.38	cps
Zirconium	91-1	697	573	670	647	10.04	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-06DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-29-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:43:33	DataFile Name :	058AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	164724	162467	165146	164112	0.88	cps
Antimony	121-1	790	803	873	822	5.44	cps
Arsenic	75-2	117	77	143	112	29.90	cps
Barium	135-1	28724	29315	29128	29056	1.04	cps
Barium	137-1	50009	51521	49902	50477	1.79	cps
Beryllium	9-1	420	444	442	435	3.02	cps
Bismuth	209-1	5420307	5504075	5434438	5452940	0.82	cps
Bismuth	209-2	2513340	2634742	2508220	2552101	2.81	cps
Bromine	81-1	32210	32351	33300	32620	1.82	cps
Cadmium	108-1	30	37	17	28	36.66	cps
Cadmium	106-1	4884	5021	5071	4992	1.94	cps
Cadmium	111-1	3528	3619	3698	3615	2.35	cps
Calcium	43-1	1123056	1119956	1120079	1121030	0.16	cps
Calcium	44-1	18497793	18402591	18667705	18522697	0.73	cps
Carbon	12-1	3634343	3708075	3597507	3646642	1.54	cps
Carbon	12-2	24768	24491	24497	24585	0.64	cps
Chlorine	35-1	202735	203517	202105	202786	0.35	cps
Chlorine	35-2	767	847	837	817	5.34	cps
Chromium	52-2	3450	3244	3267	3320	3.41	cps
Cobalt	59-2	64817	65362	64402	64860	0.74	cps
Copper	63-2	29995	29828	29551	29791	0.75	cps
Dysprosium	156-1	27208	27331	27098	27212	0.43	cps
Dysprosium	156-2	10481	10257	10434	10391	1.13	cps
Erbium	164-1	31377	31681	31718	31592	0.59	cps
Erbium	164-2	11692	11332	11345	11456	1.78	cps
Gadolinium	160-1	26373	27472	27702	27182	2.61	cps
Gadolinium	160-2	12306	12059	11935	12100	1.56	cps
Holmium	165-1	8791569	8941602	8955358	8896177	1.02	cps
Holmium	165-2	3559110	3715601	3530552	3601754	2.77	cps
Indium	115-1	7924352	7820372	7868185	7870970	0.66	cps
Indium	115-2	822745	848224	817750	829573	1.97	cps
Iron	54-2	3466650	3444463	3419598	3443570	0.68	cps
Iron	56-2	63479639	63155542	62608767	63081316	0.70	cps
Iron	57-2	1633989	1625184	1612293	1623822	0.67	cps
Krypton	83-1	337	363	327	342	5.54	cps
Lead	206-1	6198	6488	6595	6427	3.20	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-06DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-29-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:43:33	DataFile Name :	058AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5651	5698	5314	5555	3.77	cps
Lead	208-1	25697	26151	25937	25928	0.88	cps
Lithium	6-1	2192173	2148613	2273325	2204704	2.87	cps
Magnesium	24-2	1022884	1015748	1022063	1020232	0.38	cps
Manganese	55-2	717324	722246	711089	716886	0.78	cps
Molybdenum	94-1	1447	1170	1300	1306	10.61	cps
Molybdenum	95-1	397	397	283	359	18.23	cps
Molybdenum	96-1	1407	1480	1623	1503	7.33	cps
Molybdenum	97-1	157	223	210	197	17.94	cps
Molybdenum	98-1	470	493	507	490	3.79	cps
Neodymium	150-1	25825	27455	26556	26612	3.07	cps
Neodymium	150-2	7032	7229	7239	7166	1.63	cps
Nickel	60-2	8623	9023	9080	8908	2.80	cps
Phosphorus	31-2	117	120	120	119	1.62	cps
Potassium	39-2	38846	39424	38705	38991	0.98	cps
Rhodium	103-1	7220564	7381442	7374490	7325499	1.24	cps
Rhodium	103-2	3140913	3201315	3078568	3140266	1.95	cps
Scandium	45-1	5111821	5216534	5277037	5201797	1.61	cps
Scandium	45-2	104332	107453	102070	104618	2.58	cps
Selenium	82-1	73	87	30	63	46.77	cps
Selenium	77-2	27	43	53	41	32.76	cps
Selenium	78-2	33	67	47	49	34.32	cps
Silicon	28-1	33875695	34480426	33155185	33837102	1.96	cps
Silver	107-1	207	233	187	209	11.21	cps
Silver	109-1	110	113	100	108	6.44	cps
Sodium	23-2	1211667	1187942	1196621	1198743	1.00	cps
Strontium	86-1	206854	210386	208160	208467	0.86	cps
Strontium	88-1	1914874	1909775	1924126	1916258	0.38	cps
Sulfur	34-1	2532164	2594147	2529640	2551984	1.43	cps
Terbium	159-1	9485130	9377332	9313143	9391868	0.93	cps
Terbium	159-2	3486862	3548524	3425438	3486942	1.76	cps
Thallium	203-1	423	380	377	393	6.62	cps
Thallium	205-1	937	1003	963	968	3.47	cps
Tin	118-1	3894	3951	3821	3888	1.68	cps
Titanium	47-1	870	927	847	881	4.67	cps
Uranium	238-1	13224	13854	13621	13566	2.35	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-06DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-29-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:43:33	DataFile Name :	058AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	44726	45088	44927	44914	0.40	cps
Ytterbium	172-1	11308	11325	11215	11283	0.53	cps
Ytterbium	172-2	5238	5158	4828	5074	4.28	cps
Ytterbium	176-1	7966	7976	7969	7970	0.06	cps
Ytterbium	176-2	3661	3450	3464	3525	3.34	cps
Yttrium	89-1	14968775	14759371	14917312	14881820	0.73	cps
Yttrium	89-2	1102305	1118506	1083385	1101398	1.60	cps
Zinc	66-2	25730	26127	25680	25846	0.95	cps
Zirconium	90-1	2700	2864	2914	2826	3.95	cps
Zirconium	91-1	623	597	593	604	2.72	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-08DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-30-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:46:49	DataFile Name :	059AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	226603	224460	226781	225948	0.57	cps
Antimony	121-1	653	653	670	659	1.46	cps
Arsenic	75-2	67	83	110	87	25.22	cps
Barium	135-1	31567	31343	30705	31205	1.43	cps
Barium	137-1	54198	54164	54416	54259	0.25	cps
Beryllium	9-1	488	418	483	463	8.52	cps
Bismuth	209-1	5308062	5214189	5291899	5271384	0.95	cps
Bismuth	209-2	2508747	2480233	2516750	2501910	0.77	cps
Bromine	81-1	32397	33209	32862	32823	1.24	cps
Cadmium	108-1	33	30	13	26	41.94	cps
Cadmium	106-1	4711	4724	4521	4652	2.45	cps
Cadmium	111-1	3441	3463	3325	3410	2.17	cps
Calcium	43-1	993434	1001162	992934	995843	0.46	cps
Calcium	44-1	16394414	16605340	16440872	16480209	0.67	cps
Carbon	12-1	3633394	3705490	3680679	3673188	1.00	cps
Carbon	12-2	25502	24594	25065	25054	1.81	cps
Chlorine	35-1	193235	190739	191466	191813	0.67	cps
Chlorine	35-2	907	810	743	820	10.02	cps
Chromium	52-2	4011	4217	4254	4161	3.15	cps
Cobalt	59-2	74909	74829	73877	74538	0.77	cps
Copper	63-2	35732	36099	35879	35903	0.52	cps
Dysprosium	156-1	24980	24269	24202	24484	1.76	cps
Dysprosium	156-2	9100	9270	9340	9237	1.34	cps
Erbium	164-1	28277	28377	28430	28361	0.28	cps
Erbium	164-2	10184	10788	10421	10464	2.91	cps
Gadolinium	160-1	23818	23878	24002	23899	0.39	cps
Gadolinium	160-2	11285	11352	10915	11184	2.10	cps
Holmium	165-1	8766647	9028198	8980777	8925207	1.56	cps
Holmium	165-2	3528188	3509827	3405943	3481319	1.89	cps
Indium	115-1	7703113	7728158	7775338	7735536	0.47	cps
Indium	115-2	827298	822793	824016	824702	0.28	cps
Iron	54-2	3270932	3220426	3185387	3225582	1.33	cps
Iron	56-2	59998006	59955922	58378311	59444080	1.55	cps
Iron	57-2	1523508	1548903	1490337	1520916	1.93	cps
Krypton	83-1	310	353	350	338	7.14	cps
Lead	206-1	4591	4651	4784	4675	2.12	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-08DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-30-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:46:49	DataFile Name :	059AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3861	3781	3927	3856	1.91	cps
Lead	208-1	17792	18219	18282	18097	1.47	cps
Lithium	6-1	2218632	2158484	2136865	2171327	1.95	cps
Magnesium	24-2	1011817	1015452	1010533	1012601	0.25	cps
Manganese	55-2	754564	756815	746520	752633	0.72	cps
Molybdenum	94-1	1370	1493	1323	1396	6.29	cps
Molybdenum	95-1	297	333	330	320	6.34	cps
Molybdenum	96-1	1457	1413	1440	1437	1.52	cps
Molybdenum	97-1	230	203	243	226	9.03	cps
Molybdenum	98-1	417	393	400	403	2.98	cps
Neodymium	150-1	24362	24593	24673	24542	0.66	cps
Neodymium	150-2	6648	6772	6622	6681	1.20	cps
Nickel	60-2	8433	8166	7752	8117	4.22	cps
Phosphorus	31-2	153	203	210	189	16.40	cps
Potassium	39-2	41145	40617	41359	41040	0.93	cps
Rhodium	103-1	7152316	7281582	7269226	7234375	0.99	cps
Rhodium	103-2	3106275	3138113	3082629	3109006	0.90	cps
Scandium	45-1	5054840	5207411	5195355	5152535	1.65	cps
Scandium	45-2	105642	103919	104513	104691	0.84	cps
Selenium	82-1	93	-10	50	44	116.75	cps
Selenium	77-2	60	33	37	43	33.53	cps
Selenium	78-2	43	63	33	47	32.74	cps
Silicon	28-1	36560001	36700774	36554619	36605131	0.23	cps
Silver	107-1	197	177	190	188	5.42	cps
Silver	109-1	133	103	127	121	13.01	cps
Sodium	23-2	831444	833245	828375	831021	0.30	cps
Strontium	86-1	170172	171856	171200	171076	0.50	cps
Strontium	88-1	1570549	1557959	1515718	1548075	1.86	cps
Sulfur	34-1	2478372	2474214	2438233	2463606	0.90	cps
Terbium	159-1	9295609	9069878	9227304	9197597	1.26	cps
Terbium	159-2	3479928	3404379	3401331	3428546	1.30	cps
Thallium	203-1	390	373	393	386	2.78	cps
Thallium	205-1	1043	1010	983	1012	2.97	cps
Tin	118-1	4491	4607	4524	4541	1.32	cps
Titanium	47-1	1140	1183	1163	1162	1.87	cps
Uranium	238-1	14278	14398	14225	14300	0.62	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-08DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-30-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:46:49	DataFile Name :	059AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	55782	55183	55176	55380	0.63	cps
Ytterbium	172-1	11779	11809	11345	11644	2.23	cps
Ytterbium	172-2	4964	5198	5351	5171	3.77	cps
Ytterbium	176-1	8106	8216	8286	8203	1.11	cps
Ytterbium	176-2	3794	3594	3584	3657	3.24	cps
Yttrium	89-1	14698781	14570823	14680080	14649895	0.47	cps
Yttrium	89-2	1094979	1078751	1083113	1085614	0.77	cps
Zinc	66-2	32394	32491	32494	32459	0.18	cps
Zirconium	90-1	3397	3374	3427	3399	0.79	cps
Zirconium	91-1	633	770	803	736	12.25	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-10DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-31-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:50:07	DataFile Name :	060AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	118642	117699	116735	117692	0.81	cps
Antimony	121-1	190	250	293	244	21.23	cps
Arsenic	75-2	97	113	80	97	17.24	cps
Barium	135-1	31203	31777	30869	31283	1.47	cps
Barium	137-1	54031	54121	54382	54178	0.34	cps
Beryllium	9-1	385	449	391	409	8.58	cps
Bismuth	209-1	5549184	5370488	5503919	5474530	1.70	cps
Bismuth	209-2	2496299	2537870	2542956	2525708	1.01	cps
Bromine	81-1	32992	33577	32287	32952	1.96	cps
Cadmium	108-1	30	23	27	27	12.51	cps
Cadmium	106-1	4798	4994	4958	4916	2.13	cps
Cadmium	111-1	3501	3603	3612	3572	1.73	cps
Calcium	43-1	1290843	1329992	1274298	1298378	2.20	cps
Calcium	44-1	20845230	21559390	20875597	21093406	1.91	cps
Carbon	12-1	3605460	3596433	3648327	3616740	0.77	cps
Carbon	12-2	24404	24985	24861	24750	1.24	cps
Chlorine	35-1	191854	193603	190672	192043	0.77	cps
Chlorine	35-2	787	810	673	757	9.66	cps
Chromium	52-2	2207	2227	2024	2152	5.21	cps
Cobalt	59-2	57552	57596	57378	57509	0.20	cps
Copper	63-2	14781	14514	14794	14697	1.08	cps
Dysprosium	156-1	26172	26209	26389	26257	0.44	cps
Dysprosium	156-2	9774	9720	9927	9807	1.09	cps
Erbium	164-1	30946	32049	31641	31545	1.77	cps
Erbium	164-2	11675	12062	12072	11937	1.90	cps
Gadolinium	160-1	26466	26316	26072	26285	0.76	cps
Gadolinium	160-2	11889	11712	11595	11732	1.26	cps
Holmium	165-1	8967002	9092571	9051009	9036861	0.71	cps
Holmium	165-2	3572871	3547362	3481122	3533785	1.34	cps
Indium	115-1	7919332	7954638	8064581	7979517	0.95	cps
Indium	115-2	820094	823260	825916	823090	0.35	cps
Iron	54-2	3827799	3796595	3689339	3771245	1.93	cps
Iron	56-2	68836852	69321876	68051326	68736685	0.93	cps
Iron	57-2	1823054	1742429	1766735	1777406	2.33	cps
Krypton	83-1	307	340	340	329	5.85	cps
Lead	206-1	3897	3914	3937	3916	0.51	cps

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LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-10DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-31-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:50:07	DataFile Name :	060AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3607	3417	3320	3448	4.23	cps
Lead	208-1	15897	15464	15877	15746	1.55	cps
Lithium	6-1	2129176	2223150	2096363	2149563	3.06	cps
Magnesium	24-2	912737	921539	919532	917936	0.50	cps
Manganese	55-2	857627	867638	871227	865497	0.81	cps
Molybdenum	94-1	1083	1027	1050	1053	2.70	cps
Molybdenum	95-1	407	350	377	378	7.50	cps
Molybdenum	96-1	1697	1480	1553	1577	6.99	cps
Molybdenum	97-1	190	217	223	210	8.40	cps
Molybdenum	98-1	470	447	493	470	4.96	cps
Neodymium	150-1	24977	24983	25414	25125	1.00	cps
Neodymium	150-2	6712	6895	6695	6767	1.64	cps
Nickel	60-2	6625	6618	6645	6629	0.21	cps
Phosphorus	31-2	130	107	100	112	14.04	cps
Potassium	39-2	39190	38481	39608	39093	1.46	cps
Rhodium	103-1	7410065	7415348	7380608	7402007	0.25	cps
Rhodium	103-2	3099607	3162809	3071165	3111194	1.51	cps
Scandium	45-1	5138276	5245838	5185896	5190003	1.04	cps
Scandium	45-2	104003	104554	104104	104220	0.28	cps
Selenium	82-1	173	80	30	94	77.03	cps
Selenium	77-2	30	53	47	43	27.73	cps
Selenium	78-2	40	53	60	51	19.92	cps
Silicon	28-1	30479465	30844836	30844128	30722810	0.69	cps
Silver	107-1	170	153	163	162	5.17	cps
Silver	109-1	90	100	97	96	5.33	cps
Sodium	23-2	868217	867813	856599	864210	0.76	cps
Strontium	86-1	230758	231748	234207	232238	0.76	cps
Strontium	88-1	2128158	2094866	2154715	2125913	1.41	cps
Sulfur	34-1	2604934	2605276	2585273	2598494	0.44	cps
Terbium	159-1	9374649	9293506	9300686	9322947	0.48	cps
Terbium	159-2	3447245	3472355	3417646	3445748	0.79	cps
Thallium	203-1	350	297	417	354	16.96	cps
Thallium	205-1	917	847	787	850	7.65	cps
Tin	118-1	4187	4087	4041	4105	1.83	cps
Titanium	47-1	847	963	947	919	6.87	cps
Uranium	238-1	15730	16304	16007	16014	1.79	cps

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Inst Id :P8
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LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-10DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-31-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:50:07	DataFile Name :	060AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	48903	48846	49813	49187	1.10	cps
Ytterbium	172-1	12509	12910	12663	12694	1.59	cps
Ytterbium	172-2	5568	5501	5741	5603	2.21	cps
Ytterbium	176-1	8446	8316	9153	8638	5.22	cps
Ytterbium	176-2	3997	4124	3757	3960	4.70	cps
Yttrium	89-1	14703632	14616611	15084151	14801465	1.68	cps
Yttrium	89-2	1090609	1085038	1097926	1091191	0.59	cps
Zinc	66-2	26214	27079	27046	26780	1.83	cps
Zirconium	90-1	2207	2390	2494	2364	6.14	cps
Zirconium	91-1	567	533	510	537	5.31	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-12DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-32-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:53:22	DataFile Name :	061AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	106530	106711	105873	106371	0.41	cps
Antimony	121-1	367	370	330	356	6.24	cps
Arsenic	75-2	107	87	130	108	20.12	cps
Barium	135-1	29285	29175	28914	29125	0.65	cps
Barium	137-1	51006	50775	51170	50983	0.39	cps
Beryllium	9-1	413	381	418	404	4.86	cps
Bismuth	209-1	5339158	5356767	5429962	5375296	0.90	cps
Bismuth	209-2	2387268	2447166	2526593	2453676	2.85	cps
Bromine	81-1	31926	31455	31412	31598	0.90	cps
Cadmium	108-1	33	30	20	28	24.98	cps
Cadmium	106-1	4504	4711	4894	4703	4.15	cps
Cadmium	111-1	3243	3417	3505	3388	3.94	cps
Calcium	43-1	1177388	1171467	1174358	1174404	0.25	cps
Calcium	44-1	19729768	19471989	19582212	19594657	0.66	cps
Carbon	12-1	3727452	3683016	3598861	3669776	1.78	cps
Carbon	12-2	25325	25596	24741	25221	1.73	cps
Chlorine	35-1	188106	187974	188380	188153	0.11	cps
Chlorine	35-2	853	677	793	774	11.60	cps
Chromium	52-2	2014	2097	2117	2076	2.64	cps
Cobalt	59-2	53433	53119	52871	53141	0.53	cps
Copper	63-2	11551	11748	11195	11498	2.44	cps
Dysprosium	156-1	26994	26991	27221	27069	0.49	cps
Dysprosium	156-2	10324	10281	10234	10280	0.44	cps
Erbium	164-1	32212	32600	32386	32399	0.60	cps
Erbium	164-2	12169	12029	12156	12118	0.64	cps
Gadolinium	160-1	26957	26937	27041	26978	0.20	cps
Gadolinium	160-2	11985	12186	12062	12078	0.84	cps
Holmium	165-1	8854069	8580929	8716195	8717064	1.57	cps
Holmium	165-2	3264395	3439968	3491116	3398493	3.50	cps
Indium	115-1	7903887	7816749	7725774	7815470	1.14	cps
Indium	115-2	766642	809641	805710	793998	2.99	cps
Iron	54-2	3726835	3743680	3761097	3743871	0.46	cps
Iron	56-2	69285397	69742246	69071534	69366392	0.49	cps
Iron	57-2	1769740	1769223	1778087	1772350	0.28	cps
Krypton	83-1	313	363	373	350	9.18	cps
Lead	206-1	23117	23224	23334	23225	0.47	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-12DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-32-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:53:22	DataFile Name :	061AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	20657	20019	20069	20248	1.75	cps
Lead	208-1	91836	91760	91917	91838	0.09	cps
Lithium	6-1	2205820	2214939	2126109	2182289	2.24	cps
Magnesium	24-2	833424	819166	822075	824888	0.91	cps
Manganese	55-2	751820	749189	748928	749979	0.21	cps
Molybdenum	94-1	1133	1027	1080	1080	4.94	cps
Molybdenum	95-1	373	413	413	400	5.77	cps
Molybdenum	96-1	1593	1560	1633	1596	2.30	cps
Molybdenum	97-1	260	270	267	266	1.92	cps
Molybdenum	98-1	567	493	530	530	6.92	cps
Neodymium	150-1	26987	26990	26630	26869	0.77	cps
Neodymium	150-2	7089	7102	7025	7072	0.58	cps
Nickel	60-2	5708	6081	6118	5969	3.80	cps
Phosphorus	31-2	73	90	110	91	20.15	cps
Potassium	39-2	35691	36165	35885	35914	0.66	cps
Rhodium	103-1	7255374	7306712	7078560	7213549	1.66	cps
Rhodium	103-2	2914970	3047904	3098242	3020372	3.13	cps
Scandium	45-1	5232744	5116999	5089042	5146262	1.48	cps
Scandium	45-2	98200	100837	101619	100219	1.79	cps
Selenium	82-1	117	70	13	67	77.61	cps
Selenium	77-2	50	43	53	49	10.42	cps
Selenium	78-2	70	60	70	67	8.66	cps
Silicon	28-1	29481210	29179078	29076960	29245750	0.72	cps
Silver	107-1	183	180	153	172	9.55	cps
Silver	109-1	67	83	97	82	18.28	cps
Sodium	23-2	832543	837189	826698	832143	0.63	cps
Strontium	86-1	222088	221556	222764	222136	0.27	cps
Strontium	88-1	2080099	2023690	2023960	2042583	1.59	cps
Sulfur	34-1	2465827	2440032	2434023	2446627	0.69	cps
Terbium	159-1	9170441	9191728	9149008	9170392	0.23	cps
Terbium	159-2	3210324	3376714	3356476	3314505	2.74	cps
Thallium	203-1	437	320	233	330	30.92	cps
Thallium	205-1	863	790	833	829	4.45	cps
Tin	118-1	3721	3981	3704	3802	4.08	cps
Titanium	47-1	887	840	880	869	2.91	cps
Uranium	238-1	17859	17846	17519	17741	1.09	cps

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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-12DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-PCS-TC-32-042325	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:53:22	DataFile Name :	061AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	50643	51445	50713	50934	0.87	cps
Ytterbium	172-1	13313	13140	13120	13191	0.81	cps
Ytterbium	172-2	5835	5818	5851	5835	0.29	cps
Ytterbium	176-1	8943	9353	9043	9113	2.35	cps
Ytterbium	176-2	3987	3827	4074	3963	3.16	cps
Yttrium	89-1	14616496	14417685	14680393	14571525	0.94	cps
Yttrium	89-2	1018444	1073355	1067952	1053250	2.87	cps
Zinc	66-2	28051	28178	28248	28159	0.35	cps
Zirconium	90-1	2377	2257	2300	2311	2.63	cps
Zirconium	91-1	450	447	430	442	2.42	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-14DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-18-042325DL2	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:56:41	DataFile Name :	062AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	302354	302939	301589	302294	0.22	cps
Antimony	121-1	16760	17041	17695	17165	2.79	cps
Arsenic	75-2	130	103	140	124	15.23	cps
Barium	135-1	33933	34354	33902	34063	0.74	cps
Barium	137-1	59199	58948	59999	59382	0.92	cps
Beryllium	9-1	275	301	289	289	4.55	cps
Bismuth	209-1	5294635	5397948	5181569	5291384	2.05	cps
Bismuth	209-2	2429547	2511526	2475165	2472080	1.66	cps
Bromine	81-1	32394	32341	32618	32451	0.45	cps
Cadmium	108-1	50	40	47	46	11.18	cps
Cadmium	106-1	4818	4778	4734	4776	0.87	cps
Cadmium	111-1	3541	3496	3461	3499	1.14	cps
Calcium	43-1	442123	442444	438064	440877	0.55	cps
Calcium	44-1	7222024	7483993	7451370	7385796	1.93	cps
Carbon	12-1	3622780	3561338	3661674	3615264	1.40	cps
Carbon	12-2	24838	25205	25409	25150	1.15	cps
Chlorine	35-1	275271	282814	291834	283306	2.93	cps
Chlorine	35-2	1300	1247	1343	1297	3.73	cps
Chromium	52-2	8092	7956	7856	7968	1.49	cps
Cobalt	59-2	63283	62386	61854	62508	1.16	cps
Copper	63-2	63994	63404	64318	63905	0.73	cps
Dysprosium	156-1	26737	27762	28517	27672	3.23	cps
Dysprosium	156-2	10441	10621	10581	10548	0.90	cps
Erbium	164-1	30762	31036	31110	30969	0.59	cps
Erbium	164-2	11655	11992	11545	11731	1.99	cps
Gadolinium	160-1	27789	27248	27452	27496	0.99	cps
Gadolinium	160-2	12496	12683	12322	12500	1.44	cps
Holmium	165-1	8639866	8757225	8776252	8724448	0.85	cps
Holmium	165-2	3445842	3468525	3454874	3456414	0.33	cps
Indium	115-1	7698325	7700739	7761049	7720038	0.46	cps
Indium	115-2	811688	816468	819006	815721	0.46	cps
Iron	54-2	2945820	2948990	2933253	2942688	0.28	cps
Iron	56-2	53044059	53414546	52800459	53086355	0.58	cps
Iron	57-2	1283506	1275108	1285563	1281393	0.43	cps
Krypton	83-1	413	370	357	380	7.80	cps
Lead	206-1	8246	7939	8253	8146	2.20	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-14DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-18-042325DL2	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:56:41	DataFile Name :	062AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	6742	6718	6515	6658	1.87	cps
Lead	208-1	31535	31565	31372	31491	0.33	cps
Lithium	6-1	2136688	2120840	2110719	2122749	0.62	cps
Magnesium	24-2	1136549	1197235	1179947	1171244	2.67	cps
Manganese	55-2	384488	380368	379383	381413	0.71	cps
Molybdenum	94-1	1713	1773	1940	1809	6.49	cps
Molybdenum	95-1	523	503	393	473	14.79	cps
Molybdenum	96-1	1557	1530	1520	1536	1.23	cps
Molybdenum	97-1	287	303	207	266	19.46	cps
Molybdenum	98-1	657	580	627	621	6.22	cps
Neodymium	150-1	29776	30338	29259	29791	1.81	cps
Neodymium	150-2	8246	8076	8233	8185	1.16	cps
Nickel	60-2	15308	15125	14664	15032	2.21	cps
Phosphorus	31-2	247	267	290	268	8.10	cps
Potassium	39-2	44512	44880	45716	45036	1.37	cps
Rhodium	103-1	7177099	7125101	7229758	7177319	0.73	cps
Rhodium	103-2	3087162	3045243	3109391	3080599	1.06	cps
Scandium	45-1	5131848	5070488	5135652	5112663	0.72	cps
Scandium	45-2	102100	102801	104486	103129	1.19	cps
Selenium	82-1	70	30	33	44	49.94	cps
Selenium	77-2	70	23	50	48	49.01	cps
Selenium	78-2	33	37	57	42	29.89	cps
Silicon	28-1	35856443	35060430	35897572	35604815	1.33	cps
Silver	107-1	317	247	290	284	12.42	cps
Silver	109-1	220	190	177	196	11.35	cps
Sodium	23-2	998485	993388	991433	994435	0.37	cps
Strontium	86-1	129789	129910	130297	129999	0.20	cps
Strontium	88-1	1128229	1125450	1142350	1132010	0.80	cps
Sulfur	34-1	2305506	2259575	2251983	2272355	1.27	cps
Terbium	159-1	9059035	9032797	9123115	9071649	0.51	cps
Terbium	159-2	3380273	3379324	3371404	3377000	0.14	cps
Thallium	203-1	497	533	593	541	9.02	cps
Thallium	205-1	1173	1257	1130	1187	5.43	cps
Tin	118-1	3807	3827	3954	3863	2.06	cps
Titanium	47-1	1923	1743	1880	1849	5.08	cps
Uranium	238-1	15980	16301	16314	16198	1.17	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-14DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-18-042325DL2	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 16:56:41	DataFile Name :	062AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	62543	61588	61605	61912	0.88	cps
Ytterbium	172-1	11295	11412	11145	11284	1.19	cps
Ytterbium	172-2	5281	5084	4888	5084	3.87	cps
Ytterbium	176-1	7866	7926	8053	7948	1.20	cps
Ytterbium	176-2	3297	3624	3414	3445	4.81	cps
Yttrium	89-1	14303032	14484706	14715655	14501131	1.43	cps
Yttrium	89-2	1078488	1084632	1086336	1083152	0.38	cps
Zinc	66-2	48151	48315	47837	48101	0.51	cps
Zirconium	90-1	4167	4257	4851	4425	8.40	cps
Zirconium	91-1	797	880	897	858	6.25	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV06	Instrumnet Name :	P8
Client Sample ID :	CCV06	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:03:03	DataFile Name :	063CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4537996	4607913	4540781	4562230	0.87	cps
Antimony	121-1	12327280	12826785	12743318	12632461	2.12	cps
Arsenic	75-2	269899	273631	271340	271623	0.69	cps
Barium	135-1	14793033	15475849	15149347	15139410	2.26	cps
Barium	137-1	25857445	26384144	26202467	26148019	1.02	cps
Beryllium	9-1	2598027	2681101	2701720	2660283	2.06	cps
Bismuth	209-1	4467038	4571230	4685703	4574657	2.39	cps
Bismuth	209-2	2092796	2111352	2087309	2097152	0.60	cps
Bromine	81-1	29625	29177	30029	29610	1.44	cps
Cadmium	108-1	232307	235456	237543	235102	1.12	cps
Cadmium	106-1	335543	343818	342694	340685	1.32	cps
Cadmium	111-1	3133194	3054215	3054410	3080606	1.48	cps
Calcium	43-1	19471520	20087943	19646404	19735289	1.61	cps
Calcium	44-1	321358615	322622555	323527235	322502802	0.34	cps
Carbon	12-1	4109392	4266165	4265694	4213750	2.14	cps
Carbon	12-2	34791	35142	35189	35041	0.62	cps
Chlorine	35-1	211381	216378	216001	214587	1.30	cps
Chlorine	35-2	860	930	1000	930	7.53	cps
Chromium	52-2	2849547	2934399	2894133	2892693	1.47	cps
Cobalt	59-2	5111905	5086153	5136765	5111608	0.50	cps
Copper	63-2	37515217	37840888	37989012	37781706	0.64	cps
Dysprosium	156-1	653	723	647	674	6.30	cps
Dysprosium	156-2	127	187	140	151	20.85	cps
Erbium	164-1	537	533	537	536	0.36	cps
Erbium	164-2	217	190	187	198	8.31	cps
Gadolinium	160-1	407	510	503	473	12.22	cps
Gadolinium	160-2	177	187	197	187	5.36	cps
Holmium	165-1	8038138	8104531	8053492	8065387	0.43	cps
Holmium	165-2	3227673	3243245	3235986	3235635	0.24	cps
Indium	115-1	6656281	6586332	6605450	6616021	0.55	cps
Indium	115-2	668610	671504	672291	670802	0.29	cps
Iron	54-2	27962843	28275990	28070322	28103052	0.57	cps
Iron	56-2	516836379	524741379	527053325	522877028	1.02	cps
Iron	57-2	13270545	13077387	13221189	13189707	0.76	cps
Krypton	83-1	383	343	390	372	6.78	cps
Lead	206-1	42915669	43970246	43528906	43471607	1.22	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV06	Instrumnet Name :	P8
Client Sample ID :	CCV06	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:03:03	DataFile Name :	063CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	36183242	36772199	37197919	36717787	1.39	cps
Lead	208-1	167885843	170868120	174037861	170930608	1.80	cps
Lithium	6-1	1901591	1988262	1995064	1961639	2.66	cps
Magnesium	24-2	78842327	79256085	78621546	78906653	0.41	cps
Manganese	55-2	11702567	12014941	11971984	11896497	1.42	cps
Molybdenum	94-1	44756061	45155058	45606479	45172533	0.94	cps
Molybdenum	95-1	65122966	65543394	64802287	65156216	0.57	cps
Molybdenum	96-1	70958171	72053181	71907417	71639589	0.83	cps
Molybdenum	97-1	40419019	40909714	41429207	40919313	1.23	cps
Molybdenum	98-1	105844588	104896428	107245242	105995420	1.11	cps
Neodymium	150-1	1177	1240	1343	1253	6.71	cps
Neodymium	150-2	100	97	83	93	9.45	cps
Nickel	60-2	1289704	1298549	1297061	1295105	0.37	cps
Phosphorus	31-2	45003	45558	45755	45439	0.86	cps
Potassium	39-2	27855082	27907040	27874185	27878769	0.09	cps
Rhodium	103-1	6106167	5985712	6085572	6059151	1.06	cps
Rhodium	103-2	2532411	2548233	2533969	2538204	0.34	cps
Scandium	45-1	4601112	4542503	4567681	4570432	0.64	cps
Scandium	45-2	94219	95330	95860	95137	0.88	cps
Selenium	82-1	182013	183110	181031	182052	0.57	cps
Selenium	77-2	3260	3367	3454	3360	2.88	cps
Selenium	78-2	11805	11321	11942	11689	2.79	cps
Silicon	28-1	25349024	25203488	25461093	25337868	0.51	cps
Silver	107-1	15272095	15404336	15330822	15335751	0.43	cps
Silver	109-1	14503712	14299809	14284569	14362697	0.85	cps
Sodium	23-2	160237894	159099031	160224321	159853749	0.41	cps
Strontium	86-1	4236410	4291864	4333167	4287147	1.13	cps
Strontium	88-1	36222034	37030551	37597814	36950133	1.87	cps
Sulfur	34-1	1550860	1508828	1536297	1531995	1.39	cps
Terbium	159-1	8265631	8495895	8484417	8415314	1.54	cps
Terbium	159-2	3123844	3117658	3083879	3108460	0.69	cps
Thallium	203-1	10544404	10726220	10696275	10655633	0.91	cps
Thallium	205-1	25020201	25604012	26102965	25575726	2.12	cps
Tin	118-1	10260515	10469133	10498877	10409508	1.25	cps
Titanium	47-1	18245882	18507911	18338478	18364090	0.72	cps
Uranium	238-1	32798825	33325266	34494385	33539492	2.59	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV06	Instrumnet Name :	P8
Client Sample ID :	CCV06	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:03:03	DataFile Name :	063CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2214261	2194883	2205744	2204963	0.44	cps
Ytterbium	172-1	913	823	903	880	5.61	cps
Ytterbium	172-2	390	423	433	416	5.46	cps
Ytterbium	176-1	51500	53320	54700	53173	3.02	cps
Ytterbium	176-2	20563	20052	21120	20578	2.60	cps
Yttrium	89-1	12420639	12752852	12751076	12641522	1.51	cps
Yttrium	89-2	928248	936054	943250	935850	0.80	cps
Zinc	66-2	4352659	4252462	4305140	4303420	1.16	cps
Zirconium	90-1	22882695	22911529	23047431	22947219	0.38	cps
Zirconium	91-1	5031497	5087320	4992978	5037265	0.94	cps

Reviewed By:mohan
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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB06	Instrumnet Name :	P8
Client Sample ID :	CCB06	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:05:48	DataFile Name :	064CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	457	507	427	463	8.72	cps
Antimony	121-1	3891	3347	2747	3328	17.19	cps
Arsenic	75-2	13	7	10	10	33.30	cps
Barium	135-1	697	630	447	591	21.90	cps
Barium	137-1	1213	1030	813	1019	19.65	cps
Beryllium	9-1	496	396	365	419	16.29	cps
Bismuth	209-1	5381237	5395231	5392378	5389615	0.14	cps
Bismuth	209-2	2512571	2478621	2467587	2486260	0.94	cps
Bromine	81-1	30403	30590	31081	30691	1.14	cps
Cadmium	108-1	33	33	27	31	12.36	cps
Cadmium	106-1	4404	4784	4301	4496	5.66	cps
Cadmium	111-1	3333	3512	3135	3327	5.67	cps
Calcium	43-1	1700	1470	1477	1549	8.45	cps
Calcium	44-1	39738	35765	33489	36331	8.71	cps
Carbon	12-1	3642091	3674732	3626852	3647892	0.67	cps
Carbon	12-2	24928	24457	24390	24592	1.19	cps
Chlorine	35-1	165828	166995	166846	166556	0.38	cps
Chlorine	35-2	707	630	620	652	7.27	cps
Chromium	52-2	1207	1140	1310	1219	7.03	cps
Cobalt	59-2	143	220	200	188	21.18	cps
Copper	63-2	3380	3517	3280	3393	3.50	cps
Dysprosium	156-1	7	10	17	11	45.82	cps
Dysprosium	156-2	0	0	10	3	173.21	cps
Erbium	164-1	43	63	47	51	20.96	cps
Erbium	164-2	13	20	37	23	51.52	cps
Gadolinium	160-1	103	77	47	76	37.52	cps
Gadolinium	160-2	0	20	10	10	100.00	cps
Holmium	165-1	8594061	8648075	8664531	8635556	0.43	cps
Holmium	165-2	3446931	3441372	3413941	3434081	0.51	cps
Indium	115-1	7714822	7943605	7612898	7757108	2.18	cps
Indium	115-2	795407	795071	796571	795683	0.10	cps
Iron	54-2	1333	1257	1283	1291	3.01	cps
Iron	56-2	20318	20538	19510	20122	2.69	cps
Iron	57-2	573	477	510	520	9.44	cps
Krypton	83-1	233	280	277	263	9.89	cps
Lead	206-1	4331	3454	3080	3622	17.72	cps

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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB06	Instrumnet Name :	P8
Client Sample ID :	CCB06	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:05:48	DataFile Name :	064CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3797	2890	2614	3100	19.97	cps
Lead	208-1	16951	13626	12172	14250	17.19	cps
Lithium	6-1	2286919	2303363	2345482	2311921	1.31	cps
Magnesium	24-2	2104	2000	1753	1952	9.21	cps
Manganese	55-2	3257	3244	3020	3174	4.19	cps
Molybdenum	94-1	3667	2844	2797	3103	15.78	cps
Molybdenum	95-1	3577	2667	2094	2779	26.92	cps
Molybdenum	96-1	4184	3007	2707	3299	23.66	cps
Molybdenum	97-1	2294	1627	1437	1786	25.20	cps
Molybdenum	98-1	5371	4071	3510	4317	22.11	cps
Neodymium	150-1	7	10	10	9	21.63	cps
Neodymium	150-2	7	3	3	4	43.40	cps
Nickel	60-2	657	673	643	658	2.29	cps
Phosphorus	31-2	80	107	87	91	15.23	cps
Potassium	39-2	20324	19810	19684	19939	1.70	cps
Rhodium	103-1	7231530	7315349	7082852	7209911	1.63	cps
Rhodium	103-2	3058248	3043755	3072705	3058236	0.47	cps
Scandium	45-1	4923671	5056299	4962519	4980830	1.37	cps
Scandium	45-2	99901	99739	100267	99969	0.27	cps
Selenium	82-1	63	10	43	39	69.28	cps
Selenium	77-2	3	0	0	1	173.21	cps
Selenium	78-2	20	50	30	33	45.83	cps
Silicon	28-1	466390	477299	481619	475103	1.65	cps
Silver	107-1	2167	1873	1527	1856	17.27	cps
Silver	109-1	1940	1557	1260	1586	21.50	cps
Sodium	23-2	61291	59849	57931	59690	2.82	cps
Strontium	86-1	783	737	677	732	7.30	cps
Strontium	88-1	2210	1687	1603	1833	17.94	cps
Sulfur	34-1	564204	571747	568572	568174	0.67	cps
Terbium	159-1	9079651	9276552	9180359	9178854	1.07	cps
Terbium	159-2	3348775	3325545	3331439	3335253	0.36	cps
Thallium	203-1	1110	1027	877	1004	11.77	cps
Thallium	205-1	2734	2290	2227	2417	11.42	cps
Tin	118-1	4614	4201	4121	4312	6.14	cps
Titanium	47-1	1167	947	760	958	21.25	cps
Uranium	238-1	1423	1260	927	1203	21.04	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB06	Instrumnet Name :	P8
Client Sample ID :	CCB06	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:05:48	DataFile Name :	064CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	47	53	53	51	7.52	cps
Ytterbium	172-1	37	80	33	50	52.07	cps
Ytterbium	172-2	33	7	13	18	78.05	cps
Ytterbium	176-1	1160	1180	1070	1137	5.15	cps
Ytterbium	176-2	270	280	290	280	3.57	cps
Yttrium	89-1	13658079	13483395	13856595	13666023	1.37	cps
Yttrium	89-2	1001791	1006318	1001790	1003300	0.26	cps
Zinc	66-2	1903	1693	1710	1769	6.60	cps
Zirconium	90-1	4738	3977	3821	4178	11.74	cps
Zirconium	91-1	1057	877	860	931	11.71	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DL2	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:09:13	DataFile Name :	065AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	242780	241946	244168	242965	0.46	cps
Antimony	121-1	348683	351861	353449	351331	0.69	cps
Arsenic	75-2	217	183	180	193	10.49	cps
Barium	135-1	47001	47613	46292	46969	1.41	cps
Barium	137-1	80524	80162	82150	80946	1.31	cps
Beryllium	9-1	492	469	514	492	4.56	cps
Bismuth	209-1	5291801	5323463	5284882	5300049	0.39	cps
Bismuth	209-2	2450421	2428311	2425149	2434627	0.57	cps
Bromine	81-1	29969	31626	31392	30996	2.89	cps
Cadmium	108-1	37	80	60	59	36.83	cps
Cadmium	106-1	4738	4771	4854	4788	1.26	cps
Cadmium	111-1	3624	3627	3666	3639	0.64	cps
Calcium	43-1	488807	496541	493782	493043	0.79	cps
Calcium	44-1	8292395	8125163	8286725	8234761	1.15	cps
Carbon	12-1	3703021	3719895	3715228	3712714	0.23	cps
Carbon	12-2	25001	24941	25432	25125	1.07	cps
Chlorine	35-1	388592	418532	429001	412042	5.09	cps
Chlorine	35-2	1890	1863	1773	1842	3.32	cps
Chromium	52-2	7869	7659	7929	7819	1.81	cps
Cobalt	59-2	60628	60407	59751	60262	0.76	cps
Copper	63-2	41457	40882	41627	41322	0.95	cps
Dysprosium	156-1	33057	32834	32864	32918	0.37	cps
Dysprosium	156-2	11342	11702	11755	11600	1.94	cps
Erbium	164-1	35013	36146	36045	35735	1.76	cps
Erbium	164-2	13050	13247	13127	13141	0.76	cps
Gadolinium	160-1	30264	31040	31070	30791	1.48	cps
Gadolinium	160-2	14505	13814	13540	13953	3.56	cps
Holmium	165-1	8794582	8663025	8763929	8740512	0.79	cps
Holmium	165-2	3394915	3422937	3457479	3425110	0.91	cps
Indium	115-1	7681930	7773474	7664710	7706705	0.76	cps
Indium	115-2	805778	804067	800974	803606	0.30	cps
Iron	54-2	3841285	3890128	3836420	3855944	0.77	cps
Iron	56-2	71900149	69223569	70279957	70467892	1.91	cps
Iron	57-2	1845407	1758435	1792765	1798869	2.44	cps
Krypton	83-1	383	380	310	358	11.57	cps
Lead	206-1	12333	13123	13147	12868	3.60	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DL2	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:09:13	DataFile Name :	065AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	11258	11172	11365	11265	0.86	cps
Lead	208-1	50305	51066	51670	51014	1.34	cps
Lithium	6-1	2261723	2236380	2261107	2253070	0.64	cps
Magnesium	24-2	1070475	1088340	1078390	1079068	0.83	cps
Manganese	55-2	487986	483625	480603	484071	0.77	cps
Molybdenum	94-1	13500	13216	11385	12700	9.04	cps
Molybdenum	95-1	2360	2017	2150	2176	7.96	cps
Molybdenum	96-1	5224	5014	5028	5089	2.31	cps
Molybdenum	97-1	1323	1323	1253	1300	3.11	cps
Molybdenum	98-1	3110	3200	3157	3156	1.43	cps
Neodymium	150-1	31757	31968	32272	31999	0.81	cps
Neodymium	150-2	8690	8476	8526	8564	1.30	cps
Nickel	60-2	21576	21690	21209	21492	1.17	cps
Phosphorus	31-2	1110	1117	1130	1119	0.91	cps
Potassium	39-2	102352	101282	100514	101383	0.91	cps
Rhodium	103-1	7076509	7011841	7003343	7030564	0.57	cps
Rhodium	103-2	3048184	3071060	2963697	3027647	1.87	cps
Scandium	45-1	5026251	5025212	4981270	5010911	0.51	cps
Scandium	45-2	100958	100807	99562	100442	0.76	cps
Selenium	82-1	47	70	60	59	19.88	cps
Selenium	77-2	47	97	60	68	38.20	cps
Selenium	78-2	50	63	77	63	21.06	cps
Silicon	28-1	34356163	34441723	34594537	34464141	0.35	cps
Silver	107-1	1710	1713	1577	1667	4.68	cps
Silver	109-1	1537	1560	1647	1581	3.67	cps
Sodium	23-2	5045567	5130168	5030829	5068855	1.06	cps
Strontium	86-1	143117	144905	144804	144275	0.70	cps
Strontium	88-1	1244574	1257314	1263545	1255144	0.77	cps
Sulfur	34-1	2234753	2255314	2217460	2235842	0.85	cps
Terbium	159-1	9147140	9070368	9054737	9090748	0.54	cps
Terbium	159-2	3335290	3355400	3309304	3333331	0.69	cps
Thallium	203-1	2097	2160	2297	2185	4.68	cps
Thallium	205-1	5178	5061	5555	5264	4.90	cps
Tin	118-1	5298	5281	5078	5219	2.35	cps
Titanium	47-1	2704	2880	2854	2813	3.39	cps
Uranium	238-1	16981	16678	16644	16768	1.11	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DL2	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:09:13	DataFile Name :	065AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	58609	58710	58921	58747	0.27	cps
Ytterbium	172-1	13280	13177	13090	13182	0.72	cps
Ytterbium	172-2	5901	5771	5828	5834	1.12	cps
Ytterbium	176-1	9203	9223	9107	9178	0.68	cps
Ytterbium	176-2	3937	4171	4071	4060	2.88	cps
Yttrium	89-1	14559919	14332884	14465463	14452755	0.79	cps
Yttrium	89-2	1057923	1056869	1069938	1061577	0.68	cps
Zinc	66-2	63541	63541	63166	63416	0.34	cps
Zirconium	90-1	32987	33527	28710	31741	8.31	cps
Zirconium	91-1	7075	7582	6088	6915	10.99	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DUPDL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DUF	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:12:29	DataFile Name :	066AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	248799	247269	245718	247262	0.62	cps
Antimony	121-1	1073	1020	1173	1089	7.15	cps
Arsenic	75-2	130	103	97	110	16.03	cps
Barium	135-1	31156	30922	31851	31310	1.54	cps
Barium	137-1	52725	53686	53110	53174	0.91	cps
Beryllium	9-1	396	435	428	420	4.94	cps
Bismuth	209-1	5304192	5336402	5287482	5309359	0.47	cps
Bismuth	209-2	2452589	2395663	2419376	2422543	1.18	cps
Bromine	81-1	31054	31485	31512	31351	0.82	cps
Cadmium	108-1	27	30	27	28	6.92	cps
Cadmium	106-1	4778	4684	4711	4724	1.02	cps
Cadmium	111-1	3489	3431	3416	3445	1.12	cps
Calcium	43-1	485314	496508	495314	492379	1.25	cps
Calcium	44-1	8047591	8092554	8248221	8129455	1.30	cps
Carbon	12-1	3612877	3640968	3708497	3654114	1.34	cps
Carbon	12-2	25312	25699	24594	25202	2.23	cps
Chlorine	35-1	201405	196192	195080	197559	1.71	cps
Chlorine	35-2	763	760	750	758	0.92	cps
Chromium	52-2	5268	5388	4964	5207	4.19	cps
Cobalt	59-2	60495	62165	61643	61434	1.39	cps
Copper	63-2	41527	41835	41855	41739	0.44	cps
Dysprosium	156-1	31357	31226	31477	31353	0.40	cps
Dysprosium	156-2	11855	11945	11552	11784	1.75	cps
Erbium	164-1	35327	36400	35190	35639	1.86	cps
Erbium	164-2	13250	13223	13494	13322	1.12	cps
Gadolinium	160-1	30822	30782	31110	30905	0.58	cps
Gadolinium	160-2	14171	14304	13974	14150	1.17	cps
Holmium	165-1	8714597	8725139	8676634	8705457	0.29	cps
Holmium	165-2	3444696	3401454	3432542	3426231	0.65	cps
Indium	115-1	7539642	7567562	7670551	7592585	0.91	cps
Indium	115-2	795344	803802	796559	798568	0.57	cps
Iron	54-2	3867291	3872426	3840461	3860060	0.44	cps
Iron	56-2	71977921	71222246	70989124	71396430	0.72	cps
Iron	57-2	1853453	1828783	1841593	1841276	0.67	cps
Krypton	83-1	380	380	333	364	7.39	cps
Lead	206-1	4261	4044	4161	4155	2.61	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DUPDL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DUF	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:12:29	DataFile Name :	066AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3524	3601	3531	3552	1.20	cps
Lead	208-1	16144	16114	16234	16164	0.39	cps
Lithium	6-1	2174259	2165860	2232718	2190946	1.66	cps
Magnesium	24-2	1085109	1093106	1085258	1087824	0.42	cps
Manganese	55-2	489799	491370	482947	488039	0.92	cps
Molybdenum	94-1	2044	2097	1873	2005	5.82	cps
Molybdenum	95-1	467	433	443	448	3.82	cps
Molybdenum	96-1	1807	1810	1697	1771	3.64	cps
Molybdenum	97-1	207	330	263	267	23.15	cps
Molybdenum	98-1	670	620	553	614	9.53	cps
Neodymium	150-1	32065	32225	33331	32541	2.12	cps
Neodymium	150-2	8673	8693	8646	8671	0.27	cps
Nickel	60-2	8596	8733	8613	8647	0.86	cps
Phosphorus	31-2	257	217	150	208	25.94	cps
Potassium	39-2	41316	40634	40283	40744	1.29	cps
Rhodium	103-1	7084782	7059617	7195034	7113144	1.01	cps
Rhodium	103-2	3029368	3039817	3009572	3026252	0.51	cps
Scandium	45-1	5087021	5088930	5074376	5083442	0.16	cps
Scandium	45-2	102197	102656	101472	102108	0.58	cps
Selenium	82-1	47	97	87	77	34.51	cps
Selenium	77-2	40	43	57	47	18.90	cps
Selenium	78-2	57	50	73	60	20.03	cps
Silicon	28-1	35073351	34872619	35525134	35157035	0.95	cps
Silver	107-1	307	327	333	322	4.31	cps
Silver	109-1	277	270	260	269	3.12	cps
Sodium	23-2	783521	773375	776604	777833	0.67	cps
Strontium	86-1	143063	143821	145323	144069	0.80	cps
Strontium	88-1	1245415	1253518	1264094	1254343	0.75	cps
Sulfur	34-1	2334445	2275275	2271127	2293616	1.54	cps
Terbium	159-1	8991564	9147068	8884836	9007823	1.46	cps
Terbium	159-2	3364433	3401897	3313519	3359950	1.32	cps
Thallium	203-1	480	520	480	493	4.68	cps
Thallium	205-1	1133	1137	1093	1121	2.15	cps
Tin	118-1	3681	4017	4488	4062	9.99	cps
Titanium	47-1	1173	1197	1207	1192	1.43	cps
Uranium	238-1	16611	16648	16808	16689	0.63	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16DUPDL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325DUF	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:12:29	DataFile Name :	066AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	59774	59627	58921	59441	0.77	cps
Ytterbium	172-1	13003	12970	13090	13021	0.48	cps
Ytterbium	172-2	5818	5635	5975	5809	2.93	cps
Ytterbium	176-1	9117	9100	8783	9000	2.09	cps
Ytterbium	176-2	4011	4201	4041	4084	2.50	cps
Yttrium	89-1	14381106	13998187	14290369	14223220	1.41	cps
Yttrium	89-2	1068315	1069993	1069760	1069356	0.09	cps
Zinc	66-2	40631	40310	40635	40526	0.46	cps
Zirconium	90-1	5231	5238	4624	5031	7.01	cps
Zirconium	91-1	1203	997	943	1048	13.11	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16LDL2X125	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325LDL	Dilution Factor :	125
Date & Time Acquired :	2025-04-29 17:15:49	DataFile Name :	067AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	49855	50079	50772	50235	0.95	cps
Antimony	121-1	610	757	660	676	11.04	cps
Arsenic	75-2	23	13	30	22	37.76	cps
Barium	135-1	6368	6475	6508	6450	1.13	cps
Barium	137-1	11178	11415	11442	11345	1.28	cps
Beryllium	9-1	165	171	183	173	5.19	cps
Bismuth	209-1	5219232	5184364	5238776	5214124	0.53	cps
Bismuth	209-2	2514223	2409658	2478969	2467617	2.16	cps
Bromine	81-1	31689	32424	31653	31922	1.36	cps
Cadmium	108-1	13	20	23	19	26.96	cps
Cadmium	106-1	4281	4221	4567	4356	4.25	cps
Cadmium	111-1	3050	3010	3218	3093	3.55	cps
Calcium	43-1	98595	100743	100649	99996	1.21	cps
Calcium	44-1	1682779	1686442	1719114	1696112	1.18	cps
Carbon	12-1	3552997	3596334	3661757	3603696	1.52	cps
Carbon	12-2	24975	24741	24774	24830	0.51	cps
Chlorine	35-1	171580	171921	171486	171663	0.13	cps
Chlorine	35-2	750	743	683	726	5.06	cps
Chromium	52-2	1900	1933	1890	1908	1.19	cps
Cobalt	59-2	12179	12279	12656	12371	2.03	cps
Copper	63-2	10100	10160	10117	10126	0.31	cps
Dysprosium	156-1	6005	6115	6121	6080	1.08	cps
Dysprosium	156-2	2264	2384	2474	2374	4.44	cps
Erbium	164-1	7339	7335	7155	7276	1.44	cps
Erbium	164-2	2720	2847	2474	2680	7.08	cps
Gadolinium	160-1	5871	6045	6168	6028	2.47	cps
Gadolinium	160-2	2844	2747	2817	2803	1.78	cps
Holmium	165-1	8615384	8684183	8505022	8601529	1.05	cps
Holmium	165-2	3402138	3455059	3389263	3415487	1.02	cps
Indium	115-1	7545234	7697090	7692457	7644927	1.13	cps
Indium	115-2	797541	799753	793151	796815	0.42	cps
Iron	54-2	755324	746554	756785	752888	0.73	cps
Iron	56-2	14489505	14577626	14171482	14412871	1.48	cps
Iron	57-2	346571	349932	341003	345835	1.30	cps
Krypton	83-1	313	320	303	312	2.69	cps
Lead	206-1	2367	2400	2524	2430	3.40	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16LDL2X125	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325LDL	Dilution Factor :	125
Date & Time Acquired :	2025-04-29 17:15:49	DataFile Name :	067AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1934	2234	2094	2087	7.19	cps
Lead	208-1	9708	9892	9975	9858	1.38	cps
Lithium	6-1	2221105	2138733	2089466	2149768	3.09	cps
Magnesium	24-2	216975	220913	217480	218456	0.98	cps
Manganese	55-2	100534	99413	101303	100417	0.95	cps
Molybdenum	94-1	1143	1260	1150	1185	5.53	cps
Molybdenum	95-1	340	323	367	343	6.37	cps
Molybdenum	96-1	777	680	653	703	9.23	cps
Molybdenum	97-1	177	207	193	192	7.82	cps
Molybdenum	98-1	450	380	377	402	10.30	cps
Neodymium	150-1	6475	6528	6425	6476	0.80	cps
Neodymium	150-2	1793	1690	1527	1670	8.05	cps
Nickel	60-2	2174	2324	2184	2227	3.77	cps
Phosphorus	31-2	93	127	113	111	15.10	cps
Potassium	39-2	21937	22845	22611	22464	2.10	cps
Rhodium	103-1	7004264	7066481	7201464	7090737	1.42	cps
Rhodium	103-2	3132687	3029806	3081736	3081410	1.67	cps
Scandium	45-1	5016651	4946295	5004848	4989265	0.76	cps
Scandium	45-2	101388	102882	101854	102041	0.75	cps
Selenium	82-1	63	47	-10	33	115.32	cps
Selenium	77-2	7	13	20	13	49.99	cps
Selenium	78-2	40	43	33	39	13.09	cps
Silicon	28-1	7293674	7371871	7438479	7368008	0.98	cps
Silver	107-1	297	277	260	278	6.61	cps
Silver	109-1	210	203	207	207	1.61	cps
Sodium	23-2	194130	192860	191074	192688	0.80	cps
Strontium	86-1	29184	28983	29237	29135	0.46	cps
Strontium	88-1	247978	253099	252426	251168	1.11	cps
Sulfur	34-1	903891	1000386	991088	965122	5.52	cps
Terbium	159-1	9069316	8983005	9088047	9046789	0.62	cps
Terbium	159-2	3317862	3203444	3340983	3287430	2.24	cps
Thallium	203-1	383	357	293	344	13.42	cps
Thallium	205-1	790	927	1040	919	13.62	cps
Tin	118-1	3517	3564	3617	3566	1.40	cps
Titanium	47-1	487	467	480	478	2.13	cps
Uranium	238-1	3407	3451	3467	3442	0.90	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16LDL2X125	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325LDL	Dilution Factor :	125
Date & Time Acquired :	2025-04-29 17:15:49	DataFile Name :	067AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	11768	12125	11972	11955	1.50	cps
Ytterbium	172-1	2560	2684	2640	2628	2.38	cps
Ytterbium	172-2	1180	1233	1267	1227	3.56	cps
Ytterbium	176-1	2670	2740	2654	2688	1.71	cps
Ytterbium	176-2	987	1020	1010	1006	1.70	cps
Yttrium	89-1	13542819	13586386	13917268	13682158	1.50	cps
Yttrium	89-2	1026124	1016977	1042549	1028550	1.26	cps
Zinc	66-2	9550	9430	9477	9485	0.64	cps
Zirconium	90-1	2780	2604	2617	2667	3.69	cps
Zirconium	91-1	633	620	520	591	10.48	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:19:10	DataFile Name :	068AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	263220	264740	261928	263296	0.53	cps
Antimony	121-1	513096	510478	515514	513029	0.49	cps
Arsenic	75-2	123	103	127	118	10.71	cps
Barium	135-1	576457	587991	588030	584159	1.14	cps
Barium	137-1	1010208	1018598	1017887	1015565	0.46	cps
Beryllium	9-1	110106	111157	110941	110735	0.50	cps
Bismuth	209-1	5216124	5253650	5210437	5226737	0.45	cps
Bismuth	209-2	2468083	2447848	2460432	2458788	0.42	cps
Bromine	81-1	31659	32658	32655	32324	1.78	cps
Cadmium	108-1	9520	9930	9974	9808	2.55	cps
Cadmium	106-1	19450	19891	19470	19604	1.27	cps
Cadmium	111-1	133298	134211	134946	134152	0.62	cps
Calcium	43-1	630661	634936	634718	633438	0.38	cps
Calcium	44-1	10577859	10306228	10521019	10468369	1.37	cps
Carbon	12-1	3656867	3753329	3704549	3704915	1.30	cps
Carbon	12-2	25142	25536	24591	25089	1.89	cps
Chlorine	35-1	2841956	3223555	3403942	3156485	9.09	cps
Chlorine	35-2	15926	16026	16319	16090	1.27	cps
Chromium	52-2	118301	118899	118251	118484	0.30	cps
Cobalt	59-2	277604	274905	277221	276577	0.53	cps
Copper	63-2	1861144	1853451	1902660	1872418	1.41	cps
Dysprosium	156-1	28611	29626	29646	29294	2.02	cps
Dysprosium	156-2	10601	10611	11038	10750	2.32	cps
Erbium	164-1	32981	34137	32496	33205	2.54	cps
Erbium	164-2	12162	12009	12132	12101	0.67	cps
Gadolinium	160-1	27849	28637	29142	28543	2.28	cps
Gadolinium	160-2	12696	13187	12626	12836	2.38	cps
Holmium	165-1	8604805	8766022	8678802	8683210	0.93	cps
Holmium	165-2	3439968	3446968	3502014	3462983	0.98	cps
Indium	115-1	7663088	7867621	7730533	7753747	1.34	cps
Indium	115-2	801958	805303	804618	803959	0.22	cps
Iron	54-2	3864724	3817958	3765376	3816019	1.30	cps
Iron	56-2	70580744	70916994	69937694	70478477	0.71	cps
Iron	57-2	1825551	1763328	1789531	1792804	1.74	cps
Krypton	83-1	330	407	357	364	10.68	cps
Lead	206-1	1868850	1940093	1914098	1907680	1.89	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:19:10	DataFile Name :	068AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1531429	1540347	1538208	1536661	0.30	cps
Lead	208-1	7400497	7495126	7470813	7455479	0.66	cps
Lithium	6-1	2138190	2161561	2118701	2139484	1.00	cps
Magnesium	24-2	1700348	1758807	1736606	1731921	1.70	cps
Manganese	55-2	945117	946926	941586	944543	0.29	cps
Molybdenum	94-1	847250	855159	856731	853047	0.60	cps
Molybdenum	95-1	920673	933492	933661	929275	0.80	cps
Molybdenum	96-1	1043698	1050851	1050813	1048454	0.39	cps
Molybdenum	97-1	571490	586888	583912	580763	1.41	cps
Molybdenum	98-1	1559177	1627778	1590485	1592480	2.16	cps
Neodymium	150-1	29549	30151	29810	29837	1.01	cps
Neodymium	150-2	8193	8243	8046	8160	1.25	cps
Nickel	60-2	67579	68269	67228	67692	0.78	cps
Phosphorus	31-2	163	180	160	168	6.39	cps
Potassium	39-2	240764	241902	243566	242078	0.58	cps
Rhodium	103-1	7152247	7156505	7072286	7127013	0.67	cps
Rhodium	103-2	3068032	3022104	3050441	3046859	0.76	cps
Scandium	45-1	5108424	4969747	5099077	5059083	1.53	cps
Scandium	45-2	103211	102892	102358	102820	0.42	cps
Selenium	82-1	8016	8146	8026	8063	0.90	cps
Selenium	77-2	220	213	203	212	3.95	cps
Selenium	78-2	550	497	497	514	5.99	cps
Silicon	28-1	32071501	32894930	33230957	32732463	1.82	cps
Silver	107-1	105583	110310	110206	108700	2.48	cps
Silver	109-1	98956	102115	103828	101633	2.43	cps
Sodium	23-2	2103800	2117584	2168618	2130001	1.60	cps
Strontium	86-1	332220	340547	337866	336878	1.26	cps
Strontium	88-1	3084726	3111627	3103350	3099901	0.44	cps
Sulfur	34-1	2138546	2154029	2179523	2157366	0.96	cps
Terbium	159-1	9040213	9196515	8973304	9070011	1.26	cps
Terbium	159-2	3333574	3370966	3304687	3336409	1.00	cps
Thallium	203-1	429452	432262	431973	431229	0.36	cps
Thallium	205-1	1027409	1027407	1037860	1030892	0.59	cps
Tin	118-1	378732	385593	382609	382311	0.90	cps
Titanium	47-1	1417	1403	1327	1382	3.51	cps
Uranium	238-1	1296443	1279171	1298839	1291484	0.83	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:19:10	DataFile Name :	068AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	146662	145802	144707	145723	0.67	cps
Ytterbium	172-1	11692	12239	12196	12042	2.53	cps
Ytterbium	172-2	5388	5621	5615	5541	2.40	cps
Ytterbium	176-1	10177	10618	10664	10486	2.56	cps
Ytterbium	176-2	4711	4437	4668	4605	3.19	cps
Yttrium	89-1	14513061	14367571	14410859	14430497	0.52	cps
Yttrium	89-2	1076202	1071315	1077284	1074934	0.30	cps
Zinc	66-2	227234	226559	230174	227989	0.84	cps
Zirconium	90-1	892315	897331	912249	900632	1.15	cps
Zirconium	91-1	194751	201350	199558	198553	1.72	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDDL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:22:22	DataFile Name :	069AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	270104	272090	270082	270759	0.43	cps
Antimony	121-1	516408	521154	524037	520533	0.74	cps
Arsenic	75-2	93	87	127	102	20.97	cps
Barium	135-1	590431	587243	595442	591039	0.70	cps
Barium	137-1	1013165	1022359	1032063	1022529	0.92	cps
Beryllium	9-1	109470	113051	112407	111643	1.71	cps
Bismuth	209-1	5117268	5202111	5355634	5225004	2.31	cps
Bismuth	209-2	2486780	2484798	2455172	2475583	0.72	cps
Bromine	81-1	32565	33263	32555	32794	1.24	cps
Cadmium	108-1	10074	9984	10321	10126	1.72	cps
Cadmium	106-1	19667	20252	20168	20029	1.58	cps
Cadmium	111-1	133772	135822	137904	135833	1.52	cps
Calcium	43-1	633840	648612	649089	643847	1.35	cps
Calcium	44-1	10437171	10815131	10597393	10616565	1.79	cps
Carbon	12-1	3632411	3621831	3706655	3653632	1.27	cps
Carbon	12-2	25112	25589	25165	25289	1.03	cps
Chlorine	35-1	3203485	3536907	3709727	3483373	7.39	cps
Chlorine	35-2	16763	17484	17394	17214	2.28	cps
Chromium	52-2	120613	119571	121252	120479	0.70	cps
Cobalt	59-2	283834	282793	282251	282959	0.28	cps
Copper	63-2	1930268	1927004	1900822	1919365	0.84	cps
Dysprosium	156-1	29212	28601	29623	29145	1.76	cps
Dysprosium	156-2	11438	11405	11008	11284	2.12	cps
Erbium	164-1	33041	33790	33890	33573	1.38	cps
Erbium	164-2	12763	12386	12826	12658	1.88	cps
Gadolinium	160-1	29008	28855	29259	29041	0.70	cps
Gadolinium	160-2	13500	13257	13394	13383	0.91	cps
Holmium	165-1	8833426	8798916	8721632	8784658	0.65	cps
Holmium	165-2	3494958	3512857	3410598	3472804	1.57	cps
Indium	115-1	7788459	7610351	7807913	7735574	1.41	cps
Indium	115-2	817548	820545	813783	817292	0.41	cps
Iron	54-2	3950744	3954088	3913455	3939429	0.57	cps
Iron	56-2	72643266	72951749	71509761	72368258	1.05	cps
Iron	57-2	1817777	1840353	1813320	1823817	0.79	cps
Krypton	83-1	310	383	427	373	15.80	cps
Lead	206-1	1932608	1910760	1909915	1917761	0.67	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDDL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:22:22	DataFile Name :	069AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1534147	1571971	1566189	1557436	1.31	cps
Lead	208-1	7409966	7490281	7494671	7464973	0.64	cps
Lithium	6-1	2105826	2038666	2114809	2086434	1.99	cps
Magnesium	24-2	1771201	1804840	1786373	1787471	0.94	cps
Manganese	55-2	964681	973547	959983	966071	0.71	cps
Molybdenum	94-1	853292	876936	880044	870091	1.68	cps
Molybdenum	95-1	941077	954047	952133	949086	0.74	cps
Molybdenum	96-1	1046161	1074501	1066844	1062502	1.38	cps
Molybdenum	97-1	580849	597877	598176	592301	1.67	cps
Molybdenum	98-1	1596229	1634278	1607533	1612680	1.21	cps
Neodymium	150-1	30368	30689	31026	30694	1.07	cps
Neodymium	150-2	8589	8539	8383	8504	1.27	cps
Nickel	60-2	69398	69987	70135	69840	0.56	cps
Phosphorus	31-2	200	183	170	184	8.15	cps
Potassium	39-2	247622	248797	242873	246430	1.27	cps
Rhodium	103-1	7183321	7326246	7321084	7276884	1.11	cps
Rhodium	103-2	3156158	3066929	3054275	3092454	1.80	cps
Scandium	45-1	5037689	5228042	5151020	5138917	1.86	cps
Scandium	45-2	103932	102711	102888	103177	0.64	cps
Selenium	82-1	8156	8426	8550	8377	2.40	cps
Selenium	77-2	213	180	220	204	10.48	cps
Selenium	78-2	610	503	620	578	11.19	cps
Silicon	28-1	32354924	33244180	34236231	33278445	2.83	cps
Silver	107-1	111382	112138	114810	112776	1.60	cps
Silver	109-1	101987	104805	106390	104394	2.14	cps
Sodium	23-2	2217864	2199904	2192215	2203328	0.60	cps
Strontium	86-1	341823	347047	349117	345996	1.09	cps
Strontium	88-1	3147906	3202708	3219563	3190059	1.17	cps
Sulfur	34-1	2128638	2178903	2218722	2175421	2.08	cps
Terbium	159-1	9108101	8983350	9088300	9059917	0.74	cps
Terbium	159-2	3419817	3411277	3414124	3415073	0.13	cps
Thallium	203-1	431497	438264	441792	437184	1.20	cps
Thallium	205-1	1026276	1053742	1071120	1050379	2.15	cps
Tin	118-1	382366	390134	388436	386979	1.06	cps
Titanium	47-1	1610	1397	1267	1425	12.17	cps
Uranium	238-1	1279739	1295968	1317615	1297774	1.46	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16MSDDL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325MSI	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:22:22	DataFile Name :	069AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	148690	146929	148990	148203	0.75	cps
Ytterbium	172-1	11979	12716	12403	12366	2.99	cps
Ytterbium	172-2	5701	5635	5495	5610	1.88	cps
Ytterbium	176-1	10518	10611	10951	10693	2.13	cps
Ytterbium	176-2	4631	4444	4688	4588	2.78	cps
Yttrium	89-1	14460809	14479443	14896917	14612390	1.69	cps
Yttrium	89-2	1092023	1095753	1092012	1093263	0.20	cps
Zinc	66-2	232743	233193	231618	232518	0.35	cps
Zirconium	90-1	905524	929069	941442	925345	1.97	cps
Zirconium	91-1	199706	206764	203193	203221	1.74	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16ADL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325ADL	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:25:31	DataFile Name :	070AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	273206	273187	272445	272946	0.16	cps
Antimony	121-1	522477	527469	527146	525697	0.53	cps
Arsenic	75-2	110	120	137	122	11.02	cps
Barium	135-1	586721	600029	601852	596201	1.39	cps
Barium	137-1	1019213	1045527	1053711	1039484	1.73	cps
Beryllium	9-1	112184	114471	113465	113373	1.01	cps
Bismuth	209-1	5183798	5282361	5230138	5232099	0.94	cps
Bismuth	209-2	2461459	2536107	2507597	2501721	1.51	cps
Bromine	81-1	32732	32474	32758	32655	0.48	cps
Cadmium	108-1	10027	9914	10157	10033	1.21	cps
Cadmium	106-1	20328	20098	20168	20198	0.58	cps
Cadmium	111-1	134184	139438	138496	137373	2.04	cps
Calcium	43-1	645558	652140	655325	651008	0.77	cps
Calcium	44-1	10790604	10746980	10965241	10834275	1.07	cps
Carbon	12-1	3728038	3758070	3658502	3714870	1.37	cps
Carbon	12-2	24955	25275	25552	25261	1.18	cps
Chlorine	35-1	3411991	3685788	3754010	3617263	5.00	cps
Chlorine	35-2	17184	17915	17911	17670	2.38	cps
Chromium	52-2	120897	122479	123793	122390	1.18	cps
Cobalt	59-2	286203	286420	283985	285536	0.47	cps
Copper	63-2	1956526	1994235	1895720	1948827	2.55	cps
Dysprosium	156-1	29560	29379	29867	29602	0.83	cps
Dysprosium	156-2	10694	10781	10871	10782	0.82	cps
Erbium	164-1	33893	33569	33589	33684	0.54	cps
Erbium	164-2	12446	12613	12583	12547	0.71	cps
Gadolinium	160-1	29272	29432	29633	29446	0.61	cps
Gadolinium	160-2	13580	13160	13724	13488	2.17	cps
Holmium	165-1	8787621	8689197	8739740	8738853	0.56	cps
Holmium	165-2	3473752	3449628	3411798	3445060	0.91	cps
Indium	115-1	7722662	7763433	7682021	7722705	0.53	cps
Indium	115-2	809747	813160	812899	811935	0.23	cps
Iron	54-2	3947099	4039950	3986940	3991330	1.17	cps
Iron	56-2	71956827	72505144	71865984	72109318	0.48	cps
Iron	57-2	1862937	1854156	1856188	1857760	0.25	cps
Krypton	83-1	360	360	373	364	2.11	cps
Lead	206-1	1958689	1959430	1999125	1972414	1.17	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16ADL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325ADL	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:25:31	DataFile Name :	070AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1575040	1576416	1589252	1580236	0.50	cps
Lead	208-1	7596462	7617261	7647816	7620513	0.34	cps
Lithium	6-1	2156825	2098658	2172819	2142767	1.82	cps
Magnesium	24-2	1806981	1815431	1791739	1804717	0.67	cps
Manganese	55-2	973346	979658	976666	976557	0.32	cps
Molybdenum	94-1	865929	888668	892287	882295	1.62	cps
Molybdenum	95-1	956674	962170	972242	963696	0.82	cps
Molybdenum	96-1	1067550	1099263	1090935	1085916	1.51	cps
Molybdenum	97-1	597793	600726	606576	601698	0.74	cps
Molybdenum	98-1	1636782	1662560	1653854	1651065	0.79	cps
Neodymium	150-1	30298	30875	31250	30808	1.56	cps
Neodymium	150-2	8326	8396	8333	8352	0.46	cps
Nickel	60-2	70560	69512	69100	69724	1.08	cps
Phosphorus	31-2	197	157	160	171	12.97	cps
Potassium	39-2	246514	250360	246455	247776	0.90	cps
Rhodium	103-1	7090117	7176595	7107235	7124649	0.64	cps
Rhodium	103-2	3130622	3091625	3016416	3079554	1.89	cps
Scandium	45-1	5117491	5043135	5146851	5102492	1.05	cps
Scandium	45-2	101052	104144	104255	103150	1.76	cps
Selenium	82-1	8286	8346	8369	8334	0.52	cps
Selenium	77-2	197	203	197	199	1.94	cps
Selenium	78-2	547	647	513	569	12.20	cps
Silicon	28-1	33733938	33878924	34016273	33876378	0.42	cps
Silver	107-1	112780	113667	116177	114208	1.54	cps
Silver	109-1	104990	107361	108308	106886	1.60	cps
Sodium	23-2	2195583	2229271	2255053	2226635	1.34	cps
Strontium	86-1	345156	352100	353621	350292	1.29	cps
Strontium	88-1	3164543	3192529	3221665	3192912	0.89	cps
Sulfur	34-1	2212909	2210251	2198667	2207276	0.34	cps
Terbium	159-1	9082372	9100159	9008917	9063816	0.53	cps
Terbium	159-2	3404561	3421368	3406441	3410790	0.27	cps
Thallium	203-1	443386	441310	443158	442618	0.26	cps
Thallium	205-1	1045669	1058584	1069429	1057894	1.12	cps
Tin	118-1	383547	395999	401184	393576	2.30	cps
Titanium	47-1	1370	1410	1330	1370	2.92	cps
Uranium	238-1	1298905	1310233	1314938	1308025	0.63	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1883-16ADL2X25	Instrumnet Name :	P8
Client Sample ID :	OU4-VSL-19-042325ADL	Dilution Factor :	25
Date & Time Acquired :	2025-04-29 17:25:31	DataFile Name :	070AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	149404	150478	149768	149884	0.36	cps
Ytterbium	172-1	12192	12296	12740	12409	2.34	cps
Ytterbium	172-2	5605	5875	5775	5751	2.37	cps
Ytterbium	176-1	10721	11141	10511	10791	2.97	cps
Ytterbium	176-2	4704	4567	4621	4631	1.49	cps
Yttrium	89-1	14545988	14787956	14856359	14730101	1.11	cps
Yttrium	89-2	1078726	1087191	1080904	1082274	0.41	cps
Zinc	66-2	234339	235133	235150	234874	0.20	cps
Zirconium	90-1	921907	941232	942982	935373	1.25	cps
Zirconium	91-1	204211	208693	210028	207644	1.47	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV07	Instrumnet Name :	P8
Client Sample ID :	CCV07	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:41:48	DataFile Name :	071CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4577891	4602976	4626945	4602604	0.53	cps
Antimony	121-1	12618784	12841038	12727503	12729108	0.87	cps
Arsenic	75-2	275292	274561	275887	275247	0.24	cps
Barium	135-1	15131170	15366944	15532212	15343442	1.31	cps
Barium	137-1	26284406	26379063	26744780	26469416	0.92	cps
Beryllium	9-1	2661553	2706994	2688602	2685716	0.85	cps
Bismuth	209-1	4545373	4613017	4495886	4551425	1.29	cps
Bismuth	209-2	2042335	2099991	2107785	2083370	1.72	cps
Bromine	81-1	29190	29942	29464	29532	1.29	cps
Cadmium	108-1	231563	236485	235447	234498	1.11	cps
Cadmium	106-1	341082	341742	345213	342679	0.65	cps
Cadmium	111-1	3105998	3120869	3129988	3118952	0.39	cps
Calcium	43-1	19946472	20173373	20223701	20114516	0.73	cps
Calcium	44-1	325442315	326799742	333812202	328684753	1.37	cps
Carbon	12-1	4170107	4204681	4338220	4237669	2.09	cps
Carbon	12-2	35566	35580	35767	35638	0.31	cps
Chlorine	35-1	232844	234988	235387	234406	0.58	cps
Chlorine	35-2	940	963	947	950	1.27	cps
Chromium	52-2	2873915	2921236	2897164	2897438	0.82	cps
Cobalt	59-2	5177945	5170496	5168678	5172373	0.09	cps
Copper	63-2	38307280	38384461	38459491	38383744	0.20	cps
Dysprosium	156-1	700	743	657	700	6.19	cps
Dysprosium	156-2	187	130	157	158	17.97	cps
Erbium	164-1	567	610	553	577	5.14	cps
Erbium	164-2	190	193	193	192	1.00	cps
Gadolinium	160-1	460	493	507	487	4.94	cps
Gadolinium	160-2	217	163	180	187	14.62	cps
Holmium	165-1	8073768	8033822	8265418	8124336	1.52	cps
Holmium	165-2	3212083	3147414	3228597	3196032	1.34	cps
Indium	115-1	6545198	6485467	6595330	6541998	0.84	cps
Indium	115-2	665050	674261	675152	671488	0.83	cps
Iron	54-2	28670023	28530056	28249650	28483243	0.75	cps
Iron	56-2	530231739	525121566	537269419	530874241	1.15	cps
Iron	57-2	13414782	13203794	13401570	13340049	0.89	cps
Krypton	83-1	330	303	350	328	7.14	cps
Lead	206-1	43374793	43550196	43631973	43518987	0.30	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV07	Instrumnet Name :	P8
Client Sample ID :	CCV07	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:41:48	DataFile Name :	071CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	36829679	36785967	37803408	37139684	1.55	cps
Lead	208-1	169855427	170214362	173755366	171275051	1.26	cps
Lithium	6-1	1911931	1984840	1965882	1954217	1.94	cps
Magnesium	24-2	79951152	79362595	79847749	79720499	0.39	cps
Manganese	55-2	12103334	11971304	12034452	12036364	0.55	cps
Molybdenum	94-1	44420454	45508848	45899536	45276279	1.69	cps
Molybdenum	95-1	64824169	66167316	67109306	66033597	1.74	cps
Molybdenum	96-1	71499821	72657331	71836901	71998017	0.83	cps
Molybdenum	97-1	40028612	41222808	39701151	40317524	1.99	cps
Molybdenum	98-1	104566592	105698325	105813472	105359463	0.65	cps
Neodymium	150-1	1210	1263	1300	1258	3.60	cps
Neodymium	150-2	133	123	57	104	39.90	cps
Nickel	60-2	1313639	1320131	1325411	1319727	0.45	cps
Phosphorus	31-2	45130	45685	45498	45438	0.62	cps
Potassium	39-2	28447633	28994290	28450011	28630645	1.10	cps
Rhodium	103-1	6064109	5939779	5893777	5965889	1.48	cps
Rhodium	103-2	2539534	2640036	2552347	2577306	2.12	cps
Scandium	45-1	4588915	4572270	4711382	4624189	1.64	cps
Scandium	45-2	94925	96924	96370	96073	1.07	cps
Selenium	82-1	182958	184852	184454	184088	0.54	cps
Selenium	77-2	3380	3644	3544	3523	3.77	cps
Selenium	78-2	11622	11588	11722	11644	0.60	cps
Silicon	28-1	25479327	25269660	25452983	25400657	0.45	cps
Silver	107-1	15400425	15487629	15541567	15476540	0.46	cps
Silver	109-1	14372317	14555480	14497594	14475130	0.65	cps
Sodium	23-2	163203398	162490721	163500084	163064734	0.32	cps
Strontium	86-1	4180791	4272715	4277000	4243502	1.28	cps
Strontium	88-1	36620650	37586066	37288409	37165042	1.33	cps
Sulfur	34-1	1552049	1545047	1567646	1554914	0.74	cps
Terbium	159-1	8478868	8483166	8251705	8404580	1.58	cps
Terbium	159-2	3101781	3111088	3099701	3104190	0.20	cps
Thallium	203-1	10532676	10760230	10778271	10690392	1.28	cps
Thallium	205-1	25091266	25436281	25377666	25301738	0.73	cps
Tin	118-1	10361887	10424232	10291431	10359183	0.64	cps
Titanium	47-1	18238023	18724877	18427934	18463611	1.33	cps
Uranium	238-1	33259548	33593645	34565159	33806118	2.01	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV07	Instrumnet Name :	P8
Client Sample ID :	CCV07	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:41:48	DataFile Name :	071CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2187568	2225182	2230108	2214286	1.05	cps
Ytterbium	172-1	830	860	807	832	3.21	cps
Ytterbium	172-2	423	443	383	417	7.33	cps
Ytterbium	176-1	52089	53702	53344	53045	1.60	cps
Ytterbium	176-2	20519	20212	20730	20487	1.27	cps
Yttrium	89-1	12538086	12630354	12427678	12532040	0.81	cps
Yttrium	89-2	925516	942628	943201	937115	1.07	cps
Zinc	66-2	4363440	4375238	4390520	4376399	0.31	cps
Zirconium	90-1	22616424	23238539	23294260	23049741	1.63	cps
Zirconium	91-1	5072181	5182358	5267911	5174150	1.90	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB07	Instrumnet Name :	P8
Client Sample ID :	CCB07	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:50:52	DataFile Name :	072CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	320	407	390	372	12.35	cps
Antimony	121-1	780	800	673	751	9.07	cps
Arsenic	75-2	7	7	3	6	34.70	cps
Barium	135-1	227	267	247	247	8.11	cps
Barium	137-1	410	377	360	382	6.66	cps
Beryllium	9-1	163	160	170	164	3.17	cps
Bismuth	209-1	5302511	5330499	5464341	5365784	1.61	cps
Bismuth	209-2	2410289	2453359	2511265	2458304	2.06	cps
Bromine	81-1	31582	32491	31328	31801	1.92	cps
Cadmium	108-1	10	13	10	11	17.30	cps
Cadmium	106-1	4261	4251	4501	4337	3.26	cps
Cadmium	111-1	3012	3023	3200	3078	3.43	cps
Calcium	43-1	1110	1103	1160	1125	2.75	cps
Calcium	44-1	28201	28391	28922	28505	1.31	cps
Carbon	12-1	3633286	3605609	3565782	3601559	0.94	cps
Carbon	12-2	24778	24193	24133	24368	1.46	cps
Chlorine	35-1	171128	170454	170838	170807	0.20	cps
Chlorine	35-2	820	703	647	723	12.22	cps
Chromium	52-2	1253	1187	1200	1213	2.91	cps
Cobalt	59-2	103	103	183	130	35.53	cps
Copper	63-2	2604	2860	2660	2708	4.98	cps
Dysprosium	156-1	7	17	7	10	57.72	cps
Dysprosium	156-2	3	0	3	2	86.60	cps
Erbium	164-1	43	73	37	51	38.21	cps
Erbium	164-2	3	10	23	12	83.33	cps
Gadolinium	160-1	57	77	73	69	15.55	cps
Gadolinium	160-2	27	20	7	18	57.27	cps
Holmium	165-1	8671657	8675606	8728868	8692044	0.37	cps
Holmium	165-2	3281703	3359358	3447800	3362953	2.47	cps
Indium	115-1	7736445	7860602	7652794	7749947	1.35	cps
Indium	115-2	758744	803765	814280	792263	3.72	cps
Iron	54-2	927	990	983	967	3.60	cps
Iron	56-2	13536	13643	13306	13495	1.28	cps
Iron	57-2	323	330	323	326	1.18	cps
Krypton	83-1	330	347	300	326	7.26	cps
Lead	206-1	1503	1680	1670	1618	6.13	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB07	Instrumnet Name :	P8
Client Sample ID :	CCB07	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:50:52	DataFile Name :	072CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1343	1373	1417	1378	2.68	cps
Lead	208-1	6104	6401	6401	6302	2.72	cps
Lithium	6-1	2229118	2208689	2173654	2203820	1.27	cps
Magnesium	24-2	1120	1097	1030	1082	4.32	cps
Manganese	55-2	2877	2844	3020	2914	3.22	cps
Molybdenum	94-1	1187	1240	1157	1195	3.53	cps
Molybdenum	95-1	753	647	700	700	7.62	cps
Molybdenum	96-1	893	887	850	877	2.66	cps
Molybdenum	97-1	410	393	433	412	4.88	cps
Molybdenum	98-1	1040	1097	1047	1061	2.92	cps
Neodymium	150-1	10	3	7	7	50.03	cps
Neodymium	150-2	3	0	3	2	86.60	cps
Nickel	60-2	560	607	613	593	4.90	cps
Phosphorus	31-2	97	73	97	89	15.16	cps
Potassium	39-2	19436	19517	19520	19491	0.24	cps
Rhodium	103-1	7137353	7363576	7241819	7247583	1.56	cps
Rhodium	103-2	2936971	3072407	3124006	3044461	3.17	cps
Scandium	45-1	5104593	5093477	5115385	5104485	0.21	cps
Scandium	45-2	97731	102674	103174	101193	2.97	cps
Selenium	82-1	-30	-57	23	-21	-192.94	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	43	23	30	32	31.61	cps
Silicon	28-1	510984	488441	481024	493483	3.16	cps
Silver	107-1	420	433	397	417	4.45	cps
Silver	109-1	380	423	337	380	11.40	cps
Sodium	23-2	50076	49825	50641	50180	0.83	cps
Strontium	86-1	630	537	540	569	9.31	cps
Strontium	88-1	827	817	867	837	3.16	cps
Sulfur	34-1	597289	594406	600463	597386	0.51	cps
Terbium	159-1	9189353	9233487	9027140	9149993	1.19	cps
Terbium	159-2	3192604	3388120	3377481	3319401	3.31	cps
Thallium	203-1	437	470	370	426	11.96	cps
Thallium	205-1	1197	1053	1087	1112	6.74	cps
Tin	118-1	3624	3724	3614	3654	1.67	cps
Titanium	47-1	430	377	380	396	7.55	cps
Uranium	238-1	340	297	313	317	6.90	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB07	Instrumnet Name :	P8
Client Sample ID :	CCB07	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 17:50:52	DataFile Name :	072CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	33	40	40	38	10.19	cps
Ytterbium	172-1	43	40	70	51	32.17	cps
Ytterbium	172-2	23	17	13	18	28.64	cps
Ytterbium	176-1	1020	990	1137	1049	7.39	cps
Ytterbium	176-2	303	287	290	293	3.01	cps
Yttrium	89-1	13759344	13703670	13882811	13781942	0.67	cps
Yttrium	89-2	969249	1028095	1036575	1011306	3.63	cps
Zinc	66-2	1677	1523	1793	1665	8.14	cps
Zirconium	90-1	2264	2377	2247	2296	3.08	cps
Zirconium	91-1	580	470	513	521	10.63	cps

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB167789

SOP ID : M7470A-Mercury-19

SDG No : NA

Matrix : WATER

Pippete ID: HG A

Balance ID : N/A

Filter paper ID : NA

pH Strip ID : M6069

Hood ID : #1

Block ID: 1. HG HOT BLOCK#3 2. N/A

Start Digest Date: 04/29/2025 **Time :** 10:35 **Temp :** 94 °C

End Digest Date: 04/29/2025 **Time :** 12:35 **Temp :** 95 °C

Digestion tube ID: M5595

Block thermometer ID: HG-DIG#3

Dig Technician Signature: MB

Supervisor Signature: TZ

Temp : 1. 94°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
ICV	30mL	MP85485
CCV	30mL	MP85487
CRA	30mL	MP85489
Blank Spike	0.48mL	MP85478
Matrix Spike	0.48mL	MP85478

Chemical Used	ML/SAMPLE USED	Lot Number
HNO3/H2SO4(1:2)	2.5mL	MP85240
KMnO4 (5%)	4.5mL	MP85241
K2S2O8 (5%)	2.5mL	MP85242
Hydroxylamine HCL (12%)	2.0mL	MP85243
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
0.0 ppb	S0	30mL	MP85479
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	30mL	MP85480
2.5 ppb	S2.5	30mL	MP85481
5.0 ppb	S5.0	30mL	MP85482
7.5 ppb	S7.5	30mL	MP85483
10.0 ppb	S10.0	30mL	MP85484
ICV	ICV	30mL	MP85485
ICB	ICB	30mL	MP85486
CCV	CCV	30mL	MP85487
CCB	CCB	30mL	MP85488
CRI	CRI	30mL	MP85489
CHK STD	CHK STD	30mL	MP85490

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
4/29/25 A 13:15	MB - Dig. Lab	MB - Digested Lab
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB167789

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Comment	Prep Pos
PB167789BL	PBW789	30	30	<2	N/A	3-1
PB167789BS	LCS789	30	30	<2	N/A	2
PB167789TB	LEB789	30	30	<2	MP85478	3
Q1883-02	OU4-PCS-TC-27-042325	30	30	<2	N/A	4
Q1883-04	OU4-PCS-TC-28-042325	30	30	<2	N/A	5
Q1883-06	OU4-PCS-TC-29-042325	30	30	<2	N/A	6
Q1883-08	OU4-PCS-TC-30-042325	30	30	<2	N/A	7
Q1883-10	OU4-PCS-TC-31-042325	30	30	<2	N/A	8
Q1883-12	OU4-PCS-TC-32-042325	30	30	<2	N/A	9
Q1883-14	OU4-VSL-18-042325	30	30	<2	N/A	10
Q1883-16	OU4-VSL-19-042325	30	30	<2	N/A	11
Q1883-16DUP	OU4-VSL-19-042325DUP	30	30	<2	N/A	12
Q1883-16MS	OU4-VSL-19-042325MS	30	30	<2	MP85478	13
Q1883-16MSD	OU4-VSL-19-042325MSD	30	30	<2	MP85478	14

Alliance TECHNICAL GROUP

SPLP EXTRACTION LOGPAGE

PB167771

SOP ID : M1312-SPLP-10

SDG No : N/A

Weigh By : JP

Balance ID : WC SC-7

pH Meter ID : WC PH METER-1

Extraction By : JP

Filter By : JP

Pippete ID : WC

Tumbler ID : T-2

TCLP Filter ID : 115525

Start Prep Date : 04/28/2025 **Time :** 14:00

End Prep Date : 04/29/2025 **Time :** 07:20

Combination Ratio : 20

ZHE Cleaning Batch : ~~N/A~~ 10

Initial Room Temperature: 22 °C

Final Room Temperature: 21 °C

TCLP Technician Signature : JP

Supervisor By : [illegible]

Standared Name	MLS USED	STD REF. # FROM LOG
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

Chemical Used	ML/SAMPLE U	Lot Number
SPLP FLUID	WP112802	N/A
N/A	N/A	N/A
1:1 HNO3	N/A	WP112799
pH Strips	N/A	W1931,W1934,W3171,W3172
pH Strips	W1940,W1941,W1942	W3166,W1938,W1939,
N/A	N/A	N/A
120ml Plastic bottle	N/A	2738
1:1 HNO3	N/A	MP84041

Extraction Conformance/Non-Conformance Comments:

Matrix spikes are added after fiftration and before preservation. Particle size reduction is not required. q1883-16 is used for MS-MSD.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
04/29/25 10:00	JP (TCLP Room)	5129. (Wet Dry)
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB167780

SOP ID : M3010A-Digestion-17

SDG No : N/A

Matrix : WATER

Pippete ID: ICP A

Balance ID : N/A

Filter paper ID : N/A

pH Strip ID : M6069

Hood ID : #3

Block ID: 1. HOT BLOCK #3 2. N/A

Start Digest Date: 04/29/2025 **Time :** 12:05 **Temp :** 96 °C

End Digest Date: 04/29/2025 **Time :** 14:15 **Temp :** 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: SJS

Supervisor Signature:

Temp : 1. 96°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
Spike Sol 1	0.50	MP85371
Spike Sol 2	1.00	MP85372
Spike Sol 3	1.00	MP85373
Spike Sol 4	1.00	MP85374
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Conc. HNO3	3.00	M6158
1:1 HCL	5.00	MP85156
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

HOT BLOCK #1 CELL#50 96C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
04/29/25 15:15	SJS-met.dig	Melinda Cal
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
PB167780BL	PBW780	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	1
PB167780BS	LCS780	<2	50	50	Colorless	Colorless	Clear	Clear	MP85371,MP85372,MP85373,M	2
PB167780TB	LEB780	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	14
Q1883-02	OU4-PCS-TC-27-042325	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	3
Q1883-04	OU4-PCS-TC-28-042325	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	4
Q1883-06	OU4-PCS-TC-29-042325	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	5
Q1883-08	OU4-PCS-TC-30-042325	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	6
Q1883-10	OU4-PCS-TC-31-042325	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	7
Q1883-12	OU4-PCS-TC-32-042325	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	8
Q1883-14	OU4-PCS-18-042325	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	9
Q1883-16	OU4-PCS-19-042325	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	10
Q1883-16MS	OU4-PCS-19-042325MS	<2	50	50	Colorless	Colorless	Clear	Clear	MP85371,MP85372,MP85373,M	12
Q1883-16MSD	OU4-PCS-19-042325MSD	<2	50	50	Colorless	Colorless	Clear	Clear	MP85371,MP85372,MP85373,M	13
Q1883-16DUP	OU4-PCS-19-042325DUP	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	11

Alliance TECHNICAL GROUP

SPLP EXTRACTION LOGPAGE

PB167771

Sample ID	ClientID	TCLP Vessel ID	Sample Wt (g)	Volume Extraction Fluid #1 (mL)	Multi phasic	Phase Miscible	Phases Combined	Final Leachate PH	Metals Leachate Adj. PH	Pre Pos
PB167771TB	LEB771	19	N/A	2000	N/A	N/A	N/A	4.24	1.0	T-2
Q1883-02	OU4-PCS-TC-27-042325	11	100.02	2000	N/A	N/A	N/A	5.0	1.5	T-2
Q1883-04	OU4-PCS-TC-28-042325	12	100.03	2000	N/A	N/A	N/A	5.5	1.0	T-2
Q1883-06	OU4-PCS-TC-29-042325	13	100.02	2000	N/A	N/A	N/A	5.5	1.0	T-2
Q1883-08	OU4-PCS-TC-30-042325	14	100.01	2000	N/A	N/A	N/A	5.6	1.5	T-2
Q1883-10	OU4-PCS-TC-31-042325	15	100.02	2000	N/A	N/A	N/A	5.0	1.5	T-2
Q1883-12	OU4-PCS-TC-32-042325	16	100.03	2000	N/A	N/A	N/A	5.5	1.0	T-2
Q1883-14	OU4-PCS-18-042325	17	100.04	2000	N/A	N/A	N/A	4.5	1.5	T-2
Q1883-16	OU4-PCS-19-042325	18	100.05	2000	N/A	N/A	N/A	5.0	1.0	T-2

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 # LB135594

Review By	mohan	Review On	5/1/2025 9:41:29 AM
Supervise By	jaswal	Supervise On	5/1/2025 11:29:42 PM

STD. NAME	STD REF.#
ICAL Standard	MP85479,MP85480,MP85481,MP85482,MP85483,MP85484
ICV Standard	MP85485
CCV Standard	MP85487
ICSA Standard	
CRI Standard	MP85489
LCS Standard	
Chk Standard	MP85486,MP85488,MP85490,MP85492

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	04/29/25 13:16		mohan	OK
2	S0.2	S0.2	CAL2	04/29/25 13:21		mohan	OK
3	S2.5	S2.5	CAL3	04/29/25 13:23		mohan	OK
4	S5	S5	CAL4	04/29/25 13:25		mohan	OK
5	S7.5	S7.5	CAL5	04/29/25 13:33		mohan	OK
6	S10	S10	CAL6	04/29/25 13:46		mohan	OK
7	ICV106	ICV106	ICV	04/29/25 13:51		mohan	OK
8	ICB106	ICB106	ICB	04/29/25 13:54		mohan	OK
9	CCV43	CCV43	CCV	04/29/25 13:56		mohan	OK
10	CCB43	CCB43	CCB	04/29/25 13:58		mohan	OK
11	CRA	CRA	CRDL	04/29/25 14:00		mohan	OK
12	HighStd	HighStd	HIGH STD	04/29/25 14:03		mohan	OK
13	ChkStd	ChkStd	SAM	04/29/25 14:05		mohan	OK
14	PB167789BL	PB167789BL	MB	04/29/25 14:07		mohan	OK
15	PB167789BS	PB167789BS	LCS	04/29/25 14:12		mohan	OK
16	Q1883-02	OU4-PCS-TC-27-042	SAM	04/29/25 14:14		mohan	OK
17	Q1883-04	OU4-PCS-TC-28-042	SAM	04/29/25 14:17		mohan	OK
18	Q1883-06	OU4-PCS-TC-29-042	SAM	04/29/25 14:19		mohan	OK

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Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB135594

Review By	mohan	Review On	5/1/2025 9:41:29 AM
Supervise By	jaswal	Supervise On	5/1/2025 11:29:42 PM

STD. NAME	STD REF.#
ICAL Standard	MP85479,MP85480,MP85481,MP85482,MP85483,MP85484
ICV Standard	MP85485
CCV Standard	MP85487
ICSA Standard	
CRI Standard	MP85489
LCS Standard	
Chk Standard	MP85486,MP85488,MP85490,MP85492

19	Q1883-08	OU4-PCS-TC-30-042	SAM	04/29/25 14:21		mohan	OK
20	Q1883-10	OU4-PCS-TC-31-042	SAM	04/29/25 14:24		mohan	OK
21	CCV44	CCV44	CCV	04/29/25 14:26		mohan	OK
22	CCB44	CCB44	CCB	04/29/25 14:28		mohan	OK
23	Q1883-12	OU4-PCS-TC-32-042	SAM	04/29/25 14:30		mohan	OK
24	Q1883-14	OU4-VSL-18-042325	SAM	04/29/25 14:33		mohan	OK
25	Q1883-16	OU4-VSL-19-042325	SAM	04/29/25 14:35		mohan	OK
26	Q1883-16DUP	OU4-VSL-19-042325D	DUP	04/29/25 14:37		mohan	OK
27	Q1883-16MS	OU4-VSL-19-042325M	MS	04/29/25 14:39		mohan	OK
28	Q1883-16MSD	OU4-VSL-19-042325M	MSD	04/29/25 14:42		mohan	OK
29	PB167789TB	PB167789TB	MB	04/29/25 14:46		mohan	OK
30	Q1883-16L	OU4-VSL-19-042325L	SD	04/29/25 14:48		mohan	OK
31	Q1883-16A	OU4-VSL-19-042325A	PS	04/29/25 14:51		mohan	OK
32	CCV45	CCV45	CCV	04/29/25 14:53		mohan	OK
33	CCB45	CCB45	CCB	04/29/25 14:55		mohan	OK

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Instrument ID: P8

Daily Analysis Runlog For Sequence/QCBatch ID # LB135595

Review By	jaswal	Review On	4/29/2025 4:08:50 PM
Supervise By	mohan	Supervise On	4/29/2025 4:10:15 PM

STD. NAME	STD REF.#
ICAL Standard	MP85351,MP85362,MP85361,MP85358,MP85357,MP85356,MP85355,MP85353,MP85352
ICV Standard	MP85363,MP85361
CCV Standard	MP85365
ICSA Standard	MP85366,MP85367
CRI Standard	MP85362
LCS Standard	
Chk Standard	MP85369,MP85370

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	TUNE	TUNE	TUNE	04/29/25 10:50		Jaswal	OK
2	S0	S0	CAL1	04/29/25 11:31		Jaswal	OK
3	S2	S2	CAL3	04/29/25 11:38		Jaswal	OK
4	S3	S3	CAL4	04/29/25 11:41		Jaswal	OK
5	S4	S4	CAL5	04/29/25 11:45		Jaswal	OK
6	S5	S5	CAL6	04/29/25 11:47		Jaswal	OK
7	S6	S6	CAL7	04/29/25 11:50		Jaswal	OK
8	S7	S7	CAL8	04/29/25 11:53		Jaswal	OK
9	S8	S8	CAL9	04/29/25 11:56		Jaswal	OK
10	ICV01	ICV01	ICV	04/29/25 12:14		Jaswal	OK
11	LLICV	LLICV	LLICV	04/29/25 12:18		Jaswal	OK
12	ICB01	ICB01	ICB	04/29/25 12:29		Jaswal	OK
13	ICSA01	ICSA01	ICSA	04/29/25 12:32		Jaswal	OK
14	ICSAB01	ICSAB01	ICSAB	04/29/25 12:37		Jaswal	OK
15	CCV01	CCV01	CCV	04/29/25 12:40		Jaswal	OK
16	CCB01	CCB01	CCB	04/29/25 12:44		Jaswal	OK
17	CRI	CRI	CRDL	04/29/25 12:47		Jaswal	OK
18	Q1812-02	RINSE-EB-TANK-041	SAM	04/29/25 12:50		Jaswal	OK

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Instrument ID: P8

Daily Analysis Runlog For Sequence/QCBatch ID # LB135595

Review By	jaswal	Review On	4/29/2025 4:08:50 PM
Supervise By	mohan	Supervise On	4/29/2025 4:10:15 PM

STD. NAME	STD REF.#
ICAL Standard	MP85351,MP85362,MP85361,MP85358,MP85357,MP85356,MP85355,MP85353,MP85352
ICV Standard	MP85363,MP85361
CCV Standard	MP85365
ICSA Standard	MP85366,MP85367
CRI Standard	MP85362
LCS Standard	
Chk Standard	MP85369,MP85370

19	Q1812-03	RINSE-EB-PUMP-041	SAM	04/29/25 12:54		Jaswal	OK
20	PB167612BL	PB167612BL	MB	04/29/25 12:57		Jaswal	OK
21	PB167612BS	PB167612BS	LCS	04/29/25 13:00		Jaswal	OK
22	CCV02	CCV02	CCV	04/29/25 13:03		Jaswal	OK
23	CCB02	CCB02	CCB	04/29/25 13:07		Jaswal	OK
24	CCV03	CCV03	CCV	04/29/25 14:47		Jaswal	OK
25	CCB03	CCB03	CCB	04/29/25 14:59		Jaswal	OK
26	PB167780BL	PB167780BL	MB	04/29/25 15:04		Jaswal	OK
27	PB167780BS	PB167780BS	LCS	04/29/25 15:08		Jaswal	OK
28	PB167780TB	PB167780TB	MB	04/29/25 15:15		Jaswal	OK
29	Q1883-02DL	OU4-PCS-TC-27-042	SAM	04/29/25 15:18	INT_STD fail for 89Y (1,2)	Jaswal	Dilution
30	Q1883-04DL	OU4-PCS-TC-28-042	SAM	04/29/25 15:21	INT_STD fail for 89Y (1,2)	Jaswal	Dilution
31	Q1883-06DL	OU4-PCS-TC-29-042	SAM	04/29/25 15:25	INT_STD fail for 89Y (1,2)	Jaswal	Dilution
32	Q1883-08DL	OU4-PCS-TC-30-042	SAM	04/29/25 15:28	INT_STD fail for 89Y (1)	Jaswal	Dilution
33	Q1883-10DL	OU4-PCS-TC-31-042	SAM	04/29/25 15:31	INT_STD fail for 89Y (1,2)	Jaswal	Dilution
34	Q1883-12DL	OU4-PCS-TC-32-042	SAM	04/29/25 15:34	INT_STD fail for 89Y (1,2)	Jaswal	Dilution
35	CCV04	CCV04	CCV	04/29/25 15:41		Jaswal	OK
36	CCB04	CCB04	CCB	04/29/25 15:48		Jaswal	OK
37	Q1883-14DL	OU4-VSL-18-042325[	SAM	04/29/25 15:55	INT_STD fail for 89Y (1,2)	Jaswal	Dilution
38	Q1883-16DL	OU4-VSL-19-042325[	SAM	04/29/25 15:58	INT_STD fail for 89Y (1,2)	Jaswal	Dilution

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Instrument ID: P8

Daily Analysis Runlog For Sequence/QCBatch ID # LB135595

Review By	jaswal	Review On	4/29/2025 4:08:50 PM
Supervise By	mohan	Supervise On	4/29/2025 4:10:15 PM

STD. NAME	STD REF.#
ICAL Standard	MP85351,MP85362,MP85361,MP85358,MP85357,MP85356,MP85355,MP85353,MP85352
ICV Standard	MP85363,MP85361
CCV Standard	MP85365
ICSA Standard	MP85366,MP85367
CRI Standard	MP85362
LCS Standard	
Chk Standard	MP85369,MP85370

39	Q1883-16DUPDL	OU4-VSL-19-042325[	DUP	04/29/25 16:01	INT_STD fail for 89Y (1,2)	Jaswal	Dilution
40	Q1883-16LDL	OU4-VSL-19-042325L	SD	04/29/25 16:04	INT_STD fail for 89Y (1,2)	Jaswal	Dilution
41	Q1883-16MSDL	OU4-VSL-19-042325M	MS	04/29/25 16:08	INT_STD fail for 89Y (1,2)	Jaswal	Dilution
42	Q1883-16MSDDL	OU4-VSL-19-042325M	MSD	04/29/25 16:11	INT_STD fail for 89Y (1,2)	Jaswal	Dilution
43	Q1883-16ADL	OU4-VSL-19-042325A	PS	04/29/25 16:14	INT_STD fail for 89Y (1,2)	Jaswal	Dilution
44	CCV05	CCV05	CCV	04/29/25 16:20		Jaswal	OK
45	CCB05	CCB05	CCB	04/29/25 16:28		Jaswal	OK
46	Q1883-02DL2	OU4-PCS-TC-27-042	SAM	04/29/25 16:36	25x for INT_STD fail for 89Y (1,2)	Jaswal	Confirms
47	Q1883-04DL2	OU4-PCS-TC-28-042	SAM	04/29/25 16:40	25x for INT_STD fail for 89Y (1,2)	Jaswal	Confirms
48	Q1883-06DL2	OU4-PCS-TC-29-042	SAM	04/29/25 16:43	25x for INT_STD fail for 89Y (1,2)	Jaswal	Confirms
49	Q1883-08DL2	OU4-PCS-TC-30-042	SAM	04/29/25 16:46	25x for INT_STD fail for 89Y (1)	Jaswal	Confirms
50	Q1883-10DL2	OU4-PCS-TC-31-042	SAM	04/29/25 16:50	25x for INT_STD fail for 89Y (1,2)	Jaswal	Confirms
51	Q1883-12DL2	OU4-PCS-TC-32-042	SAM	04/29/25 16:53	25x for INT_STD fail for 89Y (1,2)	Jaswal	Confirms
52	Q1883-14DL2	OU4-VSL-18-042325[	SAM	04/29/25 16:56	25x for INT_STD fail for 89Y (1,2)	Jaswal	Confirms
53	CCV06	CCV06	CCV	04/29/25 17:03		Jaswal	OK
54	CCB06	CCB06	CCB	04/29/25 17:05		Jaswal	OK
55	Q1883-16DL2	OU4-VSL-19-042325[	SAM	04/29/25 17:09	25x for INT_STD fail for 89Y (1,2)	Jaswal	Confirms

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Instrument ID: P8

Daily Analysis Runlog For Sequence/QCBatch ID # LB135595

Review By	jaswal	Review On	4/29/2025 4:08:50 PM
Supervise By	mohan	Supervise On	4/29/2025 4:10:15 PM

STD. NAME	STD REF.#
ICAL Standard	MP85351,MP85362,MP85361,MP85358,MP85357,MP85356,MP85355,MP85353,MP85352
ICV Standard	MP85363,MP85361
CCV Standard	MP85365
ICSA Standard	MP85366,MP85367
CRI Standard	MP85362
LCS Standard	
Chk Standard	MP85369,MP85370

56	Q1883-16DUPDL2	OU4-VSL-19-042325D	DUP	04/29/25 17:12	25x for INT_STD fail for 89Y (1,2)	Jaswal	Confirms
57	Q1883-16LDL2	OU4-VSL-19-042325L	SD	04/29/25 17:15	25x for INT_STD fail for 89Y (1,2)	Jaswal	Confirms
58	Q1883-16MSDL2	OU4-VSL-19-042325M	MS	04/29/25 17:19	25x for INT_STD fail for 89Y (1,2)	Jaswal	Confirms
59	Q1883-16MSDDL2	OU4-VSL-19-042325M	MSD	04/29/25 17:22	25x for INT_STD fail for 89Y (1,2)	Jaswal	Confirms
60	Q1883-16ADL2	OU4-VSL-19-042325A	PS	04/29/25 17:25	25x for INT_STD fail for 89Y (1,2)	Jaswal	Confirms
61	CCV07	CCV07	CCV	04/29/25 17:41		Jaswal	OK
62	CCB07	CCB07	CCB	04/29/25 17:50		Jaswal	OK

Alliance TECHNICAL GROUP

SPLP EXTRACTION LOGPAGE

PB167771

SOP ID : M1312-SPLP-10

SDG No : N/A

Weigh By : JP

Balance ID : WC SC-7

pH Meter ID : WC PH METER-1

Extraction By : JP

Filter By : JP

Pippete ID : WC

Tumbler ID : T-2

TCLP Filter ID : 115525

Start Prep Date : 04/28/2025 **Time :** 14:00

End Prep Date : 04/29/2025 **Time :** 07:20

Combination Ratio : 20

ZHE Cleaning Batch : ~~N/A~~ 10

Initial Room Temperature: 22 °C

Final Room Temperature: 21 °C

TCLP Technician Signature : JP

Supervisor By : JP

Standared Name	MLS USED	STD REF. # FROM LOG
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

Chemical Used	ML/SAMPLE U	Lot Number
SPLP FLUID	WP112802	N/A
N/A	N/A	N/A
1:1 HNO3	N/A	WP112799
pH Strips	N/A	W1931,W1934,W3171,W3172
pH Strips	W1940,W1941,W1942	W3166,W1938,W1939,
N/A	N/A	N/A
120ml Plastic bottle	N/A	2738
1:1 HNO3	N/A	MP84041

Extraction Conformance/Non-Conformance Comments:

Matrix spikes are added after fiftration and before preservation. Particle size reduction is not required. q1883-16 is used for MS-MSD.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
04/29/25 10:00	JP TCLP Room	5/29.
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

SPLP EXTRACTION LOGPAGE

PB167771

Sample ID	ClientID	TCLP Vessel ID	Sample Wt (g)	Volume Extraction Fluid #1 (mL)	Multi phasic	Phase Miscible	Phases Combined	Final Leachate PH	Metals Leachate Adj. PH	Prep Pos
PB167771TB	LEB771	19	N/A	2000	N/A	N/A	N/A	4.24	1.0	T-2
Q1883-02	OU4-PCS-TC-27-042325	11	100.02	2000	N/A	N/A	N/A	5.0	1.5	T-2
Q1883-04	OU4-PCS-TC-28-042325	12	100.03	2000	N/A	N/A	N/A	5.5	1.0	T-2
Q1883-06	OU4-PCS-TC-29-042325	13	100.02	2000	N/A	N/A	N/A	5.5	1.0	T-2
Q1883-08	OU4-PCS-TC-30-042325	14	100.01	2000	N/A	N/A	N/A	5.6	1.5	T-2
Q1883-10	OU4-PCS-TC-31-042325	15	100.02	2000	N/A	N/A	N/A	5.0	1.5	T-2
Q1883-12	OU4-PCS-TC-32-042325	16	100.03	2000	N/A	N/A	N/A	5.5	1.0	T-2
Q1883-14	OU4-PCS-18-042325	17	100.04	2000	N/A	N/A	N/A	4.5	1.5	T-2
Q1883-16	OU4-PCS-19-042325	18	100.05	2000	N/A	N/A	N/A	5.0	1.0	T-2

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
PB167771TB	LEB771	N/A	N/A	N/A	N/A	N/A	N/A
Q1883-02	OU4-PCS-TC-27-042325	N/A	N/A	N/A	N/A	100	N/A
Q1883-04	OU4-PCS-TC-28-042325	N/A	N/A	N/A	N/A	100	N/A
Q1883-06	OU4-PCS-TC-29-042325	N/A	N/A	N/A	N/A	100	N/A
Q1883-08	OU4-PCS-TC-30-042325	N/A	N/A	N/A	N/A	100	N/A
Q1883-10	OU4-PCS-TC-31-042325	N/A	N/A	N/A	N/A	100	N/A
Q1883-12	OU4-PCS-TC-32-042325	N/A	N/A	N/A	N/A	100	N/A
Q1883-14	OU4-PCS-18-042325	N/A	N/A	N/A	N/A	100	N/A
Q1883-16	OU4-PCS-19-042325	N/A	N/A	N/A	N/A	100	N/A

Alliance TECHNICAL GROUP

SPLP Fluid Determination

PB167771

Hot Block ID : WC S-1 / WC S-2

Thermometer ID : FLASHPOINT

SampleID	ClientID	Sample Weight (g)	Volume DI Water (mL)	PH after 5 min stir	PH after 10 min stir	Extraction Fluid 1 or 2	pH Extraction Fluid
PB167771TB	LEB771	N/A	N/A	N/A	N/A	#1	4.24
Q1883-02	OU4-PCS-TC-27-042325	N/A	N/A	N/A	N/A	#1	4.24
Q1883-04	OU4-PCS-TC-28-042325	N/A	N/A	N/A	N/A	#1	4.24
Q1883-06	OU4-PCS-TC-29-042325	N/A	N/A	N/A	N/A	#1	4.24
Q1883-08	OU4-PCS-TC-30-042325	N/A	N/A	N/A	N/A	#1	4.24
Q1883-10	OU4-PCS-TC-31-042325	N/A	N/A	N/A	N/A	#1	4.24
Q1883-12	OU4-PCS-TC-32-042325	N/A	N/A	N/A	N/A	#1	4.24
Q1883-14	OU4-PCS-18-042325	N/A	N/A	N/A	N/A	#1	4.24
Q1883-16	OU4-PCS-19-042325	N/A	N/A	N/A	N/A	#1	4.24

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Prep Standard - Chemical Standard Summary

Order ID : Q1883

Test : SPLP Mercury,SPLP MetalGroup3

Prepbatch ID : PB167780,PB167789,

Sequence ID/Qc Batch ID: LB135594,LB135595,

Standard ID :
MP85156,MP85240,MP85241,MP85242,MP85243,MP85351,MP85352,MP85353,MP85355,MP85356,MP85357,MP85358,MP85360,MP85361,MP85362,MP85363,MP85365,MP85366,MP85367,MP85368,MP85369,MP85370,MP85371,MP85372,MP85373,MP85374,MP85478,MP85479,MP85480,MP85481,MP85482,MP85483,MP85484,MP85485,MP85486,MP85487,MP85488,MP85489,MP85490,MP85492,

Chemical ID :
M4251,M4465,M4916,M5062,M5305,M5471,M5520,M5532,M5658,M5697,M5739,M5751,M5798,M5799,M5800,M5801,M5811,M5815,M5817,M5873,M5874,M5882,M5884,M5942,M5961,M5962,M5977,M5981,M6021,M6023,M6025,M6026,M6028,M6030,M6032,M6041,M6055,M6079,M6086,M6087,M6127,M6128,M6137,M6144,M6145,M6146,M6150,M6151,M6153,M6158,M6159,M6160,W3112,

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
170	1:1HCL	MP85156	04/07/2025	08/18/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 1250.00000ml of M6151 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3965	2:1 H2SO4 : HNO3	MP85240	04/16/2025	10/16/2025	Mohan Bera	None	None	Sarabjit Jaswal 04/29/2025

FROM 1600.00000ml of M6041 + 800.00000ml of M6158 = Final Quantity: 3200.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
65	POTASSIUM PERMANGANATE SOLUTION 5 %	MP85241	04/16/2025	10/16/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 04/29/2025

FROM 100.00000gram of M4916 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
66	POTASSIUM PERSULFATE SOLUTION 5 %	MP85242	04/16/2025	08/06/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 04/29/2025

FROM 100.00000ml of M4465 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
67	SODIUM CHLORIDE - HYDROXYL- CHLORIDE SOLUTION	MP85243	04/16/2025	06/25/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 04/29/2025

FROM 2000.00000ml of W3112 + 240.00000gram of M4251 + 240.00000gram of M5884 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1122	ICPMS CALIB BLANK(S0/ICB/CCB)	MP85351	04/14/2025	05/05/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 25.00000ml of M6151 + 4925.00000ml of W3112 + 50.00000ml of M6158 = Final Quantity: 5000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2902	S8 ICPMS	MP85352	04/14/2025	05/05/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 1.00000ml of M6159 + 2.50000ml of M5520 + 2.50000ml of M5811 + 5.00000ml of M6086 + 5.00000ml of M6127 + 5.00000ml of M6144 + 79.00000ml of MP85351 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3947	S7(SFAM,6020,200.8)	MP85353	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.10000ml of M6153 + 1.00000ml of M5799 + 1.00000ml of M5981 + 1.00000ml of M6079 + 1.00000ml of M6137 + 1.90000ml of M6159 + 10.00000ml of M5942 + 10.00000ml of M5977 + 10.00000ml of M6158 + 2.00000ml of M5815 + 2.00000ml of M5817 + 4.00000ml of M6025 + 4.00000ml of M6032 + 4.90000ml of M5520 + 4.90000ml of M5811 + 5.00000ml of M6151 + 50.00000ml of M5305 + 830.50000ml of W3112 + 9.00000ml of M5697 + 9.00000ml of M6128 + 9.00000ml of M6145 + 9.90000ml of M6086 + 9.90000ml of M6127 + 9.90000ml of M6144 = Final Quantity: 1000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3948	S6(SFAM,6020,200.8)	MP85355	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.50000ml of M6151 + 1.00000ml of M6158 + 48.50000ml of W3112 + 50.00000ml of MP85353 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3949	S5(SFAM,6020,200.8)	MP85356	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.50000ml of M6151 + 1.00000ml of M6158 + 73.50000ml of W3112 + 25.00000ml of MP85353 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3954	S4(SFAM,6020,200.8)	MP85357	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.50000ml of M6151 + 1.00000ml of M6158 + 86.00000ml of W3112 + 12.50000ml of MP85353 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3951	S3(SFAM, 6020,200.8)	MP85358	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.50000ml of M6151 + 1.00000ml of M6158 + 88.50000ml of W3112 + 10.00000ml of MP85355 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3955	S2CONC(SFAM,6020,200.8)	MP85360	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.00500ml of M6153 + 0.05000ml of M5798 + 0.05000ml of M5800 + 0.05000ml of M5801 + 0.05000ml of M5961 + 0.05000ml of M5981 + 0.05000ml of M6023 + 0.05000ml of M6025 + 0.05000ml of M6028 + 0.05000ml of M6030 + 0.05000ml of M6079 + 0.05000ml of M6128 + 0.10000ml of M5658 + 0.10000ml of M5751 + 0.10000ml of M6146 + 0.10000ml of M6159 + 0.25000ml of M5799 + 0.25000ml of M5811 + 0.25000ml of M5942 + 0.25000ml of M5962 + 0.25000ml of M5977 + 0.25000ml of M6021 + 0.25000ml of M6145 + 0.50000ml of M6032 + 0.50000ml of M6137 + 1.25000ml of M5815 + 1.25000ml of M5817 + 1.25000ml of M6151 + 2.50000ml of M5520 + 2.50000ml of M6087 + 2.50000ml of M6127 + 2.50000ml of M6144 + 2.50000ml of M6158 + 230.04500ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3956	S2(SFAM,6020,200.8)	MP85361	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.50000ml of M6151 + 1.00000ml of M6158 + 98.00000ml of W3112 + 0.50000ml of MP85360 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3957	S1(SFAM,6020,200.8)	MP85362	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.50000ml of M6151 + 1.00000ml of M6158 + 88.50000ml of W3112 + 10.00000ml of MP85361 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3958	ICV(SFAM)	MP85363	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 2.00000ml of M6150 + 98.00000ml of MP85351 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3961	CCV	MP85365	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.20000ml of M6026 + 0.50000ml of M5471 + 0.50000ml of M5799 + 0.50000ml of M5981 + 0.50000ml of M6079 + 0.50000ml of M6137 + 1.00000ml of M5815 + 1.00000ml of M5817 + 10.00000ml of M6158 + 12.45000ml of M5520 + 12.45000ml of M5811 + 2.00000ml of M6032 + 24.90000ml of M6087 + 24.95000ml of M6127 + 24.95000ml of M6144 + 25.00000ml of M5305 + 4.50000ml of M5697 + 4.50000ml of M6128 + 4.50000ml of M6145 + 4.95000ml of M6159 + 5.00000ml of M6151 + 5.50000ml of M5942 + 5.50000ml of M5977 + 824.15000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1142	ICSA ICPMS	MP85366	04/14/2025	04/30/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 10.00000ml of M5873 + 90.00000ml of MP85351 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1143	ICSAB ICPMS	MP85367	04/14/2025	04/30/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 10.00000ml of M5873 + 10.00000ml of M5874 + 80.00000ml of MP85351 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3962	MG 10PPM FOR TUNE	MP85368	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.01000ml of M6127 + 9.99000ml of MP85351 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3894	TUNE 200PPB	MP85369	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 2.00000ml of M6055 + 2.00000ml of MP85368 + 96.00000ml of MP85351 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3903	ISS 3PPM	MP85370	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 5.00000ml of M6158 + 75.00000ml of M5739 + 170.00000ml of MP85351 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3880	M&B SPIKE-1	MP85371	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 5.00000ml of M5471 + 5.00000ml of M5658 + 5.00000ml of M5798 + 5.00000ml of M5800 + 5.00000ml of M5961 + 5.00000ml of M5962 + 5.00000ml of M5981 + 5.00000ml of M6021 + 5.00000ml of M6023 + 5.00000ml of M6028 + 5.00000ml of M6030 + 5.00000ml of M6079 + 5.00000ml of M6160 + 35.00000ml of MP85351 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3881	M&B SPIKE-2	MP85372	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 10.00000ml of M5942 + 10.00000ml of M5977 + 12.50000ml of M5520 + 12.50000ml of M5811 + 12.50000ml of M6032 + 2.50000ml of M5799 + 2.50000ml of M6137 + 5.00000ml of M6159 + 32.50000ml of MP85351 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3882	M&B SPIKE-3	MP85373	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.62500ml of M6026 + 12.50000ml of M5697 + 12.50000ml of M6128 + 12.50000ml of M6145 + 11.87500ml of MP85351 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3900	M&B SPIKE-4	MP85374	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 6.25000ml of M6087 + 6.25000ml of M6127 + 6.25000ml of M6144 + 6.25000ml of MP85351 = Final Quantity: 25.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP85478	04/29/2025	04/30/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 1.00000ml of M6158 + 2.50000ml of M5062 + 96.50000ml of W3112 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1340	Hg 0.00 PPB STD	MP85479	04/29/2025	04/30/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1341	Hg 0.2 PPB STD	MP85480	04/29/2025	04/30/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 247.30000ml of W3112 + 0.20000ml of MP85478 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1342	Hg 2.5 PPB STD	MP85481	04/29/2025	04/30/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 245.00000ml of W3112 + 2.50000ml of MP85478 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1343	Hg 5.0 PPB STD	MP85482	04/29/2025	04/30/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 242.50000ml of W3112 + 5.00000ml of MP85478 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1344	Hg 7.5 PPB STD	MP85483	04/29/2025	04/30/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 240.00000ml of W3112 + 7.50000ml of MP85478 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1345	Hg 10.0 PPB STD	MP85484	04/29/2025	04/30/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 237.50000ml of W3112 + 10.00000ml of MP85478 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1346	Hg ICV SOLUTION	MP85485	04/29/2025	04/30/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M5532 + 2.50000ml of M6158 + 245.00000ml of W3112 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1351	ICB (Hg 0.00 PPB SOLUTION)	MP85486	04/29/2025	04/30/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1358	CCV (Hg 5.0 PPB SOLUTION)	MP85487	04/29/2025	04/30/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 485.00000ml of W3112 + 5.00000ml of M6158 + 10.00000ml of MP85478 = Final Quantity: 500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1352	CCB (Hg 0.00 PPB SOLUTION)	MP85488	04/29/2025	04/30/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 495.00000ml of W3112 + 5.00000ml of M6158 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1349	CRA/CRI (Hg 0.2 PPB SOLUTION)	MP85489	04/29/2025	04/30/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 247.30000ml of W3112 + 0.20000ml of MP85478 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1350	CHK STD (Hg 7.0 PPB SOLUTION)	MP85490	04/29/2025	04/30/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 240.50000ml of W3112 + 7.00000ml of MP85478 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
68	STANNOUS CHLORIDE SOLUTION	MP85492	04/29/2025	04/30/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 04/29/2025

FROM 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6151 = Final Quantity: 500.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-2196-01 / Hydroxylamine Hydrochloride, Crystal (cs/4x500g)	0000215387	06/25/2025	12/19/2018 / mohan	12/05/2018 / mohan	M4251

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3238-05 / Potassium Persulfate (2.5kg)	0000234156	08/06/2025	07/23/2019 / jaswal	07/25/2019 / manojkumar	M4465

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 #
Inorganic Ventures	6020CAL-1 / Calibration Standard Method 6020	S2-MEB711244	10/20/2026	03/07/2025 / JANVI	04/01/2022 / jaswal	M5305

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57038 / Sr, 1000 PPM, 125 ml	082922	08/29/2025	04/14/2025 / jaswal	03/16/2023 / jaswal	M5471

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57119 / Potassium (K) 10,000PPM	120822	12/08/2025	08/01/2024 / Jaswal	03/17/2023 / bin	M5520

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-5 / ICV (HG) STOCK SOLN	ICV5-0415	04/30/2025	01/02/2025 / jaswal	03/30/2023 / mohan	M5532

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58024 / Chromium, Cr, 500 ml, 1000 PPM	060523	06/05/2026	08/28/2023 / jaswal	08/25/2023 / jaswal	M5658

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	102523	10/25/2026	04/03/2024 / jaswal	10/27/2023 / jaswal	M5697

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	6020ISS / 6020ISS, 10 ug/ml, Bi, Ho, In, 6Li, Rh, Sc, TB, Y	T2-MEB709511	09/03/2026	08/07/2024 / jaswal	04/11/2022 / jaswal	M5739

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	071723	07/17/2026	10/01/2024 / Jaswal	08/25/2023 / jaswal	M5751

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58126 / Fe, 10000 PPM, 500 ml	051523	05/15/2026	02/06/2025 / kareem	01/03/2024 / jaswal	M5811

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57115 / P, 10000 PPM, 125 ml	041723	04/17/2026	05/21/2024 / Jaswal	02/09/2024 / jaswal	M5815

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57116 / S, 10000 PPM, 125 ml	071123	07/11/2026	03/01/2024 / jaswal	02/09/2024 / jaswal	M5817

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART A / ICSA (ICPMS) STOCK SOLN	CP-MS ICSA-0803	04/30/2025	04/17/2024 / jaswal	07/14/2022 / jaswal	M5873

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART B / ICSB (ICPMS) STOCK SOLUTION	CP-MS ICSB-0803	04/30/2025	04/17/2024 / jaswal	07/14/2022 / jaswal	M5874

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3980-01 / Stannous Chloride (cs/4x500g)	232820	08/31/2028	04/30/2024 / mohan	04/25/2024 / mohan	M5882

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000281938	07/06/2026	04/30/2024 / mohan	04/25/2024 / mohan	M5884

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGTI1-1 / TITANIUM 125mL 1000ug/mL	T2-TI719972	06/17/2027	06/18/2024 / Jaswal	02/22/2024 / Jaswal	M5942

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57028 / Ni, 1000 PPM, 125 ml	041124	04/11/2027	07/02/2024 / Jaswal	06/11/2024 / Jaswal	M5961

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57034 / Se, 1000 PPM, 125 ml	060624	06/06/2027	07/02/2024 / Jaswal	06/14/2024 / Jaswal	M5962

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGMO1-1 / MOLYBDENUM 125mL 1000ug/mL	T2-MO720876	07/17/2027	01/16/2025 / JANVI	02/22/2024 / Jaswal	M5977

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57092 / U, 1000 PPM, 125 ml	060724	06/07/2027	07/29/2024 / Jaswal	06/11/2024 / Jaswal	M5981

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57082 / Pb, 1000 PPM, 125 ml	061224	11/09/2026	08/05/2024 / Jaswal	08/05/2024 / Jaswal	M6025

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57182 / Pb, 10000 PPM, 125 ml	110923	11/09/2026	12/05/2024 / janvi	08/05/2024 / Jaswal	M6026

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57048 / Cd, 1000 PPM, 125 ml	070124	07/01/2027	08/05/2024 / kareem	08/05/2024 / Jaswal	M6028

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57047 / Ag, 1000 PPM, 125 ml	122823	12/28/2026	08/05/2024 / kareem	08/05/2024 / Jaswal	M6030

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57056 / Ba, 1000 PPM, 125 ml	010924	01/09/2027	01/14/2025 / Jaswal	08/05/2024 / Jaswal	M6032

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	08/16/2024 / mohan	08/16/2024 / mohan	M6041

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Calcium, 500 ml, 10000 PPM	082324	08/23/2027	01/03/2025 / janvi	10/14/2024 / jaswal	M6087

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	112124	11/21/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6127

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58025 / Mn, 1000 PPM, 500 ml	101124	10/11/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6128

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGSI1-1 / SILICON 125mL 1000ug/mL	V2-SI744713	07/10/2029	01/14/2025 / Jaswal	10/03/2024 / Jaswal	M6137

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58111 / Na, 10000 PPM, 500 ml	072424	07/24/2027	01/23/2025 / kareem	01/13/2025 / Jaswal	M6144

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58030 / Zinc, Zn, 500 ml, 1000 PPM	121724	12/17/2027	02/04/2025 / jaswal	01/13/2025 / Jaswal	M6145

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57051 / Sb, 1000 PPM, 125 ml	071724	07/17/2027	01/31/2025 / kareem	10/18/2024 / kareem	M6146

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-1 / ICV (ICP/ICPMS) STOCK SOLN	ICV1-1014	07/07/2025	02/07/2025 / JANVI	04/20/2021 / JANVI	M6150

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	08/18/2025	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGSR10 / Strontium (SR), 125mL 10,000ppm	V2-SR754329	02/28/2026	02/28/2025 / JANVI	01/07/2025 / JANVI	M6153

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	03/25/2029	03/10/2025 / Eman	02/02/2025 / Sagar	M6158

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / Al, 10000 PPM, 500 ml	011325	03/18/2026	03/18/2025 / kareem	02/09/2025 / kareem	M6159

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57051 / Sb, 1000 PPM, 125 ml	071724	03/24/2026	03/24/2025 / kareem	10/18/2024 / kareem	M6160

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

ThermoFisher SCIENTIFIC

M5882 M3

Certificate of Analysis

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Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	T142	Quality Test / Release Date	08/17/2023
Lot Number	232820		
Description	STANNOUS CHLORIDE, DIHYDRATE CERTIFIED ACS (Suitable for Mercury Determination)		
Country of Origin	United States	Suggested Retest Date	Aug/2028
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear crystals
ASSAY	%	Inclusive Between 98 - 103	100.65
CALCIUM	%	<= 0.005	0.0017
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IRON (Fe)	%	<= 0.003	0.0011
LEAD (Pb)	%	<= 0.01	0.0006
MERCURY (Hg)	ppm	<= 0.05	<0.05
POTASSIUM (K)	%	<= 0.005	0.0001
SODIUM (Na)	%	<= 0.01	<0.01
SOLUBILITY IN HCL	PASS/FAIL	= PASS TEST	PASS TEST
SULFATE (SO4)	PASS/FAIL	= P.T. (ABOUT 0.003%)	P.T. (ABOUT 0.003%)

Harout Sahagian - Quality Control Supervisor - Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6032

R 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57056**		**Lot #**		
Lot Number:	**010924**	**Solvent:**	24002546	Nitric Acid	
Description:	**Barium (Ba)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	010927				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

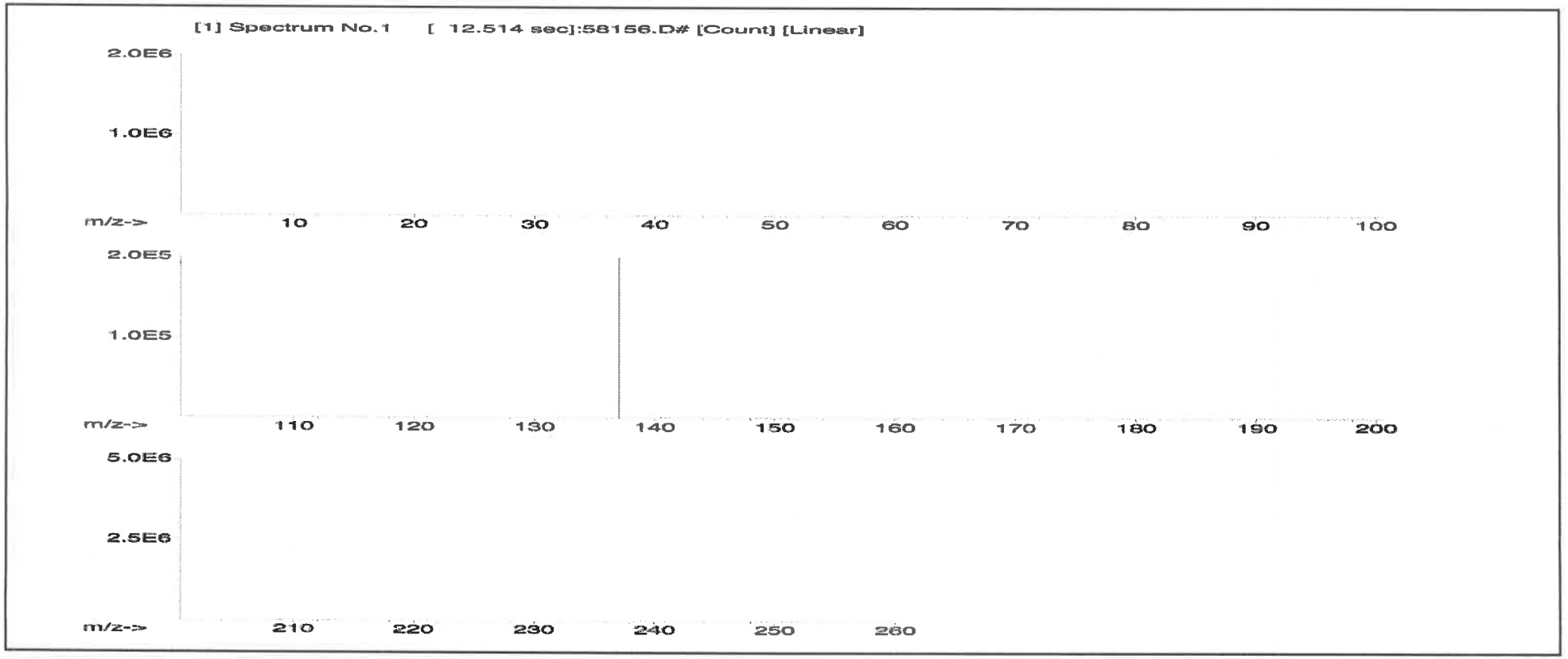
Giovanni Esposito

Formulated By:	Giovanni Esposito	010924

Pedro Rentas

Reviewed By:	Pedro L. Rentas	010924

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Barium nitrate (Ba)	IN023	BAD022019A1	1000	99.999	0.10	52.3	3.82417	3.82441	**1000.1**	**2.0**	10022-31-8	0.5 mg/m3	orl-rat 355 mg/kg	3104a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Revd 10/14/2024 M6085/M6086/M6087

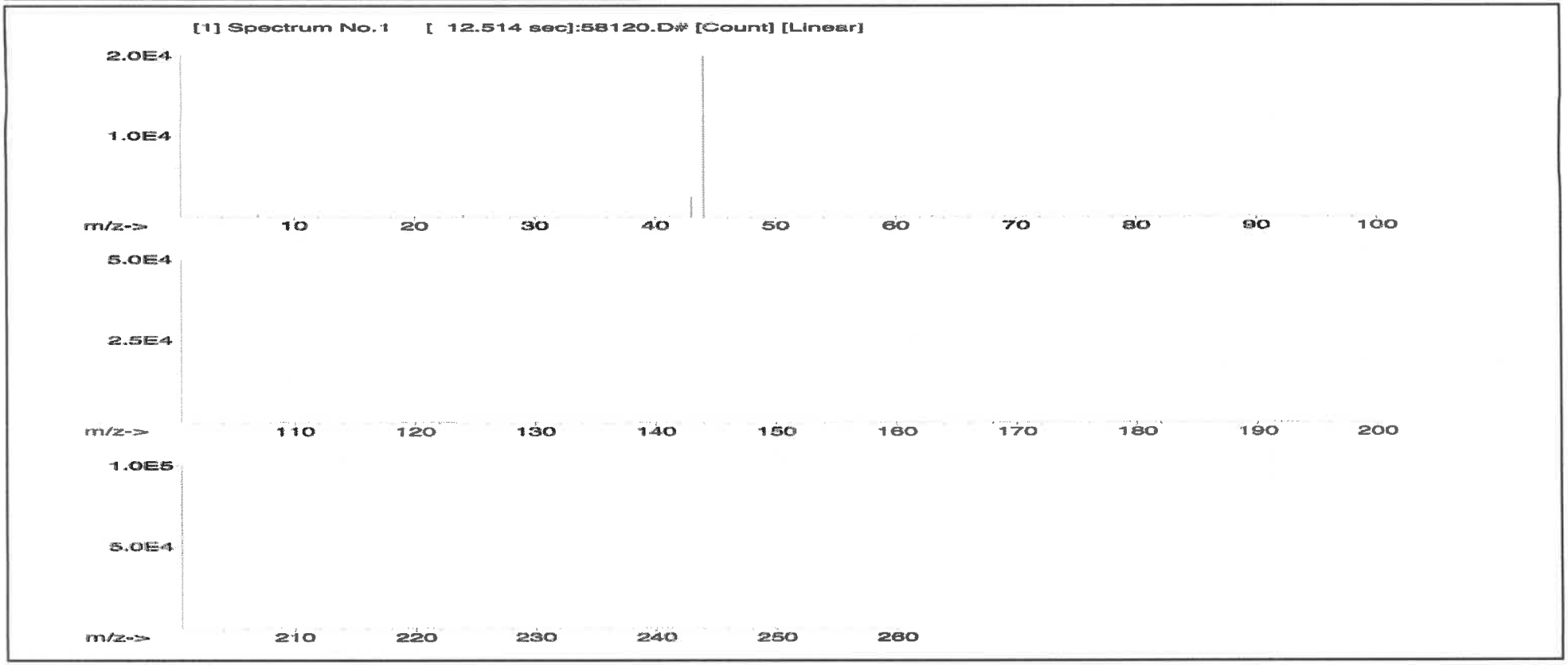
CERTIFIED WEIGHT REPORT:

Part Number:	**58120**		**Lot #**		
Lot Number:	**082324**		**Solvent:**	24002546	Nitric Acid
Description:	**Calcium (Ca)**				
			2%	80.0 (mL)	Nitric Acid
Expiration Date:	082327				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	4000.1	0.15	Flask Uncertainty		

Giovanni Esposito

Formulated By:	Giovanni Esposito	082324
Reviewed By:	Pedro L. Rentas	082324

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD03203B3	10000	99.999	0.10	39.9	100.2537	100.2656	**10001.2**	**20.0**	471-34-1	5 mg/m3	ori-rat >2000mg/kg	3109a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	30	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Revd 10/14/2024 MG085/MG086/MG087

CERTIFIED WEIGHT REPORT:

Part Number:	**58120**		**Lot #**		
Lot Number:	**082324**		**Solvent:**	24002546	Nitric Acid
Description:	**Calcium (Ca)**				
			2%	80.0 (mL)	Nitric Acid
Expiration Date:	082327				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	4000.1	0.15	Flask Uncertainty		

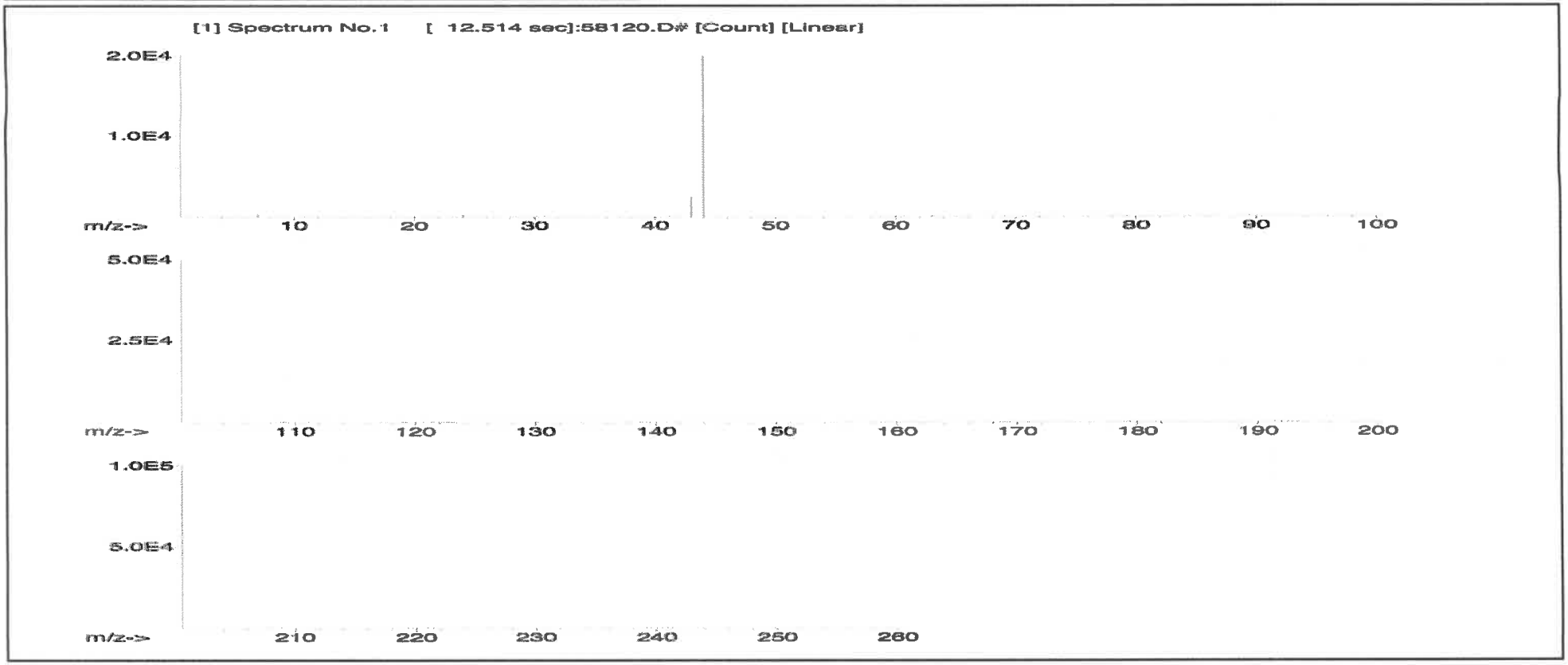
Giovanni Esposito

Formulated By:	Giovanni Esposito	082324

Pedro Rentas

Reviewed By:	Pedro L. Rentas	082324

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD03203B3	10000	99.999	0.10	39.9	100.2537	100.2656	**10001.2**	**20.0**	471-34-1	5 mg/m3	ori-rat >2000mg/kg	3109a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	30	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M6028

R: 8/5/24

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CERTIFIED WEIGHT REPORT:

Part Number: 57048
Lot Number: 070124
Description: Cadmium (Cd)

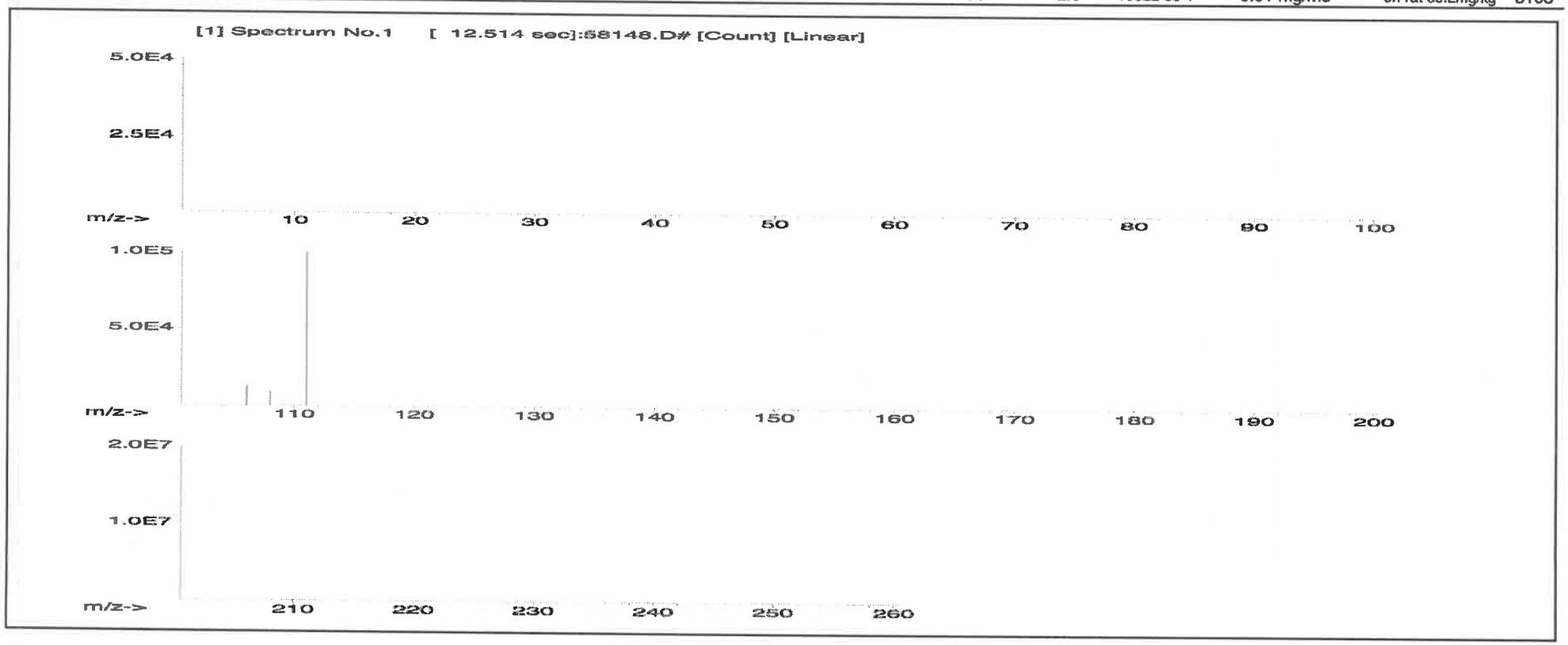
Expiration Date: 070127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.07

		Lot #	
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.100 Flask Uncertainty

Formulated By:	Aleah O'Brady	070124
Reviewed By:	Pedro L. Rentas	070124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cadmium nitrate tetrahydrate (Cd)	IN024	CDM092021A1	1000	99.999	0.10	36.5	5.4797	5.4804	**1000.1**	**2.0**	10022-68-1	0.01 mg/m3	orl-rat 60.2mg/kg	3108



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	T	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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R : 01/03/24. M5810, M5811

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CERTIFIED WEIGHT REPORT:

Part Number:	**58126**		**Lot #**	
Lot Number:	**051523**	**Solvent:**	21110221	Nitric Acid
Description:	**Iron (Fe)**	5.0%	250.0 (mL)	Nitric Acid
Expiration Date:	051526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**10000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	5000.1	0.12	Flask Uncertainty	

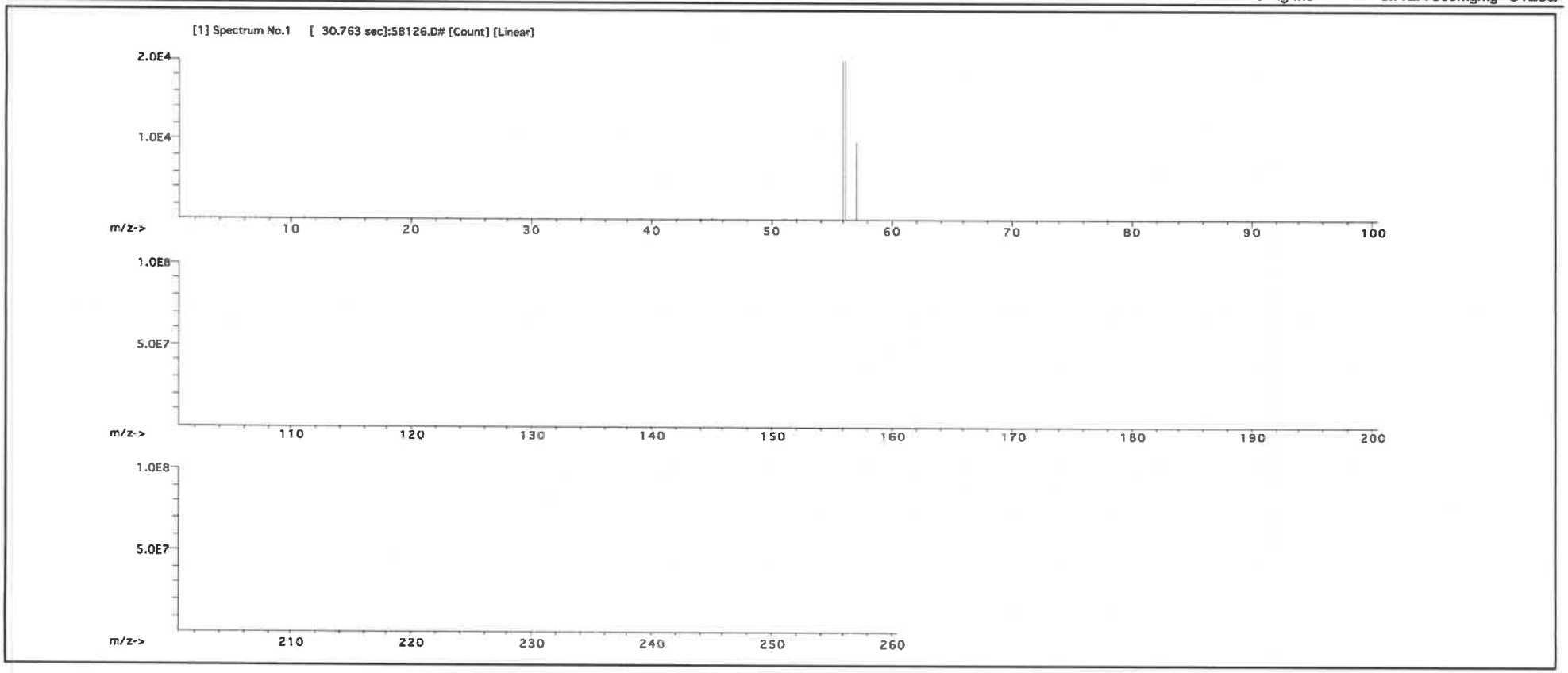
Giovanni Esposito

Formulated By:	Giovanni Esposito	051523

Pedro Rentas

Reviewed By:	Pedro L. Rentas	051523

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Iron (Fe)	IN346	2302010-500	10000	99.995	0.10	100.0	50.0034	50.0111	**10001.5**	**20.0**	7439-89-6	5 mg/m3	orl-rat 7500mg/kg	3126a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.10	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.10	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.05	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.10	Ge	<0.10	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.10
B	<0.02	Cu	<0.10	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



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R: 8/5/24 M6025

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CERTIFIED WEIGHT REPORT:

Part Number: 57182
Lot Number: 110923
Description: Lead (Pb)

Expiration Date: 110926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

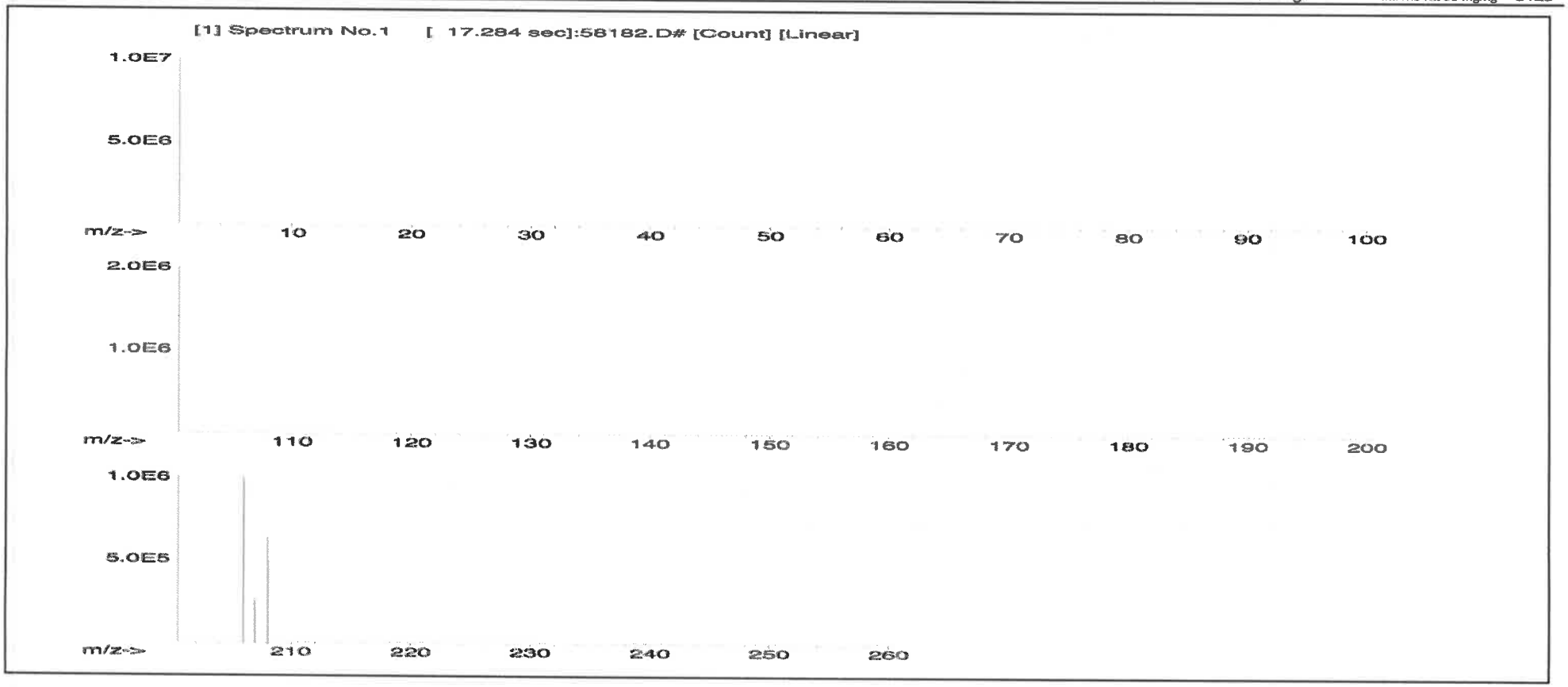
Weight shown below was diluted to (mL): 2000.02

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Lawence Barry	110923
Reviewed By:	Pedro L. Rentas	110923

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lead(II) nitrate (Pb)	IN029	PBD122016A1	10000	99.999	0.10	62.5	32.0006	32.0040	**10001.1**	**20.0**	10099-74-8	0.05 mg/m3	intrvns-rat 93 mg/kg	3128



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	T	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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Certified Reference Material CRM

M6026

R: 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

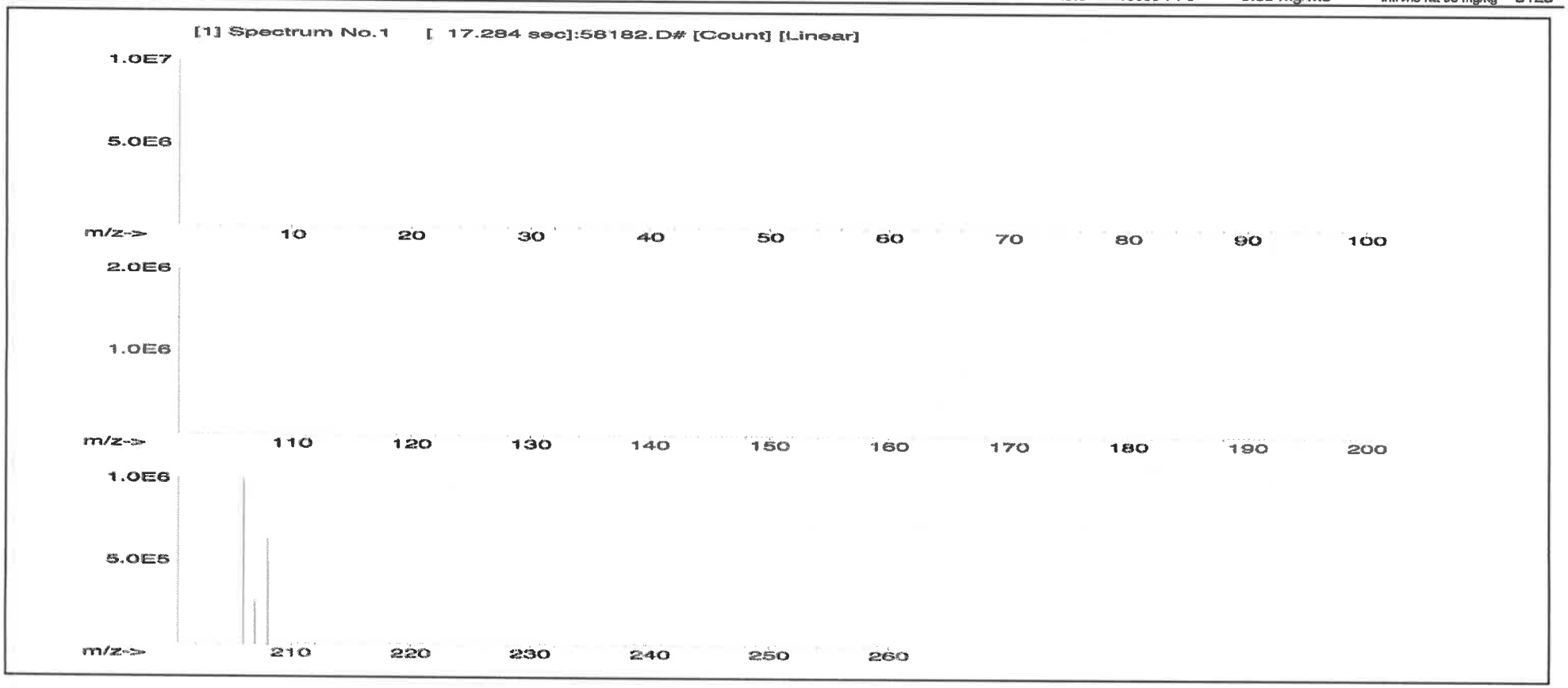
Part Number: 57182
Lot Number: 110923
Description: Lead (Pb)

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).

Hydroxylamine Hydrochloride, Crystal
BAKER ANALYZED® A.C.S. Reagent
Suitable for Mercury Determination
(hydroxylammonium chloride)

M4251
JB

Material No.: 2196-01
Batch No.: 0000215387
Manufactured Date: 2018/06/27
Retest Date: 2025/06/25
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay ($NH_2OH \cdot HCl$) (by $KMnO_4$ titrn)	>= 96.0 %	99.1
Clarity of Alcohol Solution	Passes Test	PT
Residue after Ignition	<= 0.050 %	0.017
Titrable Free Acid (meq/g)	<= 0.25	0.19
Ammonium (NH_4)	Passes Test	PT
Sulfur Compounds (as SO_4)	<= 0.005 %	< 0.003
Trace Impurities - ACS - Heavy Metals (as Pb)	<= 5 ppm	4
Trace Impurities - Iron (Fe)	<= 5 ppm	< 3
Trace Impurities - Mercury (Hg)	<= 0.050 ppm	< 0.005

For Laboratory, Research or Manufacturing Use

Country of Origin: CN
Packaging Site: Paris Mfg Ctr & DC

ISO
Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

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
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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



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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	6020CAL-1
Lot Number:	S2-MEB711244
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	20 µg/mL ea:

Silver,	Aluminum,
Arsenic,	Barium,
Beryllium,	Calcium,
Cadmium,	Cobalt,
Chromium,	Copper,
Iron,	Potassium,
Magnesium,	Manganese,
Sodium,	Nickel,
Lead,	Antimony,
Selenium,	Thallium,
Vanadium,	Zinc

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**20.01 ± 0.08 µg/mL**	**Antimony, Sb**	**20.01 ± 0.12 µg/mL**
Arsenic, As	**20.01 ± 0.18 µg/mL**	**Barium, Ba**	**20.01 ± 0.11 µg/mL**
Beryllium, Be	**20.01 ± 0.14 µg/mL**	**Cadmium, Cd**	**20.01 ± 0.11 µg/mL**
Calcium, Ca	**20.01 ± 0.10 µg/mL**	**Chromium, Cr**	**20.01 ± 0.16 µg/mL**
Cobalt, Co	**20.01 ± 0.11 µg/mL**	**Copper, Cu**	**20.01 ± 0.10 µg/mL**
Iron, Fe	**20.01 ± 0.09 µg/mL**	**Lead, Pb**	**20.01 ± 0.11 µg/mL**
Magnesium, Mg	**19.99 ± 0.10 µg/mL**	**Manganese, Mn**	**20.01 ± 0.10 µg/mL**
Nickel, Ni	**20.01 ± 0.11 µg/mL**	**Potassium, K**	**20.01 ± 0.10 µg/mL**
Selenium, Se	**20.02 ± 0.14 µg/mL**	**Silver, Ag**	**20.02 ± 0.09 µg/mL**
Sodium, Na	**20.01 ± 0.10 µg/mL**	**Thallium, Tl**	**20.01 ± 0.13 µg/mL**
Vanadium, V	**20.01 ± 0.11 µg/mL**	**Zinc, Zn**	**20.01 ± 0.11 µg/mL**

Density: 1.026 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Fe	Calculated		See Sec. 4.2
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

Low Silver Note: This solution contains “LOW” levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 20, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 20, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M519. M520 BH R:03/17/23

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58119
Lot Number: 120822
Description: Potassium (K)

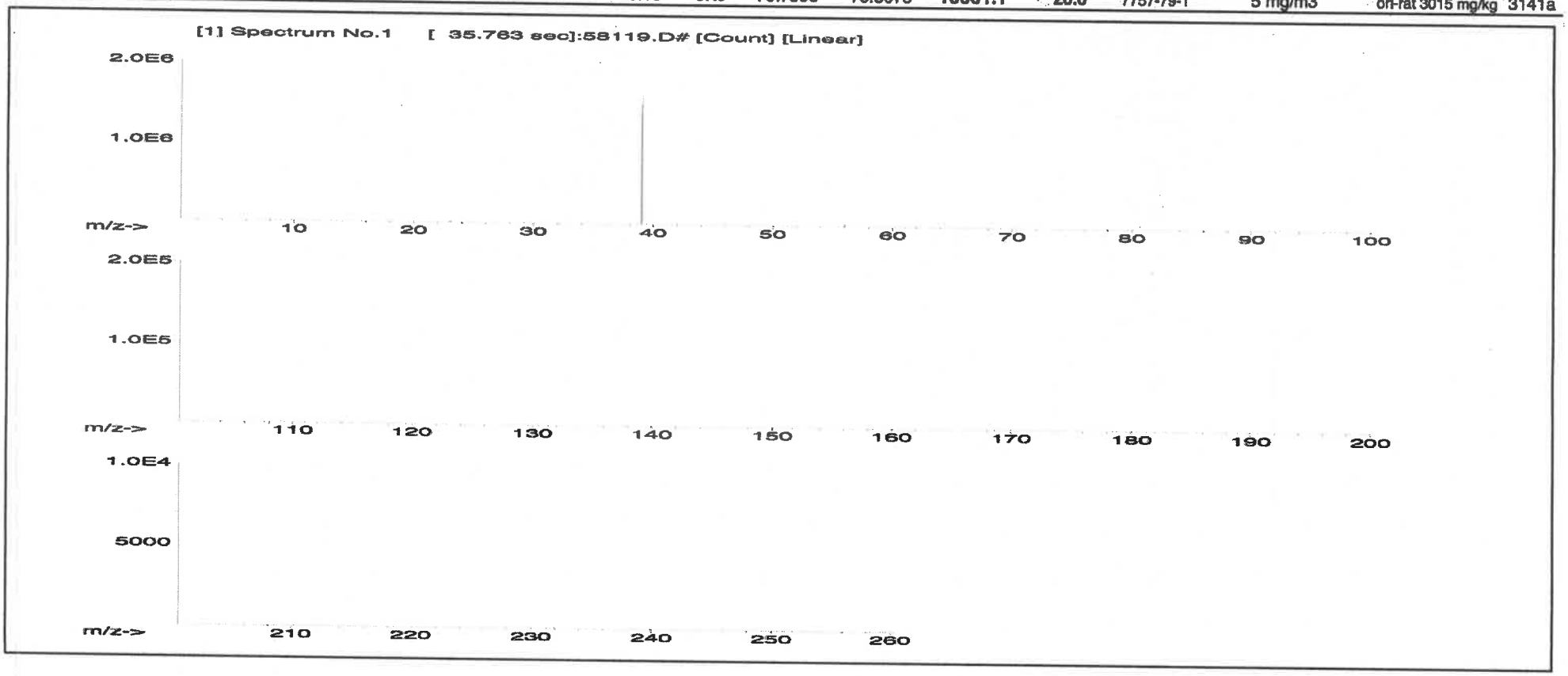
Expiration Date: 120825
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.4

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.06 Flask Uncertainty

Giovanni Esposito
Formulated By: Giovanni Esposito 120822
Pedro Rentas
Reviewed By: Pedro L. Rentas 120822

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Potassium nitrate (K)	IN034	KD022021A1	10000	99.999	0.10	37.6	79.7990	79.8075	**10001.1**	**20.0**	7757-79-1	5 mg/m3	orl-rat 3015 mg/kg	3141a



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ANAB ISO 17034 Accredited
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	T	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

MSS28-37
MB

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

Instructions for QATS Reference Material: *Inorganic ICV Solutions*

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	**CN^-**	99

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M5658 R ! 8/25/23

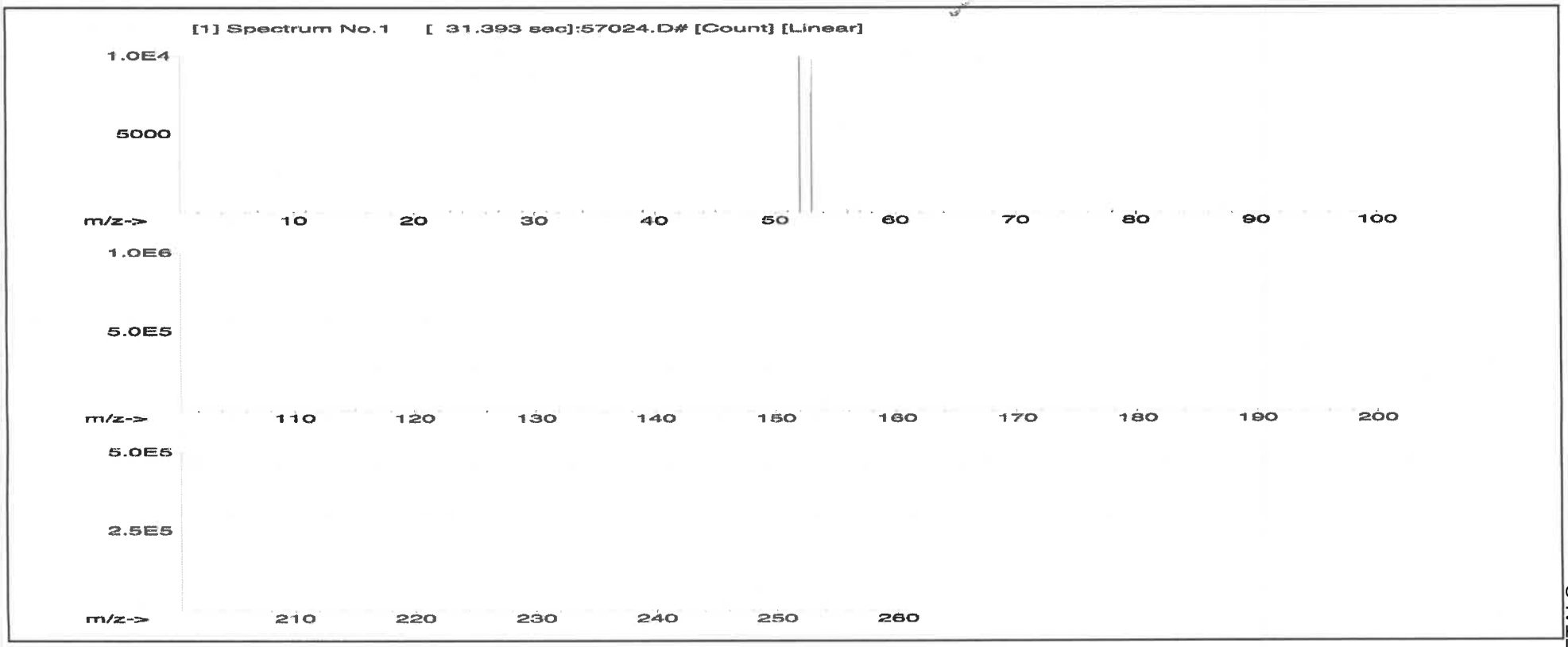
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AR-1539 Certificate Number
https://Absolutestandards.com

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



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AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<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).

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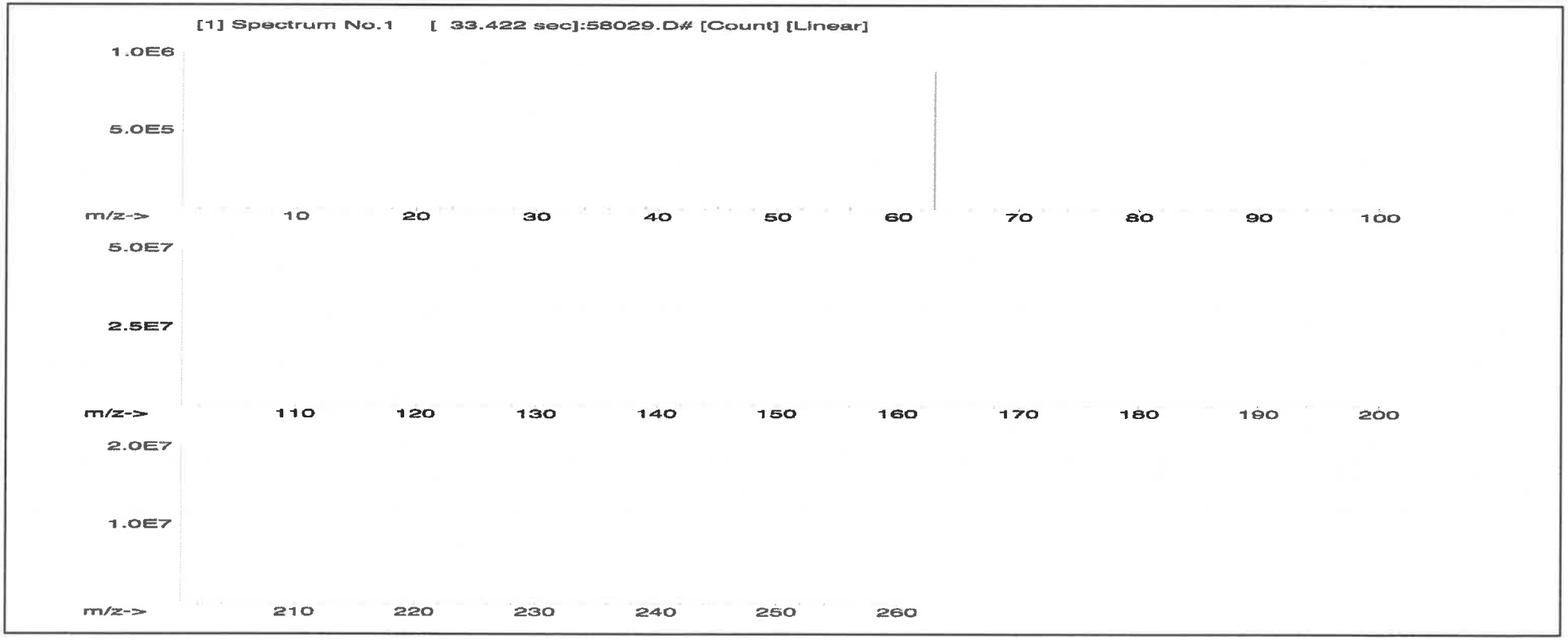
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	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.
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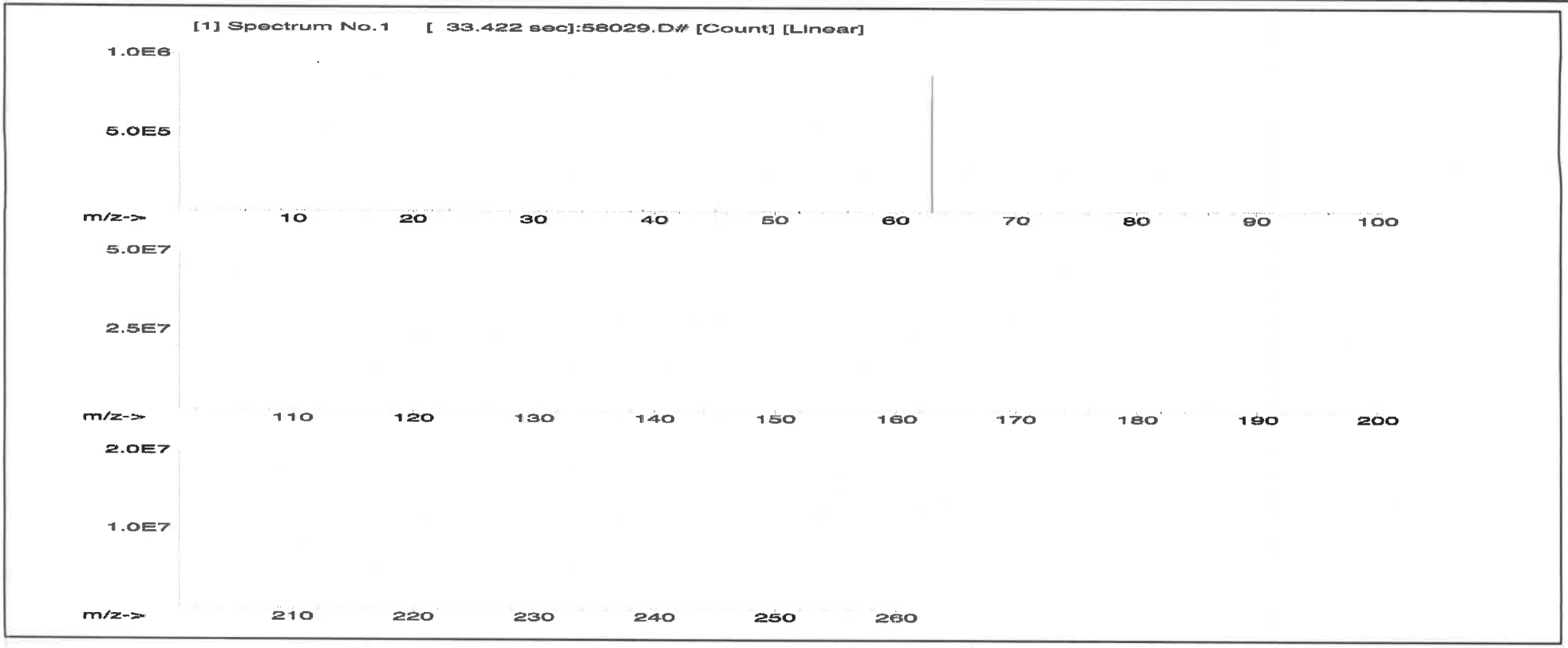
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58029**	21110221	Nitric Acid	
Lot Number:	**071723**			
Description:	**Copper (Cu)**	2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	071726			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	071723
Reviewed By:	Pedro L. Rentas	071723

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
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Trace Metals Verification by ICP-MS (µg/mL)

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Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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R: 02/09/24 M5798

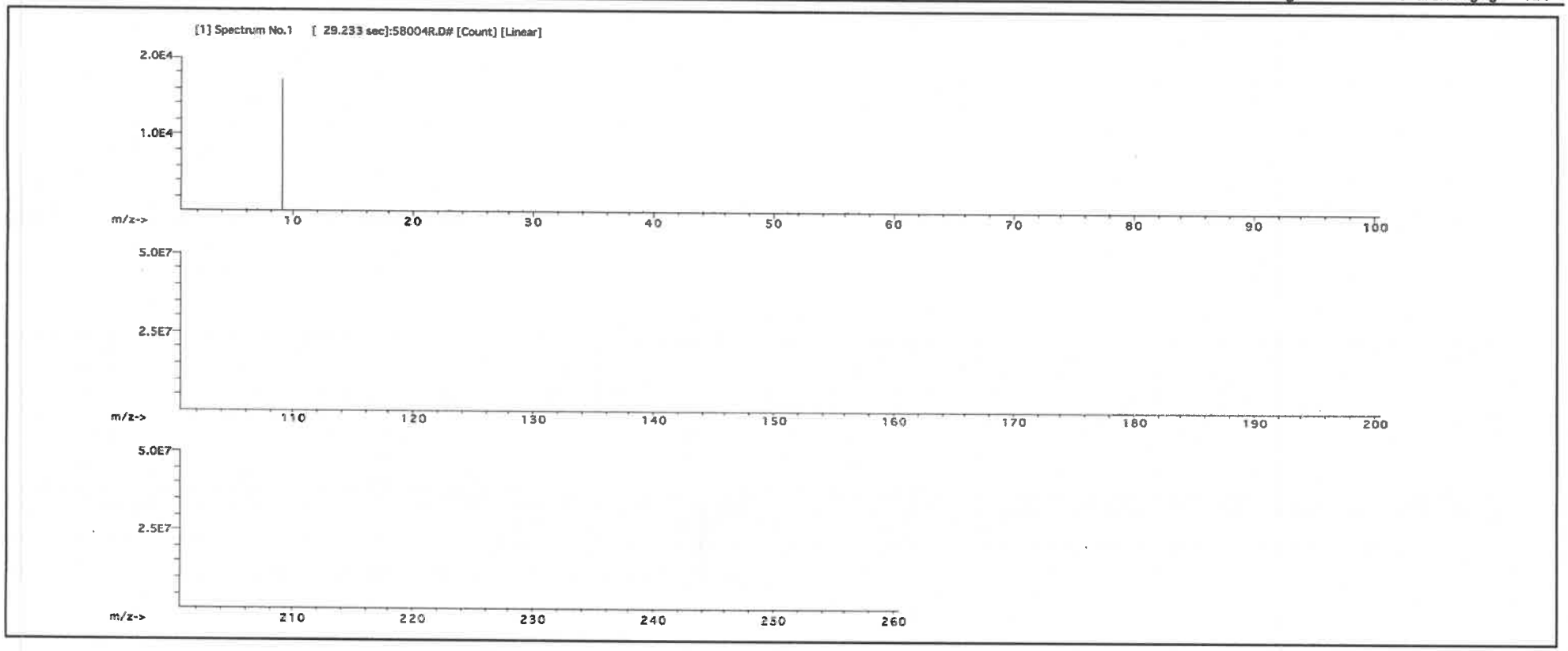
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CERTIFIED WEIGHT REPORT:

		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



Q1883-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<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.
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* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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BA

CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

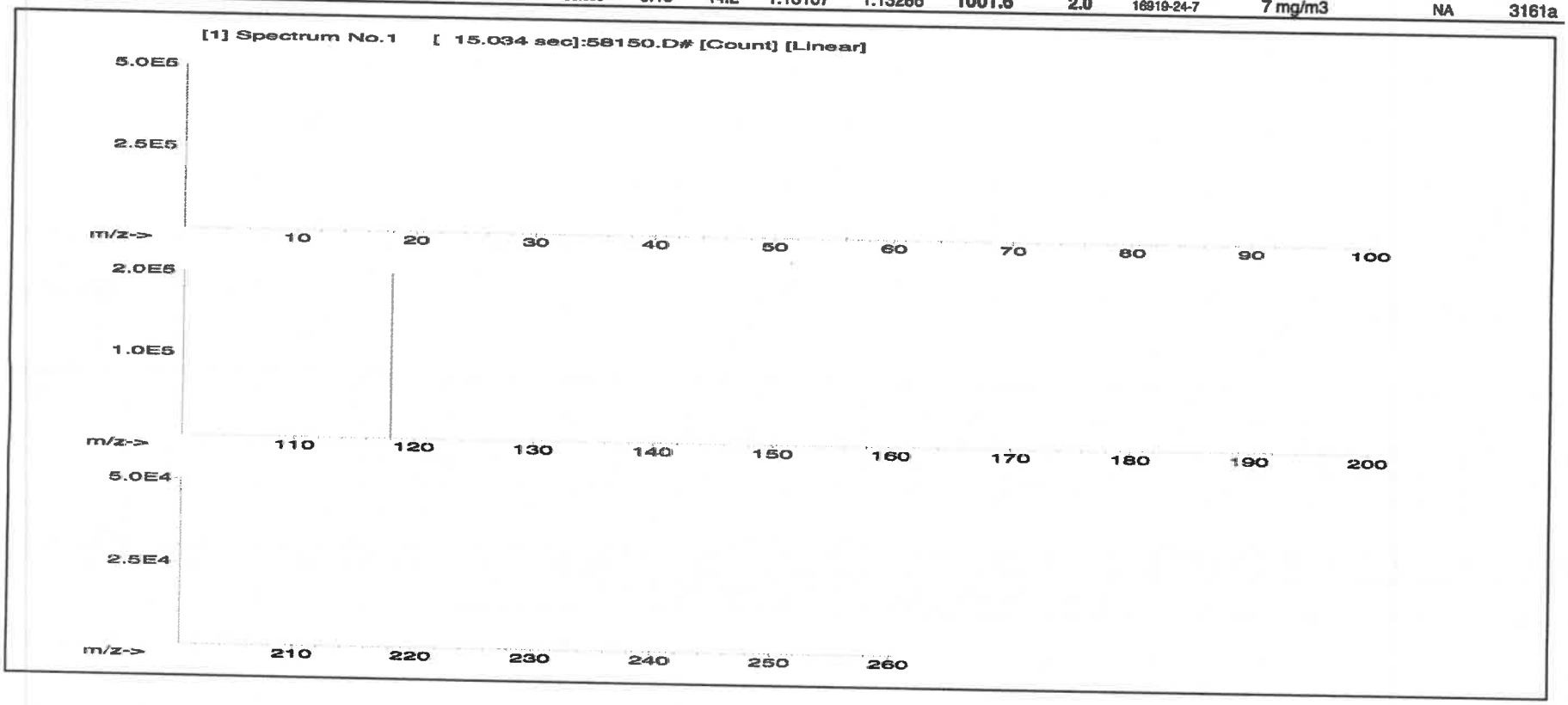
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	Lot #	
Solvents:	21110221	Nitric Acid
	22D0562008	Hydrochloric acid
2%	10.0	Nitric Acid
6%	30.0	Hydrochloric acid
	(mL)	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Benson Chan	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium hexafluorostannate(IV) (Sn)	IN010	SND042023A1	1000	99.999	0.10	44.2	1.13107	1.13286	**1001.6**	**2.0**	16919-24-7	7 mg/m3	NA	3161a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<500	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	T	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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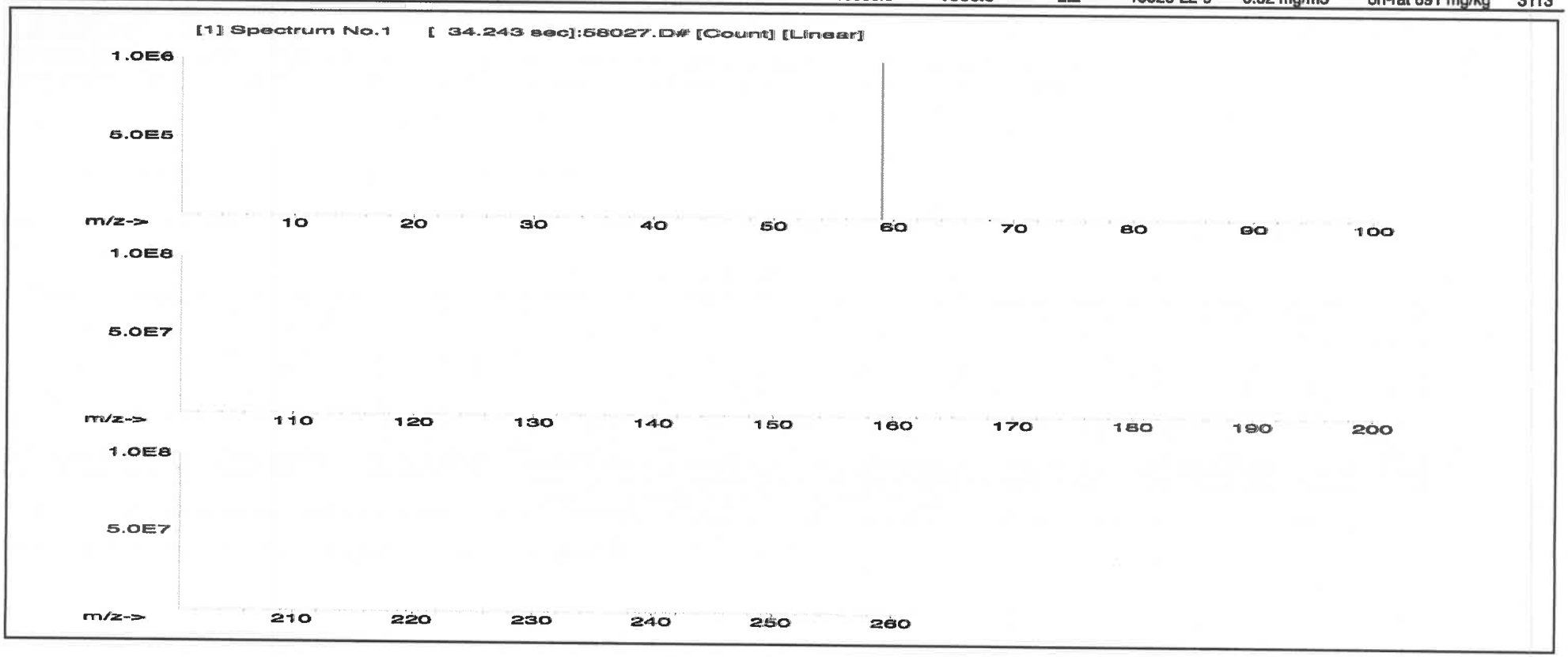
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57027**	24002546	Nitric Acid		
Lot Number:	**091923**				
Description:	**Cobalt (Co)**	2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	091926				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By: Lawrence Barry 091923

Reviewed By: Pedro L. Rentas 091923

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cobalt(II) nitrate hexahydrate (Co)	58127	050923	0.1000	200.0	0.084	1000	10000.0	**1000.0**	2.2	10026-22-9	0.02 mg/m3	orl-rat 691 mg/kg	3113



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	T	Gé	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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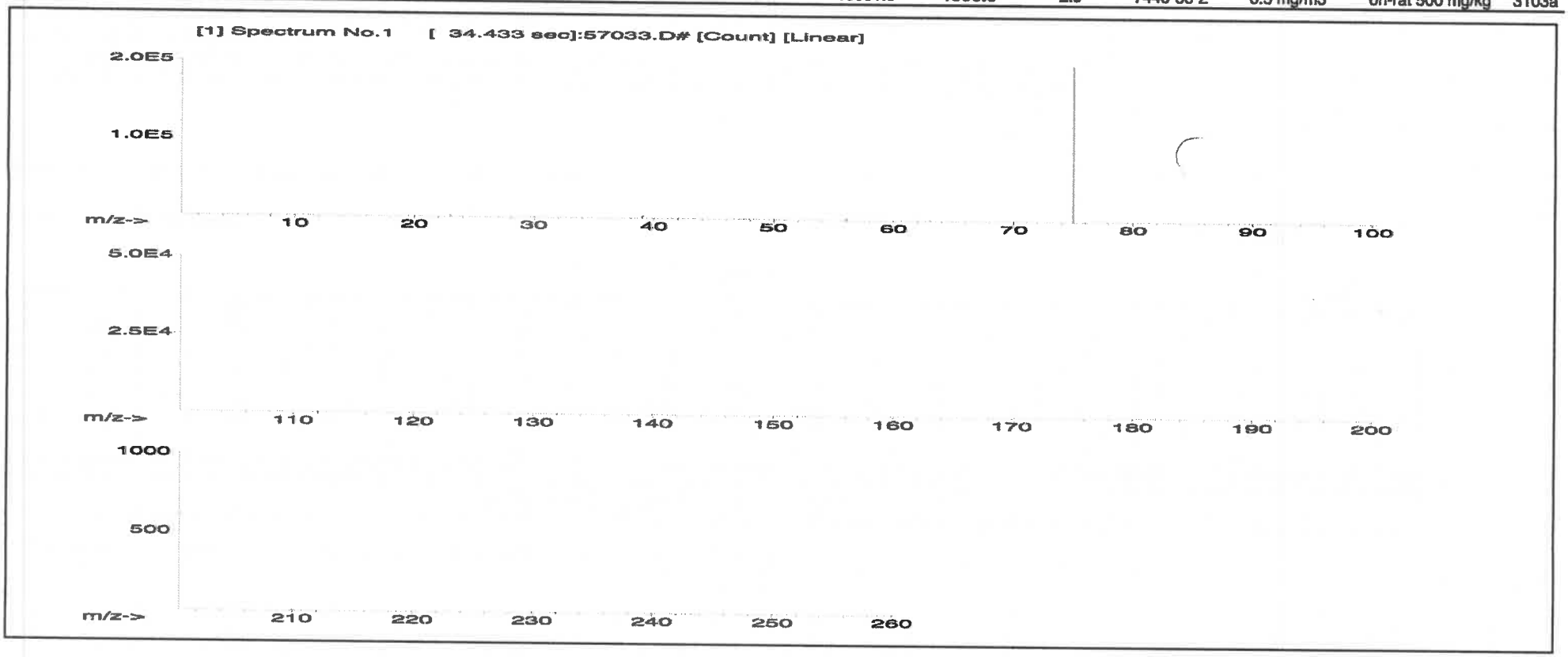
CERTIFIED **WEIGHT** REPORT:

		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



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	T	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge*	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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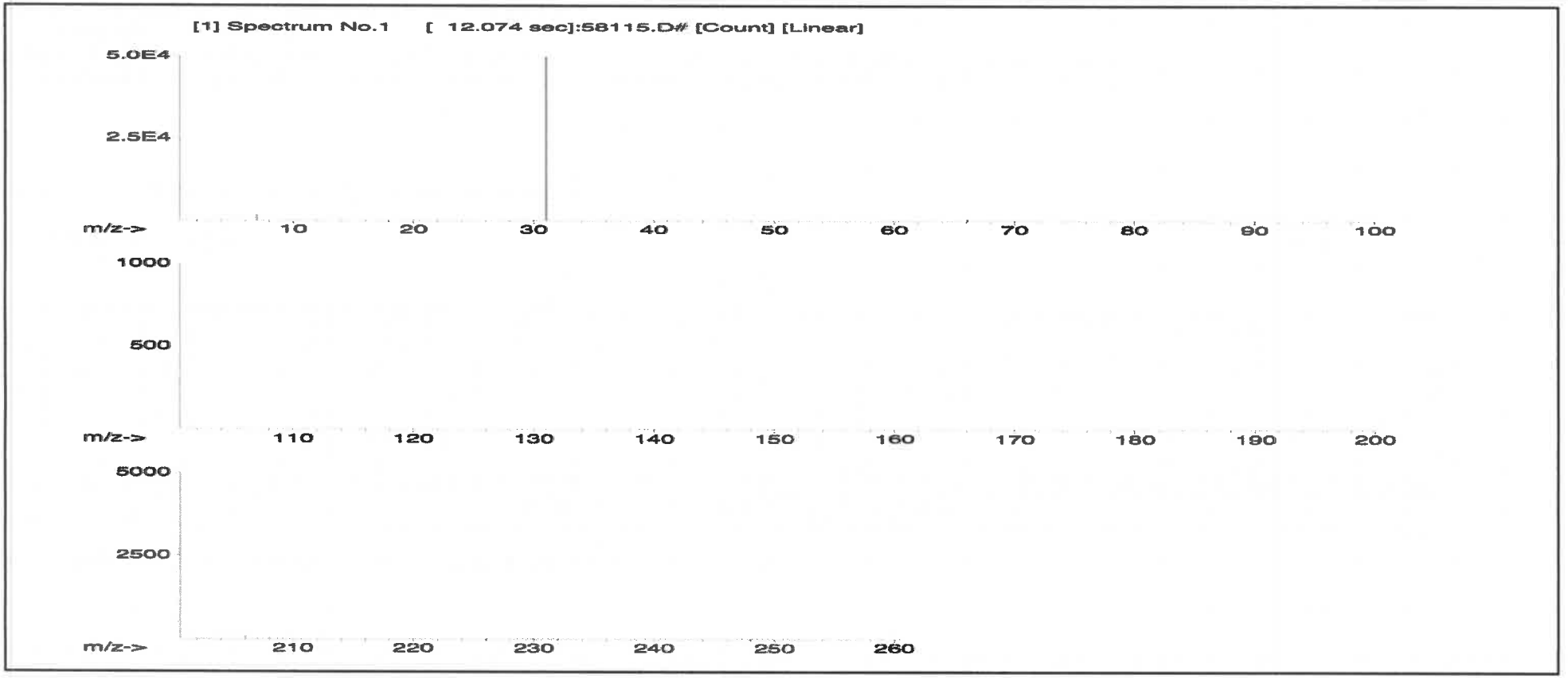
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CERTIFIED WEIGHT REPORT:

Part Number:	**57115**		**Solvent:**	21110221	Nitric Acid
Lot Number:	**041723**				
Description:	**Phosphorous (P)**		2%	40.0 (mL)	Nitric Acid
Expiration Date:	041726				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	041723
Reviewed By:	Pedro L. Rentas	041723

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium dihydrogen phosphate (P)	IN008	PV082019A1	10000	99.999	0.10	27.5	72.7287	72.7289	**10000.0**	**20.0**	7722-76-1	5 mg/m3	orl-rat >2000mg/kg	3186



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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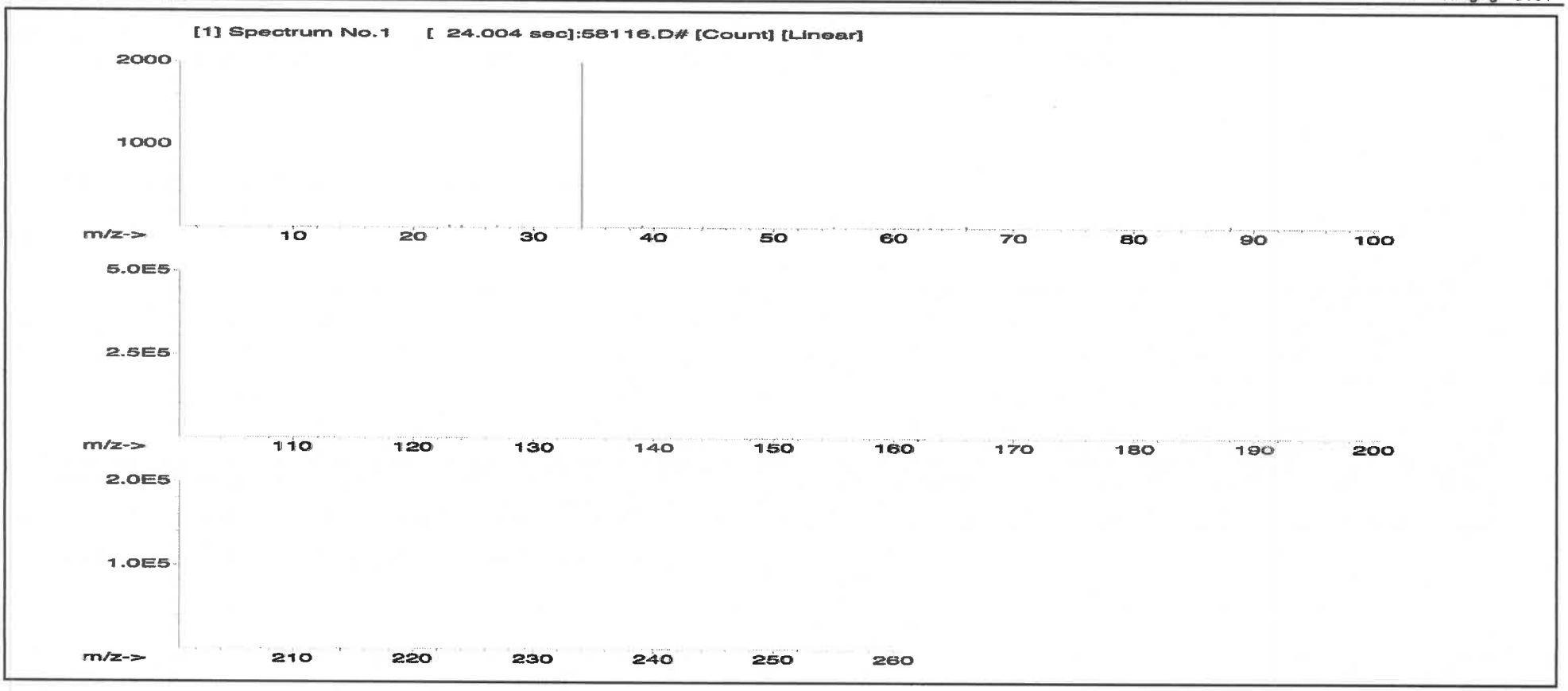
CERTIFIED WEIGHT REPORT:

Part Number:	**57116**			
Lot Number:	**071123**	**Solvent:**	071123	ASTM Type 1 Water
Description:	**Sulfur (S)**			
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	

Lot #

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



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	T	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Sodium Chloride, Crystal
BAKER ANALYZED® A.C.S. Reagent

MF884
MB

avantor™ | J.T.Baker®

Material No.: 3624-01
Batch No.: 0000281938
Manufactured Date: 2021-06-07
Retest Date: 2026-06-07
Revision No.: 1

Certificate of Analysis

Test	Specification	Result
Assay (NaCl) (by Ag titrn)	≥ 99.0 %	100.0 %
pH of 5% Solution at 25°C	5.0 - 9.0	6.3
Insoluble Matter	≤ 0.005 %	0.003 %
Iodide (I)	≤ 0.002 %	< 0.002 %
Bromide (Br)	≤ 0.01 %	< 0.01 %
Chlorate and Nitrate (as NO_3)	≤ 0.003 %	< 0.001 %
ACS - Phosphate (PO_4)	≤ 5 ppm	< 5 ppm
Sulfate (SO_4)	≤ 0.004 %	< 0.004 %
Barium (Ba)	Passes Test	Passes Test
ACS - Heavy Metals (as Pb)	≤ 5 ppm	< 5 ppm
Iron (Fe)	≤ 2 ppm	< 1 ppm
Calcium (Ca)	≤ 0.002 %	< 0.001 %
Magnesium (Mg)	≤ 0.001 %	< 0.001 %
Potassium (K)	≤ 0.005 %	0.001 %

For Laboratory,Research,or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs
Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC

James T Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Mansford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

R: 02/22/24 M5942

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:	CGTI1
Lot Number:	T2-TI719972
Matrix:	2% (v/v) HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Titanium
Starting Material:	Ti Metal
Starting Material Lot#:	2094
Starting Material Purity:	99.9975%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 5 µg/mL

Density: 1.012 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **1002 ± 4 µg/mL**
ICP Assay NIST SRM 3162a Lot Number: 130925

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000536	M	Eu	<	0.000268	O	Na	<	0.032670	M	Se		0.001204	O	Zn	<	0.003267
O	Al		0.000872	O	Fe		0.003225	O	Nb	<	0.043560	O	Si		0.004735	O	Zr	<	0.043560
M	As	<	0.008586	M	Ga	<	0.000268	M	Nd	<	0.000268	M	Sm	<	0.000268				
M	Au	<	0.004577	M	Gd	<	0.000268	O	Ni	<	0.010890	M	Sn		0.000096				
O	B	<	0.008929	M	Ge	<	0.002146	M	Os	<	0.000269	O	Sr		0.000096				
M	Ba	<	0.002683	M	Hf		0.002161	O	P	<	0.054450	M	Ta		0.010560				
M	Be	<	0.005366	M	Hg	<	0.003231	M	Pb	<	0.001073	M	Tb	<	0.000268				
M	Bi	<	0.001609	M	Ho	<	0.000268	M	Pd	<	0.000268	M	Te	<	0.001341				
O	Ca		0.000676	M	In	<	0.002683	M	Pr	<	0.000268	M	Th	<	0.053663				
M	Cd	<	0.000268	M	Ir	<	0.000269	M	Pt	<	0.000536	s	Ti	<					
M	Ce	<	0.000268	M	K		0.001172	M	Rb	<	0.000268	M	Tl	<	0.000268				
M	Co	<	0.004293	M	La	<	0.000268	M	Re	<	0.000268	M	Tm	<	0.000268				
M	Cr		0.000752	O	Li	<	0.027225	M	Rh	<	0.000268	M	U	<	0.000268				
M	Cs	<	0.000268	M	Lu	<	0.000268	M	Ru	<	0.000269	M	V	<	0.019855				
O	Cu	<	0.010890	O	Mg	<	0.005445	i	S	<		M	W		0.000473				
M	Dy	<	0.000268	O	Mn	<	0.003267	M	Sb	<	0.006976	M	Y	<	0.002146				
M	Er	<	0.000268	M	Mo		0.000774	O	Sc	<	0.004900	M	Yb	<	0.000536				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 47.87 +4 6 Ti(F)6-2

Chemical Compatibility - Soluble in concentrated HCl, HF, H3PO4 H2SO4 and HNO3. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths or high levels of transition elements unless they are fluorinated). Stable with most inorganic anions with a tendency to hydrolyze forming the hydrated oxide in all dilute acids except HF.

Stability - 2-100 ppb levels stable (Alone or mixed with all other metals) as the Ti(F)6-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the Ti(F)6-2 chemically stable for years in 2-5% HNO3 / trace HF in an LDPE container.

Ti Containing Samples (Preparation and Solution) - Metal (Soluble in H2O / HF caution -powder reacts violently); Oxide - low temperature history anatase or rutile (Dissolved by heating in 1:1:1 H2O / HF / H2SO4); Oxide - high temperature history (~800EC) brookite (fuse in Pt0 with K2S2O7); Ores (fuse in Pt0 with KF + K2S2O7 - no KF if silica not present); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve by heating with 1:1:1 H2O / HF / H2SO4 or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite crystalline form).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 48 amu	14 ppt	N/A	32S16O, 32S14N, 14N16O18O, 14N17N2, 36Ar12C, 48Ca, [96X=2 (where X = Zr, Mo, Ru)]
ICP-OES 323.452 nm	0.0054 / 0.00092 µg/mL	1	Ce, Ar, Ni
ICP-OES 334.941 nm	0.0038 / 0.000028 µg/mL	1	Nb, Ta, Cr, U
ICP-OES 336.121 nm	0.0053 / 0.000034 µg/mL	1	W, Mo, Co

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 17, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5961 R: 6/11/24

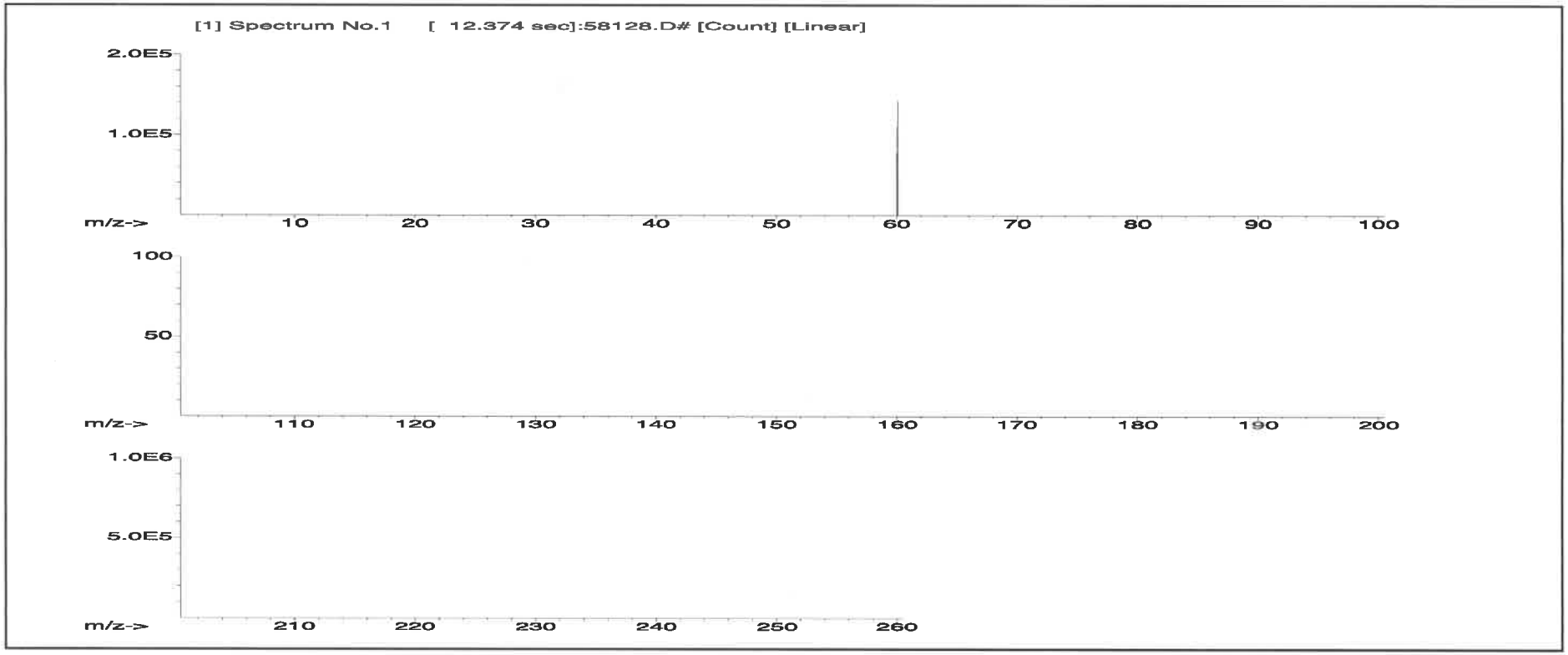
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57028**		**Lot #**		
Lot Number:	**041124**	**Solvent:**	24002546	Nitric Acid	
Description:	**Nickel (Ni)**				
		2%	5.0 (mL)	Nitric Acid	
Expiration Date:	041127				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	249.85	0.002	Flask Uncertainty		

Formulated By:	Brian Geddes	041124
Reviewed By:	Pedro L. Rentas	041124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Nickel(II) nitrate hexahydrate (Ni)	IN033	NIM052023A1	1000	99.999	0.10	20.2	1.2369	1.2369	**1000.0**	**2.0**	13478-00-7	1 mg/m3	orl-rat 1620 mg/kg	3136



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Certified Reference Material CRM

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AR-1539 Certificate Number
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	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
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Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
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B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

M5962 R! 06/14/24.

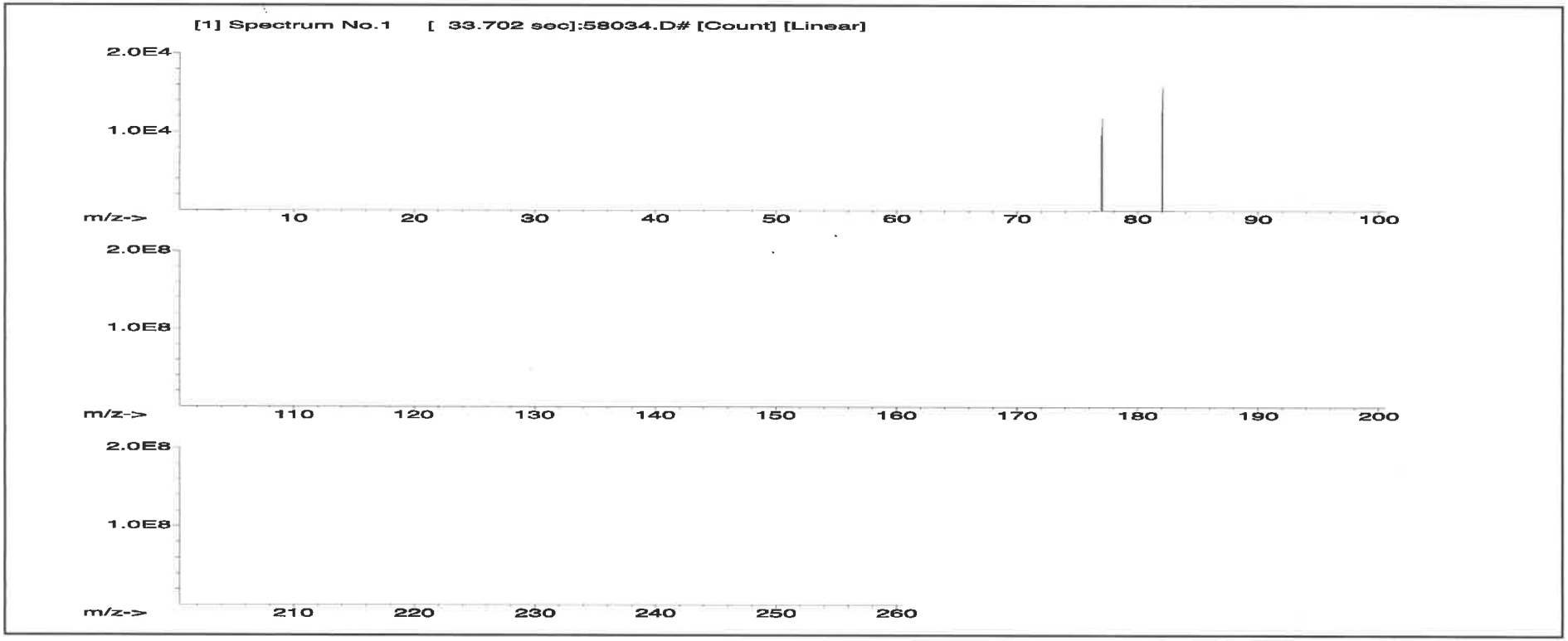
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AR-1539 Certificate Number
https://Absolutestandards.com

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



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Certified Reference Material CRM

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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	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.
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* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
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Christiansburg, VA 24073 USA
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P: 800-669-6799/540-585-3030
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Certificate of Analysis

M5976, M5977
R: 02/22/24

1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMO1
Lot Number:	T2-MO720876
Matrix:	H2O tr. NH4OH
Value / Analyte(s):	1 000 µg/mL ea: Molybdenum
Starting Material:	Ammonium Molybdate
Starting Material Lot#:	2361
Starting Material Purity:	99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 998 ± 7 µg/mL

Density: 1.000 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **998 ± 4 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance.

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000590	M	Eu	<	0.000300	M	Na		0.000879	M	Se	<	0.008000	M	Zn		0.000598
M	Al		0.000563	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.000175				
M	Ba		0.001689	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.006334	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Tl	<	0.032000				
M	Ce	<	0.008300	M	K		0.130213	M	Rb		0.004575	M	Tl		0.001266				
M	Co		0.000598	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.000527	O	Li		0.000059	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.000527	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.002252	M	Mg		0.000563	i	S	<		M	W		0.087982				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.001513	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br16O,190Os2+,190Pt2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- July 17, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5981 R:6/11/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Q1883-METALS

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		

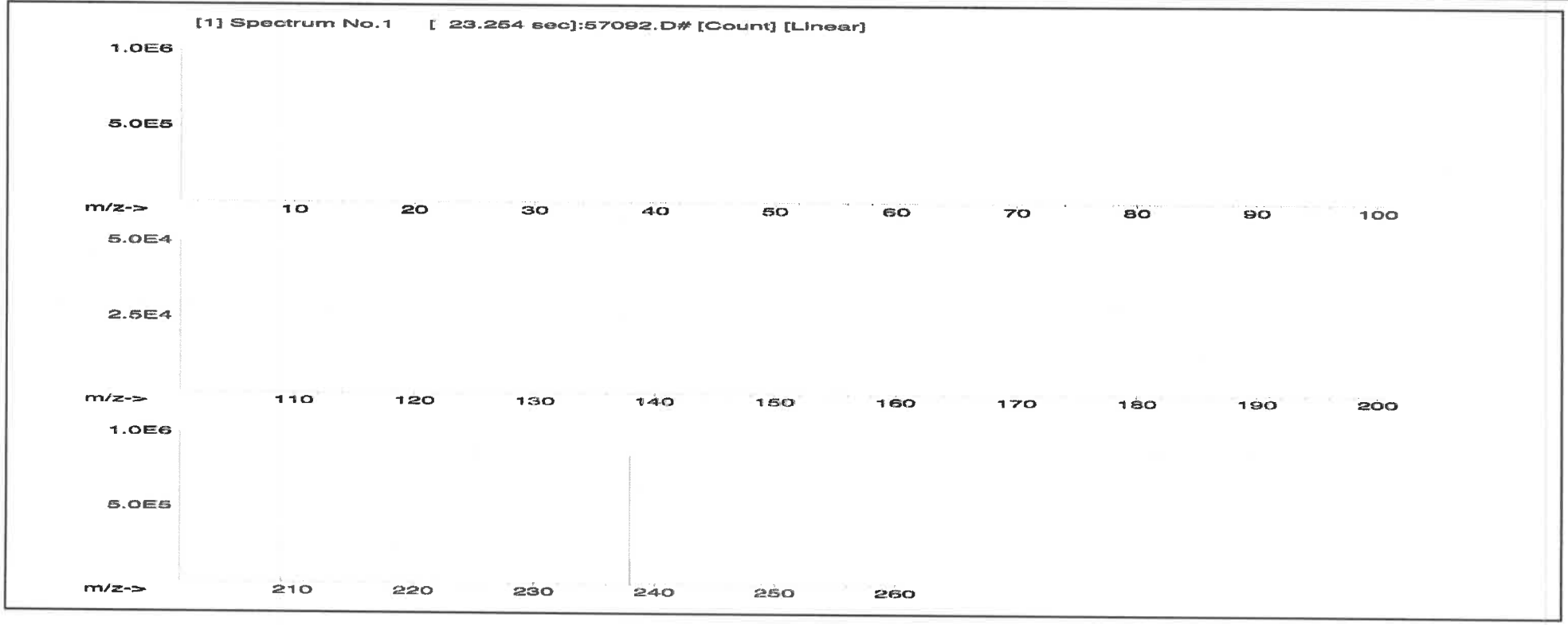
Giovanni Esposito

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



587 of 649

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**

Printed: 6/7/2024, 3:58:45 PM

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

M 6041-46
MS

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010
Manufactured Date: 2023-03-22
Retest Date: 2028-03-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H_2SO_4)	95.0 – 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Substances Reducing Permanganate (as SO2)	≤ 2 ppm	< 2 ppm
Ammonium (NH_4)	≤ 1 ppm	1 ppm
Chloride (Cl)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO_3)	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO_4)	≤ 0.5 ppm	< 0.1 ppm
Trace Impurities – Aluminum (Al)	≤ 30.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities – Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities – Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities – Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities – Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
Trace Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010

Test	Specification	Result
Trace Impurities - Sodium (Na)	≤ 500.0 ppb	5.4 ppb
Trace Impurities - Strontium (Sr)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities - Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities - Zinc (Zn)	≤ 5.0 ppb	0.4 ppb

For Laboratory,Research,or Manufacturing Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

R 18/19/24, M60055

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

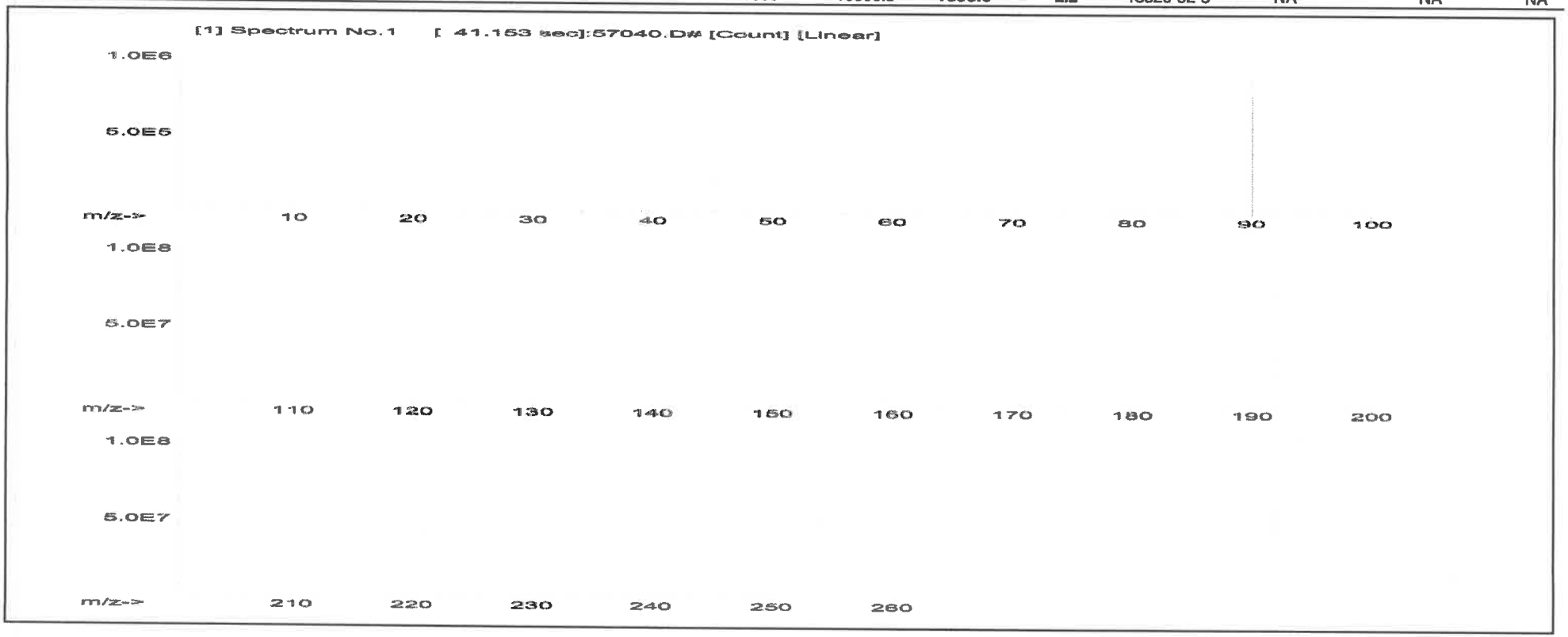
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	T

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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CERTIFIED WEIGHT REPORT:

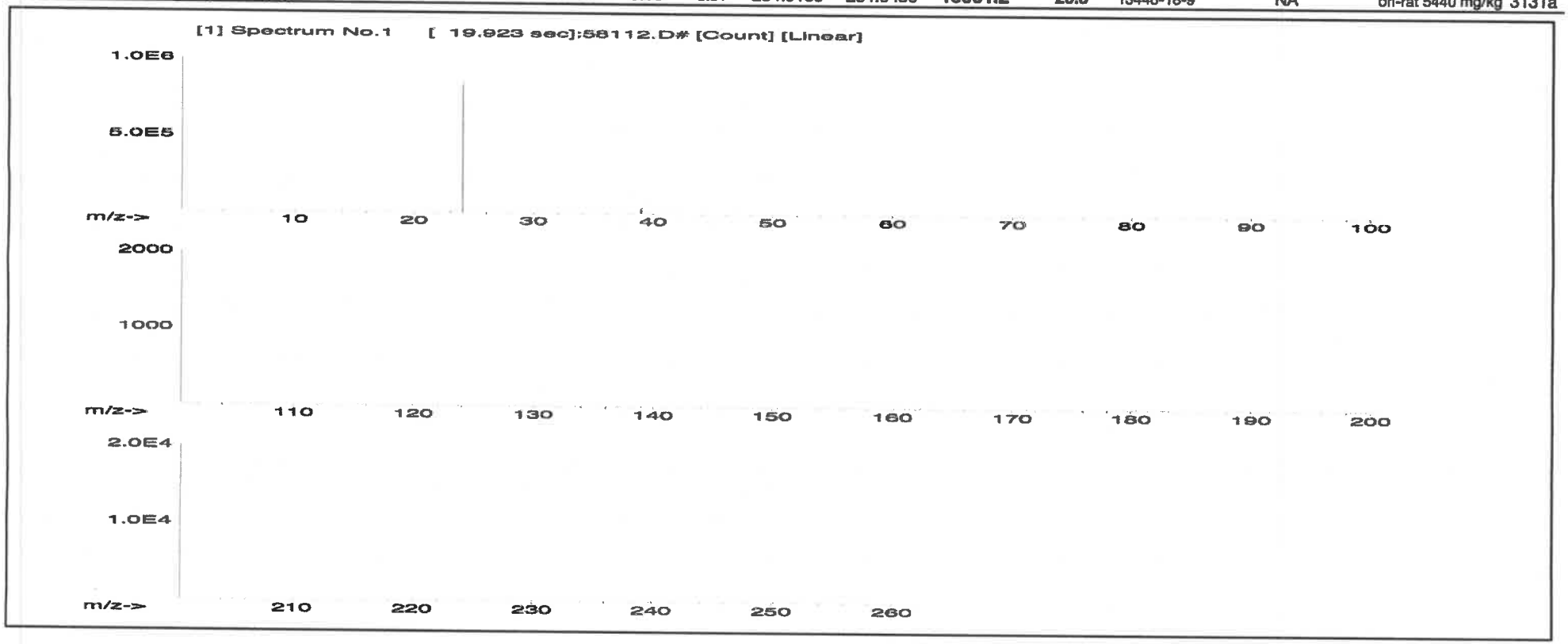
R -> 1/13/25
M 6127

Part Number:	**58112**		**Lot #**	
Lot Number:	**112124**	**Solvent:**	24012496	Nitric Acid
Description:	**Magnesium (Mg)**	2%	40.0 (mL)	Nitric Acid
Expiration Date:	112127			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**10000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty	

Giovanni Esposito

Formulated By:	Giovanni Esposito	112124
Reviewed By:	Pedro L. Rentas	112124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Magnesium nitrate hexahydrate (Mg)	IN030	MGD052023A1	10000	99.999	0.10	8.51	234.9183	234.9459	**10001.2**	**20.0**	13446-18-9	NA	orl-rat 5440 mg/kg	3131a



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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.
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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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CERTIFIED WEIGHT REPORT:

R->1/13/28

M6128

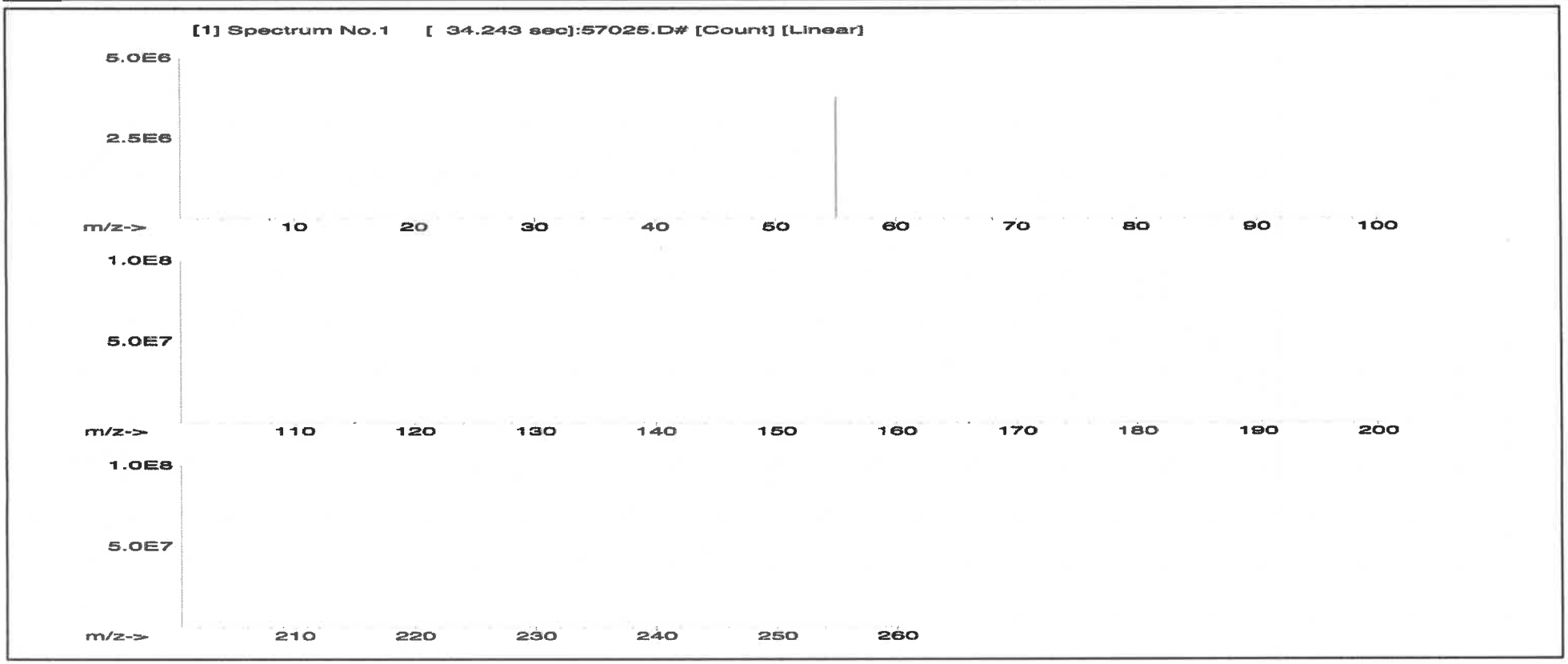
Part Number: 58025
Lot Number: 101124
Description: Manganese (Mn)
Expiration Date: 101127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 4000.2 ± 0.10 Flask Uncertainty

		Lot #	
Solvent:	24002546	Nitric Acid	
	2%	80.0 (mL)	Nitric Acid
		5E-05	Balance Uncertainty

Giovanni Esposito

Formulated By:	Giovanni Esposito	101124
Reviewed By:	Pedro L. Rentas	101124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Manganese(II) nitrate hydrate (Mn)	IN031	MNM092020A1	1000	99.999	0.10	20.8	19.2322	19.2344	**1000.1**	**2.0**	15710-66-4	5 mg/m3	orl-rat >300mg/kg	3132



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	T	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

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:

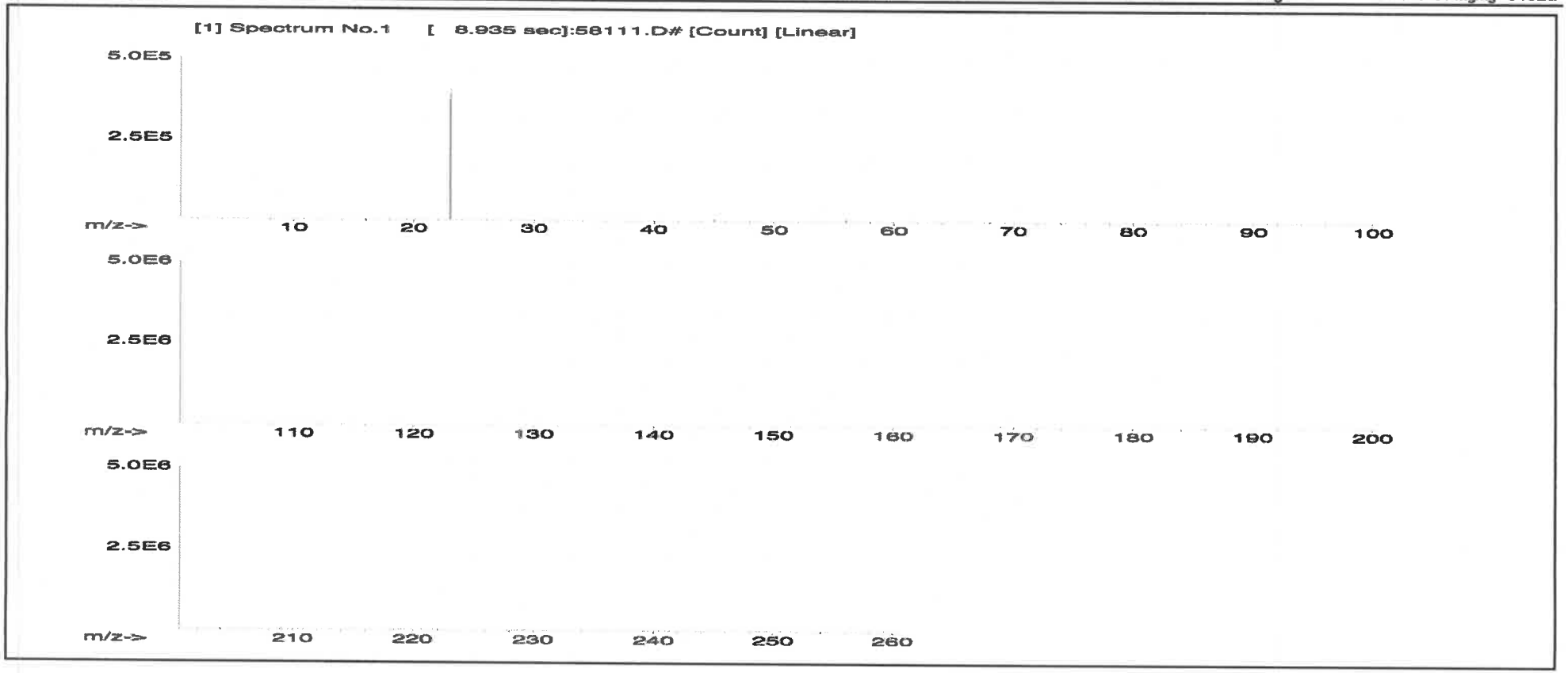
R->1/13/25

MG144

			Lot #	
Part Number:	**58111**	**Solvent:**	24002546	Nitric Acid
Lot Number:	**072424**			
Description:	**Sodium (Na)**	2%	80.0 (mL)	Nitric Acid
Expiration Date:	072427			
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):	4000.2	0.10	Flask Uncertainty	

Formulated By:	Benson Chan	072424
Reviewed By:	Pedro L. Rentas	072424

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Sodium nitrate (Na)	IN036	NAV012015I1	10000	99.999	0.10	26.9	148.7096	######	**10000.0**	**20.0**	7631-99-4	5 mg/m3	orl-rat 3430 mg/kg	3152a



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https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	T	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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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

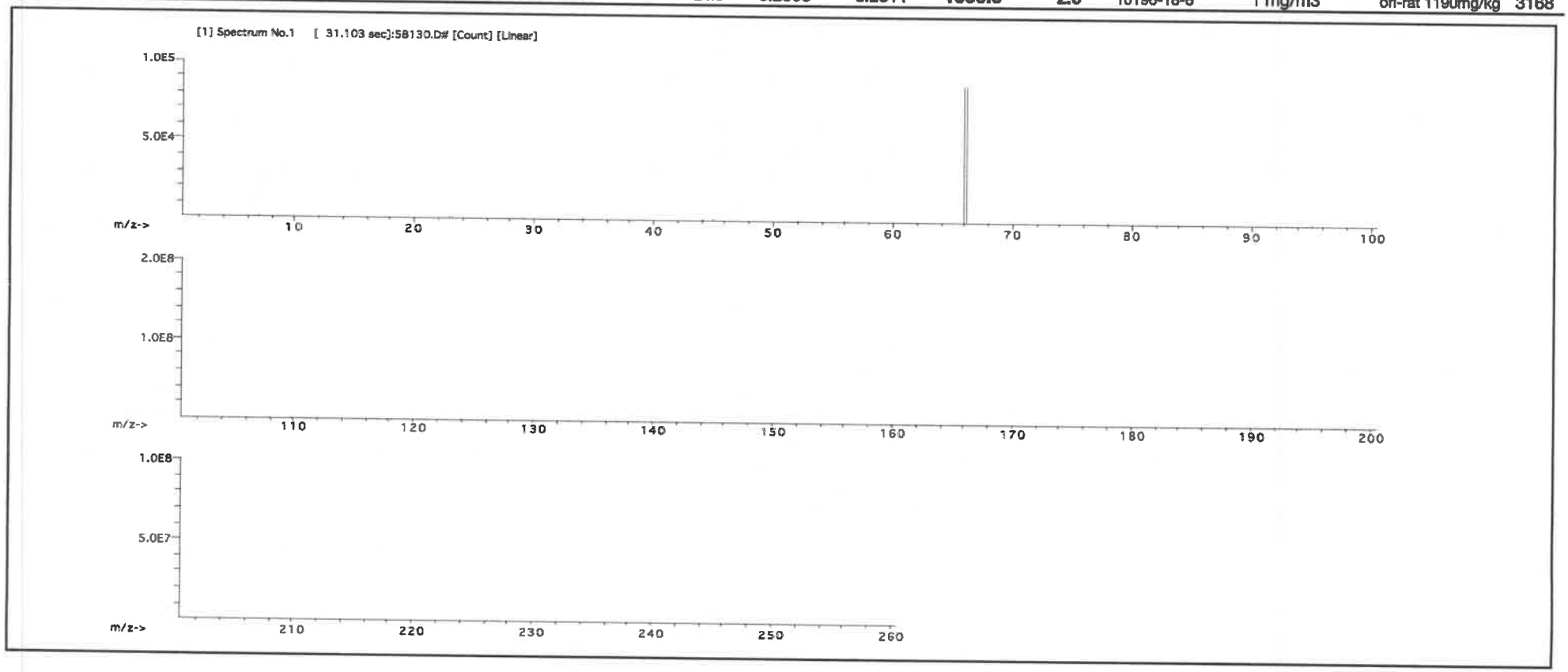
Expiration Date: 121727
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

				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.
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www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	T
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

R : 4/20/21

QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

M6150

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) ***CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS***

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	CN^-	99

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

M6151

R→ 1/15/25

Material No.: 9530-33
Batch No.: 22G2862015
Manufactured Date: 2022-06-15
Retest Date: 2027-06-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl_2)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO_4)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO_3)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH_4)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
Trace Impurities – Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities – Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	2.9 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities – Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities – Niobium (Nb)	≤ 1.0 ppb	0.8 ppb
Trace Impurities – Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	0.5 ppb
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	2.3 ppb
Trace Impurities – Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Tantalum (Ta)	≤ 1.0 ppb	1.6 ppb
Trace Impurities – Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	4.0 ppb
Trace Impurities – Titanium (Ti)	≤ 1.0 ppb	1.5 ppb
Trace Impurities – Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities – Zirconium (Zr)	≤ 1.0 ppb	0.3 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result

For Laboratory,Research,or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

R→1/7/23
M6153

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSR10
Lot Number:	V2-SR745329
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Strontium
Starting Material:	Strontium Carbonate
Starting Material Lot#:	2647
Starting Material Purity:	99.9960%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10081 ± 39 µg/mL

Density: 1.030 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10059 ± 50 µg/mL**
ICP Assay NIST SRM Traceable to 3153a Lot Number: K2-SR650985

Assay Method #2 **10087 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000960	M	Eu	<	0.000480	O	Na		0.002964	M	Se	<	0.042000	M	Zn	0.004560
M	Al		0.003420	O	Fe		0.013225	M	Nb	<	0.000480	O	Si		0.012997	M	Zr	0.001847
M	As	<	0.007200	M	Ga	<	0.002900	M	Nd	<	0.000480	M	Sm	<	0.000480			
M	Au	<	0.003900	M	Gd	<	0.000480	O	Ni		0.001482	M	Sn	<	0.000480			
O	B	<	0.003200	M	Ge	<	0.004800	M	Os	<	0.001500	s	Sr	<				
M	Ba		0.638494	M	Hf	<	0.000480	O	P	<	0.017000	M	Ta	<	0.000480			
O	Be	<	0.000450	M	Hg	<	0.000960	M	Pb		0.010717	M	Tb	<	0.000480			
M	Bi	<	0.002000	M	Ho	<	0.000480	M	Pd	<	0.002000	M	Te	<	0.016000			
O	Ca		0.025083	M	In	<	0.008600	M	Pr		0.000547	M	Th	<	0.000480			
M	Cd	<	0.000960	M	Ir	<	0.000480	M	Pt	<	0.000480	M	Ti		0.004560			
M	Ce		0.000661	O	K		0.025083	M	Rb	<	0.003400	M	Tl	<	0.000480			
M	Co		0.001527	M	La	<	0.000480	M	Re	<	0.000480	M	Tm		0.004332			
O	Cr	<	0.004700	O	Li	<	0.005600	O	Rh	<	0.013000	M	U	<	0.000480			
M	Cs	<	0.000480	M	Lu	<	0.000480	M	Ru	<	0.000960	M	V	<	0.000960			
O	Cu	<	0.003800	O	Mg		0.001048	O	S	<	0.045000	M	W	<	0.002400			
M	Dy	<	0.000960	O	Mn		0.000319	M	Sb	<	0.009600	O	Y	<	0.001200			
M	Er	<	0.000480	M	Mo	<	0.002900	M	Sc	<	0.001500	M	Yb	<	0.000480			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 87.62 +2 6 $Sr(H_2O)_{6}^{+2}$

Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1 - 3.5% HNO_3 / LDPE container.

Sr Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO_3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 88 amu	1200 ppt	N/A	72Ge16O, 176Yb+2, 176Lu+2 , 176Hf+2
ICP-OES 407.771 nm	0.0004 / 0.00006 µg/mL	1	U, Ce
ICP-OES 421.552 nm	0.0008 / 0.00004 µg/mL	1	Rb
ICP-OES 460.733 nm	0.07 / 0.003 µg/mL	1	Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

avantor™ | J.T.Baker®

R-02102/2025

M-6158

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
Trace Impurities - Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities - Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities - Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities - Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities - Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count - 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count - 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

INORGANIC VENTURES™
Refine your results. Redefine your industry.

A: 4/11/22

Certificate of Analysis

M5738, M5739, M5740, M5741, M5742, M5743

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
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



QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-MS (ICSA WITH ICSB)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of an Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix**. For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-0803" and for the ICSAB mixture use "ICSA-0803+ICSB-0803".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to the Contracting Officer, Ross Miller at miller.ross@epa.gov. If directed by Ross Miller, return the chain of custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

This interference check sample set is to be used to verify elemental isobaric correction factors of inductively coupled plasma-mass spectrometers (ICP-MS). This reference material set consists of two (2) concentrated solutions. The ICSA solution contains several interferent elements and species; for a complete listing refer to the CLP SOW. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be, Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for the ICP-MS ICS Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-0803, Inferferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO_3. Analyze this solution by ICP-MS.

ICSB-0803, Analytes, mixed with ICSA-0803, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO_3. Analyze this ICSAB solution by ICP-MS.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-MS ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-MS ICSA-0803, AND ICSA-0803 MIXED WITH ICSB-0803

ICSA: M5873

ICSB: M5874

Element	CRQL	Part A (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)	Part A +Part B (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)
Al	20.0	[100000]			[100000]		
Sb	2.0	(1.5)	-2.5	5.5	(22.0)	18.0	26.0
As	1.0	(0.1)	-1.9	2.1	19.0	16.2	21.9
Ba	10.0	(1.2)	-18.8	21.2	(22.0)	2.0	42.0
Be	1.0	(0)	-2.0	2.0	19.0	16.2	21.9
Cd	1.0	(0.7)	-1.3	2.7	20.0	17.0	23.0
Ca	500	[100000]			[100000]		
C		[200000]			[200000]		
Cl		[1000000]			[1000000]		
Cr	2.0	(21.0)	17.0	25.0	40.0	34.0	46.0
Co	1.0	(1.0)	-1.0	3.0	20.0	17.0	23.0
Cu	2.0	(8.0)	4.0	12.0	(25.0)	21.0	29.0
Fe	200	[100000]			[100000]		
Pb	1.0	(4.0)	2.0	6.0	25.0	21.3	28.8
Mg	500	[100000]			[100000]		
Mn	1.0	(7.0)	5.0	9.0	27.0	23.0	31.1
Mo		[2000]			[2000]		
Ni	1.0	(6.0)	4.0	8.0	24.0	20.4	27.6
P		[100000]			[100000]		
K	500	[100000]			[100000]		
Se	5.0	(0.3)	-9.7	10.3	(19.0)	9.0	29.0
Ag	1.0	(0)	-2.0	2.0	18.0	15.3	20.7
Na	500	[100000]			[100000]		
S		[100000]			[100000]		
Tl	1.0	(0)	-2.0	2.0	21.0	17.9	24.2
Ti		[2000]			[2000]		
V	5.0	(0.5)	-9.5	10.5	(19.0)	9.0	29.0
Zn	5.0	(11.0)	1.0	21.0	(29.0)	19.0	39.0

[ ] Indicates analytes that do not require ICP-MS determination in the ICS.
The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 2 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-MS (ICSA WITH ICSB)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of an Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix**. For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-0803" and for the ICSAB mixture use "ICSA-0803+ICSB-0803".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to the Contracting Officer, Ross Miller at miller.ross@epa.gov. If directed by Ross Miller, return the chain of custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

This interference check sample set is to be used to verify elemental isobaric correction factors of inductively coupled plasma-mass spectrometers (ICP-MS). This reference material set consists of two (2) concentrated solutions. The ICSA solution contains several interferent elements and species; for a complete listing refer to the CLP SOW. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be, Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for the ICP-MS ICS Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-0803, Inferferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO_3. Analyze this solution by ICP-MS.

ICSB-0803, Analytes, mixed with ICSA-0803, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO_3. Analyze this ICSAB solution by ICP-MS.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-MS ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-MS ICSA-0803, AND ICSA-0803 MIXED WITH ICSB-0803

ICSA: M5873

ICSB: M5874

Element	CRQL	Part A (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)	Part A +Part B (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)
Al	20.0	[100000]			[100000]		
Sb	2.0	(1.5)	-2.5	5.5	(22.0)	18.0	26.0
As	1.0	(0.1)	-1.9	2.1	19.0	16.2	21.9
Ba	10.0	(1.2)	-18.8	21.2	(22.0)	2.0	42.0
Be	1.0	(0)	-2.0	2.0	19.0	16.2	21.9
Cd	1.0	(0.7)	-1.3	2.7	20.0	17.0	23.0
Ca	500	[100000]			[100000]		
C		[200000]			[200000]		
Cl		[1000000]			[1000000]		
Cr	2.0	(21.0)	17.0	25.0	40.0	34.0	46.0
Co	1.0	(1.0)	-1.0	3.0	20.0	17.0	23.0
Cu	2.0	(8.0)	4.0	12.0	(25.0)	21.0	29.0
Fe	200	[100000]			[100000]		
Pb	1.0	(4.0)	2.0	6.0	25.0	21.3	28.8
Mg	500	[100000]			[100000]		
Mn	1.0	(7.0)	5.0	9.0	27.0	23.0	31.1
Mo		[2000]			[2000]		
Ni	1.0	(6.0)	4.0	8.0	24.0	20.4	27.6
P		[100000]			[100000]		
K	500	[100000]			[100000]		
Se	5.0	(0.3)	-9.7	10.3	(19.0)	9.0	29.0
Ag	1.0	(0)	-2.0	2.0	18.0	15.3	20.7
Na	500	[100000]			[100000]		
S		[100000]			[100000]		
Tl	1.0	(0)	-2.0	2.0	21.0	17.9	24.2
Ti		[2000]			[2000]		
V	5.0	(0.5)	-9.5	10.5	(19.0)	9.0	29.0
Zn	5.0	(11.0)	1.0	21.0	(29.0)	19.0	39.0

[ ] Indicates analytes that do not require ICP-MS determination in the ICS.
The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 2 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

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Certified Reference Material CRM

M6030

R: 8/5/24

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CERTIFIED WEIGHT REPORT:

Part Number: 57047
Lot Number: 122823
Description: Silver (Ag)

Expiration Date: 122826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

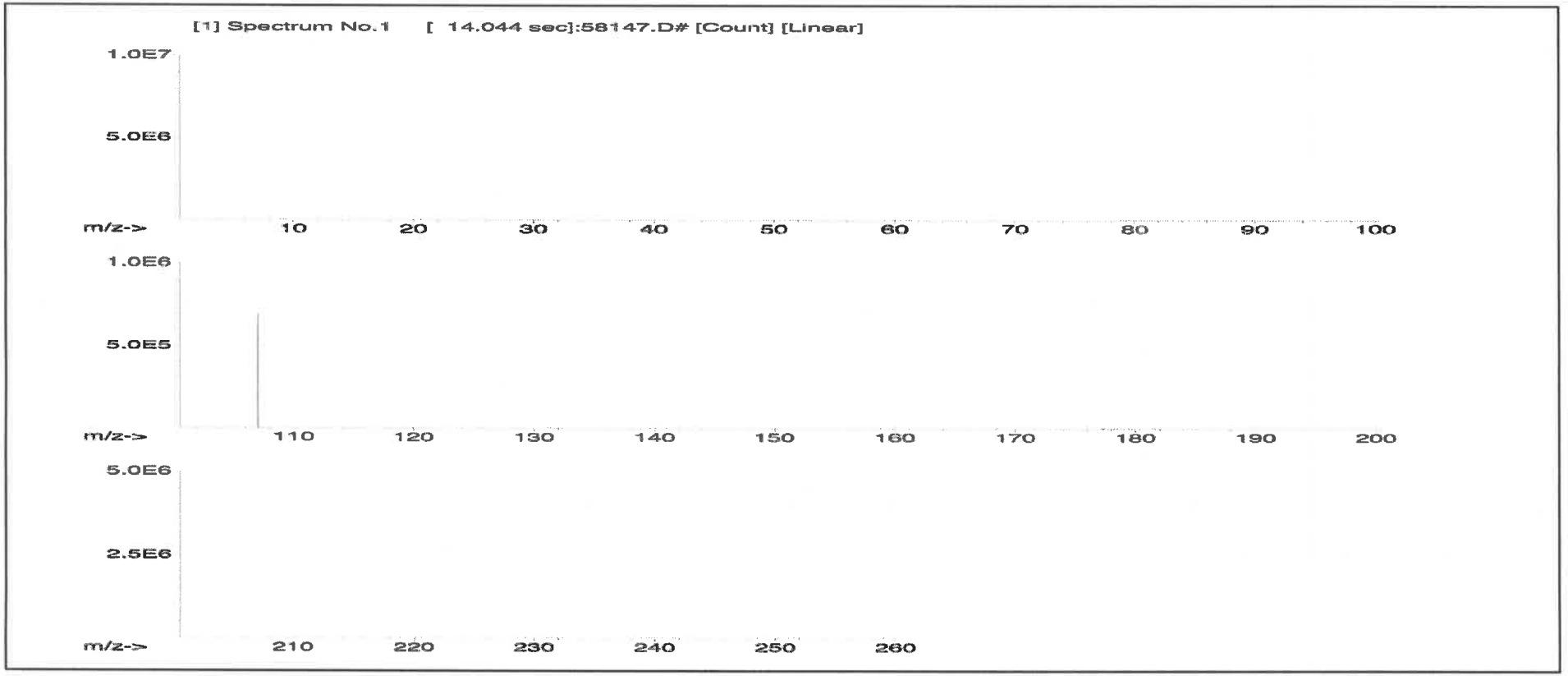
Weight shown below was diluted to (mL): 4000.30 0.058 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	80.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Benson Chan	122823
Reviewed By:	Pedro L. Rentas	122823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Silver nitrate (Ag)	IN035	J0612AGA1	1000.0	99.9999	0.10	63.7	6.27992	6.27998	**1000.0**	**2.0**	7761-88-8	10 ug/m3	NA	3151



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	T	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

R: 10/18/24

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CERTIFIED WEIGHT REPORT:

MG146

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

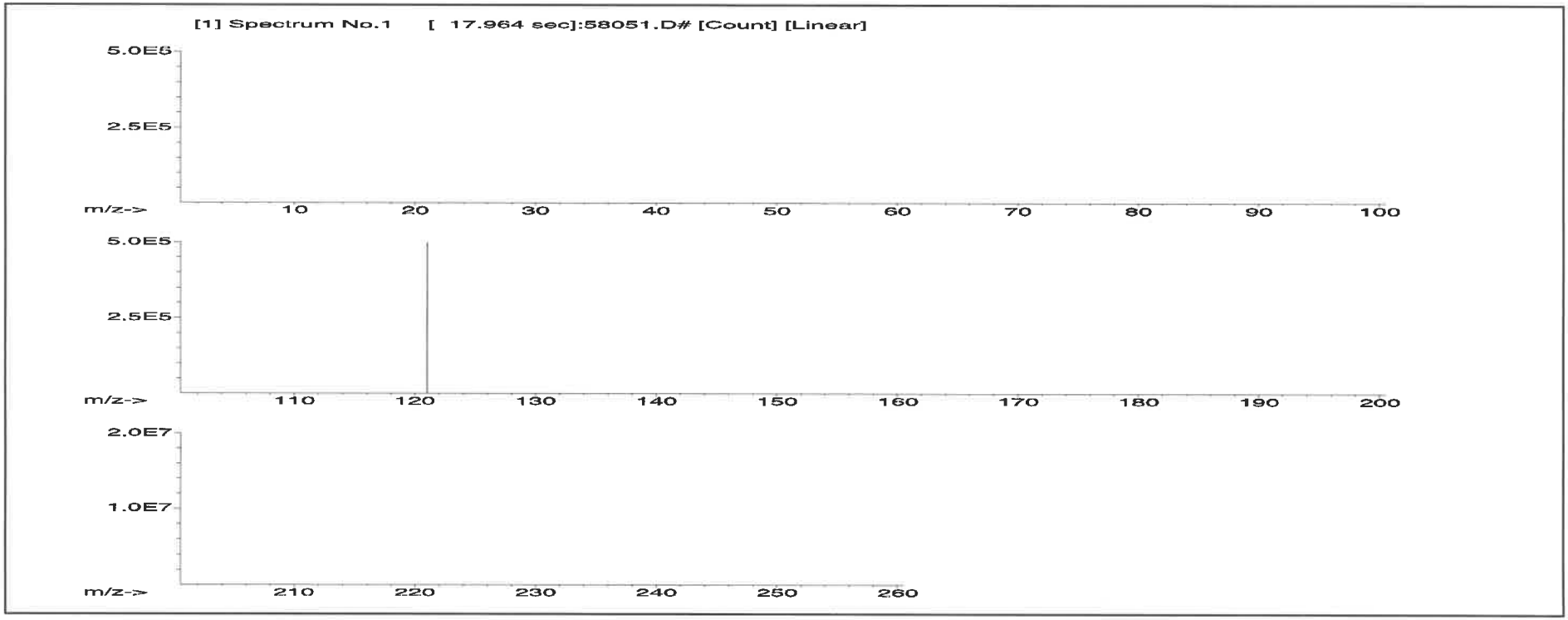
Giovanni Esposito

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



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	T	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

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Certified by:

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* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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Certified Reference Material CRM

ANAB ISO 17034 Accredited
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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

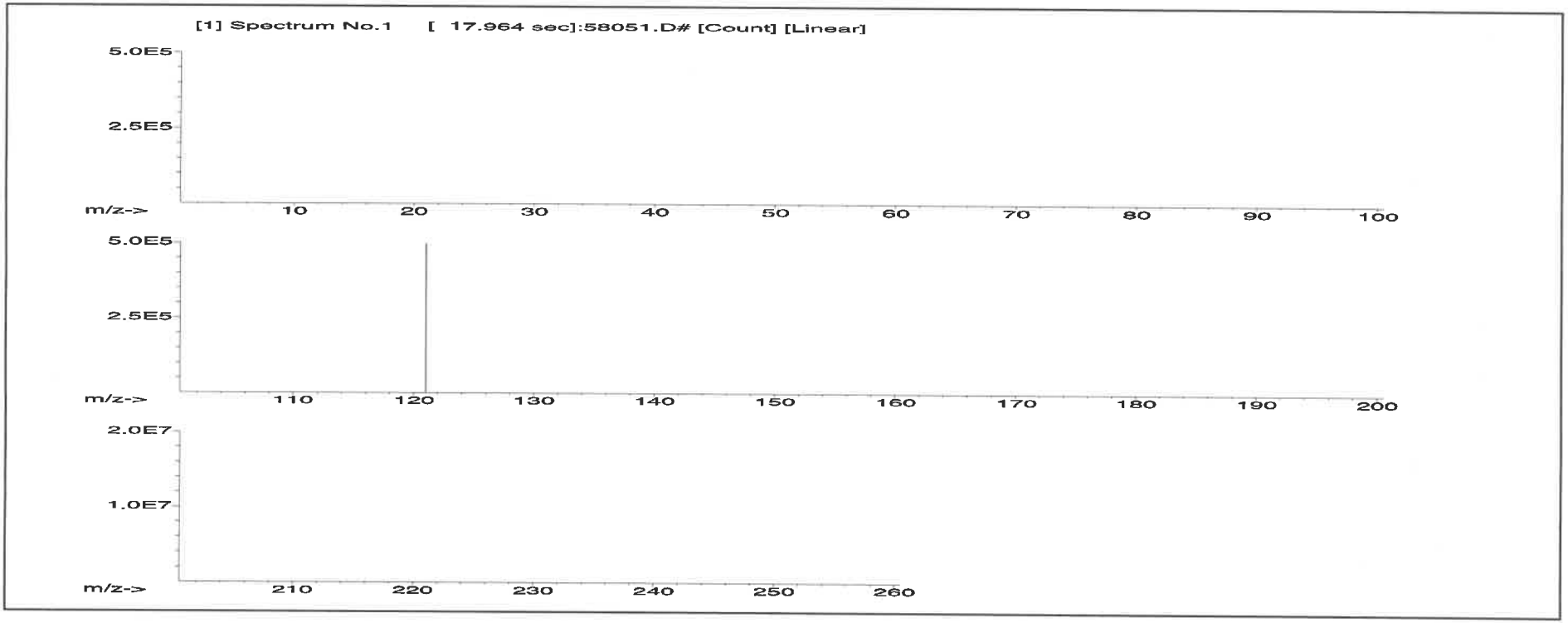
Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	40.0 (mL)	Nitric Acid	

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
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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

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* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
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R: 8/5/24 M6019

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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 888.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSR1
Lot Number:	U2-SR730227
Matrix:	0.1% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Strontium
Starting Material:	SrCO3
Starting Material Lot#:	M2-2192
Starting Material Purity:	99.9993%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1001 ± 3 µg/mL

Density: 1.000 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **998 ± 4 µg/mL**
ICP Assay NIST SRM Traceable to 3153a Lot Number: K2-SR650985

Assay Method #2 **1001 ± 3 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **1001 ± 2 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001980	M	Eu	<	0.000495	O	Na		0.000200	M	Se	<	0.013862	O	Zn		0.000143
O	Al		0.000370	O	Fe		0.000410	M	Nb	<	0.000495	i	Si	<		M	Zr	<	0.000495
M	As	<	0.000495	M	Ga	<	0.000495	M	Nd	<	0.000495	M	Sm	<	0.000495				
M	Au	<	0.000989	M	Gd	<	0.000495	O	Ni	<	0.007631	M	Sn	<	0.000990				
M	B	<	0.039606	M	Ge	<	0.000495	M	Os	<	0.000494	s	Sr	<					
M	Ba		0.006486	M	Hf	<	0.000495	i	P	<		M	Ta	<	0.000495				
M	Be	<	0.000990	M	Hg	<	0.000989	M	Pb	<	0.002970	M	Tb	<	0.000495				
M	Bi	<	0.000495	M	Ho	<	0.000495	M	Pd	<	0.003957	M	Te	<	0.027724				
O	Ca		0.004255	M	In	<	0.000495	M	Pr	<	0.000495	M	Th	<	0.000990				
M	Cd		0.001339	M	Ir	<	0.000494	M	Pt	<	0.002970	M	Ti	<	0.005940				
M	Ce	<	0.004950	O	K	<	0.008184	M	Rb	<	0.002970	M	Tl	<	0.000495				
M	Co	<	0.000495	M	La	<	0.000495	M	Re	<	0.000495	M	Tm	<	0.000495				
O	Cr	<	0.003207	O	Li	<	0.000884	O	Rh	<	0.012829	M	U	<	0.001485				
M	Cs	<	0.000990	M	Lu	<	0.002970	M	Ru	<	0.000989	M	V	<	0.001980				
M	Cu		0.000099	O	Mg		0.000064	i	S	<		M	W	<	0.003960				
M	Dy	<	0.000495	O	Mn		0.000066	M	Sb	<	0.014852	O	Y	<	0.000995				
M	Er	<	0.000495	M	Mo	<	0.001980	M	Sc	<	0.001980	M	Yb	<	0.000495				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 87.62 +2 6 $Sr(H_2O)_{6}^{+2}$

Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1 - 3.5% HNO_3 / LDPE container.

Sr Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO_3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 88 amu	1200 ppt	N/A	72Ge16O, 176Yb+2, 176Lu+2 , 176Hf+2
ICP-OES 407.771 nm	0.0004 / 0.00006 µg/mL	1	U, Ce
ICP-OES 421.552 nm	0.0008 / 0.00004 µg/mL	1	Rb
ICP-OES 460.733 nm	0.07 / 0.003 µg/mL	1	Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 03, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 03, 2028**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6023

R ! 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57081
Lot Number: 062724
Description: Thallium (Tl)

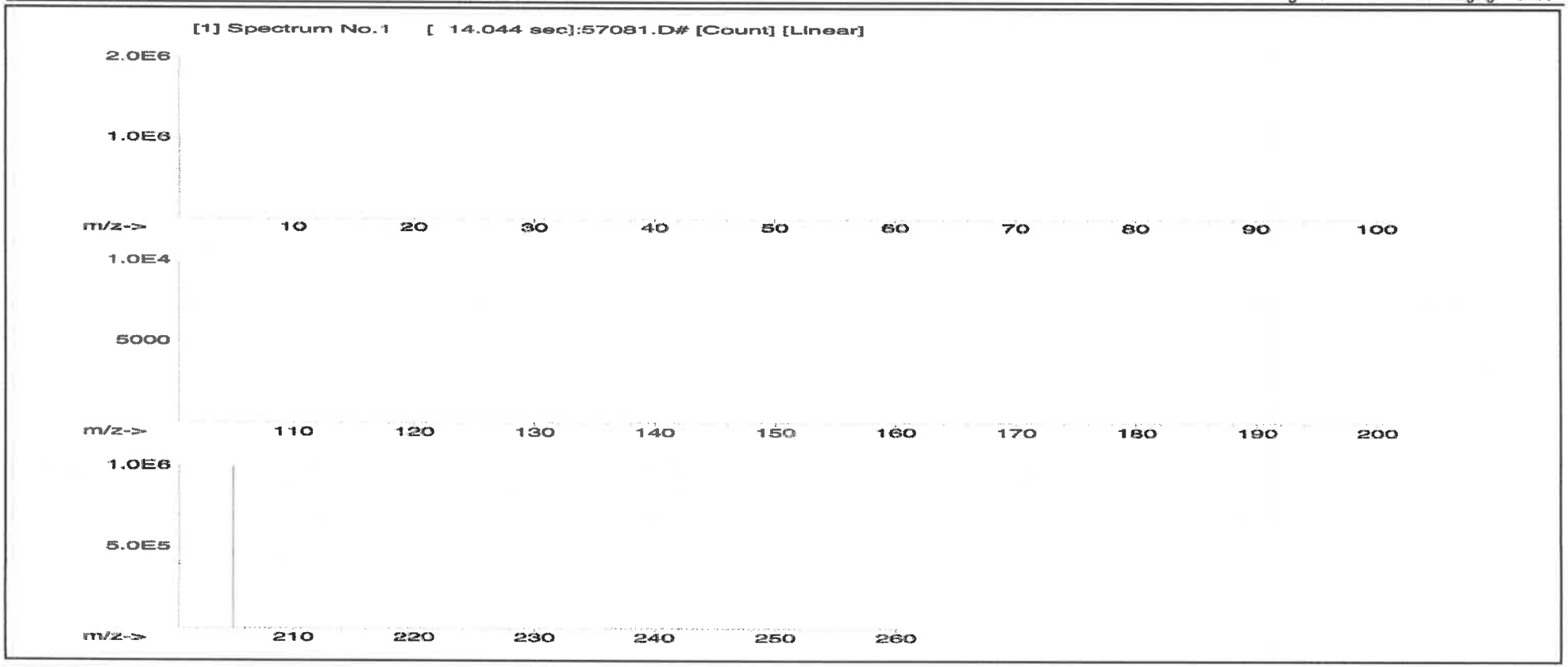
Expiration Date: 062727
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.1

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	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



641 of 649
Q1883-METALS

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	

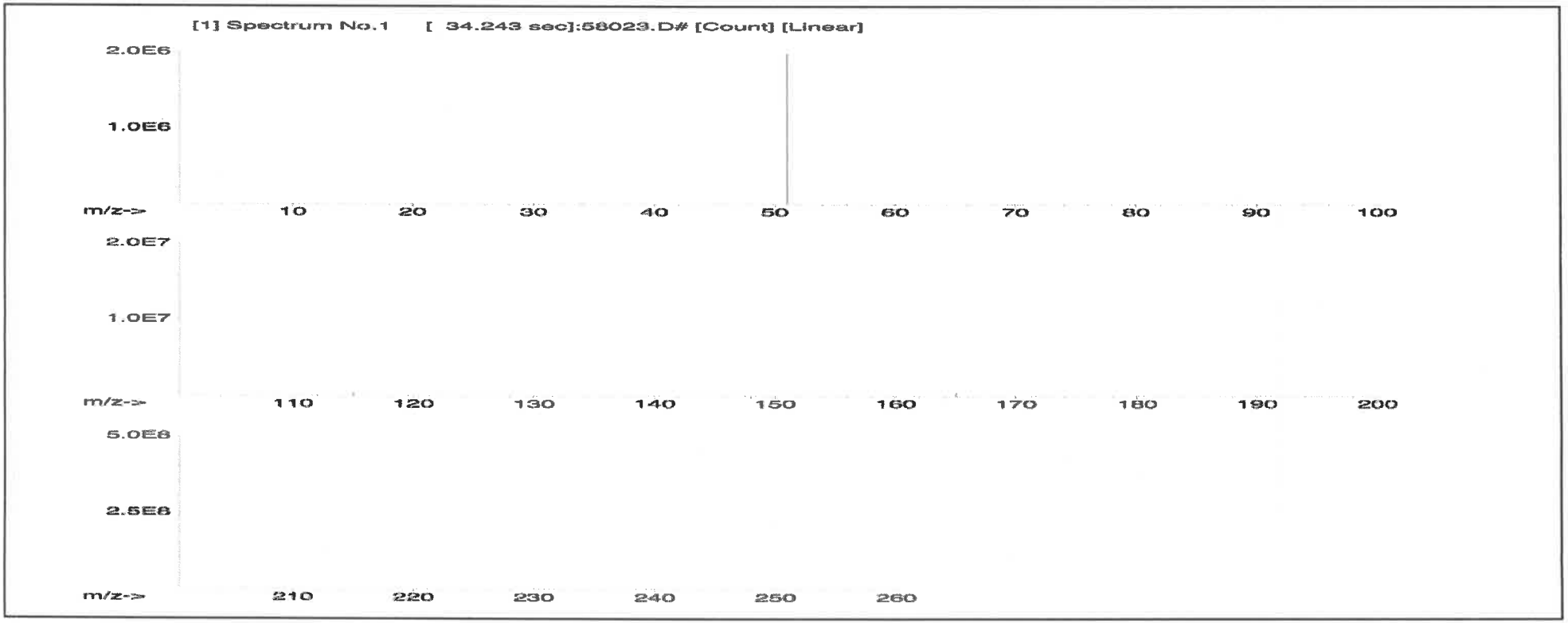
Aleah O'Brady

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.
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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	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

Chemtech

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

http://www.contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

Doc # 381 Rev 4_01/08/2020

Q1883

Page 1 of 1

Company Name:	Nobis Group
Address:	55 Technology Dr Suite 101, Lowell, MA 01851
Phone:	978-703-6014
Project Name:	Raymark
Project Location:	Stratford, CT
Project Number:	95700
Project Manager:	Adam Roy
Con-Test Quote Name/Number:	
Invoice Recipient:	
Sampled By:	S. Stone

Requested Turnaround Time
5-Day ☐ 10-Day ☑
PFAS 10-Day (std) ☐ Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other: Equis edd
CLP Like Data Pkg Required: ☐ No
Email To: aroy@nobis-group.com
Fax To #:

Dissolved Metals Samples
○ Field Filtered
○ Lab to Filter

Orthophosphate Samples
○ Field Filtered
○ Lab to Filter

PCB ONLY
SOXHLET ☑
NON SOXHLET ☐

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	[1]Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	M/O	RCP VOCs	% Solids	PAHs	Herbicides	Pesticides	PCBs	Metals ICP + Hg - 6010	Cyanide	SPLP RCP Metals - 6020
	OU4-PCS-TC-27-042325	4/23/25	12:45	C	SO		3	2	1				X	X	X	X	X	X	X	X	X
	OU4-PCS-TC-28-042326	4/23/25	12:50	C	SO		3	2	1				X	X	X	X	X	X	X	X	X
	OU4-PCS-TC-29-042327	4/23/25	13:00	C	SO		3	2	1				X	X	X	X	X	X	X	X	X
	OU4-PCS-TC-30-042328	4/23/25	13:15	C	SO		3	2	1				X	X	X	X	X	X	X	X	X
	OU4-PCS-TC-31-042329	4/23/25	13:20	C	SO		3	2	1				X	X	X	X	X	X	X	X	X
	OU4-PCS-TC-32-042330	4/23/25	13:30	C	SO		3	2	1				X	X	X	X	X	X	X	X	X
	OU4-VSL-18-042325	4/23/25	11:20	C	SO		3	2	1				X	X	X	X	X	X	X	X	X
	OU4-VSL-19-042326	4/23/25	11:50	C	SO		3	2	1				X	X	X	X	X	X	X	X	X
	SO-TB-01-042325	4/23/25	800		SO		3						X								

[2] Preservation Code
Total Number Of:
VIALS_____
GLASS_____
PLASTIC_____
BACTERIA_____
ENCORE_____

Glassware in the fridge? Y / N
Glassware in freezer? Y / N
Prepackaged Cooler? Y / N

*Contest is not responsible for missing samples from prepacked coolers

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Relinquished by: (signature)	Date/Time: 4/24/25 1310
Received by: (signature)	Date/Time: 4/25/25 0930
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Client Comments: Other preservative is DI water. DI preserved VOCs were frozen on 4/24/25 @ 0600. Freeze upon receiving.

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
MCP Certification Form Required
☑ CT RCP Required
RCP Certification Form Required
☐ MA State DW Required
PWSID #

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

Lab Comments: 3.6°C Adjust Factor +1 IR Run #1

Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Con-Test values your partnership on each project and will try to assist with missing information, but will not be held accountable.

284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1883 NOBI03
Client Name : Nobis Group
Client Contact : Adam Roy
Invoice Name : Nobis Group
Invoice Contact : Adam Roy

Order Date : 4/25/2025 10:10:00 AM
Project Name : Raymark Superfund Site
Receive DateTime : 4/25/2025 9:30:00 AM
Purchase Order :

Project Mgr :
Report Type : Level 4
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
Q1883-01	OU4-PCS-TC-27-042325	Solid	04/23/2025	12:45					
					VOCMS Group3		8260D		10 Bus. Days
Q1883-03	OU4-PCS-TC-28-042325	Solid	04/23/2025	12:50					
					VOCMS Group3		8260D		10 Bus. Days
Q1883-05	OU4-PCS-TC-29-042325	Solid	04/23/2025	13:00					
					VOCMS Group3		8260D		10 Bus. Days
Q1883-07	OU4-PCS-TC-30-042325	Solid	04/23/2025	13:15					
					VOCMS Group3		8260D		10 Bus. Days
Q1883-09	OU4-PCS-TC-31-042325	Solid	04/23/2025	13:20					
					VOCMS Group3		8260D		10 Bus. Days
Q1883-11	OU4-PCS-TC-32-042325	Solid	04/23/2025	13:30					
					VOCMS Group3		8260D		10 Bus. Days
Q1883-13	OU4-PCS-18-042325 VSL	Solid	04/23/2025	11:20					
					VOCMS Group3		8260D		10 Bus. Days
Q1883-15	OU4-PCS-19-042325 VSL	Solid	04/23/2025	11:50					

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1883 NOBI03
Client Name : Nobis Group
Client Contact : Adam Roy
Invoice Name : Nobis Group
Invoice Contact : Adam Roy

Order Date : 4/25/2025 10:10:00 AM
Project Name : Raymark Superfund Site
Receive DateTime : 4/25/2025 9:30:00 AM
Purchase Order :

Project Mgr :
Report Type : Level 4
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
					VOCMS Group3		8260D		10 Bus. Days
Q1883-17	SO-TB-01-042325	Solid	04/23/2025	08:00					
					VOCMS Group3		8260D		10 Bus. Days

Relinguished By : [signature]
Date / Time : 4/25/25 1120

Received By : Sam
Date / Time : 04/25/25 11:20
Storage Area : VOA Refridgerator Room

02 46
F22