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 : P5306

ATTENTION : Adam Roy

Laboratory Certification ID # 20012

Table Of Contents for P5306

1) METALS DATA 2
2) Signature Page 4
3) Case Narrative 5
4) Qualifier Page 7
5) Conformance/Non Conformance 8
6) QA Checklist 9
7) Chronicle 10
8) Hit Summary 12
9) Sample Data 13
- 9.1) OU4-VSL-07-121224 14
- 9.2) OU4-VSL-08-121224 15
- 9.3) OU4-VSL-09-121224 16
- 9.4) OU4-VSL-10-121224 17
- 9.5) OU4-VSL-11-121224 18
- 9.6) OU4-VSL-12-121224 19
- 9.7) OU4-VSL-13-121224 20
- 9.8) OU4-VSL-14-121224 21
- 9.9) OU4-VSL-06R-121224 22

10) METALS CALIBRATION DATA 23
- 10.1) Initial and Continuing Calibration Verification 24
- 10.2) CRDL Standard For AA & ICP 29
- 10.3) Initial and Continuing Calibration Blank Summary 30
- 10.4) Preparation Blank Summary 34
- 10.5) Interference Check Sample 36

11) METALS QC DATA 37
- 11.1) Matrix Spike Summary 38
- 11.2) Post Digest Spike Summary 40
- 11.3) Duplicate Sample Summary 41
- 11.4) Laboratory Control Sample Summary 43
- 11.5) Internal Standard Relative Intensity Summary8A 45
- 11.6) Internal Standard Relative Intensity Summary8B 49
- 11.7) ICP Serial Dilutions 53

12) METALS PREPARATION & INSTRUMENT DATA 54
13) PREPARATION & ANALYTICAL SUMMARY 55
- 13.1) Sample Preparation Summary 56

13.2) Analysis Run Log 58
14) METALS RAW DATA 60
14.1) METALS RAW DATA - ANALYTICAL 61
14.2) LB134010 61
14.3) LB134070 63
14.4) METALS RAW DATA - PREP 330
14.4.1) PB165737 330
14.4.2) PB165834 333
15) Analytical Runlogs 336
16) Extraction Logs 341
16.1) PB165699.pdf 341
17) Standard Prep Logs 345
18) Shipping Document 477
18.1) Chain Of Custody 478
18.2) Lab Certificate 479
18.3) Internal COC 480

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Cover Page

Order ID : P5306

Project ID : Raymark Superfund Site

Client : Nobis Group

Lab Sample Number	Client Sample Number
P5306-01	OU4-VSL-07-121224
P5306-02	OU4-VSL-07-121224
P5306-03	OU4-VSL-08-121224
P5306-04	OU4-VSL-08-121224
P5306-05	OU4-VSL-09-121224
P5306-06	OU4-VSL-09-121224
P5306-07	OU4-VSL-10-121224
P5306-08	OU4-VSL-10-121224
P5306-09	OU4-VSL-11-121224
P5306-10	OU4-VSL-11-121224
P5306-11	OU4-VSL-12-121224
P5306-12	OU4-VSL-12-121224
P5306-13	OU4-VSL-13-121224
P5306-14	OU4-VSL-13-121224
P5306-15	OU4-VSL-14-121224
P5306-16	OU4-VSL-14-121224
P5306-17	OU4-VSL-06R-121224
P5306-18	OU4-VSL-06R-121224

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: 1/2/2025

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 # P5306
Test Name: SPLP MetalGroup3,SPLP Mercury

A. Number of Samples and Date of Receipt:
18 Solid samples were received on 12/17/2024.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Cyanide, Herbicide Group1, Mercury, Metals Group6, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SPLP Extraction, SPLP Mercury, SPLP MetalGroup3, SPLP MetalGroup6, SVOCMS Group3 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 7470 (Water).

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 analysis met criteria for all samples.
The Matrix Spike Duplicate analysis met criteria for all samples.
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:

P5306- SPLP 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.

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: P5306 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.			
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:

P5306- SPLP 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.

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 #: P5306

	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:** 01/02/2025

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LAB CHRONICLE

OrderID:	P5306	**OrderDate:**	12/17/2024 10:24:00 AM
Client:	Nobis Group	**Project:**	Raymark Superfund Site
Contact:	Adam Roy	**Location:**	L41,L61,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5306-01	**OU4-VSL-07-121224**	**SOIL**			**12/12/24**			**12/17/24**
			Mercury	7471B		12/18/24	12/18/24	
			Metals ICP-TAL	6010D		12/17/24	12/18/24	
P5306-02	**OU4-VSL-07-121224**	**Water**			**12/12/24**			**12/17/24**
			SPLP Mercury	7470A		12/19/24	12/19/24	
			SPLP MetalGroup3	6020B		12/18/24	12/23/24	
P5306-03	**OU4-VSL-08-121224**	**SOIL**			**12/12/24**			**12/17/24**
			Mercury	7471B		12/18/24	12/18/24	
			Metals ICP-TAL	6010D		12/17/24	12/18/24	
P5306-04	**OU4-VSL-08-121224**	**Water**			**12/12/24**			**12/17/24**
			SPLP Mercury	7470A		12/19/24	12/19/24	
			SPLP MetalGroup3	6020B		12/18/24	12/23/24	
P5306-05	**OU4-VSL-09-121224**	**SOIL**			**12/12/24**			**12/17/24**
			Mercury	7471B		12/18/24	12/18/24	
			Metals ICP-TAL	6010D		12/17/24	12/18/24	
P5306-06	**OU4-VSL-09-121224**	**Water**			**12/12/24**			**12/17/24**
			SPLP Mercury	7470A		12/19/24	12/19/24	
			SPLP MetalGroup3	6020B		12/18/24	12/23/24	
P5306-07	**OU4-VSL-10-121224**	**SOIL**			**12/12/24**			**12/17/24**
			Mercury	7471B		12/18/24	12/18/24	
			Metals ICP-TAL	6010D		12/17/24	12/18/24	
P5306-08	**OU4-VSL-10-121224**	**Water**			**12/12/24**			**12/17/24**
			SPLP Mercury	7470A		12/19/24	12/19/24	
			SPLP MetalGroup3	6020B		12/18/24	12/23/24	
P5306-09	**OU4-VSL-11-121224**	**SOIL**			**12/12/24**			**12/17/24**

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LAB CHRONICLE

			Mercury	7471B		12/18/24	12/18/24
			Metals ICP-TAL	6010D		12/17/24	12/18/24
P5306-10	**OU4-VSL-11-121224**	**Water**			**12/12/24**		**12/17/24**
			SPLP Mercury	7470A		12/19/24	12/19/24
			SPLP MetalGroup3	6020B		12/18/24	12/23/24
P5306-11	**OU4-VSL-12-121224**	**SOIL**			**12/12/24**		**12/17/24**
			Mercury	7471B		12/18/24	12/18/24
			Metals ICP-TAL	6010D		12/17/24	12/18/24
P5306-12	**OU4-VSL-12-121224**	**Water**			**12/12/24**		**12/17/24**
			SPLP Mercury	7470A		12/19/24	12/19/24
			SPLP MetalGroup3	6020B		12/18/24	12/23/24
P5306-13	**OU4-VSL-13-121224**	**SOIL**			**12/12/24**		**12/17/24**
			Mercury	7471B		12/18/24	12/18/24
			Metals ICP-TAL	6010D		12/17/24	12/18/24
P5306-14	**OU4-VSL-13-121224**	**Water**			**12/12/24**		**12/17/24**
			SPLP Mercury	7470A		12/19/24	12/19/24
			SPLP MetalGroup3	6020B		12/18/24	12/23/24
P5306-15	**OU4-VSL-14-121224**	**SOIL**			**12/12/24**		**12/17/24**
			Mercury	7471B		12/18/24	12/18/24
			Metals ICP-TAL	6010D		12/17/24	12/18/24
P5306-16	**OU4-VSL-14-121224**	**Water**			**12/12/24**		**12/17/24**
			SPLP Mercury	7470A		12/19/24	12/19/24
			SPLP MetalGroup3	6020B		12/18/24	12/23/24
P5306-17	**OU4-VSL-06R-121224**	**SOIL**			**12/12/24**		**12/17/24**
			Metals Group6	6010D		12/17/24	12/23/24
P5306-18	**OU4-VSL-06R-121224**	**Water**			**12/12/24**		**12/17/24**
			SPLP MetalGroup3	6020B		12/18/24	12/23/24

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Hit Summary Sheet
SW-846

SDG No.: P5306 **Order ID:** P5306

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

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : OU4-VSL-07-121224									
P5306-02	OU4-VSL-07-121224	Water	Vanadium	624	D	0.18	0.63	12.5	ug/L
Client ID : OU4-VSL-08-121224									
P5306-04	OU4-VSL-08-121224	Water	Mercury	0.27		0.081	0.16	0.20	ug/L
P5306-04	OU4-VSL-08-121224	Water	Vanadium	638	D	0.18	0.63	12.5	ug/L
Client ID : OU4-VSL-09-121224									
P5306-06	OU4-VSL-09-121224	Water	Vanadium	731	D	0.18	0.63	12.5	ug/L
Client ID : OU4-VSL-10-121224									
P5306-08	OU4-VSL-10-121224	Water	Vanadium	542	D	0.18	0.63	12.5	ug/L
Client ID : OU4-VSL-11-121224									
P5306-10	OU4-VSL-11-121224	Water	Vanadium	544	D	0.18	0.63	12.5	ug/L
Client ID : OU4-VSL-12-121224									
P5306-12	OU4-VSL-12-121224	Water	Vanadium	696	D	0.18	0.63	12.5	ug/L
Client ID : OU4-VSL-13-121224									
P5306-14	OU4-VSL-13-121224	Water	Vanadium	676	D	0.18	0.63	12.5	ug/L
Client ID : OU4-VSL-14-121224									
P5306-16	OU4-VSL-14-121224	Water	Vanadium	671	D	0.18	0.63	12.5	ug/L
Client ID : OU4-VSL-06R-121224									
P5306-18	OU4-VSL-06R-121224	Water	Vanadium	628	D	0.18	0.63	12.5	ug/L

SAMPLE DATA

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Nobis Group	Date Collected:	12/12/24
Project:	Raymark Superfund Site	Date Received:	12/17/24
Client Sample ID:	OU4-VSL-07-121224	SDG No.:	P5306
Lab Sample ID:	P5306-02	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.
7439-97-6	Mercury	0.16	U	1	0.081	0.16	0.20	ug/L	12/19/24 08:10	12/19/24 13:26	SW7470A	
7440-62-2	Vanadium	624	D	5	0.18	0.63	12.5	ug/L	12/18/24 12:00	12/23/24 13:02	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:	12/12/24
Project:	Raymark Superfund Site	Date Received:	12/17/24
Client Sample ID:	OU4-VSL-08-121224	SDG No.:	P5306
Lab Sample ID:	P5306-04	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.
7439-97-6	Mercury	0.27		1	0.081	0.16	0.20	ug/L	12/19/24 08:10	12/19/24 13:42	SW7470A	
7440-62-2	Vanadium	638	D	5	0.18	0.63	12.5	ug/L	12/18/24 12:00	12/23/24 13:27	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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Fax : 908 789 8922

Report of Analysis

Client:	Nobis Group	Date Collected:	12/12/24
Project:	Raymark Superfund Site	Date Received:	12/17/24
Client Sample ID:	OU4-VSL-09-121224	SDG No.:	P5306
Lab Sample ID:	P5306-06	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.
7439-97-6	Mercury	0.16	U	1	0.081	0.16	0.20	ug/L	12/19/24 08:10	12/19/24 13:45	SW7470A	
7440-62-2	Vanadium	731	D	5	0.18	0.63	12.5	ug/L	12/18/24 12:00	12/23/24 13:30	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:	12/12/24
Project:	Raymark Superfund Site	Date Received:	12/17/24
Client Sample ID:	OU4-VSL-10-121224	SDG No.:	P5306
Lab Sample ID:	P5306-08	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.
7439-97-6	Mercury	0.16	U	1	0.081	0.16	0.20	ug/L	12/19/24 08:10	12/19/24 13:47	SW7470A	
7440-62-2	Vanadium	542	D	5	0.18	0.63	12.5	ug/L	12/18/24 12:00	12/23/24 13:33	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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Fax : 908 789 8922

Report of Analysis

Client:	Nobis Group	Date Collected:	12/12/24
Project:	Raymark Superfund Site	Date Received:	12/17/24
Client Sample ID:	OU4-VSL-11-121224	SDG No.:	P5306
Lab Sample ID:	P5306-10	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.
7439-97-6	Mercury	0.16	U	1	0.081	0.16	0.20	ug/L	12/19/24 08:10	12/19/24 13:49	SW7470A	
7440-62-2	Vanadium	544	D	5	0.18	0.63	12.5	ug/L	12/18/24 12:00	12/23/24 13:36	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:	12/12/24
Project:	Raymark Superfund Site	Date Received:	12/17/24
Client Sample ID:	OU4-VSL-12-121224	SDG No.:	P5306
Lab Sample ID:	P5306-12	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.
7439-97-6	Mercury	0.16	U	1	0.081	0.16	0.20	ug/L	12/19/24 08:10	12/19/24 13:51	SW7470A	
7440-62-2	Vanadium	696	D	5	0.18	0.63	12.5	ug/L	12/18/24 12:00	12/23/24 13:39	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:	12/12/24
Project:	Raymark Superfund Site	Date Received:	12/17/24
Client Sample ID:	OU4-VSL-13-121224	SDG No.:	P5306
Lab Sample ID:	P5306-14	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.
7439-97-6	Mercury	0.16	U	1	0.081	0.16	0.20	ug/L	12/19/24 08:10	12/19/24 13:54	SW7470A	
7440-62-2	Vanadium	676	D	5	0.18	0.63	12.5	ug/L	12/18/24 12:00	12/23/24 13:43	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:	12/12/24
Project:	Raymark Superfund Site	Date Received:	12/17/24
Client Sample ID:	OU4-VSL-14-121224	SDG No.:	P5306
Lab Sample ID:	P5306-16	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.
7439-97-6	Mercury	0.16	U	1	0.081	0.16	0.20	ug/L	12/19/24 08:10	12/19/24 13:56	SW7470A	
7440-62-2	Vanadium	671	D	5	0.18	0.63	12.5	ug/L	12/18/24 12:00	12/23/24 13:46	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:	12/12/24
Project:	Raymark Superfund Site	Date Received:	12/17/24
Client Sample ID:	OU4-VSL-06R-121224	SDG No.:	P5306
Lab Sample ID:	P5306-18	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.
7440-62-2	Vanadium	628	D	5	0.18	0.63	12.5	ug/L	12/18/24 12:00	12/23/24 13:49	SW6020	3010A

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments: SPLP MetalGroup3

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

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

METAL CALIBRATION DATA

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** P5306

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** P5306 **SAS No.:** P5306

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
ICV25	Mercury	3.84	4.0	96	90 - 110	CV	12/19/2024	11:58	LB134010

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** P5306

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** P5306 **SAS No.:** P5306

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
CCV46	Mercury	4.72	5.0	94	90 - 110	CV	12/19/2024	12:03	LB134010
CCV47	Mercury	5.07	5.0	102	90 - 110	CV	12/19/2024	12:58	LB134010
CCV48	Mercury	4.90	5.0	98	90 - 110	CV	12/19/2024	13:36	LB134010
CCV49	Mercury	4.76	5.0	95	90 - 110	CV	12/19/2024	14:00	LB134010
CCV50	Mercury	4.80	5.0	96	90 - 110	CV	12/19/2024	14:28	LB134010

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** P5306

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** P5306 **SAS No.:** P5306

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	Vanadium	101	100	101	90 - 110	P	12/23/2024	12:06	LB134070

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** P5306

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** P5306 **SAS No.:** P5306

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Vanadium	5.31	5.0	106	80 - 120	P	12/23/2024	12:20	LB134070

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** P5306

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** P5306 **SAS No.:** P5306

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	Vanadium	508	500	102	90 - 110	P	12/23/2024	12:35	LB134070
CCV02	Vanadium	516	500	103	90 - 110	P	12/23/2024	13:20	LB134070
CCV03	Vanadium	520	500	104	90 - 110	P	12/23/2024	13:55	LB134070

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Metals

- 2b -
CRDL STANDARD FOR AA & ICP

Client: Nobis Group **SDG No.:** P5306

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** P5306 **SAS No.:** P5306

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRA	Mercury	0.17	0.2	85	40 - 160	CV	12/19/2024	12:07	LB134010
CRI	Vanadium	5.37	5.0	107	70 - 130	P	12/23/2024	12:52	LB134070

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** P5306

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** P5306 **SAS No.:** P5306

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB25	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	12/19/2024	12:00	LB134010

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** P5306

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** P5306 **SAS No.:** P5306

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB46	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	12/19/2024	12:05	LB134010
CCB47	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	12/19/2024	13:01	LB134010
CCB48	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	12/19/2024	13:38	LB134010
CCB49	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	12/19/2024	14:02	LB134010
CCB50	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	12/19/2024	14:30	LB134010

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** P5306

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** P5306 **SAS No.:** P5306

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Vanadium	5.00	+/-5.00	U	0.25	5.00	P	12/23/2024	12:25	LB134070

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** P5306

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** P5306 **SAS No.:** P5306

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Vanadium	5.00	+/-5.00	U	0.25	5.00	P	12/23/2024	12:43	LB134070
CCB02	Vanadium	5.00	+/-5.00	U	0.25	5.00	P	12/23/2024	13:23	LB134070
CCB03	Vanadium	5.00	+/-5.00	U	0.25	5.00	P	12/23/2024	13:58	LB134070

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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** P5306

Instrument: CV1

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB165737BL		**WATER**		**Batch Number:**		**PB165737**		**Prep Date:**	**12/19/2024**	
	Mercury	0.20	<0.20	U	0.16	0.20	CV	12/19/2024	13:17	LB134010

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB165737TB		**WATER**		**Batch Number:**		**PB165737**		**Prep Date:**	**12/19/2024**	
	Mercury	0.20	<0.20	U	0.16	0.20	CV	12/19/2024	14:25	LB134010

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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** P5306

Instrument: P7

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB165834BL		**WATER**		**Batch Number:**		**PB165834**		**Prep Date:**	**12/18/2024**	
	Vanadium	2.50	<2.50	U	0.13	2.50	P	12/23/2024	12:56	LB134070

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB165834TB		**WATER**		**Batch Number:**		**PB165834**		**Prep Date:**	**12/18/2024**	
	Vanadium	2.50	<2.50	U	0.13	2.50	P	12/23/2024	13:52	LB134070

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Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: Nobis Group **SDG No.:** P5306

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** P5306 **SAS No.:** P5306

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

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Vanadium	0.17	0.5	34	-9.5	10.5	12/23/2024	12:29	LB134070
ICSAB01	Vanadium	20.4	19.0	107	9	29	12/23/2024	12:32	LB134070

METAL QC DATA

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metals
- 5a -
MATRIX SPIKE SUMMARY

client: Nobis Group **level:** low **sdg no.:** P5306

contract: NOBI03 **lab code:** CHEM **case no.:** P5306 **sas no.:** P5306

matrix: Water **sample id:** P5306-02 **client id:** OU4-VSL-07-121224MS

Percent Solids for Sample: NA **Spiked ID:** P5306-02MS **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	82 - 119	3.86		0.20	U	4.0	96		CV
Vanadium	ug/L	86 - 115	895	D	624	D	250	109		P

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metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: Nobis Group **level:** low **sdg no.:** P5306

contract: NOBI03 **lab code:** CHEM **case no.:** P5306 **sas no.:** P5306

matrix: Water **sample id:** P5306-02 **client id:** OU4-VSL-07-121224MSD

Percent Solids for Sample: NA **Spiked ID:** P5306-02MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	82 - 119	3.92		0.20	U	4.0	98		CV
Vanadium	ug/L	86 - 115	881	D	624	D	250	103		P

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Metals
- 5b -

Client: Nobis Group **SDG No.:** P5306

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** P5306 **SAS No.:** P5306

Matrix: **Level:** LOW **Client ID:**

Sample ID: **Spiked ID:**

Analyte	Units	Acceptance Limit %R	C	Sample Result	C	Spike Added	% Recovery	Qual	M

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Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Nobis Group **Level:** LOW **SDG No.:** P5306

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** P5306 **SAS No.:** P5306

Matrix: Water **Sample ID:** P5306-02 **Client ID:** OU4-VSL-07-121224DUP

Percent Solids for Sample: NA **Duplicate ID** P5306-02DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L	20	0.20	U	0.20	U			CV
Vanadium	ug/L	20	624	D	622	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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Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Nobis Group **Level:** LOW **SDG No.:** P5306

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** P5306 **SAS No.:** P5306

Matrix: Water **Sample ID:** P5306-02MS **Client ID:** OU4-VSL-07-121224MSD

Percent Solids for Sample: NA **Duplicate ID** P5306-02MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L	20	3.86		3.92		2		CV
Vanadium	ug/L	20	895	D	881	D	2		P

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

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Nobis Group **SDG No.:** P5306

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** P5306 **SAS No.:** P5306

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB165737BS							
Mercury	ug/L	4.0	4.16		104	82 - 119	CV

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Nobis Group **SDG No.:** P5306

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** P5306 **SAS No.:** P5306

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB165834BS							
Vanadium	ug/L	250	249		100	86 - 115	P

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FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: Nobis Group Contract: NOBI03

Lab Code: CHEM Case no.: P5306 Sas No.: P5306 SDG No.: P5306

Instrument ID: P7 Start Date : 12/23/2024

Run Number: LB134070 End Date : 12/23/2024

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	1059	100		100		100		100		100	
S2	S2	1105	101		99		100		100		99	
S3	S3	1109	103		100		101		101		101	
S4	S4	1112	105		99		100		99		101	
S5	S5	1114	107		94		95		94		100	
S6	S6	1117	101		84		87		84		95	
S7	S7	1120	101		85		88		83		97	
S8	S8	1123	98		88		88		80		94	
ICV01	ICV01	1206	106		97		97		98		99	
LLICV01	LLICV01	1220	103		97		97		98		98	
ICB01	ICB01	1225	102		97		97		97		97	
ICSA01	ICSA01	1229	101		91		92		88		99	
ICSAB01	ICSAB01	1232	101		93		97		91		103	
CCV01	CCV01	1235	98		91		93		86		99	
CCB01	CCB01	1243	104		95		96		96		99	
CRI	CRI	1252	105		96		97		97		99	
PB165834BL	PB165834BL	1256	103		95		95		96		97	
PB165834BS	PB165834BS	1259	107		93		95		92		99	
P5306-02	OU4-VSL-07-	1302	98		90		118		88		98	
P5306-02DUP	OU4-VSL-07-	1305	98		93		122	*	91		100	
P5306-02L	OU4-VSL-07-	1308	101		97		105		98		104	
P5306-02MS	OU4-VSL-07-	1311	98		95		122	*	93		101	
P5306-02MSD	OU4-VSL-07-	1314	99		94		121	*	92		101	
P5306-02A	OU4-VSL-07-	1317	98		94		121	*	92		101	
CCV02	CCV02	1320	97		89		92		85		98	
CCB02	CCB02	1323	107		94		96		96		102	
P5306-04	OU4-VSL-08-	1327	101		92		114		91		99	
P5306-06	OU4-VSL-09-	1330	99		91		120		90		100	
P5306-08	OU4-VSL-10-	1333	99		95		123	*	94		103	
P5306-10	OU4-VSL-11-	1336	99		94		123	*	93		102	
P5306-12	OU4-VSL-12-	1339	99		97		117		95		103	
P5306-14	OU4-VSL-13-	1343	98		96		118		95		102	
P5306-16	OU4-VSL-14-	1346	99		97		117		96		103	
P5306-18	OU4-VSL-06R	1349	99		96		124	*	95		103	
PB165834TB	PB165834TB	1352	99		97		100		101		103	
CCV03	CCV03	1355	100		92		95		88		101	

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.: P5306 | Sas No.: P5306 | SDG No.: P5306

Instrument ID: P7 | Start Date : 12/23/2024

Run Number: LB134070 | End Date : 12/23/2024

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
CCB03	CCB03	1358	104		91		95		95		100	

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.: P5306 | Sas No.: P5306 | SDG No.: P5306

Instrument ID: P7 | Start Date : 12/23/2024

Run Number: LB134070 | End Date : 12/23/2024

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	1059	100		100		100		100		100	
S2	S2	1105	101		100		100		102		101	
S3	S3	1109	100		99		99		101		101	
S4	S4	1112	97		97		97		101		102	
S5	S5	1114	85		87		88		96		97	
S6	S6	1117	82		86		85		96		97	
S7	S7	1120	82		86		84		96		97	
S8	S8	1123	88		88		80		95		96	
ICV01	ICV01	1206	95		95		96		99		100	
LLICV01	LLICV01	1220	97		97		97		98		99	
ICB01	ICB01	1225	97		97		97		98		99	
ICSA01	ICSA01	1229	87		90		86		98		100	
ICSAB01	ICSAB01	1232	89		92		89		100		101	
CCV01	CCV01	1235	88		89		84		96		98	
CCB01	CCB01	1243	91		93		95		100		100	
CRI	CRI	1252	94		96		97		100		100	
PB165834BL	PB165834BL	1256	95		96		97		100		100	
PB165834BS	PB165834BS	1259	87		89		88		98		98	
P5306-02	OU4-VSL-07-	1302	88		116		89		98		100	
P5306-02DUP	OU4-VSL-07-	1305	90		119		91		99		101	
P5306-02L	OU4-VSL-07-	1308	95		102		97		102		103	
P5306-02MS	OU4-VSL-07-	1311	89		116		90		99		101	
P5306-02MSD	OU4-VSL-07-	1314	90		115		90		100		100	
P5306-02A	OU4-VSL-07-	1317	90		116		91		100		101	
CCV02	CCV02	1320	87		90		84		97		99	
CCB02	CCB02	1323	89		93		95		100		101	
P5306-04	OU4-VSL-08-	1327	87		109		90		98		100	
P5306-06	OU4-VSL-09-	1330	86		117		89		99		101	
P5306-08	OU4-VSL-10-	1333	92		119		93		101		103	
P5306-10	OU4-VSL-11-	1336	89		116		91		100		102	
P5306-12	OU4-VSL-12-	1339	92		111		92		100		103	
P5306-14	OU4-VSL-13-	1343	91		112		93		101		102	
P5306-16	OU4-VSL-14-	1346	93		112		93		102		102	
P5306-18	OU4-VSL-06R	1349	90		117		91		100		101	
PB165834TB	PB165834TB	1352	94		98		99		101		103	
CCV03	CCV03	1355	87		89		84		97		99	

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.: P5306 | Sas No.: P5306 | SDG No.: P5306

Instrument ID: P7 | Start Date : 12/23/2024

Run Number: LB134070 | End Date : 12/23/2024

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
CCB03	CCB03	1358	89		92		95		100		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.: P5306 Sas No.: P5306 SDG No.: P5306

Instrument ID: P7 Start Date : 12/23/2024

Run Number: LB134070 End Date : 12/23/2024

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	1059	100		100							
S2	S2	1105	100		101							
S3	S3	1109	101		102							
S4	S4	1112	101		103							
S5	S5	1114	100		103							
S6	S6	1117	96		98							
S7	S7	1120	98		99							
S8	S8	1123	95		88							
ICV01	ICV01	1206	99		102							
LLICV01	LLICV01	1220	97		100							
ICB01	ICB01	1225	97		101							
ICSA01	ICSA01	1229	98		98							
ICSAB01	ICSAB01	1232	103		100							
CCV01	CCV01	1235	100		96							
CCB01	CCB01	1243	99		105							
CRI	CRI	1252	98		104							
PB165834BL	PB165834BL	1256	98		103							
PB165834BS	PB165834BS	1259	100		103							
P5306-02	OU4-VSL-07-1	1302	99		100							
P5306-02DUP	OU4-VSL-07-1	1305	100		100							
P5306-02L	OU4-VSL-07-1	1308	104		106							
P5306-02MS	OU4-VSL-07-1	1311	102		101							
P5306-02MSD	OU4-VSL-07-1	1314	102		102							
P5306-02A	OU4-VSL-07-1	1317	102		103							
CCV02	CCV02	1320	99		98							
CCB02	CCB02	1323	101		108							
P5306-04	OU4-VSL-08-1	1327	101		102							
P5306-06	OU4-VSL-09-1	1330	101		102							
P5306-08	OU4-VSL-10-1	1333	103		103							
P5306-10	OU4-VSL-11-1	1336	103		103							
P5306-12	OU4-VSL-12-1	1339	103		103							
P5306-14	OU4-VSL-13-1	1343	103		103							
P5306-16	OU4-VSL-14-1	1346	103		103							
P5306-18	OU4-VSL-06R-	1349	104		104							

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.: P5306 Sas No.: P5306 SDG No.: P5306

Instrument ID: P7 Start Date : 12/23/2024

Run Number: LB134070 End Date : 12/23/2024

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 165Ho	Q	Element 209Bi	Q	Element	Q	Element	Q	Element	Q
PB165834TB	PB165834TB	1352	103		107							
CCV03	CCV03	1355	102		100							
CCB03	CCB03	1358	100		107							

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.: P5306 | Sas No.: P5306 | SDG No.: P5306

Instrument ID: P7 | Start Date : 12/23/2024

Run Number: LB134070 | End Date : 12/23/2024

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
S0	S0	1059	100									
S2	S2	1105	101									
S3	S3	1109	101									
S4	S4	1112	101									
S5	S5	1114	98									
S6	S6	1117	98									
S7	S7	1120	95									
S8	S8	1123	86									
ICV01	ICV01	1206	102									
LLICV01	LLICV01	1220	101									
ICB01	ICB01	1225	101									
ICSA01	ICSA01	1229	97									
ICSAB01	ICSAB01	1232	99									
CCV01	CCV01	1235	92									
CCB01	CCB01	1243	103									
CRI	CRI	1252	104									
PB165834BL	PB165834BL	1256	105									
PB165834BS	PB165834BS	1259	100									
P5306-02	OU4-VSL-07-1	1302	99									
P5306-02DUP	OU4-VSL-07-1	1305	100									
P5306-02L	OU4-VSL-07-1	1308	105									
P5306-02MS	OU4-VSL-07-1	1311	100									
P5306-02MSD	OU4-VSL-07-1	1314	99									
P5306-02A	OU4-VSL-07-1	1317	100									
CCV02	CCV02	1320	95									
CCB02	CCB02	1323	106									
P5306-04	OU4-VSL-08-1	1327	101									
P5306-06	OU4-VSL-09-1	1330	99									
P5306-08	OU4-VSL-10-1	1333	103									
P5306-10	OU4-VSL-11-1	1336	101									
P5306-12	OU4-VSL-12-1	1339	101									
P5306-14	OU4-VSL-13-1	1343	102									
P5306-16	OU4-VSL-14-1	1346	101									
P5306-18	OU4-VSL-06R-	1349	102									

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.: P5306 Sas No.: P5306 SDG No.: P5306

Instrument ID: P7 Start Date : 12/23/2024

Run Number: LB134070 End Date : 12/23/2024

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
PB165834TB	PB165834TB	1352	106									
CCV03	CCV03	1355	95									
CCB03	CCB03	1358	107									

Internal Standard %RI Limit: 30 -120

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Metals

-9 -

ICP SERIAL DILUTIONS

SAMPLE NO.

OU4-VSL-07-121224L

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

Lab Code: CHEM **Lb No.:** lb134010 **Lab Sample ID :** P5306-02L **SDG No.:** P5306

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
Mercury	0.20	U	1.00	U			CV
Vanadium	624	D	630	D	1		P

METAL PREPARATION & INSTRUMENT DATA

METAL PREPARATION & ANALYICAL SUMMARY

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Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Nobis Group **SDG No.:** P5306

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

Case No.: P5306 **SAS No.:** P5306

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB165737**						
P5306-02	OU4-VSL-07-121224	SAM	WATER	12/19/2024	30.0	30.0	
P5306-02DUP	OU4-VSL-07-121224DUP	DUP	WATER	12/19/2024	30.0	30.0	
P5306-02MS	OU4-VSL-07-121224MS	MS	WATER	12/19/2024	30.0	30.0	
P5306-02MSD	OU4-VSL-07-121224MSD	MSD	WATER	12/19/2024	30.0	30.0	
P5306-04	OU4-VSL-08-121224	SAM	WATER	12/19/2024	30.0	30.0	
P5306-06	OU4-VSL-09-121224	SAM	WATER	12/19/2024	30.0	30.0	
P5306-08	OU4-VSL-10-121224	SAM	WATER	12/19/2024	30.0	30.0	
P5306-10	OU4-VSL-11-121224	SAM	WATER	12/19/2024	30.0	30.0	
P5306-12	OU4-VSL-12-121224	SAM	WATER	12/19/2024	30.0	30.0	
P5306-14	OU4-VSL-13-121224	SAM	WATER	12/19/2024	30.0	30.0	
P5306-16	OU4-VSL-14-121224	SAM	WATER	12/19/2024	30.0	30.0	
PB165737BL	PB165737BL	MB	WATER	12/19/2024	30.0	30.0	
PB165737BS	PB165737BS	LCS	WATER	12/19/2024	30.0	30.0	
PB165737TB	PB165737TB	MB	WATER	12/19/2024	30.0	30.0	

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Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Nobis Group **SDG No.:** P5306

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

Case No.: P5306 **SAS No.:** P5306

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB165834**						
P5306-02	OU4-VSL-07-121224	SAM	WATER	12/18/2024	50.0	25.0	
P5306-02DUP	OU4-VSL-07-121224DUP	DUP	WATER	12/18/2024	50.0	25.0	
P5306-02MS	OU4-VSL-07-121224MS	MS	WATER	12/18/2024	50.0	25.0	
P5306-02MSD	OU4-VSL-07-121224MSD	MSD	WATER	12/18/2024	50.0	25.0	
P5306-04	OU4-VSL-08-121224	SAM	WATER	12/18/2024	50.0	25.0	
P5306-06	OU4-VSL-09-121224	SAM	WATER	12/18/2024	50.0	25.0	
P5306-08	OU4-VSL-10-121224	SAM	WATER	12/18/2024	50.0	25.0	
P5306-10	OU4-VSL-11-121224	SAM	WATER	12/18/2024	50.0	25.0	
P5306-12	OU4-VSL-12-121224	SAM	WATER	12/18/2024	50.0	25.0	
P5306-14	OU4-VSL-13-121224	SAM	WATER	12/18/2024	50.0	25.0	
P5306-16	OU4-VSL-14-121224	SAM	WATER	12/18/2024	50.0	25.0	
P5306-18	OU4-VSL-06R-121224	SAM	WATER	12/18/2024	50.0	25.0	
PB165834BL	PB165834BL	MB	WATER	12/18/2024	50.0	25.0	
PB165834BS	PB165834BS	LCS	WATER	12/18/2024	50.0	25.0	
PB165834TB	PB165834TB	MB	WATER	12/18/2024	50.0	25.0	

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metals
- 14 -
ANALYSIS RUN LOG

Client: Nobis Group **Contract:** NOBI03

Lab code: CHEM **Case no.:** P5306 **Sas no.:** P5306 **Sdg no.:** P5306

Instrument id number: **Method:** **Run number:** LB134010

Start date: 12/19/2024 **End date:** 12/19/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1139	HG
S0.2	S0.2	1	1142	HG
S2.5	S2.5	1	1144	HG
S5	S5	1	1148	HG
S7.5	S7.5	1	1150	HG
S10	S10	1	1155	HG
ICV25	ICV25	1	1158	HG
ICB25	ICB25	1	1200	HG
CCV46	CCV46	1	1203	HG
CCB46	CCB46	1	1205	HG
CRA	CRA	1	1207	HG
CCV47	CCV47	1	1258	HG
CCB47	CCB47	1	1301	HG
PB165737BL	PB165737BL	1	1317	HG
PB165737BS	PB165737BS	1	1319	HG
P5306-02	OU4-VSL-07-121224	1	1326	HG
P5306-02DUP	OU4-VSL-07-121224DUP	1	1328	HG
P5306-02MS	OU4-VSL-07-121224MS	1	1333	HG
CCV48	CCV48	1	1336	HG
CCB48	CCB48	1	1338	HG
P5306-02MSD	OU4-VSL-07-121224MSD	1	1340	HG
P5306-04	OU4-VSL-08-121224	1	1342	HG
P5306-06	OU4-VSL-09-121224	1	1345	HG
P5306-08	OU4-VSL-10-121224	1	1347	HG
P5306-10	OU4-VSL-11-121224	1	1349	HG
P5306-12	OU4-VSL-12-121224	1	1351	HG
P5306-14	OU4-VSL-13-121224	1	1354	HG
P5306-16	OU4-VSL-14-121224	1	1356	HG
CCV49	CCV49	1	1400	HG
CCB49	CCB49	1	1402	HG
P5306-02L	OU4-VSL-07-121224L	5	1414	HG
PB165737TB	PB165737TB	1	1425	HG
CCV50	CCV50	1	1428	HG
CCB50	CCB50	1	1430	HG

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metals
- 14 -
ANALYSIS RUN LOG

Client: Nobis Group **Contract:** NOBI03

Lab code: CHEM **Case no.:** P5306 **Sas no.:** P5306 **Sdg no.:** P5306

Instrument id number: **Method:** **Run number:** LB134070

Start date: 12/23/2024 **End date:** 12/23/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1059	V
S2	S2	1	1105	V
S3	S3	1	1109	V
S4	S4	1	1112	V
S5	S5	1	1114	V
S6	S6	1	1117	V
S7	S7	1	1120	V
S8	S8	1	1123	,
ICV01	ICV01	1	1206	V
LLICV01	LLICV01	1	1220	V
ICB01	ICB01	1	1225	V
ICSA01	ICSA01	1	1229	V
ICSAB01	ICSAB01	1	1232	V
CCV01	CCV01	1	1235	V
CCB01	CCB01	1	1243	V
CRI	CRI	1	1252	V
PB165834BL	PB165834BL	1	1256	V
PB165834BS	PB165834BS	1	1259	V
P5306-02	OU4-VSL-07-121224	5	1302	V
P5306-02DUP	OU4-VSL-07-121224DUP	5	1305	V
P5306-02L	OU4-VSL-07-121224L	25	1308	V
P5306-02MS	OU4-VSL-07-121224MS	5	1311	V
P5306-02MSD	OU4-VSL-07-121224MSD	5	1314	V
CCV02	CCV02	1	1320	V
CCB02	CCB02	1	1323	V
P5306-04	OU4-VSL-08-121224	5	1327	V
P5306-06	OU4-VSL-09-121224	5	1330	V
P5306-08	OU4-VSL-10-121224	5	1333	V
P5306-10	OU4-VSL-11-121224	5	1336	V
P5306-12	OU4-VSL-12-121224	5	1339	V
P5306-14	OU4-VSL-13-121224	5	1343	V
P5306-16	OU4-VSL-14-121224	5	1346	V
P5306-18	OU4-VSL-06R-121224	5	1349	V
PB165834TB	PB165834TB	1	1352	V
CCV03	CCV03	1	1355	V
CCB03	CCB03	1	1358	V

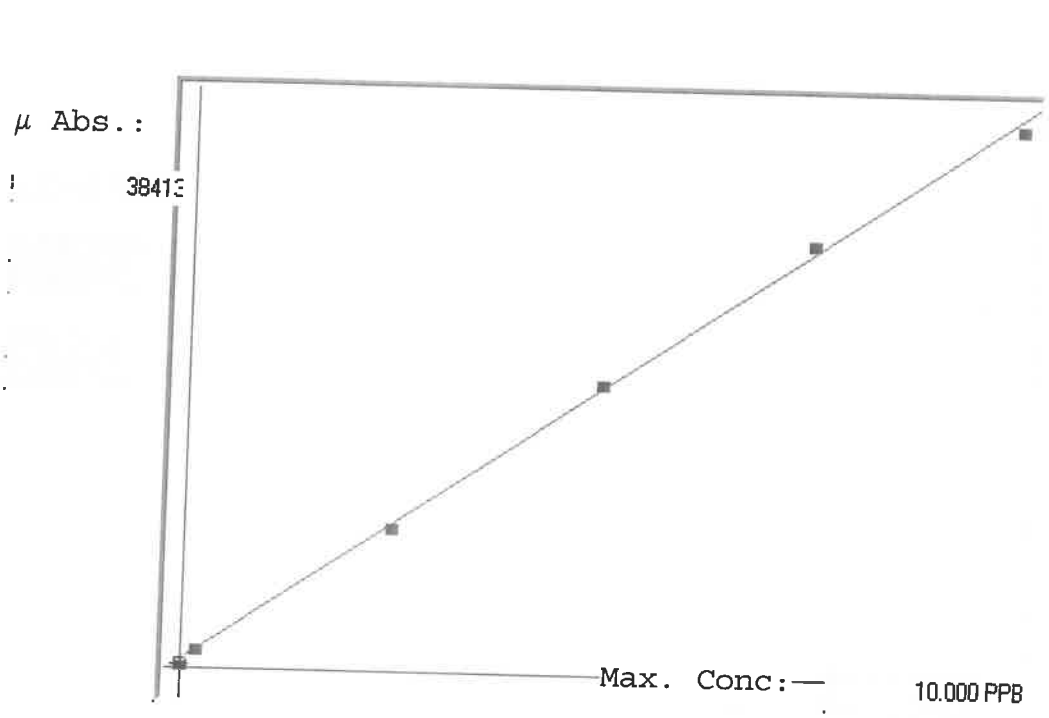
METAL
RAW DATA

Reviewed By:mohan
On:12/20/2024 9:50:24 PM
Inst Id :CV1
LB :LB134010

LB134010

7470A

INSTRUMENT ID : CV1



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	% D
0.0	0.000	-0.067	-0.067	340	0.000	340	0				8
0.2	0.200	0.216	0.016	1432	0.0 %	1432					-2
2.5	2.500	2.442	-0.058	10011	0.0 %	10011					2
5.0	5.000	5.119	0.119	20326	0.0 %	20326					2
7.5	7.500	7.678	0.178	30190	0.0 %	30190					-2
10.0	10.000	9.812	-0.188	38413	0.0 %	38413					

Reviewed By:mohan
On:12/20/2024 9:50:24 PM
Inst Id :CV1
LB :LB134010

LB134010 INSTRUMENT ID : CV1

Method: 7470A Operator: Admin Date of Analysis: 19 Dec 2024 11:21:21

Sample ID	Extended ID	µ Abs.	Conc.	Stnd Conc	Method	Units	Date	Type	Type
0.0 - 1	S1	340	-	0.00000	7470A	PPB	19 Dec 2024 11:39:55	S	Std
0.2 - 1	S2-2	1432	-	0.20000	7470A	PPB	19 Dec 2024 11:42:12	S	Std
2.5 - 1	S2-5	10011	-	2.50000	7470A	PPB	19 Dec 2024 11:44:28	S	Std
5.0 - 1	S5	20326	-	5.00000	7470A	PPB	19 Dec 2024 11:48:24	S	Std
7.5 - 1	S7-5	30190	-	7.50000	7470A	PPB	19 Dec 2024 11:50:41	S	Std
10.0 - 1	S10	38413	-	10.00000	7470A	PPB	19 Dec 2024 11:55:41	S	Std
ICV25 - 1	ICV25	15408	3.8426		-7470A	PPB	19 Dec 2024 11:58:34	U	SMPL
ICB25 - 1	ICB25	237	-0.0941		-7470A	PPB	19 Dec 2024 12:00:49	U	SMPL
CCV46 - 1	CCV46	18775	4.7163		-7470A	PPB	19 Dec 2024 12:03:05	U	SMPL
CCB46 - 1	CCB46	236	-0.0943		-7470A	PPB	19 Dec 2024 12:05:19	U	SMPL
CRA - 1	CRA	1255	0.1701		-7470A	PPB	19 Dec 2024 12:07:36	U	SMPL
HighStd - 1	HighStd	36442	9.3006		-7470A	PPB	19 Dec 2024 12:18:47	U	SMPL
ChkStd - 1	ChkStd	29010	7.3721		-7470A	PPB	19 Dec 2024 12:26:51	U	SMPL
PB165735BL - 1	PBW	448	-0.0393		-7470A	PPB	19 Dec 2024 12:31:48	U	SMPL
PB165735BS - 1	LCSW	16175	4.0416		-7470A	PPB	19 Dec 2024 12:39:18	U	SMPL
P5279-02 - 1	ROCKAWAY-PARK	-116	-0.1857		-7470A	PPB	19 Dec 2024 12:41:33	U	SMPL
P5279-02DUP - 1	ROCKAWAY-PARKDUP	33	-0.1470		-7470A	PPB	19 Dec 2024 12:43:51	U	SMPL
P5279-02MS - 1	ROCKAWAY-PARKMS	11983	2.9539		-7470A	PPB	19 Dec 2024 12:46:08	U	SMPL
P5279-02MSD - 1	ROCKAWAY-PARKMSD	10606	2.5965		-7470A	PPB	19 Dec 2024 12:48:25	U	SMPL
PB165736BL - 1	PBW	504	-0.0248		-7470A	PPB	19 Dec 2024 12:53:43	U	SMPL
CCV47 - 1	CCV47	20150	5.0731		-7470A	PPB	19 Dec 2024 12:58:51	U	SMPL
CCB47 - 1	CCB47	433	-0.0432		-7470A	PPB	19 Dec 2024 13:01:06	U	SMPL
PB165736BS - 1	LCSW	16766	4.1950		-7470A	PPB	19 Dec 2024 13:05:54	U	SMPL
P5291-13 - 1	WC-20241213	-108	-0.1836		-7470A	PPB	19 Dec 2024 13:08:09	U	SMPL
P5291-13DUP - 1	WC-20241213DUP	-122	-0.1872		-7470A	PPB	19 Dec 2024 13:10:26	U	SMPL
P5291-13MS - 1	WC-20241213MS	12104	2.9853		-7470A	PPB	19 Dec 2024 13:12:42	U	SMPL
P5291-13MSD - 1	WC-20241213MSD	11414	2.8062		-7470A	PPB	19 Dec 2024 13:14:57	U	SMPL
PB165737BL - 1	PBW	457	-0.0370		-7470A	PPB	19 Dec 2024 13:17:14	U	SMPL
PB165737BS - 1	LCSW	16622	4.1576		-7470A	PPB	19 Dec 2024 13:19:32	U	SMPL
P5306-02 - 1	OU4-VSL-07-121224	651	0.0134		-7470A	PPB	19 Dec 2024 13:26:41	U	SMPL
P5306-02DUP - 1	OU4-VSL-07-121224DUP	478	-0.0315		-7470A	PPB	19 Dec 2024 13:28:57	U	SMPL
P5306-02MS - 1	OU4-VSL-07-121224MS	15461	3.8564		-7470A	PPB	19 Dec 2024 13:33:48	U	SMPL
CCV48 - 1	CCV48	19486	4.9008		-7470A	PPB	19 Dec 2024 13:36:03	U	SMPL
CCB48 - 1	CCB48	464	-0.0352		-7470A	PPB	19 Dec 2024 13:38:20	U	SMPL
P5306-02MSD - 1	OU4-VSL-07-121224MSD	15725	3.9249		-7470A	PPB	19 Dec 2024 13:40:36	U	SMPL
P5306-04 - 1	OU4-VSL-08-121224	1621	0.2651		-7470A	PPB	19 Dec 2024 13:42:52	U	SMPL
P5306-06 - 1	OU4-VSL-09-121224	592	-0.0019		-7470A	PPB	19 Dec 2024 13:45:08	U	SMPL
P5306-08 - 1	OU4-VSL-10-121224	436	-0.0424		-7470A	PPB	19 Dec 2024 13:47:24	U	SMPL
P5306-10 - 1	OU4-VSL-11-121224	397	-0.0525		-7470A	PPB	19 Dec 2024 13:49:40	U	SMPL
P5306-12 - 1	OU4-VSL-12-121224	264	-0.0871		-7470A	PPB	19 Dec 2024 13:51:57	U	SMPL
P5306-14 - 1	OU4-VSL-13-121224	209	-0.1013		-7470A	PPB	19 Dec 2024 13:54:13	U	SMPL
P5306-16 - 1	OU4-VSL-14-121224	478	-0.0315		-7470A	PPB	19 Dec 2024 13:56:30	U	SMPL
CCV49 - 1	CCV49	18957	4.7635		-7470A	PPB	19 Dec 2024 14:00:30	U	SMPL
CCB49 - 1	CCB49	554	-0.0118		-7470A	PPB	19 Dec 2024 14:02:45	U	SMPL
P5279-02LX5 - 1		2	-0.1550		-7470A	PPB	19 Dec 2024 14:05:02	U	SMPL
P5279-02A - 1		16615	4.1558		-7470A	PPB	19 Dec 2024 14:07:17	U	SMPL
P5291-13LX5 - 1		-73	-0.1745		-7470A	PPB	19 Dec 2024 14:09:33	U	SMPL
P5291-13A - 1		16596	4.1509		-7470A	PPB	19 Dec 2024 14:11:49	U	SMPL
P5306-02LX5 - 1		177	-0.1096		-7470A	PPB	19 Dec 2024 14:14:05	U	SMPL
P5306-02A - 1		16372	4.0927		-7470A	PPB	19 Dec 2024 14:16:22	U	SMPL
PB165679TB - 1	PB165679TB	646	0.0121		-7470A	PPB	19 Dec 2024 14:21:15	U	SMPL
PB165680TB - 1	PB165680TB	622	0.0058		-7470A	PPB	19 Dec 2024 14:23:31	U	SMPL
PB165599TB - 1	PB165599TB	606	0.0017		-7470A	PPB	19 Dec 2024 14:25:47	U	SMPL
CCV50 - 1	CCV50	19113	4.8040		-7470A	PPB	19 Dec 2024 14:28:04	U	SMPL
CCB50 - 1	CCB50	474	-0.0326		-7470A	PPB	19 Dec 2024 14:30:21	U	SMPL

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

Batch Folder: D:\Agilent\ICPMH\1\DATA\P7122324MS.b\
Analysis File: P7122324MS.batch.bin
DA Date-Time: 2024-12-23 17:01:15
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2024-12-23 10:59:16
2	006CALS.d	S02	2024-12-23 11:05:51
3	007CALS.d	S03	2024-12-23 11:09:06
4	008CALS.d	S04	2024-12-23 11:12:08
5	009CALS.d	S05	2024-12-23 11:14:58
6	010CALS.d	S06	2024-12-23 11:17:46
7	011CALS.d	S07	2024-12-23 11:20:30
8	012CALS.d	S08	2024-12-23 11:23:17

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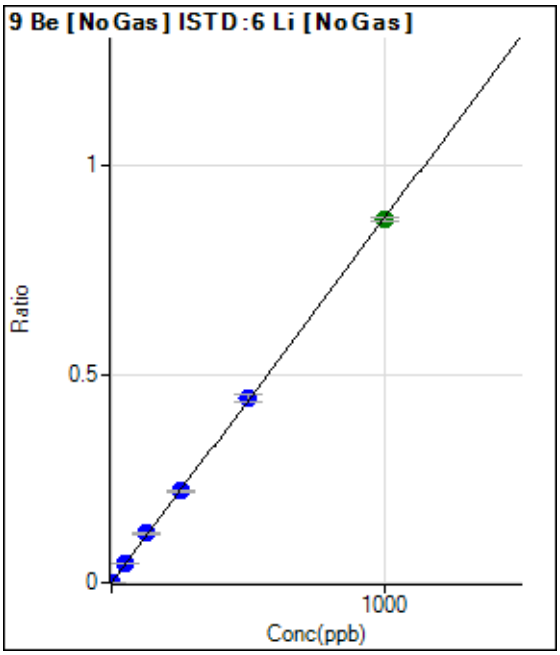
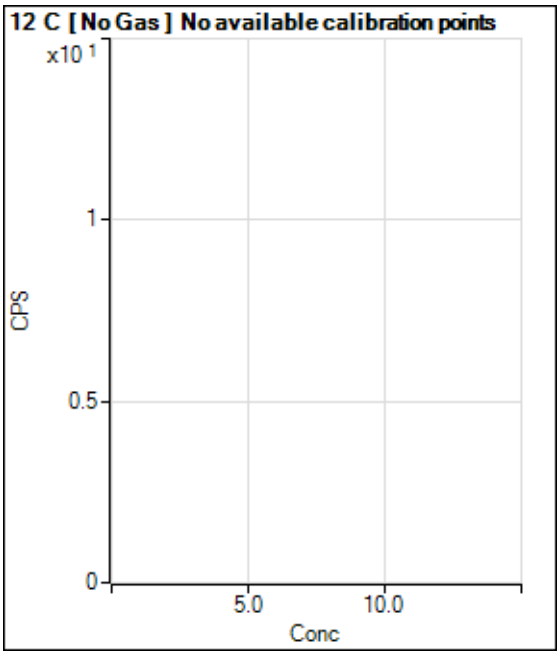


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	56.67	0.0000	P	11.8
2	☐	1.000	1.175	1823.46	0.0011	P	6.6
3	☐	50.000	54.527	83405.72	0.0477	P	1.3
4	☐	125.000	135.026	209945.46	0.1182	P	2.2
5	☐	250.000	251.410	399224.25	0.2200	P	1.6
6	☐	500.000	506.043	759413.90	0.4428	P	3.3
7	☐	1000.000	995.146	1486101.64	0.8707	A	0.9
8	☐			530.01	0.0003	P	7.2

y = 8.7489E-004 * x + 3.3492E-005
R = 0.9999
DL = 0.01351
BEC = 0.03828

Weight: <None>
Min Conc: 0



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
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2	☐						
3	☐						
4	☐						
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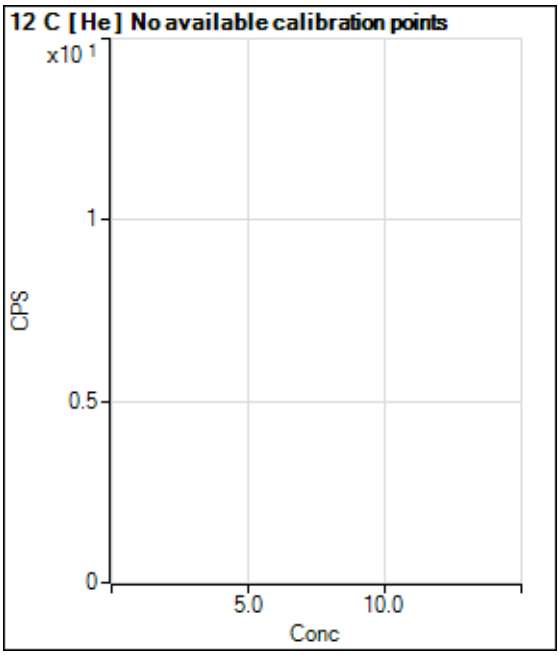
LB :LB134070



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2	☐						
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6	☐						
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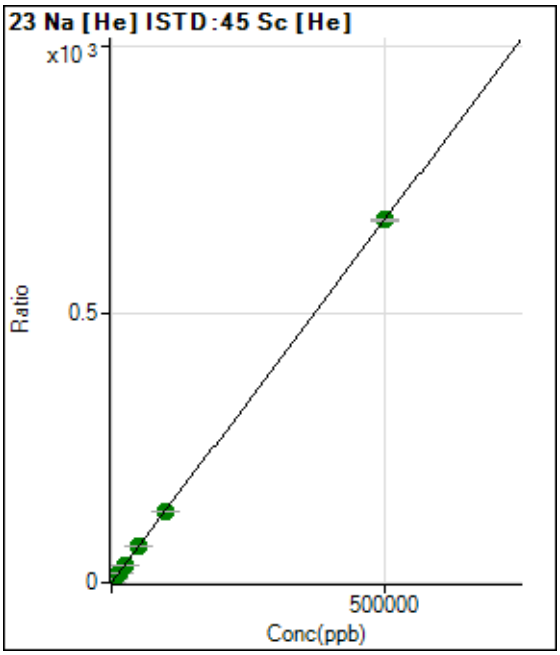

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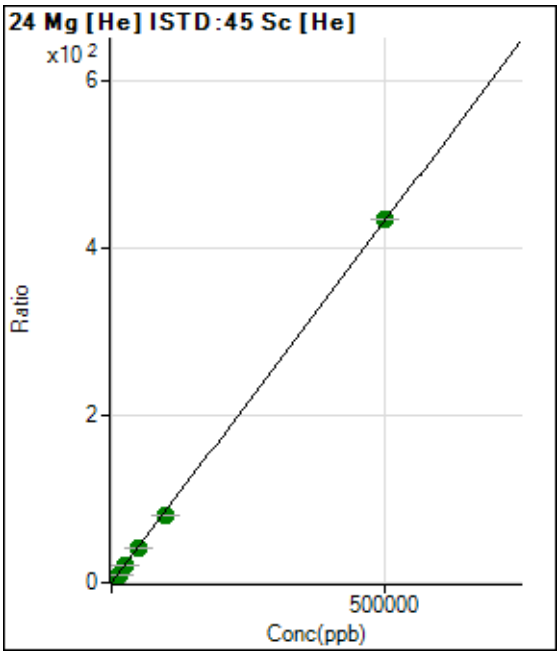
1	☐	0.000	0.000	22209.44	0.0375	P	1.7
2	☐	500.000	509.986	434280.33	0.7258	P	0.3
3	☐	5000.000	4936.720	3985543.38	6.7000	A	1.2
4	☐	12500.000	12559.490	9771609.85	16.9876	A	0.4
5	☐	25000.000	24690.286	16732555.31	33.3592	A	1.0
6	☐	50000.000	49576.905	32400303.68	66.9458	A	0.5
7	☐	100000.00	98623.807	64898651.81	133.1388	A	0.2
8	☐	500000.00	500332.16	350546243.67	675.2788	A	0.8

y = 0.0013 * x + 0.0375
R = 1.0000
DL = 1.398
BEC = 27.78

Weight: <None>
Min Conc: 0

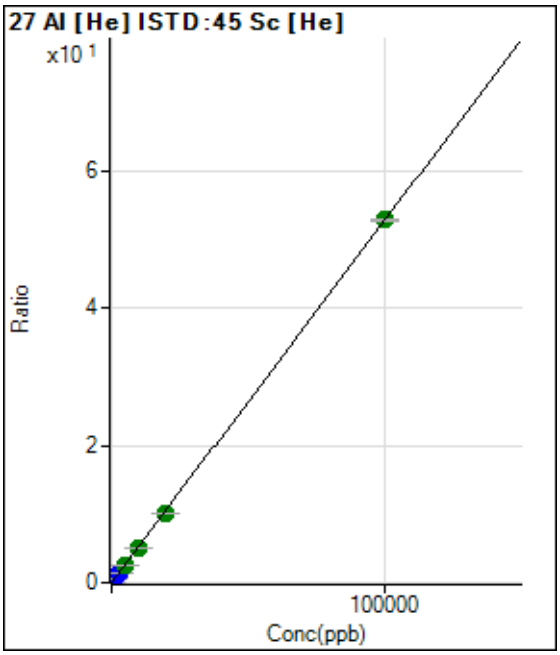
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	582.24	0.0010	P	5.9
2	☐	500.000	522.237	271108.56	0.4531	P	0.1
3	☐	5000.000	4700.869	2421363.60	4.0704	A	0.4
4	☐	12500.000	11775.989	5864395.05	10.1952	A	0.6
5	☐	25000.000	23316.065	10125072.49	20.1852	A	0.4
6	☐	50000.000	46762.604	19592580.82	40.4823	A	0.4
7	☐	100000.00	92700.541	39117677.47	80.2498	A	0.4
8	☐	500000.00	501888.89	225542414.42	434.4750	A	0.1

y = 8.6568E-004 * x + 9.8288E-004
R = 0.9999
DL = 0.2012
BEC = 1.135

Weight: <None>
Min Conc: 0

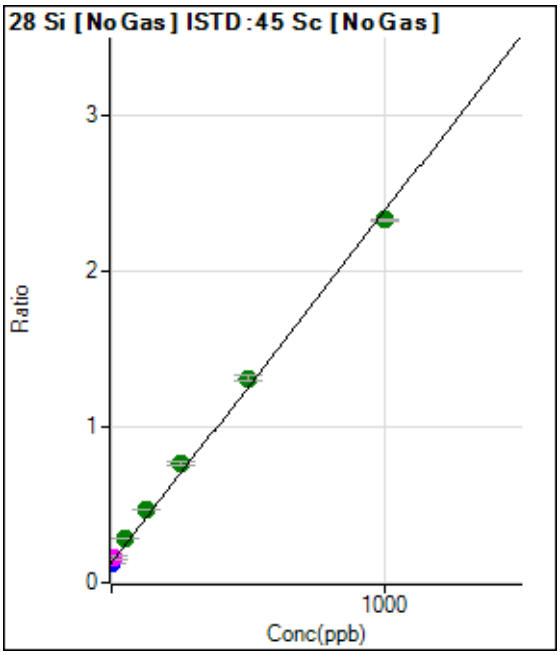


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	151.12	0.0003	P	13.4
2	☐	20.000	19.892	6434.73	0.0108	P	2.6
3	☐	1000.000	971.777	305255.07	0.5132	P	0.8
4	☐	2500.000	2457.738	746262.79	1.2974	P	1.2
5	☐	5000.000	4804.346	1272026.55	2.5360	A	0.9
6	☐	10000.000	9691.032	2475598.02	5.1152	A	0.7
7	☐	20000.000	19212.774	4943020.69	10.1407	A	1.0
8	☐	100000.00	100199.46	27453679.31	52.8853	A	0.6

y = 5.2780E-004 * x + 2.5514E-004
R = 1.0000
DL = 0.1943
BEC = 0.4834

Weight: <None>
Min Conc: 0

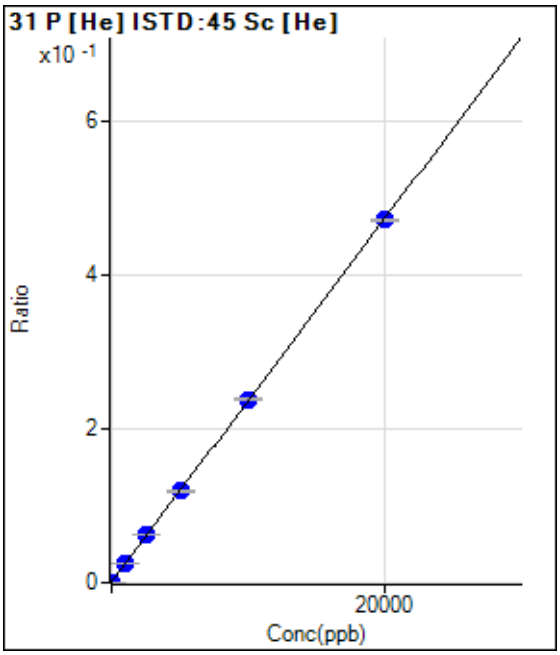
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	850085.00	0.1280	P	0.8
2	☐	10.000	14.916	1063374.44	0.1616	M	15.2
3	☐	50.000	71.146	1922438.81	0.2882	A	0.9
4	☐	125.000	151.579	3097499.08	0.4694	A	0.4
5	☐	250.000	280.694	4760621.56	0.7602	A	3.3
6	☐	500.000	525.120	7304793.78	1.3108	A	2.7
7	☐	1000.000	975.338	13142040.91	2.3249	A	0.5
8	☐			754768.23	0.1293	P	4.4

y = 0.0023 * x + 0.1280
R = 0.9989
DL = 1.316
BEC = 56.82

Weight: <None>
Min Conc: 0



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-15.688	177.78	0.0003	P	9.1
2	☐	0.000	15.688	623.35	0.0010	P	11.3
3	☐	1000.000	1031.310	14901.80	0.0251	P	1.2
4	☐	2500.000	2622.293	36043.40	0.0627	P	0.4
5	☐	5000.000	5009.190	59732.46	0.1191	P	0.9
6	☐	10000.000	10056.228	115377.06	0.2384	P	0.7
7	☐	20000.000	19952.736	230239.19	0.4723	P	0.7
8	☐			252.22	0.0005	P	15.7

y = 2.3639E-005 * x + 6.7098E-004
R = 1.0000
DL = 9.185
BEC = 28.38

Weight: <None>
Min Conc: 0

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
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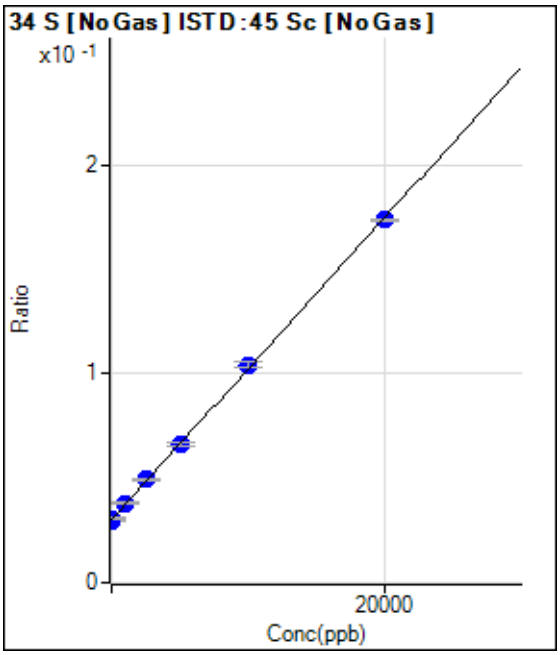
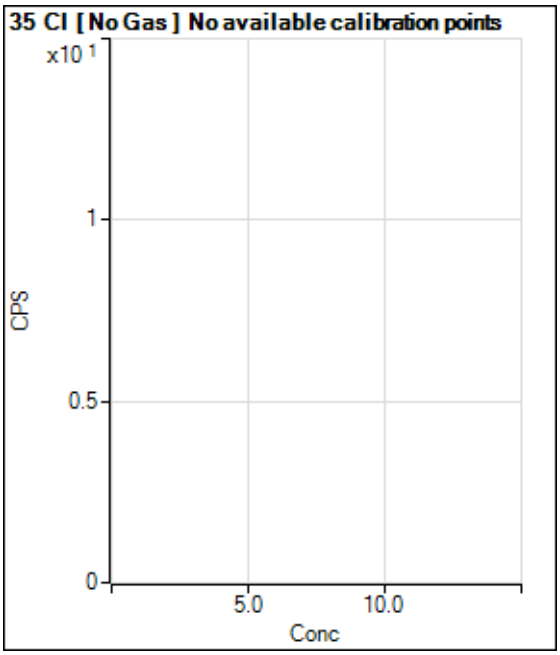


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-77.910	196606.49	0.0296	P	0.6
2	☐	0.000	77.910	202372.66	0.0307	P	2.5
3	☐	1000.000	1090.931	253700.38	0.0380	P	0.9
4	☐	2500.000	2643.072	324925.97	0.0492	P	0.4
5	☐	5000.000	4971.865	413639.16	0.0661	P	2.9
6	☐	10000.000	10257.775	580680.73	0.1042	P	3.2
7	☐	20000.000	19855.716	980722.64	0.1735	P	0.2
8	☐			157410.28	0.0270	P	5.2

y = 7.2186E-006 * x + 0.0302
R = 0.9998
DL = 196.2
BEC = 4178

Weight: <None>
Min Conc: 0



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2	☐						
3	☐						
4	☐						
5	☐						
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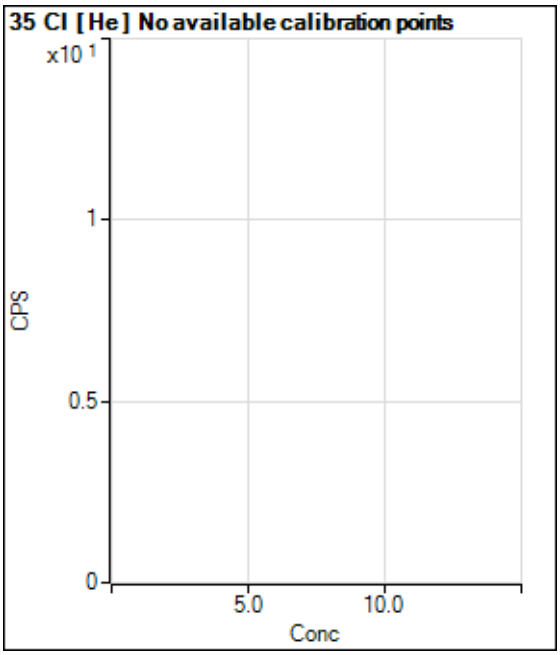

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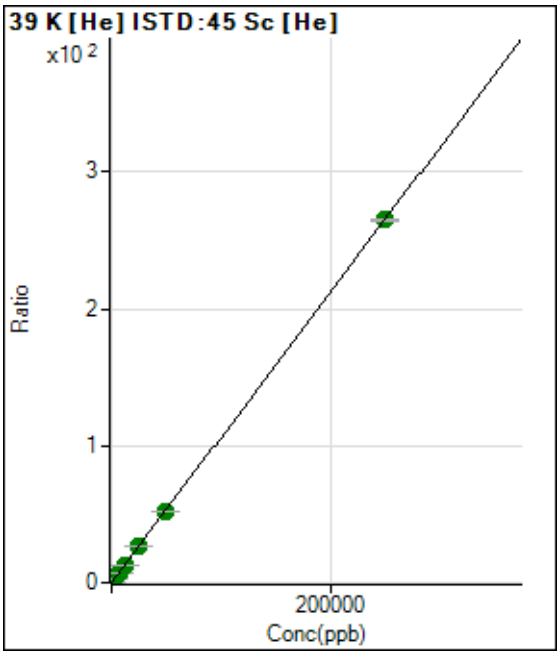

	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	51499.00	0.0870	P	0.7
2	☐	500.000	550.087	400419.98	0.6692	P	0.1
3	☐	2500.000	2518.457	1637320.50	2.7525	A	2.0
4	☐	6250.000	6304.056	3887990.74	6.7593	A	0.7
5	☐	12500.000	12150.258	6494166.85	12.9470	A	0.8
6	☐	25000.000	24577.965	12632125.64	26.1007	A	0.4
7	☐	50000.000	48986.099	25315818.79	51.9346	A	0.6
8	☐	250000.00	250260.83	137548343.51	264.9669	A	0.3

y = 0.0011 * x + 0.0870
R = 1.0000
DL = 1.604
BEC = 82.15

Weight: <None>
Min Conc: 0

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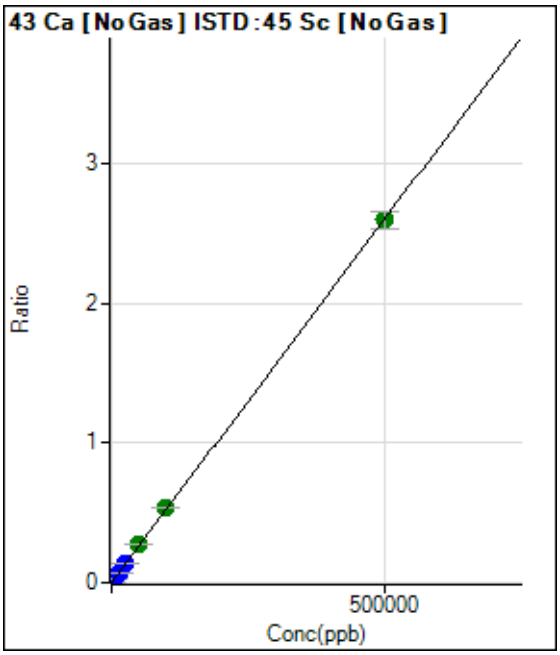

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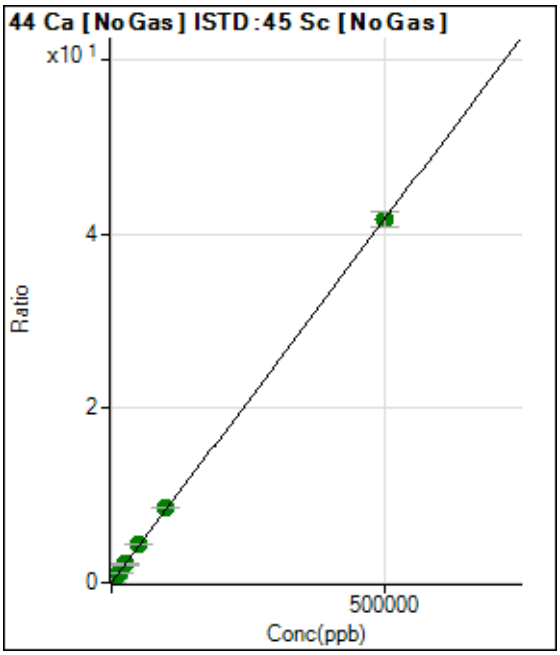
2	☐	500.000	587.545	20450.52	0.0031	P	2.1
3	☐	5000.000	5443.947	189259.65	0.0284	P	0.2
4	☐	12500.000	13678.357	469954.87	0.0712	P	1.3
5	☐	25000.000	26526.710	864768.21	0.1381	P	2.4
6	☐	50000.000	52825.661	1532080.20	0.2749	A	2.8
7	☐	100000.00	102459.83	3014058.12	0.5332	A	0.6
8	☐	500000.00	499115.14	15152756.58	2.5972	A	5.0

y = 5.2034E-006 * x + 4.7351E-005
R = 1.0000
DL = 3.58
BEC = 9.1

Weight: <None>
Min Conc: 0

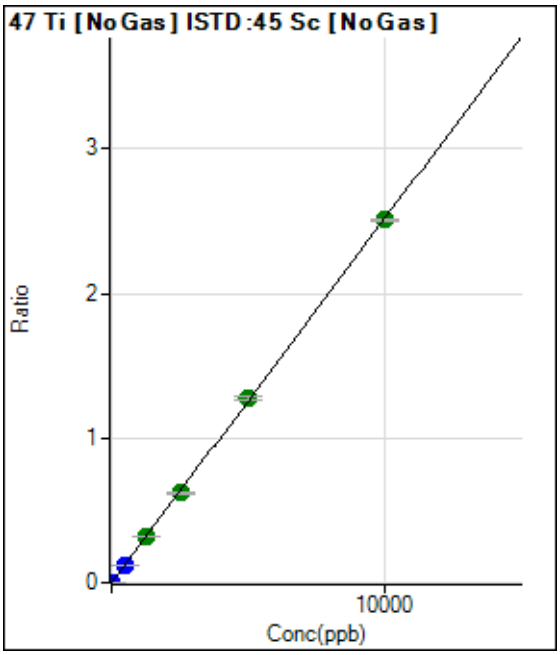


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11684.60	0.0018	P	0.7
2	☐	500.000	586.291	333470.32	0.0506	P	1.2
3	☐	5000.000	5125.377	2860913.29	0.4289	A	0.8
4	☐	12500.000	12950.889	7134322.25	1.0811	A	0.1
5	☐	25000.000	25223.599	13178846.05	2.1040	A	1.9
6	☐	50000.000	52529.936	24407824.36	4.3798	A	2.7
7	☐	100000.00	102348.60	48229505.39	8.5319	A	0.5
8	☐	500000.00	499253.49	242823911.94	41.6114	A	4.4

y = 8.3344E-005 * x + 0.0018
R = 1.0000
DL = 0.4546
BEC = 21.11

Weight: <None>
Min Conc: 0

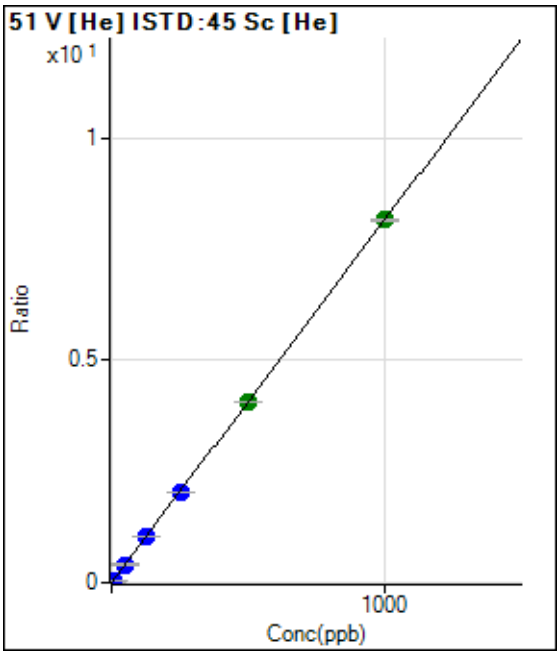
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	100.00	0.0000	P	11.6
2	☐	5.000	5.388	9024.99	0.0014	P	2.4
3	☐	500.000	501.054	840285.09	0.1260	P	0.3
4	☐	1250.000	1262.737	2094847.38	0.3175	A	0.9
5	☐	2500.000	2470.623	3889649.60	0.6211	A	2.8
6	☐	5000.000	5063.171	7094422.74	1.2729	A	2.2
7	☐	10000.000	9974.114	14174578.54	2.5075	A	0.4
8	☐			4023.92	0.0007	P	17.4

y = 2.5140E-004 * x + 1.5055E-005
R = 1.0000
DL = 0.02078
BEC = 0.05989

Weight: <None>
Min Conc: 0

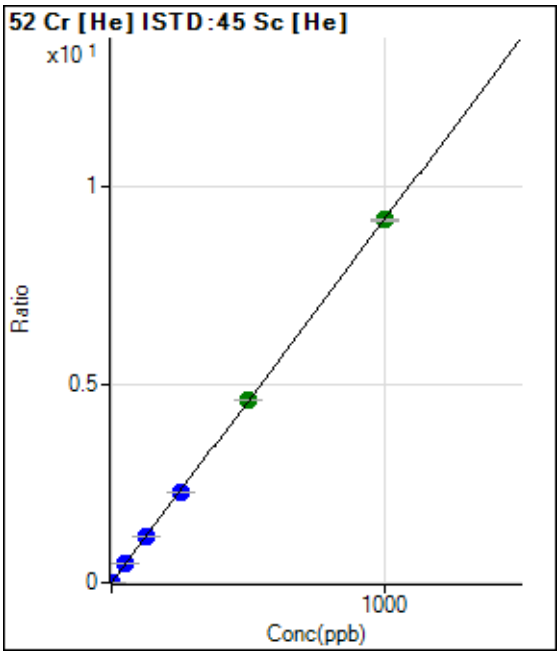


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.11	0.0000	P	45.5
2	☐	5.000	5.431	26491.02	0.0443	P	0.3
3	☐	50.000	50.298	243796.96	0.4098	P	0.7
4	☐	125.000	127.486	597494.36	1.0388	P	1.0
5	☐	250.000	248.044	1013816.15	2.0211	P	0.2
6	☐	500.000	498.830	1967070.04	4.0644	A	0.6
7	☐	1000.000	1000.746	3974628.41	8.1540	A	0.7
8	☐			904.48	0.0017	P	4.9

y = 0.0081 * x + 1.8744E-005
R = 1.0000
DL = 0.003143
BEC = 0.0023

Weight: <None>
Min Conc: 0

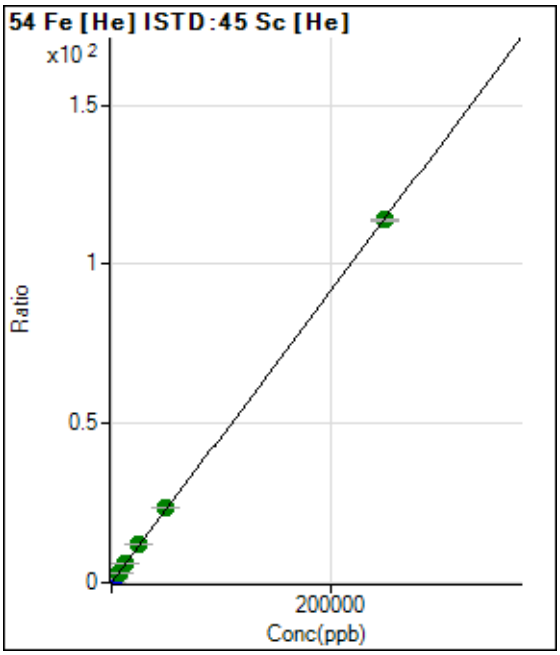
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1567.87	0.0026	P	1.9
2	☐	2.000	2.192	13612.89	0.0227	P	1.9
3	☐	50.000	50.715	278220.19	0.4677	P	1.3
4	☐	125.000	128.183	677647.26	1.1781	P	0.7
5	☐	250.000	249.059	1146964.14	2.2866	P	0.3
6	☐	500.000	501.646	2227665.99	4.6028	A	0.1
7	☐	1000.000	998.978	4466704.21	9.1634	A	0.5
8	☐			7403.18	0.0143	P	2.6

y = 0.0092 * x + 0.0026
R = 1.0000
DL = 0.01602
BEC = 0.2887

Weight: <None>
Min Conc: 0



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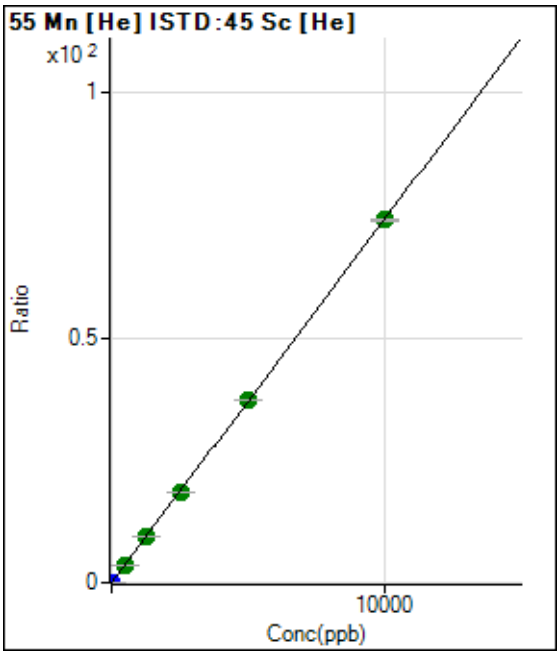
1	☐	0.000	0.000	2503.57	0.0042	P	2.7
2	☐	50.000	60.076	18954.26	0.0317	P	1.1
3	☐	2500.000	2691.404	733985.63	1.2339	P	0.8
4	☐	6250.000	6647.884	1749468.41	3.0415	A	1.2
5	☐	12500.000	13027.820	2987924.44	5.9564	A	0.6
6	☐	25000.000	26133.002	5780691.58	11.9440	A	0.8
7	☐	50000.000	51748.608	11526849.41	23.6473	A	0.5
8	☐	250000.00	249498.72	59176762.45	113.9961	A	0.6

y = 4.5688E-004 * x + 0.0042
R = 1.0000
DL = 0.7513
BEC = 9.253

Weight: <None>
Min Conc: 0

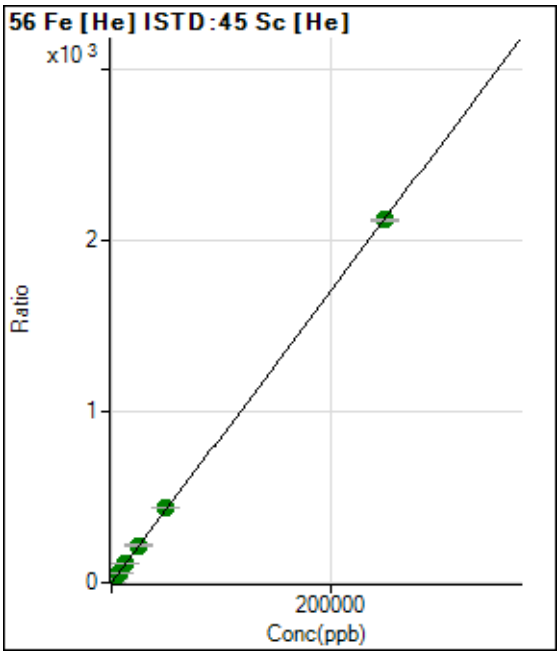
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	262.23	0.0004	P	9.6
2	☐	1.000	1.105	5166.49	0.0086	P	4.1
3	☐	500.000	497.267	2193194.03	3.6869	A	0.6
4	☐	1250.000	1259.459	5370900.75	9.3373	A	0.8
5	☐	2500.000	2497.757	9288500.77	18.5174	A	0.5
6	☐	5000.000	5028.939	18043984.04	37.2821	A	0.5
7	☐	10000.000	9985.046	36083213.90	74.0238	A	0.7
8	☐			17960.17	0.0346	P	9.5

y = 0.0074 * x + 4.4277E-004
R = 1.0000
DL = 0.01718
BEC = 0.05972

Weight: <None>
Min Conc: 0



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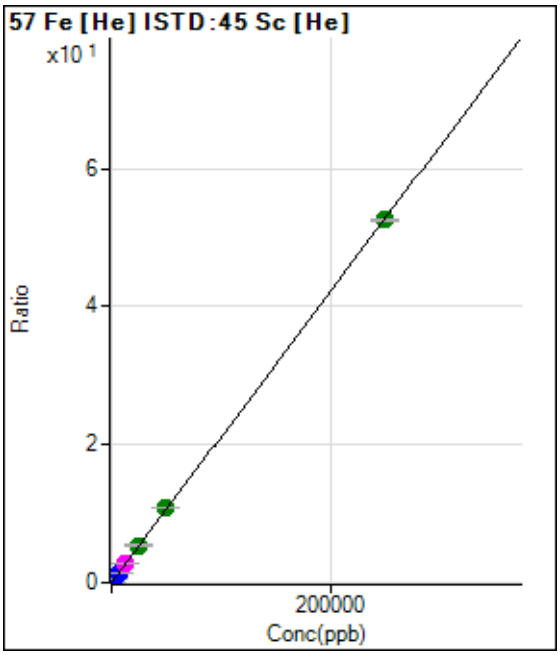
1	☐	0.000	0.000	20023.41	0.0338	P	0.9
2	☐	50.000	56.467	307187.22	0.5134	P	0.5
3	☐	2500.000	2557.956	12942913.00	21.7579	A	0.7
4	☐	6250.000	6498.422	31765592.86	55.2234	A	1.1
5	☐	12500.000	12779.640	54460526.97	108.5684	A	0.6
6	☐	25000.000	25770.815	105943836.20	218.8995	A	0.6
7	☐	50000.000	51346.411	212583070.17	436.1072	A	0.7
8	☐	250000.00	249632.86	1100580036.9	2,120.109	A	0.2

y = 0.0085 * x + 0.0338
R = 1.0000
DL = 0.1113
BEC = 3.981

Weight: <None>
Min Conc: 0

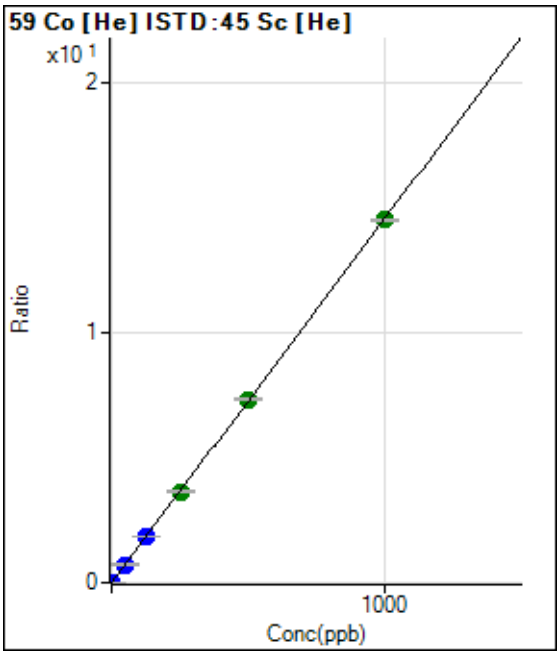
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	916.71	0.0015	P	5.2
2	☐	50.000	58.166	8252.32	0.0138	P	2.3
3	☐	2500.000	2632.356	330526.62	0.5556	P	0.5
4	☐	6250.000	6643.138	805198.64	1.3999	P	1.1
5	☐	12500.000	13011.322	1374445.87	2.7403	M	1.7
6	☐	25000.000	25791.527	2628201.58	5.4305	A	1.3
7	☐	50000.000	51152.350	5249196.13	10.7687	A	0.5
8	☐	250000.00	249653.65	27280362.09	52.5516	A	0.7

y = 2.1049E-004 * x + 0.0015
R = 1.0000
DL = 1.14
BEC = 7.353

Weight: <None>
Min Conc: 0

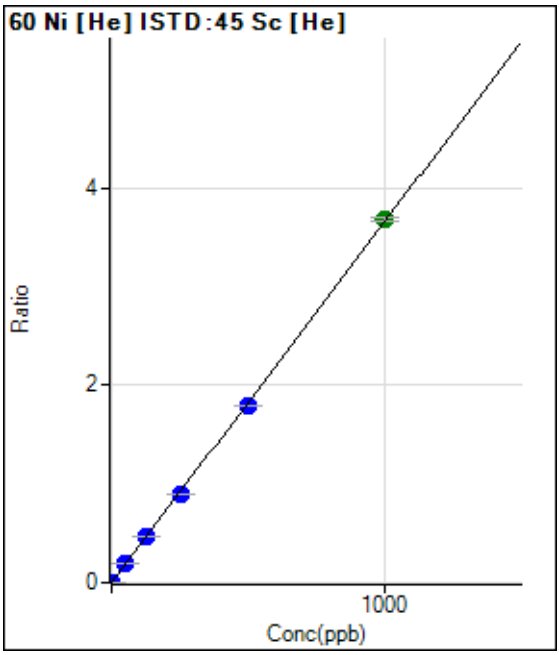


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	112.22	0.0002	P	12.5
2	☐	1.000	1.138	10032.31	0.0168	P	1.0
3	☐	50.000	50.218	435327.46	0.7318	P	0.6
4	☐	125.000	126.742	1062210.56	1.8467	P	0.9
5	☐	250.000	250.994	1834407.14	3.6569	A	0.9
6	☐	500.000	503.762	3552153.70	7.3394	A	0.6
7	☐	1000.000	997.641	7084861.84	14.5347	A	0.6
8	☐			18961.01	0.0365	P	1.8

y = 0.0146 * x + 1.8955E-004
R = 1.0000
DL = 0.004884
BEC = 0.01301

Weight: <None>
Min Conc: 0

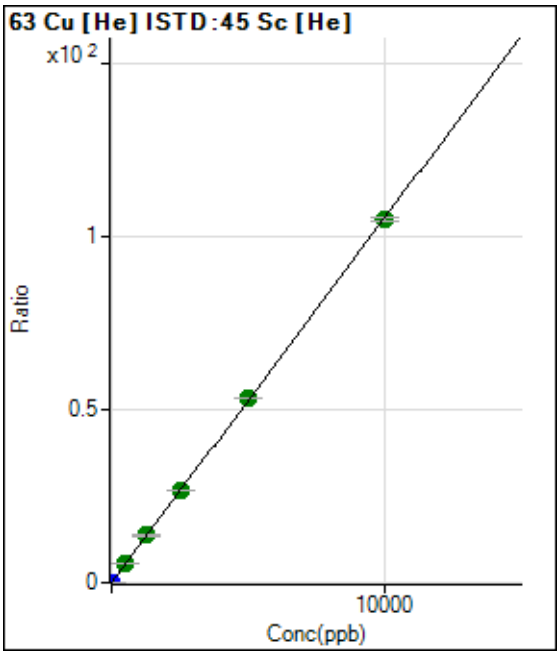
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	398.90	0.0007	P	7.5
2	☐	1.000	1.087	2782.51	0.0046	P	6.6
3	☐	50.000	50.954	111266.28	0.1870	P	0.8
4	☐	125.000	128.045	269780.06	0.4690	P	0.7
5	☐	250.000	246.718	453002.69	0.9031	P	0.4
6	☐	500.000	489.451	866767.63	1.7909	P	0.3
7	☐	1000.000	1005.667	1793400.28	3.6791	A	1.2
8	☐			6426.99	0.0124	P	2.7

y = 0.0037 * x + 6.7336E-004
R = 0.9999
DL = 0.04162
BEC = 0.1841

Weight: <None>
Min Conc: 0

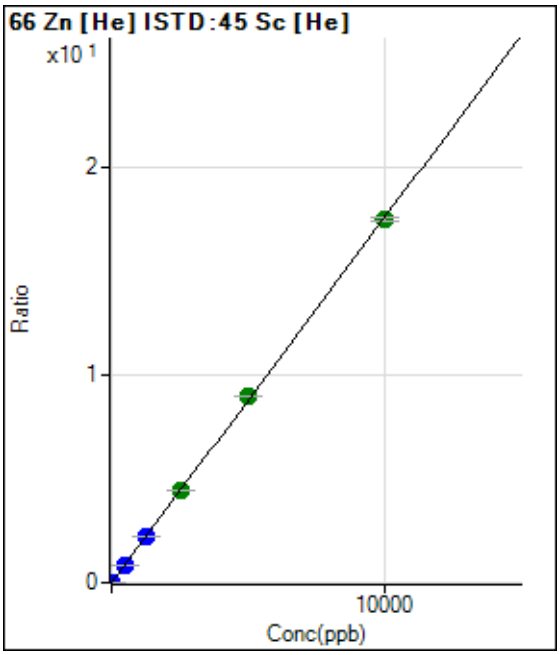


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	733.36	0.0012	P	1.6
2	☐	2.000	2.075	13805.34	0.0231	P	1.4
3	☐	500.000	522.393	3270862.21	5.4986	A	1.1
4	☐	1250.000	1300.955	7874730.16	13.6918	A	2.0
5	☐	2500.000	2534.439	13379105.36	26.6723	A	0.7
6	☐	5000.000	5065.681	25800506.28	53.3097	A	0.6
7	☐	10000.000	9951.061	51045819.79	104.7207	A	0.9
8	☐			10493.76	0.0202	P	6.7

y = 0.0105 * x + 0.0012
R = 1.0000
DL = 0.005674
BEC = 0.1177

Weight: <None>
Min Conc: 0

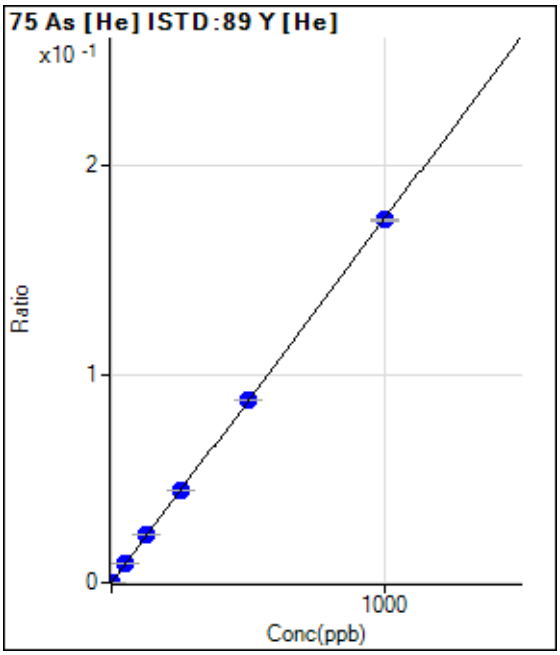
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	245.56	0.0004	P	10.7
2	☐	5.000	5.403	5920.12	0.0099	P	3.1
3	☐	500.000	494.481	516305.88	0.8680	P	1.1
4	☐	1250.000	1252.271	1263976.50	2.1975	P	0.8
5	☐	2500.000	2538.916	2234460.90	4.4548	A	1.1
6	☐	5000.000	5100.369	4331003.72	8.9488	A	0.2
7	☐	10000.000	9940.078	8501006.68	17.4398	A	1.1
8	☐			6474.79	0.0125	P	1.4

y = 0.0018 * x + 4.1474E-004
R = 0.9999
DL = 0.07555
BEC = 0.2364

Weight: <None>
Min Conc: 0

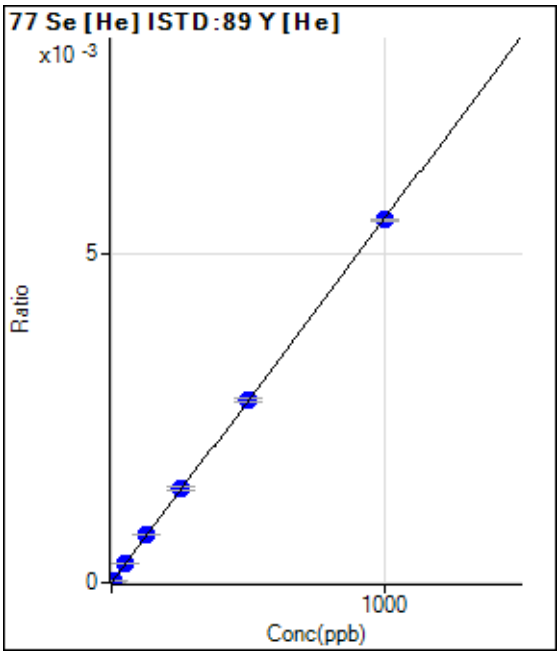


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.11	0.0000	P	92.2
2	☐	1.000	1.134	771.14	0.0002	P	6.3
3	☐	50.000	53.752	35423.32	0.0094	P	0.6
4	☐	125.000	133.814	86966.01	0.0234	P	0.5
5	☐	250.000	254.727	148978.87	0.0445	P	0.5
6	☐	500.000	501.218	288340.05	0.0875	P	0.5
7	☐	1000.000	996.920	573343.30	0.1741	P	0.3
8	☐			357.79	0.0001	P	9.1

y = 1.7464E-004 * x + 2.9089E-006
R = 1.0000
DL = 0.04605
BEC = 0.01666

Weight: <None>
Min Conc: 0

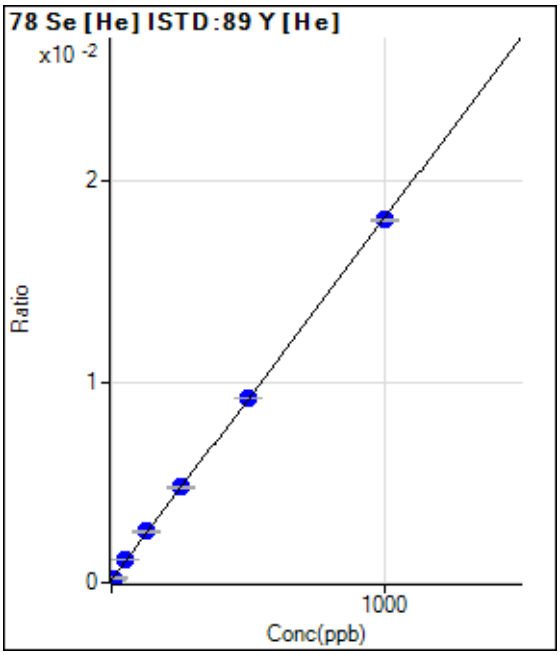
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3.33	0.0000	P	173.
2	☐	5.000	6.137	133.34	0.0000	P	7.5
3	☐	50.000	53.167	1110.05	0.0003	P	6.8
4	☐	125.000	130.751	2689.16	0.0007	P	1.0
5	☐	250.000	258.154	4774.15	0.0014	P	3.1
6	☐	500.000	500.892	9110.64	0.0028	P	2.0
7	☐	1000.000	996.633	18120.05	0.0055	P	0.7
8	☐			2.22	0.0000	P	86.6

y = 5.5204E-006 * x + 8.6202E-007
R = 1.0000
DL = 0.8114
BEC = 0.1562

Weight: <None>
Min Conc: 0

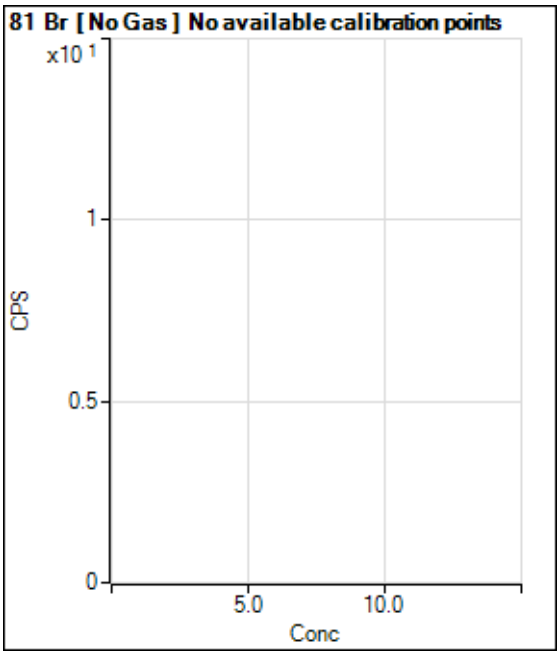


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	527.79	0.0001	P	17.4
2	☐	5.000	5.028	877.81	0.0002	P	10.6
3	☐	50.000	54.345	4217.30	0.0011	P	2.6
4	☐	125.000	134.794	9556.51	0.0026	P	3.1
5	☐	250.000	256.046	15925.32	0.0048	P	1.8
6	☐	500.000	504.263	30406.78	0.0092	P	0.2
7	☐	1000.000	994.916	59534.62	0.0181	P	0.3
8	☐			393.34	0.0001	P	3.4

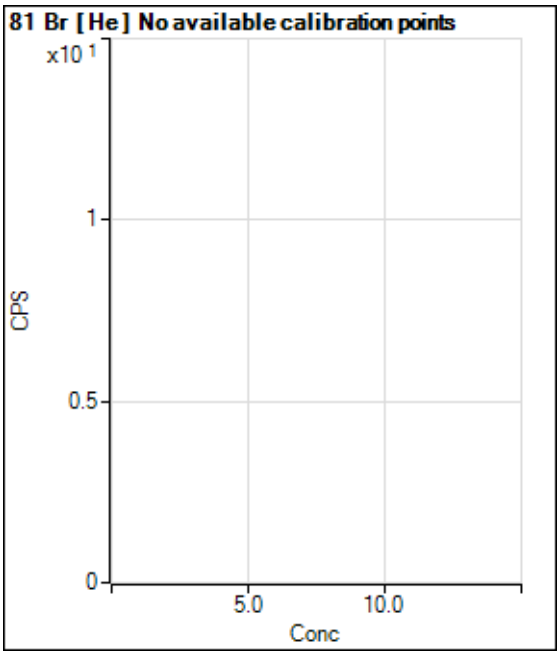
y = 1.8033E-005 * x + 1.3803E-004
R = 0.9999
DL = 4.003
BEC = 7.654

Weight: <None>
Min Conc: 0

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

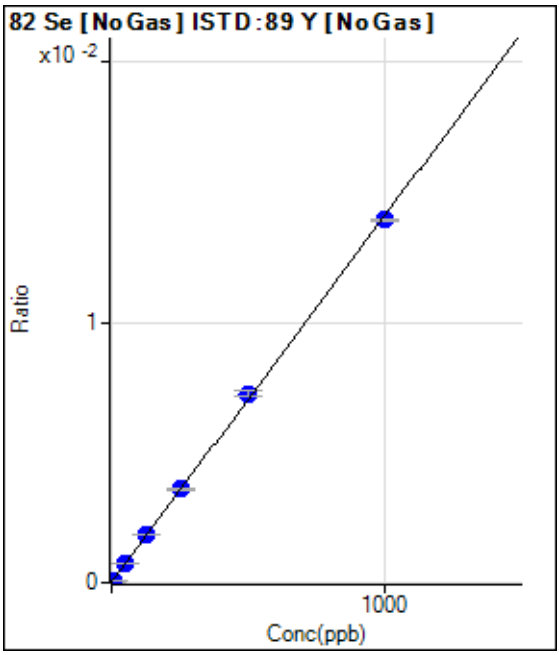


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			15671.74		P	1.2
2	☐			15380.34		P	2.8
3	☐			15245.75		P	2.6
4	☐			15280.22		P	0.7
5	☐			13510.72		P	2.0
6	☐			11581.28		P	1.9
7	☐			11748.10		P	1.5
8	☐			12931.30		P	2.6



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			183.34		P	10.9
2	☐			177.78		P	7.6
3	☐			177.78		P	6.6
4	☐			162.22		P	6.6
5	☐			126.67		P	16.0
6	☐			120.00		P	12.1
7	☐			91.11		P	26.0
8	☐			152.22		P	13.9

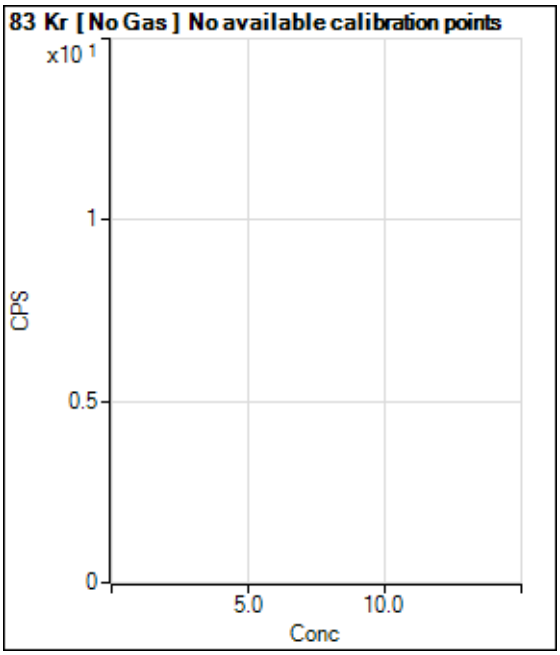
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	182.27	0.0000	P	7.5
2	☐	5.000	5.558	1266.46	0.0001	P	2.6
3	☐	50.000	52.248	10443.85	0.0007	P	1.4
4	☐	125.000	131.768	25953.74	0.0019	P	0.9
5	☐	250.000	254.426	47552.65	0.0036	P	2.6
6	☐	500.000	516.089	87623.98	0.0073	P	3.3
7	☐	1000.000	989.888	171104.76	0.0139	P	0.4
8	☐			329.06	0.0000	P	4.8

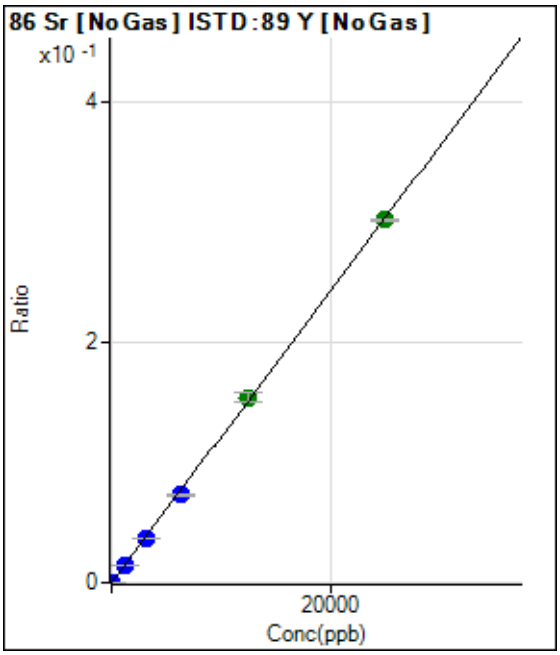
y = 1.4064E-005 * x + 1.3125E-005
R = 0.9998
DL = 0.2095
BEC = 0.9332

Weight: <None>
Min Conc: 0



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			258.89		P	12.7
2	☐			223.34		P	14.2
3	☐			226.67		P	1.5
4	☐			235.56		P	14.2
5	☐			207.78		P	14.6
6	☐			207.78		P	25.0
7	☐			212.23		P	4.8
8	☐			235.56		P	10.6

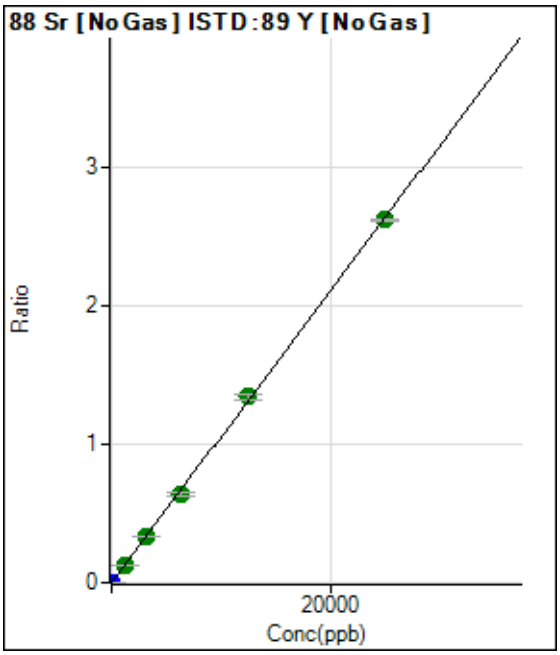
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	464.46	0.0000	P	15.8
2	☐	1.000	25.848	4801.93	0.0003	P	3.1
3	☐	1250.000	1233.482	208867.66	0.0150	P	0.5
4	☐	3125.000	3091.355	520635.86	0.0374	P	0.2
5	☐	6250.000	6014.990	964042.26	0.0728	P	2.9
6	☐	12500.000	12749.833	1859013.60	0.1543	A	4.4
7	☐	25000.000	24938.866	3705524.77	0.3018	A	0.6
8	☐			11343.33	0.0009	P	4.2

y = 1.2100E-005 * x + 3.3422E-005
R = 0.9999
DL = 1.313
BEC = 2.762

Weight: <None>
Min Conc: 0

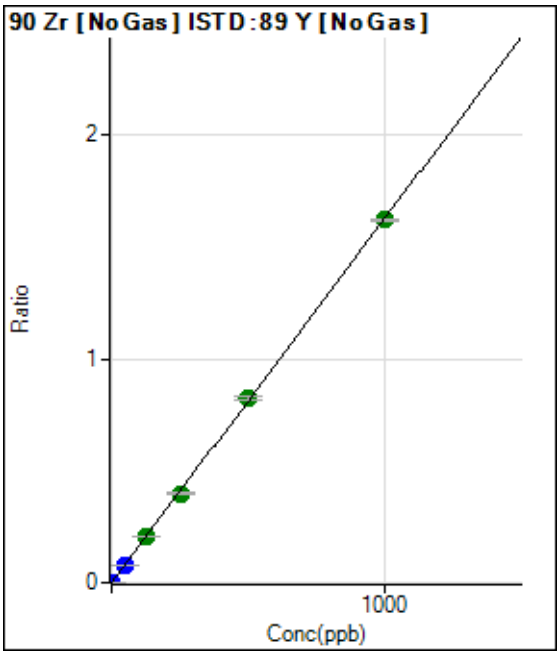


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	343.34	0.0000	P	8.5
2	☐	1.000	26.554	39094.08	0.0028	P	1.3
3	☐	1250.000	1240.705	1822756.57	0.1305	A	1.2
4	☐	3125.000	3162.427	4626550.49	0.3327	A	0.9
5	☐	6250.000	6073.357	8461102.93	0.6389	A	2.3
6	☐	12500.000	12751.911	16165625.73	1.3415	A	3.1
7	☐	25000.000	24913.991	32180308.69	2.6209	A	0.6
8	☐			97916.53	0.0080	P	1.5

y = 1.0520E-004 * x + 2.4720E-005
R = 0.9999
DL = 0.06011
BEC = 0.235

Weight: <None>
Min Conc: 0

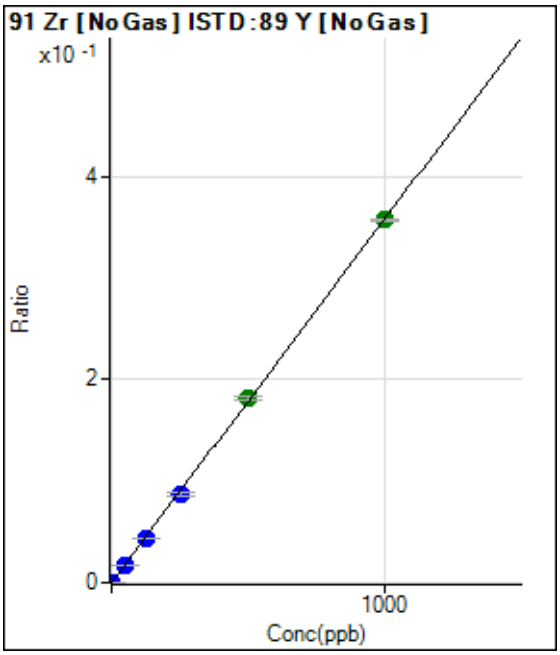
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	666.69	0.0000	P	12.4
2	☐	1.000	1.026	23802.67	0.0017	P	0.4
3	☐	50.000	48.778	1107548.40	0.0793	P	0.5
4	☐	125.000	125.182	2829620.93	0.2035	A	1.6
5	☐	250.000	245.408	5281868.04	0.3989	A	2.4
6	☐	500.000	508.006	9951248.81	0.8256	A	2.1
7	☐	1000.000	997.183	19898436.79	1.6206	A	0.7
8	☐			14686.33	0.0012	P	5.8

y = 0.0016 * x + 4.8023E-005
R = 0.9999
DL = 0.01096
BEC = 0.02955

Weight: <None>
Min Conc: 0

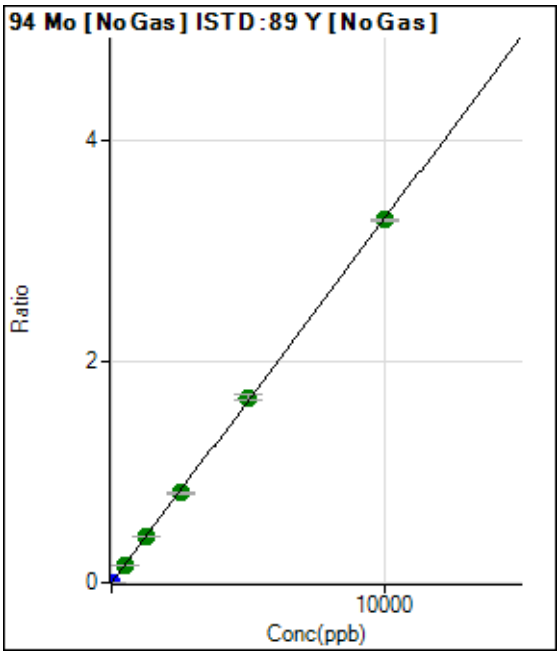


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	134.45	0.0000	P	28.3
2	☐	1.000	1.034	5259.88	0.0004	P	4.1
3	☐	50.000	49.431	246845.03	0.0177	P	1.3
4	☐	125.000	124.087	616951.41	0.0444	P	0.4
5	☐	250.000	242.998	1150076.40	0.0869	P	3.1
6	☐	500.000	506.851	2183925.63	0.1812	A	1.8
7	☐	1000.000	998.468	4382250.94	0.3569	A	0.9
8	☐			3252.61	0.0003	P	6.9

y = 3.5745E-004 * x + 9.6958E-006
R = 0.9999
DL = 0.02303
BEC = 0.02712

Weight: <None>
Min Conc: 0

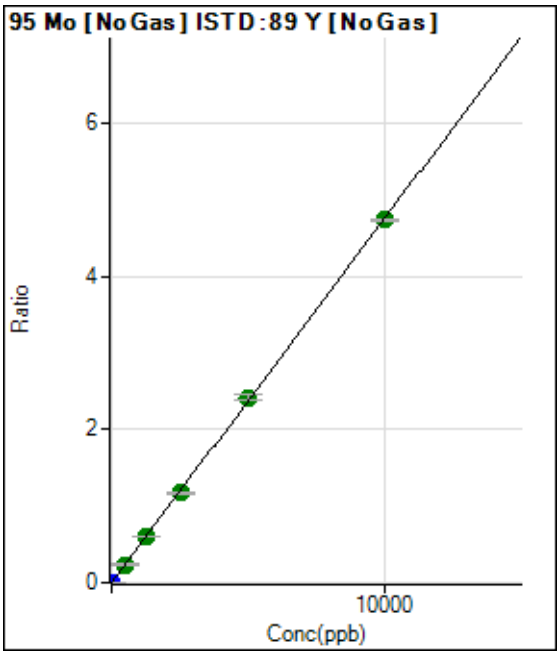
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	341.12	0.0000	P	3.8
2	☐	5.000	6.201	28619.10	0.0021	P	3.0
3	☐	500.000	499.152	2291813.37	0.1641	A	0.7
4	☐	1250.000	1258.738	5755325.47	0.4139	A	0.6
5	☐	2500.000	2459.207	10705659.91	0.8086	A	3.1
6	☐	5000.000	5086.625	20155013.87	1.6724	A	2.7
7	☐	10000.000	9965.835	40231511.90	3.2766	A	0.6
8	☐			15205.88	0.0012	P	13.0

y = 3.2878E-004 * x + 2.4559E-005
R = 0.9999
DL = 0.008426
BEC = 0.0747

Weight: <None>
Min Conc: 0

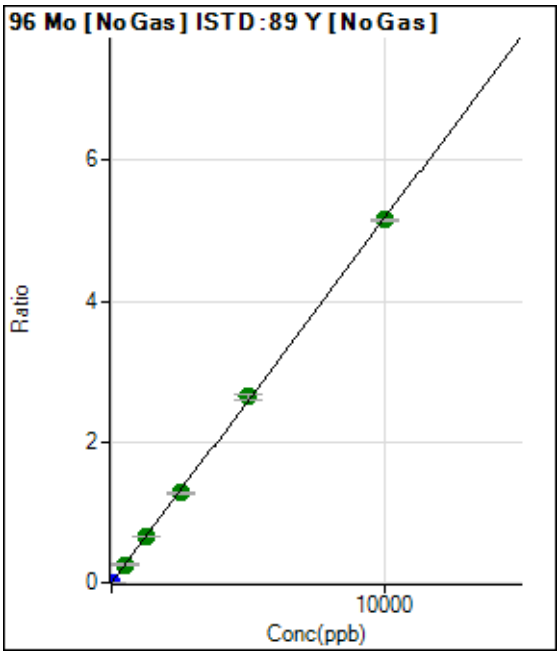


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	156.67	0.0000	P	3.3
2	☐	5.000	5.185	34360.28	0.0025	P	1.2
3	☐	500.000	499.077	3313653.67	0.2373	A	1.5
4	☐	1250.000	1254.380	8294689.25	0.5965	A	0.5
5	☐	2500.000	2467.886	15537025.74	1.1735	A	3.1
6	☐	5000.000	5083.154	29127958.46	2.4171	A	2.9
7	☐	10000.000	9965.950	58185831.91	4.7388	A	0.7
8	☐			16300.58	0.0013	P	18.7

y = 4.7550E-004 * x + 1.1277E-005
R = 0.9999
DL = 0.002336
BEC = 0.02372

Weight: <None>
Min Conc: 0

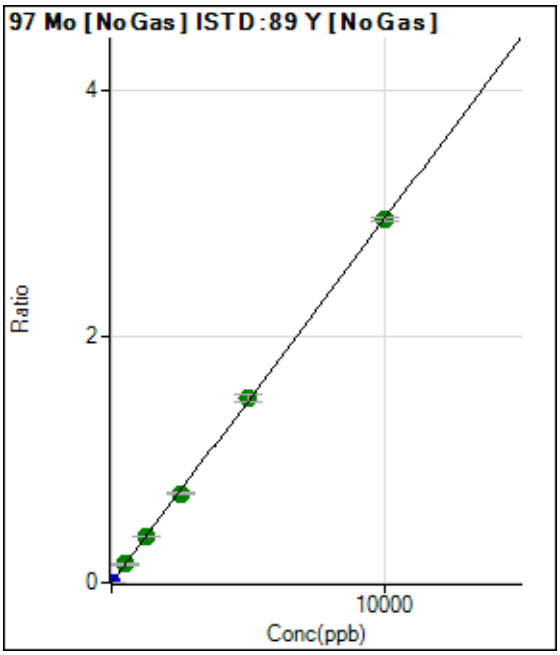
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	260.00	0.0000	P	8.3
2	☐	5.000	5.372	38840.33	0.0028	P	2.3
3	☐	500.000	499.862	3613911.37	0.2588	A	1.3
4	☐	1250.000	1264.473	9104699.17	0.6547	A	0.6
5	☐	2500.000	2468.137	16920377.80	1.2779	A	3.0
6	☐	5000.000	5094.899	31786878.14	2.6380	A	3.5
7	☐	10000.000	9958.714	63311186.84	5.1562	A	0.4
8	☐			28398.00	0.0023	P	11.6

y = 5.1776E-004 * x + 1.8709E-005
R = 0.9999
DL = 0.008997
BEC = 0.03613

Weight: <None>
Min Conc: 0

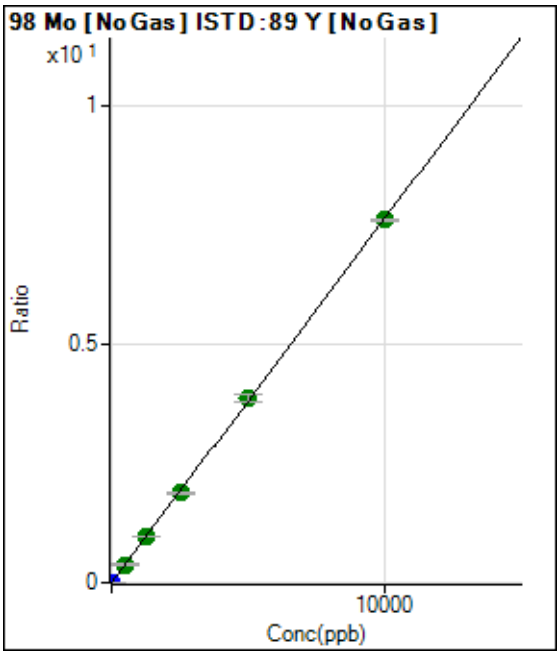


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	97.78	0.0000	P	10.8
2	☐	5.000	5.277	21708.40	0.0016	P	0.6
3	☐	500.000	502.604	2071773.96	0.1484	A	1.0
4	☐	1250.000	1254.935	5151704.85	0.3705	A	1.3
5	☐	2500.000	2448.491	9569060.14	0.7228	A	3.3
6	☐	5000.000	5073.847	18047362.51	1.4978	A	3.8
7	☐	10000.000	9975.206	36156090.01	2.9447	A	1.1
8	☐			9999.13	0.0008	P	16.0

y = 2.9520E-004 * x + 7.0385E-006
R = 0.9999
DL = 0.007726
BEC = 0.02384

Weight: <None>
Min Conc: 0

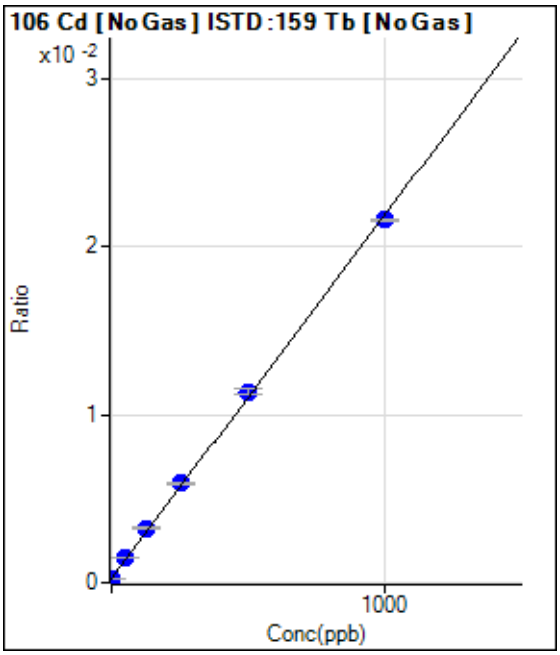
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	252.23	0.0000	P	9.5
2	☐	5.000	5.203	55359.96	0.0040	P	1.0
3	☐	500.000	498.475	5314070.79	0.3806	A	1.8
4	☐	1250.000	1255.829	13333659.94	0.9588	A	0.7
5	☐	2500.000	2460.325	24869089.91	1.8785	A	3.2
6	☐	5000.000	5073.166	46673103.75	3.8733	A	3.5
7	☐	10000.000	9972.683	93488689.72	7.6141	A	0.8
8	☐			25282.50	0.0021	P	17.2

y = 7.6349E-004 * x + 1.8157E-005
R = 1.0000
DL = 0.00681
BEC = 0.02378

Weight: <None>
Min Conc: 0

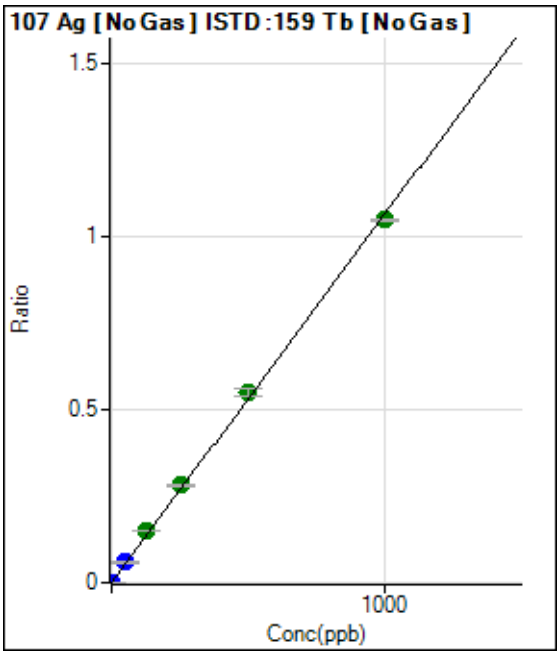


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3512.68	0.0002	P	1.4
2	☐	1.000	1.081	3820.55	0.0003	P	5.5
3	☐	50.000	56.224	21159.92	0.0015	P	2.4
4	☐	125.000	139.462	47228.73	0.0033	P	0.6
5	☐	250.000	261.807	84091.52	0.0059	P	2.3
6	☐	500.000	514.259	153930.91	0.0114	P	3.1
7	☐	1000.000	987.800	298585.78	0.0216	P	0.8
8	☐			3122.59	0.0002	P	3.6

y = 2.1618E-005 * x + 2.4610E-004
R = 0.9997
DL = 0.4883
BEC = 11.38

Weight: <None>
Min Conc: 0

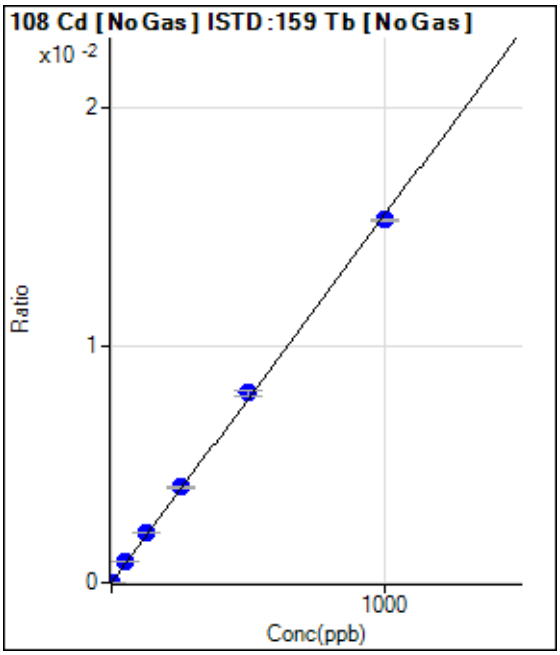
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	82.22	0.0000	P	25.9
2	☐	1.000	1.141	17289.25	0.0012	P	1.1
3	☐	50.000	54.979	846906.39	0.0585	P	1.0
4	☐	125.000	139.692	2152307.23	0.1486	A	0.7
5	☐	250.000	265.355	4019862.02	0.2823	A	1.9
6	☐	500.000	517.280	7453121.21	0.5503	A	4.0
7	☐	1000.000	985.436	14491065.76	1.0483	A	0.4
8	☐			3931.70	0.0003	P	17.3

y = 0.0011 * x + 5.7617E-006
R = 0.9996
DL = 0.004201
BEC = 0.005416

Weight: <None>
Min Conc: 0

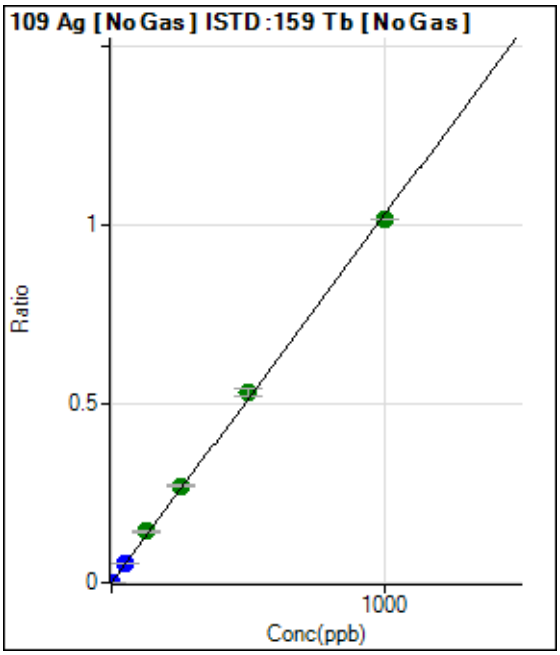


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10.00	0.0000	P	32.9
2	☐	1.000	1.073	245.56	0.0000	P	23.3
3	☐	50.000	55.646	12489.89	0.0009	P	1.8
4	☐	125.000	138.112	30995.32	0.0021	P	0.2
5	☐	250.000	260.915	57561.37	0.0040	P	1.9
6	☐	500.000	516.741	108447.81	0.0080	P	2.9
7	☐	1000.000	986.980	211351.12	0.0153	P	0.6
8	☐			117.78	0.0000	P	28.8

y = 1.5490E-005 * x + 7.0001E-007
R = 0.9997
DL = 0.04463
BEC = 0.04519

Weight: <None>
Min Conc: 0

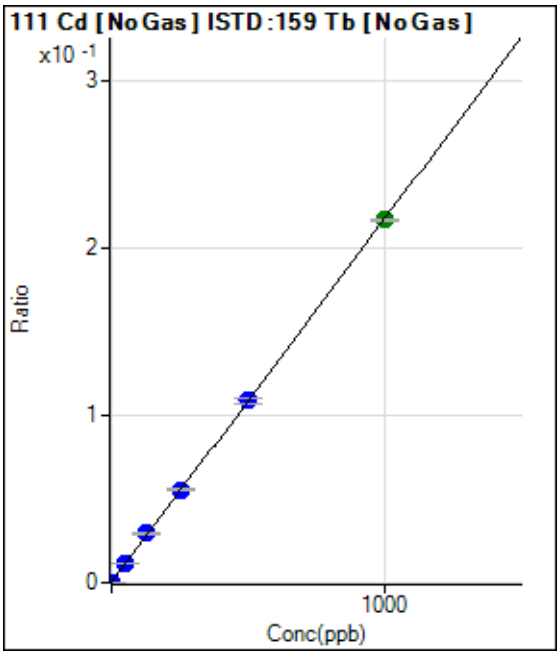
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	53.33	0.0000	P	25.2
2	☐	1.000	1.146	16756.42	0.0012	P	3.1
3	☐	50.000	53.922	802658.53	0.0554	P	1.2
4	☐	125.000	139.727	2080399.24	0.1436	A	2.1
5	☐	250.000	263.396	3856258.48	0.2708	A	1.3
6	☐	500.000	516.525	7192360.45	0.5310	A	3.6
7	☐	1000.000	986.352	14016827.01	1.0140	A	0.1
8	☐			3720.54	0.0003	P	16.0

y = 0.0010 * x + 3.7384E-006
R = 0.9996
DL = 0.002752
BEC = 0.003636

Weight: <None>
Min Conc: 0

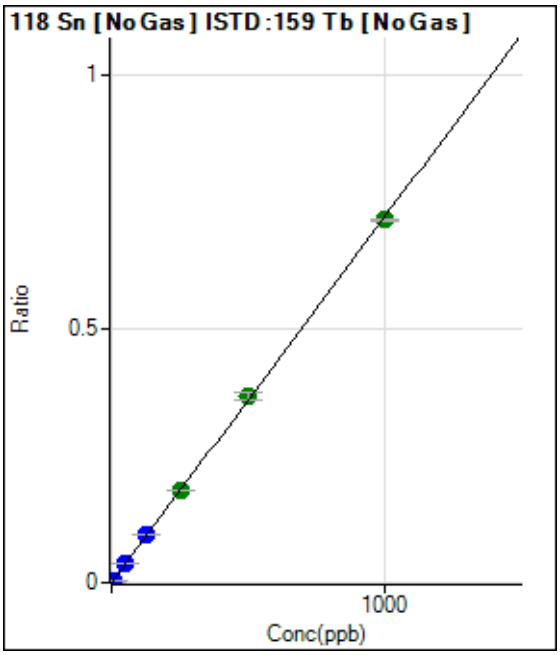


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2467.43	0.0002	P	1.3
2	☐	1.000	1.196	6127.43	0.0004	P	2.0
3	☐	50.000	53.837	171565.86	0.0118	P	1.3
4	☐	125.000	134.238	424185.30	0.0293	P	0.8
5	☐	250.000	253.431	785150.91	0.0551	P	2.2
6	☐	500.000	500.511	1472970.22	0.1087	P	2.9
7	☐	1000.000	997.540	2993167.45	0.2165	A	0.5
8	☐			2957.84	0.0002	P	1.0

y = 2.1689E-004 * x + 1.7287E-004
R = 1.0000
DL = 0.03124
BEC = 0.797

Weight: <None>
Min Conc: 0

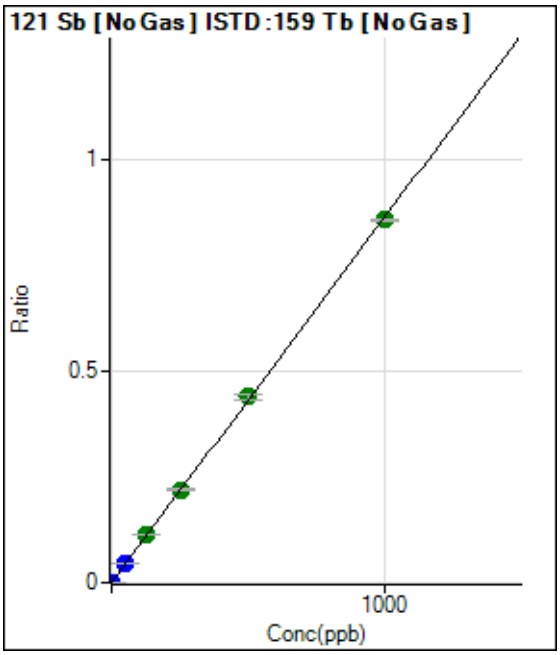
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1402.30	0.0001	P	5.3
2	☐	5.000	5.632	58819.27	0.0041	P	0.8
3	☐	50.000	51.664	539364.34	0.0373	P	1.2
4	☐	125.000	129.293	1348071.49	0.0931	P	0.3
5	☐	250.000	252.608	2588634.92	0.1818	A	1.4
6	☐	500.000	511.538	4983926.87	0.3680	A	3.7
7	☐	1000.000	992.956	9872287.08	0.7142	A	0.5
8	☐			5017.59	0.0004	P	8.5

y = 7.1915E-004 * x + 9.8256E-005
R = 0.9999
DL = 0.02175
BEC = 0.1366

Weight: <None>
Min Conc: 0

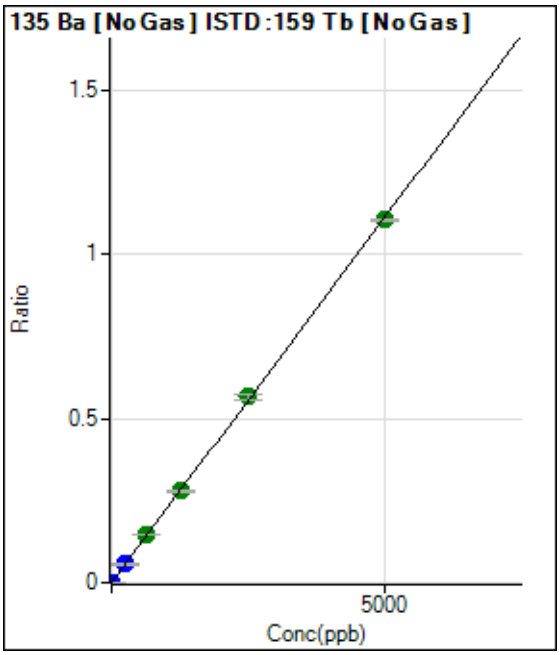


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	23.33	0.0000	P	0.4
2	☐	2.000	2.227	27293.72	0.0019	P	2.0
3	☐	50.000	51.220	640689.40	0.0443	P	1.0
4	☐	125.000	132.452	1657237.93	0.1144	A	0.1
5	☐	250.000	254.397	3129205.16	0.2198	A	2.5
6	☐	500.000	508.852	5955041.02	0.4396	A	3.0
7	☐	1000.000	993.482	11864001.49	0.8583	A	0.7
8	☐			7154.07	0.0005	P	6.3

y = 8.6389E-004 * x + 1.6345E-006
R = 0.9999
DL = 2.281E-05
BEC = 0.001892

Weight: <None>
Min Conc: 0

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



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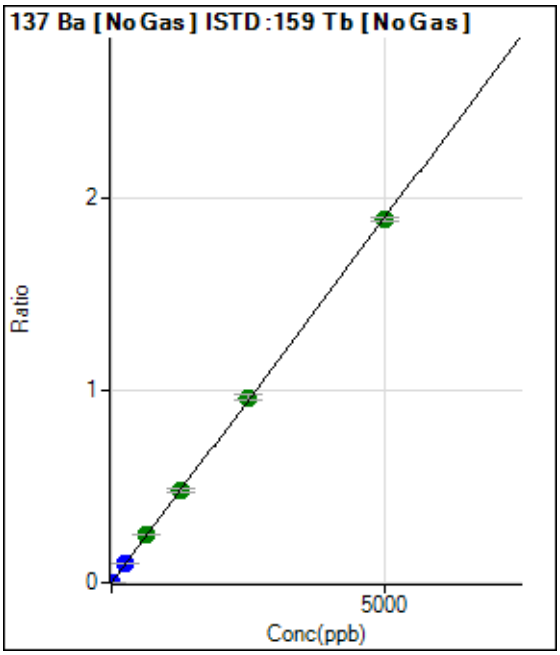
1	☐	0.000	0.000	64.44	0.0000	P	29.3
2	☐	10.000	10.730	33896.95	0.0024	P	0.5
3	☐	250.000	251.001	808302.17	0.0558	P	0.8
4	☐	625.000	661.236	2129891.44	0.1471	A	0.9
5	☐	1250.000	1258.861	3986598.76	0.2800	A	2.1
6	☐	2500.000	2545.594	7668355.93	0.5661	A	3.5
7	☐	5000.000	4970.407	15279932.14	1.1054	A	0.5
8	☐			8074.60	0.0006	P	8.3

y = 2.2239E-004 * x + 4.5132E-006
R = 0.9999
DL = 0.01783
BEC = 0.02029

Weight: <None>
Min Conc: 0



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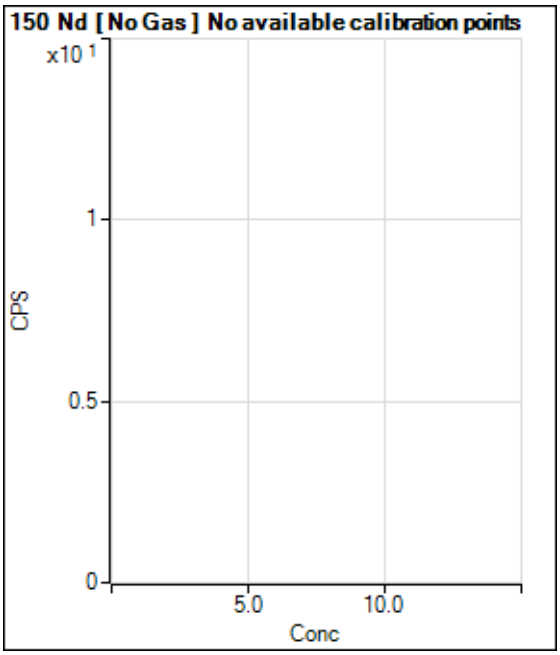
1	☐	0.000	0.000	115.56	0.0000	P	13.2
2	☐	10.000	10.887	58613.37	0.0041	P	0.6
3	☐	250.000	253.880	1393337.79	0.0962	P	0.9
4	☐	625.000	667.783	3665758.14	0.2531	A	0.7
5	☐	1250.000	1261.689	6808608.51	0.4782	A	2.7
6	☐	2500.000	2536.028	13020290.08	0.9612	A	3.3
7	☐	5000.000	4973.520	26056757.11	1.8850	A	1.1
8	☐			13873.55	0.0010	P	6.4

y = 3.7901E-004 * x + 8.0932E-006
R = 0.9999
DL = 0.008466
BEC = 0.02135

Weight: <None>
Min Conc: 0

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



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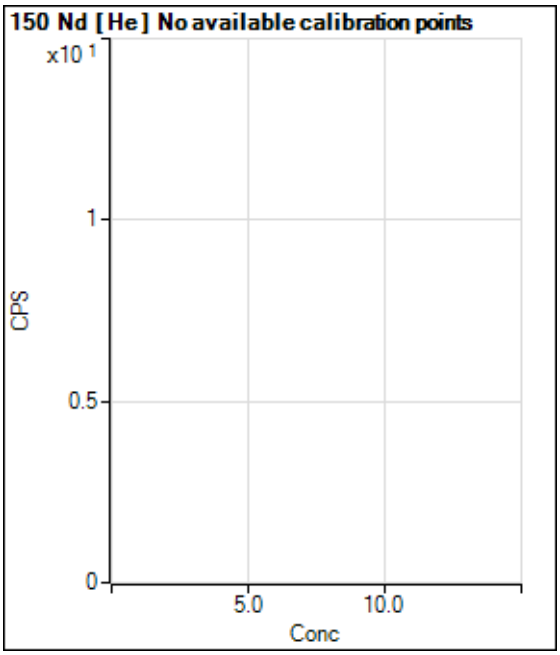
1	☐			6.67		P	100.
2	☐			10.00		P	0.0
3	☐			51.11		P	7.5
4	☐			101.11		P	21.2
5	☐			193.34		P	9.0
6	☐			330.01		P	11.6
7	☐			677.80		P	4.0
8	☐			245.56		P	14.5



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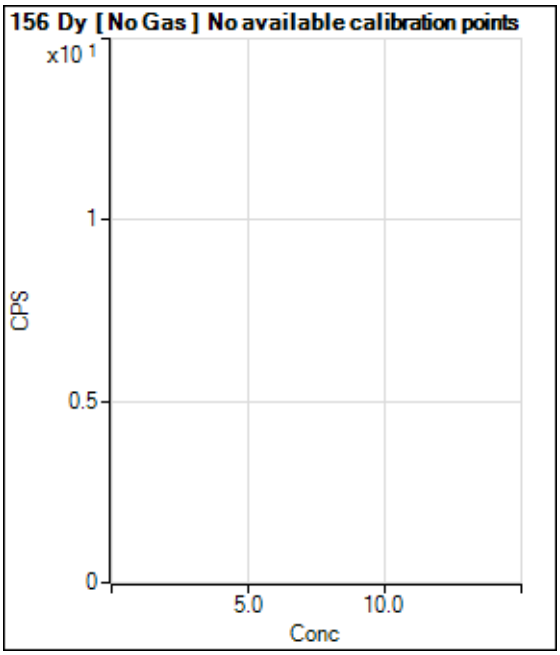
1	☐			2.22		P	86.6
2	☐			3.33		P	100.
3	☐			17.78		P	75.8
4	☐			24.44		P	34.3
5	☐			40.00		P	16.7
6	☐			83.33		P	17.4
7	☐			118.89		P	8.6
8	☐			155.56		P	14.3

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



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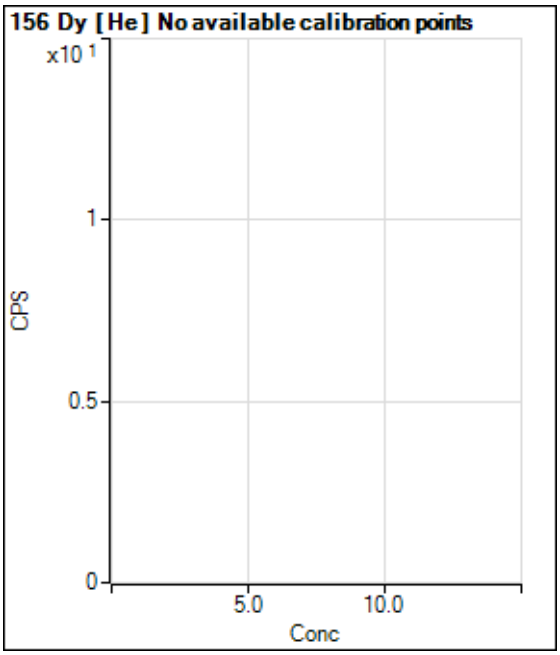
1	☐			17.78		P	10.8
2	☐			26.67		P	33.1
3	☐			37.78		P	13.5
4	☐			54.45		P	24.7
5	☐			80.00		P	16.7
6	☐			134.45		P	24.8
7	☐			222.23		P	8.3
8	☐			408.90		P	13.1



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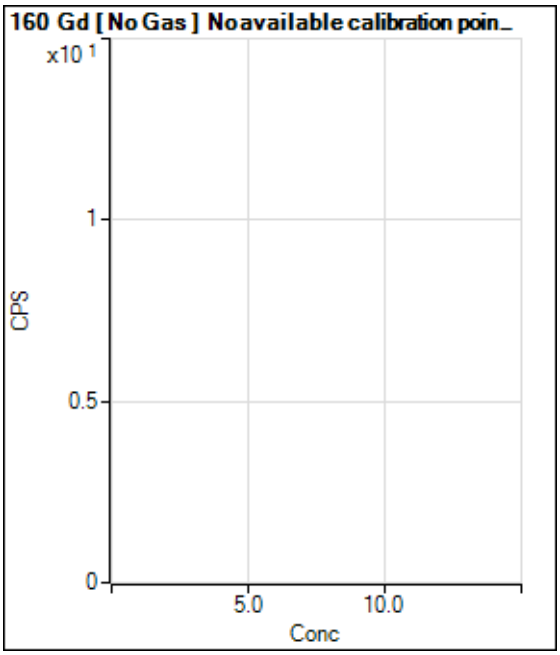
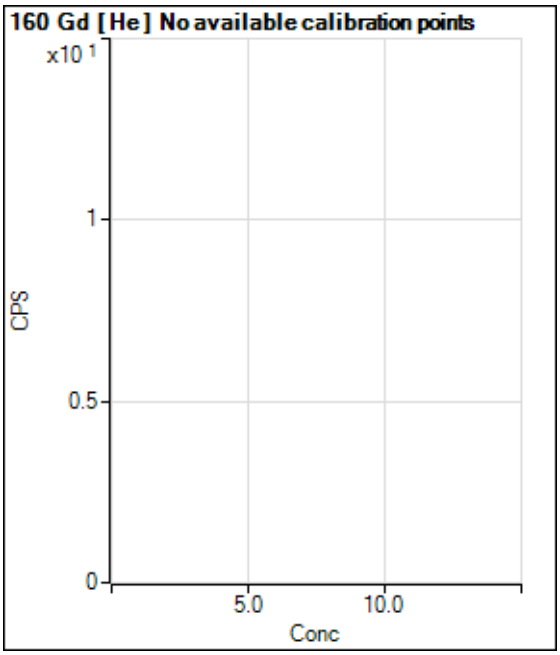
1	☐			6.67		P	50.0
2	☐			12.22		P	41.7
3	☐			47.78		P	8.1
4	☐			84.45		P	4.6
5	☐			125.56		P	25.1
6	☐			265.56		P	6.2
7	☐			587.79		P	2.4
8	☐			367.79		P	6.9

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			71.11		P	28.6
2	☐			67.78		P	2.8
3	☐			54.44		P	9.4
4	☐			78.89		P	20.0
5	☐			84.44		P	16.4
6	☐			105.56		P	23.7
7	☐			188.89		P	11.7
8	☐			465.57		P	10.1



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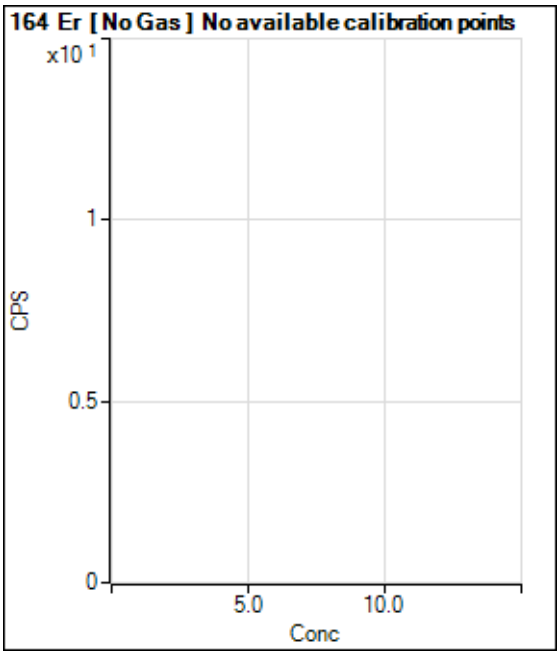
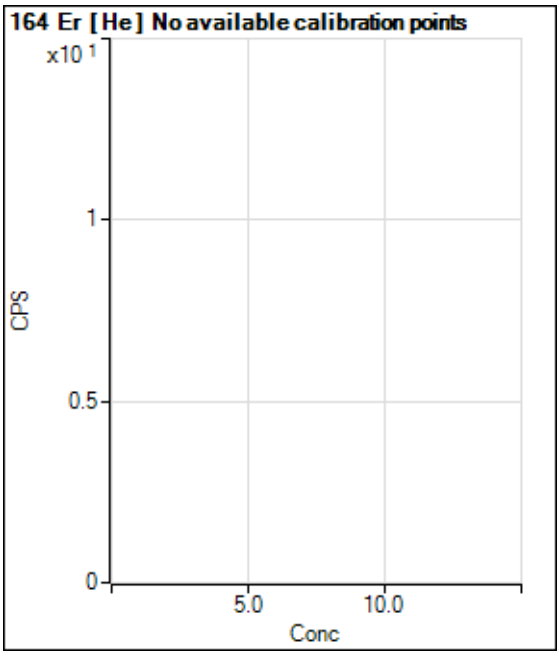
1	☐			383.34		P	19.9
2	☐			377.79		P	13.4
3	☐			421.12		P	5.9
4	☐			408.90		P	16.8
5	☐			378.90		P	7.1
6	☐			402.23		P	5.0
7	☐			485.57		P	11.5
8	☐			711.14		P	9.8

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			47.78		P	14.5
2	☐			50.00		P	24.0
3	☐			48.89		P	10.4
4	☐			71.11		P	11.8
5	☐			73.33		P	9.1
6	☐			111.11		P	20.0
7	☐			183.34		P	7.9
8	☐			500.02		P	10.5



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1	☐			35.56		P	5.4
2	☐			46.67		P	7.1
3	☐			25.56		P	37.7
4	☐			42.22		P	40.5
5	☐			61.11		P	43.8
6	☐			97.78		P	20.8
7	☐			140.00		P	18.0
8	☐			336.67		P	6.9

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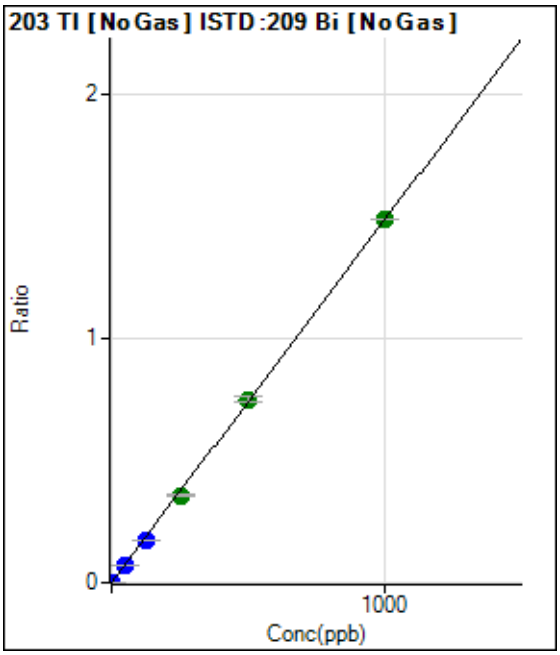
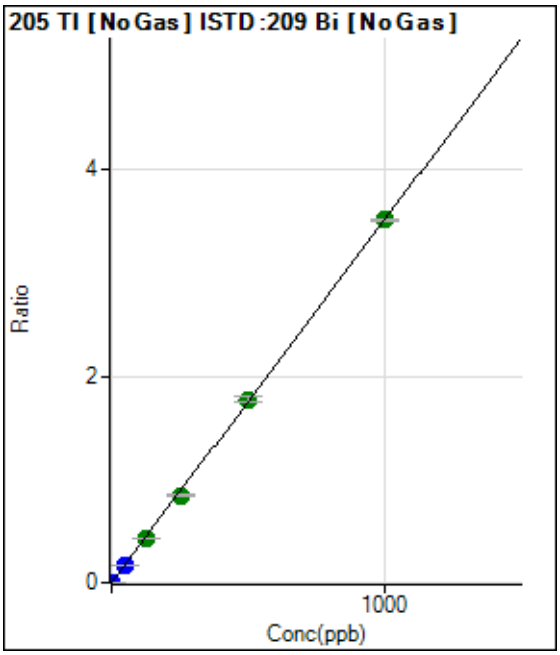
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	276.67	0.0000	P	16.0
2	☐	1.000	0.969	11700.68	0.0015	P	2.1
3	☐	50.000	45.748	547882.63	0.0679	P	1.2
4	☐	125.000	114.755	1378979.17	0.1703	P	0.8
5	☐	250.000	240.659	2896712.53	0.3571	A	1.6
6	☐	500.000	505.822	5827649.71	0.7506	A	3.1
7	☐	1000.000	1000.917	11591823.99	1.4852	A	0.1
8	☐			2544.72	0.0004	P	16.3

y = 0.0015 * x + 3.5033E-005
R = 0.9999
DL = 0.01135
BEC = 0.02361

Weight: <None>
Min Conc: 0

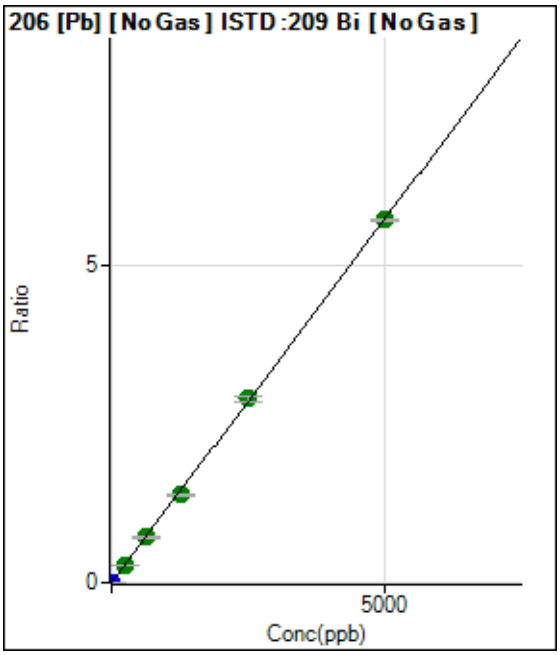


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	646.69	0.0001	P	3.4
2	☐	1.000	0.957	27347.53	0.0034	P	2.8
3	☐	50.000	45.329	1285368.32	0.1593	P	1.3
4	☐	125.000	123.654	3518330.50	0.4345	A	0.2
5	☐	250.000	240.778	6862042.95	0.8460	A	1.9
6	☐	500.000	504.857	13771933.13	1.7738	A	3.2
7	☐	1000.000	1000.279	27429529.03	3.5143	A	0.3
8	☐			5962.51	0.0009	P	15.8

y = 0.0035 * x + 8.1913E-005
R = 0.9999
DL = 0.00238
BEC = 0.02332

Weight: <None>
Min Conc: 0

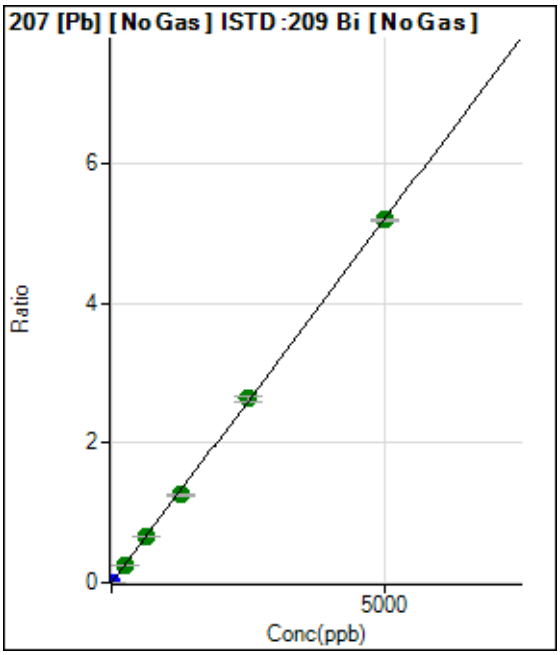
Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	357.79	0.0000	P	6.5
2	☐	1.000	0.989	9362.20	0.0012	P	3.0
3	☐	250.000	244.918	2264672.69	0.2807	A	0.5
4	☐	625.000	624.411	5794023.66	0.7156	A	1.3
5	☐	1250.000	1211.313	11258592.96	1.3881	A	2.6
6	☐	2500.000	2529.494	22503956.19	2.8987	A	3.5
7	☐	5000.000	4995.253	44678270.17	5.7243	A	0.3
8	☐			13580.35	0.0019	P	11.4

y = 0.0011 * x + 4.5332E-005
R = 0.9999
DL = 0.007655
BEC = 0.03956

Weight: <None>
Min Conc: 0

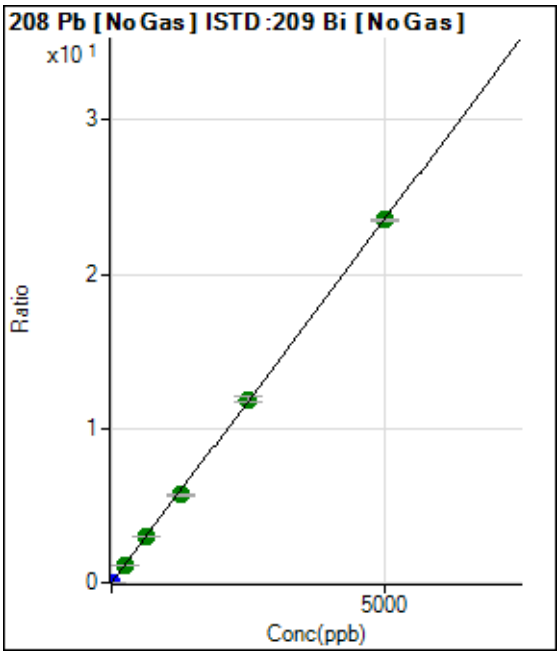


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	266.67	0.0000	P	13.7
2	☐	1.000	0.976	8339.28	0.0011	P	1.5
3	☐	250.000	246.495	2071847.33	0.2568	A	0.7
4	☐	625.000	628.658	5303135.75	0.6549	A	0.5
5	☐	1250.000	1212.916	10248580.06	1.2636	A	2.5
6	☐	2500.000	2533.868	20494306.22	2.6397	A	3.3
7	☐	5000.000	4992.055	40589001.34	5.2005	A	0.8
8	☐			12432.51	0.0018	P	8.9

y = 0.0010 * x + 3.3778E-005
R = 0.9999
DL = 0.01337
BEC = 0.03242

Weight: <None>
Min Conc: 0

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



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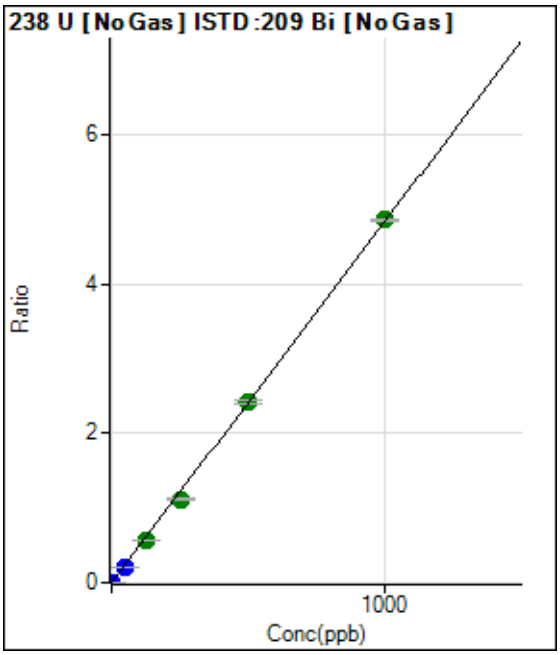
1	☐	0.000	0.000	1303.37	0.0002	P	4.3
2	☐	1.000	0.975	37736.36	0.0048	P	1.7
3	☐	250.000	246.382	9356550.50	1.1598	A	0.3
4	☐	625.000	624.374	23795958.40	2.9388	A	0.5
5	☐	1250.000	1215.182	46389028.20	5.7195	A	2.4
6	☐	2500.000	2527.501	92364922.79	11.8960	A	3.0
7	☐	5000.000	4995.213	183495095.60	23.5105	A	0.7
8	☐			55506.56	0.0080	P	10.7

y = 0.0047 * x + 1.6509E-004
R = 1.0000
DL = 0.004501
BEC = 0.03508

Weight: <None>
Min Conc: 0



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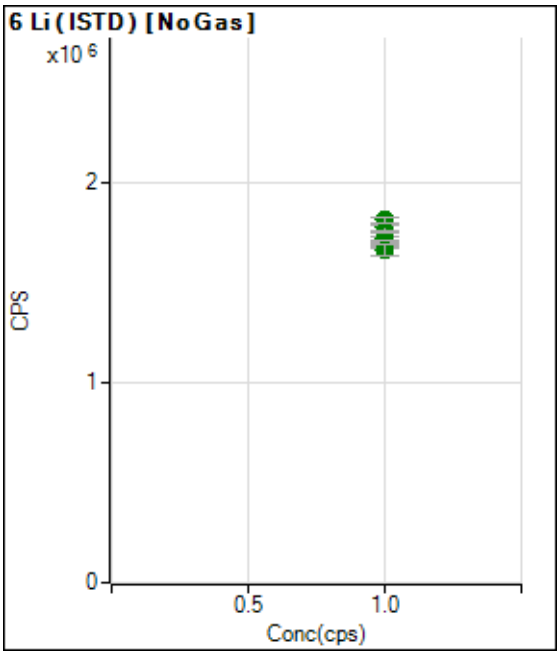
1	☐	0.000	0.000	8.89	0.0000	P	56.8
2	☐	1.000	0.895	34396.50	0.0043	P	1.8
3	☐	50.000	43.119	1683865.39	0.2087	P	1.5
4	☐	125.000	118.885	4659868.61	0.5755	A	1.1
5	☐	250.000	231.269	9080149.45	1.1195	A	2.6
6	☐	500.000	501.152	18838300.69	2.4260	A	2.5
7	☐	1000.000	1005.215	37979421.65	4.8661	A	0.7
8	☐			7383.32	0.0011	P	22.0

y = 0.0048 * x + 1.1228E-006
R = 0.9998
DL = 0.0003955
BEC = 0.0002319

Weight: <None>
Min Conc: 0

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



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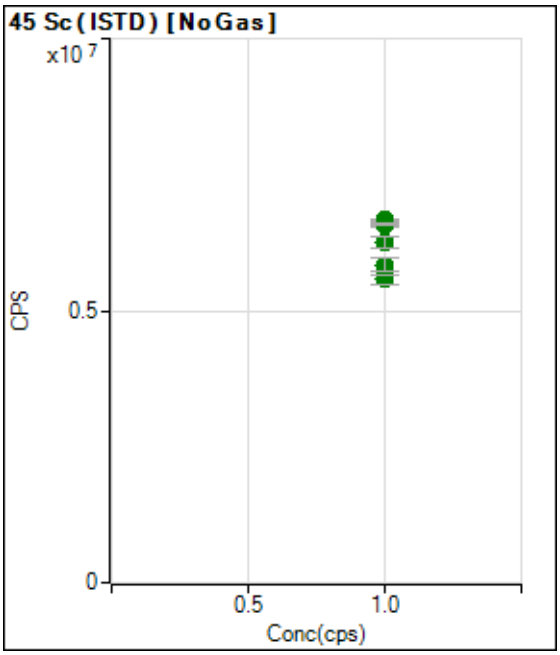
2	☐	1.000		1718946.97		A	1.7
3	☐	1.000		1747056.95		A	1.5
4	☐	1.000		1777074.02		A	1.5
5	☐	1.000		1815047.99		A	1.6
6	☐	1.000		1716786.35		A	4.3
7	☐	1.000		1706915.16		A	0.9
8	☐	1.000		1664780.58		A	3.6



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		6642528.37		A	0.3
2	☐	1.000		6587929.83		A	1.3
3	☐	1.000		6670014.55		A	0.5
4	☐	1.000		6598898.16		A	0.8
5	☐	1.000		6266154.56		A	3.4
6	☐	1.000		5575614.64		A	2.8
7	☐	1.000		5652817.76		A	0.2
8	☐	1.000		5842567.34		A	4.2

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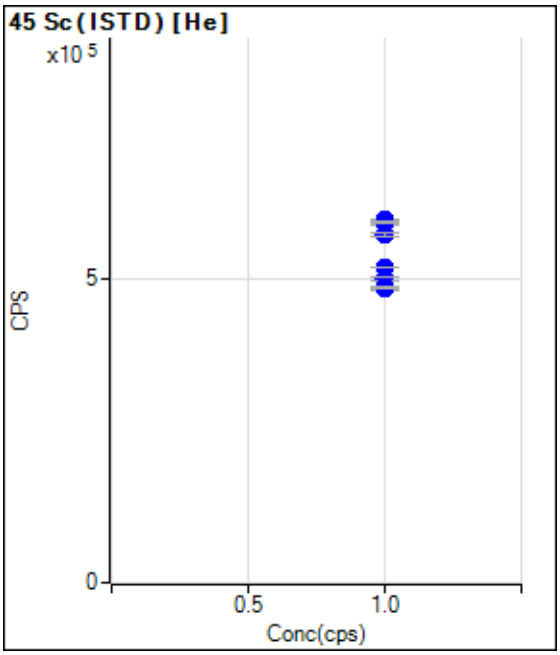
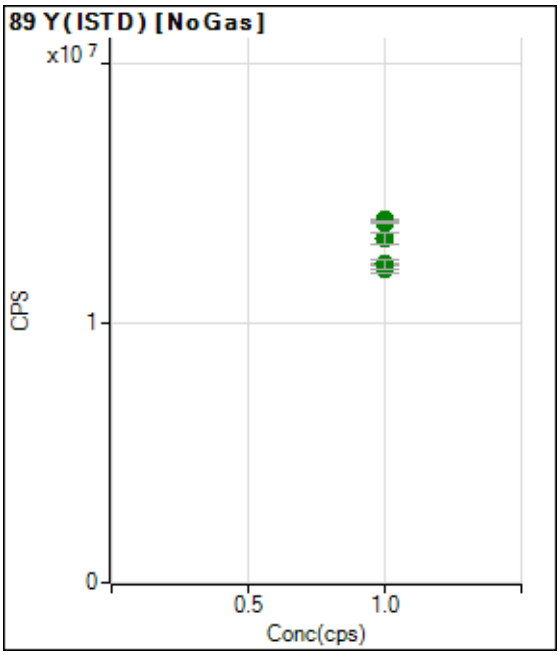


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		592280.24		P	0.5
2	☐	1.000		598379.63		P	0.3
3	☐	1.000		594868.37		P	0.4
4	☐	1.000		575232.58		P	1.2
5	☐	1.000		501625.21		P	1.1
6	☐	1.000		483980.04		P	0.3
7	☐	1.000		487450.14		P	0.3
8	☐	1.000		519115.01		P	0.1



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		13890455.77		A	1.0
2	☐	1.000		13872947.43		A	0.9
3	☐	1.000		13963417.99		A	0.6
4	☐	1.000		13906513.26		A	0.6
5	☐	1.000		13247836.33		A	3.2
6	☐	1.000		12057812.18		A	2.9
7	☐	1.000		12278465.09		A	0.3
8	☐	1.000		12271259.54		A	3.1

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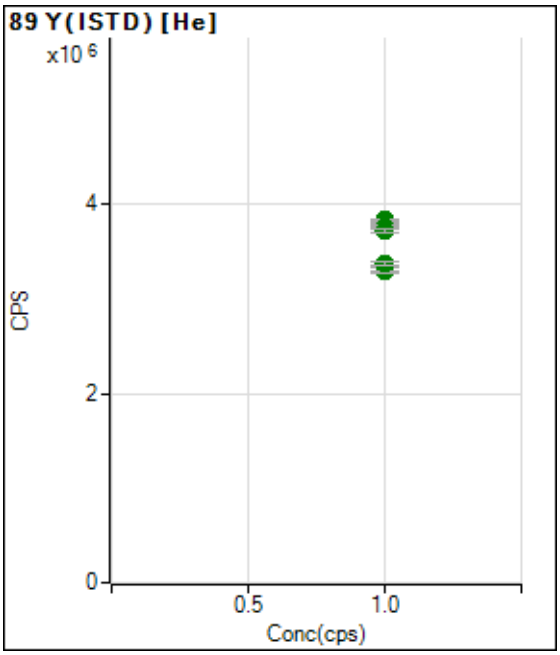
Inst Id :P7
LB :LB134070



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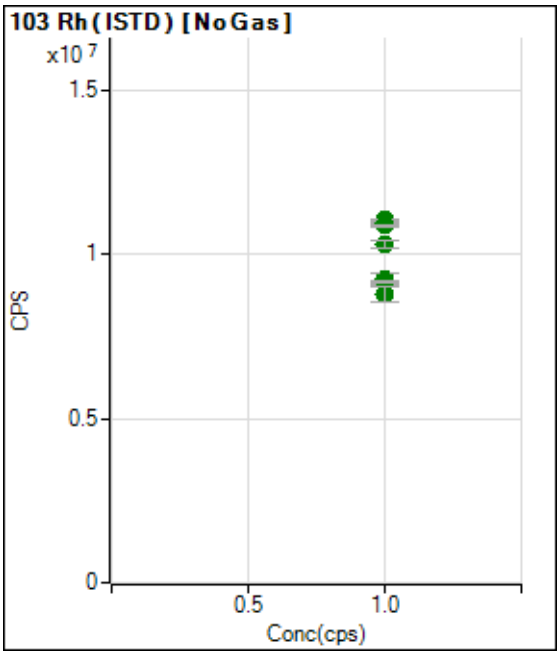
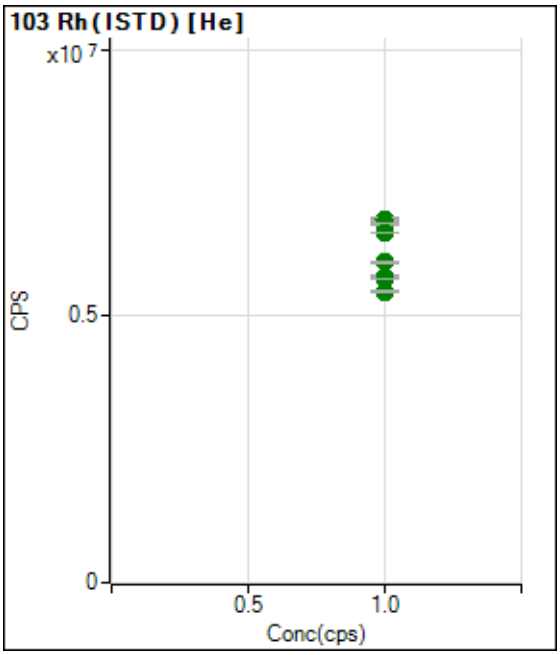
1	☐	1.000		3828367.06		A	1.0
2	☐	1.000		3838246.02		A	0.2
3	☐	1.000		3772364.25		A	0.8
4	☐	1.000		3720958.63		A	1.2
5	☐	1.000		3348664.39		A	1.0
6	☐	1.000		3293916.82		A	0.2
7	☐	1.000		3293014.85		A	0.5
8	☐	1.000		3371383.98		A	1.0



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		10991170.25		A	0.2
2	☐	1.000		10982415.39		A	1.1
3	☐	1.000		11056227.20		A	0.7
4	☐	1.000		10885566.92		A	0.5
5	☐	1.000		10319097.42		A	2.7
6	☐	1.000		9254455.21		A	3.3
7	☐	1.000		9172414.72		A	0.5
8	☐	1.000		8791840.28		A	4.8

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



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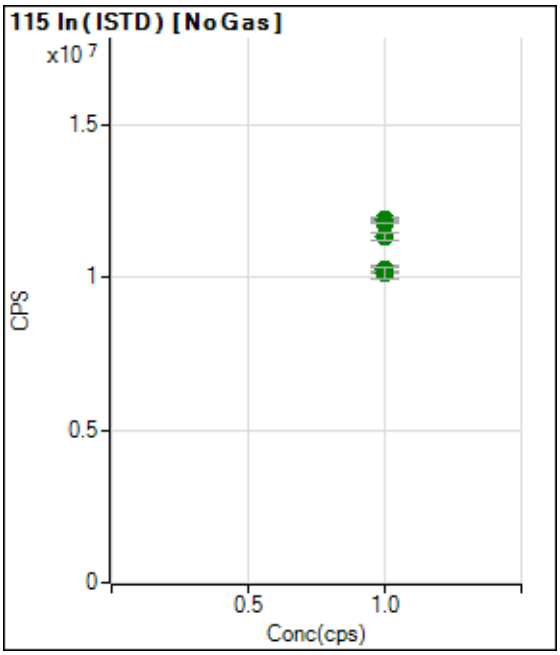
2	☐	1.000		6801067.75		A	0.9
3	☐	1.000		6731431.43		A	0.8
4	☐	1.000		6558537.40		A	0.5
5	☐	1.000		6009121.44		A	0.6
6	☐	1.000		5746823.73		A	1.0
7	☐	1.000		5691404.84		A	0.3
8	☐	1.000		5455781.38		A	0.4



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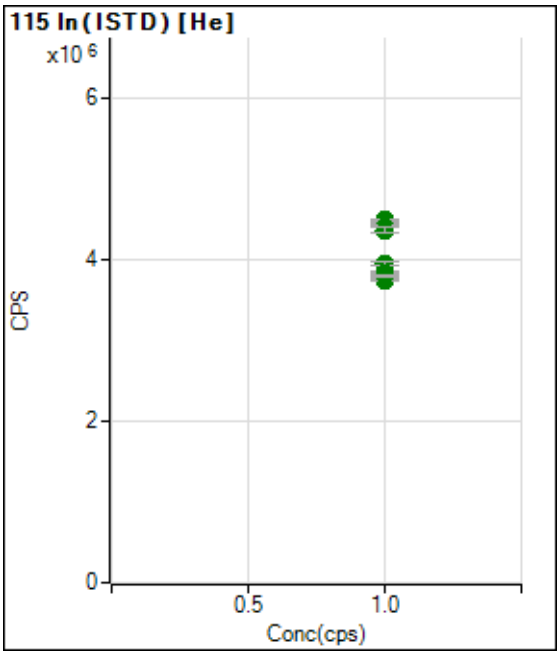
1	☐	1.000		11874820.08		A	1.1
2	☐	1.000		11824149.34		A	0.8
3	☐	1.000		11873820.93		A	1.0
4	☐	1.000		11786364.14		A	0.2
5	☐	1.000		11342123.49		A	2.5
6	☐	1.000		10259192.49		A	3.0
7	☐	1.000		10244099.36		A	1.1
8	☐	1.000		10136351.45		A	3.7

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



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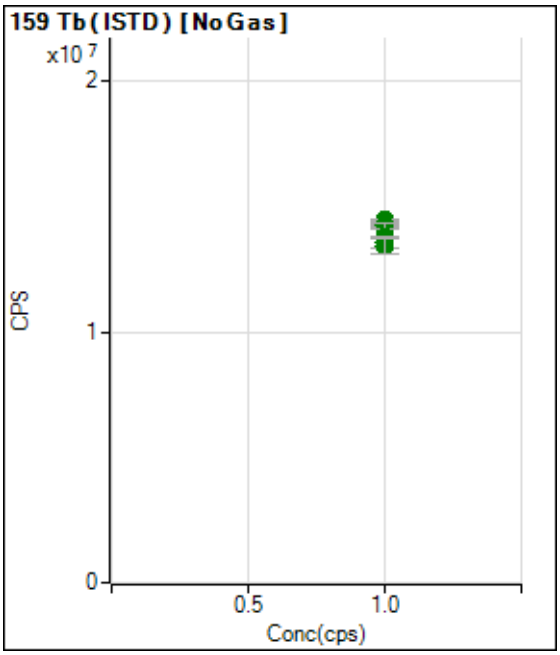
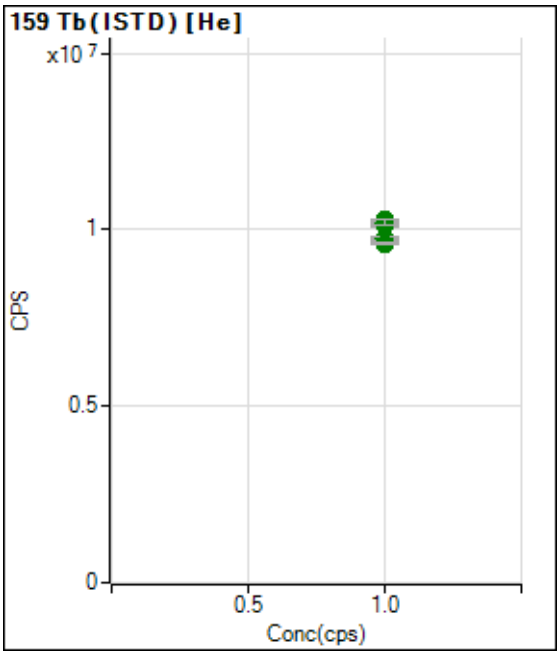
1	☐	1.000		4474689.53		A	1.1
2	☐	1.000		4491569.47		A	0.7
3	☐	1.000		4413885.91		A	0.7
4	☐	1.000		4359012.06		A	1.6
5	☐	1.000		3951140.16		A	0.9
6	☐	1.000		3839043.01		A	0.6
7	☐	1.000		3743256.40		A	0.7
8	☐	1.000		3801104.30		A	0.6

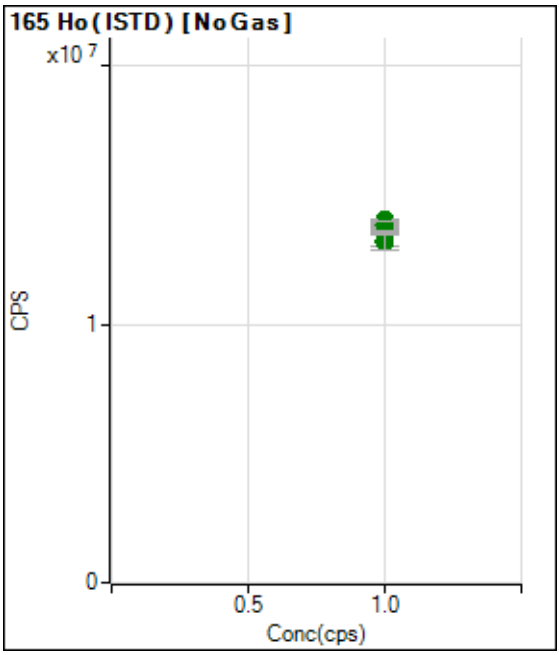


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		14273211.04		A	0.4
2	☐	1.000		14177542.29		A	0.2
3	☐	1.000		14479295.06		A	0.7
4	☐	1.000		14483112.98		A	0.3
5	☐	1.000		14242980.06		A	2.0
6	☐	1.000		13555779.52		A	3.4
7	☐	1.000		13823226.60		A	0.3
8	☐	1.000		13433491.33		A	4.1

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

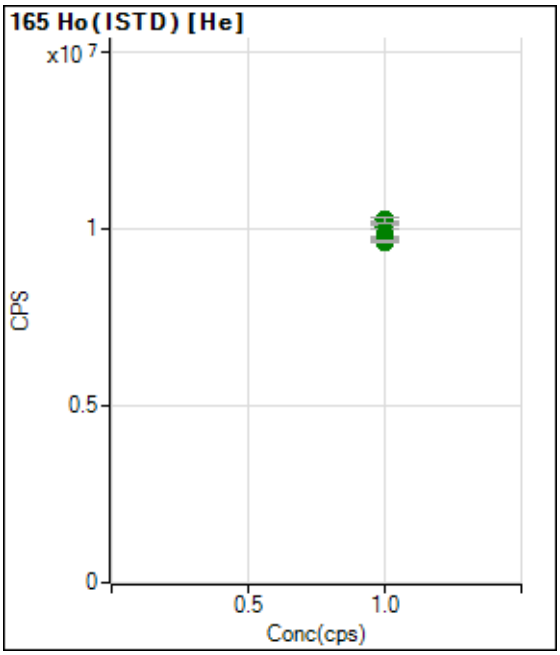


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		10110838.67		A	0.9
2	☐	1.000		10273290.89		A	0.3
3	☐	1.000		10233664.99		A	0.5
4	☐	1.000		10206288.39		A	1.3
5	☐	1.000		9748617.77		A	1.2
6	☐	1.000		9725609.58		A	0.2
7	☐	1.000		9735786.66		A	0.9
8	☐	1.000		9603271.24		A	0.3

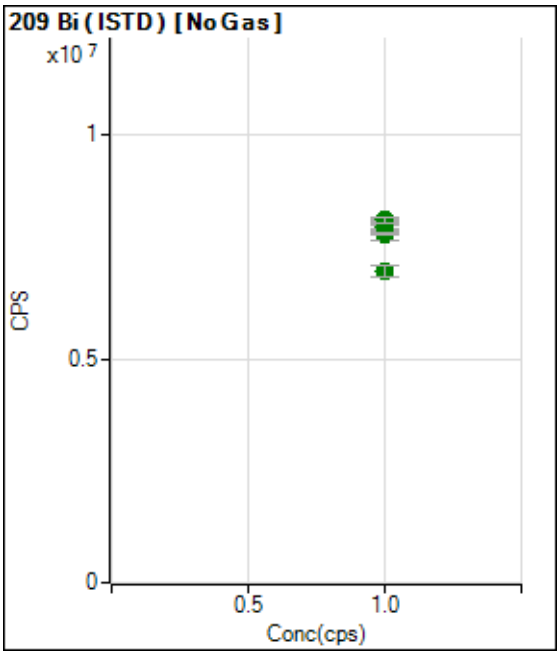


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		13835410.49		A	1.3
2	☐	1.000		13767330.07		A	0.5
3	☐	1.000		14030545.62		A	0.3
4	☐	1.000		13976514.79		A	0.7
5	☐	1.000		13855477.44		A	1.9
6	☐	1.000		13241210.64		A	3.2
7	☐	1.000		13574044.10		A	0.2
8	☐	1.000		13166572.58		A	4.4

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

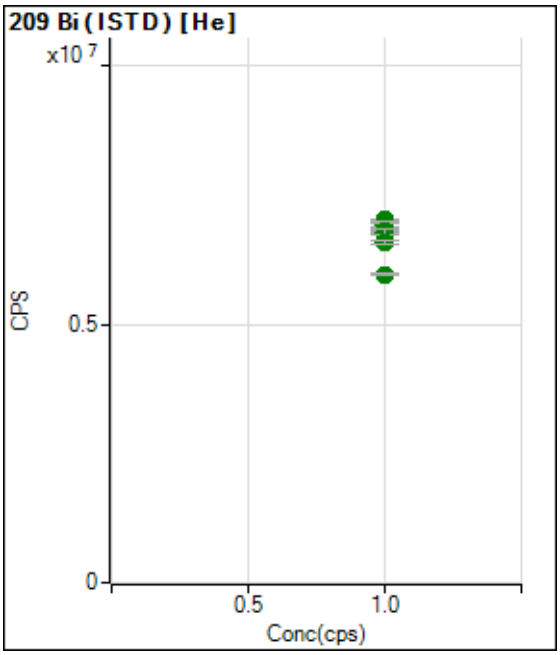


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		10062582.35		A	1.2
2	☐	1.000		10184896.86		A	0.9
3	☐	1.000		10171756.24		A	1.0
4	☐	1.000		10264872.49		A	1.4
5	☐	1.000		9762886.59		A	0.7
6	☐	1.000		9780862.98		A	0.8
7	☐	1.000		9738434.99		A	0.4
8	☐	1.000		9645286.94		A	0.6



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		7893526.69		A	0.7
2	☐	1.000		7941956.20		A	1.3
3	☐	1.000		8067521.96		A	0.7
4	☐	1.000		8097234.60		A	0.6
5	☐	1.000		8112489.67		A	1.4
6	☐	1.000		7769202.73		A	3.2
7	☐	1.000		7805061.76		A	0.7
8	☐	1.000		6960975.66		A	4.2

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		6921079.00		A	0.7
2	☐	1.000		6985818.23		A	0.6
3	☐	1.000		7019977.60		A	0.9
4	☐	1.000		6980726.22		A	0.6
5	☐	1.000		6793355.80		A	0.9
6	☐	1.000		6775103.72		A	1.6
7	☐	1.000		6586026.71		A	0.8
8	☐	1.000		5967244.36		A	0.3

US EPA Tune Check Report

Reviewed By:jasw
On:12/31/2024 4:0
AM
Inst Id :P7
LB :LB134070

Operator Name Jaswal

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\P7122324MS.b

Acq. Date-Time 2024-12-23 10:04:46

Report Comment ---

Instrument Name G8403A JP14410463

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		7807	78072.60			0.564	5.000
24		246811	2468108.82			0.722	5.000
25		30340	303397.03			0.492	5.000
26		34397	343971.65			0.668	5.000
59		99131	991313.99			0.855	5.000
113		12681	126806.55			0.704	5.000
115		164586	1645864.52			1.145	5.000
206		29974	299736.11			0.409	5.000
207		25980	259800.37			0.593	5.000
208		62521	625213.62			0.641	5.000
220		0	2.60			34.401	

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	7822	7761	7871	7812	7771
24	245599	249806	246568	245330	246751
25	30322	30102	30506	30403	30365
26	34344	34021	34534	34594	34493
59	98519	100361	98302	98864	99610
113	12795	12594	12703	12725	12587
115	166506	166646	163926	163344	162511
206	30000	29804	30103	30064	29897
207	26145	25735	26067	25964	25989
208	62835	61924	62839	62713	62296

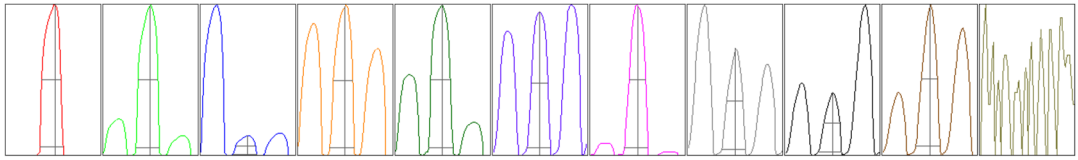
US EPA Tune Check Report

Reviewed By:jasw
On:12/31/2024 4:0
AM
Inst Id :P7
LB :LB134070

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	13938.06	9.10	8.90 - 9.10	
24	418713.38	24.00	23.90 - 24.10	
25	52722.64	25.00	24.90 - 25.10	
26	59555.39	26.00	25.90 - 26.10	
59	171377.09	59.00	58.90 - 59.10	
113	24822.11	113.00	112.90 - 113.10	
115	317927.88	115.05	114.90 - 115.10	
206	62411.91	206.05	205.90 - 206.10	
207	53587.97	207.05	206.90 - 207.10	
208	128552.86	208.05	207.90 - 208.10	
220			-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.59	0.733	0.900	
24	0.63	0.742	0.900	
25	0.61	0.757	0.900	
26	0.61	0.777	0.900	
59	0.61	0.777	0.900	
113	0.52	0.741	0.900	
115	0.52	0.748	0.900	
206	0.51	0.751	0.900	
207	0.51	0.729	0.900	
208	0.50	0.774	0.900	
220				

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

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.82 L/min Dilution Gas 0.40 L/min

US EPA Tune Check Report

Reviewed By:jasw
On:12/31/2024 4:0
AM
Inst Id :P7
LB :LB134070

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

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.8 V	Deflect	15.8 V
Extract 2	-135.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-65 V	Cell Exit	-50 V		

Cell Parameters

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

QP Parameters

Mass Gain	136	Axis Gain	0.9973	QP Bias	-3.0 V
Mass Offset	131	Axis Offset	0.17		

Hardware Settings

Torch

Torch H	0.4 mm	Torch V	0.4 mm		

EM

Discriminator	4.8 mV	Analog HV	2237 V	Pulse HV	1013 V

[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		33953	339530.58			0.383	
89		58512	585118.13			0.434	
205		35632	356316.59			0.265	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	34113	33943	34010	33943	33756
89	58847	58636	58510	58396	58171
205	35749	35672	35664	35562	35511

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.82 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.9 V	Deflect	3.8 V

US EPA Tune Check Report

Reviewed By:jasw
On:12/31/2024 4:0
AM
Inst Id :P7
LB :LB134070

Extract 2	-145.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-70 V	Cell Exit	-60 V		

Cell Parameters

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

QP Parameters

Mass Gain	136	Axis Gain	0.9973	QP Bias	-13.0 V
Mass Offset	131	Axis Offset	0.17		

Hardware Settings

Torch

Torch H	0.4 mm	Torch V	0.4 mm		

EM

Discriminator	4.8 mV	Analog HV	2237 V	Pulse HV	1013 V

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 10:59:16	DataFile Name :	004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.06	0.07	-0.01	0.00	N/A	ppb
Antimony	121-1	0.00	0.00	0.00	0.00	N/A	ppb
Arsenic	75-2	-0.02	0.01	0.00	0.00	N/A	ppb
Barium	135-1	0.00	0.00	-0.01	0.00	N/A	ppb
Barium	137-1	0.00	0.00	0.00	0.00	N/A	ppb
Beryllium	9-1	-0.01	0.00	0.00	0.00	N/A	ppb
Bismuth	209-1				100		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.01	0.00	-0.01	0.00	N/A	ppb
Cadmium	106-1	0.17	-0.16	-0.01	0.00	N/A	ppb
Cadmium	111-1	0.01	-0.01	0.00	0.00	N/A	ppb
Calcium	43-1	-0.90	-0.45	1.35	0.00	N/A	ppb
Calcium	44-1	-0.17	0.11	0.06	0.00	N/A	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.01	0.00	0.00	0.00	N/A	ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	N/A	ppb
Copper	63-2	0.00	0.00	0.00	0.00	N/A	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				100		%
Indium	115-1				100		%
Indium	115-2				100		%
Iron	56-2	-0.02	-0.03	0.04	0.00	N/A	ppb
Iron	57-2	-0.26	0.44	-0.17	0.00	N/A	ppb
Iron	54-2	-0.15	-0.13	0.29	0.00	N/A	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 10:59:16	DataFile Name :	004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.00	0.00	0.00	0.00	N/A	ppb
Lead	207-1	0.00	0.00	0.00	0.00	N/A	ppb
Lead	208-1	0.00	0.00	0.00	0.00	N/A	ppb
Lithium	6-1				100		%
Magnesium	24-2	0.01	0.06	-0.07	0.00	N/A	ppb
Manganese	55-2	-0.01	0.01	0.00	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	0.01	-0.01	0.00	N/A	ppb
Phosphorus	31-2	-16.52	-14.37	-16.17	-15.69		ppb
Potassium	39-2	-0.49	-0.08	0.57	0.00	N/A	ppb
Rhodium	103-1				100		%
Rhodium	103-2				100		%
Scandium	45-1				100		%
Scandium	45-2				100		%
Selenium	82-1	0.00	0.07	-0.07	0.00	N/A	ppb
Selenium	77-2	-0.16	-0.16	0.31	0.00	N/A	ppb
Selenium	78-2	0.02	1.32	-1.34	0.00	N/A	ppb
Silicon	28-1	-0.28	-0.22	0.51	0.00	N/A	ppb
Silver	107-1	0.00	0.00	0.00	0.00	N/A	ppb
Silver	109-1	0.00	0.00	0.00	0.00	N/A	ppb
Sodium	23-2	0.23	0.30	-0.54	0.00	N/A	ppb
Strontium	86-1	-0.07	-0.40	0.47	0.00	N/A	ppb
Strontium	88-1	0.01	0.01	-0.02	0.00	N/A	ppb
Sulfur	34-1	-71.20	-105.03	-57.50	-77.91		ppb
Terbium	159-1				100		%
Terbium	159-2				100		%
Thallium	203-1	0.00	0.00	0.00	0.00	N/A	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	N/A	ppb
Tin	118-1	-0.01	0.01	0.00	0.00	N/A	ppb
Titanium	47-1	-0.01	0.00	0.00	0.00	N/A	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 10:59:16	DataFile Name :	004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	N/A	ppb
Vanadium	51-2	0.00	0.00	0.00	0.00	N/A	ppb
Yttrium	89-1				100		%
Yttrium	89-2				100		%
Zinc	66-2	-0.03	0.00	0.02	0.00	N/A	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	N/A	ppb
Zirconium	91-1	-0.01	0.01	0.00	0.00	N/A	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:05:51	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	19.39	19.85	20.44	19.89	2.65	ppb
Antimony	121-1	2.19	2.28	2.21	2.23	1.99	ppb
Arsenic	75-2	1.06	1.13	1.21	1.13	6.40	ppb
Barium	135-1	10.74	10.67	10.78	10.73	0.51	ppb
Barium	137-1	10.85	10.85	10.96	10.89	0.58	ppb
Beryllium	9-1	1.25	1.09	1.18	1.17	6.83	ppb
Bismuth	209-1				101		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.77	1.25	1.20	1.07	24.31	ppb
Cadmium	106-1	1.83	0.47	0.94	1.08	63.82	ppb
Cadmium	111-1	1.23	1.20	1.16	1.20	3.25	ppb
Calcium	43-1	586.75	600.29	575.59	587.54	2.10	ppb
Calcium	44-1	577.85	591.05	589.97	586.29	1.25	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.23	2.20	2.14	2.19	2.14	ppb
Cobalt	59-2	1.15	1.14	1.12	1.14	1.02	ppb
Copper	63-2	2.07	2.10	2.05	2.07	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				100		%
Holmium	165-2				101		%
Indium	115-1				100		%
Indium	115-2				100		%
Iron	56-2	56.15	56.77	56.49	56.47	0.55	ppb
Iron	57-2	57.77	56.91	59.82	58.17	2.56	ppb
Iron	54-2	60.92	59.43	59.88	60.08	1.27	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:05:51	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.96	1.02	1.00	0.99	3.09	ppb
Lead	207-1	0.96	0.98	0.99	0.98	1.50	ppb
Lead	208-1	0.96	0.99	0.98	0.97	1.77	ppb
Lithium	6-1				101		%
Magnesium	24-2	521.90	522.26	522.55	522.24	0.06	ppb
Manganese	55-2	1.06	1.16	1.09	1.11	4.31	ppb
Molybdenum	94-1	6.07	6.12	6.41	6.20	2.99	ppb
Molybdenum	95-1	5.12	5.18	5.25	5.19	1.24	ppb
Molybdenum	96-1	5.33	5.28	5.51	5.37	2.27	ppb
Molybdenum	97-1	5.31	5.27	5.25	5.28	0.57	ppb
Molybdenum	98-1	5.26	5.17	5.18	5.20	0.97	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.13	0.99	1.14	1.09	7.71	ppb
Phosphorus	31-2	12.23	13.44	21.39	15.69	31.69	ppb
Potassium	39-2	550.16	549.24	550.86	550.09	0.15	ppb
Rhodium	103-1				100		%
Rhodium	103-2				100		%
Scandium	45-1				99		%
Scandium	45-2				101		%
Selenium	82-1	5.72	5.38	5.57	5.56	3.08	ppb
Selenium	77-2	6.62	5.67	6.12	6.14	7.70	ppb
Selenium	78-2	3.53	6.14	5.41	5.03	26.74	ppb
Silicon	28-1	2.35	21.23	21.17	14.92	72.99	ppb
Silver	107-1	1.13	1.15	1.14	1.14	1.11	ppb
Silver	109-1	1.16	1.11	1.17	1.15	3.08	ppb
Sodium	23-2	508.32	511.77	509.87	509.99	0.34	ppb
Strontium	86-1	25.25	25.44	26.87	25.85	3.43	ppb
Strontium	88-1	26.93	26.23	26.51	26.55	1.32	ppb
Sulfur	34-1	-44.19	127.45	150.46	77.91	136.52	ppb
Terbium	159-1				99		%
Terbium	159-2				102		%
Thallium	203-1	0.97	0.95	0.99	0.97	2.11	ppb
Thallium	205-1	0.95	0.93	0.99	0.96	2.88	ppb
Tin	118-1	5.64	5.68	5.58	5.63	0.81	ppb
Titanium	47-1	5.53	5.27	5.36	5.39	2.43	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:05:51	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.88	0.91	0.89	0.89	1.82	ppb
Vanadium	51-2	5.44	5.42	5.44	5.43	0.26	ppb
Yttrium	89-1				100		%
Yttrium	89-2				100		%
Zinc	66-2	5.33	5.60	5.28	5.40	3.20	ppb
Zirconium	90-1	1.02	1.03	1.03	1.03	0.43	ppb
Zirconium	91-1	0.98	1.05	1.06	1.03	4.17	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:09:06	DataFile Name :	007CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	978.26	973.48	963.60	971.78	0.77	ppb
Antimony	121-1	50.63	51.35	51.68	51.22	1.04	ppb
Arsenic	75-2	53.61	54.11	53.53	53.75	0.58	ppb
Barium	135-1	248.80	252.55	251.66	251.00	0.78	ppb
Barium	137-1	251.14	255.37	255.13	253.88	0.94	ppb
Beryllium	9-1	53.90	54.36	55.32	54.53	1.33	ppb
Bismuth	209-1				102		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	54.86	55.33	56.75	55.65	1.76	ppb
Cadmium	106-1	54.39	56.67	57.60	56.22	2.94	ppb
Cadmium	111-1	53.06	53.96	54.49	53.84	1.34	ppb
Calcium	43-1	5446.16	5453.18	5432.50	5443.95	0.19	ppb
Calcium	44-1	5170.14	5122.18	5083.82	5125.38	0.84	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	51.36	50.70	50.09	50.72	1.26	ppb
Cobalt	59-2	50.55	50.19	49.92	50.22	0.63	ppb
Copper	63-2	528.81	520.05	518.32	522.39	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				101		%
Holmium	165-2				101		%
Indium	115-1				100		%
Indium	115-2				99		%
Iron	56-2	2572.09	2563.10	2538.68	2557.96	0.68	ppb
Iron	57-2	2646.55	2628.32	2622.21	2632.36	0.48	ppb
Iron	54-2	2716.25	2678.70	2679.26	2691.40	0.80	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:09:06	DataFile Name :	007CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	245.53	245.73	243.49	244.92	0.51	ppb
Lead	207-1	246.76	244.69	248.03	246.50	0.68	ppb
Lead	208-1	245.71	247.13	246.30	246.38	0.29	ppb
Lithium	6-1				103		%
Magnesium	24-2	4693.78	4723.98	4684.85	4700.87	0.44	ppb
Manganese	55-2	498.66	499.37	493.78	497.27	0.61	ppb
Molybdenum	94-1	495.47	499.16	502.83	499.15	0.74	ppb
Molybdenum	95-1	498.54	491.98	506.72	499.08	1.48	ppb
Molybdenum	96-1	495.62	496.51	507.46	499.86	1.32	ppb
Molybdenum	97-1	498.68	500.65	508.48	502.60	1.03	ppb
Molybdenum	98-1	493.18	493.40	508.85	498.48	1.80	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	51.15	51.25	50.46	50.95	0.84	ppb
Phosphorus	31-2	1031.47	1018.43	1044.03	1031.31	1.24	ppb
Potassium	39-2	2554.76	2543.07	2457.54	2518.46	2.11	ppb
Rhodium	103-1				101		%
Rhodium	103-2				99		%
Scandium	45-1				100		%
Scandium	45-2				100		%
Selenium	82-1	51.42	52.64	52.68	52.25	1.37	ppb
Selenium	77-2	49.06	56.01	54.43	53.17	6.86	ppb
Selenium	78-2	52.86	54.17	56.01	54.35	2.91	ppb
Silicon	28-1	71.99	69.80	71.65	71.15	1.66	ppb
Silver	107-1	54.37	55.23	55.34	54.98	0.97	ppb
Silver	109-1	53.37	53.80	54.60	53.92	1.15	ppb
Sodium	23-2	4967.74	4975.96	4866.45	4936.72	1.24	ppb
Strontium	86-1	1226.77	1236.32	1237.35	1233.48	0.47	ppb
Strontium	88-1	1224.71	1244.48	1252.92	1240.70	1.17	ppb
Sulfur	34-1	1056.54	1073.15	1143.11	1090.93	4.21	ppb
Terbium	159-1				101		%
Terbium	159-2				101		%
Thallium	203-1	45.21	45.74	46.30	45.75	1.20	ppb
Thallium	205-1	44.82	45.22	45.95	45.33	1.26	ppb
Tin	118-1	50.96	51.94	52.09	51.66	1.19	ppb
Titanium	47-1	501.37	499.39	502.40	501.05	0.30	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:09:06	DataFile Name :	007CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	42.51	43.03	43.82	43.12	1.53	ppb
Vanadium	51-2	50.61	50.37	49.91	50.30	0.71	ppb
Yttrium	89-1				101		%
Yttrium	89-2				99		%
Zinc	66-2	500.52	491.59	491.33	494.48	1.06	ppb
Zirconium	90-1	48.58	48.72	49.03	48.78	0.47	ppb
Zirconium	91-1	48.73	49.61	49.95	49.43	1.27	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:12:08	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2423.88	2468.64	2480.70	2457.74	1.22	ppb
Antimony	121-1	132.60	132.26	132.50	132.45	0.13	ppb
Arsenic	75-2	133.66	133.29	134.49	133.81	0.46	ppb
Barium	135-1	655.90	667.25	660.56	661.24	0.86	ppb
Barium	137-1	666.20	673.15	664.00	667.78	0.72	ppb
Beryllium	9-1	134.51	138.24	132.33	135.03	2.21	ppb
Bismuth	209-1				103		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	138.39	138.13	137.82	138.11	0.20	ppb
Cadmium	106-1	138.77	140.55	139.07	139.46	0.68	ppb
Cadmium	111-1	133.74	135.52	133.45	134.24	0.84	ppb
Calcium	43-1	13619.93	13538.18	13876.97	13678.36	1.29	ppb
Calcium	44-1	12951.14	12964.57	12936.96	12950.89	0.11	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	127.24	128.35	128.96	128.18	0.68	ppb
Cobalt	59-2	125.47	127.47	127.28	126.74	0.87	ppb
Copper	63-2	1275.97	1299.68	1327.22	1300.95	1.97	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				102		%
Indium	115-1				99		%
Indium	115-2				97		%
Iron	56-2	6442.29	6578.09	6474.88	6498.42	1.09	ppb
Iron	57-2	6560.70	6698.31	6670.40	6643.14	1.10	ppb
Iron	54-2	6559.35	6710.17	6674.13	6647.88	1.18	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:12:08	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	631.45	615.88	625.91	624.41	1.26	ppb
Lead	207-1	631.76	625.56	628.65	628.66	0.49	ppb
Lead	208-1	626.69	621.01	625.42	624.37	0.48	ppb
Lithium	6-1				105		%
Magnesium	24-2	11701.54	11819.62	11806.81	11775.99	0.55	ppb
Manganese	55-2	1248.19	1267.89	1262.30	1259.46	0.81	ppb
Molybdenum	94-1	1266.19	1251.27	1258.76	1258.74	0.59	ppb
Molybdenum	95-1	1261.09	1249.83	1252.22	1254.38	0.47	ppb
Molybdenum	96-1	1260.94	1259.78	1272.69	1264.47	0.56	ppb
Molybdenum	97-1	1273.23	1244.00	1247.58	1254.93	1.27	ppb
Molybdenum	98-1	1265.09	1248.21	1254.19	1255.83	0.68	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	127.27	127.75	129.12	128.04	0.75	ppb
Phosphorus	31-2	2621.37	2611.49	2634.02	2622.29	0.43	ppb
Potassium	39-2	6253.70	6341.49	6316.98	6304.06	0.72	ppb
Rhodium	103-1				99		%
Rhodium	103-2				97		%
Scandium	45-1				99		%
Scandium	45-2				97		%
Selenium	82-1	133.00	130.73	131.58	131.77	0.87	ppb
Selenium	77-2	129.95	132.30	130.00	130.75	1.03	ppb
Selenium	78-2	138.64	129.98	135.76	134.79	3.27	ppb
Silicon	28-1	150.54	151.92	152.27	151.58	0.61	ppb
Silver	107-1	140.71	139.48	138.88	139.69	0.67	ppb
Silver	109-1	141.12	141.65	136.42	139.73	2.06	ppb
Sodium	23-2	12542.87	12519.66	12615.93	12559.49	0.40	ppb
Strontium	86-1	3087.41	3087.83	3098.83	3091.35	0.21	ppb
Strontium	88-1	3192.98	3138.41	3155.89	3162.43	0.88	ppb
Sulfur	34-1	2615.79	2641.96	2671.47	2643.07	1.05	ppb
Terbium	159-1				101		%
Terbium	159-2				101		%
Thallium	203-1	114.17	114.35	115.74	114.75	0.75	ppb
Thallium	205-1	123.45	123.51	124.00	123.65	0.24	ppb
Tin	118-1	129.22	129.70	128.96	129.29	0.29	ppb
Titanium	47-1	1253.63	1258.85	1275.73	1262.74	0.91	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:12:08	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	119.18	117.49	119.99	118.89	1.07	ppb
Vanadium	51-2	126.13	128.60	127.73	127.49	0.98	ppb
Yttrium	89-1				100		%
Yttrium	89-2				97		%
Zinc	66-2	1241.39	1255.65	1259.77	1252.27	0.77	ppb
Zirconium	90-1	125.88	122.94	126.72	125.18	1.59	ppb
Zirconium	91-1	123.86	123.74	124.67	124.09	0.41	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:14:58	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	4756.29	4820.85	4835.90	4804.35	0.88	ppb
Antimony	121-1	247.69	255.32	260.18	254.40	2.47	ppb
Arsenic	75-2	254.07	256.25	253.86	254.73	0.52	ppb
Barium	135-1	1229.27	1277.93	1269.39	1258.86	2.06	ppb
Barium	137-1	1222.20	1276.01	1286.86	1261.69	2.74	ppb
Beryllium	9-1	247.64	250.76	255.83	251.41	1.65	ppb
Bismuth	209-1				103		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	255.05	263.91	263.78	260.91	1.95	ppb
Cadmium	106-1	254.53	265.95	264.94	261.81	2.42	ppb
Cadmium	111-1	246.91	257.25	256.13	253.43	2.24	ppb
Calcium	43-1	25783.20	26913.01	26883.92	26526.71	2.43	ppb
Calcium	44-1	24683.71	25542.76	25444.32	25223.60	1.86	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	248.10	249.61	249.47	249.06	0.33	ppb
Cobalt	59-2	251.00	253.27	248.72	250.99	0.91	ppb
Copper	63-2	2521.03	2553.80	2528.49	2534.44	0.68	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				97		%
Indium	115-1				96		%
Indium	115-2				88		%
Iron	56-2	12761.22	12869.38	12708.32	12779.64	0.64	ppb
Iron	57-2	12756.31	13165.12	13112.54	13011.32	1.71	ppb
Iron	54-2	13061.19	12939.35	13082.92	13027.82	0.59	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:14:58	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1175.36	1232.61	1225.96	1211.31	2.58	ppb
Lead	207-1	1179.29	1220.17	1239.29	1212.92	2.53	ppb
Lead	208-1	1181.56	1229.39	1234.59	1215.18	2.41	ppb
Lithium	6-1				107		%
Magnesium	24-2	23205.57	23341.09	23401.54	23316.06	0.43	ppb
Manganese	55-2	2487.85	2491.98	2513.44	2497.76	0.55	ppb
Molybdenum	94-1	2376.13	2524.92	2476.58	2459.21	3.09	ppb
Molybdenum	95-1	2381.37	2526.76	2495.53	2467.89	3.10	ppb
Molybdenum	96-1	2386.42	2529.96	2488.03	2468.14	2.99	ppb
Molybdenum	97-1	2354.26	2492.90	2498.32	2448.49	3.33	ppb
Molybdenum	98-1	2368.49	2510.43	2502.06	2460.32	3.24	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	245.84	247.73	246.59	246.72	0.39	ppb
Phosphorus	31-2	4962.50	5054.96	5010.11	5009.19	0.92	ppb
Potassium	39-2	12049.07	12170.15	12231.56	12150.26	0.76	ppb
Rhodium	103-1				94		%
Rhodium	103-2				88		%
Scandium	45-1				94		%
Scandium	45-2				85		%
Selenium	82-1	246.72	257.21	259.34	254.43	2.66	ppb
Selenium	77-2	250.58	257.37	266.51	258.15	3.10	ppb
Selenium	78-2	261.38	253.22	253.54	256.05	1.81	ppb
Silicon	28-1	268.04	289.31	284.73	280.69	3.99	ppb
Silver	107-1	259.90	269.55	266.61	265.35	1.86	ppb
Silver	109-1	259.71	266.74	263.74	263.40	1.34	ppb
Sodium	23-2	24422.23	24720.84	24927.79	24690.29	1.03	ppb
Strontium	86-1	5811.05	6116.13	6117.79	6014.99	2.94	ppb
Strontium	88-1	5928.44	6203.81	6087.83	6073.36	2.28	ppb
Sulfur	34-1	4670.08	5143.11	5102.41	4971.86	5.27	ppb
Terbium	159-1				100		%
Terbium	159-2				96		%
Thallium	203-1	236.40	242.06	243.52	240.66	1.56	ppb
Thallium	205-1	235.67	244.54	242.13	240.78	1.90	ppb
Tin	118-1	250.09	256.51	251.23	252.61	1.36	ppb
Titanium	47-1	2394.86	2486.50	2530.51	2470.62	2.80	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:14:58	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	224.43	235.24	234.13	231.27	2.57	ppb
Vanadium	51-2	248.35	247.55	248.23	248.04	0.17	ppb
Yttrium	89-1				95		%
Yttrium	89-2				87		%
Zinc	66-2	2507.63	2545.50	2563.62	2538.92	1.13	ppb
Zirconium	90-1	238.96	250.19	247.08	245.41	2.36	ppb
Zirconium	91-1	234.31	246.48	248.20	243.00	3.12	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:17:46	DataFile Name :	010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	9751.88	9706.99	9614.23	9691.03	0.72	ppb
Antimony	121-1	526.54	501.39	498.62	508.85	3.02	ppb
Arsenic	75-2	498.62	503.05	501.98	501.22	0.46	ppb
Barium	135-1	2647.20	2482.66	2506.93	2545.59	3.49	ppb
Barium	137-1	2630.74	2477.87	2499.47	2536.03	3.26	ppb
Beryllium	9-1	523.66	490.10	504.37	506.04	3.33	ppb
Bismuth	209-1				98		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	533.71	506.27	510.24	516.74	2.87	ppb
Cadmium	106-1	532.83	506.20	503.75	514.26	3.14	ppb
Cadmium	111-1	517.20	493.20	491.13	500.51	2.90	ppb
Calcium	43-1	54397.87	51435.51	52643.61	52825.66	2.82	ppb
Calcium	44-1	54164.15	51663.82	51761.84	52529.94	2.70	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	501.68	502.02	501.24	501.65	0.08	ppb
Cobalt	59-2	506.53	500.71	504.04	503.76	0.58	ppb
Copper	63-2	5091.34	5072.07	5033.63	5065.68	0.58	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				96		%
Holmium	165-2				97		%
Indium	115-1				86		%
Indium	115-2				86		%
Iron	56-2	25848.64	25603.56	25860.25	25770.81	0.56	ppb
Iron	57-2	26171.12	25592.50	25610.96	25791.53	1.28	ppb
Iron	54-2	26298.08	25885.28	26215.65	26133.00	0.84	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:17:46	DataFile Name :	010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2629.27	2500.95	2458.27	2529.49	3.52	ppb
Lead	207-1	2625.11	2512.21	2464.29	2533.87	3.26	ppb
Lead	208-1	2607.62	2517.24	2457.64	2527.50	2.99	ppb
Lithium	6-1				101		%
Magnesium	24-2	46977.57	46638.62	46671.62	46762.60	0.40	ppb
Manganese	55-2	5031.60	5000.34	5054.88	5028.94	0.54	ppb
Molybdenum	94-1	5242.10	5000.86	5016.92	5086.63	2.65	ppb
Molybdenum	95-1	5254.57	4988.95	5005.93	5083.15	2.93	ppb
Molybdenum	96-1	5299.78	5019.87	4965.05	5094.90	3.52	ppb
Molybdenum	97-1	5295.18	4960.76	4965.60	5073.85	3.78	ppb
Molybdenum	98-1	5275.81	4989.21	4954.47	5073.17	3.48	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	488.76	491.25	488.35	489.45	0.32	ppb
Phosphorus	31-2	9980.45	10126.93	10061.31	10056.23	0.73	ppb
Potassium	39-2	24671.57	24561.64	24500.69	24577.96	0.35	ppb
Rhodium	103-1				84		%
Rhodium	103-2				85		%
Scandium	45-1				84		%
Scandium	45-2				82		%
Selenium	82-1	535.58	505.44	507.25	516.09	3.27	ppb
Selenium	77-2	494.98	495.04	512.66	500.89	2.03	ppb
Selenium	78-2	505.45	503.73	503.61	504.26	0.21	ppb
Silicon	28-1	542.91	514.11	518.35	525.12	2.96	ppb
Silver	107-1	540.54	509.12	502.18	517.28	3.95	ppb
Silver	109-1	538.25	505.65	505.67	516.52	3.64	ppb
Sodium	23-2	49857.89	49422.72	49450.10	49576.91	0.49	ppb
Strontium	86-1	13394.70	12465.17	12389.62	12749.83	4.39	ppb
Strontium	88-1	13204.95	12476.07	12574.72	12751.91	3.10	ppb
Sulfur	34-1	10780.55	9938.94	10053.84	10257.77	4.45	ppb
Terbium	159-1				95		%
Terbium	159-2				96		%
Thallium	203-1	523.78	496.90	496.78	505.82	3.07	ppb
Thallium	205-1	520.97	504.98	488.62	504.86	3.20	ppb
Tin	118-1	533.62	500.71	500.29	511.54	3.74	ppb
Titanium	47-1	5178.21	4955.57	5055.73	5063.17	2.20	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:17:46	DataFile Name :	010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	515.48	496.28	491.70	501.15	2.52	ppb
Vanadium	51-2	499.42	501.58	495.49	498.83	0.62	ppb
Yttrium	89-1				87		%
Yttrium	89-2				86		%
Zinc	66-2	5107.12	5102.03	5091.96	5100.37	0.15	ppb
Zirconium	90-1	520.29	500.84	502.88	508.01	2.10	ppb
Zirconium	91-1	517.39	502.95	500.21	506.85	1.82	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:20:30	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	19422.13	19059.23	19156.96	19212.77	0.98	ppb
Antimony	121-1	990.74	1001.72	987.98	993.48	0.73	ppb
Arsenic	75-2	993.90	999.63	997.23	996.92	0.29	ppb
Barium	135-1	4990.43	4974.58	4946.21	4970.41	0.45	ppb
Barium	137-1	5023.50	4980.33	4916.74	4973.52	1.08	ppb
Beryllium	9-1	995.78	985.75	1003.91	995.15	0.91	ppb
Bismuth	209-1				99		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	980.86	986.51	993.57	986.98	0.65	ppb
Cadmium	106-1	979.25	989.06	995.09	987.80	0.81	ppb
Cadmium	111-1	999.60	991.65	1001.37	997.54	0.52	ppb
Calcium	43-1	101811.21	102683.34	102884.95	102459.83	0.56	ppb
Calcium	44-1	101698.61	102677.89	102669.31	102348.60	0.55	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1004.08	998.42	994.43	998.98	0.49	ppb
Cobalt	59-2	1000.22	991.29	1001.41	997.64	0.55	ppb
Copper	63-2	10056.02	9916.05	9881.11	9951.06	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				98		%
Holmium	165-2				97		%
Indium	115-1				86		%
Indium	115-2				84		%
Iron	56-2	51426.72	51663.97	50948.54	51346.41	0.71	ppb
Iron	57-2	50928.65	51136.85	51391.55	51152.35	0.45	ppb
Iron	54-2	51561.85	51655.24	52028.74	51748.61	0.48	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:20:30	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	5007.38	4978.88	4999.50	4995.25	0.29	ppb
Lead	207-1	4983.01	4959.50	5033.66	4992.05	0.76	ppb
Lead	208-1	5007.17	4955.58	5022.89	4995.21	0.70	ppb
Lithium	6-1				101		%
Magnesium	24-2	93129.46	92576.83	92395.34	92700.54	0.41	ppb
Manganese	55-2	10024.19	10026.53	9904.42	9985.05	0.70	ppb
Molybdenum	94-1	9902.33	10022.13	9973.05	9965.84	0.60	ppb
Molybdenum	95-1	9881.63	9992.85	10023.36	9965.95	0.75	ppb
Molybdenum	96-1	9926.49	10003.20	9946.45	9958.71	0.40	ppb
Molybdenum	97-1	9937.13	9885.91	10102.58	9975.21	1.14	ppb
Molybdenum	98-1	9903.92	9955.48	10058.65	9972.68	0.79	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	992.75	1016.31	1007.95	1005.67	1.19	ppb
Phosphorus	31-2	20107.87	19848.50	19901.85	19952.74	0.69	ppb
Potassium	39-2	48940.09	49282.68	48735.53	48986.10	0.56	ppb
Rhodium	103-1				83		%
Rhodium	103-2				84		%
Scandium	45-1				85		%
Scandium	45-2				82		%
Selenium	82-1	985.02	993.65	990.99	989.89	0.45	ppb
Selenium	77-2	988.69	1000.77	1000.44	996.63	0.69	ppb
Selenium	78-2	998.32	994.82	991.61	994.92	0.34	ppb
Silicon	28-1	980.45	974.38	971.19	975.34	0.48	ppb
Silver	107-1	986.56	988.49	981.25	985.44	0.38	ppb
Silver	109-1	985.96	987.61	985.48	986.35	0.11	ppb
Sodium	23-2	98385.31	98733.04	98753.07	98623.81	0.21	ppb
Strontium	86-1	24781.63	24988.07	25046.90	24938.87	0.56	ppb
Strontium	88-1	24807.99	24855.67	25078.31	24913.99	0.58	ppb
Sulfur	34-1	19805.76	19853.16	19908.23	19855.72	0.26	ppb
Terbium	159-1				97		%
Terbium	159-2				96		%
Thallium	203-1	1001.37	1000.05	1001.33	1000.92	0.08	ppb
Thallium	205-1	1002.68	997.56	1000.60	1000.28	0.26	ppb
Tin	118-1	991.40	989.24	998.23	992.96	0.47	ppb
Titanium	47-1	9956.15	9941.40	10024.79	9974.11	0.45	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:20:30	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1009.07	997.32	1009.26	1005.22	0.68	ppb
Vanadium	51-2	1008.80	997.67	995.77	1000.75	0.70	ppb
Yttrium	89-1				88		%
Yttrium	89-2				86		%
Zinc	66-2	10059.78	9926.23	9834.23	9940.08	1.14	ppb
Zirconium	90-1	995.27	991.65	1004.63	997.18	0.67	ppb
Zirconium	91-1	998.70	989.68	1007.03	998.47	0.87	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:23:17	DataFile Name :	012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	100056.97	99640.34	100901.08	100199.46	0.64	ppb
Antimony	121-1	0.64	0.63	0.57	0.61	6.36	ppb
Arsenic	75-2	0.64	0.61	0.53	0.59	9.38	ppb
Barium	135-1	2.89	2.69	2.45	2.68	8.39	ppb
Barium	137-1	2.81	2.79	2.50	2.70	6.41	ppb
Beryllium	9-1	0.36	0.31	0.31	0.32	8.09	ppb
Bismuth	209-1				88		%
Bismuth	209-2				86		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.43	0.71	0.43	0.52	31.24	ppb
Cadmium	106-1	-1.02	-0.25	-0.60	-0.62		ppb
Cadmium	111-1	0.22	0.23	0.21	0.22	4.75	ppb
Calcium	43-1	470444.93	517213.20	509687.30	499115.15	5.03	ppb
Calcium	44-1	473953.28	512752.71	511054.49	499253.49	4.39	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.30	1.22	1.28	1.27	3.25	ppb
Cobalt	59-2	2.46	2.48	2.54	2.49	1.83	ppb
Copper	63-2	1.95	1.77	1.70	1.80	7.11	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				95		%
Holmium	165-2				96		%
Indium	115-1				85		%
Indium	115-2				85		%
Iron	56-2	249046.45	249758.50	250093.63	249632.86	0.21	ppb
Iron	57-2	248166.08	249116.92	251677.97	249653.66	0.73	ppb
Iron	54-2	248371.34	251217.33	248907.51	249498.72	0.61	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:23:17	DataFile Name :	012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.85	1.65	1.47	1.66	11.64	ppb
Lead	207-1	1.82	1.70	1.52	1.68	9.02	ppb
Lead	208-1	1.83	1.66	1.47	1.65	10.96	ppb
Lithium	6-1				98		%
Magnesium	24-2	502102.86	502054.27	501509.57	501888.90	0.07	ppb
Manganese	55-2	5.11	4.46	4.26	4.61	9.67	ppb
Molybdenum	94-1	4.14	3.76	3.17	3.69	13.30	ppb
Molybdenum	95-1	3.27	2.79	2.23	2.76	18.88	ppb
Molybdenum	96-1	4.91	4.48	3.88	4.43	11.69	ppb
Molybdenum	97-1	3.13	2.80	2.26	2.73	16.17	ppb
Molybdenum	98-1	3.11	2.71	2.19	2.67	17.31	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	3.17	3.30	3.13	3.20	2.84	ppb
Phosphorus	31-2	-4.23	-8.79	-10.47	-7.83		ppb
Potassium	39-2	249481.06	250188.45	251113.00	250260.83	0.33	ppb
Rhodium	103-1				80		%
Rhodium	103-2				80		%
Scandium	45-1				88		%
Scandium	45-2				88		%
Selenium	82-1	0.88	0.98	1.06	0.97	9.42	ppb
Selenium	77-2	-0.16	0.02	0.02	-0.04		ppb
Selenium	78-2	-1.22	-0.94	-1.39	-1.18		ppb
Silicon	28-1	-2.25	2.65	1.43	0.61	420.07	ppb
Silver	107-1	0.31	0.27	0.22	0.27	17.62	ppb
Silver	109-1	0.30	0.27	0.22	0.26	16.25	ppb
Sodium	23-2	495608.51	502215.58	503172.42	500332.17	0.82	ppb
Strontium	86-1	70.65	77.07	73.36	73.70	4.37	ppb
Strontium	88-1	74.37	76.65	75.89	75.64	1.54	ppb
Sulfur	34-1	-659.34	-371.62	-292.20	-441.06		ppb
Terbium	159-1				94		%
Terbium	159-2				95		%
Thallium	203-1	0.27	0.21	0.19	0.22	18.07	ppb
Thallium	205-1	0.26	0.22	0.18	0.22	17.49	ppb
Tin	118-1	0.41	0.40	0.33	0.38	11.49	ppb
Titanium	47-1	3.12	2.72	2.17	2.67	17.76	ppb

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:23:17	DataFile Name :	012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.26	0.22	0.17	0.22	21.98	ppb
Vanadium	51-2	0.22	0.21	0.20	0.21	4.93	ppb
Yttrium	89-1				88		%
Yttrium	89-2				88		%
Zinc	66-2	6.99	6.82	6.81	6.87	1.45	ppb
Zirconium	90-1	0.73	0.73	0.66	0.71	6.09	ppb
Zirconium	91-1	0.76	0.72	0.66	0.71	7.13	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:06:59	DataFile Name :	017ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	477.31	474.07	474.05	475.15	0.40	ppb
Antimony	121-1	212.53	210.86	215.03	212.81	0.99	ppb
Arsenic	75-2	215.17	218.71	218.60	217.49	0.92	ppb
Barium	135-1	99.82	100.43	100.89	100.38	0.53	ppb
Barium	137-1	101.33	101.86	102.31	101.83	0.48	ppb
Beryllium	9-1	106.22	109.98	105.39	107.20	2.28	ppb
Bismuth	209-1				102		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	95.73	97.55	100.45	97.91	2.43	ppb
Cadmium	106-1	94.30	93.66	96.55	94.84	1.60	ppb
Cadmium	111-1	107.66	107.22	108.49	107.79	0.60	ppb
Calcium	43-1	2100.13	2098.90	2092.76	2097.26	0.19	ppb
Calcium	44-1	2114.85	2131.20	2109.10	2118.38	0.54	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	103.25	103.53	104.62	103.80	0.70	ppb
Cobalt	59-2	102.30	102.02	102.77	102.36	0.37	ppb
Copper	63-2	97.46	96.99	97.52	97.32	0.30	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				99		%
Holmium	165-2				100		%
Indium	115-1				97		%
Indium	115-2				95		%
Iron	56-2	2025.65	2012.69	2041.12	2026.49	0.70	ppb
Iron	57-2	2085.50	2089.97	2076.00	2083.82	0.34	ppb
Iron	54-2	2176.10	2171.60	2169.47	2172.39	0.16	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:06:59	DataFile Name :	017ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	204.87	199.68	202.64	202.39	1.29	ppb
Lead	207-1	177.90	178.48	181.24	179.21	1.00	ppb
Lead	208-1	194.18	193.37	194.91	194.15	0.40	ppb
Lithium	6-1				106		%
Magnesium	24-2	1106.35	1100.31	1105.70	1104.12	0.30	ppb
Manganese	55-2	100.36	100.96	100.38	100.57	0.34	ppb
Molybdenum	94-1	0.02	0.03	0.01	0.02	57.71	ppb
Molybdenum	95-1	0.02	0.02	0.02	0.02	11.60	ppb
Molybdenum	96-1	0.05	0.04	0.03	0.04	18.72	ppb
Molybdenum	97-1	0.02	0.02	0.02	0.02	7.10	ppb
Molybdenum	98-1	0.02	0.02	0.02	0.02	12.15	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	105.17	104.50	104.62	104.76	0.34	ppb
Phosphorus	31-2	-12.15	-12.66	-17.37	-14.06		ppb
Potassium	39-2	1926.10	1924.85	2025.88	1958.94	2.96	ppb
Rhodium	103-1				98		%
Rhodium	103-2				96		%
Scandium	45-1				97		%
Scandium	45-2				95		%
Selenium	82-1	216.99	219.95	216.70	217.88	0.82	ppb
Selenium	77-2	224.77	224.59	227.88	225.75	0.82	ppb
Selenium	78-2	216.27	223.69	225.10	221.69	2.14	ppb
Silicon	28-1	-7.72	-7.29	-7.70	-7.57		ppb
Silver	107-1	50.85	51.57	52.27	51.57	1.38	ppb
Silver	109-1	50.74	51.48	51.65	51.29	0.94	ppb
Sodium	23-2	1946.08	1935.58	1914.69	1932.12	0.83	ppb
Strontium	86-1	5.74	5.59	5.71	5.68	1.41	ppb
Strontium	88-1	6.00	5.81	6.05	5.95	2.12	ppb
Sulfur	34-1	-143.00	-101.77	-112.50	-119.09		ppb
Terbium	159-1				99		%
Terbium	159-2				99		%
Thallium	203-1	200.59	197.44	201.19	199.74	1.01	ppb
Thallium	205-1	197.34	198.31	198.37	198.01	0.29	ppb
Tin	118-1	0.01	0.01	0.01	0.01	4.42	ppb
Titanium	47-1	0.02	0.02	0.00	0.01	93.22	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:06:59	DataFile Name :	017ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	39.53	ppb
Vanadium	51-2	101.01	100.84	100.62	100.82	0.19	ppb
Yttrium	89-1				97		%
Yttrium	89-2				95		%
Zinc	66-2	198.54	197.78	196.51	197.61	0.52	ppb
Zirconium	90-1	0.01	0.00	0.01	0.00	25.22	ppb
Zirconium	91-1	0.04	0.05	0.06	0.05	17.14	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	LLICV01	Instrumnet Name :	P7
Client Sample ID :	LLICV01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:20:59	DataFile Name :	020LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20.25	20.24	20.79	20.43	1.54	ppb
Antimony	121-1	2.18	2.19	2.15	2.17	0.82	ppb
Arsenic	75-2	1.17	1.22	1.10	1.16	4.84	ppb
Barium	135-1	10.31	10.09	10.35	10.25	1.35	ppb
Barium	137-1	10.48	10.52	10.45	10.49	0.35	ppb
Beryllium	9-1	1.20	1.22	1.17	1.20	2.07	ppb
Bismuth	209-1				100		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	1.24	1.09	0.93	1.09	13.93	ppb
Cadmium	106-1	-0.18	-0.05	-0.37	-0.20		ppb
Cadmium	111-1	1.11	1.04	1.01	1.05	4.96	ppb
Calcium	43-1	558.32	572.36	565.04	565.24	1.24	ppb
Calcium	44-1	571.86	569.73	562.89	568.16	0.82	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.22	2.16	2.08	2.15	3.24	ppb
Cobalt	59-2	1.12	1.08	1.09	1.09	1.94	ppb
Copper	63-2	2.13	2.06	2.04	2.08	2.36	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				97		%
Holmium	165-2				99		%
Indium	115-1				97		%
Indium	115-2				97		%
Iron	56-2	55.42	55.13	54.66	55.07	0.70	ppb
Iron	57-2	58.48	56.03	58.90	57.81	2.68	ppb
Iron	54-2	58.55	57.63	56.28	57.49	1.99	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	LLICV01	Instrumnet Name :	P7
Client Sample ID :	LLICV01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:20:59	DataFile Name :	020LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.99	0.92	1.03	0.98	5.42	ppb
Lead	207-1	0.94	0.92	0.97	0.94	2.36	ppb
Lead	208-1	0.96	0.93	0.99	0.96	3.50	ppb
Lithium	6-1				103		%
Magnesium	24-2	520.14	510.54	514.78	515.15	0.93	ppb
Manganese	55-2	1.07	1.09	1.05	1.07	2.14	ppb
Molybdenum	94-1	6.14	6.10	6.16	6.13	0.55	ppb
Molybdenum	95-1	5.19	5.10	5.21	5.17	1.07	ppb
Molybdenum	96-1	5.20	5.28	5.42	5.30	2.11	ppb
Molybdenum	97-1	5.18	5.02	5.22	5.14	2.10	ppb
Molybdenum	98-1	5.11	5.11	5.24	5.15	1.46	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.05	1.08	1.09	1.07	2.14	ppb
Phosphorus	31-2	13.18	17.93	17.19	16.10	15.87	ppb
Potassium	39-2	548.20	540.55	541.67	543.47	0.76	ppb
Rhodium	103-1				98		%
Rhodium	103-2				97		%
Scandium	45-1				97		%
Scandium	45-2				97		%
Selenium	82-1	5.05	5.74	5.66	5.48	6.85	ppb
Selenium	77-2	3.96	5.02	6.16	5.04	21.81	ppb
Selenium	78-2	5.19	4.87	4.43	4.83	7.83	ppb
Silicon	28-1	-2.02	-2.76	-3.24	-2.67		ppb
Silver	107-1	1.12	1.09	1.10	1.10	1.55	ppb
Silver	109-1	1.08	1.09	1.11	1.09	1.70	ppb
Sodium	23-2	513.80	503.39	501.59	506.26	1.30	ppb
Strontium	86-1	24.58	24.54	26.07	25.06	3.46	ppb
Strontium	88-1	25.99	25.69	26.62	26.10	1.83	ppb
Sulfur	34-1	124.11	146.52	96.76	122.46	20.35	ppb
Terbium	159-1				98		%
Terbium	159-2				98		%
Thallium	203-1	0.96	0.90	1.00	0.95	4.96	ppb
Thallium	205-1	0.95	0.92	0.97	0.95	2.81	ppb
Tin	118-1	5.43	5.49	5.42	5.44	0.68	ppb
Titanium	47-1	5.27	5.23	5.31	5.27	0.71	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	LLICV01	Instrumnet Name :	P7
Client Sample ID :	LLICV01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:20:59	DataFile Name :	020LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.88	0.86	0.88	0.87	1.61	ppb
Vanadium	51-2	5.38	5.24	5.29	5.31	1.34	ppb
Yttrium	89-1				97		%
Yttrium	89-2				97		%
Zinc	66-2	5.60	5.48	5.33	5.47	2.51	ppb
Zirconium	90-1	1.03	1.02	1.02	1.02	0.24	ppb
Zirconium	91-1	1.07	1.02	1.06	1.05	2.47	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:25:40	DataFile Name :	021CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.10	0.07	0.01	0.06	71.31	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	18.62	ppb
Arsenic	75-2	-0.02	-0.02	-0.01	-0.01		ppb
Barium	135-1	0.00	-0.01	0.00	0.00		ppb
Barium	137-1	0.00	0.00	0.01	0.00	188.07	ppb
Beryllium	9-1	0.00	-0.03	0.00	-0.01		ppb
Bismuth	209-1				101		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.08	0.02	0.03	0.04	74.09	ppb
Cadmium	106-1	-1.12	-1.42	-1.15	-1.23		ppb
Cadmium	111-1	-0.08	-0.10	-0.09	-0.09		ppb
Calcium	43-1	4.21	2.40	3.24	3.29	27.52	ppb
Calcium	44-1	-1.79	-1.11	-1.22	-1.37		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.00	-0.03	-0.02	-0.02		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	0.02	-0.01	0.01	0.01	190.21	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				97		%
Holmium	165-2				99		%
Indium	115-1				97		%
Indium	115-2				96		%
Iron	56-2	-0.09	-0.03	-0.07	-0.06		ppb
Iron	57-2	0.22	0.78	0.57	0.52	53.70	ppb
Iron	54-2	1.07	0.68	0.71	0.82	26.11	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:25:40	DataFile Name :	021CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.00	0.01	0.00	0.00	106.85	ppb
Lead	207-1	0.01	0.01	0.01	0.01	14.22	ppb
Lead	208-1	0.01	0.01	0.01	0.01	16.44	ppb
Lithium	6-1				102		%
Magnesium	24-2	0.21	0.18	0.11	0.17	31.04	ppb
Manganese	55-2	-0.01	0.01	0.00	0.00		ppb
Molybdenum	94-1	-0.01	-0.01	-0.01	-0.01		ppb
Molybdenum	95-1	0.00	0.00	0.01	0.00	56.51	ppb
Molybdenum	96-1	0.00	-0.01	0.00	0.00		ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00	59.98	ppb
Molybdenum	98-1	0.00	-0.01	0.00	0.00		ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.00	0.01	0.00	0.00		ppb
Phosphorus	31-2	-17.14	-16.36	-13.34	-15.61		ppb
Potassium	39-2	1.47	2.04	2.24	1.92	20.63	ppb
Rhodium	103-1				97		%
Rhodium	103-2				97		%
Scandium	45-1				97		%
Scandium	45-2				97		%
Selenium	82-1	-0.29	-0.31	-0.45	-0.35		ppb
Selenium	77-2	-0.16	-0.16	-0.16	-0.16		ppb
Selenium	78-2	-0.65	-1.86	-0.79	-1.10		ppb
Silicon	28-1	-4.74	-4.80	-5.57	-5.04		ppb
Silver	107-1	0.00	0.01	0.00	0.01	29.10	ppb
Silver	109-1	0.01	0.00	0.01	0.01	29.14	ppb
Sodium	23-2	-0.02	0.05	0.03	0.02	192.15	ppb
Strontium	86-1	-0.01	0.15	-0.27	-0.04		ppb
Strontium	88-1	0.03	-0.02	-0.01	0.00		ppb
Sulfur	34-1	167.91	107.31	53.55	109.59	52.21	ppb
Terbium	159-1				97		%
Terbium	159-2				98		%
Thallium	203-1	0.00	0.01	0.00	0.00	856.91	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	92.71	ppb
Tin	118-1	0.01	0.02	0.01	0.01	48.58	ppb
Titanium	47-1	0.01	0.00	-0.01	0.00		ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:25:40	DataFile Name :	021CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	73.35	ppb
Vanadium	51-2	0.00	0.00	0.00	0.00	477.26	ppb
Yttrium	89-1				97		%
Yttrium	89-2				97		%
Zinc	66-2	0.04	0.02	0.04	0.03	33.14	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	398.64	ppb
Zirconium	91-1	0.00	0.00	-0.01	0.00		ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:29:38	DataFile Name :	022ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	93288.72	93231.23	93599.84	93373.26	0.21	ppb
Antimony	121-1	1.12	1.11	1.11	1.11	0.74	ppb
Arsenic	75-2	0.30	0.37	0.38	0.35	11.92	ppb
Barium	135-1	1.45	1.34	1.39	1.40	4.00	ppb
Barium	137-1	1.40	1.42	1.43	1.42	0.80	ppb
Beryllium	9-1	0.31	0.28	0.30	0.30	5.77	ppb
Bismuth	209-1				98		%
Bismuth	209-2				97		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	9.74	9.37	8.88	9.33	4.67	ppb
Cadmium	106-1	-1.62	-2.41	-2.65	-2.22		ppb
Cadmium	111-1	0.26	0.23	0.17	0.22	19.37	ppb
Calcium	43-1	103466.27	102323.46	105595.69	103795.14	1.60	ppb
Calcium	44-1	103058.98	101867.83	105154.91	103360.57	1.61	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	20.69	20.87	20.78	20.78	0.42	ppb
Cobalt	59-2	1.31	1.19	1.27	1.26	4.69	ppb
Copper	63-2	7.30	7.19	7.15	7.22	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				98		%
Holmium	165-2				100		%
Indium	115-1				91		%
Indium	115-2				89		%
Iron	56-2	107012.82	104547.86	105416.03	105658.91	1.18	ppb
Iron	57-2	106049.52	104501.31	104891.57	105147.46	0.77	ppb
Iron	54-2	105830.05	105004.62	104986.88	105273.85	0.46	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:29:38	DataFile Name :	022ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	4.78	4.91	4.98	4.89	2.01	ppb
Lead	207-1	4.30	4.43	4.41	4.38	1.62	ppb
Lead	208-1	4.49	4.59	4.59	4.56	1.29	ppb
Lithium	6-1				101		%
Magnesium	24-2	95440.82	94504.69	94140.44	94695.32	0.71	ppb
Manganese	55-2	8.46	8.38	8.26	8.36	1.20	ppb
Molybdenum	94-1	1639.01	1629.20	1647.97	1638.73	0.57	ppb
Molybdenum	95-1	1996.84	2006.22	2033.96	2012.34	0.96	ppb
Molybdenum	96-1	1982.92	2008.00	1993.10	1994.68	0.63	ppb
Molybdenum	97-1	1986.85	2043.13	2025.13	2018.37	1.42	ppb
Molybdenum	98-1	2003.53	2031.76	2019.23	2018.17	0.70	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	5.52	5.48	5.37	5.46	1.41	ppb
Phosphorus	31-2	103879.63	102850.30	103763.66	103497.86	0.54	ppb
Potassium	39-2	100085.54	99936.03	100529.74	100183.77	0.31	ppb
Rhodium	103-1				88		%
Rhodium	103-2				86		%
Scandium	45-1				91		%
Scandium	45-2				87		%
Selenium	82-1	-0.08	-0.23	-0.23	-0.18		ppb
Selenium	77-2	0.02	0.19	0.19	0.13	73.67	ppb
Selenium	78-2	-1.12	-1.57	-1.19	-1.29		ppb
Silicon	28-1	-3.68	-5.02	-3.67	-4.13		ppb
Silver	107-1	0.05	0.04	0.03	0.04	24.72	ppb
Silver	109-1	0.05	0.04	0.04	0.04	14.54	ppb
Sodium	23-2	100408.10	100464.99	100167.65	100346.92	0.16	ppb
Strontium	86-1	860.09	861.29	859.90	860.43	0.09	ppb
Strontium	88-1	852.18	861.26	863.25	858.90	0.69	ppb
Sulfur	34-1	103256.55	101879.85	104626.57	103254.32	1.33	ppb
Terbium	159-1				99		%
Terbium	159-2				98		%
Thallium	203-1	0.10	0.10	0.10	0.10	2.56	ppb
Thallium	205-1	0.11	0.10	0.09	0.10	9.62	ppb
Tin	118-1	0.24	0.23	0.21	0.23	6.83	ppb
Titanium	47-1	2060.97	2042.92	2073.92	2059.27	0.76	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:29:38	DataFile Name :	022ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.02	0.02	0.02	0.02	5.38	ppb
Vanadium	51-2	0.17	0.18	0.16	0.17	6.08	ppb
Yttrium	89-1				92		%
Yttrium	89-2				90		%
Zinc	66-2	11.28	11.55	11.43	11.42	1.17	ppb
Zirconium	90-1	0.02	0.02	0.03	0.02	24.61	ppb
Zirconium	91-1	0.03	0.04	0.03	0.03	12.15	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:32:42	DataFile Name :	023ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	91965.04	90983.78	92105.70	91684.84	0.67	ppb
Antimony	121-1	19.82	21.10	21.35	20.76	3.96	ppb
Arsenic	75-2	20.97	21.65	21.45	21.36	1.64	ppb
Barium	135-1	19.80	20.86	21.14	20.60	3.45	ppb
Barium	137-1	19.97	21.69	21.72	21.13	4.75	ppb
Beryllium	9-1	20.42	21.54	21.13	21.03	2.71	ppb
Bismuth	209-1				100		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	24.46	27.23	26.23	25.97	5.40	ppb
Cadmium	106-1	14.68	15.96	15.91	15.52	4.66	ppb
Cadmium	111-1	18.40	19.94	20.11	19.48	4.84	ppb
Calcium	43-1	97190.00	103881.55	104064.39	101711.98	3.85	ppb
Calcium	44-1	96309.68	102850.59	105002.21	101387.50	4.47	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	40.99	40.92	40.96	40.95	0.08	ppb
Cobalt	59-2	21.49	21.16	21.36	21.34	0.78	ppb
Copper	63-2	26.17	25.68	25.88	25.91	0.96	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				101		%
Indium	115-1				95		%
Indium	115-2				91		%
Iron	56-2	103515.61	103586.22	103774.75	103625.53	0.13	ppb
Iron	57-2	103669.26	101246.17	102457.31	102457.58	1.18	ppb
Iron	54-2	103956.41	104349.14	103607.56	103971.04	0.36	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:32:42	DataFile Name :	023ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	23.29	24.65	24.77	24.24	3.39	ppb
Lead	207-1	22.07	23.16	23.18	22.80	2.79	ppb
Lead	208-1	22.55	23.55	23.61	23.24	2.55	ppb
Lithium	6-1				101		%
Magnesium	24-2	93590.59	92518.51	93439.60	93182.90	0.62	ppb
Manganese	55-2	28.16	27.90	28.43	28.16	0.94	ppb
Molybdenum	94-1	1536.17	1646.73	1629.61	1604.17	3.71	ppb
Molybdenum	95-1	1862.89	1979.68	1982.27	1941.61	3.51	ppb
Molybdenum	96-1	1856.94	1947.61	1969.38	1924.64	3.10	ppb
Molybdenum	97-1	1873.82	1964.92	2004.80	1947.85	3.45	ppb
Molybdenum	98-1	1885.96	1964.56	2002.63	1951.05	3.05	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	25.02	25.49	25.04	25.18	1.05	ppb
Phosphorus	31-2	102010.17	102033.85	102309.02	102117.68	0.16	ppb
Potassium	39-2	98372.97	98594.68	98409.86	98459.17	0.12	ppb
Rhodium	103-1				91		%
Rhodium	103-2				89		%
Scandium	45-1				93		%
Scandium	45-2				89		%
Selenium	82-1	18.95	21.65	20.42	20.34	6.65	ppb
Selenium	77-2	22.83	20.58	21.17	21.53	5.41	ppb
Selenium	78-2	21.54	20.03	21.15	20.91	3.74	ppb
Silicon	28-1	-5.62	-2.66	-1.53	-3.27		ppb
Silver	107-1	17.86	19.22	19.44	18.84	4.55	ppb
Silver	109-1	17.76	19.04	19.34	18.71	4.50	ppb
Sodium	23-2	98915.01	97478.19	99140.32	98511.17	0.92	ppb
Strontium	86-1	803.31	848.80	868.13	840.08	3.96	ppb
Strontium	88-1	795.38	844.88	858.74	833.00	4.00	ppb
Sulfur	34-1	95906.65	100370.66	103279.80	99852.37	3.72	ppb
Terbium	159-1				103		%
Terbium	159-2				100		%
Thallium	203-1	18.46	19.68	19.68	19.27	3.67	ppb
Thallium	205-1	18.50	19.41	19.53	19.15	2.95	ppb
Tin	118-1	0.13	0.16	0.17	0.16	14.72	ppb
Titanium	47-1	1914.46	2064.21	2061.04	2013.24	4.25	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:32:42	DataFile Name :	023ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.02	0.01	0.02	0.02	4.84	ppb
Vanadium	51-2	20.21	20.37	20.73	20.44	1.29	ppb
Yttrium	89-1				97		%
Yttrium	89-2				92		%
Zinc	66-2	31.83	30.96	31.62	31.47	1.44	ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	17.06	ppb
Zirconium	91-1	0.01	0.02	0.03	0.02	40.41	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:35:47	DataFile Name :	024CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	51151.93	50763.98	50413.52	50776.48	0.73	ppb
Antimony	121-1	459.95	513.82	514.17	495.98	6.29	ppb
Arsenic	75-2	503.69	504.42	505.21	504.44	0.15	ppb
Barium	135-1	2373.45	2593.56	2580.30	2515.77	4.91	ppb
Barium	137-1	2365.10	2631.82	2626.06	2541.00	6.00	ppb
Beryllium	9-1	469.63	518.22	529.00	505.62	6.26	ppb
Bismuth	209-1				96		%
Bismuth	209-2				92		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	458.17	505.96	503.13	489.08	5.48	ppb
Cadmium	106-1	457.85	507.06	506.72	490.54	5.77	ppb
Cadmium	111-1	440.78	488.94	485.28	471.66	5.68	ppb
Calcium	43-1	237599.87	261497.12	267395.01	255497.33	6.18	ppb
Calcium	44-1	237710.68	263626.48	265018.30	255451.82	6.02	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	508.48	504.89	505.16	506.18	0.40	ppb
Cobalt	59-2	497.99	489.92	488.86	492.26	1.01	ppb
Copper	63-2	4837.52	4824.50	4755.69	4805.90	0.91	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				98		%
Indium	115-1				90		%
Indium	115-2				86		%
Iron	56-2	129626.88	128593.74	127039.27	128419.96	1.01	ppb
Iron	57-2	129432.58	128077.71	127094.45	128201.58	0.92	ppb
Iron	54-2	129283.58	128126.12	128298.97	128569.56	0.49	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:35:47	DataFile Name :	024CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2349.73	2614.96	2588.49	2517.73	5.80	ppb
Lead	207-1	2356.43	2631.37	2633.45	2540.42	6.27	ppb
Lead	208-1	2364.04	2622.38	2632.53	2539.65	5.99	ppb
Lithium	6-1				98		%
Magnesium	24-2	240801.67	239310.21	237686.87	239266.25	0.65	ppb
Manganese	55-2	5053.81	4968.18	4961.01	4994.34	1.03	ppb
Molybdenum	94-1	4687.50	5174.03	5278.29	5046.61	6.25	ppb
Molybdenum	95-1	4630.22	5145.16	5274.13	5016.50	6.79	ppb
Molybdenum	96-1	4678.47	5218.99	5293.47	5063.64	6.63	ppb
Molybdenum	97-1	4665.97	5213.50	5258.28	5045.91	6.54	ppb
Molybdenum	98-1	4694.47	5200.81	5252.94	5049.41	6.11	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	473.44	468.59	465.36	469.13	0.87	ppb
Phosphorus	31-2	10154.80	10179.35	10065.96	10133.37	0.59	ppb
Potassium	39-2	125882.51	125749.16	125246.53	125626.07	0.27	ppb
Rhodium	103-1				86		%
Rhodium	103-2				84		%
Scandium	45-1				91		%
Scandium	45-2				88		%
Selenium	82-1	442.70	494.81	497.89	478.46	6.48	ppb
Selenium	77-2	503.30	486.90	476.35	488.85	2.78	ppb
Selenium	78-2	495.80	486.19	499.53	493.84	1.39	ppb
Silicon	28-1	187.10	211.88	211.85	203.61	7.02	ppb
Silver	107-1	463.83	503.81	508.00	491.88	4.96	ppb
Silver	109-1	464.74	510.45	504.60	493.27	5.04	ppb
Sodium	23-2	249551.88	246861.12	248253.85	248222.29	0.54	ppb
Strontium	86-1	11719.73	12820.77	13055.06	12531.85	5.69	ppb
Strontium	88-1	11611.27	12641.45	13100.78	12451.16	6.13	ppb
Sulfur	34-1	8581.05	9775.27	9965.67	9440.66	7.95	ppb
Terbium	159-1				99		%
Terbium	159-2				96		%
Thallium	203-1	476.59	524.57	526.44	509.20	5.55	ppb
Thallium	205-1	479.57	524.29	525.82	509.89	5.15	ppb
Tin	118-1	468.26	515.50	515.39	499.71	5.45	ppb
Titanium	47-1	4706.14	5059.76	5176.74	4980.88	4.92	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:35:47	DataFile Name :	024CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	476.91	525.93	518.80	507.21	5.22	ppb
Vanadium	51-2	509.36	505.93	508.31	507.87	0.35	ppb
Yttrium	89-1				93		%
Yttrium	89-2				89		%
Zinc	66-2	4781.91	4702.80	4709.62	4731.44	0.93	ppb
Zirconium	90-1	464.97	513.73	526.56	501.75	6.48	ppb
Zirconium	91-1	469.65	520.23	531.61	507.16	6.50	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:43:41	DataFile Name :	026CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.05	-0.04	0.01	0.01	666.41	ppb
Antimony	121-1	0.04	0.04	0.03	0.04	17.61	ppb
Arsenic	75-2	-0.01	-0.01	-0.01	-0.01		ppb
Barium	135-1	0.00	0.01	0.01	0.00	92.00	ppb
Barium	137-1	0.02	0.01	0.01	0.01	30.83	ppb
Beryllium	9-1	0.02	0.00	0.03	0.01	113.08	ppb
Bismuth	209-1				105		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.03	-0.01	0.02	0.01	217.22	ppb
Cadmium	106-1	-1.95	-1.73	-1.54	-1.74		ppb
Cadmium	111-1	-0.13	-0.12	-0.10	-0.12		ppb
Calcium	43-1	1.87	0.55	1.34	1.25	52.93	ppb
Calcium	44-1	-0.88	-1.59	-1.28	-1.25		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.00	0.01	-0.03	-0.01		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	0.03	0.04	0.03	0.03	12.92	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				100		%
Indium	115-1				96		%
Indium	115-2				95		%
Iron	56-2	0.35	0.31	0.22	0.29	22.62	ppb
Iron	57-2	-0.43	-0.02	0.29	-0.05		ppb
Iron	54-2	-0.12	0.44	0.25	0.19	147.54	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:43:41	DataFile Name :	026CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.05	0.04	0.04	0.05	5.60	ppb
Lead	207-1	0.06	0.05	0.05	0.05	12.75	ppb
Lead	208-1	0.05	0.05	0.04	0.05	7.75	ppb
Lithium	6-1				104		%
Magnesium	24-2	0.91	0.86	0.83	0.87	4.53	ppb
Manganese	55-2	0.02	0.01	0.02	0.02	39.32	ppb
Molybdenum	94-1	0.05	0.05	0.05	0.05	6.66	ppb
Molybdenum	95-1	0.05	0.06	0.04	0.05	17.20	ppb
Molybdenum	96-1	0.04	0.05	0.04	0.04	12.73	ppb
Molybdenum	97-1	0.04	0.04	0.04	0.04	5.55	ppb
Molybdenum	98-1	0.05	0.05	0.04	0.05	11.51	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.02	0.00	0.00	-0.01		ppb
Phosphorus	31-2	-9.74	-17.41	-16.61	-14.59		ppb
Potassium	39-2	-0.16	0.48	1.00	0.44	132.95	ppb
Rhodium	103-1				96		%
Rhodium	103-2				95		%
Scandium	45-1				95		%
Scandium	45-2				91		%
Selenium	82-1	-0.25	-0.43	-0.53	-0.41		ppb
Selenium	77-2	-0.16	-0.16	-0.16	-0.16		ppb
Selenium	78-2	-1.44	-0.78	-1.55	-1.25		ppb
Silicon	28-1	-11.60	-11.77	-11.44	-11.60		ppb
Silver	107-1	0.01	0.01	0.01	0.01	15.00	ppb
Silver	109-1	0.01	0.01	0.01	0.01	11.14	ppb
Sodium	23-2	14.06	13.80	13.71	13.86	1.30	ppb
Strontium	86-1	0.06	-0.08	-0.47	-0.16		ppb
Strontium	88-1	0.07	0.06	0.08	0.07	11.99	ppb
Sulfur	34-1	-329.77	-340.53	-314.07	-328.13		ppb
Terbium	159-1				99		%
Terbium	159-2				100		%
Thallium	203-1	0.03	0.02	0.02	0.03	19.98	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	5.61	ppb
Tin	118-1	0.00	0.04	0.00	0.01	192.85	ppb
Titanium	47-1	0.04	0.05	0.00	0.03	103.15	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:43:41	DataFile Name :	026CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	19.68	ppb
Vanadium	51-2	0.01	0.00	0.00	0.00	123.90	ppb
Yttrium	89-1				96		%
Yttrium	89-2				93		%
Zinc	66-2	0.03	0.02	0.09	0.05	79.16	ppb
Zirconium	90-1	0.01	0.01	0.01	0.01	12.64	ppb
Zirconium	91-1	0.00	0.01	0.02	0.01	81.99	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P7
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:52:49	DataFile Name :	028LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20.46	20.65	20.92	20.68	1.12	ppb
Antimony	121-1	2.15	2.17	2.21	2.18	1.47	ppb
Arsenic	75-2	1.21	0.98	1.15	1.11	11.14	ppb
Barium	135-1	10.19	10.34	10.27	10.27	0.71	ppb
Barium	137-1	10.40	10.41	10.47	10.43	0.39	ppb
Beryllium	9-1	1.16	1.13	1.20	1.17	3.08	ppb
Bismuth	209-1				104		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	1.05	1.02	1.15	1.07	6.34	ppb
Cadmium	106-1	-1.30	-1.09	-0.87	-1.09		ppb
Cadmium	111-1	1.01	0.96	1.00	0.99	2.67	ppb
Calcium	43-1	573.42	591.37	583.80	582.86	1.55	ppb
Calcium	44-1	575.16	582.92	581.74	579.94	0.72	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.10	2.13	2.09	2.11	1.00	ppb
Cobalt	59-2	1.14	1.10	1.07	1.10	2.93	ppb
Copper	63-2	2.12	2.17	2.15	2.15	1.34	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				100		%
Indium	115-1				97		%
Indium	115-2				97		%
Iron	56-2	55.92	55.95	56.22	56.03	0.30	ppb
Iron	57-2	55.74	60.81	58.69	58.41	4.36	ppb
Iron	54-2	60.24	59.82	57.34	59.13	2.65	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P7
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:52:49	DataFile Name :	028LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.94	0.98	0.96	0.96	1.96	ppb
Lead	207-1	0.98	0.97	0.98	0.98	0.66	ppb
Lead	208-1	0.96	0.96	0.97	0.96	0.22	ppb
Lithium	6-1				105		%
Magnesium	24-2	521.10	525.92	520.92	522.65	0.54	ppb
Manganese	55-2	1.08	1.05	1.04	1.05	1.86	ppb
Molybdenum	94-1	6.17	5.96	6.08	6.07	1.73	ppb
Molybdenum	95-1	5.03	5.03	5.09	5.05	0.64	ppb
Molybdenum	96-1	5.18	5.19	5.25	5.21	0.67	ppb
Molybdenum	97-1	5.31	5.20	5.18	5.23	1.42	ppb
Molybdenum	98-1	5.11	5.19	5.18	5.16	0.88	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.08	1.09	1.09	1.09	0.58	ppb
Phosphorus	31-2	20.43	14.60	11.50	15.51	29.22	ppb
Potassium	39-2	545.91	541.14	545.04	544.03	0.47	ppb
Rhodium	103-1				97		%
Rhodium	103-2				97		%
Scandium	45-1				96		%
Scandium	45-2				94		%
Selenium	82-1	5.25	5.06	5.39	5.23	3.21	ppb
Selenium	77-2	4.01	4.91	5.29	4.73	13.89	ppb
Selenium	78-2	5.14	4.65	4.56	4.79	6.48	ppb
Silicon	28-1	-7.47	-6.42	-7.11	-7.00		ppb
Silver	107-1	1.07	1.09	1.10	1.08	1.23	ppb
Silver	109-1	1.04	1.05	1.07	1.05	1.42	ppb
Sodium	23-2	516.30	514.15	512.56	514.34	0.37	ppb
Strontium	86-1	26.04	25.62	24.16	25.27	3.91	ppb
Strontium	88-1	26.11	26.14	26.41	26.22	0.64	ppb
Sulfur	34-1	-143.77	-89.77	-106.68	-113.41		ppb
Terbium	159-1				99		%
Terbium	159-2				100		%
Thallium	203-1	0.93	0.96	0.95	0.95	1.39	ppb
Thallium	205-1	0.91	0.93	0.93	0.93	1.17	ppb
Tin	118-1	5.28	5.41	5.43	5.38	1.57	ppb
Titanium	47-1	5.16	5.34	5.49	5.33	3.15	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P7
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:52:49	DataFile Name :	028LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.86	0.89	0.84	0.86	2.67	ppb
Vanadium	51-2	5.43	5.36	5.32	5.37	1.07	ppb
Yttrium	89-1				97		%
Yttrium	89-2				96		%
Zinc	66-2	5.57	5.82	5.65	5.68	2.29	ppb
Zirconium	90-1	1.03	1.04	1.01	1.03	1.75	ppb
Zirconium	91-1	1.03	1.04	0.99	1.02	2.42	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	PB165834BL	Instrumnet Name :	P7
Client Sample ID :	PB165834BL	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:56:05	DataFile Name :	029CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.78	0.57	0.88	0.75	21.65	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	16.70	ppb
Arsenic	75-2	-0.01	-0.01	0.00	-0.01		ppb
Barium	135-1	0.01	0.00	0.01	0.00	131.55	ppb
Barium	137-1	0.01	-0.01	0.00	0.00	668.79	ppb
Beryllium	9-1	0.00	0.01	0.01	0.01	65.90	ppb
Bismuth	209-1				103		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.05	-0.03	0.04	0.02	242.09	ppb
Cadmium	106-1	-1.02	-1.45	-1.22	-1.23		ppb
Cadmium	111-1	-0.08	-0.10	-0.08	-0.09		ppb
Calcium	43-1	1.02	2.21	1.70	1.64	36.38	ppb
Calcium	44-1	-1.93	-1.94	-0.73	-1.53		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	0.00	234.22	ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	79.65	ppb
Copper	63-2	0.06	0.05	0.06	0.06	17.92	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				100		%
Indium	115-1				96		%
Indium	115-2				97		%
Iron	56-2	0.04	0.15	-0.02	0.06	151.27	ppb
Iron	57-2	0.29	0.05	0.22	0.18	66.68	ppb
Iron	54-2	0.18	-0.13	0.91	0.32	167.33	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	PB165834BL	Instrumnet Name :	P7
Client Sample ID :	PB165834BL	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:56:05	DataFile Name :	029CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.01	0.01	0.01	0.01	19.10	ppb
Lead	207-1	0.01	0.01	0.02	0.02	26.55	ppb
Lead	208-1	0.01	0.01	0.02	0.02	17.96	ppb
Lithium	6-1				103		%
Magnesium	24-2	1.00	0.61	0.70	0.77	26.80	ppb
Manganese	55-2	0.04	0.06	0.04	0.05	16.97	ppb
Molybdenum	94-1	0.00	-0.01	0.00	0.00		ppb
Molybdenum	95-1	0.01	0.01	0.01	0.01	19.97	ppb
Molybdenum	96-1	0.00	0.01	0.00	0.00	224.32	ppb
Molybdenum	97-1	0.00	0.01	0.01	0.01	86.45	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	20.36	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.02	0.00	-0.01	-0.01		ppb
Phosphorus	31-2	-17.13	-12.98	-18.04	-16.05		ppb
Potassium	39-2	1.13	0.65	3.04	1.61	78.92	ppb
Rhodium	103-1				96		%
Rhodium	103-2				97		%
Scandium	45-1				95		%
Scandium	45-2				95		%
Selenium	82-1	-0.30	0.03	-0.85	-0.37		ppb
Selenium	77-2	-0.16	-0.16	-0.16	-0.16		ppb
Selenium	78-2	-0.73	-0.65	-1.45	-0.94		ppb
Silicon	28-1	-10.29	-8.16	-6.65	-8.37		ppb
Silver	107-1	0.01	0.01	0.01	0.01	3.05	ppb
Silver	109-1	0.01	0.01	0.01	0.01	14.25	ppb
Sodium	23-2	5.32	6.31	6.20	5.95	9.10	ppb
Strontium	86-1	-0.27	0.28	0.33	0.11	301.28	ppb
Strontium	88-1	0.01	0.02	0.04	0.02	52.69	ppb
Sulfur	34-1	-162.59	-29.58	81.74	-36.81		ppb
Terbium	159-1				97		%
Terbium	159-2				100		%
Thallium	203-1	0.02	0.01	0.02	0.01	21.96	ppb
Thallium	205-1	0.01	0.02	0.01	0.01	10.09	ppb
Tin	118-1	0.01	0.01	0.00	0.01	55.33	ppb
Titanium	47-1	0.02	0.01	-0.03	0.00		ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	PB165834BL	Instrumnet Name :	P7
Client Sample ID :	PB165834BL	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:56:05	DataFile Name :	029CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	4.48	ppb
Vanadium	51-2	0.00	0.00	0.00	0.00		ppb
Yttrium	89-1				95		%
Yttrium	89-2				96		%
Zinc	66-2	0.19	0.21	0.23	0.21	9.98	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	622.12	ppb
Zirconium	91-1	0.00	0.00	0.00	0.00	261.07	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	PB165834BS	Instrumnet Name :	P7
Client Sample ID :	PB165834BS	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:59:23	DataFile Name :	030LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	9752.09	9702.87	9697.23	9717.40	0.31	ppb
Antimony	121-1	503.75	520.40	518.04	514.06	1.75	ppb
Arsenic	75-2	513.50	510.80	501.93	508.74	1.19	ppb
Barium	135-1	2516.49	2544.33	2586.10	2548.97	1.37	ppb
Barium	137-1	2530.18	2587.85	2590.55	2569.52	1.33	ppb
Beryllium	9-1	486.20	493.69	486.83	488.91	0.85	ppb
Bismuth	209-1				103		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	511.13	526.24	526.90	521.42	1.71	ppb
Cadmium	106-1	512.66	527.09	527.85	522.53	1.64	ppb
Cadmium	111-1	491.89	505.79	509.30	502.33	1.83	ppb
Calcium	43-1	49853.73	51440.91	52025.82	51106.82	2.20	ppb
Calcium	44-1	49508.78	51597.17	51777.82	50961.25	2.47	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	499.95	503.49	499.44	500.96	0.44	ppb
Cobalt	59-2	497.81	504.33	505.48	502.54	0.82	ppb
Copper	63-2	5028.21	5038.86	5004.61	5023.89	0.35	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				98		%
Indium	115-1				93		%
Indium	115-2				89		%
Iron	56-2	25584.58	25583.41	25553.24	25573.74	0.07	ppb
Iron	57-2	25615.37	25585.75	25890.06	25697.06	0.65	ppb
Iron	54-2	25967.93	25986.97	25797.89	25917.59	0.40	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	PB165834BS	Instrumnet Name :	P7
Client Sample ID :	PB165834BS	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:59:23	DataFile Name :	030LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2416.22	2487.23	2423.82	2442.42	1.60	ppb
Lead	207-1	2422.50	2486.65	2455.91	2455.02	1.31	ppb
Lead	208-1	2405.21	2475.29	2445.30	2441.93	1.44	ppb
Lithium	6-1				107		%
Magnesium	24-2	46250.51	46726.33	46759.24	46578.69	0.61	ppb
Manganese	55-2	4948.81	5036.65	4964.32	4983.26	0.94	ppb
Molybdenum	94-1	4827.39	4906.34	4928.54	4887.42	1.09	ppb
Molybdenum	95-1	4866.90	4891.90	4972.02	4910.27	1.12	ppb
Molybdenum	96-1	4903.02	4921.19	4956.55	4926.92	0.55	ppb
Molybdenum	97-1	4859.01	4933.10	4953.65	4915.26	1.01	ppb
Molybdenum	98-1	4846.70	4942.35	4972.08	4920.37	1.33	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	481.74	480.86	484.10	482.24	0.35	ppb
Phosphorus	31-2	10118.54	10144.53	10084.87	10115.98	0.30	ppb
Potassium	39-2	24507.63	24653.41	24471.97	24544.34	0.39	ppb
Rhodium	103-1				92		%
Rhodium	103-2				88		%
Scandium	45-1				93		%
Scandium	45-2				87		%
Selenium	82-1	494.06	509.23	502.38	501.89	1.51	ppb
Selenium	77-2	515.27	519.94	497.73	510.98	2.29	ppb
Selenium	78-2	528.70	521.93	519.29	523.31	0.93	ppb
Silicon	28-1	501.89	504.83	513.05	506.59	1.14	ppb
Silver	107-1	516.46	522.46	531.66	523.53	1.46	ppb
Silver	109-1	518.39	522.98	535.90	525.75	1.73	ppb
Sodium	23-2	48976.80	49476.91	49386.49	49280.07	0.54	ppb
Strontium	86-1	12178.04	12645.20	12333.99	12385.74	1.92	ppb
Strontium	88-1	12116.85	12391.31	12305.78	12271.31	1.14	ppb
Sulfur	34-1	9615.01	9798.76	9877.19	9763.65	1.38	ppb
Terbium	159-1				99		%
Terbium	159-2				98		%
Thallium	203-1	488.28	492.94	485.68	488.97	0.75	ppb
Thallium	205-1	481.41	491.65	481.59	484.88	1.21	ppb
Tin	118-1	499.73	514.70	518.78	511.07	1.96	ppb
Titanium	47-1	4892.31	4998.71	5022.52	4971.18	1.39	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	PB165834BS	Instrumnet Name :	P7
Client Sample ID :	PB165834BS	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:59:23	DataFile Name :	030LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	463.75	478.03	466.36	469.38	1.62	ppb
Vanadium	51-2	494.87	500.06	501.71	498.88	0.71	ppb
Yttrium	89-1				95		%
Yttrium	89-2				89		%
Zinc	66-2	5053.01	5044.58	5054.94	5050.84	0.11	ppb
Zirconium	90-1	483.26	491.89	491.48	488.88	1.00	ppb
Zirconium	91-1	481.70	489.39	501.89	491.00	2.08	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:02:02	DataFile Name :	031SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	24920.21	24712.97	24590.30	24741.16	0.67	ppb
Antimony	121-1	0.29	0.24	0.20	0.24	19.07	ppb
Arsenic	75-2	1.42	1.36	1.52	1.43	5.58	ppb
Barium	135-1	41.88	41.89	41.99	41.92	0.14	ppb
Barium	137-1	42.35	42.44	42.82	42.54	0.58	ppb
Beryllium	9-1	0.82	0.67	0.74	0.74	10.07	ppb
Bismuth	209-1				100		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.31	0.34	0.25	0.30	16.00	ppb
Cadmium	106-1	1.27	1.19	1.15	1.20	5.09	ppb
Cadmium	111-1	0.26	0.23	0.20	0.23	11.65	ppb
Calcium	43-1	90026.54	90574.78	91079.54	90560.29	0.58	ppb
Calcium	44-1	88598.93	90420.31	90527.32	89848.86	1.21	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	7.99	8.14	7.94	8.02	1.28	ppb
Cobalt	59-2	68.79	68.62	68.42	68.61	0.27	ppb
Copper	63-2	15.96	15.87	15.66	15.83	1.00	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				100		%
Indium	115-1				92		%
Indium	115-2				91		%
Iron	56-2	215397.12	215596.92	214400.37	215131.47	0.30	ppb
Iron	57-2	213764.46	213157.66	211889.26	212937.13	0.45	ppb
Iron	54-2	213914.84	218112.61	213939.39	215322.28	1.12	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:02:02	DataFile Name :	031SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.24	1.11	1.07	1.14	8.11	ppb
Lead	207-1	1.14	1.10	1.02	1.09	5.58	ppb
Lead	208-1	1.19	1.10	1.04	1.11	6.82	ppb
Lithium	6-1				98		%
Magnesium	24-2	38914.42	38543.14	38856.31	38771.29	0.52	ppb
Manganese	55-2	3343.12	3361.54	3318.81	3341.16	0.64	ppb
Molybdenum	94-1	2.00	1.85	1.83	1.89	4.80	ppb
Molybdenum	95-1	0.76	0.61	0.53	0.64	18.35	ppb
Molybdenum	96-1	2.09	1.92	1.86	1.96	6.24	ppb
Molybdenum	97-1	0.77	0.66	0.53	0.65	18.23	ppb
Molybdenum	98-1	0.75	0.55	0.49	0.60	23.01	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	27.51	27.49	27.15	27.38	0.74	ppb
Phosphorus	31-2	621.89	619.54	622.76	621.39	0.27	ppb
Potassium	39-2	741.41	741.35	734.89	739.22	0.51	ppb
Rhodium	103-1				88		%
Rhodium	103-2				89		%
Scandium	45-1				90		%
Scandium	45-2				88		%
Selenium	82-1	0.32	0.36	0.24	0.31	19.63	ppb
Selenium	77-2	16.42	15.15	16.24	15.94	4.32	ppb
Selenium	78-2	-0.04	1.43	0.92	0.77	96.90	ppb
Silicon	28-1	11047.89	11323.67	11335.07	11235.54	1.45	ppb
Silver	107-1	0.15	0.12	0.09	0.12	23.40	ppb
Silver	109-1	0.13	0.12	0.09	0.11	19.79	ppb
Sodium	23-2	12742.27	12706.69	12761.50	12736.82	0.22	ppb
Strontium	86-1	4048.09	4050.68	4083.22	4060.66	0.48	ppb
Strontium	88-1	4167.09	4214.13	4173.84	4185.02	0.61	ppb
Sulfur	34-1	243341.61	246619.44	245887.05	245282.70	0.70	ppb
Terbium	159-1				98		%
Terbium	159-2				98		%
Thallium	203-1	0.13	0.10	0.09	0.10	18.13	ppb
Thallium	205-1	0.11	0.10	0.09	0.10	12.55	ppb
Tin	118-1	0.28	0.25	0.24	0.25	8.05	ppb
Titanium	47-1	4.90	4.39	4.24	4.51	7.62	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:02:02	DataFile Name :	031SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	2.57	2.58	2.47	2.54	2.46	ppb
Vanadium	51-2	248.98	250.62	249.15	249.58	0.36	ppb
Yttrium	89-1				118		%
Yttrium	89-2				116		%
Zinc	66-2	248.78	246.52	248.79	248.03	0.53	ppb
Zirconium	90-1	0.72	0.71	0.70	0.71	1.51	ppb
Zirconium	91-1	0.78	0.68	0.71	0.72	7.25	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02DUPDLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224DUF	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:05:13	DataFile Name :	032SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	24613.57	24702.81	24295.10	24537.16	0.87	ppb
Antimony	121-1	0.07	0.07	0.07	0.07	4.78	ppb
Arsenic	75-2	1.59	1.37	1.44	1.46	7.82	ppb
Barium	135-1	40.78	41.69	41.19	41.22	1.11	ppb
Barium	137-1	42.13	42.45	42.75	42.44	0.73	ppb
Beryllium	9-1	0.70	0.63	0.70	0.68	6.16	ppb
Bismuth	209-1				100		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.30	0.23	0.17	0.23	29.27	ppb
Cadmium	106-1	1.54	1.56	1.09	1.40	19.00	ppb
Cadmium	111-1	0.20	0.19	0.17	0.19	6.85	ppb
Calcium	43-1	89562.98	89045.29	88348.25	88985.51	0.69	ppb
Calcium	44-1	89562.10	88737.89	88498.75	88932.91	0.63	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	7.70	7.81	7.82	7.77	0.83	ppb
Cobalt	59-2	67.96	68.89	68.36	68.40	0.68	ppb
Copper	63-2	15.54	15.41	15.21	15.38	1.06	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				100		%
Holmium	165-2				101		%
Indium	115-1				93		%
Indium	115-2				93		%
Iron	56-2	213632.79	214765.60	213227.27	213875.22	0.37	ppb
Iron	57-2	212199.35	214301.36	213707.45	213402.72	0.51	ppb
Iron	54-2	213801.49	215773.32	214849.12	214807.98	0.46	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02DUPDLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224DUF	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:05:13	DataFile Name :	032SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.89	0.88	0.90	0.89	0.86	ppb
Lead	207-1	0.82	0.84	0.79	0.82	3.21	ppb
Lead	208-1	0.85	0.85	0.82	0.84	2.29	ppb
Lithium	6-1				98		%
Magnesium	24-2	38504.19	38897.77	38391.39	38597.78	0.69	ppb
Manganese	55-2	3311.12	3356.99	3321.80	3329.97	0.72	ppb
Molybdenum	94-1	1.39	1.30	1.32	1.34	3.49	ppb
Molybdenum	95-1	0.21	0.18	0.17	0.19	10.99	ppb
Molybdenum	96-1	1.57	1.56	1.52	1.55	1.51	ppb
Molybdenum	97-1	0.23	0.20	0.16	0.19	17.10	ppb
Molybdenum	98-1	0.17	0.16	0.13	0.15	13.41	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	27.00	27.52	27.11	27.21	0.99	ppb
Phosphorus	31-2	627.60	625.17	624.07	625.61	0.29	ppb
Potassium	39-2	728.53	743.12	735.35	735.67	0.99	ppb
Rhodium	103-1				91		%
Rhodium	103-2				91		%
Scandium	45-1				93		%
Scandium	45-2				90		%
Selenium	82-1	0.41	0.29	0.41	0.37	19.75	ppb
Selenium	77-2	14.89	14.64	17.11	15.54	8.74	ppb
Selenium	78-2	1.76	1.04	1.13	1.31	30.01	ppb
Silicon	28-1	11027.01	11057.13	10943.56	11009.23	0.53	ppb
Silver	107-1	0.04	0.03	0.04	0.04	11.71	ppb
Silver	109-1	0.04	0.04	0.04	0.04	9.03	ppb
Sodium	23-2	12612.71	12790.35	12528.32	12643.79	1.06	ppb
Strontium	86-1	4054.77	4027.59	4035.14	4039.17	0.35	ppb
Strontium	88-1	4149.42	4146.20	4154.08	4149.90	0.10	ppb
Sulfur	34-1	239219.15	241805.47	240713.00	240579.21	0.54	ppb
Terbium	159-1				100		%
Terbium	159-2				99		%
Thallium	203-1	0.05	0.05	0.05	0.05	1.24	ppb
Thallium	205-1	0.04	0.04	0.04	0.04	8.21	ppb
Tin	118-1	0.20	0.21	0.21	0.21	1.28	ppb
Titanium	47-1	3.91	3.78	3.73	3.80	2.42	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02DUPDLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224DUF	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:05:13	DataFile Name :	032SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	2.46	2.54	2.48	2.49	1.70	ppb
Vanadium	51-2	247.87	250.05	248.42	248.78	0.46	ppb
Yttrium	89-1				122		%
Yttrium	89-2				119		%
Zinc	66-2	245.64	248.16	246.72	246.84	0.51	ppb
Zirconium	90-1	0.62	0.60	0.59	0.60	2.36	ppb
Zirconium	91-1	0.66	0.63	0.60	0.63	4.79	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02LDLX25	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224LDL	Dilution Factor :	25
Date & Time Acquired :	2024-12-23 13:08:22	DataFile Name :	033SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	5043.27	4995.42	5026.92	5021.87	0.48	ppb
Antimony	121-1	0.03	0.03	0.02	0.03	12.87	ppb
Arsenic	75-2	0.33	0.35	0.30	0.33	6.84	ppb
Barium	135-1	8.52	8.57	8.46	8.52	0.59	ppb
Barium	137-1	8.51	8.46	8.44	8.47	0.48	ppb
Beryllium	9-1	0.14	0.17	0.16	0.15	10.38	ppb
Bismuth	209-1				106		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.10	-0.02	0.07	0.05	116.64	ppb
Cadmium	106-1	-1.00	-1.53	-1.29	-1.27		ppb
Cadmium	111-1	-0.06	-0.09	-0.07	-0.07		ppb
Calcium	43-1	18265.69	18882.41	19005.22	18717.77	2.12	ppb
Calcium	44-1	17761.87	17773.88	18206.99	17914.25	1.42	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.67	1.58	1.62	1.62	2.68	ppb
Cobalt	59-2	14.30	13.89	14.01	14.07	1.48	ppb
Copper	63-2	3.25	3.29	3.28	3.27	0.61	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				104		%
Holmium	165-2				103		%
Indium	115-1				99		%
Indium	115-2				97		%
Iron	56-2	44294.70	43914.22	44176.41	44128.44	0.44	ppb
Iron	57-2	43552.04	43213.16	43291.80	43352.33	0.41	ppb
Iron	54-2	44384.81	44277.16	43691.66	44117.88	0.85	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02LDLX25	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224LDL	Dilution Factor :	25
Date & Time Acquired :	2024-12-23 13:08:22	DataFile Name :	033SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.20	0.21	0.20	0.20	1.91	ppb
Lead	207-1	0.20	0.18	0.19	0.19	4.20	ppb
Lead	208-1	0.20	0.19	0.19	0.19	0.95	ppb
Lithium	6-1				101		%
Magnesium	24-2	7717.59	7806.84	7833.71	7786.05	0.78	ppb
Manganese	55-2	687.48	677.23	676.74	680.48	0.89	ppb
Molybdenum	94-1	0.31	0.31	0.34	0.32	5.95	ppb
Molybdenum	95-1	0.05	0.05	0.05	0.05	4.04	ppb
Molybdenum	96-1	0.38	0.38	0.37	0.38	1.93	ppb
Molybdenum	97-1	0.06	0.03	0.05	0.05	31.32	ppb
Molybdenum	98-1	0.03	0.03	0.02	0.03	8.21	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	5.76	5.72	5.52	5.67	2.24	ppb
Phosphorus	31-2	123.51	115.11	115.16	117.92	4.10	ppb
Potassium	39-2	147.04	147.23	147.68	147.31	0.22	ppb
Rhodium	103-1				98		%
Rhodium	103-2				97		%
Scandium	45-1				97		%
Scandium	45-2				95		%
Selenium	82-1	0.23	-0.29	-0.37	-0.14		ppb
Selenium	77-2	3.84	3.39	4.15	3.80	10.06	ppb
Selenium	78-2	-0.69	-0.38	-0.87	-0.65		ppb
Silicon	28-1	2196.13	2275.42	2285.08	2252.21	2.17	ppb
Silver	107-1	0.01	0.01	0.01	0.01	24.42	ppb
Silver	109-1	0.01	0.01	0.01	0.01	11.38	ppb
Sodium	23-2	2562.85	2587.40	2553.28	2567.84	0.69	ppb
Strontium	86-1	969.57	993.24	980.48	981.10	1.21	ppb
Strontium	88-1	1002.56	1029.05	1025.42	1019.01	1.41	ppb
Sulfur	34-1	49203.96	49607.60	50188.05	49666.54	1.00	ppb
Terbium	159-1				104		%
Terbium	159-2				102		%
Thallium	203-1	0.02	0.02	0.02	0.02	18.54	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	6.32	ppb
Tin	118-1	0.06	0.06	0.07	0.06	5.03	ppb
Titanium	47-1	0.76	0.76	0.72	0.74	2.87	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02LDLX25	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224LDL	Dilution Factor :	25
Date & Time Acquired :	2024-12-23 13:08:22	DataFile Name :	033SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.47	0.49	0.47	0.48	1.91	ppb
Vanadium	51-2	50.52	50.48	50.27	50.43	0.27	ppb
Yttrium	89-1				105		%
Yttrium	89-2				102		%
Zinc	66-2	51.91	51.95	52.71	52.19	0.86	ppb
Zirconium	90-1	0.14	0.15	0.15	0.15	3.87	ppb
Zirconium	91-1	0.15	0.15	0.14	0.15	5.14	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02MSDLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224MSI	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:11:31	DataFile Name :	034SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	25160.10	25210.30	25064.27	25144.89	0.30	ppb
Antimony	121-1	113.39	114.30	114.68	114.13	0.58	ppb
Arsenic	75-2	100.10	99.00	98.13	99.07	1.00	ppb
Barium	135-1	606.44	599.64	598.32	601.47	0.73	ppb
Barium	137-1	596.54	601.13	590.19	595.96	0.92	ppb
Beryllium	9-1	121.41	123.91	119.98	121.77	1.63	ppb
Bismuth	209-1				101		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	126.01	121.82	123.99	123.94	1.69	ppb
Cadmium	106-1	128.97	127.98	127.28	128.07	0.66	ppb
Cadmium	111-1	122.57	123.47	123.26	123.10	0.38	ppb
Calcium	43-1	93327.45	92761.74	92052.55	92713.92	0.69	ppb
Calcium	44-1	92517.29	93233.97	92567.03	92772.77	0.43	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	123.42	123.99	122.87	123.43	0.45	ppb
Cobalt	59-2	182.64	183.12	182.43	182.73	0.19	ppb
Copper	63-2	1023.09	1017.47	1014.88	1018.48	0.41	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				101		%
Indium	115-1				94		%
Indium	115-2				91		%
Iron	56-2	206815.95	209318.38	207686.18	207940.17	0.61	ppb
Iron	57-2	206559.84	208698.14	206363.30	207207.09	0.62	ppb
Iron	54-2	208259.55	210353.56	209643.22	209418.78	0.51	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02MSDLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224MSI	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:11:31	DataFile Name :	034SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	479.47	477.37	471.93	476.25	0.82	ppb
Lead	207-1	480.05	489.40	490.85	486.77	1.20	ppb
Lead	208-1	475.33	483.34	479.73	479.47	0.84	ppb
Lithium	6-1				98		%
Magnesium	24-2	44940.23	44959.32	44788.07	44895.87	0.21	ppb
Manganese	55-2	4029.52	4097.61	4051.38	4059.50	0.86	ppb
Molybdenum	94-1	592.92	601.36	595.25	596.51	0.73	ppb
Molybdenum	95-1	513.02	519.71	524.49	519.08	1.11	ppb
Molybdenum	96-1	528.10	535.11	531.79	531.67	0.66	ppb
Molybdenum	97-1	519.67	522.57	518.37	520.20	0.41	ppb
Molybdenum	98-1	513.51	520.53	517.30	517.11	0.68	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	140.41	141.17	141.03	140.87	0.29	ppb
Phosphorus	31-2	590.30	592.55	579.58	587.48	1.18	ppb
Potassium	39-2	6111.94	6071.88	6033.71	6072.51	0.64	ppb
Rhodium	103-1				93		%
Rhodium	103-2				90		%
Scandium	45-1				95		%
Scandium	45-2				89		%
Selenium	82-1	92.77	95.76	94.46	94.33	1.59	ppb
Selenium	77-2	108.03	112.54	109.76	110.11	2.07	ppb
Selenium	78-2	95.65	104.65	100.97	100.42	4.51	ppb
Silicon	28-1	10366.20	10403.14	10359.02	10376.12	0.23	ppb
Silver	107-1	0.21	0.21	0.21	0.21	0.51	ppb
Silver	109-1	0.12	0.13	0.12	0.12	4.80	ppb
Sodium	23-2	21170.70	21224.09	20951.97	21115.59	0.68	ppb
Strontium	86-1	6014.09	6134.37	6131.80	6093.42	1.13	ppb
Strontium	88-1	6193.51	6362.18	6331.14	6295.61	1.43	ppb
Sulfur	34-1	225087.14	225095.37	225080.40	225087.64	0.00	ppb
Terbium	159-1				101		%
Terbium	159-2				99		%
Thallium	203-1	106.73	108.86	107.59	107.73	0.99	ppb
Thallium	205-1	118.50	119.05	117.08	118.21	0.86	ppb
Tin	118-1	105.79	107.45	107.28	106.84	0.86	ppb
Titanium	47-1	421.60	419.40	423.30	421.43	0.46	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02MSDLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224MSI	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:11:31	DataFile Name :	034SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	115.15	116.36	118.14	116.55	1.29	ppb
Vanadium	51-2	362.25	356.52	355.64	358.13	1.00	ppb
Yttrium	89-1				122		%
Yttrium	89-2				116		%
Zinc	66-2	1174.73	1180.55	1166.01	1173.76	0.62	ppb
Zirconium	90-1	92.69	95.57	94.23	94.16	1.53	ppb
Zirconium	91-1	91.74	94.25	92.86	92.95	1.35	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02MSDDLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224MSI	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:14:22	DataFile Name :	035SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	24757.14	24625.31	24984.21	24788.89	0.73	ppb
Antimony	121-1	111.86	114.01	113.29	113.06	0.97	ppb
Arsenic	75-2	97.82	98.55	96.44	97.60	1.10	ppb
Barium	135-1	586.35	596.66	592.94	591.98	0.88	ppb
Barium	137-1	588.70	594.48	592.65	591.94	0.50	ppb
Beryllium	9-1	118.55	114.99	120.71	118.08	2.45	ppb
Bismuth	209-1				102		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	121.25	122.88	123.63	122.59	0.99	ppb
Cadmium	106-1	123.63	127.80	126.19	125.87	1.67	ppb
Cadmium	111-1	119.74	121.36	122.55	121.22	1.16	ppb
Calcium	43-1	93422.23	93459.48	93831.93	93571.21	0.24	ppb
Calcium	44-1	92267.31	93332.45	92969.66	92856.47	0.58	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	120.12	120.99	121.31	120.81	0.51	ppb
Cobalt	59-2	177.41	177.63	179.14	178.06	0.53	ppb
Copper	63-2	1009.00	1007.56	1022.94	1013.17	0.84	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				95		%
Indium	115-2				91		%
Iron	56-2	203883.96	203814.73	206407.14	204701.95	0.72	ppb
Iron	57-2	202900.40	202659.38	202886.07	202815.28	0.07	ppb
Iron	54-2	205023.22	204966.55	206975.89	205655.22	0.56	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02MSDDLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224MSI	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:14:22	DataFile Name :	035SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	485.51	469.05	475.94	476.83	1.73	ppb
Lead	207-1	485.50	477.45	483.03	482.00	0.86	ppb
Lead	208-1	480.65	470.57	481.05	477.42	1.24	ppb
Lithium	6-1				99		%
Magnesium	24-2	44284.83	43901.09	44600.89	44262.27	0.79	ppb
Manganese	55-2	3978.34	3979.74	4017.15	3991.74	0.55	ppb
Molybdenum	94-1	587.01	590.96	599.68	592.55	1.09	ppb
Molybdenum	95-1	513.48	513.77	524.78	517.34	1.25	ppb
Molybdenum	96-1	527.38	527.38	534.42	529.73	0.77	ppb
Molybdenum	97-1	510.81	517.26	529.07	519.04	1.78	ppb
Molybdenum	98-1	511.99	516.45	521.49	516.64	0.92	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	137.27	136.96	137.43	137.22	0.17	ppb
Phosphorus	31-2	555.11	603.83	603.02	587.32	4.75	ppb
Potassium	39-2	5930.14	6027.25	6093.19	6016.86	1.36	ppb
Rhodium	103-1				92		%
Rhodium	103-2				90		%
Scandium	45-1				94		%
Scandium	45-2				90		%
Selenium	82-1	93.39	94.05	95.68	94.37	1.25	ppb
Selenium	77-2	109.70	108.89	105.22	107.94	2.21	ppb
Selenium	78-2	93.34	99.00	92.72	95.02	3.64	ppb
Silicon	28-1	10333.05	10350.36	10399.83	10361.08	0.33	ppb
Silver	107-1	0.21	0.21	0.22	0.21	3.61	ppb
Silver	109-1	0.12	0.12	0.12	0.12	1.70	ppb
Sodium	23-2	20748.07	20986.91	20939.36	20891.44	0.61	ppb
Strontium	86-1	6018.48	6092.78	6126.91	6079.39	0.91	ppb
Strontium	88-1	6241.40	6295.03	6239.16	6258.53	0.51	ppb
Sulfur	34-1	225374.10	224799.88	229491.62	226555.20	1.13	ppb
Terbium	159-1				101		%
Terbium	159-2				100		%
Thallium	203-1	107.22	106.93	107.11	107.09	0.14	ppb
Thallium	205-1	116.50	115.51	115.98	115.99	0.43	ppb
Tin	118-1	105.26	107.09	108.40	106.92	1.48	ppb
Titanium	47-1	416.12	423.34	421.33	420.27	0.89	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02MSDDLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224MSI	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:14:22	DataFile Name :	035SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	116.10	115.97	116.61	116.23	0.29	ppb
Vanadium	51-2	352.52	353.83	351.29	352.55	0.36	ppb
Yttrium	89-1				121		%
Yttrium	89-2				115		%
Zinc	66-2	1155.11	1159.26	1164.55	1159.64	0.41	ppb
Zirconium	90-1	91.96	94.34	93.72	93.34	1.33	ppb
Zirconium	91-1	90.70	91.43	93.82	91.98	1.77	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02ADLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224ADL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:17:16	DataFile Name :	036SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	24758.91	25136.71	24873.70	24923.11	0.78	ppb
Antimony	121-1	113.14	114.95	114.83	114.31	0.89	ppb
Arsenic	75-2	96.56	99.59	97.46	97.87	1.59	ppb
Barium	135-1	582.35	607.30	603.04	597.56	2.23	ppb
Barium	137-1	592.08	607.36	610.72	603.39	1.65	ppb
Beryllium	9-1	119.79	121.50	122.49	121.26	1.13	ppb
Bismuth	209-1				103		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	120.58	124.20	122.50	122.43	1.48	ppb
Cadmium	106-1	125.27	128.07	126.21	126.52	1.13	ppb
Cadmium	111-1	120.79	124.53	123.18	122.83	1.54	ppb
Calcium	43-1	91445.87	93972.60	94974.65	93464.37	1.95	ppb
Calcium	44-1	92375.13	94454.39	94854.70	93894.74	1.42	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	122.61	123.64	122.12	122.79	0.63	ppb
Cobalt	59-2	188.83	187.88	180.45	185.72	2.47	ppb
Copper	63-2	1027.28	1031.94	1019.31	1026.18	0.62	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				101		%
Indium	115-1				95		%
Indium	115-2				93		%
Iron	56-2	209577.69	208656.92	207087.48	208440.70	0.60	ppb
Iron	57-2	208243.06	209148.94	204173.18	207188.39	1.28	ppb
Iron	54-2	210480.13	209537.93	207265.61	209094.56	0.79	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02ADLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224ADL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:17:16	DataFile Name :	036SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	476.02	485.48	488.23	483.24	1.32	ppb
Lead	207-1	490.52	496.73	490.99	492.75	0.70	ppb
Lead	208-1	481.42	487.80	488.07	485.77	0.77	ppb
Lithium	6-1				98		%
Magnesium	24-2	44323.96	45067.84	44792.59	44728.13	0.84	ppb
Manganese	55-2	4102.25	4087.36	4046.55	4078.72	0.71	ppb
Molybdenum	94-1	598.76	606.36	600.43	601.85	0.66	ppb
Molybdenum	95-1	527.26	526.53	529.39	527.73	0.28	ppb
Molybdenum	96-1	538.17	540.80	532.54	537.17	0.79	ppb
Molybdenum	97-1	528.03	530.79	524.52	527.78	0.60	ppb
Molybdenum	98-1	519.83	529.94	526.37	525.38	0.98	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	142.67	141.05	139.16	140.96	1.25	ppb
Phosphorus	31-2	591.95	594.62	591.97	592.85	0.26	ppb
Potassium	39-2	6094.58	5990.86	6135.47	6073.63	1.23	ppb
Rhodium	103-1				92		%
Rhodium	103-2				91		%
Scandium	45-1				94		%
Scandium	45-2				90		%
Selenium	82-1	94.16	95.21	95.48	94.95	0.73	ppb
Selenium	77-2	103.15	107.55	114.92	108.54	5.48	ppb
Selenium	78-2	97.24	98.45	97.05	97.58	0.78	ppb
Silicon	28-1	10026.18	10544.23	10684.06	10418.16	3.33	ppb
Silver	107-1	0.23	0.22	0.21	0.22	3.96	ppb
Silver	109-1	0.13	0.12	0.13	0.13	5.94	ppb
Sodium	23-2	20751.77	21200.74	21073.79	21008.77	1.10	ppb
Strontium	86-1	6109.52	6104.63	6146.79	6120.31	0.38	ppb
Strontium	88-1	6294.30	6291.40	6383.56	6323.09	0.83	ppb
Sulfur	34-1	221611.89	229403.25	230950.15	227321.76	2.20	ppb
Terbium	159-1				101		%
Terbium	159-2				100		%
Thallium	203-1	107.10	107.57	108.34	107.67	0.58	ppb
Thallium	205-1	115.51	117.29	116.31	116.37	0.77	ppb
Tin	118-1	106.75	108.21	108.61	107.86	0.91	ppb
Titanium	47-1	414.63	431.62	434.36	426.87	2.50	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02ADLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224ADL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:17:16	DataFile Name :	036SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	114.20	115.71	115.97	115.30	0.83	ppb
Vanadium	51-2	363.90	356.27	361.81	360.66	1.09	ppb
Yttrium	89-1				121		%
Yttrium	89-2				116		%
Zinc	66-2	1183.10	1193.66	1185.11	1187.29	0.47	ppb
Zirconium	90-1	94.24	95.67	95.32	95.08	0.78	ppb
Zirconium	91-1	93.14	93.79	93.93	93.62	0.45	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:20:07	DataFile Name :	037CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	50822.60	51386.56	51023.46	51077.54	0.56	ppb
Antimony	121-1	506.80	503.08	515.52	508.47	1.26	ppb
Arsenic	75-2	499.18	491.17	493.71	494.69	0.83	ppb
Barium	135-1	2550.59	2548.25	2589.90	2562.91	0.91	ppb
Barium	137-1	2588.22	2567.76	2616.76	2590.91	0.95	ppb
Beryllium	9-1	495.26	510.83	503.85	503.31	1.55	ppb
Bismuth	209-1				98		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	496.55	485.86	503.45	495.29	1.79	ppb
Cadmium	106-1	494.78	491.06	507.92	497.92	1.78	ppb
Cadmium	111-1	478.41	472.90	485.46	478.92	1.31	ppb
Calcium	43-1	255792.67	258248.10	267257.53	260432.77	2.32	ppb
Calcium	44-1	256635.32	257245.81	267178.08	260353.07	2.27	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	504.57	511.41	503.74	506.57	0.83	ppb
Cobalt	59-2	483.03	494.02	493.01	490.02	1.24	ppb
Copper	63-2	4809.15	4887.43	4858.66	4851.75	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				99		%
Holmium	165-2				99		%
Indium	115-1				89		%
Indium	115-2				86		%
Iron	56-2	130081.09	130552.50	129277.11	129970.23	0.50	ppb
Iron	57-2	129832.98	129808.32	128803.17	129481.49	0.45	ppb
Iron	54-2	129872.23	130279.32	130956.11	130369.22	0.42	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:20:07	DataFile Name :	037CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2520.40	2575.37	2551.96	2549.24	1.08	ppb
Lead	207-1	2522.67	2565.37	2594.15	2560.73	1.40	ppb
Lead	208-1	2538.18	2566.07	2572.76	2559.00	0.72	ppb
Lithium	6-1				97		%
Magnesium	24-2	240984.62	243046.30	240815.79	241615.57	0.51	ppb
Manganese	55-2	5024.26	5031.97	5005.87	5020.70	0.27	ppb
Molybdenum	94-1	5083.90	5145.31	5216.64	5148.62	1.29	ppb
Molybdenum	95-1	5083.95	5152.26	5240.68	5158.96	1.52	ppb
Molybdenum	96-1	5101.94	5117.56	5243.55	5154.35	1.51	ppb
Molybdenum	97-1	5071.95	5087.72	5202.21	5120.63	1.39	ppb
Molybdenum	98-1	5080.08	5114.37	5171.98	5122.15	0.91	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	467.49	474.38	466.92	469.60	0.88	ppb
Phosphorus	31-2	10026.40	10110.79	10131.98	10089.72	0.55	ppb
Potassium	39-2	124743.07	127233.76	126401.17	126126.00	1.01	ppb
Rhodium	103-1				85		%
Rhodium	103-2				84		%
Scandium	45-1				89		%
Scandium	45-2				87		%
Selenium	82-1	478.78	486.61	496.25	487.22	1.80	ppb
Selenium	77-2	503.61	462.48	476.49	480.86	4.35	ppb
Selenium	78-2	497.07	491.42	490.76	493.08	0.70	ppb
Silicon	28-1	204.55	208.43	217.79	210.26	3.24	ppb
Silver	107-1	501.98	487.09	510.10	499.72	2.34	ppb
Silver	109-1	492.22	489.80	500.03	494.02	1.08	ppb
Sodium	23-2	248446.65	249296.91	250104.51	249282.69	0.33	ppb
Strontium	86-1	12661.39	12742.48	12908.54	12770.80	0.99	ppb
Strontium	88-1	12686.33	12901.75	12843.00	12810.36	0.87	ppb
Sulfur	34-1	9261.57	9585.75	10019.56	9622.29	3.95	ppb
Terbium	159-1				98		%
Terbium	159-2				97		%
Thallium	203-1	509.21	516.29	506.07	510.53	1.03	ppb
Thallium	205-1	507.96	511.87	513.19	511.00	0.53	ppb
Tin	118-1	508.03	499.32	515.43	507.60	1.59	ppb
Titanium	47-1	4949.07	5043.17	5169.32	5053.86	2.19	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:20:07	DataFile Name :	037CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	492.72	514.55	508.46	505.24	2.23	ppb
Vanadium	51-2	512.64	511.62	522.68	515.65	1.19	ppb
Yttrium	89-1				92		%
Yttrium	89-2				90		%
Zinc	66-2	4761.34	4816.23	4772.19	4783.25	0.61	ppb
Zirconium	90-1	505.98	507.82	515.87	509.89	1.03	ppb
Zirconium	91-1	503.94	512.15	522.22	512.77	1.79	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:23:36	DataFile Name :	038CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	3.35	2.88	2.71	2.98	11.10	ppb
Antimony	121-1	0.18	0.17	0.14	0.16	12.32	ppb
Arsenic	75-2	0.03	0.01	0.03	0.02	50.41	ppb
Barium	135-1	0.26	0.25	0.22	0.24	9.52	ppb
Barium	137-1	0.27	0.24	0.20	0.24	14.10	ppb
Beryllium	9-1	0.11	0.10	0.07	0.09	21.88	ppb
Bismuth	209-1				108		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.13	0.18	-0.02	0.10	103.13	ppb
Cadmium	106-1	-1.85	-1.51	-1.93	-1.76		ppb
Cadmium	111-1	-0.08	-0.05	-0.09	-0.07		ppb
Calcium	43-1	32.22	27.73	20.10	26.68	22.97	ppb
Calcium	44-1	27.72	25.91	20.81	24.81	14.45	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.01	0.01	0.03	0.02	68.45	ppb
Cobalt	59-2	0.03	0.03	0.02	0.03	20.05	ppb
Copper	63-2	0.39	0.33	0.29	0.34	15.90	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				101		%
Holmium	165-2				101		%
Indium	115-1				97		%
Indium	115-2				95		%
Iron	56-2	11.06	10.36	9.28	10.24	8.76	ppb
Iron	57-2	10.03	11.07	8.65	9.92	12.22	ppb
Iron	54-2	12.01	10.58	8.72	10.44	15.77	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:23:36	DataFile Name :	038CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.30	0.26	0.24	0.27	11.62	ppb
Lead	207-1	0.31	0.28	0.23	0.28	15.50	ppb
Lead	208-1	0.30	0.27	0.24	0.27	12.33	ppb
Lithium	6-1				107		%
Magnesium	24-2	15.83	14.68	13.91	14.81	6.55	ppb
Manganese	55-2	0.38	0.36	0.30	0.34	12.01	ppb
Molybdenum	94-1	0.69	0.59	0.47	0.58	18.62	ppb
Molybdenum	95-1	0.64	0.55	0.44	0.55	18.59	ppb
Molybdenum	96-1	0.61	0.56	0.48	0.55	11.85	ppb
Molybdenum	97-1	0.62	0.54	0.49	0.55	12.02	ppb
Molybdenum	98-1	0.62	0.56	0.47	0.55	13.36	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.07	-0.01	0.02	0.03	142.98	ppb
Phosphorus	31-2	-12.08	-12.92	-11.04	-12.01		ppb
Potassium	39-2	8.95	8.74	6.35	8.01	18.03	ppb
Rhodium	103-1				96		%
Rhodium	103-2				95		%
Scandium	45-1				94		%
Scandium	45-2				89		%
Selenium	82-1	-0.22	-0.25	-0.04	-0.17		ppb
Selenium	77-2	0.01	0.01	-0.16	-0.04		ppb
Selenium	78-2	-0.67	-0.98	-0.68	-0.78		ppb
Silicon	28-1	-13.30	-12.81	-12.17	-12.76		ppb
Silver	107-1	0.08	0.08	0.06	0.07	14.77	ppb
Silver	109-1	0.09	0.07	0.06	0.07	17.63	ppb
Sodium	23-2	26.85	25.66	23.99	25.50	5.63	ppb
Strontium	86-1	0.92	0.58	0.34	0.61	47.01	ppb
Strontium	88-1	1.46	1.42	1.21	1.36	9.77	ppb
Sulfur	34-1	-539.91	-528.72	-489.83	-519.49		ppb
Terbium	159-1				102		%
Terbium	159-2				100		%
Thallium	203-1	0.06	0.06	0.05	0.06	8.40	ppb
Thallium	205-1	0.07	0.06	0.06	0.06	10.97	ppb
Tin	118-1	0.08	0.06	0.06	0.07	14.16	ppb
Titanium	47-1	0.59	0.52	0.39	0.50	20.12	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:23:36	DataFile Name :	038CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.05	0.05	0.04	0.05	11.84	ppb
Vanadium	51-2	0.03	0.04	0.03	0.03	15.07	ppb
Yttrium	89-1				96		%
Yttrium	89-2				93		%
Zinc	66-2	0.30	0.32	0.34	0.32	6.11	ppb
Zirconium	90-1	0.06	0.06	0.05	0.06	8.24	ppb
Zirconium	91-1	0.06	0.07	0.05	0.06	17.56	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-04DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-08-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:27:13	DataFile Name :	039SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	30341.01	30279.89	30025.33	30215.41	0.55	ppb
Antimony	121-1	0.07	0.08	0.08	0.08	5.68	ppb
Arsenic	75-2	1.83	1.53	1.64	1.67	8.86	ppb
Barium	135-1	37.70	38.45	39.13	38.43	1.86	ppb
Barium	137-1	38.63	39.28	39.42	39.11	1.07	ppb
Beryllium	9-1	0.39	0.41	0.37	0.39	4.96	ppb
Bismuth	209-1				102		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.12	0.18	0.20	0.17	24.71	ppb
Cadmium	106-1	1.58	0.48	0.09	0.72	107.29	ppb
Cadmium	111-1	0.21	0.13	0.10	0.15	40.42	ppb
Calcium	43-1	58313.05	58914.28	58621.01	58616.11	0.51	ppb
Calcium	44-1	57893.34	58376.31	59687.34	58652.33	1.58	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	12.92	13.01	12.98	12.97	0.36	ppb
Cobalt	59-2	60.16	60.51	60.99	60.55	0.69	ppb
Copper	63-2	27.39	27.48	27.06	27.31	0.81	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				94		%
Indium	115-2				91		%
Iron	56-2	173128.03	173833.97	174325.32	173762.44	0.35	ppb
Iron	57-2	171795.34	172544.94	172812.78	172384.35	0.31	ppb
Iron	54-2	173571.86	173959.49	174606.75	174046.03	0.30	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-04DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-08-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:27:13	DataFile Name :	039SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.46	1.46	1.50	1.47	1.61	ppb
Lead	207-1	1.35	1.32	1.42	1.37	3.53	ppb
Lead	208-1	1.40	1.41	1.47	1.43	2.54	ppb
Lithium	6-1				101		%
Magnesium	24-2	42531.18	42529.86	42488.81	42516.62	0.06	ppb
Manganese	55-2	1893.84	1895.10	1920.09	1903.01	0.78	ppb
Molybdenum	94-1	1.12	1.16	1.10	1.13	2.72	ppb
Molybdenum	95-1	0.11	0.12	0.13	0.12	6.12	ppb
Molybdenum	96-1	1.22	1.26	1.20	1.23	2.43	ppb
Molybdenum	97-1	0.14	0.12	0.13	0.13	7.90	ppb
Molybdenum	98-1	0.10	0.09	0.11	0.10	8.07	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	54.45	55.24	54.70	54.80	0.73	ppb
Phosphorus	31-2	1191.92	1239.18	1203.75	1211.62	2.03	ppb
Potassium	39-2	864.51	872.28	877.15	871.31	0.73	ppb
Rhodium	103-1				91		%
Rhodium	103-2				90		%
Scandium	45-1				92		%
Scandium	45-2				87		%
Selenium	82-1	0.46	0.47	0.52	0.48	6.45	ppb
Selenium	77-2	11.50	12.14	14.72	12.78	13.33	ppb
Selenium	78-2	1.24	0.98	0.70	0.97	27.88	ppb
Silicon	28-1	9565.37	9718.09	9829.80	9704.42	1.37	ppb
Silver	107-1	0.04	0.04	0.04	0.04	6.60	ppb
Silver	109-1	0.03	0.04	0.03	0.03	4.19	ppb
Sodium	23-2	21446.28	21557.65	21478.67	21494.20	0.27	ppb
Strontium	86-1	3319.48	3341.92	3368.14	3343.18	0.73	ppb
Strontium	88-1	3447.30	3509.76	3446.31	3467.79	1.05	ppb
Sulfur	34-1	223144.65	223959.74	228521.81	225208.73	1.29	ppb
Terbium	159-1				99		%
Terbium	159-2				98		%
Thallium	203-1	0.04	0.04	0.04	0.04	8.91	ppb
Thallium	205-1	0.04	0.04	0.04	0.04	6.53	ppb
Tin	118-1	0.19	0.19	0.20	0.20	4.04	ppb
Titanium	47-1	6.11	5.98	6.18	6.09	1.66	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-04DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-08-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:27:13	DataFile Name :	039SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	2.19	2.21	2.20	2.20	0.32	ppb
Vanadium	51-2	255.16	256.88	253.39	255.14	0.68	ppb
Yttrium	89-1				114		%
Yttrium	89-2				109		%
Zinc	66-2	298.38	295.90	297.34	297.21	0.42	ppb
Zirconium	90-1	0.51	0.53	0.53	0.52	2.76	ppb
Zirconium	91-1	0.54	0.59	0.55	0.56	4.97	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-06DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-09-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:30:23	DataFile Name :	040SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	16450.85	16157.02	16106.91	16238.26	1.14	ppb
Antimony	121-1	0.05	0.05	0.04	0.05	11.59	ppb
Arsenic	75-2	1.90	1.67	1.77	1.78	6.52	ppb
Barium	135-1	40.93	41.31	40.91	41.05	0.55	ppb
Barium	137-1	42.03	42.50	42.44	42.32	0.60	ppb
Beryllium	9-1	0.47	0.47	0.48	0.47	1.34	ppb
Bismuth	209-1				102		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.18	0.27	0.15	0.20	31.50	ppb
Cadmium	106-1	1.14	1.30	1.72	1.39	21.90	ppb
Cadmium	111-1	0.16	0.15	0.18	0.16	10.83	ppb
Calcium	43-1	103743.82	103797.84	104375.09	103972.25	0.34	ppb
Calcium	44-1	102369.91	103091.88	103835.76	103099.18	0.71	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	4.28	4.28	4.20	4.25	1.15	ppb
Cobalt	59-2	56.92	56.80	56.07	56.60	0.81	ppb
Copper	63-2	3.63	3.62	3.67	3.64	0.67	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				101		%
Indium	115-1				94		%
Indium	115-2				90		%
Iron	56-2	222593.02	220707.51	219942.28	221080.93	0.62	ppb
Iron	57-2	220638.49	219116.83	218385.61	219380.31	0.52	ppb
Iron	54-2	221771.23	220844.52	220989.56	221201.77	0.23	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-06DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-09-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:30:23	DataFile Name :	040SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.47	0.46	0.46	0.46	1.04	ppb
Lead	207-1	0.41	0.41	0.42	0.42	1.94	ppb
Lead	208-1	0.43	0.43	0.43	0.43	0.33	ppb
Lithium	6-1				99		%
Magnesium	24-2	34371.41	33916.65	33952.33	34080.13	0.74	ppb
Manganese	55-2	3652.96	3621.56	3632.81	3635.78	0.44	ppb
Molybdenum	94-1	0.97	0.91	0.96	0.95	3.24	ppb
Molybdenum	95-1	0.15	0.14	0.14	0.14	3.11	ppb
Molybdenum	96-1	1.44	1.43	1.39	1.42	1.71	ppb
Molybdenum	97-1	0.17	0.13	0.14	0.15	13.86	ppb
Molybdenum	98-1	0.11	0.11	0.09	0.10	9.24	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	18.33	18.30	18.25	18.29	0.20	ppb
Phosphorus	31-2	134.68	142.43	142.81	139.98	3.28	ppb
Potassium	39-2	663.11	663.46	657.13	661.23	0.54	ppb
Rhodium	103-1				90		%
Rhodium	103-2				89		%
Scandium	45-1				91		%
Scandium	45-2				86		%
Selenium	82-1	0.63	0.22	0.41	0.42	48.85	ppb
Selenium	77-2	13.79	13.71	16.03	14.51	9.08	ppb
Selenium	78-2	1.13	1.79	1.13	1.35	27.96	ppb
Silicon	28-1	9349.72	9576.15	9463.49	9463.12	1.20	ppb
Silver	107-1	0.02	0.02	0.02	0.02	4.71	ppb
Silver	109-1	0.03	0.03	0.03	0.03	7.02	ppb
Sodium	23-2	9564.76	9584.83	9509.36	9552.99	0.41	ppb
Strontium	86-1	5138.82	5229.99	5171.21	5180.01	0.89	ppb
Strontium	88-1	5332.00	5376.98	5403.06	5370.68	0.67	ppb
Sulfur	34-1	230293.72	231176.59	233261.88	231577.40	0.66	ppb
Terbium	159-1				100		%
Terbium	159-2				99		%
Thallium	203-1	0.04	0.03	0.03	0.03	13.28	ppb
Thallium	205-1	0.03	0.04	0.03	0.03	4.15	ppb
Tin	118-1	0.17	0.20	0.17	0.18	9.37	ppb
Titanium	47-1	2.53	2.61	2.67	2.60	2.78	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-06DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-09-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:30:23	DataFile Name :	040SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	4.14	4.21	4.17	4.17	0.84	ppb
Vanadium	51-2	292.96	292.71	291.21	292.29	0.32	ppb
Yttrium	89-1				120		%
Yttrium	89-2				117		%
Zinc	66-2	234.69	234.24	232.80	233.91	0.42	ppb
Zirconium	90-1	0.40	0.41	0.39	0.40	1.70	ppb
Zirconium	91-1	0.39	0.41	0.39	0.40	2.67	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-08DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-10-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:33:31	DataFile Name :	041SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	21416.53	21294.77	21160.09	21290.47	0.60	ppb
Antimony	121-1	0.04	0.03	0.04	0.04	2.43	ppb
Arsenic	75-2	1.13	1.21	1.16	1.17	3.69	ppb
Barium	135-1	35.95	37.10	37.49	36.85	2.18	ppb
Barium	137-1	36.64	37.65	37.99	37.43	1.88	ppb
Beryllium	9-1	0.65	0.63	0.74	0.68	8.45	ppb
Bismuth	209-1				103		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.22	0.32	0.15	0.23	38.42	ppb
Cadmium	106-1	1.05	1.21	1.18	1.15	7.37	ppb
Cadmium	111-1	0.12	0.12	0.14	0.13	9.22	ppb
Calcium	43-1	75378.92	79253.12	78509.81	77713.95	2.65	ppb
Calcium	44-1	75272.05	77522.18	78288.79	77027.68	2.04	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	5.61	5.62	5.41	5.55	2.11	ppb
Cobalt	59-2	67.50	67.06	65.45	66.67	1.62	ppb
Copper	63-2	13.42	13.35	13.00	13.26	1.69	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				103		%
Holmium	165-2				103		%
Indium	115-1				97		%
Indium	115-2				93		%
Iron	56-2	207037.66	203329.49	198832.36	203066.51	2.02	ppb
Iron	57-2	202602.12	200057.29	195285.65	199315.02	1.86	ppb
Iron	54-2	205933.47	202749.64	199006.29	202563.13	1.71	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-08DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-10-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:33:31	DataFile Name :	041SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.57	0.59	0.59	0.58	2.15	ppb
Lead	207-1	0.51	0.55	0.53	0.53	4.10	ppb
Lead	208-1	0.54	0.55	0.57	0.55	2.35	ppb
Lithium	6-1				99		%
Magnesium	24-2	31091.50	30799.39	29874.77	30588.56	2.08	ppb
Manganese	55-2	3090.63	3064.31	2991.01	3048.65	1.69	ppb
Molybdenum	94-1	1.58	1.61	1.60	1.60	1.11	ppb
Molybdenum	95-1	0.09	0.10	0.09	0.09	8.28	ppb
Molybdenum	96-1	1.40	1.44	1.41	1.42	1.59	ppb
Molybdenum	97-1	0.09	0.09	0.09	0.09	1.36	ppb
Molybdenum	98-1	0.05	0.05	0.06	0.06	8.37	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	16.59	16.31	15.88	16.26	2.22	ppb
Phosphorus	31-2	469.64	490.81	490.60	483.68	2.51	ppb
Potassium	39-2	729.12	708.08	696.86	711.35	2.30	ppb
Rhodium	103-1				94		%
Rhodium	103-2				93		%
Scandium	45-1				95		%
Scandium	45-2				92		%
Selenium	82-1	0.70	0.78	0.35	0.61	37.07	ppb
Selenium	77-2	13.96	15.12	13.50	14.19	5.87	ppb
Selenium	78-2	0.05	0.89	0.67	0.53	81.18	ppb
Silicon	28-1	11006.82	11600.56	11601.87	11403.08	3.01	ppb
Silver	107-1	0.03	0.03	0.02	0.03	8.38	ppb
Silver	109-1	0.02	0.02	0.02	0.02	7.42	ppb
Sodium	23-2	10721.17	10600.88	10286.91	10536.32	2.13	ppb
Strontium	86-1	3831.09	3940.36	3898.05	3889.83	1.42	ppb
Strontium	88-1	3967.29	4095.35	4018.19	4026.94	1.60	ppb
Sulfur	34-1	209052.52	212422.78	216256.93	212577.41	1.70	ppb
Terbium	159-1				103		%
Terbium	159-2				101		%
Thallium	203-1	0.03	0.03	0.02	0.03	20.02	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	4.95	ppb
Tin	118-1	0.22	0.23	0.24	0.23	4.09	ppb
Titanium	47-1	3.88	3.96	3.95	3.93	1.16	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-08DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-10-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:33:31	DataFile Name :	041SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	2.18	2.29	2.32	2.26	3.25	ppb
Vanadium	51-2	220.96	216.66	212.36	216.66	1.98	ppb
Yttrium	89-1				123		%
Yttrium	89-2				119		%
Zinc	66-2	248.46	244.83	238.68	243.99	2.03	ppb
Zirconium	90-1	0.79	0.83	0.82	0.81	2.33	ppb
Zirconium	91-1	0.84	0.83	0.86	0.84	1.60	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-10DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-11-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:36:42	DataFile Name :	042SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	19943.39	19554.93	19535.99	19678.10	1.17	ppb
Antimony	121-1	0.03	0.03	0.04	0.03	7.54	ppb
Arsenic	75-2	1.19	1.37	1.14	1.24	9.47	ppb
Barium	135-1	37.04	37.22	37.03	37.10	0.28	ppb
Barium	137-1	37.63	37.70	37.99	37.77	0.50	ppb
Beryllium	9-1	0.66	0.67	0.62	0.65	3.70	ppb
Bismuth	209-1				103		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.25	0.19	0.07	0.17	51.89	ppb
Cadmium	106-1	2.09	1.16	0.16	1.14	85.25	ppb
Cadmium	111-1	0.22	0.16	0.07	0.15	48.66	ppb
Calcium	43-1	91642.10	92268.36	94501.54	92804.00	1.62	ppb
Calcium	44-1	92197.26	92067.53	93377.95	92547.58	0.78	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	4.77	4.69	4.71	4.72	0.88	ppb
Cobalt	59-2	61.77	62.28	62.01	62.02	0.41	ppb
Copper	63-2	10.18	10.14	10.06	10.13	0.63	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				102		%
Indium	115-1				96		%
Indium	115-2				94		%
Iron	56-2	199442.42	199109.54	198319.73	198957.23	0.29	ppb
Iron	57-2	198958.67	197696.92	197454.56	198036.72	0.41	ppb
Iron	54-2	197647.46	200106.06	198883.17	198878.90	0.62	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-10DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-11-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:36:42	DataFile Name :	042SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.42	0.44	0.45	0.44	3.54	ppb
Lead	207-1	0.42	0.41	0.43	0.42	3.05	ppb
Lead	208-1	0.41	0.42	0.43	0.42	2.14	ppb
Lithium	6-1				99		%
Magnesium	24-2	31195.97	31151.49	31267.62	31205.02	0.19	ppb
Manganese	55-2	3473.13	3524.35	3476.25	3491.24	0.82	ppb
Molybdenum	94-1	1.28	1.30	1.33	1.30	1.90	ppb
Molybdenum	95-1	0.09	0.08	0.09	0.08	9.30	ppb
Molybdenum	96-1	1.30	1.33	1.34	1.33	1.50	ppb
Molybdenum	97-1	0.08	0.09	0.09	0.08	7.14	ppb
Molybdenum	98-1	0.04	0.03	0.04	0.04	3.21	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	15.64	15.70	15.11	15.48	2.10	ppb
Phosphorus	31-2	379.76	377.14	371.07	375.99	1.19	ppb
Potassium	39-2	701.48	698.63	702.09	700.73	0.26	ppb
Rhodium	103-1				93		%
Rhodium	103-2				91		%
Scandium	45-1				94		%
Scandium	45-2				89		%
Selenium	82-1	0.55	0.44	0.62	0.54	17.56	ppb
Selenium	77-2	12.70	14.76	13.91	13.79	7.48	ppb
Selenium	78-2	0.75	1.52	1.29	1.19	33.13	ppb
Silicon	28-1	10100.80	10126.58	10297.81	10175.06	1.05	ppb
Silver	107-1	0.03	0.02	0.02	0.02	12.65	ppb
Silver	109-1	0.02	0.02	0.02	0.02	13.72	ppb
Sodium	23-2	9442.34	9334.84	9376.62	9384.60	0.58	ppb
Strontium	86-1	4296.39	4307.92	4356.72	4320.35	0.74	ppb
Strontium	88-1	4446.71	4478.94	4485.33	4470.33	0.46	ppb
Sulfur	34-1	217978.55	219476.73	220839.28	219431.52	0.65	ppb
Terbium	159-1				102		%
Terbium	159-2				100		%
Thallium	203-1	0.02	0.03	0.02	0.02	12.78	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	4.07	ppb
Tin	118-1	0.17	0.19	0.18	0.18	5.47	ppb
Titanium	47-1	3.34	3.25	3.34	3.31	1.56	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-10DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-11-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:36:42	DataFile Name :	042SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	2.39	2.42	2.46	2.42	1.40	ppb
Vanadium	51-2	217.72	217.93	217.33	217.66	0.14	ppb
Yttrium	89-1				123		%
Yttrium	89-2				116		%
Zinc	66-2	231.93	233.00	230.87	231.94	0.46	ppb
Zirconium	90-1	0.64	0.63	0.64	0.64	0.97	ppb
Zirconium	91-1	0.64	0.63	0.67	0.65	2.96	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-12DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-12-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:39:49	DataFile Name :	043SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	33149.76	33315.41	33424.27	33296.48	0.42	ppb
Antimony	121-1	0.02	0.02	0.02	0.02	5.31	ppb
Arsenic	75-2	1.52	1.73	1.53	1.59	7.54	ppb
Barium	135-1	32.15	32.79	32.85	32.60	1.18	ppb
Barium	137-1	32.98	33.26	33.56	33.27	0.88	ppb
Beryllium	9-1	0.16	0.16	0.19	0.17	11.87	ppb
Bismuth	209-1				103		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.10	0.19	0.27	0.18	44.65	ppb
Cadmium	106-1	0.67	0.99	0.14	0.60	71.41	ppb
Cadmium	111-1	0.14	0.15	0.07	0.12	33.65	ppb
Calcium	43-1	46705.09	48033.90	47080.00	47273.00	1.45	ppb
Calcium	44-1	45936.82	47791.84	47651.25	47126.63	2.19	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	16.24	16.06	16.17	16.16	0.57	ppb
Cobalt	59-2	55.50	55.67	55.56	55.58	0.15	ppb
Copper	63-2	31.34	31.39	31.30	31.34	0.15	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				103		%
Indium	115-1				98		%
Indium	115-2				93		%
Iron	56-2	152645.70	151617.41	152207.30	152156.80	0.34	ppb
Iron	57-2	151417.07	148999.56	151420.64	150612.42	0.93	ppb
Iron	54-2	152102.18	151487.03	152214.20	151934.47	0.26	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-12DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-12-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:39:49	DataFile Name :	043SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.41	1.41	1.40	1.41	0.36	ppb
Lead	207-1	1.31	1.29	1.31	1.30	0.97	ppb
Lead	208-1	1.34	1.35	1.36	1.35	0.52	ppb
Lithium	6-1				99		%
Magnesium	24-2	44661.35	44709.52	44440.36	44603.74	0.32	ppb
Manganese	55-2	1212.08	1200.70	1208.55	1207.11	0.48	ppb
Molybdenum	94-1	0.88	0.91	0.97	0.92	4.91	ppb
Molybdenum	95-1	0.07	0.06	0.08	0.07	15.86	ppb
Molybdenum	96-1	1.07	1.14	1.12	1.11	3.23	ppb
Molybdenum	97-1	0.10	0.10	0.09	0.10	7.65	ppb
Molybdenum	98-1	0.06	0.06	0.06	0.06	2.46	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	72.18	71.57	72.47	72.07	0.64	ppb
Phosphorus	31-2	1164.80	1188.36	1193.25	1182.14	1.29	ppb
Potassium	39-2	901.30	902.46	894.29	899.35	0.49	ppb
Rhodium	103-1				95		%
Rhodium	103-2				92		%
Scandium	45-1				97		%
Scandium	45-2				92		%
Selenium	82-1	0.98	0.52	0.45	0.65	44.10	ppb
Selenium	77-2	13.33	14.13	11.67	13.04	9.64	ppb
Selenium	78-2	1.64	1.96	1.11	1.57	27.27	ppb
Silicon	28-1	8555.19	8810.15	8933.19	8766.18	2.20	ppb
Silver	107-1	0.04	0.04	0.04	0.04	9.12	ppb
Silver	109-1	0.03	0.04	0.04	0.04	17.21	ppb
Sodium	23-2	23296.63	23243.30	23292.86	23277.60	0.13	ppb
Strontium	86-1	2909.46	3043.07	3047.78	3000.10	2.62	ppb
Strontium	88-1	3058.82	3118.86	3094.82	3090.83	0.98	ppb
Sulfur	34-1	213474.15	220269.68	222484.38	218742.73	2.15	ppb
Terbium	159-1				103		%
Terbium	159-2				100		%
Thallium	203-1	0.02	0.03	0.03	0.03	5.65	ppb
Thallium	205-1	0.02	0.03	0.02	0.02	13.22	ppb
Tin	118-1	0.12	0.13	0.14	0.13	4.72	ppb
Titanium	47-1	3.99	3.95	4.21	4.05	3.46	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-12DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-12-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:39:49	DataFile Name :	043SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	2.08	2.12	2.15	2.12	1.74	ppb
Vanadium	51-2	279.63	278.20	277.44	278.42	0.40	ppb
Yttrium	89-1				117		%
Yttrium	89-2				111		%
Zinc	66-2	297.75	298.50	300.13	298.80	0.41	ppb
Zirconium	90-1	0.42	0.44	0.45	0.44	3.12	ppb
Zirconium	91-1	0.42	0.49	0.44	0.45	7.82	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-14DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-13-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:43:00	DataFile Name :	044SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	25015.33	24952.41	25238.78	25068.84	0.60	ppb
Antimony	121-1	0.02	0.03	0.02	0.03	5.88	ppb
Arsenic	75-2	1.78	1.72	1.92	1.81	5.62	ppb
Barium	135-1	35.42	35.55	35.37	35.45	0.27	ppb
Barium	137-1	35.93	36.27	35.86	36.02	0.60	ppb
Beryllium	9-1	0.21	0.26	0.23	0.23	11.34	ppb
Bismuth	209-1				103		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.16	0.07	0.23	0.16	52.10	ppb
Cadmium	106-1	0.74	1.23	0.44	0.80	49.80	ppb
Cadmium	111-1	0.13	0.15	0.10	0.12	21.88	ppb
Calcium	43-1	57403.87	58680.01	60849.69	58977.85	2.95	ppb
Calcium	44-1	58406.80	57850.28	58345.42	58200.83	0.52	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	14.82	14.58	14.66	14.69	0.85	ppb
Cobalt	59-2	59.08	58.77	58.20	58.68	0.76	ppb
Copper	63-2	27.88	27.68	27.90	27.82	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				103		%
Holmium	165-2				102		%
Indium	115-1				98		%
Indium	115-2				94		%
Iron	56-2	172806.33	173775.23	173776.33	173452.63	0.32	ppb
Iron	57-2	172894.01	170748.04	171514.10	171718.72	0.63	ppb
Iron	54-2	175392.69	174443.76	174502.73	174779.73	0.30	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-14DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-13-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:43:00	DataFile Name :	044SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.06	1.03	1.04	1.04	1.10	ppb
Lead	207-1	0.97	0.98	0.97	0.97	0.57	ppb
Lead	208-1	1.01	0.99	1.02	1.01	1.30	ppb
Lithium	6-1				98		%
Magnesium	24-2	43503.63	43625.02	43862.44	43663.70	0.42	ppb
Manganese	55-2	1669.06	1651.99	1663.10	1661.39	0.52	ppb
Molybdenum	94-1	1.02	1.04	1.09	1.05	3.30	ppb
Molybdenum	95-1	0.10	0.09	0.08	0.09	9.48	ppb
Molybdenum	96-1	1.22	1.29	1.28	1.27	3.21	ppb
Molybdenum	97-1	0.11	0.10	0.12	0.11	9.50	ppb
Molybdenum	98-1	0.07	0.07	0.07	0.07	1.44	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	63.84	64.18	63.62	63.88	0.44	ppb
Phosphorus	31-2	1062.81	1056.83	1050.00	1056.55	0.61	ppb
Potassium	39-2	929.41	922.67	920.25	924.11	0.51	ppb
Rhodium	103-1				95		%
Rhodium	103-2				93		%
Scandium	45-1				96		%
Scandium	45-2				91		%
Selenium	82-1	0.44	0.22	0.40	0.35	32.70	ppb
Selenium	77-2	14.57	12.17	13.18	13.31	9.06	ppb
Selenium	78-2	1.75	1.74	1.41	1.63	11.79	ppb
Silicon	28-1	9386.20	9507.33	9542.57	9478.70	0.87	ppb
Silver	107-1	0.03	0.04	0.03	0.03	18.01	ppb
Silver	109-1	0.03	0.04	0.03	0.03	14.96	ppb
Sodium	23-2	26858.81	26611.12	26609.08	26693.00	0.54	ppb
Strontium	86-1	3558.24	3591.31	3621.02	3590.19	0.87	ppb
Strontium	88-1	3691.70	3690.44	3718.20	3700.11	0.42	ppb
Sulfur	34-1	218781.99	217439.42	217838.94	218020.12	0.32	ppb
Terbium	159-1				102		%
Terbium	159-2				101		%
Thallium	203-1	0.02	0.03	0.02	0.02	20.75	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	7.93	ppb
Tin	118-1	0.48	0.49	0.48	0.48	0.55	ppb
Titanium	47-1	5.22	5.21	5.56	5.33	3.74	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-14DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-13-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:43:00	DataFile Name :	044SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	2.11	2.14	2.13	2.12	0.78	ppb
Vanadium	51-2	270.00	270.64	270.25	270.30	0.12	ppb
Yttrium	89-1				118		%
Yttrium	89-2				112		%
Zinc	66-2	291.90	286.19	287.93	288.68	1.01	ppb
Zirconium	90-1	0.48	0.49	0.48	0.49	0.84	ppb
Zirconium	91-1	0.49	0.45	0.49	0.48	4.88	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-16DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-14-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:46:07	DataFile Name :	045SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	32836.29	32636.49	32275.02	32582.60	0.87	ppb
Antimony	121-1	0.49	0.49	0.50	0.49	1.74	ppb
Arsenic	75-2	1.48	1.57	1.45	1.50	3.99	ppb
Barium	135-1	34.53	35.23	35.75	35.17	1.74	ppb
Barium	137-1	35.44	35.64	36.09	35.72	0.93	ppb
Beryllium	9-1	0.21	0.20	0.24	0.22	8.25	ppb
Bismuth	209-1				103		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.23	0.17	0.33	0.24	31.22	ppb
Cadmium	106-1	1.52	1.11	0.54	1.06	46.32	ppb
Cadmium	111-1	0.20	0.18	0.14	0.17	17.07	ppb
Calcium	43-1	45352.00	45689.24	45579.15	45540.13	0.38	ppb
Calcium	44-1	45536.34	45413.69	45427.93	45459.32	0.15	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	16.39	16.38	16.24	16.34	0.50	ppb
Cobalt	59-2	54.69	54.94	54.92	54.85	0.25	ppb
Copper	63-2	30.87	30.87	30.71	30.82	0.30	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				102		%
Indium	115-1				98		%
Indium	115-2				94		%
Iron	56-2	136788.05	137743.63	137029.87	137187.18	0.36	ppb
Iron	57-2	135604.87	135860.75	135298.79	135588.14	0.21	ppb
Iron	54-2	136014.08	137879.15	137900.78	137264.67	0.79	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-16DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-14-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:46:07	DataFile Name :	045SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2.08	2.10	2.13	2.10	1.26	ppb
Lead	207-1	1.91	1.98	1.92	1.93	1.98	ppb
Lead	208-1	1.99	2.05	2.03	2.02	1.46	ppb
Lithium	6-1				99		%
Magnesium	24-2	45156.82	45061.52	44770.21	44996.18	0.45	ppb
Manganese	55-2	1311.30	1329.90	1318.15	1319.78	0.71	ppb
Molybdenum	94-1	0.76	0.74	0.79	0.76	3.22	ppb
Molybdenum	95-1	0.09	0.09	0.08	0.09	7.62	ppb
Molybdenum	96-1	1.03	1.07	1.03	1.04	2.26	ppb
Molybdenum	97-1	0.10	0.11	0.11	0.11	7.29	ppb
Molybdenum	98-1	0.07	0.09	0.07	0.08	10.72	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	66.86	66.69	67.42	66.99	0.57	ppb
Phosphorus	31-2	837.74	785.48	809.14	810.79	3.23	ppb
Potassium	39-2	866.18	868.04	866.48	866.90	0.12	ppb
Rhodium	103-1				96		%
Rhodium	103-2				93		%
Scandium	45-1				97		%
Scandium	45-2				93		%
Selenium	82-1	0.26	0.02	0.39	0.23	83.62	ppb
Selenium	77-2	14.17	12.86	13.11	13.38	5.18	ppb
Selenium	78-2	1.29	0.79	1.76	1.28	38.14	ppb
Silicon	28-1	8410.30	8428.20	8492.43	8443.64	0.51	ppb
Silver	107-1	0.04	0.04	0.04	0.04	2.21	ppb
Silver	109-1	0.04	0.04	0.04	0.04	4.31	ppb
Sodium	23-2	21678.36	21734.47	21519.00	21643.94	0.52	ppb
Strontium	86-1	2628.27	2651.71	2648.63	2642.87	0.48	ppb
Strontium	88-1	2724.15	2725.32	2739.74	2729.74	0.32	ppb
Sulfur	34-1	225830.35	222094.50	224557.79	224160.88	0.85	ppb
Terbium	159-1				103		%
Terbium	159-2				102		%
Thallium	203-1	0.03	0.02	0.03	0.03	20.02	ppb
Thallium	205-1	0.03	0.02	0.03	0.03	6.39	ppb
Tin	118-1	0.48	0.49	0.50	0.49	2.65	ppb
Titanium	47-1	5.30	5.01	5.27	5.19	3.09	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-16DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-14-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:46:07	DataFile Name :	045SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.97	2.06	2.07	2.03	2.68	ppb
Vanadium	51-2	267.84	268.73	269.11	268.56	0.24	ppb
Yttrium	89-1				117		%
Yttrium	89-2				112		%
Zinc	66-2	291.07	293.49	290.58	291.71	0.54	ppb
Zirconium	90-1	0.34	0.36	0.33	0.34	3.74	ppb
Zirconium	91-1	0.32	0.35	0.35	0.34	5.16	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-18DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-06R-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:49:18	DataFile Name :	046SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20275.73	19972.40	19833.34	20027.16	1.13	ppb
Antimony	121-1	2.21	2.26	2.28	2.25	1.57	ppb
Arsenic	75-2	1.48	1.52	1.56	1.52	2.71	ppb
Barium	135-1	39.20	39.93	40.34	39.82	1.45	ppb
Barium	137-1	39.76	40.67	40.62	40.35	1.26	ppb
Beryllium	9-1	0.49	0.52	0.44	0.48	9.32	ppb
Bismuth	209-1				104		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.13	0.22	0.31	0.22	41.10	ppb
Cadmium	106-1	1.64	1.34	1.22	1.40	15.35	ppb
Cadmium	111-1	0.17	0.15	0.17	0.16	7.78	ppb
Calcium	43-1	87692.53	87411.98	88360.49	87821.67	0.55	ppb
Calcium	44-1	87103.53	87221.65	87340.56	87221.91	0.14	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.51	8.50	8.38	8.47	0.90	ppb
Cobalt	59-2	63.07	62.09	61.92	62.36	1.00	ppb
Copper	63-2	16.99	16.74	16.58	16.77	1.23	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				101		%
Indium	115-1				97		%
Indium	115-2				93		%
Iron	56-2	199116.84	198609.51	198581.95	198769.43	0.15	ppb
Iron	57-2	201700.29	197770.10	195865.34	198445.25	1.50	ppb
Iron	54-2	204138.13	200068.12	197156.36	200454.20	1.75	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-18DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-06R-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:49:18	DataFile Name :	046SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.60	0.58	0.62	0.60	3.42	ppb
Lead	207-1	0.57	0.54	0.54	0.55	3.18	ppb
Lead	208-1	0.57	0.57	0.58	0.57	1.13	ppb
Lithium	6-1				99		%
Magnesium	24-2	37630.96	36992.86	36892.30	37172.04	1.08	ppb
Manganese	55-2	3037.18	2999.10	2983.86	3006.71	0.91	ppb
Molybdenum	94-1	1.05	1.03	1.04	1.04	0.80	ppb
Molybdenum	95-1	0.11	0.11	0.11	0.11	2.29	ppb
Molybdenum	96-1	1.38	1.30	1.34	1.34	2.81	ppb
Molybdenum	97-1	0.09	0.12	0.12	0.11	12.62	ppb
Molybdenum	98-1	0.06	0.06	0.07	0.06	8.25	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	35.98	35.63	35.03	35.55	1.35	ppb
Phosphorus	31-2	352.40	360.38	357.53	356.77	1.13	ppb
Potassium	39-2	869.66	853.16	845.20	856.01	1.46	ppb
Rhodium	103-1				95		%
Rhodium	103-2				91		%
Scandium	45-1				96		%
Scandium	45-2				90		%
Selenium	82-1	0.40	0.77	0.53	0.57	33.27	ppb
Selenium	77-2	13.04	16.30	16.38	15.24	12.50	ppb
Selenium	78-2	1.66	0.76	0.84	1.09	46.20	ppb
Silicon	28-1	9981.44	10256.46	10134.64	10124.18	1.36	ppb
Silver	107-1	0.04	0.03	0.03	0.03	7.66	ppb
Silver	109-1	0.03	0.04	0.04	0.03	16.53	ppb
Sodium	23-2	19729.66	19260.39	19058.04	19349.36	1.78	ppb
Strontium	86-1	4436.87	4449.59	4443.40	4443.29	0.14	ppb
Strontium	88-1	4585.65	4631.36	4610.82	4609.28	0.50	ppb
Sulfur	34-1	230648.24	226556.59	227439.80	228214.88	0.94	ppb
Terbium	159-1				103		%
Terbium	159-2				100		%
Thallium	203-1	0.03	0.02	0.02	0.02	16.84	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	9.34	ppb
Tin	118-1	0.14	0.17	0.17	0.16	10.23	ppb
Titanium	47-1	2.97	3.14	3.09	3.07	2.78	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-18DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-06R-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:49:18	DataFile Name :	046SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	2.57	2.59	2.54	2.56	1.04	ppb
Vanadium	51-2	253.25	249.58	250.37	251.07	0.77	ppb
Yttrium	89-1				124		%
Yttrium	89-2				117		%
Zinc	66-2	266.80	261.37	258.96	262.37	1.53	ppb
Zirconium	90-1	0.48	0.49	0.48	0.48	1.28	ppb
Zirconium	91-1	0.49	0.48	0.45	0.47	4.69	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	PB165834TB	Instrumnet Name :	P7
Client Sample ID :	PB165834TB	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:52:26	DataFile Name :	047SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	3.12	3.32	3.21	3.21	3.12	ppb
Antimony	121-1	1.75	1.74	1.78	1.76	1.39	ppb
Arsenic	75-2	0.01	0.01	0.00	0.01	56.69	ppb
Barium	135-1	0.01	0.03	0.01	0.02	42.16	ppb
Barium	137-1	0.02	0.03	0.02	0.02	25.47	ppb
Beryllium	9-1	0.03	0.00	0.03	0.02	84.85	ppb
Bismuth	209-1				107		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.02	0.06	-0.03	0.00	1305.80	ppb
Cadmium	106-1	-1.40	-1.53	-1.64	-1.52		ppb
Cadmium	111-1	-0.09	-0.11	-0.11	-0.10		ppb
Calcium	43-1	23.89	18.47	11.44	17.93	34.79	ppb
Calcium	44-1	20.00	12.28	9.29	13.85	39.89	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.19	0.19	0.18	0.19	4.19	ppb
Cobalt	59-2	0.02	0.02	0.01	0.01	22.23	ppb
Copper	63-2	0.06	0.06	0.05	0.06	4.75	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				103		%
Holmium	165-2				103		%
Indium	115-1				100		%
Indium	115-2				98		%
Iron	56-2	12.97	12.13	10.73	11.94	9.45	ppb
Iron	57-2	13.98	14.42	12.11	13.50	9.11	ppb
Iron	54-2	15.59	13.18	11.44	13.41	15.55	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	PB165834TB	Instrumnet Name :	P7
Client Sample ID :	PB165834TB	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:52:26	DataFile Name :	047SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.13	0.14	0.13	0.13	1.12	ppb
Lead	207-1	0.15	0.15	0.14	0.15	5.13	ppb
Lead	208-1	0.14	0.14	0.14	0.14	2.10	ppb
Lithium	6-1				99		%
Magnesium	24-2	2.56	2.52	2.20	2.43	8.11	ppb
Manganese	55-2	1.78	1.74	1.74	1.75	1.19	ppb
Molybdenum	94-1	0.02	0.02	0.00	0.01	71.12	ppb
Molybdenum	95-1	0.01	0.01	0.00	0.01	69.74	ppb
Molybdenum	96-1	0.00	0.00	0.00	0.00	68.55	ppb
Molybdenum	97-1	0.01	0.01	0.01	0.01	24.33	ppb
Molybdenum	98-1	0.01	0.00	0.01	0.01	85.07	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.10	0.14	0.07	0.10	35.56	ppb
Phosphorus	31-2	-14.91	-18.54	-13.78	-15.74		ppb
Potassium	39-2	4.71	3.38	3.61	3.90	18.18	ppb
Rhodium	103-1				101		%
Rhodium	103-2				99		%
Scandium	45-1				97		%
Scandium	45-2				94		%
Selenium	82-1	-0.29	-0.27	-0.44	-0.33		ppb
Selenium	77-2	0.01	-0.16	-0.16	-0.10		ppb
Selenium	78-2	-0.22	0.22	-1.17	-0.39		ppb
Silicon	28-1	-3.10	-2.88	-3.74	-3.24		ppb
Silver	107-1	0.00	0.00	0.00	0.00	16.75	ppb
Silver	109-1	0.00	0.00	0.00	0.00	27.40	ppb
Sodium	23-2	130.87	130.48	128.55	129.97	0.96	ppb
Strontium	86-1	0.74	0.28	0.16	0.40	77.00	ppb
Strontium	88-1	1.18	0.89	0.69	0.92	26.95	ppb
Sulfur	34-1	3236.74	3231.34	3225.40	3231.16	0.18	ppb
Terbium	159-1				103		%
Terbium	159-2				101		%
Thallium	203-1	0.00	0.01	0.00	0.00	71.11	ppb
Thallium	205-1	0.00	0.00	0.00	0.00		ppb
Tin	118-1	0.09	0.11	0.13	0.11	17.44	ppb
Titanium	47-1	0.06	0.08	0.07	0.07	18.55	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	PB165834TB	Instrumnet Name :	P7
Client Sample ID :	PB165834TB	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:52:26	DataFile Name :	047SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	66.91	ppb
Vanadium	51-2	0.01	0.02	0.02	0.02	21.85	ppb
Yttrium	89-1				100		%
Yttrium	89-2				98		%
Zinc	66-2	0.69	0.70	0.81	0.73	9.63	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	234.14	ppb
Zirconium	91-1	0.01	0.00	0.00	0.00	170.50	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:55:45	DataFile Name :	048CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	51828.04	51522.72	51312.50	51554.42	0.50	ppb
Antimony	121-1	510.17	506.56	498.45	505.06	1.19	ppb
Arsenic	75-2	504.19	504.31	502.60	503.70	0.19	ppb
Barium	135-1	2580.57	2581.66	2564.96	2575.73	0.36	ppb
Barium	137-1	2582.50	2626.54	2556.79	2588.61	1.36	ppb
Beryllium	9-1	491.15	502.42	492.00	495.19	1.27	ppb
Bismuth	209-1				100		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	499.83	496.09	502.40	499.44	0.63	ppb
Cadmium	106-1	501.76	501.70	498.57	500.68	0.36	ppb
Cadmium	111-1	478.86	477.82	476.09	477.59	0.29	ppb
Calcium	43-1	260243.52	260798.51	261145.64	260729.22	0.17	ppb
Calcium	44-1	262662.84	260600.52	261585.85	261616.40	0.39	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	512.82	511.62	516.91	513.78	0.54	ppb
Cobalt	59-2	501.18	498.33	502.05	500.52	0.39	ppb
Copper	63-2	4837.28	4868.26	4846.04	4850.53	0.33	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				99		%
Indium	115-1				92		%
Indium	115-2				87		%
Iron	56-2	129652.87	131552.36	130575.40	130593.54	0.73	ppb
Iron	57-2	128938.91	130464.53	130005.08	129802.84	0.60	ppb
Iron	54-2	130570.45	131117.23	131159.56	130949.08	0.25	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:55:45	DataFile Name :	048CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2592.04	2587.00	2554.58	2577.87	0.79	ppb
Lead	207-1	2586.18	2560.94	2539.35	2562.16	0.91	ppb
Lead	208-1	2577.74	2571.26	2548.97	2565.99	0.59	ppb
Lithium	6-1				100		%
Magnesium	24-2	241643.53	241298.42	241592.76	241511.57	0.08	ppb
Manganese	55-2	5071.41	5103.74	5075.77	5083.64	0.35	ppb
Molybdenum	94-1	5071.03	5131.79	5057.28	5086.70	0.78	ppb
Molybdenum	95-1	5123.06	5090.46	5065.98	5093.17	0.56	ppb
Molybdenum	96-1	5111.06	5160.43	5133.81	5135.10	0.48	ppb
Molybdenum	97-1	5077.91	5129.83	5076.82	5094.86	0.59	ppb
Molybdenum	98-1	5051.42	5137.22	5065.36	5084.67	0.91	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	470.06	472.57	474.28	472.30	0.45	ppb
Phosphorus	31-2	10094.41	10184.23	10156.41	10145.02	0.45	ppb
Potassium	39-2	127234.98	128048.02	127593.04	127625.35	0.32	ppb
Rhodium	103-1				88		%
Rhodium	103-2				84		%
Scandium	45-1				92		%
Scandium	45-2				87		%
Selenium	82-1	478.39	491.14	483.79	484.44	1.32	ppb
Selenium	77-2	476.60	479.79	489.73	482.04	1.42	ppb
Selenium	78-2	493.02	492.02	492.06	492.37	0.12	ppb
Silicon	28-1	207.56	204.93	209.44	207.31	1.09	ppb
Silver	107-1	502.93	494.15	497.47	498.18	0.89	ppb
Silver	109-1	503.14	497.29	501.52	500.65	0.60	ppb
Sodium	23-2	248742.49	251630.23	253823.38	251398.70	1.01	ppb
Strontium	86-1	12699.74	12834.07	12779.62	12771.14	0.53	ppb
Strontium	88-1	12682.74	12727.00	12615.24	12674.99	0.44	ppb
Sulfur	34-1	9901.28	9691.00	9793.12	9795.13	1.07	ppb
Terbium	159-1				101		%
Terbium	159-2				97		%
Thallium	203-1	524.24	510.84	509.26	514.78	1.60	ppb
Thallium	205-1	521.36	517.59	510.85	516.60	1.03	ppb
Tin	118-1	505.90	511.07	506.69	507.89	0.55	ppb
Titanium	47-1	5018.72	5050.82	5013.95	5027.83	0.40	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:55:45	DataFile Name :	048CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	509.33	505.30	508.96	507.87	0.44	ppb
Vanadium	51-2	514.07	519.16	528.01	520.42	1.36	ppb
Yttrium	89-1				95		%
Yttrium	89-2				89		%
Zinc	66-2	4810.45	4805.28	4793.59	4803.11	0.18	ppb
Zirconium	90-1	505.55	507.00	498.94	503.83	0.85	ppb
Zirconium	91-1	506.49	508.82	507.35	507.55	0.23	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:58:28	DataFile Name :	049CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.95	0.85	1.23	1.01	19.29	ppb
Antimony	121-1	0.25	0.22	0.18	0.22	15.80	ppb
Arsenic	75-2	0.00	0.02	0.00	0.01	190.00	ppb
Barium	135-1	0.25	0.12	0.09	0.15	55.83	ppb
Barium	137-1	0.23	0.11	0.07	0.14	62.35	ppb
Beryllium	9-1	0.09	0.08	0.09	0.09	9.99	ppb
Bismuth	209-1				107		%
Bismuth	209-2				107		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.08	0.06	0.03	0.06	48.04	ppb
Cadmium	106-1	-1.54	-1.58	-2.27	-1.80		ppb
Cadmium	111-1	-0.05	-0.08	-0.14	-0.09		ppb
Calcium	43-1	25.24	14.91	10.27	16.80	45.60	ppb
Calcium	44-1	22.55	10.07	5.17	12.60	71.12	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.00	0.01	-0.01	0.00	643.16	ppb
Cobalt	59-2	0.01	0.01	0.01	0.01	17.21	ppb
Copper	63-2	0.15	0.15	0.12	0.14	12.18	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				100		%
Holmium	165-2				100		%
Indium	115-1				96		%
Indium	115-2				95		%
Iron	56-2	3.78	3.68	3.50	3.65	3.82	ppb
Iron	57-2	4.46	3.45	4.38	4.10	13.64	ppb
Iron	54-2	4.36	4.17	3.87	4.14	6.01	ppb
Krypton	83-1						cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:58:28	DataFile Name :	049CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.22	0.15	0.10	0.16	38.19	ppb
Lead	207-1	0.26	0.14	0.12	0.17	44.83	ppb
Lead	208-1	0.24	0.15	0.11	0.17	41.17	ppb
Lithium	6-1				104		%
Magnesium	24-2	6.07	5.84	5.37	5.76	6.19	ppb
Manganese	55-2	0.15	0.15	0.15	0.15	0.83	ppb
Molybdenum	94-1	0.59	0.39	0.26	0.41	39.72	ppb
Molybdenum	95-1	0.59	0.35	0.24	0.39	44.96	ppb
Molybdenum	96-1	0.57	0.34	0.24	0.38	44.54	ppb
Molybdenum	97-1	0.55	0.34	0.24	0.38	41.87	ppb
Molybdenum	98-1	0.55	0.34	0.25	0.38	39.57	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.03	-0.02	-0.02	0.00		ppb
Phosphorus	31-2	-12.64	-12.84	-13.61	-13.03		ppb
Potassium	39-2	10.75	10.73	8.97	10.15	10.05	ppb
Rhodium	103-1				95		%
Rhodium	103-2				95		%
Scandium	45-1				91		%
Scandium	45-2				89		%
Selenium	82-1	-0.19	-0.48	-0.58	-0.42		ppb
Selenium	77-2	-0.16	-0.16	-0.16	-0.16		ppb
Selenium	78-2	-1.05	-0.59	-1.79	-1.14		ppb
Silicon	28-1	-8.12	-11.52	-12.79	-10.81		ppb
Silver	107-1	0.09	0.06	0.05	0.07	27.55	ppb
Silver	109-1	0.08	0.05	0.05	0.06	31.25	ppb
Sodium	23-2	18.00	17.51	18.08	17.86	1.71	ppb
Strontium	86-1	0.97	0.65	0.47	0.70	36.40	ppb
Strontium	88-1	1.17	0.57	0.45	0.73	52.76	ppb
Sulfur	34-1	-63.27	-246.23	-346.73	-218.74		ppb
Terbium	159-1				100		%
Terbium	159-2				100		%
Thallium	203-1	0.06	0.05	0.03	0.04	26.42	ppb
Thallium	205-1	0.07	0.04	0.03	0.05	40.78	ppb
Tin	118-1	0.09	0.07	0.05	0.07	31.40	ppb
Titanium	47-1	0.54	0.28	0.23	0.35	47.98	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:58:28	DataFile Name :	049CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.04	0.02	0.02	0.03	41.07	ppb
Vanadium	51-2	0.01	0.01	0.01	0.01	8.39	ppb
Yttrium	89-1				95		%
Yttrium	89-2				92		%
Zinc	66-2	0.15	0.19	0.18	0.17	10.94	ppb
Zirconium	90-1	0.06	0.04	0.03	0.04	29.25	ppb
Zirconium	91-1	0.06	0.04	0.02	0.04	40.34	ppb

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 10:59:16	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	133	173	147	151	13.48	cps
Antimony	121-1	23	23	23	23	0.00	cps
Arsenic	75-2	0	20	13	11	91.66	cps
Barium	135-1	70	80	43	64	29.41	cps
Barium	137-1	133	110	103	116	13.64	cps
Beryllium	9-1	50	60	60	57	10.19	cps
Bismuth	209-1	7951849	7837903	7890828	7893527	0.72	cps
Bismuth	209-2	6976952	6890811	6895473	6921079	0.70	cps
Bromine	81-1	15728	15458	15829	15672	1.22	cps
Bromine	81-2	203	183	163	183	10.91	cps
Cadmium	108-1	13	10	7	10	33.30	cps
Cadmium	106-1	3580	3460	3497	3513	1.75	cps
Cadmium	111-1	2510	2432	2460	2467	1.61	cps
Calcium	43-1	283	300	360	314	12.82	cps
Calcium	44-1	11591	11785	11678	11685	0.83	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1540	1583	1580	1568	1.54	cps
Cobalt	59-2	100	110	127	112	12.01	cps
Copper	63-2	723	737	740	733	1.20	cps
Dysprosium	156-1	17	20	17	18	10.81	cps
Dysprosium	156-2	10	3	7	7	50.03	cps
Erbium	164-1	40	50	53	48	14.52	cps
Erbium	164-2	33	37	37	36	5.42	cps
Gadolinium	160-1	53	67	93	71	28.64	cps
Gadolinium	160-2	297	440	413	383	19.89	cps
Holmium	165-1	14009303	13856685	13640244	13835410	1.34	cps
Holmium	165-2	10201488	9971341	10014918	10062582	1.21	cps
Indium	115-1	11977318	11920606	11726536	11874820	1.11	cps
Indium	115-2	4510664	4419738	4493666	4474690	1.08	cps
Iron	56-2	20003	19947	20120	20023	0.44	cps
Iron	57-2	887	973	890	917	5.36	cps
Iron	54-2	2470	2474	2567	2504	2.19	cps
Krypton	83-1	297	237	243	259	12.70	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 10:59:16	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	363	377	333	358	6.20	cps
Lead	207-1	260	233	307	267	13.92	cps
Lead	208-1	1377	1253	1280	1303	4.98	cps
Lithium	6-1	1726347	1660938	1695405	1694230	1.93	cps
Magnesium	24-2	587	617	543	582	6.33	cps
Manganese	55-2	237	287	263	262	9.54	cps
Molybdenum	94-1	350	347	327	341	3.70	cps
Molybdenum	95-1	163	150	157	157	4.26	cps
Molybdenum	96-1	287	240	253	260	9.25	cps
Molybdenum	97-1	93	90	110	98	10.96	cps
Molybdenum	98-1	243	233	280	252	9.74	cps
Neodymium	150-1	7	0	13	7	99.98	cps
Neodymium	150-2	3	3	0	2	86.60	cps
Nickel	60-2	400	430	367	399	7.94	cps
Phosphorus	31-2	167	197	170	178	9.25	cps
Potassium	39-2	51363	51581	51554	51499	0.23	cps
Rhodium	103-1	11014207	10988398	10970906	10991170	0.20	cps
Rhodium	103-2	6802775	6804933	6771686	6793131	0.27	cps
Scandium	45-1	6643827	6664526	6619232	6642528	0.34	cps
Scandium	45-2	594270	593749	588822	592280	0.51	cps
Selenium	82-1	184	194	169	182	6.94	cps
Selenium	77-2	0	0	10	3	173.21	cps
Selenium	78-2	530	613	440	528	16.43	cps
Silicon	28-1	846039	849567	854650	850085	0.51	cps
Silver	107-1	70	107	70	82	25.75	cps
Silver	109-1	40	67	53	53	25.00	cps
Sodium	23-2	22470	22507	21652	22209	2.18	cps
Strontium	86-1	457	393	543	464	16.21	cps
Strontium	88-1	360	360	310	343	8.41	cps
Sulfur	34-1	196969	195956	196895	196606	0.29	cps
Terbium	159-1	14336934	14257282	14225417	14273211	0.40	cps
Terbium	159-2	10179293	10141589	10011633	10110839	0.87	cps
Thallium	203-1	327	267	237	277	16.57	cps
Thallium	205-1	673	620	647	647	4.12	cps
Tin	118-1	1340	1480	1387	1402	5.08	cps
Titanium	47-1	87	107	107	100	11.55	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 10:59:16	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	13	3	10	9	57.30	cps
Vanadium	51-2	10	17	7	11	45.82	cps
Yttrium	89-1	14021496	13750525	13899346	13890456	0.98	cps
Yttrium	89-2	3829861	3788340	3866900	3828367	1.03	cps
Zinc	66-2	220	247	270	246	10.19	cps
Zirconium	90-1	580	687	733	667	11.79	cps
Zirconium	91-1	110	177	117	134	27.31	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:05:51	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6298	6405	6601	6435	2.39	cps
Antimony	121-1	26889	27894	27099	27294	1.94	cps
Arsenic	75-2	723	767	823	771	6.50	cps
Barium	135-1	33980	33710	34001	33897	0.48	cps
Barium	137-1	58499	58429	58911	58613	0.44	cps
Beryllium	9-1	1910	1703	1857	1823	5.88	cps
Bismuth	209-1	8051830	7918237	7855801	7941956	1.26	cps
Bismuth	209-2	7021615	6936202	6999637	6985818	0.63	cps
Bromine	81-1	15178	15879	15084	15380	2.82	cps
Bromine	81-2	170	193	170	178	7.58	cps
Cadmium	108-1	180	283	273	246	23.21	cps
Cadmium	106-1	4057	3634	3771	3821	5.66	cps
Cadmium	111-1	6255	6133	5995	6127	2.12	cps
Calcium	43-1	20661	20604	20087	20451	1.55	cps
Calcium	44-1	332649	331517	336245	333470	0.74	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	13886	13633	13319	13613	2.09	cps
Cobalt	59-2	10137	10053	9907	10032	1.16	cps
Copper	63-2	13853	13957	13606	13805	1.30	cps
Dysprosium	156-1	30	17	33	27	33.06	cps
Dysprosium	156-2	17	13	7	12	41.65	cps
Erbium	164-1	53	60	37	50	24.03	cps
Erbium	164-2	50	43	47	47	7.15	cps
Gadolinium	160-1	70	67	67	68	2.84	cps
Gadolinium	160-2	323	423	387	378	13.39	cps
Holmium	165-1	13841377	13708279	13752334	13767330	0.49	cps
Holmium	165-2	10270954	10088216	10195521	10184897	0.90	cps
Indium	115-1	11856362	11894711	11721375	11824149	0.77	cps
Indium	115-2	4522600	4489120	4462989	4491569	0.67	cps
Iron	56-2	306697	307850	307015	307187	0.19	cps
Iron	57-2	8232	8072	8452	8252	2.31	cps
Iron	54-2	19256	18725	18882	18954	1.44	cps
Krypton	83-1	227	190	253	223	14.24	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:05:51	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	9183	9573	9330	9362	2.11	cps
Lead	207-1	8319	8349	8349	8339	0.21	cps
Lead	208-1	37577	38231	37400	37736	1.16	cps
Lithium	6-1	1689351	1719961	1747528	1718947	1.69	cps
Magnesium	24-2	271932	270369	271024	271109	0.29	cps
Manganese	55-2	5004	5384	5111	5166	3.80	cps
Molybdenum	94-1	27977	28545	29336	28619	2.39	cps
Molybdenum	95-1	33896	34684	34501	34360	1.20	cps
Molybdenum	96-1	38474	38554	39493	38840	1.46	cps
Molybdenum	97-1	21803	21917	21406	21708	1.24	cps
Molybdenum	98-1	55883	55525	54672	55360	1.12	cps
Neodymium	150-1	10	10	10	10	0.00	cps
Neodymium	150-2	3	0	7	3	100.05	cps
Nickel	60-2	2887	2564	2897	2783	6.82	cps
Phosphorus	31-2	577	590	703	623	11.17	cps
Potassium	39-2	401941	398777	400542	400420	0.40	cps
Rhodium	103-1	11020172	11079650	10847424	10982415	1.10	cps
Rhodium	103-2	6870745	6762545	6769914	6801068	0.89	cps
Scandium	45-1	6663741	6497829	6602219	6587930	1.27	cps
Scandium	45-2	600583	596721	597835	598380	0.33	cps
Selenium	82-1	1297	1245	1258	1266	2.14	cps
Selenium	77-2	143	123	133	133	7.50	cps
Selenium	78-2	773	953	907	878	10.64	cps
Silicon	28-1	888017	1142370	1159736	1063374	14.30	cps
Silver	107-1	17107	17444	17317	17289	0.98	cps
Silver	109-1	17040	16162	17067	16756	3.07	cps
Sodium	23-2	434530	434518	433793	434280	0.10	cps
Strontium	86-1	4694	4781	4931	4802	2.49	cps
Strontium	88-1	39576	39005	38701	39094	1.14	cps
Sulfur	34-1	198859	201959	206300	202373	1.85	cps
Terbium	159-1	14201927	14176090	14154609	14177542	0.17	cps
Terbium	159-2	10288500	10294716	10236657	10273291	0.31	cps
Thallium	203-1	11852	11432	11819	11701	2.00	cps
Thallium	205-1	27621	26559	27862	27348	2.53	cps
Tin	118-1	58970	59251	58237	58819	0.89	cps
Titanium	47-1	9366	8713	8996	9025	3.63	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:05:51	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	34267	34942	33980	34396	1.44	cps
Vanadium	51-2	26643	26340	26490	26491	0.57	cps
Yttrium	89-1	13851695	14012449	13754698	13872947	0.94	cps
Yttrium	89-2	3833578	3833383	3847777	3838246	0.22	cps
Zinc	66-2	5861	6111	5788	5920	2.86	cps
Zirconium	90-1	23652	24117	23639	23803	1.14	cps
Zirconium	91-1	5008	5408	5364	5260	4.17	cps

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:09:06	DataFile Name :	007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	305989	306071	303705	305255	0.44	cps
Antimony	121-1	636096	644590	641383	640689	0.67	cps
Arsenic	75-2	35626	35365	35279	35423	0.51	cps
Barium	135-1	804678	816099	804129	808302	0.84	cps
Barium	137-1	1384282	1406377	1389354	1393338	0.83	cps
Beryllium	9-1	81201	84324	84692	83406	2.30	cps
Bismuth	209-1	8092996	8110291	7999279	8067522	0.74	cps
Bismuth	209-2	7049024	7060200	6950708	7019978	0.86	cps
Bromine	81-1	14807	15592	15338	15246	2.62	cps
Bromine	81-2	177	167	190	178	6.58	cps
Cadmium	108-1	12369	12462	12639	12490	1.10	cps
Cadmium	106-1	20678	21376	21426	21160	1.98	cps
Cadmium	111-1	169881	172546	172271	171566	0.85	cps
Calcium	43-1	188454	190686	188640	189260	0.65	cps
Calcium	44-1	2872382	2875853	2834505	2860913	0.80	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	280551	278399	275711	278220	0.87	cps
Cobalt	59-2	436316	435514	434153	435327	0.25	cps
Copper	63-2	3297039	3259229	3256319	3270862	0.69	cps
Dysprosium	156-1	37	43	33	38	13.48	cps
Dysprosium	156-2	43	50	50	48	8.06	cps
Erbium	164-1	43	53	50	49	10.42	cps
Erbium	164-2	20	37	20	26	37.66	cps
Gadolinium	160-1	53	60	50	54	9.35	cps
Gadolinium	160-2	397	447	420	421	5.94	cps
Holmium	165-1	14072726	14010332	14008579	14030546	0.26	cps
Holmium	165-2	10259764	10199410	10056095	10171756	1.03	cps
Indium	115-1	11752830	11981863	11886771	11873821	0.97	cps
Indium	115-2	4416329	4443137	4382191	4413886	0.69	cps
Iron	56-2	12959223	12980798	12888718	12942913	0.37	cps
Iron	57-2	330896	330323	330361	330527	0.10	cps
Iron	54-2	737606	731206	733145	733986	0.45	cps
Krypton	83-1	227	230	223	227	1.47	cps

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:09:06	DataFile Name :	007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	2277449	2284167	2232402	2264673	1.24	cps
Lead	207-1	2080713	2067633	2067195	2071847	0.37	cps
Lead	208-1	9360451	9434867	9274333	9356551	0.86	cps
Lithium	6-1	1720679	1771806	1748685	1747057	1.47	cps
Magnesium	24-2	2407444	2435461	2421186	2421364	0.58	cps
Manganese	55-2	2189995	2204466	2185120	2193194	0.46	cps
Molybdenum	94-1	2282503	2300933	2292004	2291813	0.40	cps
Molybdenum	95-1	3321220	3279590	3340151	3313654	0.93	cps
Molybdenum	96-1	3595295	3604009	3642430	3613911	0.69	cps
Molybdenum	97-1	2062492	2071933	2080897	2071774	0.44	cps
Molybdenum	98-1	5275462	5281066	5385685	5314071	1.17	cps
Neodymium	150-1	47	53	53	51	7.52	cps
Neodymium	150-2	20	30	3	18	75.79	cps
Nickel	60-2	111215	112017	110567	111266	0.65	cps
Phosphorus	31-2	14841	14734	15131	14902	1.38	cps
Potassium	39-2	1653192	1654381	1604388	1637320	1.74	cps
Rhodium	103-1	11086177	11113897	10968607	11056227	0.70	cps
Rhodium	103-2	6789248	6724998	6680048	6731431	0.82	cps
Scandium	45-1	6638936	6708936	6662171	6670015	0.53	cps
Scandium	45-2	592341	595406	596859	594868	0.39	cps
Selenium	82-1	10315	10563	10453	10444	1.19	cps
Selenium	77-2	1033	1160	1137	1110	6.07	cps
Selenium	78-2	4151	4171	4331	4217	2.34	cps
Silicon	28-1	1926114	1913369	1927834	1922439	0.41	cps
Silver	107-1	841114	853772	845834	846906	0.76	cps
Silver	109-1	797918	803656	806402	802659	0.54	cps
Sodium	23-2	3993500	4020765	3942365	3985543	1.00	cps
Strontium	86-1	208423	210176	208004	208868	0.55	cps
Strontium	88-1	1805282	1835578	1827410	1822757	0.86	cps
Sulfur	34-1	250870	254320	255911	253700	1.02	cps
Terbium	159-1	14541941	14529229	14366714	14479295	0.67	cps
Terbium	159-2	10212603	10196192	10292199	10233665	0.50	cps
Thallium	203-1	543115	550729	549804	547883	0.76	cps
Thallium	205-1	1275086	1289116	1291903	1285368	0.70	cps
Tin	118-1	534365	544164	539565	539364	0.91	cps
Titanium	47-1	836901	842396	841558	840285	0.35	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:09:06	DataFile Name :	007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	1665466	1689376	1696754	1683865	0.97	cps
Vanadium	51-2	244282	244367	242742	243797	0.38	cps
Yttrium	89-1	14009612	14018514	13862128	13963418	0.63	cps
Yttrium	89-2	3803583	3741113	3772397	3772364	0.83	cps
Zinc	66-2	520400	513768	514749	516306	0.69	cps
Zirconium	90-1	1106756	1110659	1105230	1107548	0.25	cps
Zirconium	91-1	244182	248710	247643	246845	0.96	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:12:08	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	744941	749253	744594	746263	0.35	cps
Antimony	121-1	1653321	1655916	1662477	1657238	0.28	cps
Arsenic	75-2	86906	87673	86319	86966	0.78	cps
Barium	135-1	2105383	2150696	2133596	2129891	1.07	cps
Barium	137-1	3644428	3697732	3655115	3665758	0.77	cps
Beryllium	9-1	208766	211953	209117	209945	0.83	cps
Bismuth	209-1	8080363	8147836	8063505	8097235	0.55	cps
Bismuth	209-2	6992457	6935869	7013852	6980726	0.58	cps
Bromine	81-1	15158	15351	15331	15280	0.70	cps
Bromine	81-2	150	167	170	162	6.61	cps
Cadmium	108-1	30950	31020	31017	30995	0.13	cps
Cadmium	106-1	46849	47601	47237	47229	0.80	cps
Cadmium	111-1	421158	428512	422886	424185	0.91	cps
Calcium	43-1	469844	467466	472555	469955	0.54	cps
Calcium	44-1	7162847	7177030	7063090	7134322	0.87	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	680818	678214	673910	677647	0.51	cps
Cobalt	59-2	1064326	1067852	1054453	1062211	0.65	cps
Copper	63-2	7817992	7864148	7942051	7874730	0.80	cps
Dysprosium	156-1	40	67	57	54	24.75	cps
Dysprosium	156-2	87	80	87	84	4.56	cps
Erbium	164-1	63	70	80	71	11.80	cps
Erbium	164-2	57	47	23	42	40.52	cps
Gadolinium	160-1	67	97	73	79	19.97	cps
Gadolinium	160-2	357	487	383	409	16.79	cps
Holmium	165-1	13864710	14061860	14002974	13976515	0.72	cps
Holmium	165-2	10230349	10423724	10140544	10264872	1.41	cps
Indium	115-1	11812407	11788389	11758296	11786364	0.23	cps
Indium	115-2	4384769	4414000	4278268	4359012	1.64	cps
Iron	56-2	31872428	32138914	31285437	31765593	1.37	cps
Iron	57-2	804875	811514	799207	805199	0.77	cps
Iron	54-2	1747171	1765049	1736185	1749468	0.83	cps
Krypton	83-1	203	270	233	236	14.17	cps

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:12:08	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	5847332	5750783	5783955	5794024	0.85	cps
Lead	207-1	5318296	5310048	5281063	5303136	0.37	cps
Lead	208-1	23834786	23816176	23736913	23795958	0.22	cps
Lithium	6-1	1773510	1751985	1805727	1777074	1.52	cps
Magnesium	24-2	5897908	5883294	5811983	5864395	0.78	cps
Manganese	55-2	5387373	5404290	5321039	5370901	0.82	cps
Molybdenum	94-1	5757997	5760446	5747533	5755325	0.12	cps
Molybdenum	95-1	8293782	8321285	8269001	8294689	0.32	cps
Molybdenum	96-1	9029899	9133032	9151167	9104699	0.72	cps
Molybdenum	97-1	5198567	5141962	5114586	5151705	0.83	cps
Molybdenum	98-1	13359166	13343799	13298015	13333660	0.24	cps
Neodymium	150-1	77	117	110	101	21.19	cps
Neodymium	150-2	23	33	17	24	34.31	cps
Nickel	60-2	271394	269039	268907	269780	0.52	cps
Phosphorus	31-2	36467	35879	35785	36043	1.03	cps
Potassium	39-2	3904075	3908920	3850977	3887991	0.83	cps
Rhodium	103-1	10837107	10942571	10877023	10885567	0.49	cps
Rhodium	103-2	6590253	6557514	6527845	6558537	0.48	cps
Scandium	45-1	6625188	6631439	6540067	6598898	0.77	cps
Scandium	45-2	582179	574935	568583	575233	1.18	cps
Selenium	82-1	26052	25927	25882	25954	0.34	cps
Selenium	77-2	2674	2754	2640	2689	2.17	cps
Selenium	78-2	9820	9346	9503	9557	2.53	cps
Silicon	28-1	3094370	3117955	3080172	3097499	0.62	cps
Silver	107-1	2160534	2150544	2145844	2152307	0.35	cps
Silver	109-1	2093903	2110465	2036830	2080399	1.86	cps
Sodium	23-2	9876779	9735875	9702176	9771610	0.95	cps
Strontium	86-1	517141	523600	521167	520636	0.63	cps
Strontium	88-1	4645970	4622972	4610709	4626550	0.39	cps
Sulfur	34-1	324921	326481	323376	324926	0.48	cps
Terbium	159-1	14433091	14492915	14523333	14483113	0.32	cps
Terbium	159-2	10276408	10289458	10052999	10206288	1.30	cps
Thallium	203-1	1369173	1382673	1385091	1378979	0.62	cps
Thallium	205-1	3505227	3536366	3513399	3518331	0.46	cps
Tin	118-1	1342626	1353245	1348344	1348071	0.39	cps
Titanium	47-1	2088122	2098791	2097629	2094847	0.28	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:12:08	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	4661691	4634204	4683710	4659869	0.53	cps
Vanadium	51-2	598307	602416	591760	597494	0.90	cps
Yttrium	89-1	13830780	14001624	13887136	13906513	0.63	cps
Yttrium	89-2	3722399	3765778	3674699	3720959	1.22	cps
Zinc	66-2	1268197	1266811	1256922	1263977	0.49	cps
Zirconium	90-1	2830167	2798074	2860622	2829621	1.11	cps
Zirconium	91-1	612451	619425	618978	616951	0.63	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:14:58	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1275514	1270444	1270122	1272027	0.24	cps
Antimony	121-1	3113879	3126795	3146942	3129205	0.53	cps
Arsenic	75-2	150275	149356	147305	148979	1.02	cps
Barium	135-1	3978400	4028866	3952531	3986599	0.97	cps
Barium	137-1	6741155	6855887	6828784	6808609	0.88	cps
Beryllium	9-1	398475	400028	399169	399224	0.19	cps
Bismuth	209-1	8242988	8050311	8044171	8112490	1.39	cps
Bismuth	209-2	6790956	6853662	6735450	6793356	0.87	cps
Bromine	81-1	13793	13253	13486	13511	2.01	cps
Bromine	81-2	150	117	113	127	16.00	cps
Cadmium	108-1	57503	57962	57219	57561	0.65	cps
Cadmium	106-1	83653	84990	83632	84092	0.92	cps
Cadmium	111-1	781851	793407	780195	785151	0.92	cps
Calcium	43-1	872187	870866	851252	864768	1.36	cps
Calcium	44-1	13380836	13244959	12910744	13178846	1.84	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1157207	1144085	1139600	1146964	0.80	cps
Cobalt	59-2	1857906	1842256	1803060	1834407	1.54	cps
Copper	63-2	13479102	13417926	13240288	13379105	0.93	cps
Dysprosium	156-1	67	93	80	80	16.66	cps
Dysprosium	156-2	90	150	137	126	25.09	cps
Erbium	164-1	67	80	73	73	9.09	cps
Erbium	164-2	33	87	63	61	43.76	cps
Gadolinium	160-1	100	73	80	84	16.44	cps
Gadolinium	160-2	377	407	353	379	7.06	cps
Holmium	165-1	14162970	13744251	13659211	13855477	1.95	cps
Holmium	165-2	9838757	9703677	9746225	9762887	0.71	cps
Indium	115-1	11637312	11306301	11082757	11342123	2.46	cps
Indium	115-2	3989935	3923484	3940002	3951140	0.88	cps
Iron	56-2	55078519	54583674	53719388	54460527	1.26	cps
Iron	57-2	1364945	1384279	1374114	1374446	0.70	cps
Iron	54-2	3033898	2953589	2976287	2987924	1.39	cps
Krypton	83-1	203	240	180	208	14.56	cps

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:14:58	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	11102858	11371470	11301450	11258593	1.24	cps
Lead	207-1	10127067	10233119	10385555	10248580	1.27	cps
Lead	208-1	45841324	46582151	46743610	46389028	1.04	cps
Lithium	6-1	1838930	1823105	1783110	1815048	1.59	cps
Magnesium	24-2	10206447	10088341	10080429	10125072	0.70	cps
Manganese	55-2	9370410	9223487	9271605	9288501	0.81	cps
Molybdenum	94-1	10718910	10882117	10515953	10705660	1.71	cps
Molybdenum	95-1	15536326	15749724	15325026	15537026	1.37	cps
Molybdenum	96-1	16953038	17171203	16636893	16920378	1.59	cps
Molybdenum	97-1	9535569	9646809	9524803	9569060	0.71	cps
Molybdenum	98-1	24811066	25125105	24671099	24869090	0.93	cps
Neodymium	150-1	183	183	213	193	8.96	cps
Neodymium	150-2	33	47	40	40	16.68	cps
Nickel	60-2	457172	452723	449113	453003	0.89	cps
Phosphorus	31-2	59940	59993	59264	59732	0.68	cps
Potassium	39-2	6523275	6474335	6484890	6494167	0.40	cps
Rhodium	103-1	10607566	10296441	10053285	10319097	2.69	cps
Rhodium	103-2	6049691	6001285	5976388	6009121	0.62	cps
Scandium	45-1	6498740	6216582	6083141	6266155	3.39	cps
Scandium	45-2	508048	499254	497574	501625	1.12	cps
Selenium	82-1	47790	47592	47276	47553	0.55	cps
Selenium	77-2	4687	4744	4891	4774	2.20	cps
Selenium	78-2	16429	15698	15648	15925	2.74	cps
Silicon	28-1	4755324	4846702	4679838	4760622	1.76	cps
Silver	107-1	4023541	4064979	3971067	4019862	1.17	cps
Silver	109-1	3885309	3887268	3796198	3856258	1.35	cps
Sodium	23-2	16764269	16675270	16758127	16732555	0.30	cps
Strontium	86-1	965177	970521	956429	964042	0.74	cps
Strontium	88-1	8557062	8555166	8271081	8461103	1.94	cps
Sulfur	34-1	415091	418296	407530	413639	1.34	cps
Terbium	159-1	14552306	14175827	14000807	14242980	1.98	cps
Terbium	159-2	9850001	9772846	9623006	9748618	1.18	cps
Thallium	203-1	2891619	2891690	2906828	2896713	0.30	cps
Thallium	205-1	6825714	6916868	6843547	6862043	0.70	cps
Tin	118-1	2618667	2616329	2530909	2588635	1.93	cps
Titanium	47-1	3912791	3886141	3870018	3889650	0.56	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:14:58	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	8955624	9167566	9117258	9080149	1.22	cps
Vanadium	51-2	1028061	1007020	1006368	1013816	1.22	cps
Yttrium	89-1	13720382	13108487	12914640	13247836	3.17	cps
Yttrium	89-2	3386463	3337150	3322380	3348664	1.00	cps
Zinc	66-2	2235374	2229845	2238164	2234461	0.19	cps
Zirconium	90-1	5328919	5330397	5186288	5281868	1.57	cps
Zirconium	91-1	1149281	1155034	1145913	1150076	0.40	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:17:46	DataFile Name :	010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2487314	2473914	2465566	2475598	0.44	cps
Antimony	121-1	5927195	5986433	5951495	5955041	0.50	cps
Arsenic	75-2	287576	289235	288209	288340	0.29	cps
Barium	135-1	7671230	7630880	7702958	7668356	0.47	cps
Barium	137-1	12992370	12979823	13088678	13020290	0.46	cps
Beryllium	9-1	750408	764741	763093	759414	1.03	cps
Bismuth	209-1	7498064	7835052	7974492	7769203	3.15	cps
Bismuth	209-2	6725044	6702921	6897347	6775104	1.57	cps
Bromine	81-1	11485	11838	11421	11581	1.94	cps
Bromine	81-2	127	130	103	120	12.11	cps
Cadmium	108-1	107736	108397	109210	108448	0.68	cps
Cadmium	106-1	153296	154639	153858	153931	0.44	cps
Cadmium	111-1	1463952	1480824	1474135	1472970	0.58	cps
Calcium	43-1	1527949	1522990	1545302	1532080	0.76	cps
Calcium	44-1	24373468	24507726	24342279	24407824	0.36	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2224371	2224099	2234528	2227666	0.27	cps
Cobalt	59-2	3566147	3522374	3567941	3552154	0.73	cps
Copper	63-2	25891280	25772970	25737269	25800506	0.31	cps
Dysprosium	156-1	137	100	167	134	24.84	cps
Dysprosium	156-2	247	277	273	266	6.19	cps
Erbium	164-1	87	130	117	111	19.97	cps
Erbium	164-2	80	120	93	98	20.83	cps
Gadolinium	160-1	120	77	120	106	23.70	cps
Gadolinium	160-2	383	400	423	402	5.00	cps
Holmium	165-1	12783934	13612336	13327363	13241211	3.18	cps
Holmium	165-2	9705621	9774382	9862586	9780863	0.80	cps
Indium	115-1	9909649	10482056	10385873	10259192	2.99	cps
Indium	115-2	3866081	3833321	3817726	3839043	0.64	cps
Iron	56-2	106098105	105009452	106723952	105943836	0.82	cps
Iron	57-2	2662764	2601858	2619983	2628202	1.19	cps
Iron	54-2	5808126	5712482	5821467	5780692	1.03	cps
Krypton	83-1	153	257	213	208	24.97	cps

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:17:46	DataFile Name :	010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	22591913	22455173	22464783	22503956	0.34	cps
Lead	207-1	20505360	20505360	20472199	20494306	0.09	cps
Lead	208-1	92024445	92827569	92242754	92364923	0.45	cps
Lithium	6-1	1637806	1783356	1729197	1716786	4.28	cps
Magnesium	24-2	19652181	19495009	19630553	19592581	0.43	cps
Manganese	55-2	18025350	17899228	18207375	18043984	0.86	cps
Molybdenum	94-1	20088526	20207071	20169444	20155014	0.30	cps
Molybdenum	95-1	29122357	29155105	29106413	29127958	0.09	cps
Molybdenum	96-1	31983347	31942956	31434331	31786878	0.96	cps
Molybdenum	97-1	18219666	17997990	17924431	18047363	0.85	cps
Molybdenum	98-1	46949451	46815451	46254409	46673104	0.79	cps
Neodymium	150-1	370	327	293	330	11.65	cps
Neodymium	150-2	67	90	93	83	17.43	cps
Nickel	60-2	864201	867923	868178	866768	0.26	cps
Phosphorus	31-2	114333	115914	115884	115377	0.78	cps
Potassium	39-2	12660483	12594321	12641573	12632126	0.27	cps
Rhodium	103-1	8912105	9496073	9355187	9254455	3.29	cps
Rhodium	103-2	5731583	5700055	5808834	5746824	0.97	cps
Scandium	45-1	5397142	5689403	5640299	5575615	2.81	cps
Scandium	45-2	483230	482849	485862	483980	0.34	cps
Selenium	82-1	87950	87527	87395	87624	0.33	cps
Selenium	77-2	9026	8999	9306	9111	1.87	cps
Selenium	78-2	30555	30358	30308	30407	0.43	cps
Silicon	28-1	7290724	7316441	7307216	7304794	0.18	cps
Silver	107-1	7492839	7485433	7381092	7453121	0.84	cps
Silver	109-1	7210249	7184507	7182326	7192360	0.22	cps
Sodium	23-2	32533434	32224215	32443262	32400304	0.49	cps
Strontium	86-1	1889460	1854066	1833514	1859014	1.52	cps
Strontium	88-1	16191264	16130136	16175478	16165626	0.20	cps
Sulfur	34-1	582793	579787	579462	580681	0.32	cps
Terbium	159-1	13030280	13820792	13816266	13555780	3.36	cps
Terbium	159-2	9731612	9704029	9741188	9725610	0.20	cps
Thallium	203-1	5827546	5777008	5878395	5827650	0.87	cps
Thallium	205-1	13724435	13901065	13690299	13771933	0.82	cps
Tin	118-1	5001651	4977950	4972180	4983927	0.31	cps
Titanium	47-1	7026123	7088151	7168994	7094423	1.01	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:17:46	DataFile Name :	010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	18710437	18823121	18981343	18838301	0.72	cps
Vanadium	51-2	1966386	1973317	1961507	1967070	0.30	cps
Yttrium	89-1	11655620	12289980	12227836	12057812	2.90	cps
Yttrium	89-2	3302280	3292075	3287396	3293917	0.23	cps
Zinc	66-2	4330023	4322298	4340690	4331004	0.21	cps
Zirconium	90-1	9855958	10003876	9993912	9951249	0.83	cps
Zirconium	91-1	2155716	2209618	2186443	2183926	1.24	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:20:30	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4988355	4921790	4918917	4943021	0.79	cps
Antimony	121-1	11792236	11976783	11822985	11864001	0.83	cps
Arsenic	75-2	573149	576881	570000	573343	0.60	cps
Barium	135-1	15290981	15311304	15237512	15279932	0.25	cps
Barium	137-1	26232225	26124345	25813701	26056757	0.83	cps
Beryllium	9-1	1492681	1481667	1483957	1486102	0.39	cps
Bismuth	209-1	7809328	7856384	7749473	7805062	0.69	cps
Bismuth	209-2	6546685	6567580	6643815	6586027	0.78	cps
Bromine	81-1	11641	11948	11655	11748	1.48	cps
Bromine	81-2	70	87	117	91	25.96	cps
Cadmium	108-1	209345	211502	213206	211351	0.92	cps
Cadmium	106-1	295049	299318	301390	298586	1.08	cps
Cadmium	111-1	2989459	2979087	3010957	2993167	0.54	cps
Calcium	43-1	2986322	3025036	3030817	3014058	0.80	cps
Calcium	44-1	47784741	48455169	48448606	48229505	0.80	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	4481800	4480771	4437542	4466704	0.57	cps
Cobalt	59-2	7091055	7066009	7097522	7084862	0.23	cps
Copper	63-2	51495759	51055369	50586331	51045820	0.89	cps
Dysprosium	156-1	213	210	243	222	8.26	cps
Dysprosium	156-2	577	603	583	588	2.36	cps
Erbium	164-1	177	200	173	183	7.92	cps
Erbium	164-2	137	117	167	140	17.98	cps
Gadolinium	160-1	200	203	163	189	11.75	cps
Gadolinium	160-2	437	547	473	486	11.53	cps
Holmium	165-1	13556557	13605911	13559664	13574044	0.20	cps
Holmium	165-2	9709663	9779757	9725885	9738435	0.38	cps
Indium	115-1	10123246	10274005	10335047	10244099	1.06	cps
Indium	115-2	3744644	3715274	3769851	3743256	0.73	cps
Iron	56-2	212546617	214689203	210513390	212583070	0.98	cps
Iron	57-2	5217255	5267091	5263242	5249196	0.53	cps
Iron	54-2	11465536	11548812	11566200	11526849	0.47	cps
Krypton	83-1	203	223	210	212	4.80	cps

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:20:30	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	44811604	44825038	44398169	44678270	0.54	cps
Lead	207-1	40538973	40590879	40637153	40589001	0.12	cps
Lead	208-1	184040461	183241758	183203067	183495096	0.26	cps
Lithium	6-1	1713297	1717958	1689491	1706915	0.89	cps
Magnesium	24-2	39231126	39210577	38911329	39117677	0.46	cps
Manganese	55-2	36162023	36367341	35720278	36083214	0.92	cps
Molybdenum	94-1	39912194	40606648	40175694	40231512	0.87	cps
Molybdenum	95-1	57603062	58556502	58397931	58185832	0.88	cps
Molybdenum	96-1	63007046	63826561	63099954	63311187	0.71	cps
Molybdenum	97-1	35962352	35964407	36541511	36156090	0.92	cps
Molybdenum	98-1	92699199	93669839	94097032	93488690	0.77	cps
Neodymium	150-1	690	697	647	678	4.01	cps
Neodymium	150-2	130	110	117	119	8.57	cps
Nickel	60-2	1767282	1819064	1793855	1793400	1.44	cps
Phosphorus	31-2	231630	229890	229198	230239	0.54	cps
Potassium	39-2	25248270	25563090	25136097	25315819	0.87	cps
Rhodium	103-1	9133155	9217774	9166315	9172415	0.46	cps
Rhodium	103-2	5712108	5685141	5676965	5691405	0.32	cps
Scandium	45-1	5636529	5661110	5660815	5652818	0.25	cps
Scandium	45-2	486611	489260	486479	487450	0.32	cps
Selenium	82-1	169997	172382	170935	171105	0.70	cps
Selenium	77-2	18024	18258	18078	18120	0.68	cps
Selenium	78-2	59897	59733	58973	59535	0.83	cps
Silicon	28-1	13169136	13149151	13107836	13142041	0.24	cps
Silver	107-1	14459829	14553612	14459756	14491066	0.37	cps
Silver	109-1	13965058	14051619	14033804	14016827	0.33	cps
Sodium	23-2	64630224	65211572	64854159	64898652	0.45	cps
Strontium	86-1	3676392	3726432	3713750	3705525	0.70	cps
Strontium	88-1	31993415	32222810	32324702	32180309	0.53	cps
Sulfur	34-1	975861	982054	984253	980723	0.44	cps
Terbium	159-1	13777605	13839888	13852187	13823227	0.29	cps
Terbium	159-2	9672089	9705399	9829872	9735787	0.85	cps
Thallium	203-1	11603450	11657965	11514057	11591824	0.63	cps
Thallium	205-1	27510625	27534975	27242987	27429529	0.59	cps
Tin	118-1	9824227	9847143	9945492	9872287	0.65	cps
Titanium	47-1	14108239	14148774	14266722	14174579	0.58	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:20:30	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	38146975	37929774	37861515	37979422	0.39	cps
Vanadium	51-2	3999747	3977124	3947014	3974628	0.67	cps
Yttrium	89-1	12259250	12323464	12252681	12278465	0.32	cps
Yttrium	89-2	3301905	3304334	3272806	3293015	0.53	cps
Zinc	66-2	8588581	8520694	8393746	8501007	1.16	cps
Zirconium	90-1	19829476	19860751	20005084	19898437	0.47	cps
Zirconium	91-1	4376487	4359660	4410606	4382251	0.59	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:23:17	DataFile Name :	012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	27437574	27253811	27669653	27453679	0.76	cps
Antimony	121-1	7829	7135	6498	7154	9.30	cps
Arsenic	75-2	387	363	323	358	8.95	cps
Barium	135-1	9113	7892	7219	8075	11.89	cps
Barium	137-1	15091	13940	12589	13874	9.03	cps
Beryllium	9-1	597	500	493	530	10.91	cps
Bismuth	209-1	7288883	6850332	6743712	6960976	4.15	cps
Bismuth	209-2	5952066	5959371	5990297	5967244	0.34	cps
Bromine	81-1	13039	13199	12555	12931	2.59	cps
Bromine	81-2	140	140	177	152	13.91	cps
Cadmium	108-1	103	153	97	118	26.30	cps
Cadmium	106-1	3150	3147	3070	3123	1.45	cps
Cadmium	111-1	3110	2899	2865	2958	4.48	cps
Calcium	43-1	14976617	15188909	15292744	15152757	1.06	cps
Calcium	44-1	241675876	241188763	245607096	242823912	1.00	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	7576	7175	7459	7403	2.78	cps
Cobalt	59-2	18695	18825	19363	18961	1.87	cps
Copper	63-2	11281	10277	9923	10494	6.71	cps
Dysprosium	156-1	353	460	413	409	13.08	cps
Dysprosium	156-2	390	340	373	368	6.92	cps
Erbium	164-1	443	510	547	500	10.48	cps
Erbium	164-2	337	313	360	337	6.93	cps
Gadolinium	160-1	440	437	520	466	10.13	cps
Gadolinium	160-2	780	713	640	711	9.85	cps
Holmium	165-1	13836897	12773506	12889314	13166573	4.43	cps
Holmium	165-2	9711092	9628569	9596200	9645287	0.61	cps
Indium	115-1	10574546	9929510	9904998	10136351	3.75	cps
Indium	115-2	3794820	3783794	3824699	3801104	0.56	cps
Iron	56-2	1098918997	1099257130	1103563984	1100580037	0.24	cps
Iron	57-2	27140580	27175253	27525253	27280362	0.78	cps
Iron	54-2	58959287	59483136	59087864	59176762	0.46	cps
Krypton	83-1	260	237	210	236	10.62	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:23:17	DataFile Name :	012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	15809	13287	11645	13580	15.45	cps
Lead	207-1	14067	12332	10898	12433	12.77	cps
Lead	208-1	64026	54760	47733	55507	14.72	cps
Lithium	6-1	1733482	1626482	1634378	1664781	3.58	cps
Magnesium	24-2	225828477	225232150	225566617	225542414	0.13	cps
Manganese	55-2	19904	17353	16623	17960	9.59	cps
Molybdenum	94-1	17597	15098	12922	15206	15.38	cps
Molybdenum	95-1	19897	16016	12989	16301	21.24	cps
Molybdenum	96-1	32556	28020	24618	28398	14.03	cps
Molybdenum	97-1	11838	9987	8172	9999	18.33	cps
Molybdenum	98-1	30392	24968	20488	25282	19.62	cps
Neodymium	150-1	223	287	227	246	14.51	cps
Neodymium	150-2	130	167	170	156	14.27	cps
Nickel	60-2	6381	6608	6291	6427	2.54	cps
Phosphorus	31-2	297	240	220	252	15.77	cps
Potassium	39-2	137235238	137274101	138135691	137548344	0.37	cps
Rhodium	103-1	9274410	8530291	8570820	8791840	4.76	cps
Rhodium	103-2	5452161	5433528	5481654	5455781	0.44	cps
Scandium	45-1	6117952	5643634	5766116	5842567	4.21	cps
Scandium	45-2	519552	518230	519563	519115	0.15	cps
Selenium	82-1	324	323	341	329	3.05	cps
Selenium	77-2	0	3	3	2	86.60	cps
Selenium	78-2	393	403	383	393	2.54	cps
Silicon	28-1	751926	755926	756452	754768	0.33	cps
Silver	107-1	4788	3851	3157	3932	20.81	cps
Silver	109-1	4454	3694	3014	3721	19.37	cps
Sodium	23-2	347530155	351266968	352841608	350546244	0.78	cps
Strontium	86-1	11284	11571	11174	11343	1.81	cps
Strontium	88-1	99702	96893	97155	97917	1.58	cps
Sulfur	34-1	155404	155078	161749	157410	2.39	cps
Terbium	159-1	14064499	13070200	13165775	13433491	4.08	cps
Terbium	159-2	9592493	9577359	9639962	9603271	0.34	cps
Thallium	203-1	3140	2354	2140	2545	20.70	cps
Thallium	205-1	7215	5815	4858	5963	19.89	cps
Tin	118-1	5571	5044	4437	5018	11.31	cps
Titanium	47-1	4888	3947	3237	4024	20.57	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 11:23:17	DataFile Name :	012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	9283	7389	5478	7383	25.77	cps
Vanadium	51-2	953	893	867	904	4.91	cps
Yttrium	89-1	12703317	11979101	12131361	12271260	3.11	cps
Yttrium	89-2	3389398	3333661	3391093	3371384	0.97	cps
Zinc	66-2	6585	6418	6421	6475	1.47	cps
Zirconium	90-1	15655	14868	13536	14686	7.29	cps
Zirconium	91-1	3580	3197	2980	3253	9.34	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:06:59	DataFile Name :	017ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	142393	141528	141091	141671	0.47	cps
Antimony	121-1	2625181	2584104	2607438	2605574	0.79	cps
Arsenic	75-2	137940	138061	137916	137973	0.06	cps
Barium	135-1	317481	316887	314996	316454	0.41	cps
Barium	137-1	549209	547780	544396	547128	0.45	cps
Beryllium	9-1	167392	169676	168826	168631	0.68	cps
Bismuth	209-1	8107044	8076013	7973389	8052149	0.87	cps
Bismuth	209-2	7055122	7107131	6963112	7041789	1.04	cps
Bromine	81-1	14764	14637	14304	14568	1.63	cps
Bromine	81-2	267	183	170	207	25.35	cps
Cadmium	108-1	21212	21446	21850	21503	1.50	cps
Cadmium	106-1	32667	32212	32750	32543	0.89	cps
Cadmium	111-1	336332	332327	332717	333792	0.66	cps
Calcium	43-1	71132	70613	70600	70782	0.43	cps
Calcium	44-1	1153762	1154784	1146050	1151532	0.41	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	536111	537969	541947	538676	0.55	cps
Cobalt	59-2	841688	839967	843538	841731	0.21	cps
Copper	63-2	579785	577409	578810	578668	0.21	cps
Dysprosium	156-1	10	37	10	19	81.51	cps
Dysprosium	156-2	10	13	3	9	57.30	cps
Erbium	164-1	43	33	37	38	13.48	cps
Erbium	164-2	50	27	40	39	30.10	cps
Gadolinium	160-1	37	50	63	50	26.66	cps
Gadolinium	160-2	477	407	453	446	8.00	cps
Holmium	165-1	13839185	13651891	13571731	13687602	1.00	cps
Holmium	165-2	10050128	10078417	9933882	10020809	0.76	cps
Indium	115-1	11585537	11554165	11463732	11534478	0.55	cps
Indium	115-2	4292570	4279382	4247935	4273296	0.54	cps
Iron	56-2	9732934	9677732	9784227	9731631	0.55	cps
Iron	57-2	248742	249453	247035	248410	0.50	cps
Iron	54-2	563773	563017	560752	562514	0.28	cps
Krypton	83-1	267	250	207	241	12.85	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:06:59	DataFile Name :	017ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1903622	1848323	1851883	1867943	1.66	cps
Lead	207-1	1502713	1501896	1505680	1503430	0.13	cps
Lead	208-1	7410381	7351318	7315924	7359208	0.65	cps
Lithium	6-1	1800541	1762817	1830262	1797873	1.88	cps
Magnesium	24-2	541342	538775	539760	539959	0.24	cps
Manganese	55-2	420353	423172	419470	420998	0.46	cps
Molybdenum	94-1	443	463	363	423	12.50	cps
Molybdenum	95-1	257	280	273	270	4.45	cps
Molybdenum	96-1	590	527	480	532	10.37	cps
Molybdenum	97-1	167	160	170	166	3.08	cps
Molybdenum	98-1	463	477	427	456	5.68	cps
Neodymium	150-1	27	17	20	21	24.12	cps
Neodymium	150-2	3	3	10	6	69.34	cps
Nickel	60-2	217585	216354	215942	216627	0.39	cps
Phosphorus	31-2	217	210	147	191	20.21	cps
Potassium	39-2	1200193	1200310	1256888	1219130	2.68	cps
Rhodium	103-1	10854144	10812615	10703064	10789941	0.72	cps
Rhodium	103-2	6601639	6536951	6492264	6543618	0.84	cps
Scandium	45-1	6481138	6437611	6455184	6457978	0.34	cps
Scandium	45-2	564646	565053	563329	564343	0.16	cps
Selenium	82-1	41805	41912	41310	41676	0.77	cps
Selenium	77-2	4557	4484	4547	4530	0.88	cps
Selenium	78-2	14821	15078	15161	15020	1.18	cps
Silicon	28-1	716763	718141	714211	716372	0.28	cps
Silver	107-1	773526	778377	780588	777497	0.46	cps
Silver	109-1	745824	750801	745290	747305	0.41	cps
Sodium	23-2	1504162	1497238	1476787	1492729	0.95	cps
Strontium	86-1	1403	1363	1383	1383	1.45	cps
Strontium	88-1	8946	8576	8916	8813	2.33	cps
Sulfur	34-1	188787	189435	189452	189225	0.20	cps
Terbium	159-1	14297934	14185554	14036333	14173274	0.93	cps
Terbium	159-2	9987974	10041395	10018243	10015871	0.27	cps
Thallium	203-1	2413234	2366222	2380484	2386647	1.01	cps
Thallium	205-1	5621493	5627318	5557601	5602137	0.69	cps
Tin	118-1	1537	1527	1500	1521	1.25	cps
Titanium	47-1	137	123	97	119	17.13	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:06:59	DataFile Name :	017ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	23	17	27	22	22.91	cps
Vanadium	51-2	464719	464279	461854	463618	0.33	cps
Yttrium	89-1	13639574	13491437	13496099	13542370	0.62	cps
Yttrium	89-2	3670428	3614251	3612311	3632330	0.91	cps
Zinc	66-2	196920	196308	194448	195892	0.66	cps
Zirconium	90-1	767	717	760	748	3.63	cps
Zirconium	91-1	343	390	427	387	10.80	cps

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	LLICV01	Instrumnet Name :	P7
Client Sample ID :	LLICV01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:20:59	DataFile Name :	020LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6238	6295	6461	6331	1.83	cps
Antimony	121-1	26197	26224	26147	26189	0.15	cps
Arsenic	75-2	763	803	730	766	4.80	cps
Barium	135-1	32013	31208	32413	31878	1.93	cps
Barium	137-1	55461	55471	55802	55578	0.35	cps
Beryllium	9-1	1860	1947	1847	1885	2.88	cps
Bismuth	209-1	7799796	8071809	7846707	7906104	1.84	cps
Bismuth	209-2	7076163	6882216	7015767	6991382	1.42	cps
Bromine	81-1	14981	14591	14270	14614	2.44	cps
Bromine	81-2	153	133	180	156	15.05	cps
Cadmium	108-1	277	243	213	244	12.96	cps
Cadmium	106-1	3374	3400	3347	3374	0.79	cps
Cadmium	111-1	5768	5524	5514	5602	2.57	cps
Calcium	43-1	18962	19389	19346	19232	1.22	cps
Calcium	44-1	317393	315566	315184	316048	0.37	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	13102	12949	12499	12850	2.44	cps
Cobalt	59-2	9393	9143	9226	9254	1.38	cps
Copper	63-2	13500	13203	13059	13254	1.69	cps
Dysprosium	156-1	20	20	37	26	37.66	cps
Dysprosium	156-2	7	7	0	4	86.60	cps
Erbium	164-1	50	60	63	58	12.01	cps
Erbium	164-2	40	37	23	33	26.47	cps
Gadolinium	160-1	57	63	70	63	10.52	cps
Gadolinium	160-2	463	510	520	498	6.08	cps
Holmium	165-1	13509776	13409714	13490580	13470024	0.39	cps
Holmium	165-2	9963334	9890075	10050357	9967922	0.80	cps
Indium	115-1	11504296	11527393	11434259	11488649	0.42	cps
Indium	115-2	4337925	4330493	4343231	4337216	0.15	cps
Iron	56-2	287561	288889	286594	287681	0.40	cps
Iron	57-2	7899	7679	8026	7868	2.23	cps
Iron	54-2	17657	17587	17230	17491	1.31	cps
Krypton	83-1	237	163	210	203	18.25	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	LLICV01	Instrumnet Name :	P7
Client Sample ID :	LLICV01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:20:59	DataFile Name :	020LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	9220	8896	9587	9234	3.74	cps
Lead	207-1	7929	8026	8166	8040	1.48	cps
Lead	208-1	36636	36483	37945	37021	2.17	cps
Lithium	6-1	1723947	1763139	1740586	1742557	1.13	cps
Magnesium	24-2	257206	254916	257020	256380	0.50	cps
Manganese	55-2	4787	4908	4714	4803	2.03	cps
Molybdenum	94-1	27546	27416	27149	27370	0.74	cps
Molybdenum	95-1	33422	32950	32934	33102	0.84	cps
Molybdenum	96-1	36576	37184	37421	37060	1.18	cps
Molybdenum	97-1	20728	20117	20501	20449	1.51	cps
Molybdenum	98-1	52812	52976	53190	52992	0.36	cps
Neodymium	150-1	20	3	10	11	75.52	cps
Neodymium	150-2	7	3	3	4	43.40	cps
Nickel	60-2	2570	2667	2687	2641	2.36	cps
Phosphorus	31-2	560	630	620	603	6.27	cps
Potassium	39-2	380279	379300	379968	379849	0.13	cps
Rhodium	103-1	10726539	10787701	10700432	10738224	0.42	cps
Rhodium	103-2	6536162	6655169	6637080	6609470	0.97	cps
Scandium	45-1	6422308	6408420	6475575	6435434	0.55	cps
Scandium	45-2	569982	575503	575480	573655	0.55	cps
Selenium	82-1	1135	1268	1228	1210	5.63	cps
Selenium	77-2	83	107	130	107	21.88	cps
Selenium	78-2	850	843	813	836	2.34	cps
Silicon	28-1	792641	780344	781442	784809	0.87	cps
Silver	107-1	16670	16106	16523	16433	1.78	cps
Silver	109-1	15448	15609	16126	15727	2.25	cps
Sodium	23-2	416610	412560	411141	413437	0.69	cps
Strontium	86-1	4461	4464	4617	4514	1.98	cps
Strontium	88-1	37193	36843	37398	37145	0.76	cps
Sulfur	34-1	199457	200062	199832	199784	0.15	cps
Terbium	159-1	13929961	13877574	14058959	13955498	0.67	cps
Terbium	159-2	9816953	9971300	9988237	9925497	0.95	cps
Thallium	203-1	11348	11111	11899	11453	3.53	cps
Thallium	205-1	26636	26740	27459	26945	1.66	cps
Tin	118-1	55734	56115	56166	56005	0.42	cps
Titanium	47-1	8613	8526	8736	8625	1.22	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	LLICV01	Instrumnet Name :	P7
Client Sample ID :	LLICV01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:20:59	DataFile Name :	020LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	33288	33542	33569	33466	0.46	cps
Vanadium	51-2	25014	24597	24837	24816	0.84	cps
Yttrium	89-1	13481607	13511684	13237321	13410204	1.12	cps
Yttrium	89-2	3670575	3734103	3731088	3711922	0.97	cps
Zinc	66-2	5838	5768	5618	5741	1.96	cps
Zirconium	90-1	23128	23082	22628	22946	1.21	cps
Zirconium	91-1	5268	5051	5148	5155	2.11	cps

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:25:40	DataFile Name :	021CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	177	167	150	164	8.19	cps
Antimony	121-1	160	130	117	136	16.37	cps
Arsenic	75-2	0	0	3	1	173.21	cps
Barium	135-1	70	47	60	59	19.88	cps
Barium	137-1	100	127	160	129	23.32	cps
Beryllium	9-1	63	20	57	47	50.00	cps
Bismuth	209-1	7996928	7939507	7883128	7939854	0.72	cps
Bismuth	209-2	7023467	7015579	6958430	6999159	0.51	cps
Bromine	81-1	14427	14307	14277	14337	0.55	cps
Bromine	81-2	160	183	147	163	11.36	cps
Cadmium	108-1	27	13	17	19	36.75	cps
Cadmium	106-1	3117	2980	3064	3054	2.26	cps
Cadmium	111-1	2183	2100	2136	2140	1.95	cps
Calcium	43-1	447	383	413	414	7.64	cps
Calcium	44-1	10380	10674	10667	10574	1.58	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1517	1383	1383	1428	5.39	cps
Cobalt	59-2	117	103	107	109	6.37	cps
Copper	63-2	823	657	793	758	11.72	cps
Dysprosium	156-1	13	13	17	14	13.35	cps
Dysprosium	156-2	10	7	10	9	21.63	cps
Erbium	164-1	67	60	40	56	24.98	cps
Erbium	164-2	30	20	40	30	33.33	cps
Gadolinium	160-1	53	33	73	53	37.50	cps
Gadolinium	160-2	483	510	460	484	5.16	cps
Holmium	165-1	13677474	13503199	13256581	13479085	1.57	cps
Holmium	165-2	10082592	9976659	9879819	9979690	1.02	cps
Indium	115-1	11724216	11486348	11505376	11571980	1.14	cps
Indium	115-2	4347908	4306905	4294940	4316584	0.64	cps
Iron	56-2	19055	19269	18989	19104	0.77	cps
Iron	57-2	920	983	953	952	3.33	cps
Iron	54-2	2720	2607	2604	2644	2.51	cps
Krypton	83-1	263	263	243	257	4.50	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:25:40	DataFile Name :	021CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	387	430	360	392	9.01	cps
Lead	207-1	363	387	360	370	3.93	cps
Lead	208-1	1563	1647	1607	1606	2.60	cps
Lithium	6-1	1725479	1726818	1730622	1727640	0.15	cps
Magnesium	24-2	673	653	617	648	4.44	cps
Manganese	55-2	200	297	263	253	19.38	cps
Molybdenum	94-1	297	307	303	302	1.68	cps
Molybdenum	95-1	170	167	190	176	7.19	cps
Molybdenum	96-1	240	197	230	222	10.21	cps
Molybdenum	97-1	110	100	100	103	5.59	cps
Molybdenum	98-1	280	180	243	234	21.58	cps
Neodymium	150-1	7	0	13	7	99.98	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	380	400	377	386	3.27	cps
Phosphorus	31-2	153	163	203	173	15.26	cps
Potassium	39-2	51075	51199	51065	51113	0.15	cps
Rhodium	103-1	10727294	10648849	10645692	10673945	0.43	cps
Rhodium	103-2	6601868	6578340	6517266	6565824	0.67	cps
Scandium	45-1	6448850	6403501	6436602	6429651	0.36	cps
Scandium	45-2	577039	574573	571715	574443	0.46	cps
Selenium	82-1	122	118	90	110	15.84	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	467	390	457	438	9.52	cps
Silicon	28-1	756404	750343	743020	749922	0.89	cps
Silver	107-1	153	193	150	166	14.57	cps
Silver	109-1	133	103	147	128	17.37	cps
Sodium	23-2	21619	21585	21462	21555	0.38	cps
Strontium	86-1	450	473	403	442	8.06	cps
Strontium	88-1	377	303	313	331	12.01	cps
Sulfur	34-1	202320	198096	196622	199013	1.49	cps
Terbium	159-1	14052669	13839926	13844076	13912223	0.87	cps
Terbium	159-2	9903159	10090234	9876833	9956742	1.17	cps
Thallium	203-1	237	343	273	284	19.05	cps
Thallium	205-1	683	653	703	680	3.70	cps
Tin	118-1	1493	1567	1443	1501	4.13	cps
Titanium	47-1	107	103	80	97	15.03	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:25:40	DataFile Name :	021CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	17	17	33	22	43.28	cps
Vanadium	51-2	20	7	10	12	56.76	cps
Yttrium	89-1	13532225	13445482	13363515	13447074	0.63	cps
Yttrium	89-2	3694604	3731332	3689371	3705102	0.62	cps
Zinc	66-2	283	260	273	272	4.30	cps
Zirconium	90-1	640	737	610	662	10.00	cps
Zirconium	91-1	137	143	93	124	21.82	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:29:38	DataFile Name :	022ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	25140356	25389877	25446172	25325469	0.64	cps
Antimony	121-1	13623	13493	13593	13570	0.50	cps
Arsenic	75-2	190	237	237	221	12.19	cps
Barium	135-1	4591	4261	4447	4433	3.73	cps
Barium	137-1	7565	7665	7759	7663	1.26	cps
Beryllium	9-1	537	477	500	504	6.00	cps
Bismuth	209-1	7736757	7765727	7678192	7726892	0.58	cps
Bismuth	209-2	6701859	6675553	6737614	6705009	0.46	cps
Bromine	81-1	15245	14434	14911	14863	2.74	cps
Bromine	81-2	377	400	503	427	15.80	cps
Cadmium	108-1	2124	2050	1953	2042	4.18	cps
Cadmium	106-1	2957	2727	2670	2785	5.45	cps
Cadmium	111-1	3200	3134	2975	3103	3.73	cps
Calcium	43-1	3266383	3238367	3276554	3260435	0.61	cps
Calcium	44-1	52117886	51644159	52267583	52009876	0.63	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	98237	100092	99529	99286	0.96	cps
Cobalt	59-2	9843	9079	9660	9528	4.19	cps
Copper	63-2	39870	39706	39382	39652	0.63	cps
Dysprosium	156-1	70	70	43	61	25.20	cps
Dysprosium	156-2	60	20	50	43	48.04	cps
Erbium	164-1	83	87	117	96	19.21	cps
Erbium	164-2	50	73	63	62	18.81	cps
Gadolinium	160-1	73	70	83	76	9.18	cps
Gadolinium	160-2	460	463	447	457	1.93	cps
Holmium	165-1	13679284	13605416	13493859	13592853	0.69	cps
Holmium	165-2	10016424	9926237	10143365	10028675	1.09	cps
Indium	115-1	10832720	10749511	10774890	10785707	0.40	cps
Indium	115-2	4011462	3995489	3999104	4002018	0.21	cps
Iron	56-2	464060020	458153260	461158633	461123971	0.64	cps
Iron	57-2	11398467	11350549	11373228	11374081	0.21	cps
Iron	54-2	24690241	24756083	24709090	24718472	0.14	cps
Krypton	83-1	207	260	260	242	12.71	cps

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:29:38	DataFile Name :	022ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	42750	44021	44135	43635	1.76	cps
Lead	207-1	34928	36125	35563	35539	1.68	cps
Lead	208-1	164705	169017	167147	166957	1.30	cps
Lithium	6-1	1740093	1711647	1688216	1713319	1.52	cps
Magnesium	24-2	42185984	42212815	41977384	42125394	0.31	cps
Manganese	55-2	32235	32265	31757	32085	0.89	cps
Molybdenum	94-1	6936525	6870771	6955379	6920892	0.64	cps
Molybdenum	95-1	12221908	12236118	12415097	12291041	0.88	cps
Molybdenum	96-1	13215418	13335505	13246995	13265973	0.47	cps
Molybdenum	97-1	7549733	7736288	7674186	7653402	1.24	cps
Molybdenum	98-1	19689953	19897120	19789987	19792353	0.52	cps
Neodymium	150-1	63	57	63	61	6.29	cps
Neodymium	150-2	43	33	23	33	30.00	cps
Nickel	60-2	10644	10694	10460	10599	1.16	cps
Phosphorus	31-2	1254166	1254839	1263790	1257598	0.43	cps
Potassium	39-2	54132309	54621639	54850838	54534929	0.67	cps
Rhodium	103-1	9845499	9642065	9592658	9693408	1.38	cps
Rhodium	103-2	5892330	5844117	5891313	5875920	0.47	cps
Scandium	45-1	6066520	6081656	5962705	6036960	1.07	cps
Scandium	45-2	510590	515976	515084	513883	0.56	cps
Selenium	82-1	155	126	126	136	12.16	cps
Selenium	77-2	3	7	7	6	34.70	cps
Selenium	78-2	403	383	403	397	2.91	cps
Silicon	28-1	726078	709501	713741	716440	1.20	cps
Silver	107-1	833	623	560	672	21.28	cps
Silver	109-1	723	600	570	631	12.88	cps
Sodium	23-2	69208927	69978552	69650819	69612766	0.55	cps
Strontium	86-1	134386	134101	133989	134159	0.15	cps
Strontium	88-1	1154223	1162425	1166018	1160889	0.52	cps
Sulfur	34-1	4704785	4656084	4683242	4681371	0.52	cps
Terbium	159-1	14002516	14060105	14137034	14066551	0.48	cps
Terbium	159-2	9868384	9969348	9990059	9942597	0.65	cps
Thallium	203-1	1443	1390	1407	1413	1.93	cps
Thallium	205-1	3657	3497	3107	3420	8.27	cps
Tin	118-1	3754	3727	3500	3661	3.80	cps
Titanium	47-1	3143341	3123590	3108955	3125295	0.55	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:29:38	DataFile Name :	022ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	603	583	640	609	4.72	cps
Vanadium	51-2	730	787	697	738	6.17	cps
Yttrium	89-1	12871814	12826527	12836651	12844998	0.19	cps
Yttrium	89-2	3422800	3491611	3459773	3458062	1.00	cps
Zinc	66-2	10317	10667	10544	10509	1.69	cps
Zirconium	90-1	1030	1070	1260	1120	10.97	cps
Zirconium	91-1	260	290	260	270	6.42	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:32:42	DataFile Name :	023ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	25457408	25391525	25455161	25434698	0.15	cps
Antimony	121-1	260798	264854	265041	263564	0.91	cps
Arsenic	75-2	12996	13440	13163	13199	1.70	cps
Barium	135-1	67124	67469	67633	67409	0.39	cps
Barium	137-1	115376	119540	118411	117776	1.83	cps
Beryllium	9-1	31408	31986	31459	31618	1.01	cps
Bismuth	209-1	8075805	7831556	7831181	7912847	1.78	cps
Bismuth	209-2	6873080	6818386	6763775	6818414	0.80	cps
Bromine	81-1	14931	15628	15225	15261	2.29	cps
Bromine	81-2	350	430	420	400	10.90	cps
Cadmium	108-1	5781	6138	5848	5922	3.20	cps
Cadmium	106-1	8583	8586	8479	8549	0.71	cps
Cadmium	111-1	63407	65346	65156	64636	1.65	cps
Calcium	43-1	3248782	3309879	3254482	3271048	1.03	cps
Calcium	44-1	51570978	52494456	52602869	52222768	1.09	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	198508	199801	198056	198788	0.46	cps
Cobalt	59-2	164318	163115	163011	163482	0.44	cps
Copper	63-2	145102	143521	143268	143964	0.69	cps
Dysprosium	156-1	73	33	50	52	38.48	cps
Dysprosium	156-2	43	23	50	39	35.69	cps
Erbium	164-1	107	103	103	104	1.85	cps
Erbium	164-2	50	70	73	64	19.58	cps
Gadolinium	160-1	80	93	97	90	9.80	cps
Gadolinium	160-2	473	397	437	436	8.80	cps
Holmium	165-1	14782632	14024401	14034561	14280532	3.05	cps
Holmium	165-2	10092524	10232828	10031904	10119085	1.02	cps
Indium	115-1	11579799	11178296	11103473	11287189	2.27	cps
Indium	115-2	4053261	4085507	4051452	4063407	0.47	cps
Iron	56-2	461098633	465182446	461506260	462595780	0.49	cps
Iron	57-2	11445573	11269386	11293507	11336155	0.84	cps
Iron	54-2	24912505	25210893	24788809	24970735	0.87	cps
Krypton	83-1	283	210	247	247	14.87	cps

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:32:42	DataFile Name :	023ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	215942	221601	222667	220070	1.64	cps
Lead	207-1	185917	189182	189358	188152	1.03	cps
Lead	208-1	858524	869417	871341	866427	0.80	cps
Lithium	6-1	1755007	1694033	1698769	1715936	1.98	cps
Magnesium	24-2	42492806	42349206	42355724	42399245	0.19	cps
Manganese	55-2	109716	109595	110595	109969	0.50	cps
Molybdenum	94-1	6988174	7233360	7056783	7092772	1.78	cps
Molybdenum	95-1	12255884	12576227	12414310	12415474	1.29	cps
Molybdenum	96-1	13302566	13472102	13429759	13401475	0.66	cps
Molybdenum	97-1	7653441	7749418	7794715	7732525	0.93	cps
Molybdenum	98-1	19922445	20038798	20137763	20033002	0.54	cps
Neodymium	150-1	53	60	47	53	12.50	cps
Neodymium	150-2	47	20	37	34	39.11	cps
Nickel	60-2	48358	49648	48307	48771	1.56	cps
Phosphorus	31-2	1265084	1275714	1266739	1269179	0.45	cps
Potassium	39-2	54653291	55223834	54585456	54820860	0.64	cps
Rhodium	103-1	10300652	9956787	9874624	10044021	2.25	cps
Rhodium	103-2	6069412	6053358	6029339	6050703	0.33	cps
Scandium	45-1	6423443	6122731	6009680	6185284	3.46	cps
Scandium	45-2	524471	528756	523624	525617	0.52	cps
Selenium	82-1	3869	4244	3955	4023	4.88	cps
Selenium	77-2	450	407	413	423	5.51	cps
Selenium	78-2	1867	1773	1823	1821	2.56	cps
Silicon	28-1	740818	746953	748376	745382	0.54	cps
Silver	107-1	289389	297139	297193	294574	1.52	cps
Silver	109-1	278086	284420	285763	282756	1.45	cps
Sodium	23-2	70033606	69580392	70079701	69897900	0.39	cps
Strontium	86-1	134945	137656	138787	137129	1.44	cps
Strontium	88-1	1157986	1187717	1190094	1178599	1.52	cps
Sulfur	34-1	4640786	4620828	4661712	4641109	0.44	cps
Terbium	159-1	15229611	14526225	14368611	14708149	3.12	cps
Terbium	159-2	10222969	10078930	9968127	10090009	1.27	cps
Thallium	203-1	221436	228979	228952	226456	1.92	cps
Thallium	205-1	525484	534664	538058	532735	1.22	cps
Tin	118-1	2924	3137	3214	3091	4.86	cps
Titanium	47-1	3091684	3177443	3113999	3127709	1.42	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:32:42	DataFile Name :	023ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	650	577	587	604	6.58	cps
Vanadium	51-2	86392	87790	88457	87546	1.20	cps
Yttrium	89-1	13835703	13359717	13170484	13455301	2.55	cps
Yttrium	89-2	3546451	3552206	3510375	3536344	0.64	cps
Zinc	66-2	29506	28941	29269	29239	0.97	cps
Zirconium	90-1	1037	1040	1123	1067	4.60	cps
Zirconium	91-1	200	240	277	239	16.05	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:35:47	DataFile Name :	024CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	13919992	13902153	13879493	13900546	0.15	cps
Antimony	121-1	5892366	6074526	6132671	6033188	2.08	cps
Arsenic	75-2	299211	300882	300643	300245	0.30	cps
Barium	135-1	7827437	7893417	7922768	7881208	0.62	cps
Barium	137-1	13292956	13650769	13741770	13561832	1.75	cps
Beryllium	9-1	714724	742031	741497	732751	2.13	cps
Bismuth	209-1	7954284	7418687	7375086	7582686	4.25	cps
Bismuth	209-2	6384788	6420335	6390054	6398393	0.30	cps
Bromine	81-1	13109	13823	13510	13481	2.65	cps
Bromine	81-2	87	123	110	107	17.40	cps
Cadmium	108-1	105255	107266	107612	106711	1.19	cps
Cadmium	106-1	150423	153373	154633	152810	1.41	cps
Cadmium	111-1	1420248	1453616	1455559	1443141	1.38	cps
Calcium	43-1	7860319	8077581	8175366	8037755	2.01	cps
Calcium	44-1	125964011	130438265	129787081	128729786	1.88	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2405489	2403657	2417749	2408965	0.32	cps
Cobalt	59-2	3740794	3703571	3715139	3719835	0.51	cps
Copper	63-2	26248037	26343623	26105839	26232500	0.46	cps
Dysprosium	156-1	320	343	303	322	6.24	cps
Dysprosium	156-2	433	460	457	450	3.23	cps
Erbium	164-1	267	310	283	287	7.63	cps
Erbium	164-2	237	217	217	223	5.17	cps
Gadolinium	160-1	300	293	320	304	4.56	cps
Gadolinium	160-2	497	640	633	590	13.71	cps
Holmium	165-1	14508392	13401079	13390671	13766714	4.67	cps
Holmium	165-2	9823755	9893602	9893030	9870129	0.41	cps
Indium	115-1	11259861	10442637	10429904	10710801	4.44	cps
Indium	115-2	3766795	3835728	3921193	3841238	2.01	cps
Iron	56-2	567627458	566679725	562802645	565703276	0.45	cps
Iron	57-2	14047814	13989055	13955381	13997417	0.33	cps
Iron	54-2	30456897	30375933	30578432	30470421	0.33	cps
Krypton	83-1	207	250	190	216	14.37	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:35:47	DataFile Name :	024CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	21418473	22231160	21876757	21842130	1.87	cps
Lead	207-1	19526626	20336637	20233124	20032129	2.20	cps
Lead	208-1	88504819	91565515	91379826	90483386	1.90	cps
Lithium	6-1	1739375	1636521	1602011	1659302	4.31	cps
Magnesium	24-2	107478895	107491555	107329338	107433263	0.08	cps
Manganese	55-2	19317385	19110690	19184453	19204176	0.55	cps
Molybdenum	94-1	21016218	21410461	21449964	21292214	1.13	cps
Molybdenum	95-1	30023483	30792300	30997800	30604528	1.68	cps
Molybdenum	96-1	33032415	34010059	33876451	33639642	1.58	cps
Molybdenum	97-1	18783287	19370591	19186432	19113437	1.57	cps
Molybdenum	98-1	48876293	49976569	49571831	49474898	1.12	cps
Neodymium	150-1	467	477	543	496	8.41	cps
Neodymium	150-2	160	130	150	147	10.41	cps
Nickel	60-2	893191	889664	888216	890357	0.29	cps
Phosphorus	31-2	124114	125204	124471	124596	0.45	cps
Potassium	39-2	68740142	69103464	69192931	69012179	0.35	cps
Rhodium	103-1	10041828	9260689	9072449	9458322	5.43	cps
Rhodium	103-2	5668368	5724758	5698511	5697212	0.50	cps
Scandium	45-1	6357507	5936204	5875552	6056421	4.33	cps
Scandium	45-2	515591	518866	521621	518693	0.58	cps
Selenium	82-1	85084	87754	86715	86517	1.56	cps
Selenium	77-2	9453	9183	8963	9200	2.67	cps
Selenium	78-2	30879	30415	31163	30819	1.23	cps
Silicon	28-1	3492904	3592721	3555658	3547094	1.42	cps
Silver	107-1	7317139	7334624	7461185	7370983	1.07	cps
Silver	109-1	7084881	7181402	7162127	7142803	0.72	cps
Sodium	23-2	173666167	172884877	174783391	173778145	0.55	cps
Strontium	86-1	1934216	1952886	1952885	1946662	0.55	cps
Strontium	88-1	16656921	16737692	17034610	16809741	1.18	cps
Sulfur	34-1	585555	597925	599891	594457	1.31	cps
Terbium	159-1	14829079	13684959	13806428	14106822	4.45	cps
Terbium	159-2	9675882	9778123	9759815	9737940	0.56	cps
Thallium	203-1	5625146	5774593	5761099	5720279	1.45	cps
Thallium	205-1	13402483	13665635	13625087	13564402	1.04	cps
Tin	118-1	4995059	5074582	5118607	5062749	1.24	cps
Titanium	47-1	7521848	7551119	7646753	7573240	0.86	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:35:47	DataFile Name :	024CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	18363792	18887553	18522158	18591168	1.44	cps
Vanadium	51-2	2139822	2138884	2160379	2146362	0.57	cps
Yttrium	89-1	13636574	12586057	12360225	12860952	5.30	cps
Yttrium	89-2	3401282	3415367	3407297	3407982	0.21	cps
Zinc	66-2	4325825	4281284	4310256	4305788	0.52	cps
Zirconium	90-1	10305095	10508521	10577707	10463774	1.35	cps
Zirconium	91-1	2289410	2340564	2348841	2326272	1.38	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:43:41	DataFile Name :	026CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	153	127	140	140	9.52	cps
Antimony	121-1	470	553	387	470	17.73	cps
Arsenic	75-2	7	3	3	4	43.40	cps
Barium	135-1	63	87	83	78	16.23	cps
Barium	137-1	203	163	173	180	11.56	cps
Beryllium	9-1	87	53	100	80	30.05	cps
Bismuth	209-1	8379202	8249211	8178200	8268871	1.23	cps
Bismuth	209-2	7143011	7237019	7107340	7162457	0.94	cps
Bromine	81-1	13670	13820	13773	13754	0.56	cps
Bromine	81-2	237	227	230	231	2.20	cps
Cadmium	108-1	17	7	13	12	41.65	cps
Cadmium	106-1	2900	2970	2964	2945	1.31	cps
Cadmium	111-1	2065	2105	2095	2088	0.98	cps
Calcium	43-1	360	317	340	339	6.40	cps
Calcium	44-1	10631	10257	10347	10411	1.87	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1423	1493	1270	1396	8.19	cps
Cobalt	59-2	87	87	117	97	17.92	cps
Copper	63-2	847	887	850	861	2.58	cps
Dysprosium	156-1	20	10	20	17	34.64	cps
Dysprosium	156-2	10	3	3	6	69.34	cps
Erbium	164-1	80	43	60	61	30.04	cps
Erbium	164-2	27	43	40	37	24.04	cps
Gadolinium	160-1	40	47	67	51	27.15	cps
Gadolinium	160-2	423	447	437	436	2.69	cps
Holmium	165-1	13971139	13666494	13461776	13699803	1.87	cps
Holmium	165-2	10009943	10139362	9986782	10045362	0.82	cps
Indium	115-1	11512273	11415532	11377572	11435126	0.61	cps
Indium	115-2	4269204	4273494	4228293	4256997	0.59	cps
Iron	56-2	20013	19670	19216	19633	2.04	cps
Iron	57-2	793	833	867	831	4.42	cps
Iron	54-2	2274	2390	2340	2335	2.51	cps
Krypton	83-1	210	253	217	227	10.30	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:43:41	DataFile Name :	026CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	847	793	783	808	4.22	cps
Lead	207-1	800	690	683	724	9.04	cps
Lead	208-1	3454	3280	3080	3271	5.71	cps
Lithium	6-1	1752939	1755467	1771453	1759953	0.57	cps
Magnesium	24-2	963	933	917	938	2.52	cps
Manganese	55-2	330	277	317	308	9.02	cps
Molybdenum	94-1	570	537	557	554	3.03	cps
Molybdenum	95-1	460	537	427	474	11.89	cps
Molybdenum	96-1	550	597	517	554	7.25	cps
Molybdenum	97-1	260	270	250	260	3.85	cps
Molybdenum	98-1	783	767	667	739	8.54	cps
Neodymium	150-1	13	3	10	9	57.30	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	320	363	360	348	6.93	cps
Phosphorus	31-2	240	140	150	177	31.17	cps
Potassium	39-2	47267	47213	47424	47301	0.23	cps
Rhodium	103-1	10547720	10633796	10376832	10519450	1.24	cps
Rhodium	103-2	6493861	6512230	6431383	6479158	0.65	cps
Scandium	45-1	6307001	6305487	6260586	6291025	0.42	cps
Scandium	45-2	544670	539847	538869	541129	0.57	cps
Selenium	82-1	130	94	75	99	28.06	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	403	440	393	412	5.96	cps
Silicon	28-1	642368	639757	639939	640688	0.23	cps
Silver	107-1	253	210	220	228	9.96	cps
Silver	109-1	193	167	170	177	8.23	cps
Sodium	23-2	30757	30293	30180	30410	1.01	cps
Strontium	86-1	460	433	367	420	11.45	cps
Strontium	88-1	433	417	437	429	2.50	cps
Sulfur	34-1	175211	174679	174631	174841	0.18	cps
Terbium	159-1	14222000	14230619	13928985	14127201	1.22	cps
Terbium	159-2	10034842	10130999	10019783	10061874	0.60	cps
Thallium	203-1	690	560	577	609	11.62	cps
Thallium	205-1	1597	1560	1470	1542	4.23	cps
Tin	118-1	1380	1817	1357	1518	17.08	cps
Titanium	47-1	157	170	87	138	32.49	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:43:41	DataFile Name :	026CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	170	163	117	150	19.37	cps
Vanadium	51-2	37	23	7	22	67.63	cps
Yttrium	89-1	13483139	13341410	13229644	13351398	0.95	cps
Yttrium	89-2	3599318	3549369	3570497	3573061	0.70	cps
Zinc	66-2	257	243	310	270	13.07	cps
Zirconium	90-1	820	773	783	792	3.10	cps
Zirconium	91-1	140	167	203	170	18.71	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P7
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:52:49	DataFile Name :	028LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6165	6221	6311	6232	1.19	cps
Antimony	121-1	26581	26648	26872	26700	0.57	cps
Arsenic	75-2	780	640	747	722	10.13	cps
Barium	135-1	32547	32681	32203	32477	0.76	cps
Barium	137-1	56605	56066	55963	56212	0.61	cps
Beryllium	9-1	1890	1813	1913	1872	2.79	cps
Bismuth	209-1	8243175	8193538	8237722	8224812	0.33	cps
Bismuth	209-2	7160410	7236707	7148943	7182020	0.66	cps
Bromine	81-1	14144	13787	13820	13917	1.42	cps
Bromine	81-2	97	150	120	122	21.87	cps
Cadmium	108-1	243	233	260	246	5.49	cps
Cadmium	106-1	3124	3157	3197	3159	1.16	cps
Cadmium	111-1	5610	5400	5476	5496	1.93	cps
Calcium	43-1	19396	19740	19616	19584	0.89	cps
Calcium	44-1	317998	318044	319460	318501	0.26	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	12215	12389	12208	12271	0.83	cps
Cobalt	59-2	9326	9029	8819	9058	2.81	cps
Copper	63-2	13106	13446	13333	13295	1.30	cps
Dysprosium	156-1	17	23	17	19	20.36	cps
Dysprosium	156-2	13	13	20	16	24.76	cps
Erbium	164-1	53	47	23	41	38.32	cps
Erbium	164-2	53	30	30	38	35.66	cps
Gadolinium	160-1	23	67	80	57	52.29	cps
Gadolinium	160-2	440	470	453	454	3.31	cps
Holmium	165-1	13826832	13560865	13435831	13607842	1.47	cps
Holmium	165-2	9999725	10090904	10043151	10044593	0.45	cps
Indium	115-1	11575648	11490714	11537472	11534611	0.37	cps
Indium	115-2	4319203	4318744	4365782	4334577	0.62	cps
Iron	56-2	283652	283884	285622	284386	0.38	cps
Iron	57-2	7405	8002	7765	7724	3.89	cps
Iron	54-2	17704	17600	16996	17434	2.19	cps
Krypton	83-1	213	243	213	223	7.76	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P7
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:52:49	DataFile Name :	028LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	9277	9573	9463	9438	1.59	cps
Lead	207-1	8669	8556	8713	8646	0.94	cps
Lead	208-1	38659	38428	38779	38622	0.46	cps
Lithium	6-1	1795549	1772321	1761885	1776585	0.97	cps
Magnesium	24-2	252079	254479	252458	253006	0.51	cps
Manganese	55-2	4691	4604	4537	4611	1.67	cps
Molybdenum	94-1	27720	26998	27219	27312	1.35	cps
Molybdenum	95-1	32493	32703	32686	32627	0.36	cps
Molybdenum	96-1	36485	36836	36779	36700	0.51	cps
Molybdenum	97-1	21289	20979	20651	20973	1.52	cps
Molybdenum	98-1	52952	54234	53444	53543	1.21	cps
Neodymium	150-1	7	10	0	6	91.64	cps
Neodymium	150-2	3	0	10	4	114.60	cps
Nickel	60-2	2574	2597	2600	2590	0.56	cps
Phosphorus	31-2	643	567	527	579	10.24	cps
Potassium	39-2	370655	367952	370827	369811	0.44	cps
Rhodium	103-1	10792263	10639902	10687887	10706684	0.73	cps
Rhodium	103-2	6583516	6627132	6545706	6585451	0.62	cps
Scandium	45-1	6398961	6317665	6358264	6358297	0.64	cps
Scandium	45-2	557585	557751	558615	557984	0.10	cps
Selenium	82-1	1174	1147	1197	1173	2.13	cps
Selenium	77-2	83	103	110	99	14.04	cps
Selenium	78-2	837	820	807	821	1.83	cps
Silicon	28-1	711239	717224	711821	713428	0.46	cps
Silver	107-1	16403	16490	16499	16464	0.32	cps
Silver	109-1	15355	15388	15508	15417	0.52	cps
Sodium	23-2	409429	407932	407363	408241	0.26	cps
Strontium	86-1	4707	4674	4381	4587	3.92	cps
Strontium	88-1	37431	37765	37698	37631	0.47	cps
Sulfur	34-1	186358	186453	186875	186562	0.15	cps
Terbium	159-1	14330343	14187263	14070564	14196056	0.92	cps
Terbium	159-2	10034617	10128689	10130379	10097895	0.54	cps
Thallium	203-1	11702	11952	11862	11839	1.07	cps
Thallium	205-1	27140	27518	27661	27440	0.98	cps
Tin	118-1	55807	56631	56360	56266	0.75	cps
Titanium	47-1	8396	8582	8879	8619	2.83	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P7
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:52:49	DataFile Name :	028LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	34478	35243	33596	34439	2.39	cps
Vanadium	51-2	24687	24383	24213	24428	0.98	cps
Yttrium	89-1	13508375	13611436	13449101	13522971	0.61	cps
Yttrium	89-2	3626527	3694669	3661560	3660918	0.93	cps
Zinc	66-2	5678	5928	5765	5790	2.19	cps
Zirconium	90-1	23155	23733	22664	23184	2.31	cps
Zirconium	91-1	5098	5204	4911	5071	2.93	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	PB165834BL	Instrumnet Name :	P7
Client Sample ID :	PB165834BL	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:56:05	DataFile Name :	029CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	377	310	403	363	13.23	cps
Antimony	121-1	127	153	113	131	15.54	cps
Arsenic	75-2	7	3	10	7	50.03	cps
Barium	135-1	93	57	80	77	24.20	cps
Barium	137-1	167	87	103	119	35.50	cps
Beryllium	9-1	63	77	73	71	9.76	cps
Bismuth	209-1	8300054	8119718	7861774	8093849	2.72	cps
Bismuth	209-2	7254043	7271525	7223803	7249791	0.33	cps
Bromine	81-1	14234	14464	14097	14265	1.30	cps
Bromine	81-2	193	173	143	170	14.80	cps
Cadmium	108-1	20	3	17	13	66.16	cps
Cadmium	106-1	3200	3024	2937	3054	4.40	cps
Cadmium	111-1	2236	2124	2071	2144	3.94	cps
Calcium	43-1	340	370	347	352	4.47	cps
Calcium	44-1	10324	10043	10477	10281	2.14	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1450	1533	1540	1508	3.33	cps
Cobalt	59-2	120	117	107	114	6.06	cps
Copper	63-2	1083	957	1030	1023	6.21	cps
Dysprosium	156-1	10	10	23	14	53.28	cps
Dysprosium	156-2	7	3	3	4	43.40	cps
Erbium	164-1	43	43	70	52	29.49	cps
Erbium	164-2	40	30	30	33	17.32	cps
Gadolinium	160-1	50	43	37	43	15.38	cps
Gadolinium	160-2	430	440	450	440	2.27	cps
Holmium	165-1	13804681	13589460	13161400	13518514	2.42	cps
Holmium	165-2	10106840	10067227	10084155	10086074	0.20	cps
Indium	115-1	11581744	11477978	10988698	11349474	2.79	cps
Indium	115-2	4339632	4371712	4323542	4344962	0.56	cps
Iron	56-2	19232	19586	18809	19209	2.03	cps
Iron	57-2	907	870	890	889	2.07	cps
Iron	54-2	2430	2327	2594	2450	5.49	cps
Krypton	83-1	263	180	307	250	25.75	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	PB165834BL	Instrumnet Name :	P7
Client Sample ID :	PB165834BL	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:56:05	DataFile Name :	029CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	463	493	467	474	3.47	cps
Lead	207-1	407	393	447	416	6.68	cps
Lead	208-1	1940	1830	1970	1913	3.85	cps
Lithium	6-1	1798752	1777131	1682666	1752850	3.52	cps
Magnesium	24-2	1043	843	887	924	11.38	cps
Manganese	55-2	437	493	433	454	7.42	cps
Molybdenum	94-1	323	303	330	319	4.35	cps
Molybdenum	95-1	227	220	190	212	9.20	cps
Molybdenum	96-1	257	297	230	261	12.85	cps
Molybdenum	97-1	97	137	120	118	17.06	cps
Molybdenum	98-1	277	287	270	278	3.02	cps
Neodymium	150-1	3	7	7	6	34.70	cps
Neodymium	150-2	0	7	0	2	173.21	cps
Nickel	60-2	333	380	353	356	6.59	cps
Phosphorus	31-2	150	203	137	163	21.60	cps
Potassium	39-2	49694	48942	50380	49672	1.45	cps
Rhodium	103-1	10791667	10573389	10200417	10521824	2.84	cps
Rhodium	103-2	6580972	6635238	6575655	6597288	0.50	cps
Scandium	45-1	6458394	6288530	6169299	6305408	2.30	cps
Scandium	45-2	563771	558459	558699	560310	0.54	cps
Selenium	82-1	122	182	14	106	80.05	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	467	460	413	447	6.51	cps
Silicon	28-1	676842	689183	697163	687729	1.49	cps
Silver	107-1	220	223	213	219	2.33	cps
Silver	109-1	203	163	177	181	11.25	cps
Sodium	23-2	25191	25698	25625	25505	1.08	cps
Strontium	86-1	410	493	477	460	9.59	cps
Strontium	88-1	357	360	367	361	1.41	cps
Sulfur	34-1	187211	188325	189712	188416	0.66	cps
Terbium	159-1	14291362	14073605	13366295	13910421	3.48	cps
Terbium	159-2	10150583	10108034	9971620	10076746	0.93	cps
Thallium	203-1	497	417	467	460	8.79	cps
Thallium	205-1	1073	1130	1033	1079	4.50	cps
Tin	118-1	1497	1490	1340	1442	6.14	cps
Titanium	47-1	123	110	50	94	41.36	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	PB165834BL	Instrumnet Name :	P7
Client Sample ID :	PB165834BL	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:56:05	DataFile Name :	029CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	23	23	23	23	0.00	cps
Vanadium	51-2	10	13	7	10	33.30	cps
Yttrium	89-1	13621674	13406145	12744104	13257308	3.45	cps
Yttrium	89-2	3736451	3640546	3696462	3691153	1.31	cps
Zinc	66-2	423	433	460	439	4.32	cps
Zirconium	90-1	720	687	543	650	14.44	cps
Zirconium	91-1	150	140	113	134	14.10	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	PB165834BS	Instrumnet Name :	P7
Client Sample ID :	PB165834BS	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:59:23	DataFile Name :	030LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2649586	2623113	2616195	2629631	0.67	cps
Antimony	121-1	6282225	6308510	6169959	6253565	1.18	cps
Arsenic	75-2	303425	301912	300649	301995	0.46	cps
Barium	135-1	8078994	7940069	7929236	7982766	1.05	cps
Barium	137-1	13843439	13763291	13536571	13714434	1.16	cps
Beryllium	9-1	775316	774914	769302	773178	0.43	cps
Bismuth	209-1	8169293	8019779	8165526	8118199	1.05	cps
Bismuth	209-2	6883382	6846523	7061720	6930542	1.66	cps
Bromine	81-1	13583	12972	12892	13149	2.87	cps
Bromine	81-2	147	107	150	134	17.93	cps
Cadmium	108-1	114306	114396	112536	113746	0.92	cps
Cadmium	106-1	163535	163344	160711	162530	0.97	cps
Cadmium	111-1	1542601	1541778	1525320	1536567	0.63	cps
Calcium	43-1	1647638	1648910	1625647	1640732	0.80	cps
Calcium	44-1	26214054	26497008	25919947	26210336	1.10	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2361261	2366135	2342311	2356569	0.53	cps
Cobalt	59-2	3733323	3763372	3764211	3753635	0.47	cps
Copper	63-2	27237840	27159870	26919800	27105837	0.61	cps
Dysprosium	156-1	120	150	150	140	12.37	cps
Dysprosium	156-2	293	307	357	319	10.47	cps
Erbium	164-1	140	113	90	114	21.86	cps
Erbium	164-2	53	83	67	68	22.18	cps
Gadolinium	160-1	100	127	117	114	11.77	cps
Gadolinium	160-2	487	427	490	468	7.62	cps
Holmium	165-1	14003908	13764344	13610524	13792925	1.44	cps
Holmium	165-2	9906907	9776784	9941621	9875104	0.88	cps
Indium	115-1	11336540	10915396	10829158	11027032	2.46	cps
Indium	115-2	3984831	3959416	4036104	3993450	0.98	cps
Iron	56-2	111863068	111302045	110942122	111369078	0.42	cps
Iron	57-2	2776205	2759215	2786280	2773900	0.49	cps
Iron	54-2	6109267	6083359	6026691	6073106	0.70	cps
Krypton	83-1	267	197	257	240	15.77	cps

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	PB165834BS	Instrumnet Name :	P7
Client Sample ID :	PB165834BS	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:59:23	DataFile Name :	030LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	22619925	22858540	22680607	22719690	0.55	cps
Lead	207-1	20616681	20775328	20891371	20761127	0.66	cps
Lead	208-1	92479913	93432697	93977929	93296846	0.81	cps
Lithium	6-1	1822526	1793941	1806048	1807505	0.79	cps
Magnesium	24-2	20609846	20718387	20690331	20672855	0.27	cps
Manganese	55-2	18884958	19124650	18811225	18940278	0.87	cps
Molybdenum	94-1	21410541	21162923	20917067	21163510	1.17	cps
Molybdenum	95-1	31218593	30517019	30518393	30751335	1.32	cps
Molybdenum	96-1	34245426	33428105	33127261	33600264	1.72	cps
Molybdenum	97-1	19349945	19105357	18876639	19110647	1.24	cps
Molybdenum	98-1	49918238	49505104	49002571	49475304	0.93	cps
Neodymium	150-1	323	360	357	347	5.85	cps
Neodymium	150-2	70	93	123	96	27.98	cps
Nickel	60-2	907359	901194	905401	904651	0.35	cps
Phosphorus	31-2	123469	123170	122196	122945	0.54	cps
Potassium	39-2	13396839	13409283	13283545	13363222	0.52	cps
Rhodium	103-1	10247859	10084918	9863483	10065420	1.92	cps
Rhodium	103-2	5966230	5941316	5986354	5964633	0.38	cps
Scandium	45-1	6350304	6159153	6004004	6171154	2.81	cps
Scandium	45-2	514744	512186	511132	512687	0.36	cps
Selenium	82-1	93913	94132	91376	93140	1.64	cps
Selenium	77-2	9627	9717	9426	9590	1.55	cps
Selenium	78-2	32723	32319	32589	32543	0.63	cps
Silicon	28-1	7991641	7791914	7706749	7830101	1.87	cps
Silver	107-1	7931188	7799137	7797589	7842638	0.98	cps
Silver	109-1	7693113	7544293	7595409	7610939	0.99	cps
Sodium	23-2	34043065	34219564	34086804	34116478	0.27	cps
Strontium	86-1	1988212	2007754	1926884	1974284	2.14	cps
Strontium	88-1	17195163	17101609	16710651	17002475	1.51	cps
Sulfur	34-1	632288	621425	609171	620962	1.86	cps
Terbium	159-1	14435645	14032221	13786712	14084859	2.33	cps
Terbium	159-2	9931981	9836482	9918124	9895529	0.52	cps
Thallium	203-1	5918917	5866089	5884663	5889890	0.46	cps
Thallium	205-1	13817601	13853371	13816490	13829154	0.15	cps
Tin	118-1	5189291	5195299	5144865	5176485	0.53	cps
Titanium	47-1	7810535	7740177	7581155	7710622	1.52	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	PB165834BS	Instrumnet Name :	P7
Client Sample ID :	PB165834BS	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 12:59:23	DataFile Name :	030LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	18339594	18558547	18434515	18444219	0.60	cps
Vanadium	51-2	2075544	2086854	2089434	2083944	0.35	cps
Yttrium	89-1	13489856	13119295	12908477	13172543	2.23	cps
Yttrium	89-2	3383301	3384246	3429664	3399070	0.78	cps
Zinc	66-2	4563550	4533288	4533254	4543364	0.38	cps
Zirconium	90-1	10595193	10488015	10310977	10464728	1.37	cps
Zirconium	91-1	2322870	2295116	2315927	2311304	0.62	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:02:02	DataFile Name :	031SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6867094	6806194	6820548	6831279	0.47	cps
Antimony	121-1	3467	2880	2397	2915	18.39	cps
Arsenic	75-2	1117	1070	1183	1123	5.07	cps
Barium	135-1	129377	130346	131052	130259	0.65	cps
Barium	137-1	222964	225056	227778	225266	1.07	cps
Beryllium	9-1	1277	1043	1093	1138	10.80	cps
Bismuth	209-1	7771055	7862690	7979945	7871230	1.33	cps
Bismuth	209-2	6886628	6893267	6849604	6876500	0.34	cps
Bromine	81-1	13730	13940	13890	13853	0.79	cps
Bromine	81-2	597	510	590	566	8.53	cps
Cadmium	108-1	77	83	63	74	13.68	cps
Cadmium	106-1	3797	3801	3801	3799	0.05	cps
Cadmium	111-1	3168	3105	3039	3104	2.07	cps
Calcium	43-1	2801100	2813460	2838855	2817805	0.68	cps
Calcium	44-1	44159891	44992389	45200349	44784210	1.23	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	39629	40307	39642	39859	0.97	cps
Cobalt	59-2	523345	521735	523946	523009	0.22	cps
Copper	63-2	88358	87789	87232	87793	0.64	cps
Dysprosium	156-1	161604	164352	163634	163197	0.87	cps
Dysprosium	156-2	133144	134524	134634	134101	0.62	cps
Erbium	164-1	212067	213084	214775	213309	0.64	cps
Erbium	164-2	157516	155967	155350	156278	0.71	cps
Gadolinium	160-1	173966	176040	176095	175367	0.69	cps
Gadolinium	160-2	133754	133930	135037	134240	0.52	cps
Holmium	165-1	13623525	13631512	13829787	13694942	0.85	cps
Holmium	165-2	10125694	10010077	10095288	10077020	0.59	cps
Indium	115-1	10743223	10860039	11012383	10871882	1.24	cps
Indium	115-2	4085787	4024645	4116174	4075535	1.14	cps
Iron	56-2	955087106	955440332	956891319	955806252	0.10	cps
Iron	57-2	23492594	23412855	23438969	23448139	0.17	cps
Iron	54-2	51028283	52000603	51368246	51465710	0.96	cps
Krypton	83-1	633	607	620	620	2.15	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:02:02	DataFile Name :	031SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	11418	10327	10114	10620	6.59	cps
Lead	207-1	9523	9297	8783	9201	4.12	cps
Lead	208-1	44866	41825	40467	42386	5.31	cps
Lithium	6-1	1695480	1676109	1614611	1662066	2.54	cps
Magnesium	24-2	17588345	17410834	17677054	17558744	0.77	cps
Manganese	55-2	12939685	13003744	12929718	12957716	0.31	cps
Molybdenum	94-1	11101	10417	10324	10614	4.00	cps
Molybdenum	95-1	6088	4938	4371	5132	17.05	cps
Molybdenum	96-1	17948	16620	16156	16908	5.50	cps
Molybdenum	97-1	3814	3324	2700	3279	17.02	cps
Molybdenum	98-1	9617	7178	6438	7744	21.47	cps
Neodymium	150-1	184263	184048	185418	184576	0.40	cps
Neodymium	150-2	116570	115538	115757	115955	0.47	cps
Nickel	60-2	52893	52809	52542	52748	0.35	cps
Phosphorus	31-2	8026	7992	8089	8036	0.61	cps
Potassium	39-2	455090	454804	454444	454779	0.07	cps
Rhodium	103-1	9601010	9836130	9744107	9727082	1.22	cps
Rhodium	103-2	6015672	6001285	6091571	6036176	0.80	cps
Scandium	45-1	5978933	5968969	5989471	5979124	0.17	cps
Scandium	45-2	522090	521799	525508	523133	0.39	cps
Selenium	82-1	288	300	273	287	4.71	cps
Selenium	77-2	407	377	400	394	3.99	cps
Selenium	78-2	610	730	683	674	8.97	cps
Silicon	28-1	149550134	153008758	153688171	152082354	1.46	cps
Silver	107-1	2230	1920	1423	1858	21.90	cps
Silver	109-1	1890	1727	1297	1638	18.71	cps
Sodium	23-2	8997854	8967781	9070394	9012010	0.59	cps
Strontium	86-1	798093	805941	814457	806164	1.02	cps
Strontium	88-1	7138165	7285047	7233581	7218931	1.03	cps
Sulfur	34-1	10682896	10806327	10811780	10767001	0.68	cps
Terbium	159-1	13882719	13983401	14028034	13964718	0.53	cps
Terbium	159-2	9889245	9906238	9980276	9925253	0.49	cps
Thallium	203-1	1720	1443	1327	1497	13.50	cps
Thallium	205-1	3751	3504	3137	3464	8.91	cps
Tin	118-1	4114	3874	3754	3914	4.68	cps
Titanium	47-1	7453	6675	6481	6870	7.48	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:02:02	DataFile Name :	031SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	96543	98370	95348	96753	1.57	cps
Vanadium	51-2	1059131	1065537	1066805	1063824	0.39	cps
Yttrium	89-1	16282747	16432334	16473741	16396274	0.61	cps
Yttrium	89-2	4443029	4457537	4418624	4439730	0.44	cps
Zinc	66-2	228098	225902	229599	227866	0.82	cps
Zirconium	90-1	19950	19793	19613	19786	0.85	cps
Zirconium	91-1	4704	4141	4361	4402	6.45	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02DUPDLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224DUF	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:05:13	DataFile Name :	032SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6935879	6902433	6844352	6894221	0.67	cps
Antimony	121-1	913	833	890	879	4.68	cps
Arsenic	75-2	1283	1093	1153	1177	8.25	cps
Barium	135-1	129610	132371	130619	130866	1.07	cps
Barium	137-1	228222	229702	231061	229661	0.62	cps
Beryllium	9-1	1083	957	1073	1038	6.79	cps
Bismuth	209-1	7973785	7832804	7979820	7928803	1.05	cps
Bismuth	209-2	6939907	6907857	6899802	6915855	0.31	cps
Bromine	81-1	14421	14164	14531	14372	1.31	cps
Bromine	81-2	570	553	670	598	10.56	cps
Cadmium	108-1	77	60	47	61	24.60	cps
Cadmium	106-1	3991	3994	3844	3943	2.17	cps
Cadmium	111-1	3086	3057	3001	3048	1.42	cps
Calcium	43-1	2853889	2879527	2874908	2869441	0.48	cps
Calcium	44-1	45716498	45968483	46132159	45939047	0.46	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	39114	39304	39669	39362	0.72	cps
Cobalt	59-2	528701	531422	531659	530594	0.31	cps
Copper	63-2	87943	86478	86102	86841	1.12	cps
Dysprosium	156-1	164342	167509	168318	166723	1.26	cps
Dysprosium	156-2	134079	134551	134146	134259	0.19	cps
Erbium	164-1	216248	219195	217642	217695	0.68	cps
Erbium	164-2	159249	158888	157611	158583	0.54	cps
Gadolinium	160-1	176875	180163	178734	178591	0.92	cps
Gadolinium	160-2	137499	136514	135794	136602	0.63	cps
Holmium	165-1	13847363	13963647	13871401	13894137	0.44	cps
Holmium	165-2	10305229	10157319	10026871	10163140	1.37	cps
Indium	115-1	11167486	11051753	11029317	11082852	0.67	cps
Indium	115-2	4198293	4085101	4153463	4145619	1.37	cps
Iron	56-2	968671452	965611132	966580572	966954386	0.16	cps
Iron	57-2	23847621	23881125	24010835	23913194	0.36	cps
Iron	54-2	52153829	52191774	52395703	52247102	0.25	cps
Krypton	83-1	587	610	633	610	3.83	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02DUPDLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224DUF	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:05:13	DataFile Name :	032SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	8513	8263	8553	8443	1.86	cps
Lead	207-1	7095	7125	6828	7016	2.33	cps
Lead	208-1	33250	32662	32022	32644	1.88	cps
Lithium	6-1	1673495	1639703	1661988	1658395	1.04	cps
Magnesium	24-2	17796227	17826808	17739465	17787500	0.25	cps
Manganese	55-2	13105475	13175183	13144306	13141655	0.27	cps
Molybdenum	94-1	8039	7652	7842	7844	2.47	cps
Molybdenum	95-1	1840	1657	1553	1683	8.63	cps
Molybdenum	96-1	13857	13997	13777	13877	0.80	cps
Molybdenum	97-1	1233	1093	927	1085	14.16	cps
Molybdenum	98-1	2470	2384	2010	2288	10.69	cps
Neodymium	150-1	184358	188371	188630	187119	1.28	cps
Neodymium	150-2	116883	118052	116786	117240	0.60	cps
Nickel	60-2	53094	53635	53291	53340	0.51	cps
Phosphorus	31-2	8279	8179	8232	8230	0.61	cps
Potassium	39-2	458098	462416	461831	460782	0.51	cps
Rhodium	103-1	9997404	9989912	10022248	10003188	0.17	cps
Rhodium	103-2	6187788	6134030	6147189	6156336	0.46	cps
Scandium	45-1	6123137	6214059	6253033	6196743	1.08	cps
Scandium	45-2	533889	529395	533750	532345	0.48	cps
Selenium	82-1	316	290	322	309	5.51	cps
Selenium	77-2	380	370	433	394	8.63	cps
Selenium	78-2	777	710	720	736	4.89	cps
Silicon	28-1	152869188	155560668	154936714	154455523	0.91	cps
Silver	107-1	720	587	677	661	10.29	cps
Silver	109-1	673	580	590	614	8.34	cps
Sodium	23-2	9107842	9158098	9044679	9103540	0.62	cps
Strontium	86-1	818995	825159	832887	825680	0.84	cps
Strontium	88-1	7282027	7380581	7449912	7370840	1.14	cps
Sulfur	34-1	10758338	11034104	11053995	10948812	1.51	cps
Terbium	159-1	14285448	14269694	14253245	14269462	0.11	cps
Terbium	159-2	10187893	10030110	9962738	10060247	1.15	cps
Thallium	203-1	817	813	817	816	0.24	cps
Thallium	205-1	1873	1793	1693	1787	5.05	cps
Tin	118-1	3480	3517	3524	3507	0.67	cps
Titanium	47-1	6105	5991	5955	6017	1.30	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02DUPDLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224DUF	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:05:13	DataFile Name :	032SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	94814	96291	95925	95677	0.80	cps
Vanadium	51-2	1078259	1078587	1080369	1079072	0.11	cps
Yttrium	89-1	16681674	16920563	17047099	16883112	1.10	cps
Yttrium	89-2	4576591	4530179	4547231	4551334	0.52	cps
Zinc	66-2	230305	230708	231263	230759	0.21	cps
Zirconium	90-1	17521	17357	17117	17331	1.17	cps
Zirconium	91-1	4091	3954	3814	3953	3.50	cps

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02LDLX25	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224LDL	Dilution Factor :	25
Date & Time Acquired :	2024-12-23 13:08:22	DataFile Name :	033SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1482925	1477116	1491100	1483714	0.47	cps
Antimony	121-1	377	407	320	368	11.97	cps
Arsenic	75-2	237	250	220	236	6.38	cps
Barium	135-1	28205	28148	27871	28074	0.64	cps
Barium	137-1	48028	47385	47342	47585	0.81	cps
Beryllium	9-1	267	310	287	288	7.54	cps
Bismuth	209-1	8489818	8284008	8405072	8392966	1.23	cps
Bismuth	209-2	7273877	7244886	7280246	7266336	0.26	cps
Bromine	81-1	14707	14617	14788	14704	0.58	cps
Bromine	81-2	267	233	330	277	17.75	cps
Cadmium	108-1	33	7	27	22	62.43	cps
Cadmium	106-1	3334	3140	3224	3233	3.00	cps
Cadmium	111-1	2387	2260	2331	2326	2.73	cps
Calcium	43-1	621138	635784	633173	630032	1.24	cps
Calcium	44-1	9681035	9592301	9722207	9665181	0.69	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	9983	9593	9857	9811	2.03	cps
Cobalt	59-2	116155	113498	114828	114827	1.16	cps
Copper	63-2	19733	20070	20074	19959	0.98	cps
Dysprosium	156-1	34770	35371	34185	34775	1.71	cps
Dysprosium	156-2	28008	27767	28332	28036	1.01	cps
Erbium	164-1	44156	45290	44926	44790	1.29	cps
Erbium	164-2	32651	32257	32351	32420	0.64	cps
Gadolinium	160-1	36644	37152	36591	36796	0.84	cps
Gadolinium	160-2	28395	28880	28937	28737	1.03	cps
Holmium	165-1	14633197	14259982	14336787	14409989	1.37	cps
Holmium	165-2	10377687	10330373	10413564	10373875	0.40	cps
Indium	115-1	11899955	11742746	11771124	11804608	0.71	cps
Indium	115-2	4332835	4392206	4358974	4361338	0.68	cps
Iron	56-2	209574277	208942530	210850397	209789068	0.46	cps
Iron	57-2	5107571	5096331	5121648	5108517	0.25	cps
Iron	54-2	11298695	11334674	11219968	11284445	0.52	cps
Krypton	83-1	220	363	333	306	24.74	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02LDLX25	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224LDL	Dilution Factor :	25
Date & Time Acquired :	2024-12-23 13:08:22	DataFile Name :	033SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	2307	2324	2327	2319	0.46	cps
Lead	207-1	2020	1837	1913	1923	4.79	cps
Lead	208-1	9198	8955	8971	9041	1.50	cps
Lithium	6-1	1745546	1718322	1694301	1719390	1.49	cps
Magnesium	24-2	3722199	3786406	3811377	3773327	1.22	cps
Manganese	55-2	2839318	2812728	2819507	2823851	0.49	cps
Molybdenum	94-1	1870	1823	1994	1896	4.63	cps
Molybdenum	95-1	517	507	533	519	2.60	cps
Molybdenum	96-1	3194	3127	3047	3123	2.35	cps
Molybdenum	97-1	367	237	297	300	21.69	cps
Molybdenum	98-1	590	547	533	557	5.32	cps
Neodymium	150-1	38653	39803	39174	39210	1.47	cps
Neodymium	150-2	24181	24184	24087	24151	0.23	cps
Nickel	60-2	12108	12105	11731	11982	1.81	cps
Phosphorus	31-2	2000	1900	1907	1936	2.89	cps
Potassium	39-2	135130	136001	136697	135942	0.58	cps
Rhodium	103-1	10903199	10652131	10745277	10766869	1.18	cps
Rhodium	103-2	6535653	6581042	6576445	6564380	0.38	cps
Scandium	45-1	6531981	6467741	6399577	6466433	1.02	cps
Scandium	45-2	557054	560187	561947	559729	0.44	cps
Selenium	82-1	242	131	116	163	42.26	cps
Selenium	77-2	87	77	93	86	9.80	cps
Selenium	78-2	493	513	480	496	3.39	cps
Silicon	28-1	33147642	33976762	33757889	33627431	1.28	cps
Silver	107-1	260	233	190	228	15.51	cps
Silver	109-1	227	223	193	214	8.56	cps
Sodium	23-2	1947617	1977129	1957471	1960739	0.77	cps
Strontium	86-1	174001	174403	173037	173814	0.40	cps
Strontium	88-1	1560169	1566924	1569284	1565459	0.30	cps
Sulfur	34-1	2517077	2511167	2511516	2513253	0.13	cps
Terbium	159-1	14844814	14742273	14769706	14785598	0.36	cps
Terbium	159-2	10251716	10422324	10242834	10305625	0.98	cps
Thallium	203-1	563	477	493	511	9.00	cps
Thallium	205-1	1140	1063	1120	1108	3.59	cps
Tin	118-1	2124	2100	2167	2130	1.59	cps
Titanium	47-1	1340	1327	1253	1307	3.57	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02LDLX25	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224LDL	Dilution Factor :	25
Date & Time Acquired :	2024-12-23 13:08:22	DataFile Name :	033SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	19324	19541	19261	19375	0.76	cps
Vanadium	51-2	229329	230422	230183	229978	0.25	cps
Yttrium	89-1	14789712	14471431	14544546	14601897	1.14	cps
Yttrium	89-2	3927608	3913540	3924071	3921739	0.19	cps
Zinc	66-2	50967	51294	52197	51486	1.24	cps
Zirconium	90-1	4067	4204	4237	4170	2.16	cps
Zirconium	91-1	947	940	870	919	4.62	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02MSDLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224MSI	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:11:31	DataFile Name :	034SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	7053961	7039403	7003615	7032326	0.37	cps
Antimony	121-1	1404552	1429421	1425904	1419959	0.95	cps
Arsenic	75-2	77397	76073	76559	76676	0.87	cps
Barium	135-1	1933790	1930479	1915127	1926465	0.52	cps
Barium	137-1	3241860	3298241	3219511	3253204	1.25	cps
Beryllium	9-1	177119	176762	175724	176535	0.41	cps
Bismuth	209-1	7988561	7953805	8005856	7982741	0.33	cps
Bismuth	209-2	6918325	6932664	6917076	6922689	0.13	cps
Bromine	81-1	14414	14574	14537	14508	0.58	cps
Bromine	81-2	553	653	587	598	8.52	cps
Cadmium	108-1	27997	27326	27653	27659	1.21	cps
Cadmium	106-1	43502	43612	43140	43418	0.57	cps
Cadmium	111-1	383638	390162	387261	387020	0.84	cps
Calcium	43-1	3043798	3064925	2989158	3032627	1.29	cps
Calcium	44-1	48335696	49347221	48151236	48611384	1.32	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	602596	602910	597900	601135	0.47	cps
Cobalt	59-2	1413500	1411464	1407154	1410706	0.23	cps
Copper	63-2	5719620	5665170	5654785	5679858	0.61	cps
Dysprosium	156-1	155736	159022	159663	158140	1.33	cps
Dysprosium	156-2	127714	127610	128279	127868	0.28	cps
Erbium	164-1	203983	206267	206973	205741	0.76	cps
Erbium	164-2	148931	150302	148072	149101	0.75	cps
Gadolinium	160-1	166760	170267	170611	169212	1.26	cps
Gadolinium	160-2	128015	129522	127433	128323	0.84	cps
Holmium	165-1	14137120	13967689	14026269	14043693	0.61	cps
Holmium	165-2	10139877	10158863	10100111	10132950	0.30	cps
Indium	115-1	11186868	11300160	11152623	11213217	0.69	cps
Indium	115-2	4148959	3999899	4061984	4070281	1.84	cps
Iron	56-2	933011133	940474973	933806359	935764155	0.44	cps
Iron	57-2	23096239	23240793	22997165	23111399	0.53	cps
Iron	54-2	50544611	50845998	50710406	50700338	0.30	cps
Krypton	83-1	620	600	707	642	8.83	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02MSDLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224MSI	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:11:31	DataFile Name :	034SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4389635	4351367	4329955	4356986	0.69	cps
Lead	207-1	3995297	4055364	4094024	4048228	1.23	cps
Lead	208-1	17873133	18095091	18077706	18015310	0.69	cps
Lithium	6-1	1666959	1630082	1673463	1656834	1.41	cps
Magnesium	24-2	20665567	20590600	20526783	20594317	0.34	cps
Manganese	55-2	15868026	16070821	15900837	15946561	0.68	cps
Molybdenum	94-1	3320955	3327860	3308842	3319219	0.29	cps
Molybdenum	95-1	4155455	4159208	4216278	4176980	0.82	cps
Molybdenum	96-1	4657873	4663109	4655001	4658661	0.09	cps
Molybdenum	97-1	2613250	2596346	2587024	2598873	0.51	cps
Molybdenum	98-1	6678548	6688720	6677019	6681429	0.10	cps
Neodymium	150-1	176219	178487	180274	178327	1.14	cps
Neodymium	150-2	110982	110176	110609	110589	0.36	cps
Nickel	60-2	273158	273532	273458	273383	0.07	cps
Phosphorus	31-2	7769	7765	7609	7714	1.19	cps
Potassium	39-2	3482401	3445865	3426929	3451732	0.82	cps
Rhodium	103-1	10317495	10105552	10210225	10211090	1.04	cps
Rhodium	103-2	6146821	6095186	6039585	6093864	0.88	cps
Scandium	45-1	6267201	6349183	6239930	6285438	0.90	cps
Scandium	45-2	531184	529032	529409	529875	0.22	cps
Selenium	82-1	22447	22886	22680	22671	0.97	cps
Selenium	77-2	2644	2737	2710	2697	1.78	cps
Selenium	78-2	8246	8909	8749	8635	4.01	cps
Silicon	28-1	147137368	149590494	146396244	147708036	1.13	cps
Silver	107-1	3214	3277	3240	3244	0.98	cps
Silver	109-1	1837	1957	1773	1856	5.02	cps
Sodium	23-2	15196736	15173294	14989680	15119903	0.75	cps
Strontium	86-1	1240111	1249740	1254824	1248225	0.60	cps
Strontium	88-1	11098541	11264110	11259481	11207377	0.84	cps
Sulfur	34-1	10372116	10508172	10326679	10402323	0.91	cps
Terbium	159-1	14337798	14475771	14392232	14401934	0.48	cps
Terbium	159-2	9907571	10072828	10049619	10010006	0.89	cps
Thallium	203-1	1265371	1284951	1278378	1276233	0.78	cps
Thallium	205-1	3326627	3327465	3293728	3315940	0.58	cps
Tin	118-1	1092167	1119963	1111738	1107956	1.29	cps
Titanium	47-1	664358	669535	664137	666010	0.46	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02MSDLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224MSI	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:11:31	DataFile Name :	034SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	4453018	4480156	4578386	4503853	1.46	cps
Vanadium	51-2	1567822	1536784	1534069	1546225	1.21	cps
Yttrium	89-1	17033813	16829614	16905174	16922867	0.61	cps
Yttrium	89-2	4426531	4399372	4466536	4430813	0.76	cps
Zinc	66-2	1094996	1095957	1083236	1091397	0.65	cps
Zirconium	90-1	2566571	2614752	2589617	2590313	0.93	cps
Zirconium	91-1	558742	567140	561284	562389	0.77	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02MSDDLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224MSI	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:14:22	DataFile Name :	035SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6990010	6944826	7004949	6979928	0.45	cps
Antimony	121-1	1390051	1414186	1404904	1403047	0.87	cps
Arsenic	75-2	75518	75601	74908	75342	0.50	cps
Barium	135-1	1875699	1905242	1892863	1891268	0.78	cps
Barium	137-1	3209487	3235153	3224320	3222987	0.40	cps
Beryllium	9-1	173590	172532	174042	173388	0.45	cps
Bismuth	209-1	7968831	8100426	8045087	8038115	0.82	cps
Bismuth	209-2	6809478	6898387	6855493	6854453	0.65	cps
Bromine	81-1	13990	14160	14447	14199	1.63	cps
Bromine	81-2	490	547	577	538	8.18	cps
Cadmium	108-1	27025	27339	27499	27288	0.88	cps
Cadmium	106-1	41980	43201	42689	42623	1.44	cps
Cadmium	111-1	376052	380409	384004	380155	1.05	cps
Calcium	43-1	3022266	3026157	3024522	3024315	0.06	cps
Calcium	44-1	47815564	48410388	48004921	48076958	0.63	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	590658	594248	592333	592413	0.30	cps
Cobalt	59-2	1382707	1382836	1386458	1384000	0.15	cps
Copper	63-2	5680694	5666111	5719045	5688617	0.48	cps
Dysprosium	156-1	155725	157317	159332	157458	1.15	cps
Dysprosium	156-2	125882	126029	125147	125686	0.38	cps
Erbium	164-1	202029	207727	203834	204530	1.42	cps
Erbium	164-2	148837	148179	149402	148806	0.41	cps
Gadolinium	160-1	167751	169256	170520	169175	0.82	cps
Gadolinium	160-2	127955	126512	127925	127464	0.65	cps
Holmium	165-1	13912464	14194615	14090416	14065831	1.01	cps
Holmium	165-2	10194149	10004720	10064578	10087815	0.96	cps
Indium	115-1	11304490	11267709	11248745	11273648	0.25	cps
Indium	115-2	4099818	4057897	4046655	4068123	0.69	cps
Iron	56-2	926280386	924905506	931207079	927464324	0.36	cps
Iron	57-2	22847307	22794036	22686453	22775932	0.36	cps
Iron	54-2	50110618	50039399	50235246	50128421	0.20	cps
Krypton	83-1	607	557	617	593	5.42	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02MSDDLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224MSI	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:14:22	DataFile Name :	035SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4433920	4354396	4388152	4392156	0.91	cps
Lead	207-1	4030703	4029297	4048564	4036188	0.27	cps
Lead	208-1	18028401	17941789	18216236	18062142	0.78	cps
Lithium	6-1	1673087	1714444	1647470	1678334	2.01	cps
Magnesium	24-2	20508019	20307033	20510414	20441822	0.57	cps
Manganese	55-2	15777145	15764624	15820001	15787257	0.18	cps
Molybdenum	94-1	3268603	3281091	3293514	3281070	0.38	cps
Molybdenum	95-1	4134754	4125215	4168108	4142693	0.54	cps
Molybdenum	96-1	4624212	4610869	4621997	4619026	0.15	cps
Molybdenum	97-1	2553625	2578424	2608802	2580284	1.07	cps
Molybdenum	98-1	6619763	6658218	6650577	6642853	0.31	cps
Neodymium	150-1	176111	177823	178180	177371	0.62	cps
Neodymium	150-2	108873	110754	108748	109458	1.03	cps
Nickel	60-2	268951	268024	267374	268117	0.30	cps
Phosphorus	31-2	7379	7985	7929	7764	4.32	cps
Potassium	39-2	3404065	3455083	3472009	3443719	1.03	cps
Rhodium	103-1	10125325	10174153	10089673	10129717	0.42	cps
Rhodium	103-2	6116029	6086220	6105256	6102502	0.25	cps
Scandium	45-1	6216554	6222076	6194034	6210888	0.24	cps
Scandium	45-2	534935	534323	531207	533488	0.37	cps
Selenium	82-1	22464	22558	22695	22572	0.52	cps
Selenium	77-2	2680	2644	2587	2637	1.78	cps
Selenium	78-2	8049	8446	8049	8181	2.80	cps
Silicon	28-1	145484131	145856054	145888908	145743031	0.15	cps
Silver	107-1	3254	3244	3447	3315	3.46	cps
Silver	109-1	1827	1847	1883	1852	1.55	cps
Sodium	23-2	14998947	15154002	15031536	15061495	0.54	cps
Strontium	86-1	1233739	1245367	1238808	1239305	0.47	cps
Strontium	88-1	11118772	11182014	10963016	11087934	1.02	cps
Sulfur	34-1	10301174	10284533	10447961	10344556	0.87	cps
Terbium	159-1	14383783	14357833	14354002	14365206	0.11	cps
Terbium	159-2	10140500	10027444	10072452	10080132	0.56	cps
Thallium	203-1	1268057	1285494	1278848	1277466	0.69	cps
Thallium	205-1	3262149	3287860	3278787	3276265	0.40	cps
Tin	118-1	1090232	1107159	1120399	1105930	1.37	cps
Titanium	47-1	650432	662296	656187	656305	0.90	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02MSDDLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224MSI	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:14:22	DataFile Name :	035SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	4478614	4547404	4541504	4522507	0.84	cps
Vanadium	51-2	1536494	1540422	1520463	1532460	0.69	cps
Yttrium	89-1	16933930	16885155	16702703	16840596	0.72	cps
Yttrium	89-2	4419700	4391612	4446941	4419418	0.63	cps
Zinc	66-2	1084309	1086959	1085548	1085605	0.12	cps
Zirconium	90-1	2531488	2589584	2544891	2555321	1.19	cps
Zirconium	91-1	549184	551979	560300	553821	1.04	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02ADLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224ADL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:17:16	DataFile Name :	036SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6985489	7022598	6987723	6998603	0.30	cps
Antimony	121-1	1420849	1426803	1435640	1427764	0.52	cps
Arsenic	75-2	75722	77145	75487	76118	1.18	cps
Barium	135-1	1882778	1940592	1940814	1921395	1.74	cps
Barium	137-1	3262312	3307582	3349794	3306563	1.32	cps
Beryllium	9-1	174973	176671	176628	176091	0.55	cps
Bismuth	209-1	8076013	8075389	8133829	8095077	0.41	cps
Bismuth	209-2	6852434	6916785	6893683	6887634	0.47	cps
Bromine	81-1	14507	14844	14240	14531	2.08	cps
Bromine	81-2	580	527	603	570	6.89	cps
Cadmium	108-1	27162	27653	27469	27428	0.90	cps
Cadmium	106-1	42943	43315	43044	43100	0.45	cps
Cadmium	111-1	383355	390564	389129	387683	0.98	cps
Calcium	43-1	3025346	3028453	3040137	3031312	0.26	cps
Calcium	44-1	48955774	48761681	48638621	48785359	0.33	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	602453	601526	597436	600471	0.44	cps
Cobalt	59-2	1470642	1448918	1399406	1439655	2.54	cps
Copper	63-2	5779471	5748770	5709984	5746075	0.61	cps
Dysprosium	156-1	156515	161520	160651	159562	1.68	cps
Dysprosium	156-2	128807	128410	128602	128607	0.15	cps
Erbium	164-1	204196	207126	209961	207094	1.39	cps
Erbium	164-2	150534	150525	149591	150217	0.36	cps
Gadolinium	160-1	170369	173247	172305	171973	0.85	cps
Gadolinium	160-2	128062	128798	128718	128526	0.31	cps
Holmium	165-1	14204756	14005090	14209369	14139739	0.82	cps
Holmium	165-2	10084117	10221866	10243179	10183054	0.85	cps
Indium	115-1	11302671	11154583	11268423	11241892	0.69	cps
Indium	115-2	4143172	4146529	4152491	4147397	0.11	cps
Iron	56-2	951463932	938003106	936119053	941862030	0.89	cps
Iron	57-2	23432054	23303416	22875399	23203623	1.26	cps
Iron	54-2	51407374	50675871	50404779	50829341	1.02	cps
Krypton	83-1	630	563	597	597	5.59	cps

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Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02ADLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224ADL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:17:16	DataFile Name :	036SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4405783	4492931	4551086	4483267	1.63	cps
Lead	207-1	4127101	4179047	4160682	4155610	0.63	cps
Lead	208-1	18300434	18541466	18685765	18509221	1.05	cps
Lithium	6-1	1668952	1661441	1647652	1659349	0.65	cps
Magnesium	24-2	20511403	20651305	20639191	20600633	0.38	cps
Manganese	55-2	16256855	16039171	15967234	16087753	0.94	cps
Molybdenum	94-1	3300027	3362303	3315878	3326069	0.97	cps
Molybdenum	95-1	4202445	4222277	4227981	4217568	0.32	cps
Molybdenum	96-1	4670740	4722225	4631155	4674706	0.98	cps
Molybdenum	97-1	2612823	2642496	2600662	2618660	0.82	cps
Molybdenum	98-1	6652582	6823364	6749953	6741966	1.27	cps
Neodymium	150-1	177586	181147	180725	179820	1.08	cps
Neodymium	150-2	112739	111116	110808	111555	0.93	cps
Nickel	60-2	279312	273430	271282	274675	1.51	cps
Phosphorus	31-2	7839	7795	7805	7813	0.29	cps
Potassium	39-2	3494657	3402310	3502674	3466547	1.61	cps
Rhodium	103-1	10130150	10080322	10129816	10113429	0.28	cps
Rhodium	103-2	6208561	6151575	6128679	6162938	0.67	cps
Scandium	45-1	6357367	6192801	6151109	6233759	1.75	cps
Scandium	45-2	534551	529314	532255	532040	0.49	cps
Selenium	82-1	22416	22802	22774	22664	0.95	cps
Selenium	77-2	2560	2637	2817	2671	4.93	cps
Selenium	78-2	8493	8486	8372	8450	0.80	cps
Silicon	28-1	144385281	147874028	148815854	147025054	1.59	cps
Silver	107-1	3627	3387	3357	3457	4.28	cps
Silver	109-1	1943	1790	2023	1919	6.18	cps
Sodium	23-2	14990851	15164710	15157750	15104437	0.65	cps
Strontium	86-1	1239630	1246197	1249701	1245176	0.41	cps
Strontium	88-1	11098742	11161330	11278806	11179626	0.82	cps
Sulfur	34-1	10361855	10441931	10440319	10414702	0.44	cps
Terbium	159-1	14537003	14367878	14471209	14458696	0.59	cps
Terbium	159-2	10019970	10176890	10038785	10078548	0.85	cps
Thallium	203-1	1283685	1289160	1307768	1293538	0.98	cps
Thallium	205-1	3277991	3328262	3324469	3310240	0.85	cps
Tin	118-1	1117439	1119527	1131750	1122905	0.69	cps
Titanium	47-1	662780	672074	671783	668879	0.79	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-02ADLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-07-121224ADL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:17:16	DataFile Name :	036SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	4464819	4523412	4566380	4518203	1.13	cps
Vanadium	51-2	1584956	1536536	1569098	1563530	1.58	cps
Yttrium	89-1	16761358	16863636	16795119	16806704	0.31	cps
Yttrium	89-2	4489620	4434926	4434242	4452929	0.71	cps
Zinc	66-2	1109780	1108721	1106888	1108463	0.13	cps
Zirconium	90-1	2567969	2622659	2602602	2597743	1.07	cps
Zirconium	91-1	558223	565538	564054	562605	0.69	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:20:07	DataFile Name :	037CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	13811743	13831258	13805860	13816287	0.10	cps
Antimony	121-1	6119446	6177301	6155186	6150644	0.47	cps
Arsenic	75-2	300010	299140	296988	298713	0.52	cps
Barium	135-1	7928241	8055060	7960521	7981274	0.83	cps
Barium	137-1	13711000	13832919	13707371	13750430	0.52	cps
Beryllium	9-1	719829	728652	728068	725517	0.68	cps
Bismuth	209-1	7778527	7654633	7669992	7701050	0.88	cps
Bismuth	209-2	6611265	6527392	6583751	6574136	0.65	cps
Bromine	81-1	12612	12839	12816	12756	0.98	cps
Bromine	81-2	100	120	127	116	12.01	cps
Cadmium	108-1	107518	106984	107793	107431	0.38	cps
Cadmium	106-1	152935	154383	155155	154158	0.73	cps
Cadmium	111-1	1452713	1460322	1457609	1456881	0.26	cps
Calcium	43-1	8027494	8002666	8085078	8038413	0.53	cps
Calcium	44-1	129006165	127687415	129466238	128719939	0.72	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2383799	2392911	2369465	2382058	0.50	cps
Cobalt	59-2	3623496	3670445	3682244	3658728	0.85	cps
Copper	63-2	26058968	26229462	26212404	26166945	0.36	cps
Dysprosium	156-1	327	383	343	351	8.29	cps
Dysprosium	156-2	443	517	513	491	8.43	cps
Erbium	164-1	400	410	323	378	12.55	cps
Erbium	164-2	177	207	257	213	18.94	cps
Gadolinium	160-1	250	293	263	269	8.26	cps
Gadolinium	160-2	567	597	643	602	6.42	cps
Holmium	165-1	13899615	13701321	13653492	13751476	0.95	cps
Holmium	165-2	9928468	9971455	9925952	9941958	0.26	cps
Indium	115-1	10759354	10482817	10403206	10548459	1.77	cps
Indium	115-2	3861133	3859227	3870492	3863617	0.16	cps
Iron	56-2	568849098	565442658	562868058	565719938	0.53	cps
Iron	57-2	14072288	13934864	13899795	13968982	0.65	cps
Iron	54-2	30554350	30356568	30674975	30528631	0.53	cps
Krypton	83-1	233	213	230	226	4.75	cps

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:20:07	DataFile Name :	037CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	22466516	22590911	22430483	22495970	0.37	cps
Lead	207-1	20442206	20457088	20728126	20542473	0.78	cps
Lead	208-1	92924299	92449187	92876263	92749916	0.28	cps
Lithium	6-1	1661152	1630253	1651520	1647642	0.96	cps
Magnesium	24-2	107415668	107297065	106872318	107195017	0.27	cps
Manganese	55-2	19178556	19024034	19025025	19075872	0.47	cps
Molybdenum	94-1	21560380	21483787	21599574	21547914	0.27	cps
Molybdenum	95-1	31182206	31113087	31382557	31225950	0.45	cps
Molybdenum	96-1	34073657	33650079	34190314	33971350	0.84	cps
Molybdenum	97-1	19313051	19073895	19340098	19242348	0.76	cps
Molybdenum	98-1	50029776	49589531	49729001	49782769	0.45	cps
Neodymium	150-1	533	530	543	536	1.30	cps
Neodymium	150-2	153	167	167	162	4.74	cps
Nickel	60-2	880787	885196	875868	880617	0.53	cps
Phosphorus	31-2	122384	122230	123130	122581	0.39	cps
Potassium	39-2	68026581	68719424	68629612	68458539	0.55	cps
Rhodium	103-1	9323413	9293253	9255829	9290832	0.36	cps
Rhodium	103-2	5662087	5738005	5711512	5703868	0.68	cps
Scandium	45-1	6030953	5955137	5813652	5933247	1.86	cps
Scandium	45-2	514897	509965	512651	512504	0.48	cps
Selenium	82-1	87027	87081	88061	87390	0.67	cps
Selenium	77-2	9570	8906	9063	9180	3.78	cps
Selenium	78-2	31320	31383	30956	31220	0.74	cps
Silicon	28-1	3550485	3557911	3596014	3568136	0.68	cps
Silver	107-1	7463838	7365080	7499970	7442963	0.94	cps
Silver	109-1	7072647	7157027	7104636	7111437	0.60	cps
Sodium	23-2	172664217	171595724	173058271	172439404	0.44	cps
Strontium	86-1	1976549	1958481	1967417	1967483	0.46	cps
Strontium	88-1	17214606	17236513	17014614	17155244	0.71	cps
Sulfur	34-1	585104	591684	595833	590874	0.92	cps
Terbium	159-1	13976923	14213531	13820829	14003761	1.41	cps
Terbium	159-2	9797369	9775381	9783568	9785439	0.11	cps
Thallium	203-1	5877417	5864215	5759663	5833765	1.11	cps
Thallium	205-1	13882226	13766199	13829462	13825962	0.42	cps
Tin	118-1	5107851	5105240	5124358	5112483	0.20	cps
Titanium	47-1	7503812	7550368	7555355	7536512	0.38	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:20:07	DataFile Name :	037CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	18553202	19066704	18878754	18832887	1.38	cps
Vanadium	51-2	2150694	2125859	2183265	2153273	1.34	cps
Yttrium	89-1	12898876	12699649	12593506	12730677	1.22	cps
Yttrium	89-2	3441205	3487193	3444270	3457556	0.74	cps
Zinc	66-2	4301413	4309327	4292415	4301052	0.20	cps
Zirconium	90-1	10607326	10481378	10558599	10549101	0.60	cps
Zirconium	91-1	2323658	2325040	2350914	2333204	0.66	cps

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:23:36	DataFile Name :	038CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1067	940	890	966	9.43	cps
Antimony	121-1	2267	2104	1737	2036	13.33	cps
Arsenic	75-2	30	17	30	26	30.11	cps
Barium	135-1	923	880	760	854	9.90	cps
Barium	137-1	1633	1407	1227	1422	14.33	cps
Beryllium	9-1	237	213	170	207	16.37	cps
Bismuth	209-1	8612297	8461681	8515604	8529861	0.89	cps
Bismuth	209-2	7377812	7390716	7295355	7354628	0.70	cps
Bromine	81-1	13159	13173	13223	13185	0.25	cps
Bromine	81-2	287	260	227	258	11.66	cps
Cadmium	108-1	40	50	7	32	70.41	cps
Cadmium	106-1	3040	3084	2937	3020	2.50	cps
Cadmium	111-1	2310	2350	2211	2291	3.12	cps
Calcium	43-1	1363	1197	940	1167	18.28	cps
Calcium	44-1	25805	24473	21615	23965	8.93	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1467	1430	1537	1478	3.67	cps
Cobalt	59-2	340	343	267	317	13.68	cps
Copper	63-2	2834	2510	2244	2529	11.68	cps
Dysprosium	156-1	13	23	23	20	28.87	cps
Dysprosium	156-2	0	3	3	2	86.60	cps
Erbium	164-1	57	43	50	50	13.34	cps
Erbium	164-2	30	37	50	39	26.18	cps
Gadolinium	160-1	20	50	83	51	61.98	cps
Gadolinium	160-2	427	450	393	423	6.73	cps
Holmium	165-1	14188743	14026899	13850394	14022012	1.21	cps
Holmium	165-2	10236068	10181853	9935502	10117808	1.58	cps
Indium	115-1	11512899	11539117	11472050	11508022	0.29	cps
Indium	115-2	4241349	4252418	4235968	4243245	0.20	cps
Iron	56-2	67400	64424	59537	63787	6.22	cps
Iron	57-2	1930	2050	1780	1920	7.05	cps
Iron	54-2	5124	4791	4341	4752	8.28	cps
Krypton	83-1	217	207	173	199	11.41	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:23:36	DataFile Name :	038CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3337	2944	2697	2993	10.79	cps
Lead	207-1	3110	2797	2327	2745	14.37	cps
Lead	208-1	13740	12312	10905	12319	11.50	cps
Lithium	6-1	1825741	1807227	1790641	1807870	0.97	cps
Magnesium	24-2	7749	7238	6882	7290	5.98	cps
Manganese	55-2	1710	1627	1400	1579	10.16	cps
Molybdenum	94-1	3390	2940	2367	2899	17.69	cps
Molybdenum	95-1	4304	3684	2924	3637	19.01	cps
Molybdenum	96-1	4511	4134	3520	4055	12.33	cps
Molybdenum	97-1	2567	2217	1997	2260	12.72	cps
Molybdenum	98-1	6678	5985	5031	5898	14.02	cps
Neodymium	150-1	7	3	3	4	43.40	cps
Neodymium	150-2	10	10	3	8	49.52	cps
Nickel	60-2	497	337	403	412	19.50	cps
Phosphorus	31-2	203	193	217	204	5.72	cps
Potassium	39-2	50865	50875	49503	50414	1.56	cps
Rhodium	103-1	10625024	10603426	10556265	10594905	0.33	cps
Rhodium	103-2	6427874	6497668	6345956	6423833	1.18	cps
Scandium	45-1	6341489	6244904	6187699	6258031	1.24	cps
Scandium	45-2	527514	528811	528470	528265	0.13	cps
Selenium	82-1	135	129	166	144	13.84	cps
Selenium	77-2	3	3	0	2	86.60	cps
Selenium	78-2	447	427	447	440	2.62	cps
Silicon	28-1	621638	619011	622265	620971	0.28	cps
Silver	107-1	1380	1270	1023	1225	14.92	cps
Silver	109-1	1393	1127	973	1165	18.25	cps
Sodium	23-2	38896	38140	36927	37988	2.61	cps
Strontium	86-1	603	543	497	548	9.76	cps
Strontium	88-1	2420	2337	2013	2257	9.52	cps
Sulfur	34-1	166550	164518	164748	165272	0.67	cps
Terbium	159-1	14755549	14447512	14363316	14522125	1.42	cps
Terbium	159-2	10070743	10181697	10154620	10135687	0.57	cps
Thallium	203-1	1127	1073	990	1063	6.48	cps
Thallium	205-1	2827	2610	2380	2606	8.57	cps
Tin	118-1	2274	2060	2040	2125	6.09	cps
Titanium	47-1	1043	913	707	888	19.12	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:23:36	DataFile Name :	038CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	2000	2024	1627	1883	11.82	cps
Vanadium	51-2	140	167	127	144	14.10	cps
Yttrium	89-1	13554461	13431511	13220922	13402298	1.26	cps
Yttrium	89-2	3548130	3544283	3549728	3547380	0.08	cps
Zinc	66-2	500	513	537	517	3.59	cps
Zirconium	90-1	2030	2003	1793	1942	6.67	cps
Zirconium	91-1	427	457	353	412	12.90	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-04DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-08-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:27:13	DataFile Name :	039SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	8281228	8262517	8205362	8249703	0.48	cps
Antimony	121-1	943	1047	993	994	5.20	cps
Arsenic	75-2	1350	1130	1213	1231	9.02	cps
Barium	135-1	119590	121119	122477	121062	1.19	cps
Barium	137-1	208840	210866	210271	209993	0.50	cps
Beryllium	9-1	657	663	603	641	5.13	cps
Bismuth	209-1	8089520	8146274	7966542	8067446	1.14	cps
Bismuth	209-2	6947399	7001573	6918117	6955696	0.61	cps
Bromine	81-1	13463	13390	14013	13622	2.50	cps
Bromine	81-2	470	507	480	486	3.90	cps
Cadmium	108-1	37	50	53	47	18.89	cps
Cadmium	106-1	3994	3630	3490	3705	7.01	cps
Cadmium	111-1	3117	2833	2733	2894	6.88	cps
Calcium	43-1	1869345	1865482	1844085	1859637	0.73	cps
Calcium	44-1	29732040	29612765	30080004	29808269	0.81	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	62629	63048	62984	62887	0.36	cps
Cobalt	59-2	453317	455871	460137	456441	0.75	cps
Copper	63-2	149683	150157	148097	149313	0.72	cps
Dysprosium	156-1	144956	146508	145101	145521	0.59	cps
Dysprosium	156-2	117201	116206	117597	117001	0.61	cps
Erbium	164-1	171769	174434	174015	173406	0.83	cps
Erbium	164-2	124552	124599	126032	125061	0.67	cps
Gadolinium	160-1	152489	152975	154120	153195	0.55	cps
Gadolinium	160-2	116395	115766	116106	116089	0.27	cps
Holmium	165-1	14016604	13948645	13987533	13984261	0.24	cps
Holmium	165-2	10117249	10127104	10009276	10084543	0.65	cps
Indium	115-1	11198954	11123076	11167651	11163227	0.34	cps
Indium	115-2	4103523	4032305	4088856	4074895	0.92	cps
Iron	56-2	760356682	763269375	766576389	763400815	0.41	cps
Iron	57-2	18700595	18777572	18834966	18771044	0.36	cps
Iron	54-2	41010838	41092319	41307154	41136770	0.37	cps
Krypton	83-1	460	457	520	479	7.44	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-04DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-08-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:27:13	DataFile Name :	039SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	13884	14041	14074	14000	0.73	cps
Lead	207-1	11692	11515	12045	11751	2.30	cps
Lead	208-1	54680	55549	56403	55544	1.55	cps
Lithium	6-1	1735550	1705776	1695769	1712365	1.21	cps
Magnesium	24-2	19039945	19034675	19044864	19039828	0.03	cps
Manganese	55-2	7260508	7263557	7370379	7298148	0.86	cps
Molybdenum	94-1	6251	6458	6135	6281	2.61	cps
Molybdenum	95-1	1017	1073	1120	1070	4.84	cps
Molybdenum	96-1	10340	10664	10170	10392	2.41	cps
Molybdenum	97-1	780	680	730	730	6.85	cps
Molybdenum	98-1	1493	1390	1580	1488	6.39	cps
Neodymium	150-1	171344	173608	174647	173200	0.98	cps
Neodymium	150-2	107298	107459	106642	107133	0.40	cps
Nickel	60-2	103343	104799	103944	104029	0.70	cps
Phosphorus	31-2	14917	15491	15081	15163	1.95	cps
Potassium	39-2	518133	522257	525709	522033	0.73	cps
Rhodium	103-1	10038003	10010879	9953822	10000901	0.43	cps
Rhodium	103-2	6145680	6039796	6108028	6097835	0.88	cps
Scandium	45-1	6159783	6084332	6044631	6096249	0.96	cps
Scandium	45-2	517119	516992	517768	517293	0.08	cps
Selenium	82-1	312	314	323	316	1.96	cps
Selenium	77-2	270	283	343	299	13.07	cps
Selenium	78-2	673	650	630	651	3.33	cps
Silicon	28-1	133504265	133962051	134608878	134025065	0.41	cps
Silver	107-1	693	613	650	652	6.14	cps
Silver	109-1	540	563	520	541	4.01	cps
Sodium	23-2	14986676	15060693	15028129	15025166	0.25	cps
Strontium	86-1	640079	642438	646034	642851	0.47	cps
Strontium	88-1	5774743	5861437	5742686	5792955	1.06	cps
Sulfur	34-1	10107969	10019956	10153634	10093853	0.67	cps
Terbium	159-1	14255423	14155811	14066921	14159385	0.67	cps
Terbium	159-2	10055665	9816991	9965686	9946114	1.21	cps
Thallium	203-1	807	773	710	763	6.43	cps
Thallium	205-1	1877	1920	1733	1843	5.30	cps
Tin	118-1	3347	3337	3447	3377	1.80	cps
Titanium	47-1	9550	9240	9483	9424	1.73	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-04DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-08-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:27:13	DataFile Name :	039SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	85915	87032	84694	85880	1.36	cps
Vanadium	51-2	1075085	1082104	1069006	1075398	0.61	cps
Yttrium	89-1	15922913	15874366	15839072	15878784	0.27	cps
Yttrium	89-2	4196037	4175757	4181284	4184359	0.25	cps
Zinc	66-2	270923	268609	270318	269950	0.44	cps
Zirconium	90-1	13920	14564	14444	14309	2.39	cps
Zirconium	91-1	3237	3521	3264	3341	4.69	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-06DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-09-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:30:23	DataFile Name :	040SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4422759	4350815	4376757	4383444	0.83	cps
Antimony	121-1	650	673	543	622	11.14	cps
Arsenic	75-2	1497	1323	1387	1402	6.26	cps
Barium	135-1	130700	131127	130121	130649	0.39	cps
Barium	137-1	228724	229874	230066	229555	0.32	cps
Beryllium	9-1	747	743	743	744	0.26	cps
Bismuth	209-1	8013078	8031080	8079114	8041091	0.42	cps
Bismuth	209-2	6885109	6897367	6870499	6884325	0.20	cps
Bromine	81-1	13603	13423	13780	13602	1.31	cps
Bromine	81-2	587	550	533	557	4.90	cps
Cadmium	108-1	50	70	43	54	25.49	cps
Cadmium	106-1	3884	3911	4051	3948	2.27	cps
Cadmium	111-1	2990	2922	3038	2984	1.97	cps
Calcium	43-1	3289860	3243838	3295749	3276482	0.87	cps
Calcium	44-1	52002096	51609311	52521429	52044279	0.88	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	21339	21378	21172	21296	0.52	cps
Cobalt	59-2	422518	422315	420678	421837	0.24	cps
Copper	63-2	20064	20077	20497	20213	1.22	cps
Dysprosium	156-1	165007	166008	166227	165747	0.39	cps
Dysprosium	156-2	131912	132497	134395	132935	0.98	cps
Erbium	164-1	219981	221346	221684	221004	0.41	cps
Erbium	164-2	161036	160093	161707	160946	0.50	cps
Gadolinium	160-1	176952	179639	181682	179424	1.32	cps
Gadolinium	160-2	135979	134828	135454	135420	0.43	cps
Holmium	165-1	13954974	13875100	13889092	13906388	0.31	cps
Holmium	165-2	10008589	10151333	10188640	10116187	0.94	cps
Indium	115-1	11206512	11098013	11131694	11145406	0.50	cps
Indium	115-2	4049750	4064747	3991089	4035195	0.96	cps
Iron	56-2	962927532	956320546	961669479	960305852	0.37	cps
Iron	57-2	23656773	23531755	23666463	23618330	0.32	cps
Iron	54-2	51612371	51480121	51982286	51691593	0.50	cps
Krypton	83-1	633	627	620	627	1.06	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-06DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-09-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:30:23	DataFile Name :	040SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4634	4557	4618	4603	0.88	cps
Lead	207-1	3734	3691	3847	3757	2.15	cps
Lead	208-1	17675	17608	17775	17686	0.47	cps
Lithium	6-1	1689962	1685344	1648220	1674509	1.37	cps
Magnesium	24-2	15156280	14980031	15132128	15089480	0.63	cps
Manganese	55-2	13794154	13697795	13865271	13785740	0.61	cps
Molybdenum	94-1	5765	5418	5691	5624	3.25	cps
Molybdenum	95-1	1360	1293	1293	1316	2.93	cps
Molybdenum	96-1	12812	12682	12375	12623	1.78	cps
Molybdenum	97-1	973	777	813	854	12.24	cps
Molybdenum	98-1	1700	1713	1493	1636	7.54	cps
Neodymium	150-1	180746	185016	183473	183078	1.18	cps
Neodymium	150-2	113287	112158	113270	112905	0.57	cps
Nickel	60-2	34486	34496	34720	34568	0.38	cps
Phosphorus	31-2	1963	2060	2084	2036	3.13	cps
Potassium	39-2	401781	402622	402834	402413	0.14	cps
Rhodium	103-1	9794917	9795707	9992597	9861074	1.16	cps
Rhodium	103-2	6078535	6116731	6040287	6078518	0.63	cps
Scandium	45-1	6093778	6005405	6067768	6055650	0.75	cps
Scandium	45-2	509360	510187	514825	511457	0.58	cps
Selenium	82-1	369	271	316	319	15.44	cps
Selenium	77-2	343	343	397	361	8.53	cps
Selenium	78-2	707	763	703	724	4.65	cps
Silicon	28-1	129113781	130304171	130117558	129845170	0.49	cps
Silver	107-1	430	460	437	442	3.56	cps
Silver	109-1	447	437	490	458	6.19	cps
Sodium	23-2	6594157	6618675	6626416	6613082	0.25	cps
Strontium	86-1	1044302	1056947	1047135	1049461	0.63	cps
Strontium	88-1	9415858	9442815	9507332	9455335	0.50	cps
Sulfur	34-1	10314135	10202832	10400120	10305696	0.96	cps
Terbium	159-1	14349796	14264793	14295343	14303311	0.30	cps
Terbium	159-2	10043235	9951735	9937427	9977465	0.58	cps
Thallium	203-1	700	613	627	647	7.22	cps
Thallium	205-1	1593	1653	1587	1611	2.28	cps
Tin	118-1	3154	3410	3107	3224	5.07	cps
Titanium	47-1	3961	4024	4164	4049	2.57	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-06DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-09-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:30:23	DataFile Name :	040SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	160778	163803	162970	162517	0.96	cps
Vanadium	51-2	1215832	1216796	1221549	1218059	0.25	cps
Yttrium	89-1	16786088	16693329	16726259	16735225	0.28	cps
Yttrium	89-2	4460439	4484289	4439100	4461276	0.51	cps
Zinc	66-2	209944	209881	210482	210102	0.16	cps
Zirconium	90-1	11748	11811	11471	11677	1.55	cps
Zirconium	91-1	2510	2594	2480	2528	2.32	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-08DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-10-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:33:31	DataFile Name :	041SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6031058	6079089	6167442	6092530	1.14	cps
Antimony	121-1	493	467	470	477	3.05	cps
Arsenic	75-2	907	977	937	940	3.74	cps
Barium	135-1	118437	120988	121140	120188	1.26	cps
Barium	137-1	205729	209276	209182	208063	0.97	cps
Beryllium	9-1	1020	993	1147	1053	7.78	cps
Bismuth	209-1	8292812	8092954	8004378	8130048	1.82	cps
Bismuth	209-2	7045132	6916743	7334877	7098918	3.02	cps
Bromine	81-1	14187	14564	14247	14333	1.41	cps
Bromine	81-2	610	537	540	562	7.37	cps
Cadmium	108-1	60	83	43	62	32.29	cps
Cadmium	106-1	3981	3991	3944	3972	0.62	cps
Cadmium	111-1	2961	2908	2954	2941	0.97	cps
Calcium	43-1	2500682	2587606	2544542	2544277	1.71	cps
Calcium	44-1	40003090	40546934	40647516	40399180	0.86	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	28838	29308	28861	29002	0.92	cps
Cobalt	59-2	524793	528557	526682	526677	0.36	cps
Copper	63-2	76028	76668	76253	76316	0.43	cps
Dysprosium	156-1	153950	158587	160259	157599	2.07	cps
Dysprosium	156-2	127856	127122	128312	127763	0.47	cps
Erbium	164-1	207386	210478	210924	209596	0.92	cps
Erbium	164-2	152816	151728	152630	152391	0.38	cps
Gadolinium	160-1	166979	168965	170135	168693	0.95	cps
Gadolinium	160-2	129492	128661	129677	129277	0.42	cps
Holmium	165-1	14343020	14111843	14143182	14199349	0.88	cps
Holmium	165-2	10242245	10129830	10682714	10351596	2.82	cps
Indium	115-1	11497290	11476020	11419584	11464298	0.35	cps
Indium	115-2	4088848	4145906	4241135	4158630	1.85	cps
Iron	56-2	938154466	933999639	932514279	934889462	0.31	cps
Iron	57-2	22754215	22776848	22700315	22743792	0.17	cps
Iron	54-2	50201798	50104176	50211466	50172480	0.12	cps
Krypton	83-1	580	600	590	590	1.69	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-08DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-10-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:33:31	DataFile Name :	041SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	5748	5805	5751	5768	0.55	cps
Lead	207-1	4678	4931	4728	4779	2.81	cps
Lead	208-1	22411	22384	22611	22469	0.55	cps
Lithium	6-1	1685344	1687830	1680587	1684587	0.22	cps
Magnesium	24-2	14360874	14421241	14281949	14354688	0.49	cps
Manganese	55-2	12224771	12287082	12244922	12252259	0.26	cps
Molybdenum	94-1	9336	9413	9493	9414	0.83	cps
Molybdenum	95-1	913	1007	910	943	5.82	cps
Molybdenum	96-1	12796	13013	12879	12896	0.85	cps
Molybdenum	97-1	593	587	583	588	0.87	cps
Molybdenum	98-1	1003	1003	1117	1041	6.28	cps
Neodymium	150-1	174162	177040	176384	175862	0.86	cps
Neodymium	150-2	109410	107529	110414	109118	1.34	cps
Nickel	60-2	32742	32629	32442	32604	0.47	cps
Phosphorus	31-2	6281	6638	6775	6565	3.88	cps
Potassium	39-2	458134	452377	455312	455274	0.63	cps
Rhodium	103-1	10410308	10313635	10217664	10313869	0.93	cps
Rhodium	103-2	6217106	6230528	6411066	6286233	1.72	cps
Scandium	45-1	6374786	6273956	6227948	6292230	1.19	cps
Scandium	45-2	533540	540864	552218	542207	1.74	cps
Selenium	82-1	394	409	311	371	14.15	cps
Selenium	77-2	353	383	343	360	5.78	cps
Selenium	78-2	630	700	683	671	5.45	cps
Silicon	28-1	158861818	164739761	163550004	162383861	1.91	cps
Silver	107-1	543	503	463	503	7.95	cps
Silver	109-1	377	423	390	397	6.06	cps
Sodium	23-2	7739870	7758319	7687184	7728458	0.48	cps
Strontium	86-1	797086	809869	812105	806353	1.00	cps
Strontium	88-1	7171514	7313279	7273338	7252710	1.01	cps
Sulfur	34-1	9812299	9809734	9910171	9844068	0.58	cps
Terbium	159-1	14807354	14657081	14519972	14661469	0.98	cps
Terbium	159-2	10151560	10150733	10246195	10182830	0.54	cps
Thallium	203-1	693	593	543	610	12.52	cps
Thallium	205-1	1517	1477	1533	1509	1.93	cps
Tin	118-1	3761	3827	3881	3823	1.57	cps
Titanium	47-1	6308	6335	6285	6309	0.40	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-08DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-10-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:33:31	DataFile Name :	041SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	87481	89826	89766	89025	1.50	cps
Vanadium	51-2	960570	954806	955520	956965	0.33	cps
Yttrium	89-1	17182650	16974441	17205897	17120996	0.74	cps
Yttrium	89-2	4535200	4545568	4552790	4544519	0.19	cps
Zinc	66-2	232797	232546	231470	232271	0.30	cps
Zirconium	90-1	22991	23749	23679	23473	1.78	cps
Zirconium	91-1	5331	5218	5451	5333	2.19	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-10DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-11-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:36:42	DataFile Name :	042SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	5539734	5409451	5413495	5454227	1.36	cps
Antimony	121-1	423	463	480	456	6.39	cps
Arsenic	75-2	953	1067	897	972	8.90	cps
Barium	135-1	121016	120988	119009	120337	0.96	cps
Barium	137-1	209479	208896	208071	208816	0.34	cps
Beryllium	9-1	1027	1047	963	1012	4.30	cps
Bismuth	209-1	8249710	8159532	8003109	8137450	1.53	cps
Bismuth	209-2	6926337	7099452	6969959	6998583	1.29	cps
Bromine	81-1	14517	14654	13913	14362	2.74	cps
Bromine	81-2	553	570	443	522	13.18	cps
Cadmium	108-1	67	53	27	49	41.66	cps
Cadmium	106-1	4277	3961	3604	3947	8.54	cps
Cadmium	111-1	3231	3035	2724	2997	8.53	cps
Calcium	43-1	2999343	3013378	3007462	3006728	0.23	cps
Calcium	44-1	48337849	48166596	47604038	48036161	0.80	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	24413	23942	24043	24133	1.03	cps
Cobalt	59-2	473711	475625	474385	474574	0.20	cps
Copper	63-2	57038	56576	56208	56608	0.73	cps
Dysprosium	156-1	154256	157316	154826	155466	1.05	cps
Dysprosium	156-2	123581	123810	124035	123808	0.18	cps
Erbium	164-1	207788	207860	206743	207464	0.30	cps
Erbium	164-2	148695	149972	148237	148968	0.60	cps
Gadolinium	160-1	166769	166732	165090	166197	0.58	cps
Gadolinium	160-2	125012	125284	125146	125147	0.11	cps
Holmium	165-1	14318905	14291073	14027222	14212400	1.13	cps
Holmium	165-2	10380185	10266055	10166717	10270985	1.04	cps
Indium	115-1	11486217	11386183	11317389	11396597	0.74	cps
Indium	115-2	4167493	4199353	4185382	4184076	0.38	cps
Iron	56-2	891430840	886276280	884277267	887328129	0.42	cps
Iron	57-2	22040723	21810714	21821401	21890946	0.59	cps
Iron	54-2	47525776	47918684	47707674	47717378	0.41	cps
Krypton	83-1	603	630	540	591	7.82	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-10DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-11-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:36:42	DataFile Name :	042SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4327	4507	4461	4432	2.11	cps
Lead	207-1	3867	3741	3881	3829	2.02	cps
Lead	208-1	17354	17571	17511	17479	0.64	cps
Lithium	6-1	1685226	1696765	1668802	1683598	0.83	cps
Magnesium	24-2	14212889	14134148	14211211	14186083	0.32	cps
Manganese	55-2	13550624	13693802	13530117	13591515	0.66	cps
Molybdenum	94-1	7655	7729	7779	7721	0.80	cps
Molybdenum	95-1	937	807	873	872	7.45	cps
Molybdenum	96-1	11925	12095	12035	12018	0.72	cps
Molybdenum	97-1	507	553	550	537	4.85	cps
Molybdenum	98-1	787	760	777	774	1.74	cps
Neodymium	150-1	171003	171218	170688	170970	0.16	cps
Neodymium	150-2	105319	105736	104957	105337	0.37	cps
Nickel	60-2	30461	30451	29369	30094	2.09	cps
Phosphorus	31-2	5078	5024	4958	5020	1.20	cps
Potassium	39-2	436496	433115	435784	435132	0.41	cps
Rhodium	103-1	10265106	10213418	10087147	10188557	0.90	cps
Rhodium	103-2	6332552	6196929	6089553	6206345	1.96	cps
Scandium	45-1	6289231	6275777	6115457	6226822	1.55	cps
Scandium	45-2	526274	524106	525006	525129	0.21	cps
Selenium	82-1	358	329	369	352	5.80	cps
Selenium	77-2	320	363	343	342	6.34	cps
Selenium	78-2	683	730	713	709	3.34	cps
Silicon	28-1	143894915	143951601	142632758	143493091	0.52	cps
Silver	107-1	520	420	467	469	10.67	cps
Silver	109-1	357	417	330	368	12.07	cps
Sodium	23-2	6726172	6622423	6663400	6670665	0.78	cps
Strontium	86-1	894458	892460	889348	892088	0.29	cps
Strontium	88-1	8043780	8062350	7955644	8020591	0.71	cps
Sulfur	34-1	10085848	10132145	9933460	10050484	1.03	cps
Terbium	159-1	14681154	14609595	14444264	14578338	0.83	cps
Terbium	159-2	10139542	10094271	10186973	10140262	0.46	cps
Thallium	203-1	553	600	523	559	6.91	cps
Thallium	205-1	1327	1263	1253	1281	3.10	cps
Tin	118-1	3254	3434	3244	3310	3.23	cps
Titanium	47-1	5378	5224	5228	5277	1.66	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-10DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-11-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:36:42	DataFile Name :	042SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	95463	95486	95220	95389	0.15	cps
Vanadium	51-2	933600	930640	929672	931304	0.22	cps
Yttrium	89-1	17194795	17110497	16859969	17055087	1.02	cps
Yttrium	89-2	4507617	4413310	4422292	4447740	1.17	cps
Zinc	66-2	214366	214468	212871	213902	0.42	cps
Zirconium	90-1	18785	18392	18412	18530	1.20	cps
Zirconium	91-1	4127	4021	4191	4113	2.09	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-12DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-12-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:39:49	DataFile Name :	043SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	9481138	9554130	9567326	9534198	0.49	cps
Antimony	121-1	310	333	337	327	4.45	cps
Arsenic	75-2	1150	1303	1147	1200	7.46	cps
Barium	135-1	105594	107965	106417	106659	1.13	cps
Barium	137-1	184595	186627	185320	185514	0.56	cps
Beryllium	9-1	293	287	340	307	9.48	cps
Bismuth	209-1	8150146	8093537	8135015	8126233	0.36	cps
Bismuth	209-2	6932748	7105425	6914933	6984368	1.51	cps
Bromine	81-1	14761	14350	14100	14404	2.32	cps
Bromine	81-2	440	443	480	454	4.88	cps
Cadmium	108-1	33	53	70	52	35.16	cps
Cadmium	106-1	3844	3957	3627	3809	4.40	cps
Cadmium	111-1	2984	3029	2747	2920	5.20	cps
Calcium	43-1	1587342	1598926	1568906	1585058	0.96	cps
Calcium	44-1	25012899	25487405	25440468	25313591	1.03	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	82139	81452	81857	81816	0.42	cps
Cobalt	59-2	438289	440792	439096	439392	0.29	cps
Copper	63-2	179412	180160	179282	179618	0.26	cps
Dysprosium	156-1	142023	142023	142305	142117	0.11	cps
Dysprosium	156-2	114542	113917	115634	114698	0.76	cps
Erbium	164-1	157534	160207	160351	159364	1.00	cps
Erbium	164-2	114464	114246	115966	114892	0.82	cps
Gadolinium	160-1	145126	147426	148063	146871	1.05	cps
Gadolinium	160-2	112702	112325	112027	112351	0.30	cps
Holmium	165-1	14597988	14166001	14190345	14318111	1.69	cps
Holmium	165-2	10354983	10334205	10331993	10340394	0.12	cps
Indium	115-1	11595345	11581135	11633117	11603199	0.23	cps
Indium	115-2	4169504	4183003	4143440	4165316	0.48	cps
Iron	56-2	702508870	699652363	701053776	701071670	0.20	cps
Iron	57-2	17271788	17041732	17286064	17199861	0.80	cps
Iron	54-2	37659449	37607979	37717444	37661624	0.15	cps
Krypton	83-1	400	447	487	444	9.76	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-12DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-12-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:39:49	DataFile Name :	043SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	13503	13477	13453	13478	0.19	cps
Lead	207-1	11392	11115	11338	11281	1.30	cps
Lead	208-1	52817	52697	53258	52924	0.56	cps
Lithium	6-1	1705315	1650192	1670098	1675202	1.67	cps
Magnesium	24-2	20951034	21030010	20864107	20948384	0.40	cps
Manganese	55-2	4869420	4836686	4859143	4855083	0.34	cps
Molybdenum	94-1	5184	5231	5554	5323	3.79	cps
Molybdenum	95-1	710	673	837	740	11.58	cps
Molybdenum	96-1	9467	9827	9687	9660	1.88	cps
Molybdenum	97-1	623	597	543	588	6.93	cps
Molybdenum	98-1	1027	1010	1040	1026	1.47	cps
Neodymium	150-1	173695	177765	178723	176728	1.51	cps
Neodymium	150-2	108486	107737	106988	107737	0.70	cps
Nickel	60-2	143424	142600	144124	143383	0.53	cps
Phosphorus	31-2	15284	15628	15661	15525	1.34	cps
Potassium	39-2	564051	566234	560478	563587	0.52	cps
Rhodium	103-1	10600812	10465523	10327004	10464446	1.31	cps
Rhodium	103-2	6218281	6303796	6247266	6256448	0.70	cps
Scandium	45-1	6530272	6395990	6403039	6443100	1.17	cps
Scandium	45-2	541884	543341	542319	542515	0.14	cps
Selenium	82-1	444	331	315	363	19.46	cps
Selenium	77-2	320	337	277	311	9.96	cps
Selenium	78-2	720	740	670	710	5.08	cps
Silicon	28-1	126675268	127743595	129658821	128025895	1.18	cps
Silver	107-1	733	780	653	722	8.87	cps
Silver	109-1	517	710	640	622	15.73	cps
Sodium	23-2	17057590	17064341	17068530	17063487	0.03	cps
Strontium	86-1	582671	595096	598085	591951	1.38	cps
Strontium	88-1	5321181	5298233	5275637	5298350	0.43	cps
Sulfur	34-1	10260062	10362836	10476623	10366507	1.04	cps
Terbium	159-1	14757276	14797384	14558184	14704281	0.87	cps
Terbium	159-2	10151390	10192287	10098552	10147410	0.46	cps
Thallium	203-1	580	610	590	593	2.57	cps
Thallium	205-1	1307	1477	1347	1377	6.46	cps
Tin	118-1	2770	2787	2847	2801	1.44	cps
Titanium	47-1	6642	6448	6872	6654	3.19	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-12DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-12-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:39:49	DataFile Name :	043SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	81987	83067	84724	83259	1.66	cps
Vanadium	51-2	1234630	1231627	1225937	1230731	0.36	cps
Yttrium	89-1	16535591	16147359	16203373	16295441	1.29	cps
Yttrium	89-2	4297207	4268385	4238520	4268037	0.69	cps
Zinc	66-2	283300	284777	285790	284623	0.44	cps
Zirconium	90-1	12182	12382	12642	12402	1.86	cps
Zirconium	91-1	2637	2977	2730	2781	6.32	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-14DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-13-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:43:00	DataFile Name :	044SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	7092431	7128982	7197195	7139536	0.74	cps
Antimony	121-1	333	370	337	347	5.85	cps
Arsenic	75-2	1353	1310	1457	1373	5.49	cps
Barium	135-1	114714	116055	114972	115247	0.62	cps
Barium	137-1	198306	201754	198661	199574	0.95	cps
Beryllium	9-1	357	427	393	392	8.93	cps
Bismuth	209-1	8140843	8147523	8118719	8135695	0.19	cps
Bismuth	209-2	7029336	7059826	7002218	7030460	0.41	cps
Bromine	81-1	14958	14687	14841	14829	0.91	cps
Bromine	81-2	453	473	430	452	4.80	cps
Cadmium	108-1	47	27	63	46	40.29	cps
Cadmium	106-1	3814	4001	3734	3849	3.56	cps
Cadmium	111-1	2914	3018	2833	2922	3.19	cps
Calcium	43-1	1917623	1963212	2010463	1963766	2.36	cps
Calcium	44-1	31257580	31006695	30882935	31049070	0.61	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	74432	73793	74051	74092	0.43	cps
Cobalt	59-2	462430	463549	458210	461396	0.61	cps
Copper	63-2	158240	158371	159300	158637	0.36	cps
Dysprosium	156-1	147344	149334	147905	148194	0.69	cps
Dysprosium	156-2	119251	121335	120193	120259	0.87	cps
Erbium	164-1	169346	171755	169832	170311	0.75	cps
Erbium	164-2	123695	123389	122961	123348	0.30	cps
Gadolinium	160-1	153945	156283	158300	156176	1.40	cps
Gadolinium	160-2	116503	118106	116661	117090	0.75	cps
Holmium	165-1	14247038	14171014	14295591	14237881	0.44	cps
Holmium	165-2	10268875	10448068	10195845	10304263	1.26	cps
Indium	115-1	11682916	11674760	11555636	11637771	0.61	cps
Indium	115-2	4229235	4152671	4190191	4190699	0.91	cps
Iron	56-2	788374095	798889215	797387188	794883499	0.72	cps
Iron	57-2	19549991	19455779	19506197	19503989	0.24	cps
Iron	54-2	43048029	43144296	43077464	43089930	0.11	cps
Krypton	83-1	510	520	530	520	1.92	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-14DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-13-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:43:00	DataFile Name :	044SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	10214	10024	10017	10085	1.11	cps
Lead	207-1	8463	8563	8493	8506	0.60	cps
Lead	208-1	39990	39369	40211	39857	1.09	cps
Lithium	6-1	1658902	1635546	1679955	1658134	1.34	cps
Magnesium	24-2	20230478	20442890	20515371	20396247	0.73	cps
Manganese	55-2	6646923	6629511	6661502	6645979	0.24	cps
Molybdenum	94-1	5895	6028	6228	6050	2.77	cps
Molybdenum	95-1	980	903	840	908	7.72	cps
Molybdenum	96-1	10654	11348	11148	11050	3.23	cps
Molybdenum	97-1	637	593	687	639	7.31	cps
Molybdenum	98-1	1147	1143	1157	1149	0.60	cps
Neodymium	150-1	177523	180168	177672	178454	0.83	cps
Neodymium	150-2	109044	109504	109914	109487	0.40	cps
Nickel	60-2	125798	127442	126094	126445	0.69	cps
Phosphorus	31-2	13856	13886	13773	13839	0.42	cps
Potassium	39-2	575127	575685	573218	574677	0.23	cps
Rhodium	103-1	10547720	10373551	10436889	10452720	0.84	cps
Rhodium	103-2	6299164	6325481	6280583	6301743	0.36	cps
Scandium	45-1	6418931	6428642	6348664	6398746	0.68	cps
Scandium	45-2	537172	541301	540280	539584	0.40	cps
Selenium	82-1	316	268	307	297	8.65	cps
Selenium	77-2	350	293	317	320	8.90	cps
Selenium	78-2	730	730	703	721	2.14	cps
Silicon	28-1	136530501	138490971	137271975	137431149	0.72	cps
Silver	107-1	480	660	577	572	15.74	cps
Silver	109-1	497	600	463	520	13.70	cps
Sodium	23-2	19491689	19460591	19422397	19458226	0.18	cps
Strontium	86-1	706345	716458	715543	712782	0.78	cps
Strontium	88-1	6366800	6396324	6383458	6382194	0.23	cps
Sulfur	34-1	10331072	10284399	10174761	10263410	0.78	cps
Terbium	159-1	14554729	14669738	14608206	14610891	0.39	cps
Terbium	159-2	10201319	10206276	10229916	10212504	0.15	cps
Thallium	203-1	523	603	500	542	9.99	cps
Thallium	205-1	1307	1257	1353	1306	3.70	cps
Tin	118-1	6478	6585	6525	6529	0.82	cps
Titanium	47-1	8512	8522	8969	8668	3.01	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-14DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-13-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:43:00	DataFile Name :	044SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	83000	84342	83691	83677	0.80	cps
Vanadium	51-2	1181762	1193666	1189677	1188368	0.51	cps
Yttrium	89-1	16393274	16474948	16319036	16395753	0.48	cps
Yttrium	89-2	4304625	4309743	4302473	4305614	0.09	cps
Zinc	66-2	275324	272015	273155	273498	0.61	cps
Zirconium	90-1	13706	13917	13573	13732	1.26	cps
Zirconium	91-1	3054	2827	3034	2971	4.22	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-16DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-14-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:46:07	DataFile Name :	045SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	9571588	9467179	9370505	9469757	1.06	cps
Antimony	121-1	6278	6215	6341	6278	1.01	cps
Arsenic	75-2	1117	1193	1097	1136	4.49	cps
Barium	135-1	113410	115057	115402	114623	0.93	cps
Barium	137-1	198351	198372	198520	198414	0.05	cps
Beryllium	9-1	367	350	400	372	6.84	cps
Bismuth	209-1	8295642	8090144	8071185	8152324	1.53	cps
Bismuth	209-2	7020449	6991771	7040970	7017730	0.35	cps
Bromine	81-1	14454	14601	14497	14517	0.52	cps
Bromine	81-2	430	427	393	417	4.87	cps
Cadmium	108-1	63	50	83	66	25.59	cps
Cadmium	106-1	4117	3964	3741	3941	4.81	cps
Cadmium	111-1	3178	3096	2943	3073	3.87	cps
Calcium	43-1	1518068	1546169	1530480	1531572	0.92	cps
Calcium	44-1	24420180	24622208	24438877	24493755	0.46	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	84461	84015	83398	83958	0.64	cps
Cobalt	59-2	440174	440028	440230	440144	0.02	cps
Copper	63-2	180076	179249	178470	179265	0.45	cps
Dysprosium	156-1	137058	138350	138629	138012	0.61	cps
Dysprosium	156-2	110953	111965	112734	111884	0.80	cps
Erbium	164-1	160443	159606	158825	159625	0.51	cps
Erbium	164-2	114478	113271	115341	114363	0.91	cps
Gadolinium	160-1	145523	146207	144661	145464	0.53	cps
Gadolinium	160-2	108455	109057	109342	108951	0.42	cps
Holmium	165-1	14285297	14243854	14279140	14269430	0.16	cps
Holmium	165-2	10182978	10209857	10354564	10249133	0.90	cps
Indium	115-1	11519194	11701369	11644624	11621729	0.80	cps
Indium	115-2	4202986	4207113	4246917	4219006	0.58	cps
Iron	56-2	641603137	642949617	640176764	641576506	0.22	cps
Iron	57-2	15764855	15717948	15666610	15716471	0.31	cps
Iron	54-2	34322212	34623966	34659643	34535274	0.54	cps
Krypton	83-1	490	560	413	488	15.04	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-16DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-14-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:46:07	DataFile Name :	045SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	20135	19825	20075	20011	0.82	cps
Lead	207-1	16767	16944	16387	16699	1.71	cps
Lead	208-1	78950	79205	78282	78812	0.60	cps
Lithium	6-1	1681734	1666691	1665748	1671391	0.54	cps
Magnesium	24-2	21589699	21439581	21319587	21449622	0.63	cps
Manganese	55-2	5369033	5418776	5375595	5387802	0.50	cps
Molybdenum	94-1	4464	4364	4624	4484	2.93	cps
Molybdenum	95-1	847	900	800	849	5.89	cps
Molybdenum	96-1	8976	9266	8933	9058	2.00	cps
Molybdenum	97-1	583	653	620	619	5.66	cps
Molybdenum	98-1	1183	1360	1193	1246	7.97	cps
Neodymium	150-1	168706	169732	167644	168694	0.62	cps
Neodymium	150-2	105239	103714	104812	104588	0.75	cps
Nickel	60-2	135441	134426	136013	135293	0.59	cps
Phosphorus	31-2	11308	10574	10891	10924	3.37	cps
Potassium	39-2	554336	552727	552302	553122	0.19	cps
Rhodium	103-1	10506735	10500700	10599794	10535743	0.53	cps
Rhodium	103-2	6306708	6347851	6356009	6336856	0.42	cps
Scandium	45-1	6431571	6502286	6451849	6461902	0.56	cps
Scandium	45-2	552276	549596	550076	550649	0.26	cps
Selenium	82-1	274	218	303	265	16.32	cps
Selenium	77-2	337	310	313	320	4.54	cps
Selenium	78-2	687	657	727	690	5.09	cps
Silicon	28-1	122661608	124272508	124241911	123725343	0.74	cps
Silver	107-1	740	723	743	736	1.46	cps
Silver	109-1	677	637	617	643	4.75	cps
Sodium	23-2	16178543	16141644	15995783	16105323	0.60	cps
Strontium	86-1	519405	521072	520999	520492	0.18	cps
Strontium	88-1	4675947	4651523	4680913	4669461	0.34	cps
Sulfur	34-1	10678652	10620711	10653053	10650805	0.27	cps
Terbium	159-1	14759191	14676253	14506021	14647155	0.88	cps
Terbium	159-2	10253782	10217148	10339405	10270111	0.61	cps
Thallium	203-1	667	543	667	626	11.38	cps
Thallium	205-1	1457	1330	1383	1390	4.58	cps
Tin	118-1	6502	6648	6655	6602	1.31	cps
Titanium	47-1	8669	8286	8643	8532	2.51	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-16DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-14-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:46:07	DataFile Name :	045SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	79200	80538	81045	80261	1.19	cps
Vanadium	51-2	1205246	1203370	1206140	1204919	0.12	cps
Yttrium	89-1	16315481	16223310	16239906	16259566	0.30	cps
Yttrium	89-2	4258408	4313884	4279047	4283780	0.65	cps
Zinc	66-2	282258	283225	280657	282047	0.46	cps
Zirconium	90-1	9680	10167	9560	9802	3.28	cps
Zirconium	91-1	2010	2160	2187	2119	4.49	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-18DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-06R-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:49:18	DataFile Name :	046SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	5656086	5640753	5596889	5631243	0.55	cps
Antimony	121-1	28528	28538	28856	28641	0.65	cps
Arsenic	75-2	1170	1193	1247	1203	3.27	cps
Barium	135-1	130343	129754	131638	130578	0.74	cps
Barium	137-1	225330	225231	225930	225497	0.17	cps
Beryllium	9-1	777	820	700	766	7.94	cps
Bismuth	209-1	8193684	8084525	8323988	8200733	1.46	cps
Bismuth	209-2	7095497	7041782	7074623	7070634	0.38	cps
Bromine	81-1	15165	14594	14551	14770	2.32	cps
Bromine	81-2	577	640	587	601	5.66	cps
Cadmium	108-1	40	60	80	60	33.33	cps
Cadmium	106-1	4207	4017	3997	4074	2.85	cps
Cadmium	111-1	3134	2993	3075	3068	2.30	cps
Calcium	43-1	2930763	2916377	2925981	2924374	0.25	cps
Calcium	44-1	46633278	46616409	46330981	46526889	0.37	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	42663	43148	42490	42767	0.80	cps
Cobalt	59-2	485728	484137	482404	484089	0.34	cps
Copper	63-2	95153	94939	93949	94680	0.68	cps
Dysprosium	156-1	169057	168311	167695	168354	0.41	cps
Dysprosium	156-2	133107	135785	132881	133924	1.21	cps
Erbium	164-1	213720	215845	216099	215221	0.61	cps
Erbium	164-2	152934	151559	151182	151892	0.61	cps
Gadolinium	160-1	178961	180899	179213	179691	0.59	cps
Gadolinium	160-2	133213	134354	134363	133977	0.49	cps
Holmium	165-1	14430119	14293437	14464223	14395926	0.63	cps
Holmium	165-2	10126151	10208808	10267198	10200719	0.69	cps
Indium	115-1	11461911	11467924	11634051	11521295	0.85	cps
Indium	115-2	4137968	4154889	4150019	4147625	0.21	cps
Iron	56-2	893774440	902583027	901718253	899358573	0.54	cps
Iron	57-2	22439806	22276177	22043561	22253181	0.89	cps
Iron	54-2	49295954	48913933	48162579	48790822	1.18	cps
Krypton	83-1	633	510	597	580	10.92	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-18DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-06R-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:49:18	DataFile Name :	046SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	6021	5768	6332	6040	4.67	cps
Lead	207-1	5138	4858	4928	4974	2.93	cps
Lead	208-1	23285	23148	24159	23530	2.33	cps
Lithium	6-1	1669648	1665213	1688462	1674441	0.74	cps
Magnesium	24-2	17217747	17136273	17075684	17143235	0.42	cps
Manganese	55-2	11900327	11897263	11827121	11874904	0.35	cps
Molybdenum	94-1	6375	6258	6301	6311	0.93	cps
Molybdenum	95-1	1110	1067	1073	1083	2.15	cps
Molybdenum	96-1	12622	11905	12232	12253	2.93	cps
Molybdenum	97-1	603	713	730	682	10.09	cps
Molybdenum	98-1	1107	1107	1220	1145	5.72	cps
Neodymium	150-1	187542	191843	189960	189782	1.14	cps
Neodymium	150-2	115878	114987	116674	115846	0.73	cps
Nickel	60-2	69918	70096	68871	69628	0.95	cps
Phosphorus	31-2	4757	4918	4877	4851	1.72	cps
Potassium	39-2	532439	529713	524777	528976	0.73	cps
Rhodium	103-1	10574266	10419115	10218980	10404120	1.71	cps
Rhodium	103-2	6189367	6205263	6198508	6197713	0.13	cps
Scandium	45-1	6422182	6411167	6363239	6398862	0.49	cps
Scandium	45-2	528520	535093	534654	532756	0.69	cps
Selenium	82-1	323	412	353	363	12.47	cps
Selenium	77-2	327	403	413	381	12.44	cps
Selenium	78-2	753	673	693	707	5.89	cps
Silicon	28-1	145210191	148932688	146073231	146738703	1.33	cps
Silver	107-1	673	583	597	618	7.86	cps
Silver	109-1	463	603	583	550	13.77	cps
Sodium	23-2	14092660	13929021	13771598	13931093	1.15	cps
Strontium	86-1	926474	925657	921705	924612	0.28	cps
Strontium	88-1	8320132	8371664	8310519	8334105	0.39	cps
Sulfur	34-1	10886417	10678384	10639125	10734642	1.24	cps
Terbium	159-1	14943544	14605708	14666715	14738655	1.22	cps
Terbium	159-2	9994227	10209318	10099491	10101012	1.06	cps
Thallium	203-1	600	537	520	552	7.64	cps
Thallium	205-1	1250	1253	1190	1231	2.90	cps
Tin	118-1	3014	3227	3280	3174	4.45	cps
Titanium	47-1	4894	5151	5044	5030	2.56	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	P5306-18DLX5	Instrumnet Name :	P7
Client Sample ID :	OU4-VSL-06R-121224DL	Dilution Factor :	5
Date & Time Acquired :	2024-12-23 13:49:18	DataFile Name :	046SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	101805	101321	102184	101770	0.43	cps
Vanadium	51-2	1090593	1088153	1090707	1089818	0.13	cps
Yttrium	89-1	17246701	17182258	17132750	17187236	0.33	cps
Yttrium	89-2	4483034	4438920	4527620	4483191	0.99	cps
Zinc	66-2	247613	245590	243128	245444	0.92	cps
Zirconium	90-1	14264	14437	14060	14254	1.32	cps
Zirconium	91-1	3187	3127	2910	3075	4.73	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	PB165834TB	Instrumnet Name :	P7
Client Sample ID :	PB165834TB	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:52:26	DataFile Name :	047SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1053	1120	1090	1088	3.07	cps
Antimony	121-1	22508	22024	22528	22353	1.28	cps
Arsenic	75-2	17	20	13	17	20.01	cps
Barium	135-1	107	150	113	123	18.92	cps
Barium	137-1	210	267	237	238	11.92	cps
Beryllium	9-1	93	57	93	81	26.10	cps
Bismuth	209-1	8517685	8505968	8431232	8484962	0.55	cps
Bismuth	209-2	7305990	7277811	7356459	7313420	0.54	cps
Bromine	81-1	15098	15201	14491	14930	2.57	cps
Bromine	81-2	127	113	153	131	15.53	cps
Cadmium	108-1	7	23	3	11	96.43	cps
Cadmium	106-1	3217	3120	3077	3138	2.28	cps
Cadmium	111-1	2271	2195	2175	2213	2.28	cps
Calcium	43-1	1103	920	687	903	23.12	cps
Calcium	44-1	22023	17847	16272	18714	15.88	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2457	2467	2407	2444	1.32	cps
Cobalt	59-2	227	253	200	227	11.77	cps
Copper	63-2	1033	1043	1017	1031	1.31	cps
Dysprosium	156-1	60	27	13	33	72.11	cps
Dysprosium	156-2	20	17	10	16	32.73	cps
Erbium	164-1	93	40	47	60	48.43	cps
Erbium	164-2	47	47	40	44	8.66	cps
Gadolinium	160-1	97	83	57	79	25.82	cps
Gadolinium	160-2	430	433	477	447	5.83	cps
Holmium	165-1	14248354	14150808	14277176	14225446	0.47	cps
Holmium	165-2	10298633	10293238	10445285	10345719	0.83	cps
Indium	115-1	11801102	11909698	11856521	11855774	0.46	cps
Indium	115-2	4338403	4428528	4398725	4388552	1.05	cps
Iron	56-2	79824	76402	69975	75400	6.63	cps
Iron	57-2	2490	2560	2294	2448	5.65	cps
Iron	54-2	6295	5724	5294	5771	8.70	cps
Krypton	83-1	247	207	233	229	8.90	cps

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On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	PB165834TB	Instrumnet Name :	P7
Client Sample ID :	PB165834TB	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:52:26	DataFile Name :	047SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1693	1717	1677	1696	1.18	cps
Lead	207-1	1633	1597	1490	1573	4.73	cps
Lead	208-1	7111	7174	6881	7055	2.19	cps
Lithium	6-1	1673441	1676902	1678080	1676141	0.14	cps
Magnesium	24-2	1773	1767	1617	1719	5.15	cps
Manganese	55-2	7545	7469	7455	7490	0.65	cps
Molybdenum	94-1	420	417	350	396	9.98	cps
Molybdenum	95-1	253	217	173	214	18.67	cps
Molybdenum	96-1	263	283	293	280	5.46	cps
Molybdenum	97-1	123	130	140	131	6.40	cps
Molybdenum	98-1	313	257	343	304	14.46	cps
Neodymium	150-1	37	37	37	37	0.00	cps
Neodymium	150-2	10	3	13	9	57.30	cps
Nickel	60-2	577	660	513	583	12.61	cps
Phosphorus	31-2	177	130	193	167	19.70	cps
Potassium	39-2	50978	50564	50828	50790	0.41	cps
Rhodium	103-1	11101370	11065017	10975362	11047250	0.59	cps
Rhodium	103-2	6657432	6769194	6756562	6727730	0.91	cps
Scandium	45-1	6428488	6414067	6424018	6422191	0.11	cps
Scandium	45-2	554511	558535	559935	557660	0.50	cps
Selenium	82-1	125	130	95	117	16.28	cps
Selenium	77-2	3	0	0	1	173.21	cps
Selenium	78-2	500	533	437	490	10.02	cps
Silicon	28-1	777809	779187	767982	774993	0.79	cps
Silver	107-1	143	143	160	149	6.46	cps
Silver	109-1	107	83	100	97	12.44	cps
Sodium	23-2	118733	119297	118139	118723	0.49	cps
Strontium	86-1	583	513	490	529	9.18	cps
Strontium	88-1	2044	1643	1340	1676	21.06	cps
Sulfur	34-1	344090	343068	343325	343494	0.15	cps
Terbium	159-1	14902291	14647712	14600601	14716868	1.10	cps
Terbium	159-2	10149663	10304930	10326017	10260203	0.94	cps
Thallium	203-1	320	383	330	344	9.88	cps
Thallium	205-1	720	593	620	644	10.36	cps
Tin	118-1	2434	2550	2777	2587	6.75	cps
Titanium	47-1	190	230	203	208	9.80	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	PB165834TB	Instrumnet Name :	P7
Client Sample ID :	PB165834TB	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:52:26	DataFile Name :	047SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	33	33	13	27	43.31	cps
Vanadium	51-2	73	107	83	88	19.49	cps
Yttrium	89-1	13762181	13938699	13836730	13845870	0.64	cps
Yttrium	89-2	3727420	3754285	3731935	3737880	0.38	cps
Zinc	66-2	897	913	1030	947	7.67	cps
Zirconium	90-1	643	667	773	694	9.98	cps
Zirconium	91-1	187	123	150	153	20.74	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:55:45	DataFile Name :	048CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	14110195	13980892	13836038	13975708	0.98	cps
Antimony	121-1	6373487	6291788	6173348	6279541	1.60	cps
Arsenic	75-2	301885	299951	297737	299858	0.69	cps
Barium	135-1	8299228	8254787	8177992	8244002	0.74	cps
Barium	137-1	14154509	14312779	13892892	14120060	1.50	cps
Beryllium	9-1	732202	733273	734375	733283	0.15	cps
Bismuth	209-1	7807184	7917467	7903690	7876114	0.76	cps
Bismuth	209-2	6541399	6603106	6549953	6564819	0.51	cps
Bromine	81-1	13736	13016	13526	13426	2.76	cps
Bromine	81-2	147	100	143	130	20.03	cps
Cadmium	108-1	111974	110496	111581	111351	0.69	cps
Cadmium	106-1	160415	159471	158046	159311	0.75	cps
Cadmium	111-1	1504441	1492494	1482876	1493270	0.72	cps
Calcium	43-1	8358845	8287455	8278243	8308181	0.53	cps
Calcium	44-1	135134608	132645735	132822431	133534258	1.04	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2427073	2413435	2422986	2421165	0.29	cps
Cobalt	59-2	3766416	3732698	3736779	3745298	0.49	cps
Copper	63-2	26258315	26339460	26053863	26217213	0.56	cps
Dysprosium	156-1	287	317	273	292	7.59	cps
Dysprosium	156-2	423	483	547	484	12.73	cps
Erbium	164-1	357	313	250	307	17.49	cps
Erbium	164-2	207	180	187	191	7.26	cps
Gadolinium	160-1	323	330	237	297	17.55	cps
Gadolinium	160-2	623	533	593	583	7.86	cps
Holmium	165-1	14355869	13988410	14141981	14162087	1.30	cps
Holmium	165-2	10097842	9956376	9928697	9994305	0.91	cps
Indium	115-1	11050986	10830281	10837858	10906375	1.15	cps
Indium	115-2	3904913	3875200	3858099	3879404	0.61	cps
Iron	56-2	567991392	574415191	566553858	569653480	0.73	cps
Iron	57-2	14000402	14119409	13980958	14033590	0.53	cps
Iron	54-2	30773589	30800710	30616346	30730215	0.32	cps
Krypton	83-1	240	270	220	243	10.34	cps

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:55:45	DataFile Name :	048CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	23190258	23472133	23137596	23266662	0.77	cps
Lead	207-1	21034069	21123037	20908497	21021868	0.51	cps
Lead	208-1	94720556	95817107	94820861	95119508	0.64	cps
Lithium	6-1	1703837	1668063	1705937	1692612	1.26	cps
Magnesium	24-2	107902165	107393332	106846228	107380575	0.49	cps
Manganese	55-2	19393191	19452561	19223966	19356573	0.61	cps
Molybdenum	94-1	22334790	22059780	21872430	22089000	1.05	cps
Molybdenum	95-1	32633324	31647220	31687638	31989394	1.74	cps
Molybdenum	96-1	35450311	34933434	34965766	35116504	0.82	cps
Molybdenum	97-1	20081099	19799387	19714636	19865041	0.97	cps
Molybdenum	98-1	51665161	51281198	50873206	51273188	0.77	cps
Neodymium	150-1	473	483	483	480	1.20	cps
Neodymium	150-2	193	167	137	166	17.12	cps
Nickel	60-2	887210	889011	886593	887604	0.14	cps
Phosphorus	31-2	123433	124118	122999	123517	0.46	cps
Potassium	39-2	69508809	69722387	69036667	69422621	0.51	cps
Rhodium	103-1	9743896	9485687	9728895	9652826	1.50	cps
Rhodium	103-2	5769691	5697072	5707178	5724647	0.69	cps
Scandium	45-1	6172494	6106754	6091858	6123702	0.70	cps
Scandium	45-2	515818	514120	510878	513605	0.49	cps
Selenium	82-1	90308	90485	89678	90157	0.47	cps
Selenium	77-2	9023	9023	9173	9073	0.96	cps
Selenium	78-2	30952	30685	30565	30734	0.65	cps
Silicon	28-1	3675739	3600387	3653475	3643200	1.06	cps
Silver	107-1	7737044	7558009	7587010	7627354	1.26	cps
Silver	109-1	7479965	7350272	7391612	7407283	0.89	cps
Sodium	23-2	173179231	174612737	175023664	174271877	0.56	cps
Strontium	86-1	2058955	2030776	2034529	2041420	0.75	cps
Strontium	88-1	17873108	17504897	17457306	17611770	1.29	cps
Sulfur	34-1	627340	611388	614388	617705	1.37	cps
Terbium	159-1	14460956	14377474	14336409	14391613	0.44	cps
Terbium	159-2	9833195	10012253	9707972	9851140	1.55	cps
Thallium	203-1	6073153	6001501	5972578	6015744	0.86	cps
Thallium	205-1	14300991	14398034	14185990	14295005	0.74	cps
Tin	118-1	5262514	5285667	5225373	5257851	0.58	cps
Titanium	47-1	7787994	7754330	7678957	7740427	0.72	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:55:45	DataFile Name :	048CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	19249597	19366968	19473217	19363261	0.58	cps
Vanadium	51-2	2160569	2174767	2197903	2177746	0.87	cps
Yttrium	89-1	13396087	13074481	13154443	13208337	1.27	cps
Yttrium	89-2	3428294	3405520	3391892	3408569	0.54	cps
Zinc	66-2	4353558	4334565	4296751	4328291	0.67	cps
Zirconium	90-1	11006706	10773355	10666837	10815633	1.61	cps
Zirconium	91-1	2425403	2378058	2385708	2396390	1.06	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:58:28	DataFile Name :	049CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	400	370	473	414	12.83	cps
Antimony	121-1	2960	2744	2337	2680	11.81	cps
Arsenic	75-2	10	20	10	13	43.30	cps
Barium	135-1	820	463	353	546	44.72	cps
Barium	137-1	1307	733	493	844	49.49	cps
Beryllium	9-1	190	177	207	191	7.86	cps
Bismuth	209-1	8210251	8540599	8700498	8483783	2.95	cps
Bismuth	209-2	7440373	7355044	7359123	7384847	0.65	cps
Bromine	81-1	13773	13717	13606	13699	0.62	cps
Bromine	81-2	297	227	193	239	22.08	cps
Cadmium	108-1	27	23	17	22	22.91	cps
Cadmium	106-1	2894	3080	2900	2958	3.58	cps
Cadmium	111-1	2217	2267	2112	2198	3.59	cps
Calcium	43-1	1033	760	623	806	25.92	cps
Calcium	44-1	21042	15805	13549	16799	22.88	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1393	1453	1357	1401	3.48	cps
Cobalt	59-2	183	183	210	192	8.01	cps
Copper	63-2	1477	1507	1323	1436	6.85	cps
Dysprosium	156-1	7	13	10	10	33.30	cps
Dysprosium	156-2	7	7	0	4	86.60	cps
Erbium	164-1	57	63	60	60	5.55	cps
Erbium	164-2	23	33	43	33	30.00	cps
Gadolinium	160-1	47	50	40	46	11.18	cps
Gadolinium	160-2	460	413	450	441	5.57	cps
Holmium	165-1	13484747	14022742	14115561	13874350	2.45	cps
Holmium	165-2	10276082	9990060	10067227	10111123	1.46	cps
Indium	115-1	11041638	11424222	11741821	11402560	3.07	cps
Indium	115-2	4287331	4228638	4231299	4249089	0.78	cps
Iron	56-2	34807	34209	33347	34121	2.15	cps
Iron	57-2	1313	1197	1297	1269	4.97	cps
Iron	54-2	3287	3227	3147	3220	2.18	cps
Krypton	83-1	217	253	233	234	7.83	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:58:28	DataFile Name :	049CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	2460	1893	1400	1918	27.66	cps
Lead	207-1	2484	1490	1363	1779	34.48	cps
Lead	208-1	10749	7241	5987	7992	30.88	cps
Lithium	6-1	1706119	1764124	1806498	1758914	2.86	cps
Magnesium	24-2	3297	3177	2957	3144	5.49	cps
Manganese	55-2	830	817	820	822	0.84	cps
Molybdenum	94-1	2774	2017	1487	2092	30.91	cps
Molybdenum	95-1	3714	2364	1697	2591	39.66	cps
Molybdenum	96-1	4031	2604	1910	2848	37.96	cps
Molybdenum	97-1	2167	1403	1063	1545	36.59	cps
Molybdenum	98-1	5558	3644	2867	4023	34.43	cps
Neodymium	150-1	3	10	0	4	114.60	cps
Neodymium	150-2	3	3	3	3	0.00	cps
Nickel	60-2	410	320	307	346	16.27	cps
Phosphorus	31-2	197	193	183	191	3.63	cps
Potassium	39-2	51955	51718	50624	51432	1.38	cps
Rhodium	103-1	9894046	10619392	10689274	10400904	4.23	cps
Rhodium	103-2	6469842	6484316	6392819	6448992	0.76	cps
Scandium	45-1	5783690	6083575	6186004	6017756	3.47	cps
Scandium	45-2	528395	526091	524891	526459	0.34	cps
Selenium	82-1	133	85	67	95	35.99	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	423	447	373	414	9.04	cps
Silicon	28-1	634412	620686	613431	622843	1.71	cps
Silver	107-1	1333	977	920	1077	20.81	cps
Silver	109-1	1187	860	740	929	24.89	cps
Sodium	23-2	32648	32160	32488	32432	0.77	cps
Strontium	86-1	577	547	527	550	4.58	cps
Strontium	88-1	1893	1120	977	1330	37.08	cps
Sulfur	34-1	171800	172673	171093	171855	0.46	cps
Terbium	159-1	13597139	14533134	14726238	14285504	4.23	cps
Terbium	159-2	10281553	10055872	9893338	10076921	1.93	cps
Thallium	203-1	970	883	723	859	14.57	cps
Thallium	205-1	2564	1970	1593	2042	23.95	cps
Tin	118-1	2194	2117	1933	2081	6.42	cps
Titanium	47-1	877	520	450	616	37.17	cps

Reviewed By:jaswal
On:12/31/2024 4:01:39 AM
Inst Id :P7
LB :LB134070

LB Number :	LB134070	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2024-12-23 13:58:28	DataFile Name :	049CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	1567	953	780	1100	37.58	cps
Vanadium	51-2	73	67	63	68	7.51	cps
Yttrium	89-1	12781077	13224264	13485829	13163724	2.71	cps
Yttrium	89-2	3553298	3505859	3528943	3529367	0.67	cps
Zinc	66-2	360	390	387	379	4.34	cps
Zirconium	90-1	1837	1540	1373	1583	14.82	cps
Zirconium	91-1	387	333	247	322	21.93	cps

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB165737

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 : M4909

Hood ID : #1

Block ID: 1. HG HOT BLOCK#3 2. N/A

Start Digest Date: 12/19/2024 **Time :** 08:10 **Temp :** 93 °C

End Digest Date: 12/19/2024 **Time :** 10:10 **Temp :** 94 °C

Digestion tube ID: M5595

Block thermometer ID: HG-DIG#3

Dig Technician Signature: MB

Supervisor Signature: [signature]

Temp : 1. 93°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
ICV	30mL	MP83702
CCV	30mL	MP83704
CRA	30mL	MP83706
Blank Spike	0.48mL	MP83695
Matrix Spike	0.48mL	MP83695

Chemical Used	ML/SAMPLE USED	Lot Number
HNO3/H2SO4(1:2)	2.5mL	MP83691
KMnO4 (5%)	4.5mL	MP83692
K2S2O8 (5%)	2.5mL	MP83693
Hydroxylamine HCL (12%)	2.0mL	MP83694
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	MP83696
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	30mL	MP83697
2.5 ppb	S2.5	30mL	MP83698
5.0 ppb	S5.0	30mL	MP83699
7.5 ppb	S7.5	30mL	MP83700
10.0 ppb	S10.0	30mL	MP83701
ICV	ICV	30mL	MP83702
ICB	ICB	30mL	MP83703
CCV	CCV	30mL	MP83704
CCB	CCB	30mL	MP83705
CRI	CRI	30mL	MP83706
CHK STD	CHK STD	30mL	MP83707

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
12/19/24 @ 10:35	MB - Dig. Lab	MB - Metals Lab
	Preparation Group	**Analysis Group**

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB165737

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Comment	Prep Pos
P5306-02	OU4-VSL-07-121224	30	30	<2	N/A	3-15
P5306-02DUP	OU4-VSL-07-121224DUP	30	30	<2	N/A	16
P5306-02MS	OU4-VSL-07-121224MS	30	30	<2	MP83695	17
P5306-02MSD	OU4-VSL-07-121224MSD	30	30	<2	MP83695	18
P5306-04	OU4-VSL-08-121224	30	30	<2	N/A	19
P5306-06	OU4-VSL-09-121224	30	30	<2	N/A	20
P5306-08	OU4-VSL-10-121224	30	30	<2	N/A	21
P5306-10	OU4-VSL-11-121224	30	30	<2	N/A	22
P5306-12	OU4-VSL-12-121224	30	30	<2	N/A	23
P5306-14	OU4-VSL-13-121224	30	30	<2	N/A	24
P5306-16	OU4-VSL-14-121224	30	30	<2	N/A	25
~~PB165737BL~~ PB165737BL	~~PBW737~~ PB165737BL	30	30	<2	N/A	26
PB165737BS	LCS737	30	30	<2	MP83695	27
PB165737TB	LEB737	30	30	<2	N/A	28

Alliance TECHNICAL GROUP

SPLP EXTRACTION LOGPAGE

PB165699

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-1 / T-2

TCLP Filter ID : 114771

Start Prep Date : 12/17/2024 Time : 15:00

End Prep Date : 12/18/2024 Time : 08:15

Combination Ratio : 20

ZHE Cleaning Batch : N/A

Initial Room Temperature: 23 °C

Final Room Temperature: 22 °C

TCLP Technician Signature : JP

Supervisor By : 12

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	N/A	WP11806
N/A	N/A	N/A
N/A	N/A	N/A
pH Strips	N/A	W1931,W1934,W2350,W2755
pH Strips	N/A	W1937,W1938,W1939,W1940,W1941,W1942
N/A	N/A	N/A
120ml Plastic bottle	N/A	405130101
1:1 HNO3	N/A	MP83122

Extraction Conformance/Non-Conformance Comments:

Matrix spikes are added after fiftration and before preservation. TUMBLER T-1 checked,30 rpm. p5306-02 is used for MS-MSD.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
12/18/24 10:00	JP Lab Room	SL28. INT-DIG.
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB165834

SOP ID : M3010A-Digestion-17

SDG No : N/A

Matrix : WATER

Pippete ID: ICP A

Balance ID : N/A

Filter paper ID : N/A

pH Strip ID : M6069

Hood ID : #3

Block ID: 1. HOT BLOCK #1 2. N/A

Start Digest Date: 12/18/2024 **Time :** 12:00 **Temp :** 95 °C

End Digest Date: 12/18/2024 **Time :** 14:10 **Temp :** 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: SLD.

Supervisor Signature:

Temp : 1. 95°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
Spike Sol 1	0.50	MP83717
Spike Sol 2	1.00	MP83718
Spike Sol 3	1.00	MP83719
Spike Sol 4	1.00	MP83720
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Conc. HNO3	3.00	M6126
1:1 HCL	5.00	MP83499
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 : 95 C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
12/18/24 15:10	SL25. met digestion	
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB165834

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
P5306-02	OU4-VSL-07-121224	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	1
P5306-02MS	OU4-VSL-07-121224MS	<2	50	25	Colorless	Colorless	Clear	Clear	MP83717, MP83718, MP83719	3
P5306-02MSD	OU4-VSL-07-121224MSD	<2	50	25	Colorless	Colorless	Clear	Clear	MP83717, MP83718, MP83719	4
P5306-02DUP	OU4-VSL-07-121224DUP	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	2
P5306-04	OU4-VSL-08-121224	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	5
P5306-06	OU4-VSL-09-121224	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	6
P5306-08	OU4-VSL-10-121224	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	7
P5306-10	OU4-VSL-11-121224	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	8
P5306-12	OU4-VSL-12-121224	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	9
P5306-14	OU4-VSL-13-121224	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	10
P5306-16	OU4-VSL-14-121224	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	11
P5306-18	OU4-VSL-06R-121224	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	12
PB165834BL	PBW834	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	13
PB165834BS	LCS834	<2	50	25	Colorless	Colorless	Clear	Clear	MP83717, MP83718, MP83719	14
PB165834TB	LEB834	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	15

Alliance TECHNICAL GROUP

SPLP EXTRACTION LOGPAGE

PB165699

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 Po
P5306-02	OU4-VSL-07-121224	01	100.03	2000	N/A	N/A	N/A	3.5	1.0	T-1
P5306-04	OU4-VSL-08-121224	02	100.04	2000	N/A	N/A	N/A	4.0	1.5	T-1
P5306-06	OU4-VSL-09-121224	03	100.02	2000	N/A	N/A	N/A	4.0	1.5	T-1
P5306-08	OU4-VSL-10-121224	04	100.03	2000	N/A	N/A	N/A	3.5	1.0	T-1
P5306-10	OU4-VSL-11-121224	05	100.02	2000	N/A	N/A	N/A	4.5	1.0	T-1
P5306-12	OU4-VSL-12-121224	06	100.01	2000	N/A	N/A	N/A	4.0	1.5	T-1
P5306-14	OU4-VSL-13-121224	07	100.02	2000	N/A	N/A	N/A	3.5	1.0	T-1
P5306-16	OU4-VSL-14-121224	08	100.03	2000	N/A	N/A	N/A	4.0	1.5	T-1
P5306-18	OU4-VSL-06R-121224	09	100.04	2000	N/A	N/A	N/A	4.0	1.0	T-1
PB165699TB	LEB699	10	N/A	2000	N/A	N/A	N/A	4.24	1.5	T-1

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 # LB134010

Review By	jaswal	Review On	12/20/2024 9:48:43 PM
Supervise By	mohan	Supervise On	12/20/2024 9:50:24 PM

STD. NAME	STD REF.#
ICAL Standard	MP83696,MP83697,MP83698,MP83699,MP83700,MP83701
ICV Standard	MP83702
CCV Standard	MP83704
ICSA Standard	
CRI Standard	MP83706
LCS Standard	
Chk Standard	MP83703,MP83705,MP83707,MP83709

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	12/19/24 11:39		Mohan	OK
2	S0.2	S0.2	CAL2	12/19/24 11:42		Mohan	OK
3	S2.5	S2.5	CAL3	12/19/24 11:44		Mohan	OK
4	S5	S5	CAL4	12/19/24 11:48		Mohan	OK
5	S7.5	S7.5	CAL5	12/19/24 11:50		Mohan	OK
6	S10	S10	CAL6	12/19/24 11:55		Mohan	OK
7	ICV25	ICV25	ICV	12/19/24 11:58		Mohan	OK
8	ICB25	ICB25	ICB	12/19/24 12:00		Mohan	OK
9	CCV46	CCV46	CCV	12/19/24 12:03		Mohan	OK
10	CCB46	CCB46	CCB	12/19/24 12:05		Mohan	OK
11	CRA	CRA	CRDL	12/19/24 12:07		Mohan	OK
12	HighStd	HighStd	HIGH STD	12/19/24 12:18		Mohan	OK
13	ChkStd	ChkStd	SAM	12/19/24 12:26		Mohan	OK
14	PB165735BL	PB165735BL	MB	12/19/24 12:31		Mohan	OK
15	PB165735BS	PB165735BS	LCS	12/19/24 12:39		Mohan	OK
16	P5279-02	ROCKAWAY-PARK	SAM	12/19/24 12:41		Mohan	OK
17	P5279-02DUP	ROCKAWAY-PARKDU	DUP	12/19/24 12:43		Mohan	OK
18	P5279-02MS	ROCKAWAY-PARKM	MS	12/19/24 12:46		Mohan	OK

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Review By	jaswal	Review On	12/20/2024 9:48:43 PM
Supervise By	mohan	Supervise On	12/20/2024 9:50:24 PM

STD. NAME	STD REF.#
ICAL Standard	MP83696,MP83697,MP83698,MP83699,MP83700,MP83701
ICV Standard	MP83702
CCV Standard	MP83704
ICSA Standard	
CRI Standard	MP83706
LCS Standard	
Chk Standard	MP83703,MP83705,MP83707,MP83709

19	P5279-02MSD	ROCKAWAY-PARKMS	MSD	12/19/24 12:48		Mohan	OK
20	PB165736BL	PB165736BL	MB	12/19/24 12:53		Mohan	OK
21	CCV47	CCV47	CCV	12/19/24 12:58		Mohan	OK
22	CCB47	CCB47	CCB	12/19/24 13:01		Mohan	OK
23	PB165736BS	PB165736BS	LCS	12/19/24 13:05		Mohan	OK
24	P5291-13	WC-20241213	SAM	12/19/24 13:08		Mohan	OK
25	P5291-13DUP	WC-20241213DUP	DUP	12/19/24 13:10		Mohan	OK
26	P5291-13MS	WC-20241213MS	MS	12/19/24 13:12		Mohan	OK
27	P5291-13MSD	WC-20241213MSD	MSD	12/19/24 13:14		Mohan	OK
28	PB165737BL	PB165737BL	MB	12/19/24 13:17		Mohan	OK
29	PB165737BS	PB165737BS	LCS	12/19/24 13:19		Mohan	OK
30	P5306-02	OU4-VSL-07-121224	SAM	12/19/24 13:26		Mohan	OK
31	P5306-02DUP	OU4-VSL-07-121224D	DUP	12/19/24 13:28		Mohan	OK
32	P5306-02MS	OU4-VSL-07-121224M	MS	12/19/24 13:33		Mohan	OK
33	CCV48	CCV48	CCV	12/19/24 13:36		Mohan	OK
34	CCB48	CCB48	CCB	12/19/24 13:38		Mohan	OK
35	P5306-02MSD	OU4-VSL-07-121224M	MSD	12/19/24 13:40		Mohan	OK
36	P5306-04	OU4-VSL-08-121224	SAM	12/19/24 13:42		Mohan	OK
37	P5306-06	OU4-VSL-09-121224	SAM	12/19/24 13:45		Mohan	OK
38	P5306-08	OU4-VSL-10-121224	SAM	12/19/24 13:47		Mohan	OK

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Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB134010

Review By	jaswal	Review On	12/20/2024 9:48:43 PM
Supervise By	mohan	Supervise On	12/20/2024 9:50:24 PM

STD. NAME	STD REF.#
ICAL Standard	MP83696,MP83697,MP83698,MP83699,MP83700,MP83701
ICV Standard	MP83702
CCV Standard	MP83704
ICSA Standard	
CRI Standard	MP83706
LCS Standard	
Chk Standard	MP83703,MP83705,MP83707,MP83709

39	P5306-10	OU4-VSL-11-121224	SAM	12/19/24 13:49		Mohan	OK
40	P5306-12	OU4-VSL-12-121224	SAM	12/19/24 13:51		Mohan	OK
41	P5306-14	OU4-VSL-13-121224	SAM	12/19/24 13:54		Mohan	OK
42	P5306-16	OU4-VSL-14-121224	SAM	12/19/24 13:56		Mohan	OK
43	CCV49	CCV49	CCV	12/19/24 14:00		Mohan	OK
44	CCB49	CCB49	CCB	12/19/24 14:02		Mohan	OK
45	P5279-02L	ROCKAWAY-PARKL	SD	12/19/24 14:05		Mohan	OK
46	P5279-02A	ROCKAWAY-PARKA	PS	12/19/24 14:07		Mohan	OK
47	P5291-13L	WC-20241213L	SD	12/19/24 14:09		Mohan	OK
48	P5291-13A	WC-20241213A	PS	12/19/24 14:11		Mohan	OK
49	P5306-02L	OU4-VSL-07-121224L	SD	12/19/24 14:14		Mohan	OK
50	P5306-02A	OU4-VSL-07-121224A	PS	12/19/24 14:16		Mohan	OK
51	PB165679TB	PB165679TB	MB	12/19/24 14:21		Mohan	OK
52	PB165680TB	PB165680TB	MB	12/19/24 14:23		Mohan	OK
53	PB165737TB	PB165737TB	MB	12/19/24 14:25		Mohan	OK
54	CCV50	CCV50	CCV	12/19/24 14:28		Mohan	OK
55	CCB50	CCB50	CCB	12/19/24 14:30		Mohan	OK

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Instrument ID: P7

Daily Analysis Runlog For Sequence/QCBatch ID # LB134070

Review By	Mohan	Review On	12/31/2024 4:00:54 AM
Supervise By	jaswal	Supervise On	12/31/2024 4:01:39 AM

STD. NAME	STD REF.#
ICAL Standard	MP83619,MP83628,MP83627,MP83625,MP83623,MP83622,MP83621,MP83620,MP83636
ICV Standard	MP83629
CCV Standard	MP83632
ICSA Standard	MP83630,MP83631
CRI Standard	
LCS Standard	
Chk Standard	MP83635,MP83634

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	TUNE	TUNE	TUNE	12/23/24 10:07		Jaswal	OK
2	S0	S0	CAL1	12/23/24 10:59		Jaswal	OK
3	S2	S2	CAL3	12/23/24 11:05		Jaswal	OK
4	S3	S3	CAL4	12/23/24 11:09		Jaswal	OK
5	S4	S4	CAL5	12/23/24 11:12		Jaswal	OK
6	S5	S5	CAL6	12/23/24 11:14		Jaswal	OK
7	S6	S6	CAL7	12/23/24 11:17		Jaswal	OK
8	S7	S7	CAL8	12/23/24 11:20		Jaswal	OK
9	S8	S8	CAL9	12/23/24 11:23		Jaswal	OK
10	ICV01	ICV01	ICV	12/23/24 12:06		Jaswal	OK
11	LLICV01	LLICV01	LLICV	12/23/24 12:20		Jaswal	OK
12	ICB01	ICB01	ICB	12/23/24 12:25		Jaswal	OK
13	ICSA01	ICSA01	ICSA	12/23/24 12:29		Jaswal	OK
14	ICSAB01	ICSAB01	ICSAB	12/23/24 12:32		Jaswal	OK
15	CCV01	CCV01	CCV	12/23/24 12:35		Jaswal	OK
16	CCB01	CCB01	CCB	12/23/24 12:43		Jaswal	OK
17	CRI	CRI	CRDL	12/23/24 12:52		Jaswal	OK
18	PB165834BL	PB165834BL	MB	12/23/24 12:56		Jaswal	OK

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Instrument ID: P7

Daily Analysis Runlog For Sequence/QCBatch ID # LB134070

Review By	Mohan	Review On	12/31/2024 4:00:54 AM
Supervise By	jaswal	Supervise On	12/31/2024 4:01:39 AM

STD. NAME	STD REF.#
ICAL Standard	MP83619,MP83628,MP83627,MP83625,MP83623,MP83622,MP83621,MP83620,MP83636
ICV Standard	MP83629
CCV Standard	MP83632
ICSA Standard	MP83630,MP83631
CRI Standard	
LCS Standard	
Chk Standard	MP83635,MP83634

19	PB165834BS	PB165834BS	LCS	12/23/24 12:59		Jaswal	OK
20	P5306-02DL	OU4-VSL-07-121224[	SAM	12/23/24 13:02	INT_STD fail for 89Y (1)	Jaswal	OK
21	P5306-02DUPDL	OU4-VSL-07-121224[	DUP	12/23/24 13:05	INT_STD fail for 89Y (1)	Jaswal	OK
22	P5306-02LDL	OU4-VSL-07-121224L	SD	12/23/24 13:08	INT_STD fail for 89Y (1)	Jaswal	OK
23	P5306-02MSDL	OU4-VSL-07-121224M	MS	12/23/24 13:11	INT_STD fail for 89Y (1)	Jaswal	OK
24	P5306-02MSDDL	OU4-VSL-07-121224M	MSD	12/23/24 13:14	INT_STD fail for 89Y (1)	Jaswal	OK
25	P5306-02ADL	OU4-VSL-07-121224A	PS	12/23/24 13:17	INT_STD fail for 89Y (1)	Jaswal	OK
26	CCV02	CCV02	CCV	12/23/24 13:20		Jaswal	OK
27	CCB02	CCB02	CCB	12/23/24 13:23		Jaswal	OK
28	P5306-04DL	OU4-VSL-08-121224[	SAM	12/23/24 13:27		Jaswal	OK
29	P5306-06DL	OU4-VSL-09-121224[	SAM	12/23/24 13:30		Jaswal	OK
30	P5306-08DL	OU4-VSL-10-121224[	SAM	12/23/24 13:33	INT_STD fail for 89Y (1)	Jaswal	OK
31	P5306-10DL	OU4-VSL-11-121224[	SAM	12/23/24 13:36	INT_STD fail for 89Y (1)	Jaswal	OK
32	P5306-12DL	OU4-VSL-12-121224[	SAM	12/23/24 13:39		Jaswal	OK
33	P5306-14DL	OU4-VSL-13-121224[	SAM	12/23/24 13:43		Jaswal	OK
34	P5306-16DL	OU4-VSL-14-121224[	SAM	12/23/24 13:46		Jaswal	OK
35	P5306-18DL	OU4-VSL-06R-12122	SAM	12/23/24 13:49		Jaswal	OK
36	PB165834TB	PB165834TB	MB	12/23/24 13:52		Jaswal	OK
37	CCV03	CCV03	CCV	12/23/24 13:55		Jaswal	OK
38	CCB03	CCB03	CCB	12/23/24 13:58		Jaswal	OK

Alliance TECHNICAL GROUP

SPLP EXTRACTION LOGPAGE

PB165699

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-1 / T-2

TCLP Filter ID : 114771

Start Prep Date : 12/17/2024 **Time :** 15:00

End Prep Date : 12/18/2024 **Time :** 08:15

Combination Ratio : 20

ZHE Cleaning Batch : N/A

Initial Room Temperature: 23 °C

Final Room Temperature: 22 °C

TCLP Technician Signature : JP

Supervisor By : 12

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	N/A	WP11806
N/A	N/A	N/A
N/A	N/A	N/A
pH Strips	N/A	W1931,W1934,W2350,W2755
pH Strips	N/A	W1937,W1938,W1939,W1940,W1941,W1942
N/A	N/A	N/A
120ml Plastic bottle	N/A	405130101
1:1 HNO3	N/A	MP83122

Extraction Conformance/Non-Conformance Comments:

Matrix spikes are added after fiftration and before preservation. TUMBLER T-1 checked,30 rpm. p5306-02 is used for MS-MSD.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
12/18/24 10:00	JP Lab Room	SL23. LM-DIG.
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

SPLP EXTRACTION LOGPAGE

PB165699

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
P5306-02	OU4-VSL-07-121224	01	100.03	2000	N/A	N/A	N/A	3.5	1.0	T-1
P5306-04	OU4-VSL-08-121224	02	100.04	2000	N/A	N/A	N/A	4.0	1.5	T-1
P5306-06	OU4-VSL-09-121224	03	100.02	2000	N/A	N/A	N/A	4.0	1.5	T-1
P5306-08	OU4-VSL-10-121224	04	100.03	2000	N/A	N/A	N/A	3.5	1.0	T-1
P5306-10	OU4-VSL-11-121224	05	100.02	2000	N/A	N/A	N/A	4.5	1.0	T-1
P5306-12	OU4-VSL-12-121224	06	100.01	2000	N/A	N/A	N/A	4.0	1.5	T-1
P5306-14	OU4-VSL-13-121224	07	100.02	2000	N/A	N/A	N/A	3.5	1.0	T-1
P5306-16	OU4-VSL-14-121224	08	100.03	2000	N/A	N/A	N/A	4.0	1.5	T-1
P5306-18	OU4-VSL-06R-121224	09	100.04	2000	N/A	N/A	N/A	4.0	1.0	T-1
PB165699TB	LEB699	10	N/A	2000	N/A	N/A	N/A	4.24	1.5	T-1

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
P5306-02	OU4-VSL-07-121224	N/A	N/A	N/A	N/A	100	N/A
P5306-04	OU4-VSL-08-121224	N/A	N/A	N/A	N/A	100	N/A
P5306-06	OU4-VSL-09-121224	N/A	N/A	N/A	N/A	100	N/A
P5306-08	OU4-VSL-10-121224	N/A	N/A	N/A	N/A	100	N/A
P5306-10	OU4-VSL-11-121224	N/A	N/A	N/A	N/A	100	N/A
P5306-12	OU4-VSL-12-121224	N/A	N/A	N/A	N/A	100	N/A
P5306-14	OU4-VSL-13-121224	N/A	N/A	N/A	N/A	100	N/A
P5306-16	OU4-VSL-14-121224	N/A	N/A	N/A	N/A	100	N/A
P5306-18	OU4-VSL-06R-121224	N/A	N/A	N/A	N/A	100	N/A
PB165699TB	LEB699	N/A	N/A	N/A	N/A	N/A	N/A

Alliance TECHNICAL GROUP

SPLP Fluid Determination

PB165699

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
P5306-02	OU4-VSL-07-121224	N/A	N/A	N/A	N/A	#1	4.24
P5306-04	OU4-VSL-08-121224	N/A	N/A	N/A	N/A	#1	4.24
P5306-06	OU4-VSL-09-121224	N/A	N/A	N/A	N/A	#1	4.24
P5306-08	OU4-VSL-10-121224	N/A	N/A	N/A	N/A	#1	4.24
P5306-10	OU4-VSL-11-121224	N/A	N/A	N/A	N/A	#1	4.24
P5306-12	OU4-VSL-12-121224	N/A	N/A	N/A	N/A	#1	4.24
P5306-14	OU4-VSL-13-121224	N/A	N/A	N/A	N/A	#1	4.24
P5306-16	OU4-VSL-14-121224	N/A	N/A	N/A	N/A	#1	4.24
P5306-18	OU4-VSL-06R-121224	N/A	N/A	N/A	N/A	#1	4.24
PB165699TB	LEB699	N/A	N/A	N/A	N/A	#1	4.24

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Prep Standard - Chemical Standard Summary

Order ID : P5306

Test : SPLP Mercury,SPLP MetalGroup3

Prepbatch ID : PB165737,PB165834,

Sequence ID/Qc Batch ID: LB134010,LB134070,LB134070,

Standard ID :
MP83499,MP83619,MP83620,MP83621,MP83622,MP83623,MP83625,MP83626,MP83627,MP83628,MP83629,MP836
30,MP83631,MP83632,MP83633,MP83634,MP83635,MP83636,MP83695,MP83696,MP83697,MP83698,MP83699,MP
83700,MP83701,MP83702,MP83703,MP83704,MP83705,MP83706,MP83707,MP83709,MP83717,MP83718,MP83719,
MP83720,

Chemical ID :
M5062,M5288,M5295,M5304,M5390,M5476,M5496,M5498,M5513,M5515,M5516,M5519,M5658,M5697,M5698,M5739
,M5751,M5769,M5798,M5799,M5800,M5801,M5802,M5806,M5815,M5817,M5818,M5819,M5873,M5874,M5882,M595
3,M5961,M5962,M5976,M5978,M5981,M5982,M5983,M6021,M6023,M6025,M6028,M6030,M6033,M6055,M6121,M61
26,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	MP83499	12/09/2024	12/28/2024	Eman Mughal	None	None	Sarabjit Jaswal 12/09/2024

FROM 1250.00000ml of M6121 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1122	ICPMS CALIB BLANK(S0/ICB/CCB)	MP83619	12/13/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/17/2024

FROM 25.00000ml of M6121 + 4925.00000ml of W3112 + 50.00000ml of M6126 = 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
3947	S7(SFAM,6020,200.8)	MP83620	12/13/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/17/2024

FROM 0.10000ml of M5476 + 1.00000ml of M5799 + 1.00000ml of M5818 + 1.00000ml of M5981 + 1.00000ml of M5983 + 1.90000ml of M6033 + 10.00000ml of M6126 + 2.00000ml of M5815 + 2.00000ml of M5817 + 4.00000ml of M5390 + 4.00000ml of M6025 + 4.90000ml of M5515 + 4.90000ml of M5519 + 5.00000ml of M6121 + 50.00000ml of M5304 + 832.50000ml of W3112 + 9.00000ml of M5698 + 9.00000ml of M5751 + 9.00000ml of M5819 + 9.00000ml of M5976 + 9.00000ml of M5978 + 9.90000ml of M5498 + 9.90000ml of M5769 + 9.90000ml of M5806 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3948	S6(SFAM,6020,200.8)	MP83621	12/13/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/17/2024

FROM 0.50000ml of M6121 + 1.00000ml of M6126 + 48.50000ml of W3112 + 50.00000ml of MP83620 = Final Quantity: 100.000 ml

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Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3949	S5(SFAM,6020,200.8)	MP83622	12/13/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/17/2024

FROM 0.50000ml of M6121 + 1.00000ml of M6126 + 73.50000ml of W3112 + 25.00000ml of MP83620 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3954	S4(SFAM,6020,200.8)	MP83623	12/13/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/17/2024

FROM 0.50000ml of M6121 + 1.00000ml of M6126 + 86.00000ml of W3112 + 12.50000ml of MP83620 = Final Quantity: 100.000 ml

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Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3951	S3(SFAM, 6020,200.8)	MP83625	12/13/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/17/2024

FROM 0.50000ml of M6121 + 1.00000ml of M6126 + 88.50000ml of W3112 + 10.00000ml of MP83621 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3955	S2CONC(SFAM,6020,200.8)	MP83626	12/13/2024	01/07/2025	Sarabjit Jaswal	None	None	Mohan Bera 12/17/2024

FROM 0.05000ml of M5476 + 0.05000ml of M5698 + 0.05000ml of M5798 + 0.05000ml of M5800 + 0.05000ml of M5801 + 0.05000ml of M5961 + 0.05000ml of M5981 + 0.05000ml of M5983 + 0.05000ml of M6023 + 0.05000ml of M6025 + 0.05000ml of M6028 + 0.05000ml of M6030 + 0.10000ml of M5658 + 0.10000ml of M5751 + 0.10000ml of M5802 + 0.10000ml of M6033 + 0.25000ml of M5515 + 0.25000ml of M5799 + 0.25000ml of M5819 + 0.25000ml of M5962 + 0.25000ml of M5976 + 0.25000ml of M5978 + 0.25000ml of M6021 + 0.50000ml of M5390 + 0.50000ml of M5818 + 1.25000ml of M5815 + 1.25000ml of M5817 + 2.50000ml of M5498 + 2.50000ml of M5519 + 2.50000ml of M5769 + 2.50000ml of M5806 + 2.50000ml of M6121 + 226.25000ml of W3112 + 5.00000ml of M6126 = 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
3956	S2(SFAM,6020,200.8)	MP83627	12/13/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/17/2024

FROM 0.50000ml of M6121 + 1.00000ml of M6126 + 98.00000ml of W3112 + 0.50000ml of MP83626 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3957	S1(SFAM,6020,200.8)	MP83628	12/13/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/17/2024

FROM 0.50000ml of M6121 + 1.00000ml of M6126 + 88.50000ml of W3112 + 10.00000ml of MP83627 = 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
3958	ICV(SFAM)	MP83629	12/13/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/17/2024

FROM 2.00000ml of M5295 + 98.00000ml of MP83619 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1142	ICSA ICPMS	MP83630	12/13/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/17/2024

FROM 10.00000ml of M5873 + 90.00000ml of MP83619 = 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	MP83631	12/13/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/17/2024

FROM 10.00000ml of M5873 + 10.00000ml of M5874 + 80.00000ml of MP83619 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3961	CCV	MP83632	12/13/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/17/2024

FROM 0.20000ml of M5513 + 0.50000ml of M5476 + 0.50000ml of M5799 + 0.50000ml of M5818 + 0.50000ml of M5981 + 0.50000ml of M5983 + 1.00000ml of M5815 + 1.00000ml of M5817 + 10.00000ml of M6126 + 12.45000ml of M5515 + 12.45000ml of M5519 + 2.00000ml of M5390 + 24.95000ml of M5498 + 24.95000ml of M5516 + 24.95000ml of M5769 + 25.00000ml of M5304 + 4.50000ml of M5698 + 4.50000ml of M5751 + 4.50000ml of M5819 + 4.50000ml of M5976 + 4.50000ml of M5978 + 4.95000ml of M6033 + 5.00000ml of M6121 + 826.10000ml of W3112 = Final Quantity: 1000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3962	MG 10PPM FOR TUNE	MP83633	12/13/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/17/2024

FROM 0.01000ml of M5769 + 9.99000ml of MP83619 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3894	TUNE 200PPB	MP83634	12/13/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/17/2024

FROM 2.00000ml of M6055 + 2.00000ml of MP83633 + 96.00000ml of MP83619 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3903	ISS 3PPM	MP83635	12/13/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/17/2024

FROM 5.00000ml of M6126 + 75.00000ml of M5739 + 170.00000ml of MP83619 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2902	S8 ICPMS	MP83636	12/13/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/17/2024

FROM 1.00000ml of M6033 + 2.50000ml of M5288 + 2.50000ml of M5515 + 5.00000ml of M5498 + 5.00000ml of M5516 + 5.00000ml of M5769 + 79.00000ml of MP83619 = 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
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP83695	12/19/2024	12/20/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/20/2024

FROM 1.00000ml of M6126 + 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	MP83696	12/19/2024	12/20/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/20/2024

FROM 2.50000ml of M6126 + 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	MP83697	12/19/2024	12/20/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/20/2024

FROM 2.50000ml of M6126 + 247.30000ml of W3112 + 0.20000ml of MP83695 = 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	MP83698	12/19/2024	12/20/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/20/2024

FROM 2.50000ml of M6126 + 245.00000ml of W3112 + 2.50000ml of MP83695 = 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	MP83699	12/19/2024	12/20/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/20/2024

FROM 2.50000ml of M6126 + 242.50000ml of W3112 + 5.00000ml of MP83695 = 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	MP83700	12/19/2024	12/20/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/20/2024

FROM 2.50000ml of M6126 + 240.00000ml of W3112 + 7.50000ml of MP83695 = 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	MP83701	12/19/2024	12/20/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/20/2024

FROM 2.50000ml of M6126 + 237.50000ml of W3112 + 10.00000ml of MP83695 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1346	Hg ICV SOLUTION	MP83702	12/19/2024	12/20/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/20/2024

FROM 2.50000ml of M5953 + 2.50000ml of M6126 + 245.00000ml of W3112 = Final Quantity: 250.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1351	ICB (Hg 0.00 PPB SOLUTION)	MP83703	12/19/2024	12/20/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/20/2024

FROM 2.50000ml of M6126 + 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)	MP83704	12/19/2024	12/20/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/20/2024

FROM 485.00000ml of W3112 + 5.00000ml of M6126 + 10.00000ml of MP83695 = 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)	MP83705	12/19/2024	12/20/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/20/2024

FROM 495.00000ml of W3112 + 5.00000ml of M6126 = 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)	MP83706	12/19/2024	12/20/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/20/2024

FROM 2.50000ml of M6126 + 247.30000ml of W3112 + 0.20000ml of MP83695 = Final Quantity: 250.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1350	CHK STD (Hg 7.0 PPB SOLUTION)	MP83707	12/19/2024	12/20/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 12/20/2024

FROM 2.50000ml of M6126 + 240.50000ml of W3112 + 7.00000ml of MP83695 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
68	STANNOUS CHLORIDE SOLUTION	MP83709	12/19/2024	12/20/2024	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 12/20/2024

FROM 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6121 = 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
3880	M&B SPIKE-1	MP83717	12/18/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/20/2024

FROM 5.00000ml of M5658 + 5.00000ml of M5798 + 5.00000ml of M5800 + 5.00000ml of M5802 + 5.00000ml of M5961 + 5.00000ml of M5962 + 5.00000ml of M5981 + 5.00000ml of M5982 + 5.00000ml of M5983 + 5.00000ml of M6021 + 5.00000ml of M6023 + 5.00000ml of M6028 + 5.00000ml of M6030 + 35.00000ml of MP83619 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3881	M&B SPIKE-2	MP83718	12/18/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/20/2024

FROM 10.00000ml of M5976 + 12.50000ml of M5390 + 12.50000ml of M5515 + 12.50000ml of M5519 + 2.50000ml of M5799 + 2.50000ml of M5818 + 5.00000ml of M5496 + 42.50000ml of MP83619 = 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	MP83719	12/18/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/20/2024

FROM 0.62500ml of M5513 + 12.50000ml of M5697 + 12.50000ml of M5698 + 12.50000ml of M5819 + 11.87500ml of MP83619 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3900	M&B SPIKE-4	MP83720	12/18/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/20/2024

FROM 6.25000ml of M5498 + 6.25000ml of M5769 + 6.25000ml of M5806 + 6.25000ml of MP83619 = Final Quantity: 25.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	MSHG-10PPM / MERCURY HCl 125mL 10ug/mL	S2-HG709270	09/22/2026	05/28/2022 / mohan	01/27/2022 / mohan	M5062

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58119 / K, 10000 PPM, 500 ml	071122	07/11/2025	09/01/2022 / jaswal	07/21/2022 / jaswal	M5288

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-1 / ICV (ICP/ICPMS) STOCK SOLN	ICV-1014	02/05/2025	08/07/2024 / jaswal	04/20/2021 / bin	M5295

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	08/07/2024 / jaswal	04/01/2022 / jaswal	M5304

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57056 / Ba, 1000 PPM, 125 ml	072122	07/21/2025	08/07/2024 / jaswal	09/18/2022 / bin	M5390

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57138 / Sr, 10000 PPM, 125 ml	082922	08/29/2025	07/29/2024 / jaswal	03/16/2023 / jaswal	M5476

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / Al, 10000 PPM, 500 ml	011623	01/16/2026	08/15/2023 / jaswal	03/17/2023 / bin	M5496

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	031523	03/15/2026	08/15/2023 / jaswal	03/17/2023 / bin	M5498

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	061522	06/15/2025	03/19/2023 / bin	03/17/2023 / bin	M5513

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	092122	09/21/2025	08/01/2024 / Jaswal	03/17/2023 / bin	M5515

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58111 / Na, 10000 PPM, 500 ml	022123	11/06/2025	11/06/2024 / kareem	03/17/2023 / bin	M5516

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57119 / Potassium (K) 10,000PPM	120822	12/08/2025	01/08/2024 / bin	03/17/2023 / bin	M5519

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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.	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 #
Absolute Standards, Inc.	58025 / Mn, 1000 PPM, 500 ml	102623	10/26/2026	04/18/2024 / jaswal	10/27/2023 / jaswal	M5698

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	6020ISS / 6020ISS, 10 ug/ml, Bi, Ho, In, 6Li, Rh, Sc, TB, Y	T2-MEB709511	09/03/2026	08/07/2024 / jaswal	04/11/2022 / jaswal	M5739

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	071723	07/17/2026	10/01/2024 / Jaswal	08/25/2023 / jaswal	M5751

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	091823	09/18/2026	05/24/2024 / Jaswal	01/03/2024 / bin	M5769

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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.	57051 / Sb, 1000 PPM, 125 ml	120523	12/05/2026	08/07/2024 / jaswal	01/03/2024 / jaswal	M5802

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	122223	12/22/2026	08/01/2024 / Jaswal	01/03/2024 / jaswal	M5806

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57115 / P, 10000 PPM, 125 ml	041723	04/17/2026	05/21/2024 / Jaswal	02/09/2024 / jaswal	M5815

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57116 / S, 10000 PPM, 125 ml	071123	07/11/2026	03/01/2024 / jaswal	02/09/2024 / jaswal	M5817

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57014 / Si, 1000 PPM, 125 ml	122023	12/20/2026	03/06/2024 / jaswal	02/09/2024 / jaswal	M5818

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	111623	11/16/2026	03/20/2024 / jaswal	02/09/2024 / jaswal	M5819

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

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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 #
EPA	ICV-5 / ICV (HG) STOCK SOLN	ICV5-0415	01/01/2025	07/01/2024 / mohan	03/30/2023 / mohan	M5953

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	08/07/2024 / jaswal	02/22/2024 / Jaswal	M5976

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGTI1-1 / TITANIUM 125mL 1000ug/mL	T2-TI719972	06/17/2027	08/07/2024 / jaswal	02/22/2024 / Jaswal	M5978

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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.	57038 / Sr, 1000 PPM, 125 ml	031524	03/15/2027	07/01/2024 / Jaswal	06/11/2024 / Jaswal	M5982

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57040 / Zr, 1000 PPM, 125 ml	071423	07/14/2026	07/29/2024 / Jaswal	06/11/2024 / Jaswal	M5983

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57023 / V, 1000 PPM, 125 ml	062424	06/24/2027	09/28/2024 / jaswal	08/05/2024 / Jaswal	M6021

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57081 / Tl, 1000 PPM, 125 ml	0624724	06/27/2027	08/05/2024 / kareem	08/05/2024 / Jaswal	M6023

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57082 / Pb, 1000 PPM, 125 ml	061224	11/09/2026	08/05/2024 / Jaswal	08/05/2024 / Jaswal	M6025

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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.	58113 / Al, 10000 PPM, 500 ml	011623	01/16/2026	08/07/2024 / Jaswal	01/03/2024 / Jaswal	M6033

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 #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	0000275677	05/13/2025	11/13/2024 / Eman	10/13/2024 / Eman	M6121

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	06/03/2025	12/03/2024 / Janvi	11/12/2024 / Janvi	M6126

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

ThermoFisher SCIENTIFIC

M5882 M3

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	T142	Quality Test / Release Date	08/17/2023
Lot Number	232820		
Description	STANNOUS CHLORIDE, DIHYDRATE CERTIFIED ACS (Suitable for Mercury Determination)		
Country of Origin	United States	Suggested Retest Date	Aug/2028
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear crystals
ASSAY	%	Inclusive Between 98 - 103	100.65
CALCIUM	%	<= 0.005	0.0017
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IRON (Fe)	%	<= 0.003	0.0011
LEAD (Pb)	%	<= 0.01	0.0006
MERCURY (Hg)	ppm	<= 0.05	<0.05
POTASSIUM (K)	%	<= 0.005	0.0001
SODIUM (Na)	%	<= 0.01	<0.01
SOLUBILITY IN HCL	PASS/FAIL	= PASS TEST	PASS TEST
SULFATE (SO4)	PASS/FAIL	= P.T. (ABOUT 0.003%)	P.T. (ABOUT 0.003%)

Harout Sahagian - Quality Control Supervisor - Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

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Certified Reference Material CRM

M6028

R 8/5/24

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CERTIFIED WEIGHT REPORT:

Part Number:	**57048**		**Lot #**		
Lot Number:	**070124**	**Solvent:**	24002546	Nitric Acid	
Description:	**Cadmium (Cd)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	070127				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty		

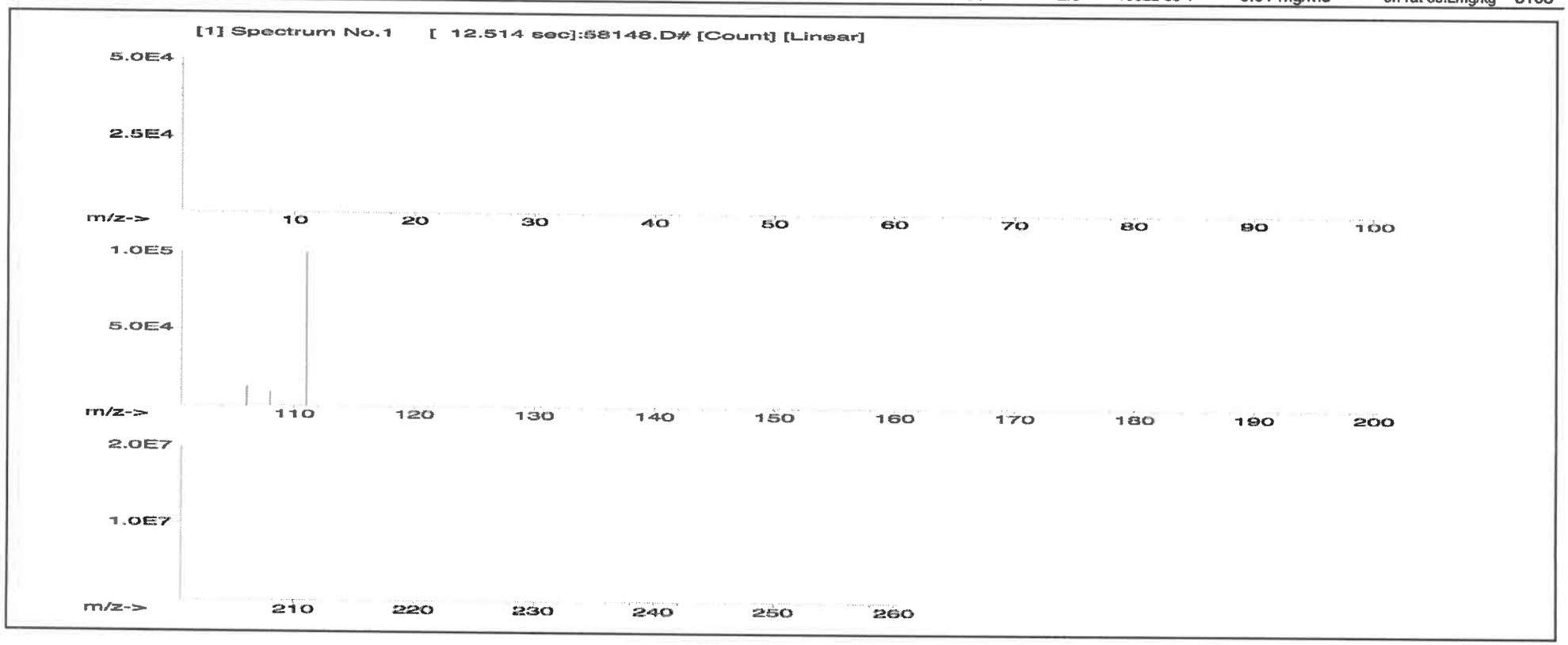
Aleah O'Brady

Formulated By:	Aleah O'Brady	070124

Pedro Rentas

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.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

R: 8/5/24 M6025

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CERTIFIED WEIGHT REPORT:

Part Number: 57182
Lot Number: 110923
Description: Lead (Pb)

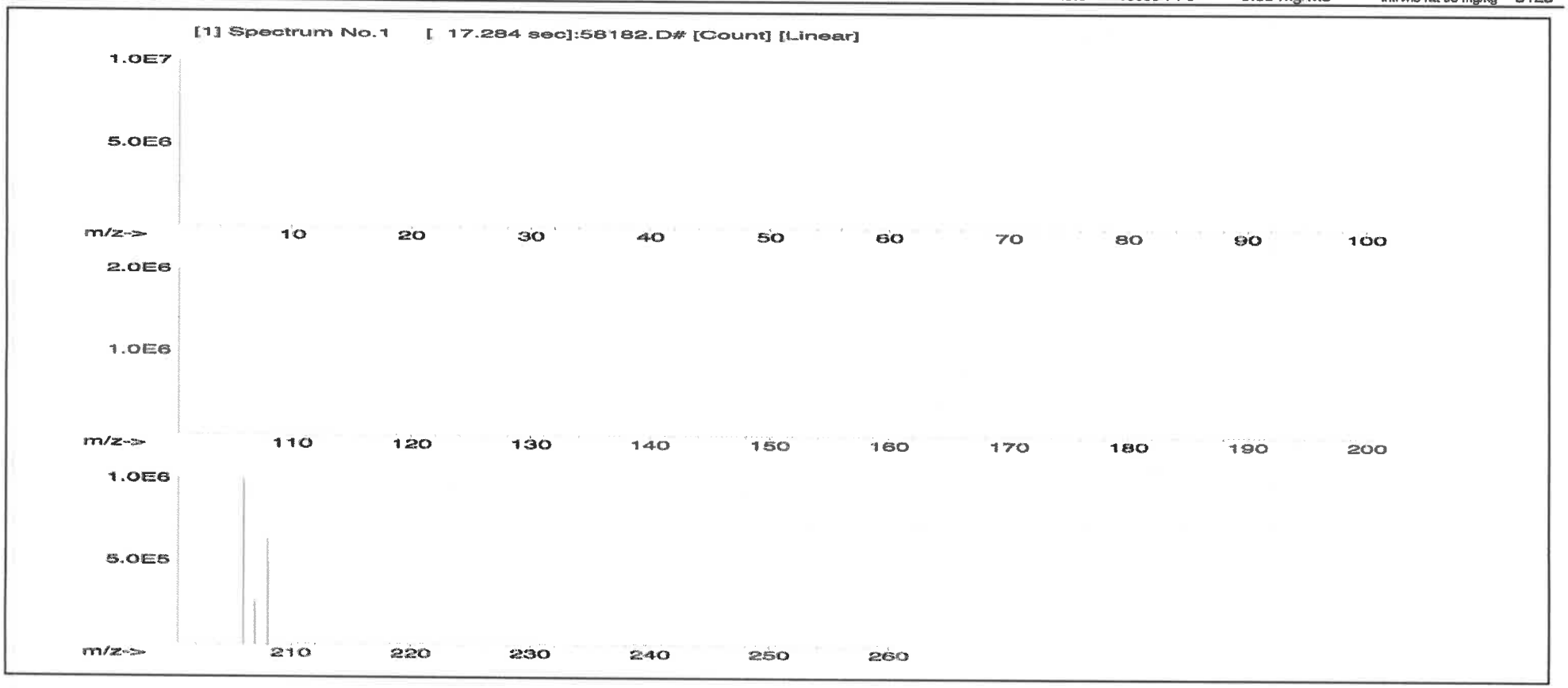
Expiration Date: 110926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

	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.

* 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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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

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag		0.000011	M	Eu	<	0.000201	O	Na		0.000004	M	Se	<	0.015915	O	Zn	<	0.001510
O	Al		0.000001	O	Fe		0.000001	M	Nb	<	0.000201	O	Si		0.000005	M	Zr	<	0.000201
M	As	<	0.000402	M	Ga	<	0.000201	M	Nd	<	0.000201	M	Sm	<	0.000201				
M	Au	<	0.003631	M	Gd	<	0.000201	M	Ni	<	0.000402	M	Sn	<	0.001007				
M	B	<	0.001208	M	Ge	<	0.000201	M	Os	<	0.000605	M	Sr	<	0.000201				
M	Ba	<	0.000201	M	Hf	<	0.000201	O	P	<	0.032370	M	Ta	<	0.000201				
M	Be	<	0.000201	s	Hg	<		M	Pb	<	0.000201	M	Tb	<	0.000201				
M	Bi	<	0.000201	M	Ho	<	0.000201	M	Pd	<	0.000403	M	Te	<	0.002216				
O	Ca		0.000007	M	In	<	0.000201	M	Pr	<	0.000201	M	Th	<	0.000201				
M	Cd	<	0.000201	M	Ir	<	0.000201	M	Pt	<	0.000402	M	Ti	<	0.000402				
M	Ce	<	0.000201	O	K		0.000020	M	Rb	<	0.000201	O	Tl	<	0.016508				
M	Co	<	0.000201	M	La	<	0.000201	M	Re	<	0.000201	M	Tm	<	0.000201				
O	Cr	<	0.003021	O	Li	<	0.000107	M	Rh	<	0.000201	M	U	<	0.008058				
M	Cs	<	0.001208	M	Lu	<	0.000201	M	Ru	<	0.000201	M	V	<	0.000201				
M	Cu	<	0.000402	O	Mg		0.000001	O	S	<	0.053950	M	W	<	0.000604				
M	Dy	<	0.000201	M	Mn	<	0.000604	M	Sb	<	0.001208	M	Y	<	0.000201				
M	Er	<	0.000201	M	Mo		0.000009	M	Sc	<	0.000201	M	Yb	<	0.000201				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+

Chemical Compatibility - Stable in HNO3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.

Stability - 2-100 ppb levels not stable in 1% HNO3 / LDPE container, stable in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO3); Oxide (Soluble in HNO3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- September 22, 2026

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5288 R: 07/21/2022

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

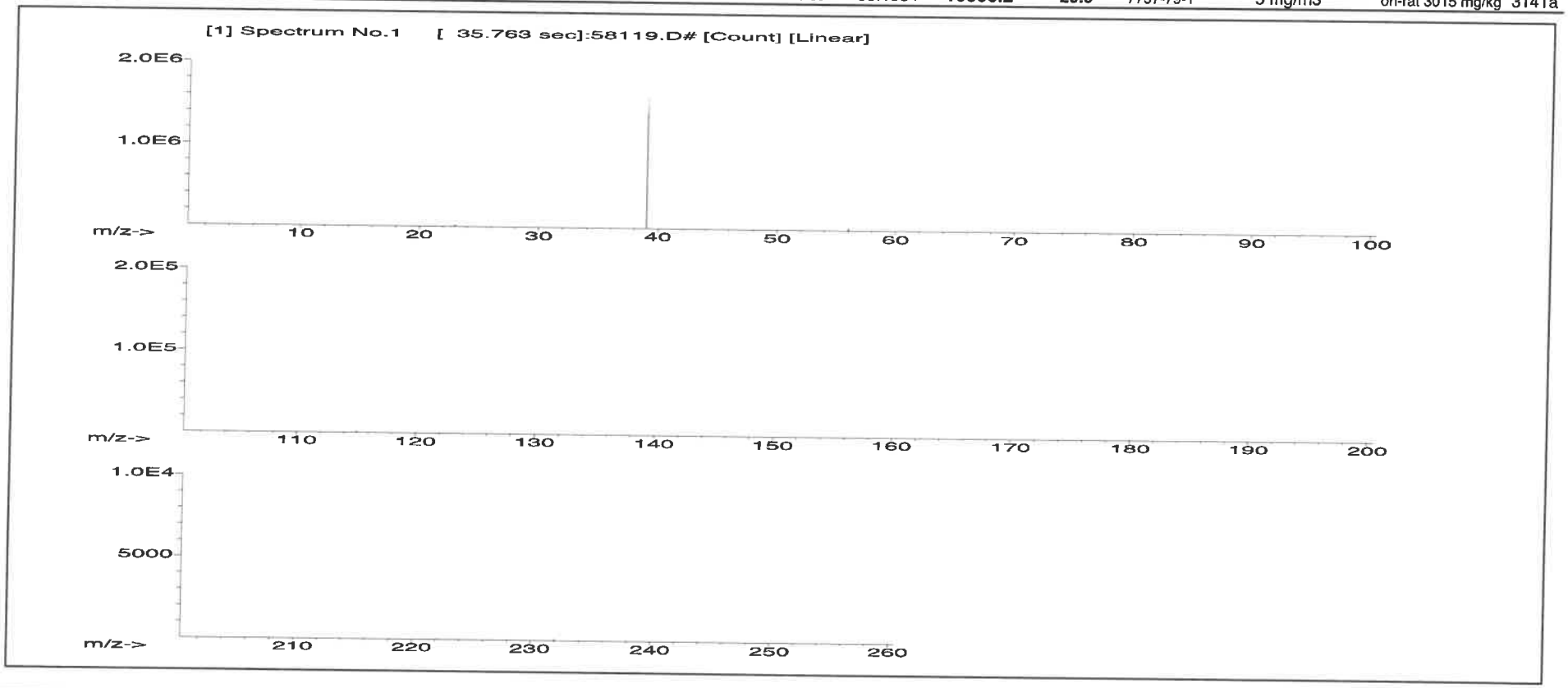
Part Number: 58119
Lot Number: 071122
Description: Potassium (K)

Expiration Date: 071125
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	071122
Reviewed By:	Pedro L. Rentas	071122

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Potassium nitrate (K)	IN034	KD022021A1	10000	99.999	0.10	37.6	53.1925	53.1934	**10000.2**	**20.0**	7757-79-1	5 mg/m3	orl-rat 3015 mg/kg	3141a



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	T	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

R : 4/20/21

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.

Contains Metals in Dilute Acidic or
Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

IM5291
IM5292
IM5293
IM5294
IM5295

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	CN^-	99

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	6020CAL-1
Lot Number:	S2-MEB711244
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	20 µg/mL ea:

Silver,	Aluminum,
Arsenic,	Barium,
Beryllium,	Calcium,
Cadmium,	Cobalt,
Chromium,	Copper,
Iron,	Potassium,
Magnesium,	Manganese,
Sodium,	Nickel,
Lead,	Antimony,
Selenium,	Thallium,
Vanadium,	Zinc

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**20.01 ± 0.08 µg/mL**	**Antimony, Sb**	**20.01 ± 0.12 µg/mL**
Arsenic, As	**20.01 ± 0.18 µg/mL**	**Barium, Ba**	**20.01 ± 0.11 µg/mL**
Beryllium, Be	**20.01 ± 0.14 µg/mL**	**Cadmium, Cd**	**20.01 ± 0.11 µg/mL**
Calcium, Ca	**20.01 ± 0.10 µg/mL**	**Chromium, Cr**	**20.01 ± 0.16 µg/mL**
Cobalt, Co	**20.01 ± 0.11 µg/mL**	**Copper, Cu**	**20.01 ± 0.10 µg/mL**
Iron, Fe	**20.01 ± 0.09 µg/mL**	**Lead, Pb**	**20.01 ± 0.11 µg/mL**
Magnesium, Mg	**19.99 ± 0.10 µg/mL**	**Manganese, Mn**	**20.01 ± 0.10 µg/mL**
Nickel, Ni	**20.01 ± 0.11 µg/mL**	**Potassium, K**	**20.01 ± 0.10 µg/mL**
Selenium, Se	**20.02 ± 0.14 µg/mL**	**Silver, Ag**	**20.02 ± 0.09 µg/mL**
Sodium, Na	**20.01 ± 0.10 µg/mL**	**Thallium, Tl**	**20.01 ± 0.13 µg/mL**
Vanadium, V	**20.01 ± 0.11 µg/mL**	**Zinc, Zn**	**20.01 ± 0.11 µg/mL**

Density: 1.026 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Fe	Calculated		See Sec. 4.2
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

Low Silver Note: This solution contains “LOW” levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 20, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 20, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

R: 09/08/22 (BA)

Certified Reference Material CRM

M5387 . M5389 . M5390 . M5391 . M5392

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

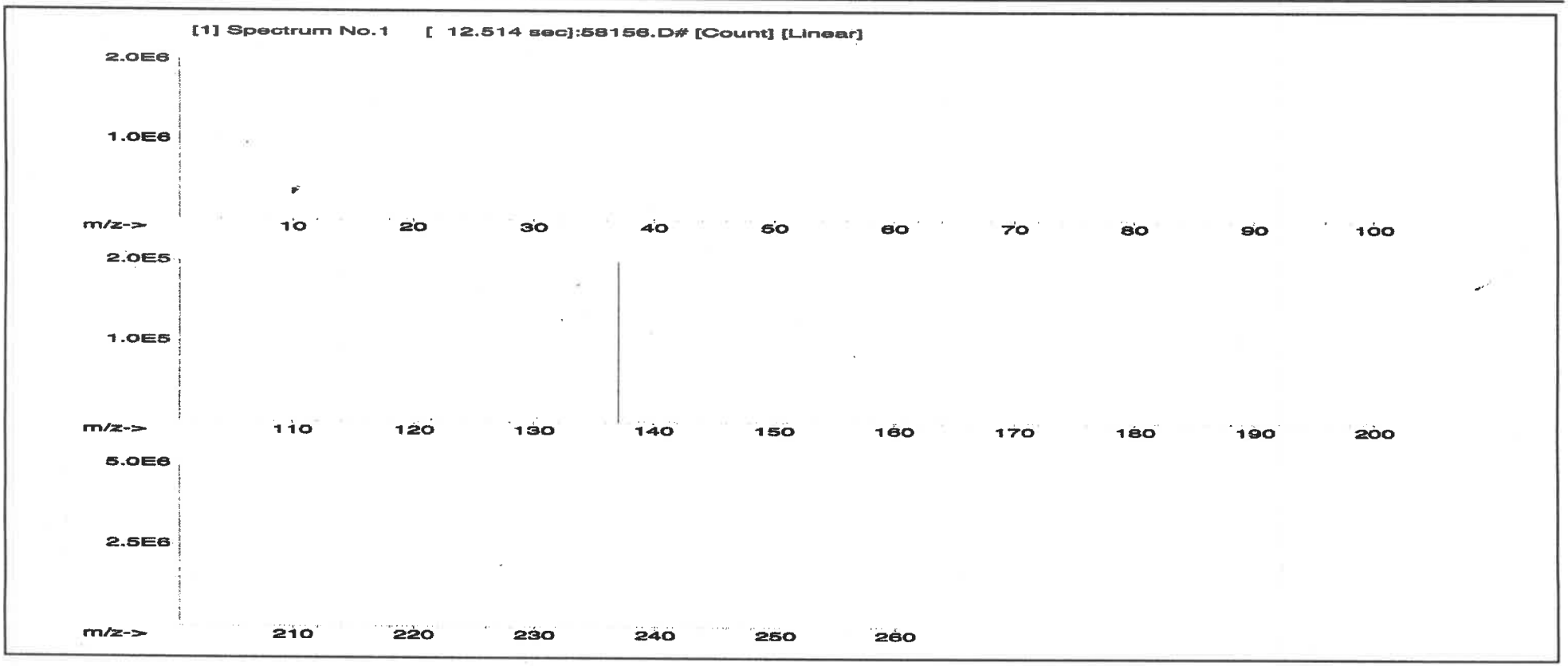
CERTIFIED WEIGHT REPORT:

Part Number:	**57056**		**Lot #**		
Lot Number:	**072122**	**Solvent:**	20510011	Nitric Acid	
Description:	**Barium (Ba)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	072125				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Giovanni Esposito

Formulated By:	Giovanni Esposito	072122
Reviewed By:	Pedro L. Rentas	072122

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Barium nitrate (Ba)	IN023	BAD022019A1	1000	99.999	0.10	52.3	3.82417	3.82426	**1000.0**	**2.0**	10022-31-8	0.5 mg/m3	orl-rat 355 mg/kg	3104a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Standards are 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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M5497 - M5498 R: 03/17/23 BH

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CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 031523
Description: Calcium (Ca)

Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41

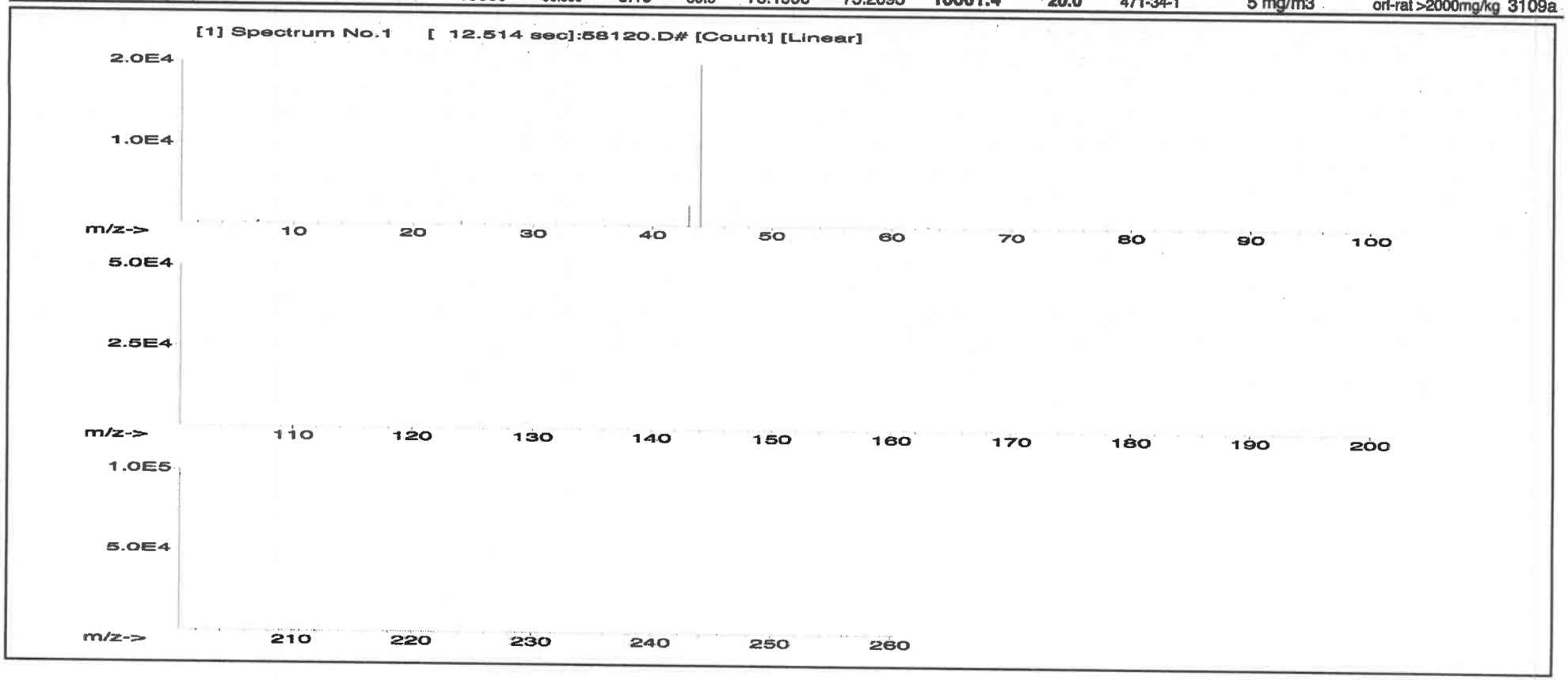
	Lot #		
Solvent:	21110221	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Giovanni Esposito

Formulated By:	Giovanni Esposito	031523
Reviewed By:	Pedro L. Rentas	031523

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD072022A1	10000	99.999	0.10	39.9	75.1990	75.2093	**10001.4**	**20.0**	471-34-1	5 mg/m3	orl-rat >2000mg/kg	3109a



EXCEL 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	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* 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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MA513 R:03/17/23 BE

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CERTIFIED WEIGHT REPORT:

Part Number: 57182
Lot Number: 061522
Description: Lead (Pb)

Expiration Date: 061525
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

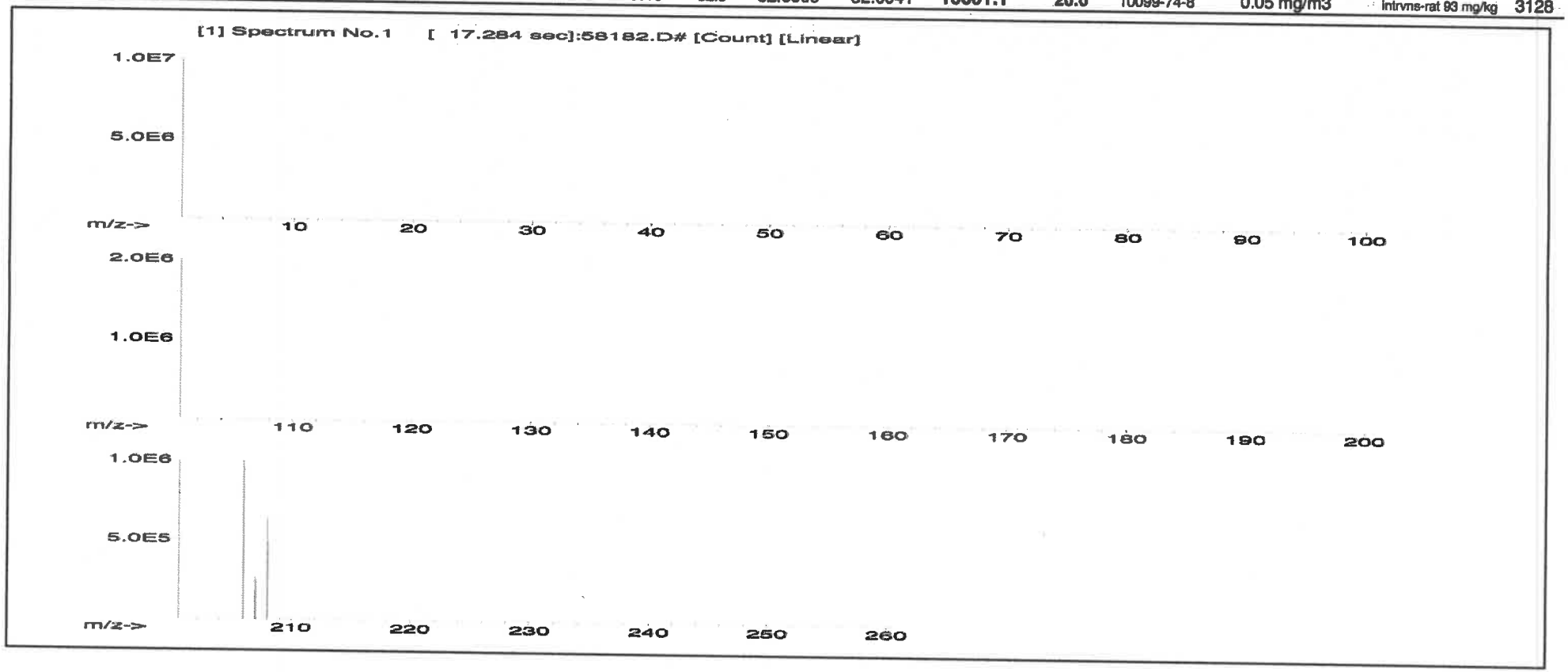
	Lot #		
Solvent:	20510011	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Giovanni Esposito

Formulated By:	Giovanni Esposito	061522
Reviewed By:	Pedro L. Rentas	061522

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	32.0041	**10001.1**	**20.0**	10099-74-8	0.05 mg/m3	Intrvns-rat 93 mg/kg	3128



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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M5514 , M5515 R: 03/17/23

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CERTIFIED WEIGHT REPORT:

Part Number: 58126
Lot Number: 092122
Description: Iron (Fe)

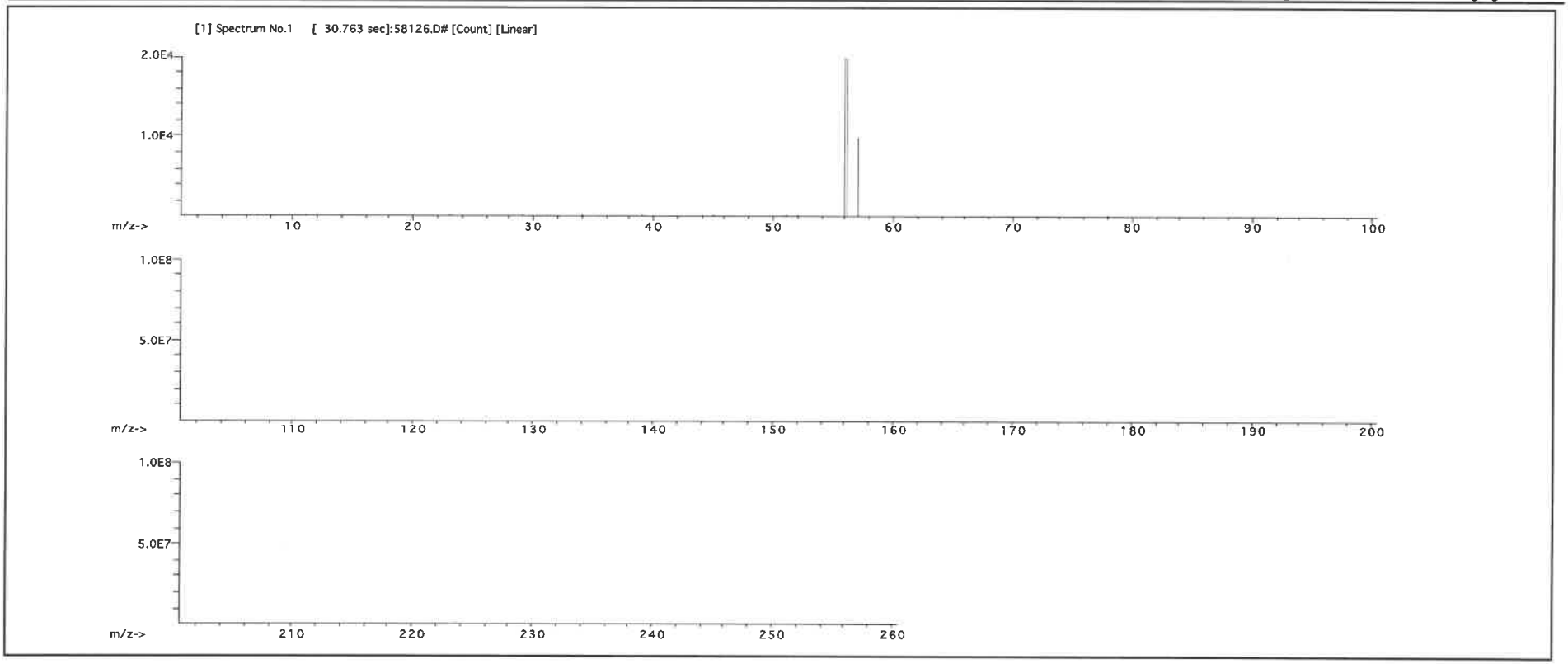
Expiration Date: 092125
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 5000.1

	Lot #		
Solvent:	20510011	Nitric Acid	
7.0%	350.0 (mL)	Nitric Acid	
5E-05	Balance Uncertainty		
0.12	Flask Uncertainty		

Giovanni Esposito

Formulated By:	Giovanni Esposito	092122
Reviewed By:	Pedro L. Rentas	092122

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	2224912-500	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



P336 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	<0.10	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	<0.05
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:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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M546 M517 R: 03/17/22 BH

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CERTIFIED WEIGHT REPORT:

Part Number: 58111
Lot Number: 022123
Description: Sodium (Na)

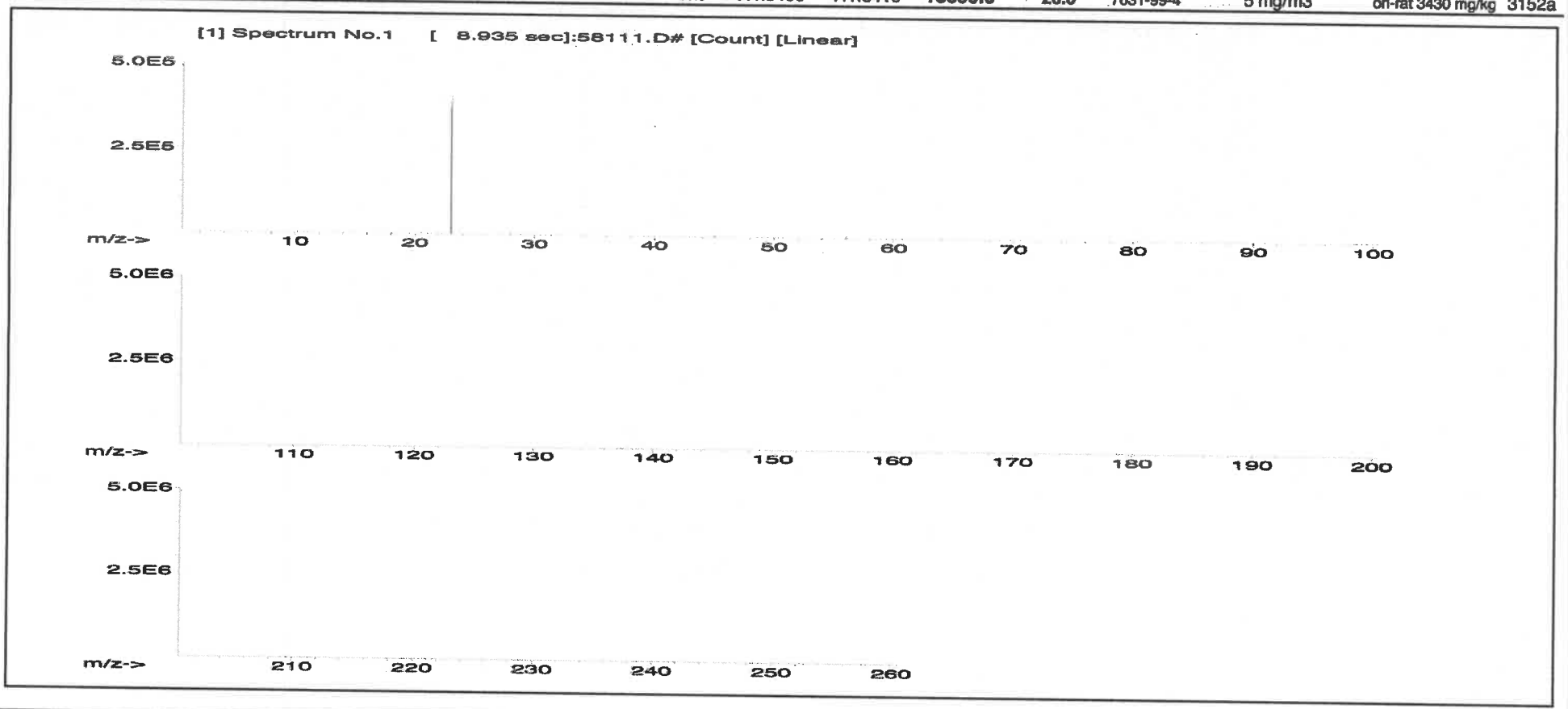
Expiration Date: 022126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41 ± 0.06 Flask Uncertainty

	Lot #	
Solvent:	21110221	Nitric Acid
2%	60.0 (mL)	Nitric Acid

5E-05 Balance Uncertainty

Formulated By: Lawrence Barry 022123
Reviewed By: Pedro L. Rentas 022123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Sodium nitrate (Na)	IN036	NAV012015I1	10000	99.999	0.10	26.9	111.5406	111.5410	**10000.0**	**20.0**	7631-99-4	5 mg/m3	orl-rat 3430 mg/kg	3152a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	T	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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Certified Reference Material CRM

M5519. M5520 BH R:03/17/23

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CERTIFIED WEIGHT REPORT:

Part Number: 58119
Lot Number: 120822
Description: Potassium (K)

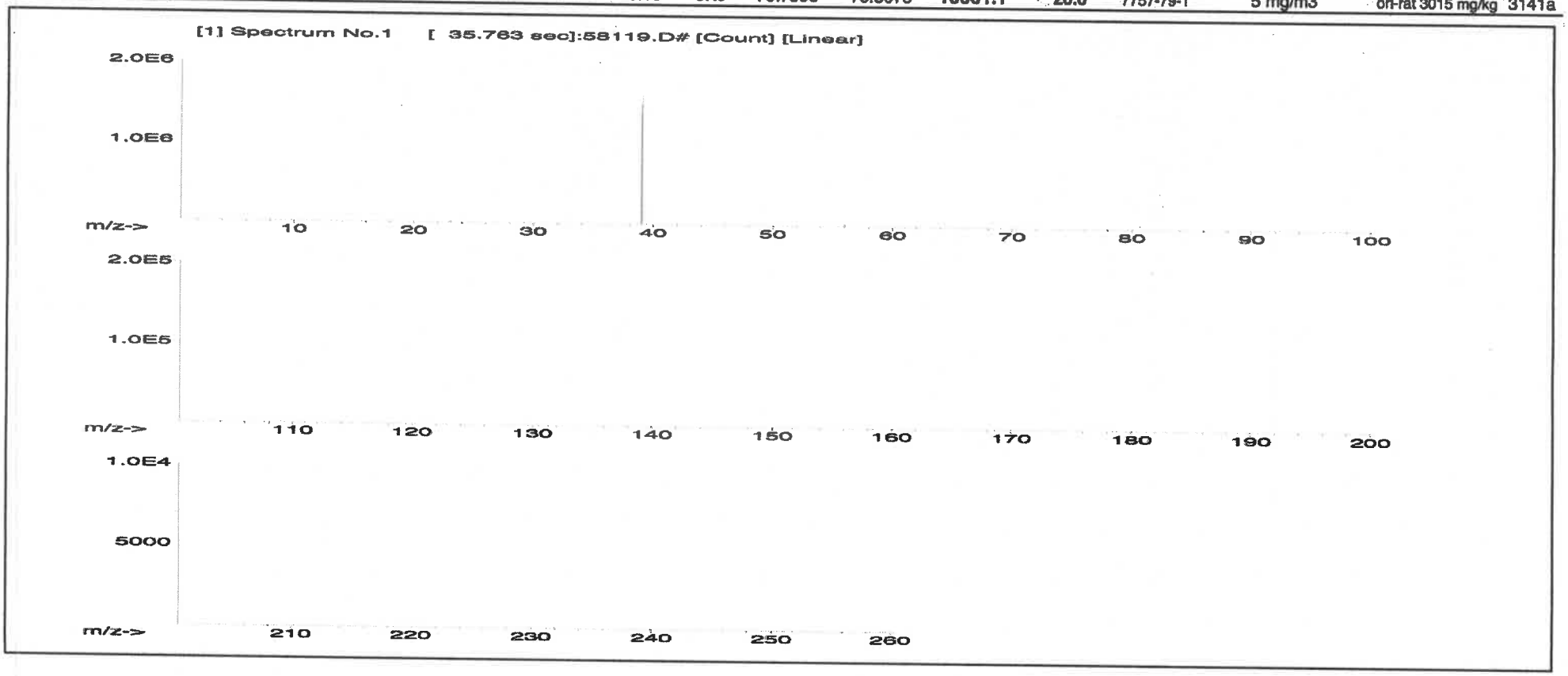
Expiration Date: 120825
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.4

	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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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:

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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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M5658 R ! 8/25/23

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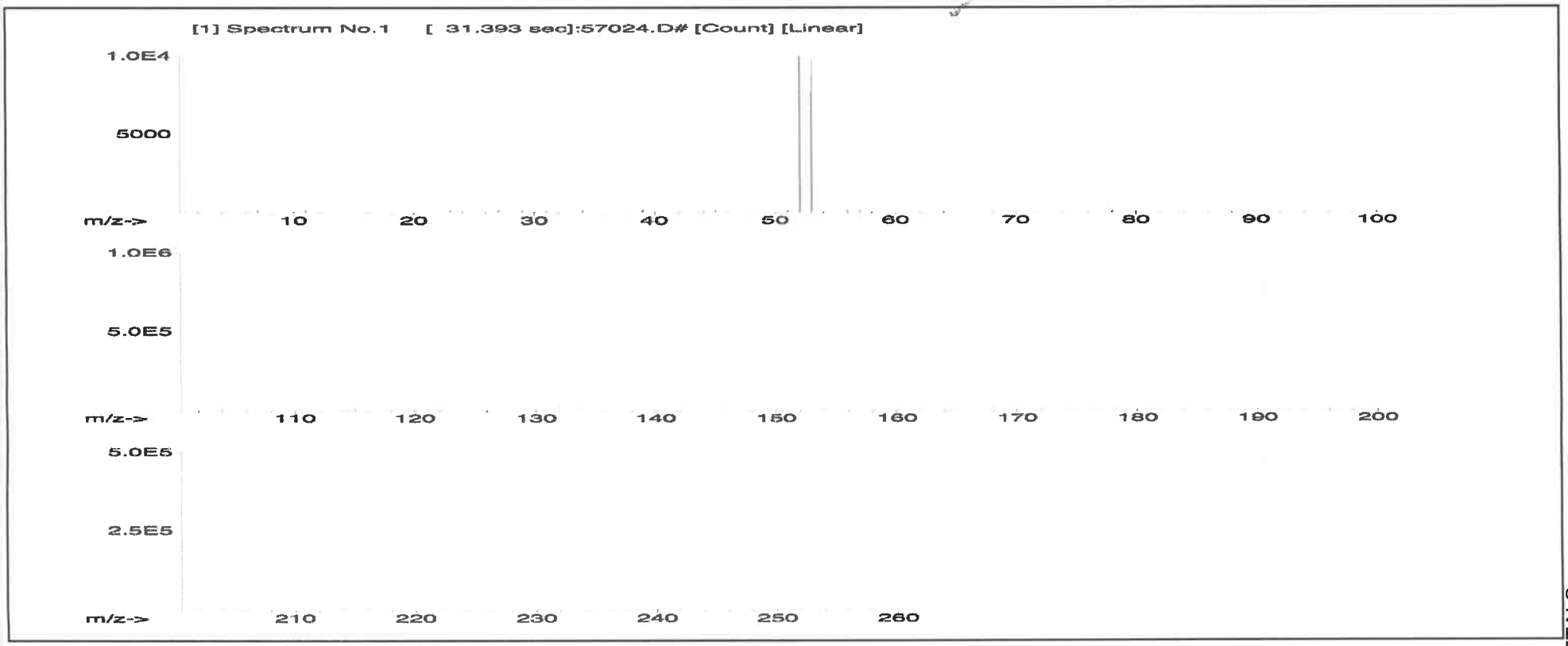
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58024**	21110221	Nitric Acid	
Lot Number:	**060523**			
Description:	**Chromium (Cr)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	060523
Reviewed By:	Pedro L. Rentas	060523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Chromium(III) nitrate nonahydrate (Cr)	58124	071122	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	7789-02-8	0.5 mg(Cr)/m3	orl-rat 3250 mg/kg	3112a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	T	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
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* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M5697 R: 10/27/23

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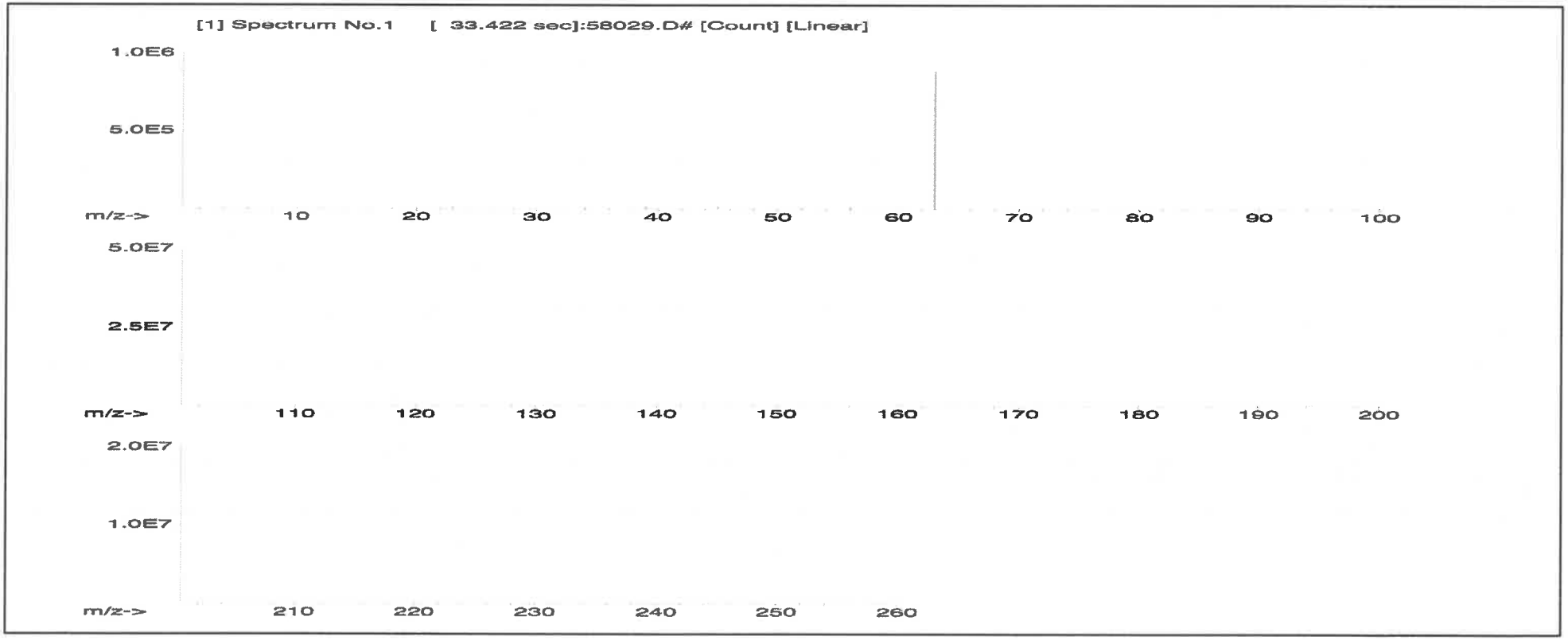
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58029**	24002546	Nitric Acid	
Lot Number:	**102523**			
Description:	**Copper (Cu)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	102526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Copper(II) nitrate trihydrate (Cu)	58129	100223	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	10031-43-3	1 mg/m3	orl-rat 794 mg/kg	3114



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
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M5648 R: 10/27/23

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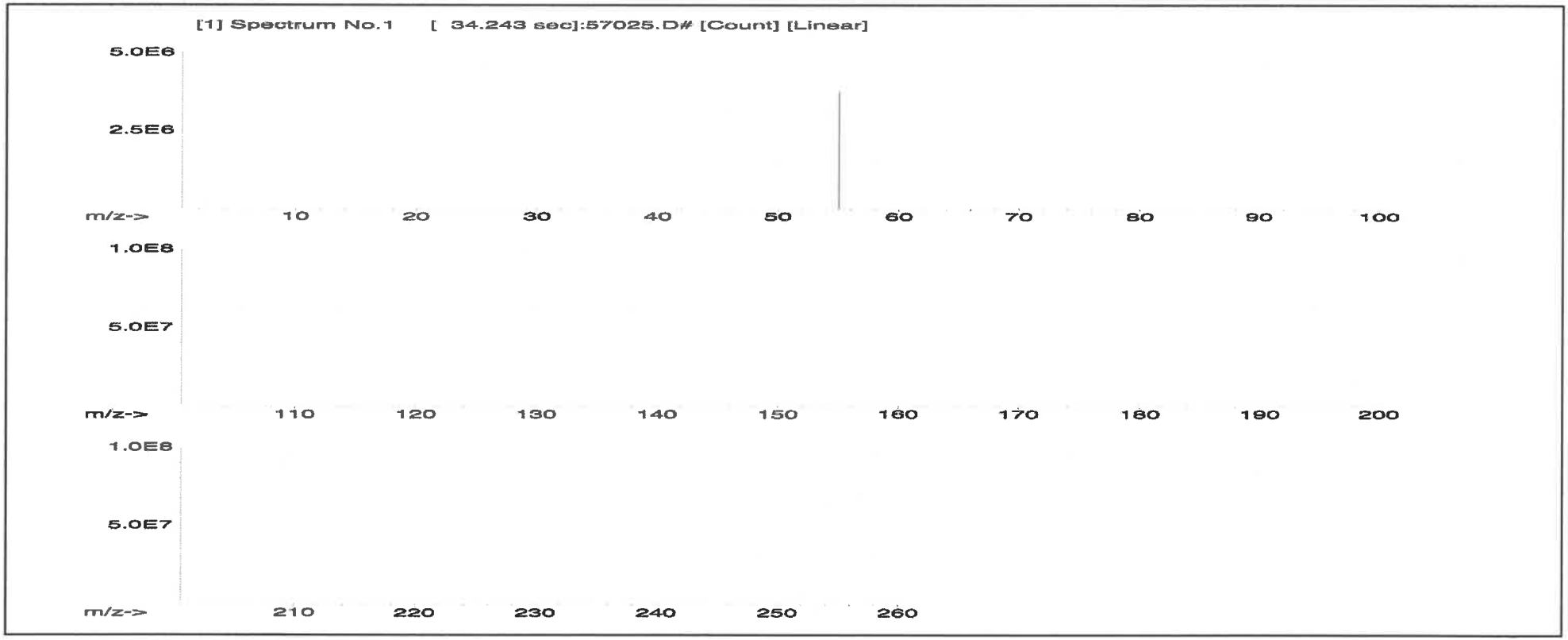
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58025**	24002546	Nitric Acid	
Lot Number:	**102623**			
Description:	**Manganese (Mn)**			
		2.0%	60.0 (mL)	Nitric Acid
Expiration Date:	102626			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	3000.41	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102623
Reviewed By:	Pedro L. Rentas	102623

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. Manganese(II) nitrate tetrahydrate (Mn)	58125	071123	0.1000	300.0	0.084	1000	10000.1	**1000.0**	**2.1**	20694-39-7	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:

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 balances that are calibrated with weights traceable to NIST (see above).
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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

R: 8/25/23 M5751

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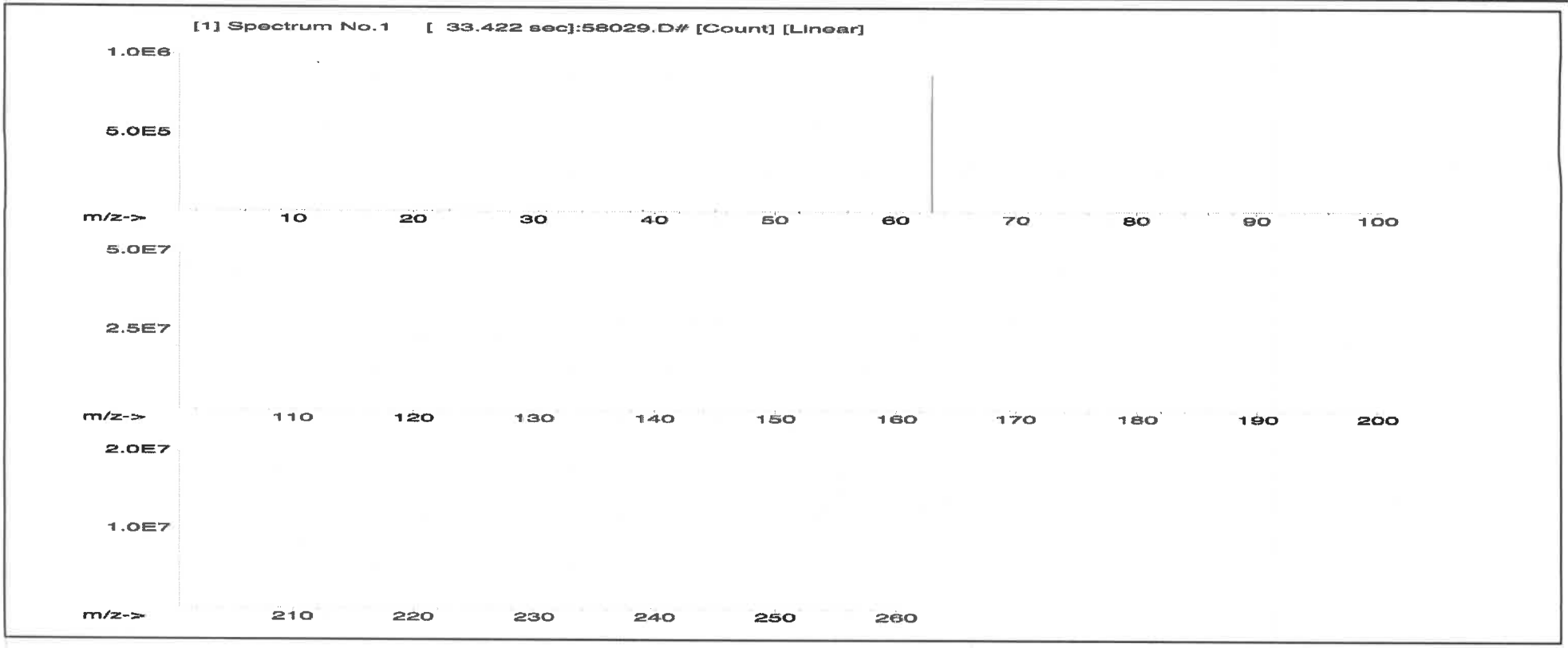
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	58029	21110221	Nitric Acid	
Lot Number:	071723			
Description:	Copper (Cu)	2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	071726			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	1000			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	071723
Reviewed By:	Pedro L. Rentas	071723

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Copper(II) nitrate trihydrate (Cu)	58129	022723	0.1000	200.0	0.084	1000	10000.5	**1000.0**	**2.2**	10031-43-3	1 mg/m3	orl-rat 794 mg/kg	3114



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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M5768 M5769 (BP) R:1/3/24

Certified Reference Material CRM

ANAB ISO 17034 Accredited
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CERTIFIED WEIGHT REPORT:

Part Number: 58112
Lot Number: 091823
Description: Magnesium (Mg)

Expiration Date: 091826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02 ± 0.058 Flask Uncertainty

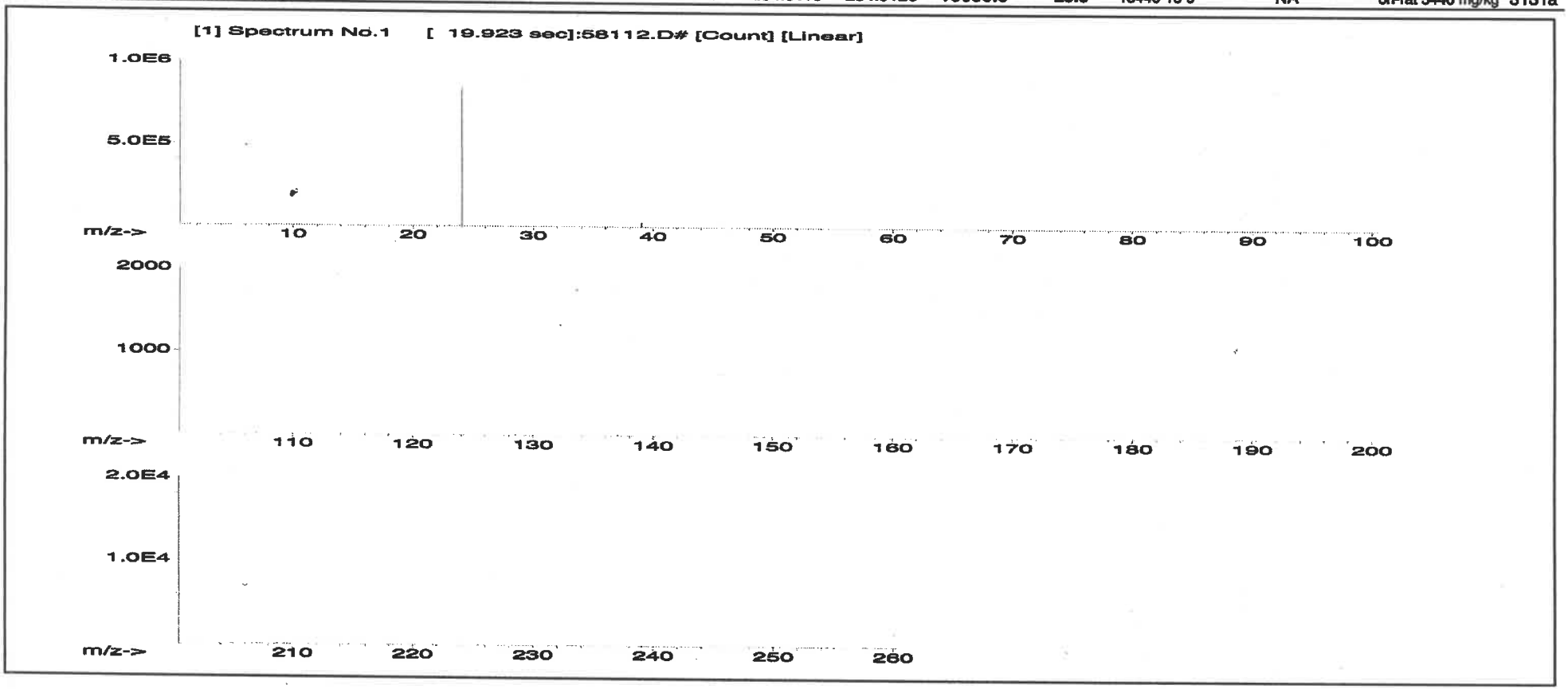
	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

M5768, M5769 (BP) R: 1/3/24

Formulated By:	Lawrence Barry	091823
Reviewed By:	Pedro L. Rentas	091823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Magnesium nitrate hexahydrate (Mg)	IN030	MGD052023A1	10000	99.999	0.10	8.51	234.9118	234.9126	**10000.0**	**20.0**	13446-18-9	NA	ori-rat 5440 mg/kg	3131a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	T	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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R: 02/09/24 M5798

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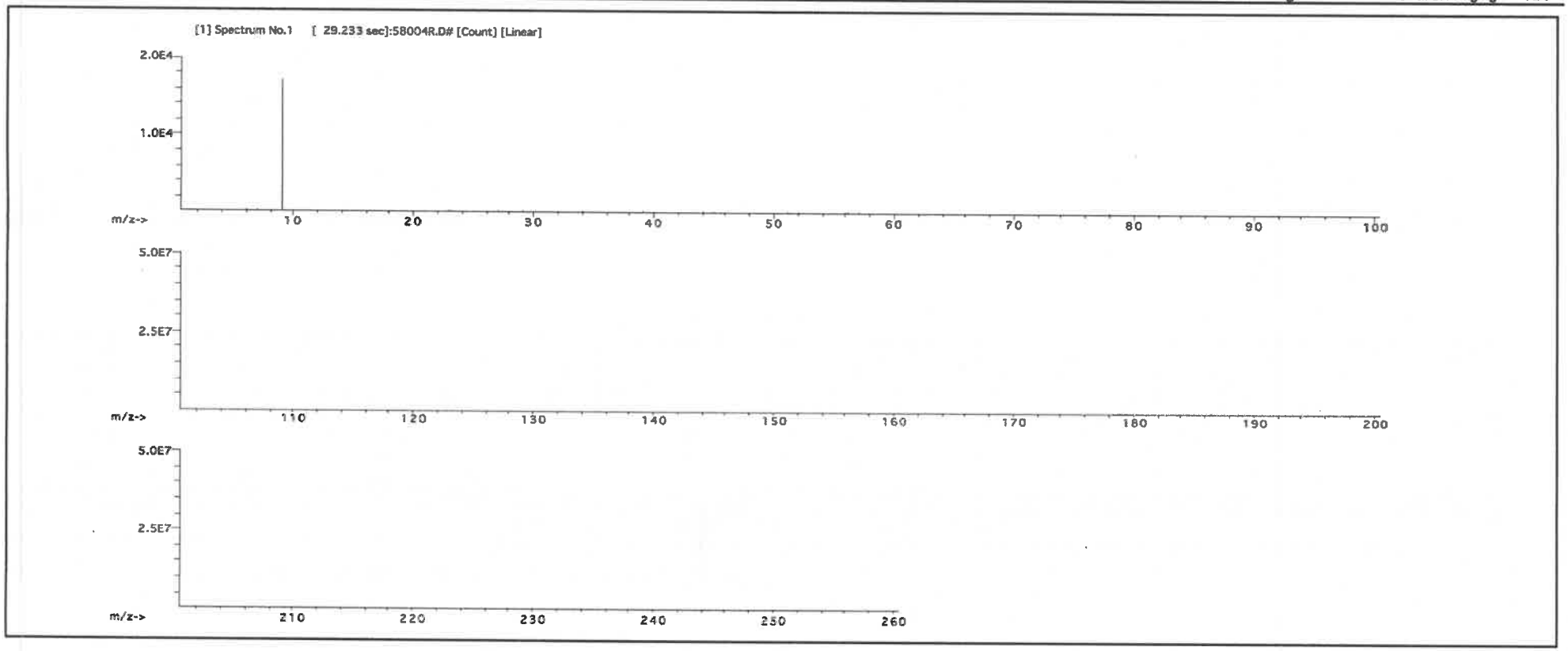
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57004**	24002546	Nitric Acid		
Lot Number:	**102523**				
Description:	**Beryllium (Be)**	2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	102526				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Beryllium nitrate (Be)	58104	091423	0.1000	200.0	0.084	1000	10001.5	**1000.0**	**2.2**	13597-99-4	0.2ug/m3	intrvns-rat 3.16mg/kg	NA



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	T	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

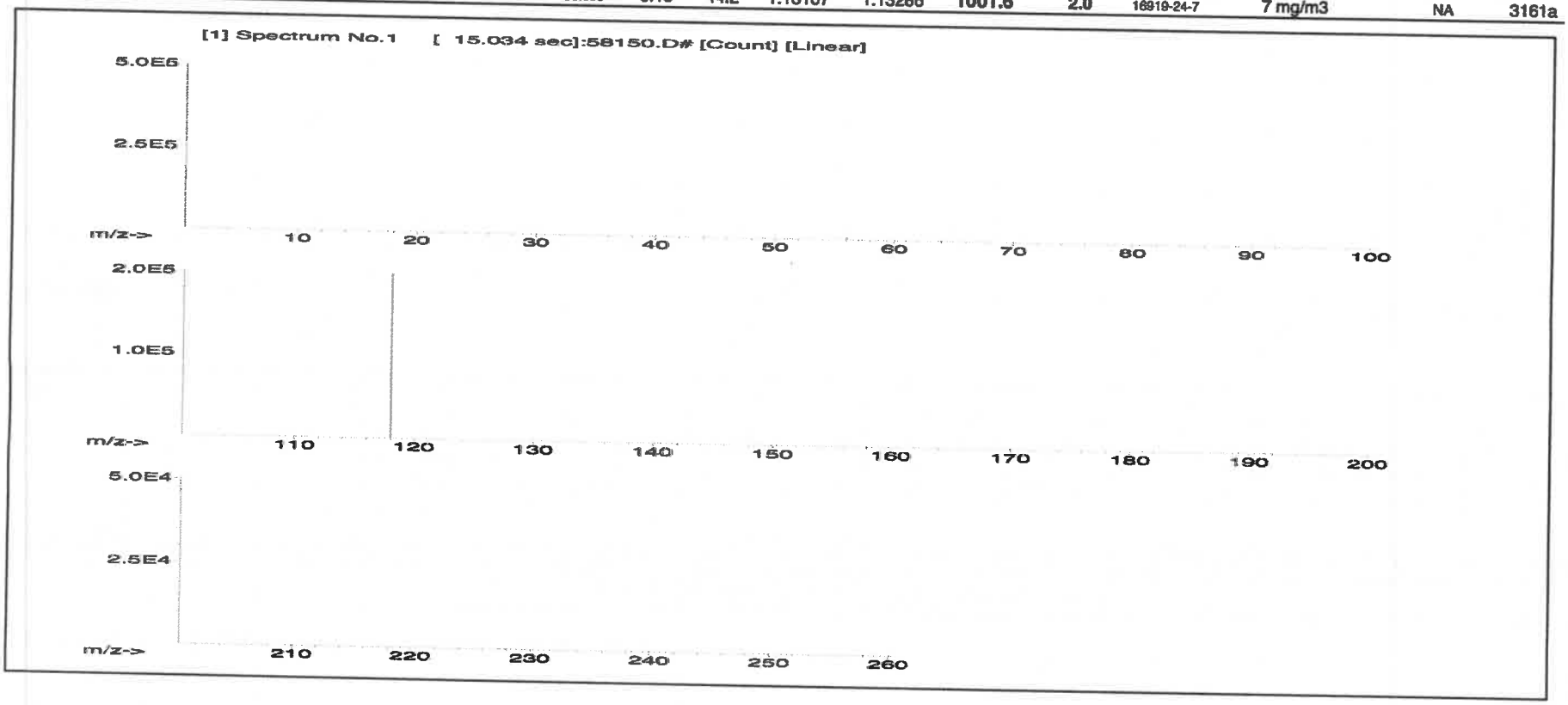
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	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.
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R: 02/09/24 IM5800 BH

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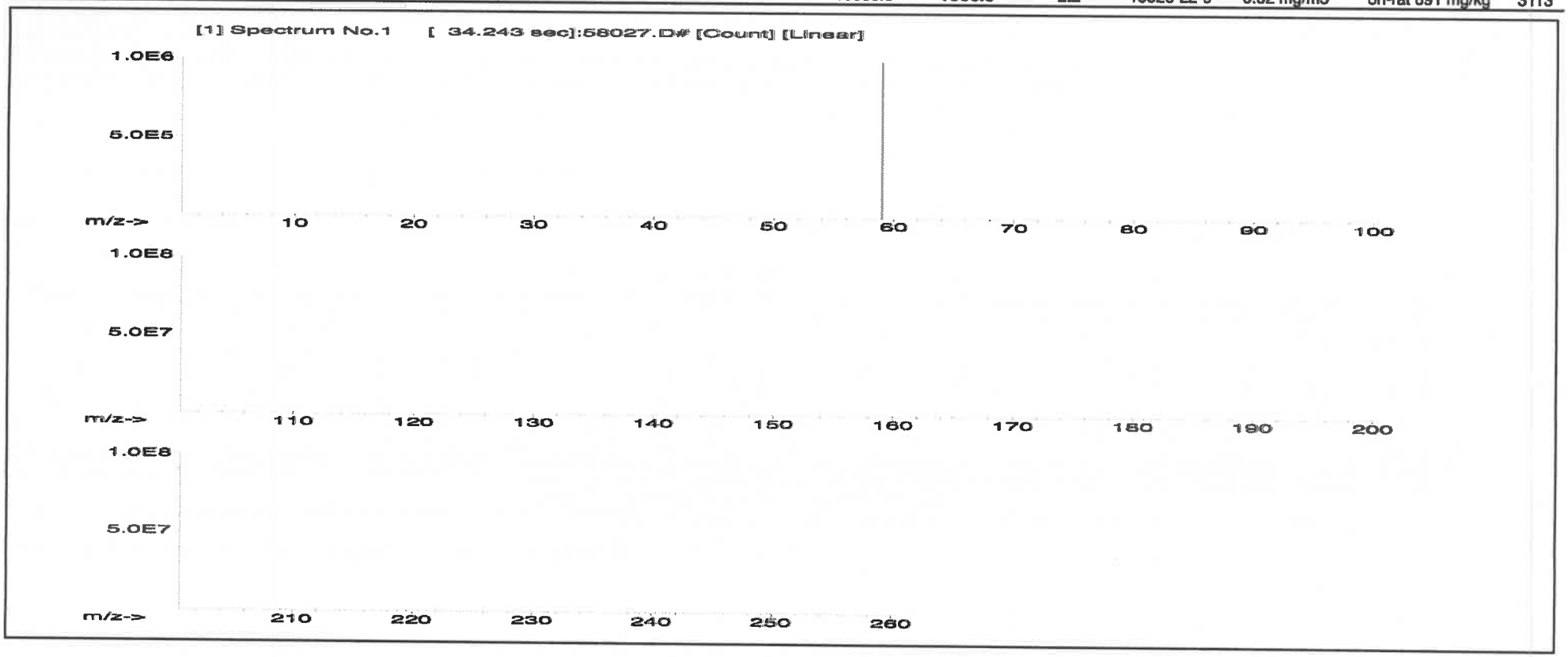
CERTIFIED WEIGHT REPORT:

		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.

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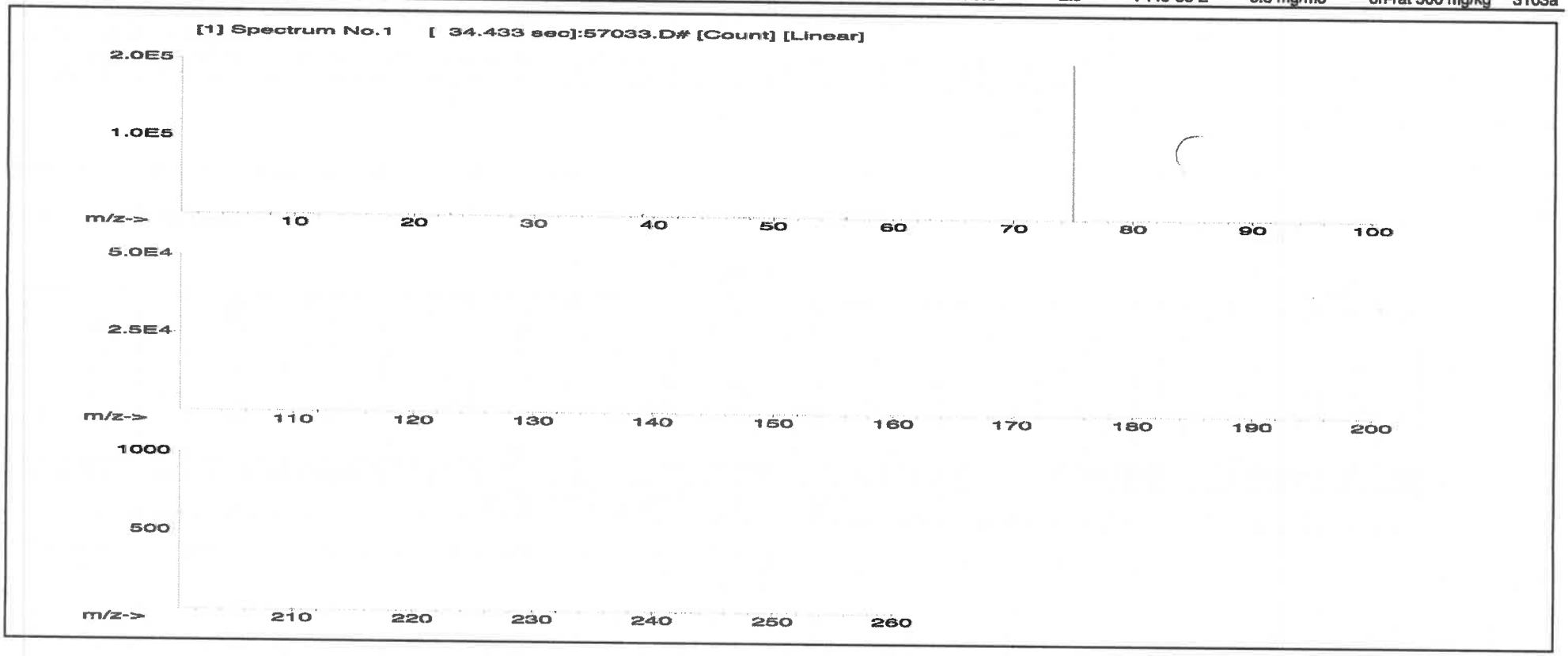
CERTIFIED **WEIGHT** REPORT:

		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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R1 02/09/24. M58165

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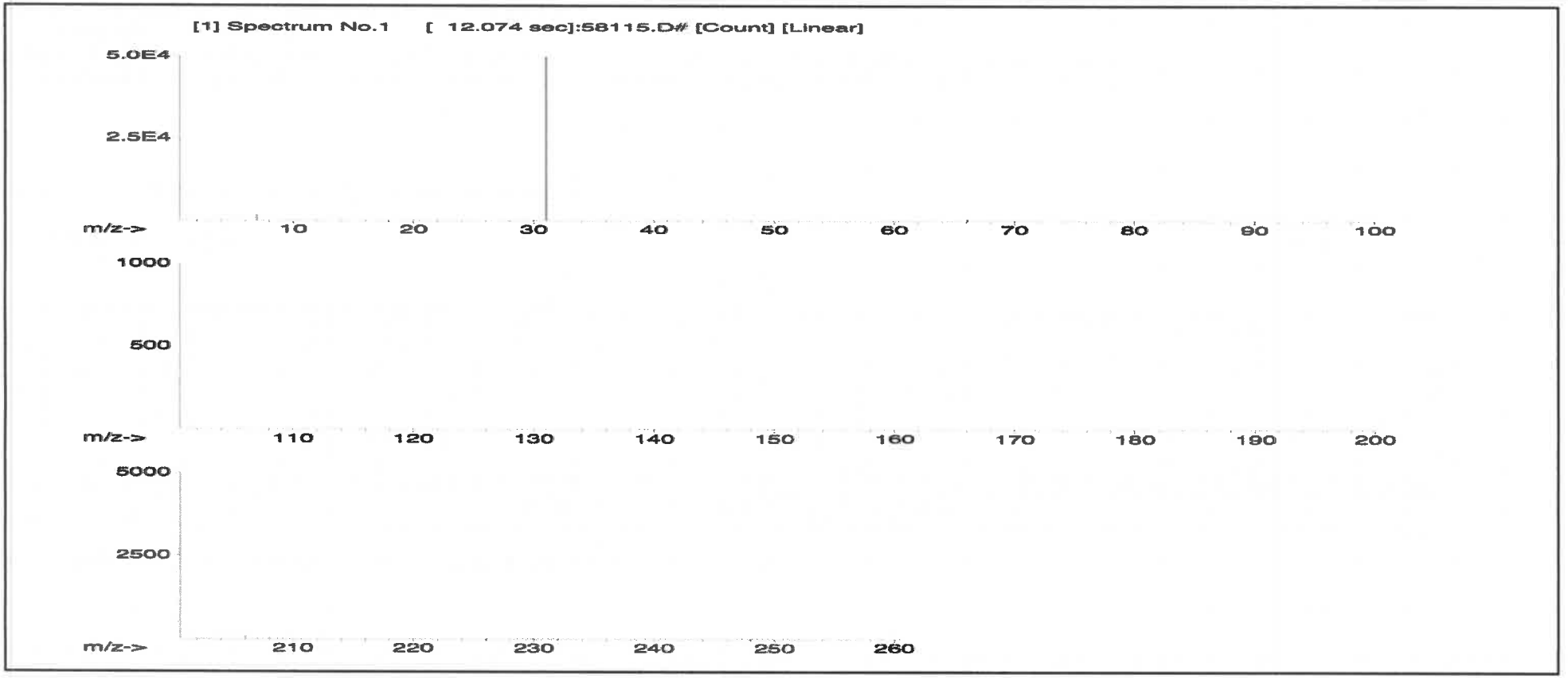
CERTIFIED WEIGHT REPORT:

Part Number:	**57115**			**Lot #**	
Lot Number:	**041723**		**Solvent:**	21110221	Nitric Acid
Description:	**Phosphorous (P)**				
			2%	40.0 (mL)	Nitric Acid
Expiration Date:	041726				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	041723
Reviewed By:	Pedro L. Rentas	041723

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium dihydrogen phosphate (P)	IN008	PV082019A1	10000	99.999	0.10	27.5	72.7287	72.7289	**10000.0**	**20.0**	7722-76-1	5 mg/m3	orl-rat >2000mg/kg	3186



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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R: 02/09/24 M5817

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CERTIFIED WEIGHT REPORT:

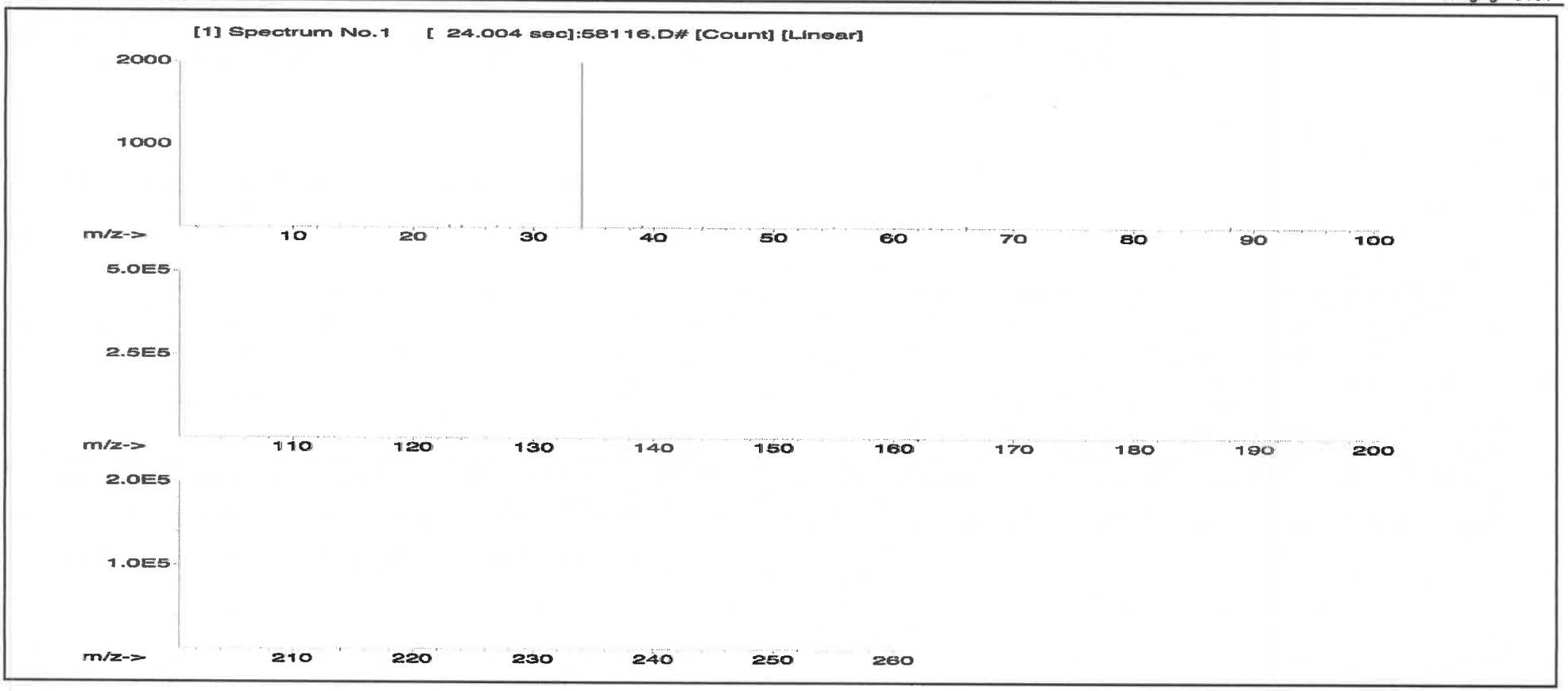
Part Number: 57116
Lot Number: 071123
Description: Sulfur (S)

Lot #
Solvent: 071123 ASTM Type 1 Water

Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB 5E-05 Balance Uncertainty
Weight shown below was diluted to (mL): 1999.48 0.058 Flask Uncertainty

Formulated By:	Lawrence Barry	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium sulfate (S)	IN117	SLBR7225V	10000	99.9	0.10	24.3	82.4675	82.4682	**10000.1**	**20.0**	7783-20-2	NA	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:

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R: 02/09/24 M.5818
Lot #

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CERTIFIED WEIGHT REPORT:

Part Number: 57014
Lot Number: 122023
Description: Silicon (Si)

Expiration Date: 122026
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1999.48 ± 0.058 Flask Uncertainty

Solvent: 24002546 Nitric Acid

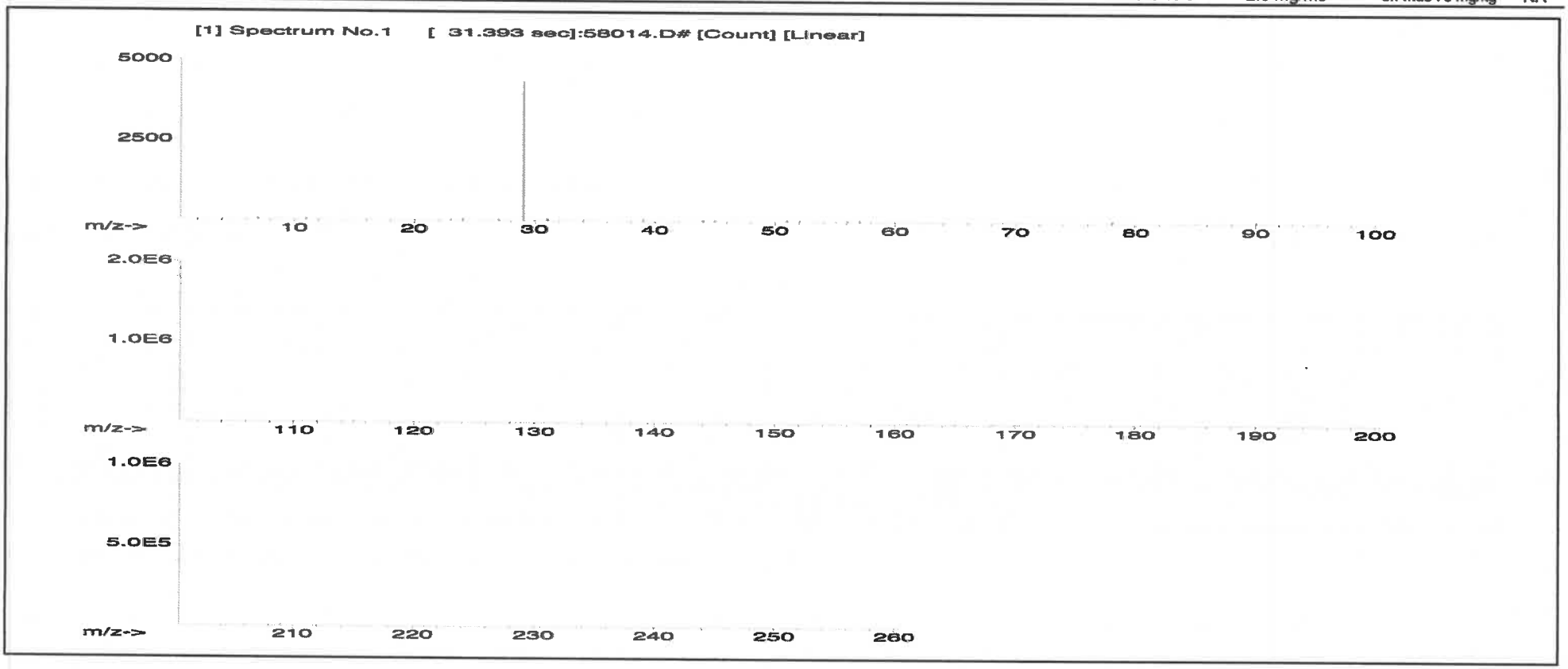
2% 40.0 (mL) Nitric Acid

5E-05 Balance Uncertainty

Aleah O'Brady
Formulated By: Aleah O'Brady 122023

Pedro Rentas
Reviewed By: Pedro L. Rentas 122023

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 hexafluorosilicate (Si)	IN009	SID082022A1	1000	99.999	0.10	14.4	13.8854	13.8855	**1000.0**	**2.0**	16919-19-0	2.5 mg/m3	orl-mus 70 mg/kg	NA



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<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	T	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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R: 02/09/24 M5819

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CERTIFIED WEIGHT REPORT:

Part Number: 58030
Lot Number: 111623
Description: Zinc (Zn)

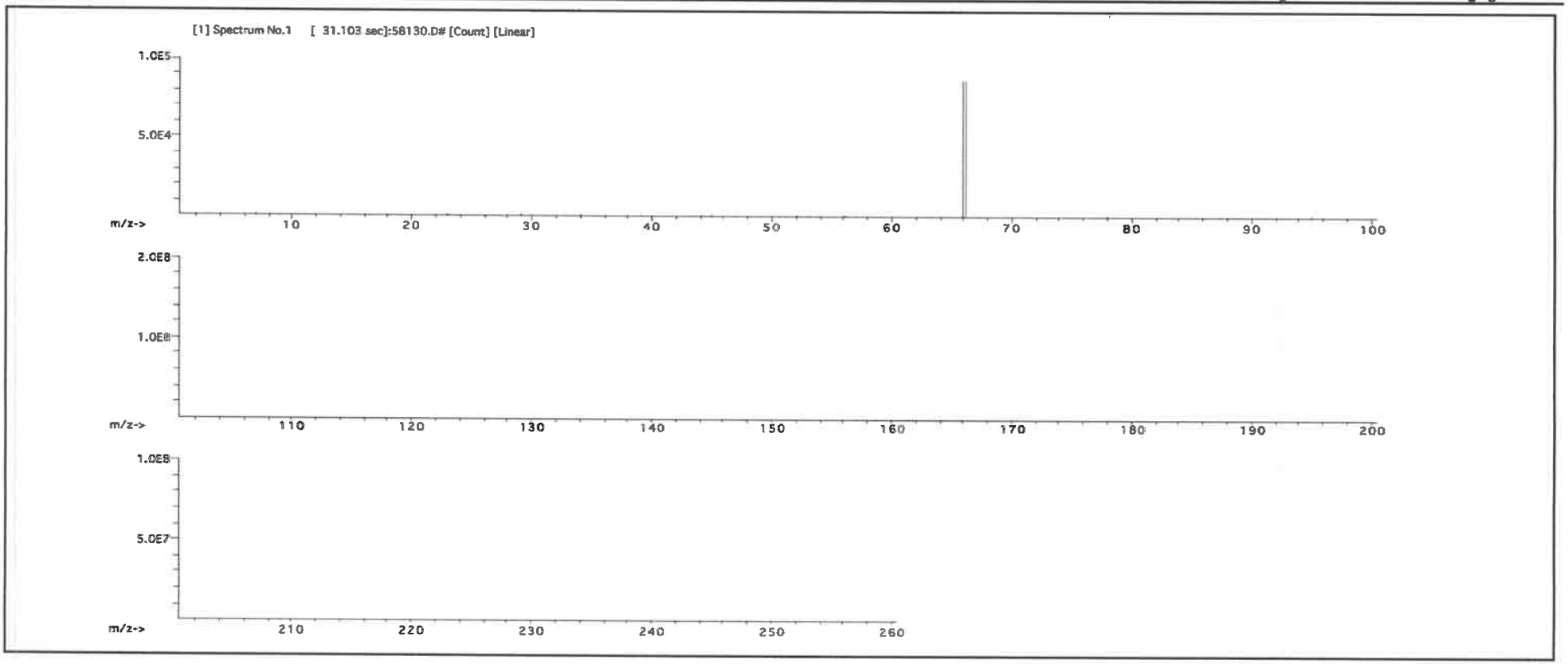
Expiration Date: 111626
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 3000.4 ± 0.06 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	

Formulated By:	Benson Chan	111623
Reviewed By:	Pedro L. Rentas	111623

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	12.3475	12.3502	**1000.2**	**2.0**	10196-18-6	1 mg/m3	orl-rat 1190mg/kg	3168



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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	T
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* 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).

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.

MSS28-32 MB MSS53 MB 3/30/23

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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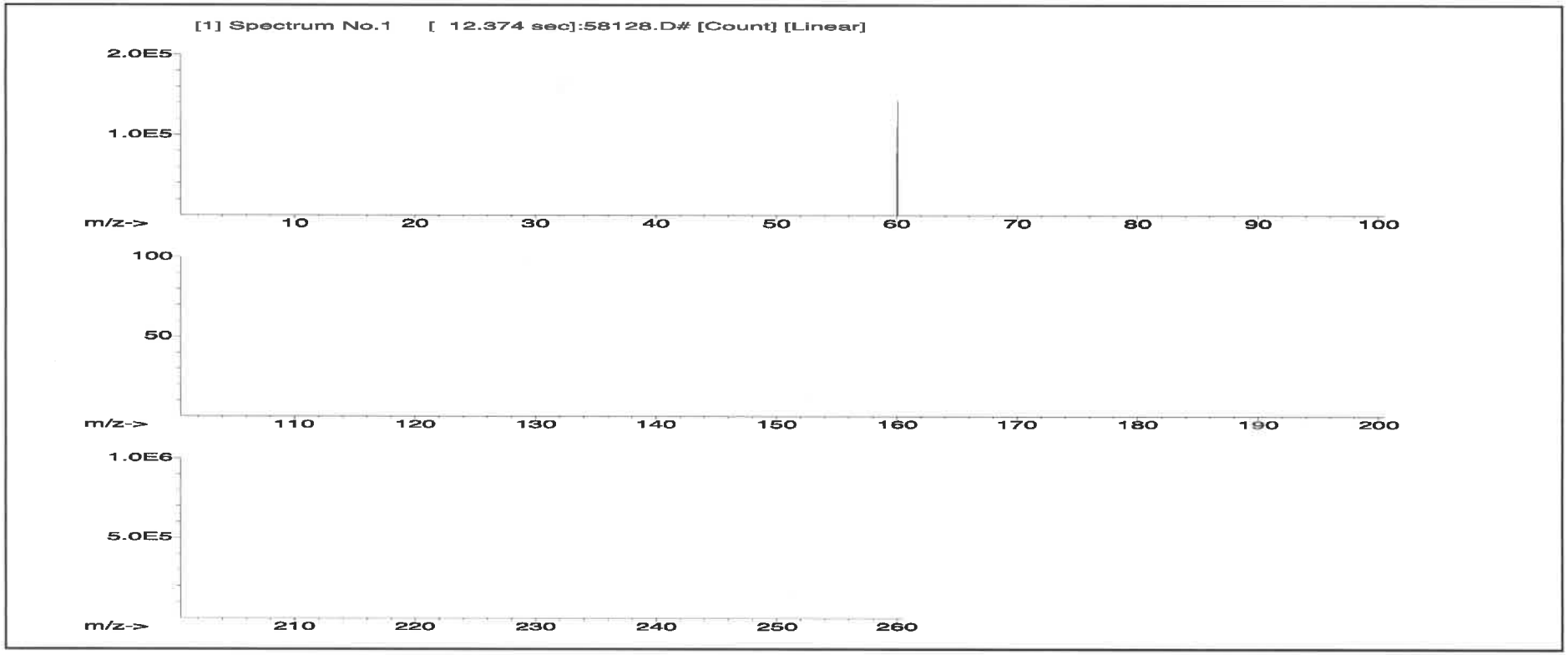
CERTIFIED WEIGHT REPORT:

		Lot #		
Part Number:	**57028**	**Solvent:**	24002546	Nitric Acid
Lot Number:	**041124**			
Description:	**Nickel (Ni)**		2%	5.0 (mL) Nitric Acid
Expiration Date:	041127			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	249.85	0.002	Flask Uncertainty	

Formulated By:	Brian Geddes	041124
Reviewed By:	Pedro L. Rentas	041124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Nickel(II) nitrate hexahydrate (Ni)	IN033	NIM052023A1	1000	99.999	0.10	20.2	1.2369	1.2369	**1000.0**	**2.0**	13478-00-7	1 mg/m3	orl-rat 1620 mg/kg	3136



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	T	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

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M5962 R! 06/14/24.

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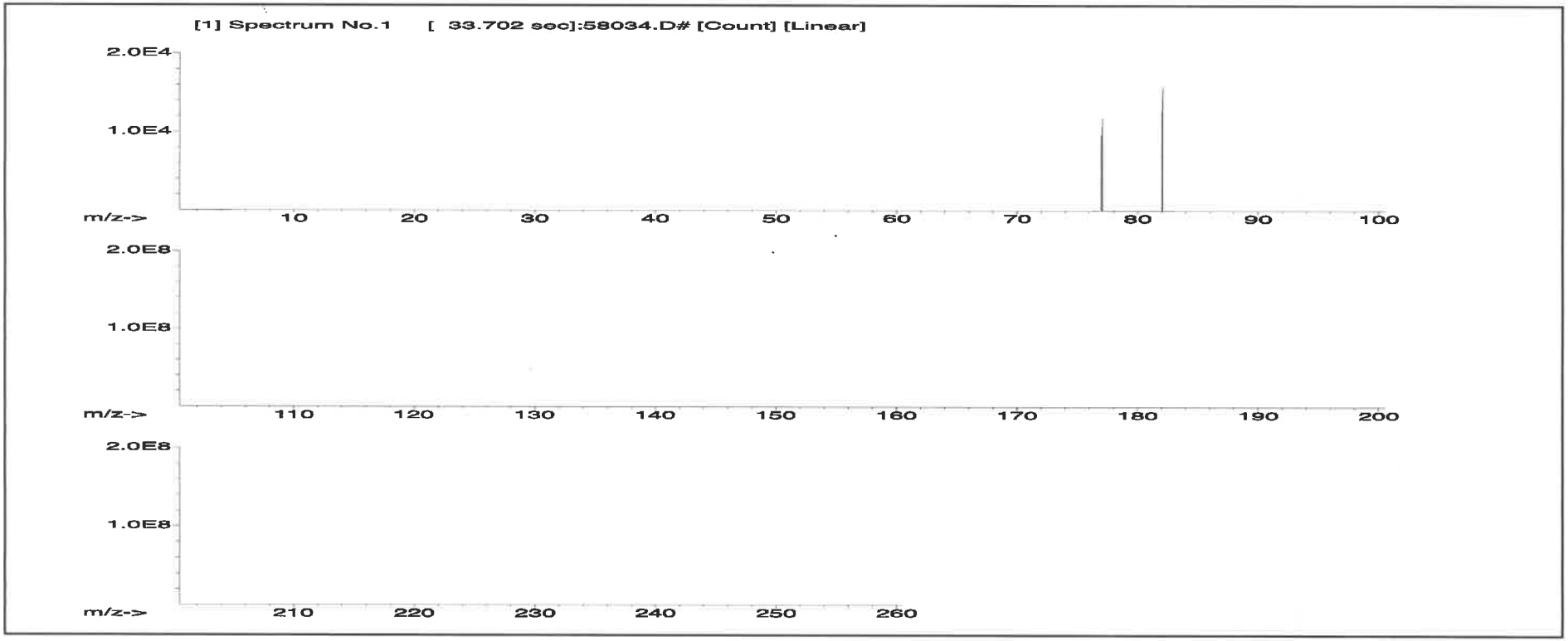
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57034**	24002546	Nitric Acid	
Lot Number:	**060624**			
Description:	**Selenium (Se)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060627			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty	

Formulated By:	Benson Chan	060624
Reviewed By:	Pedro L. Rentas	060624

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Selenium (Se)	58134	071223	0.1000	200.0	0.084	1000	10002.5	**1000.0**	**2.2**	7782-49-2	0.2 mg/m3	orl-rat 6700 mg/kg	3149



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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:

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Certified by:

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M5976, M5977
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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:	CGMO1
Lot Number:	T2-MO720876
Matrix:	H2O tr. NH4OH
Value / Analyte(s):	1 000 µg/mL ea: Molybdenum
Starting Material:	Ammonium Molybdate
Starting Material Lot#:	2361
Starting Material Purity:	99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 998 ± 7 µg/mL

Density: 1.000 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **998 ± 4 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance.

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000590	M	Eu	<	0.000300	M	Na		0.000879	M	Se	<	0.008000	M	Zn		0.000598
M	Al		0.000563	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.000175				
M	Ba		0.001689	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.006334	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Tl	<	0.032000				
M	Ce	<	0.008300	M	K		0.130213	M	Rb		0.004575	M	Tl		0.001266				
M	Co		0.000598	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.000527	O	Li		0.000059	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.000527	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.002252	M	Mg		0.000563	i	S	<		M	W		0.087982				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.001513	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br1 6O,190Os2+,190Pt 2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- July 17, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

MS978, MS979

INORGANIC VENTURES

Refine your results. Redefine your industry.

Certificate of Analysis

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info@inorganicventures.com

R: 2/22/24

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 865.01

ACCREDITED Reference Material Producer Certificate 865.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTI1
Lot Number:	T2-TI719972
Matrix:	2% (v/v) HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Titanium
Starting Material:	TI Metal
Starting Material Lot#:	2094
Starting Material Purity:	99.9975%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 5 µg/mL

Density: 1.012 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **1002 ± 4 µg/mL**
ICP Assay NIST SRM 3162a Lot Number: 130925

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/MM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \Sigma(w_i)\,(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{Char\ i}$
w_i = the weighting factors for each method calculated using the inverse square of the variance

$$w_i = (1/u_{Char\ i})^2 \,/\, (\Sigma(1/u_{Char\ i})^2)$$

CRM/RM Expanded Uncertainty ($\pm$) = $u_{CRM/RM} = k\,(u^2_{Char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2
$u_{Char} = [\Sigma((w_i)^2\,(u_{Char\ i})^2)]^{½}$ where $u_{Char\ i}$ are the errors from each characterization method
u_{bb} = bottle to bottle homogeneity standard uncertainty
u_{lts} = long term stability standard uncertainty (storage)
u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a)\,(u_{Char\ a})$$

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)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000536	M	Eu	<	0.000268	O	Na	<	0.032670	M	Se		0.001204	O	Zn	<	0.003267
O	Al		0.000872	O	Fe		0.003225	O	Nb	<	0.043560	O	Si		0.004735	O	Zr	<	0.043560
M	As	<	0.008586	M	Ga	<	0.000268	M	Nd	<	0.000268	M	Sm	<	0.000268				
M	Au	<	0.004577	M	Gd	<	0.000268	O	Ni	<	0.010890	M	Sn		0.000096				
O	B	<	0.008929	M	Ge	<	0.002146	M	Os	<	0.000269	O	Sr		0.000096				
M	Ba	<	0.002683	M	Hf		0.002161	O	P	<	0.054450	M	Ta		0.010560				
M	Be	<	0.005366	M	Hg	<	0.003231	M	Pb	<	0.001073	M	Tb	<	0.000268				
M	Bi	<	0.001609	M	Ho	<	0.000268	M	Pd	<	0.000268	M	Te	<	0.001341				
O	Ca		0.000676	M	In	<	0.002683	M	Pr	<	0.000268	M	Th	<	0.053663				
M	Cd	<	0.000268	M	Ir	<	0.000269	M	Pt	<	0.000536	s	Ti	<					
M	Ce	<	0.000268	M	K		0.001172	M	Rb	<	0.000268	M	Tl	<	0.000268				
M	Co	<	0.004293	M	La	<	0.000268	M	Re	<	0.000268	M	Tm	<	0.000268				
M	Cr		0.000752	O	Li	<	0.027225	M	Rh	<	0.000268	M	U	<	0.000268				
M	Cs	<	0.000268	M	Lu	<	0.000268	M	Ru	<	0.000269	M	V	<	0.019855				
O	Cu	<	0.010890	O	Mg	<	0.005445	i	S	<		M	W		0.000473				
M	Dy	<	0.000268	O	Mn	<	0.003267	M	Sb	<	0.006976	M	Y	<	0.002146				
M	Er	<	0.000268	M	Mo		0.000774	O	Sc	<	0.004900	M	Yb	<	0.000536				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form In Solution - 47.87 +4 6 Ti(F)6-2

Chemical Compatibility - Soluble in concentrated HCl, HF, H3PO4 H2SO4 and HNO3. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths or high levels of transition elements unless they are fluorinated). Stable with most inorganic anions with a tendency to hydrolyze forming the hydrated oxide in all dilute acids except HF.

Stability - 2-100 ppb levels stable (Alone or mixed with all other metals) as the Ti(F)6-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the Ti(F)6-2 for months in 1% 2-5% HNO3 / trace HF in an LDPE container.

Ti Containing Samples (Preparation and Solution) - Metal (Soluble in H2O / HF caution -powder reacts violently); Oxide - low temperature history anatase or rutile (Dissolved by heating in 1:1:1 H2O / HF / H2SO4); Oxide - high temperature history (~800EC) brookite (fuse in Pt0 with K2S2O7); Ores (fuse in Pt0 with KF + K2S2O7 - no KF if silica not present); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve by heating with 1:1:1 H2O / HF / H2SO4 or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite crystalline form).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 48 amu	14 ppt	N/A	32S16O, 32S14N, 14N16O18O, 14N17N2, 36Ar12C, 48Ca, [96X=2 (where X = Zr, Mo, Ru)]
ICP-OES 323.452 nm	0.0054 / 0.00092 µg/mL	1	Ce, Ar, Ni
ICP-OES 334.941 nm	0.0038 / 0.000028 µg/mL	1	Nb, Ta, Cr, U
ICP-OES 336.121 nm	0.0053 / 0.000034 µg/mL	1	W, Mo, Co

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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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

H5981 R:6/11/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57092**	24002546	Nitric Acid		
Lot Number:	**060724**				
Description:	**Uranium (U)**	2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	060727				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty		

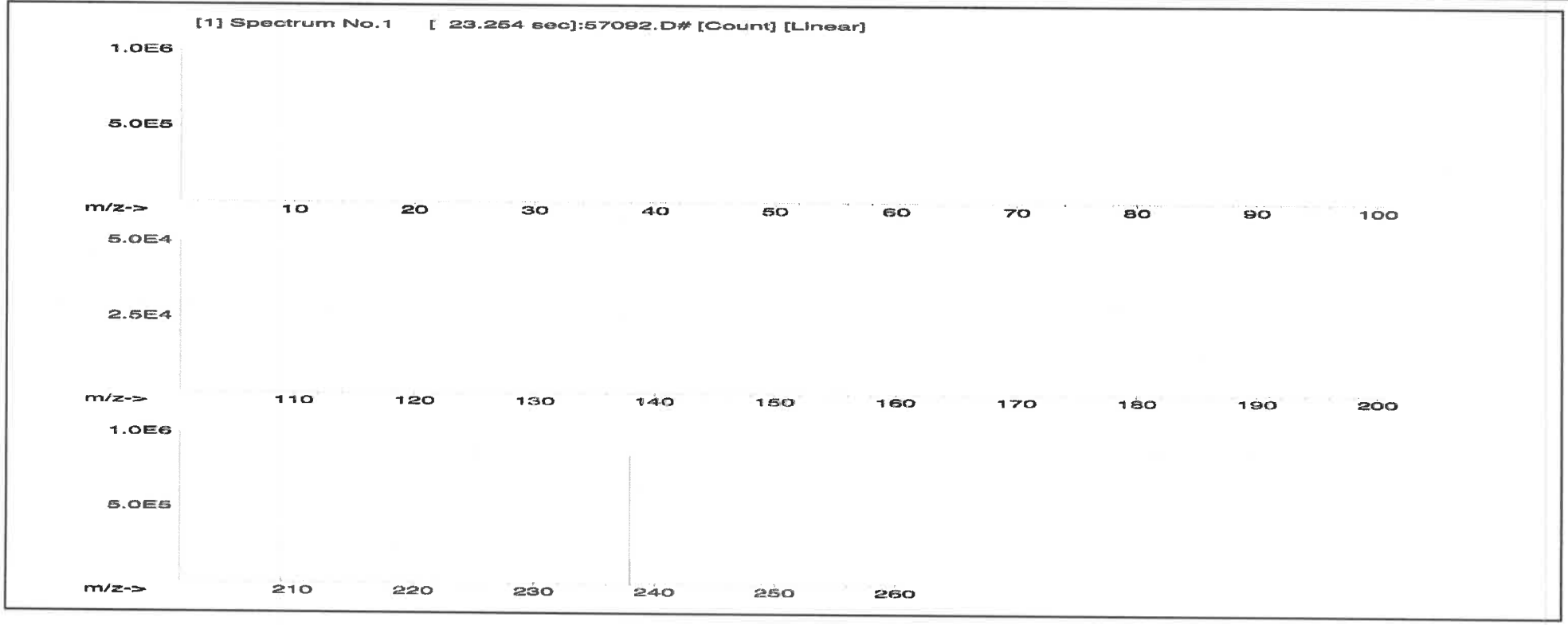
Giovanni Esposito

Formulated By:	Giovanni Esposito	060724

Pedro Rentas

Reviewed By:	Pedro L. Rentas	060724

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Uranyl nitrate hexahydrate (U)	58192	041524	0.1000	200.0	0.084	1000	10001.5	**1000.0**	**2.2**	13520-83-7	0.05 mg/m3	orl-rat 1040 mg/kg	3164



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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	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:

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).

Part # **57092** Lot # **060724**

Printed: 6/7/2024, 3:58:45 PM

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

45982 R: 6/11/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

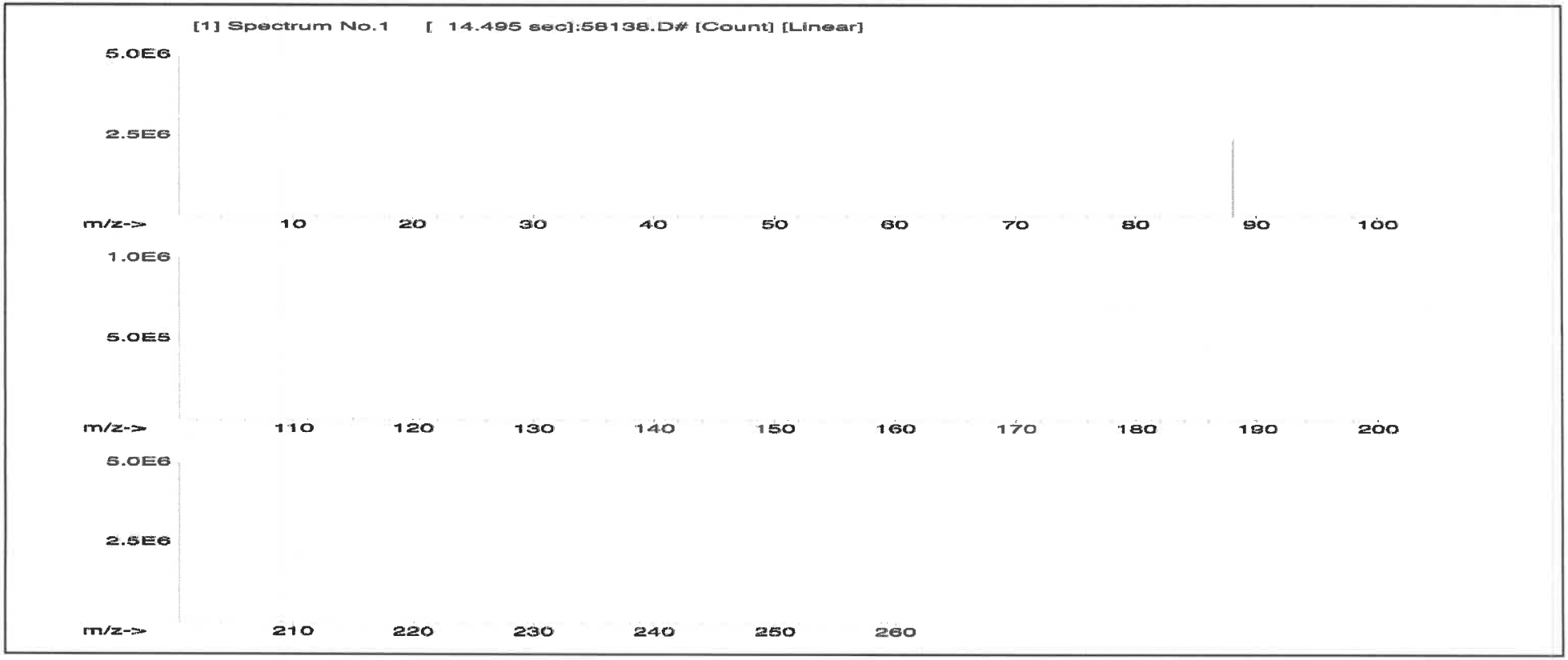
Part Number: 57038
Lot Number: 031524
Description: Strontium (Sr)

Expiration Date: 031527
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:	Benson Chan	031524
Reviewed By:	Pedro L. Rentas	031524

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Strontium nitrate (Sr)	IN017	SRZ022018A1	1000	99.997	0.10	41.2	4.85470	4.85502	**1000.1**	**2.0**	10042-76-9	NA	orl-rat >2000mg/kg	3153a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	T	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5983 R: 6/11/24

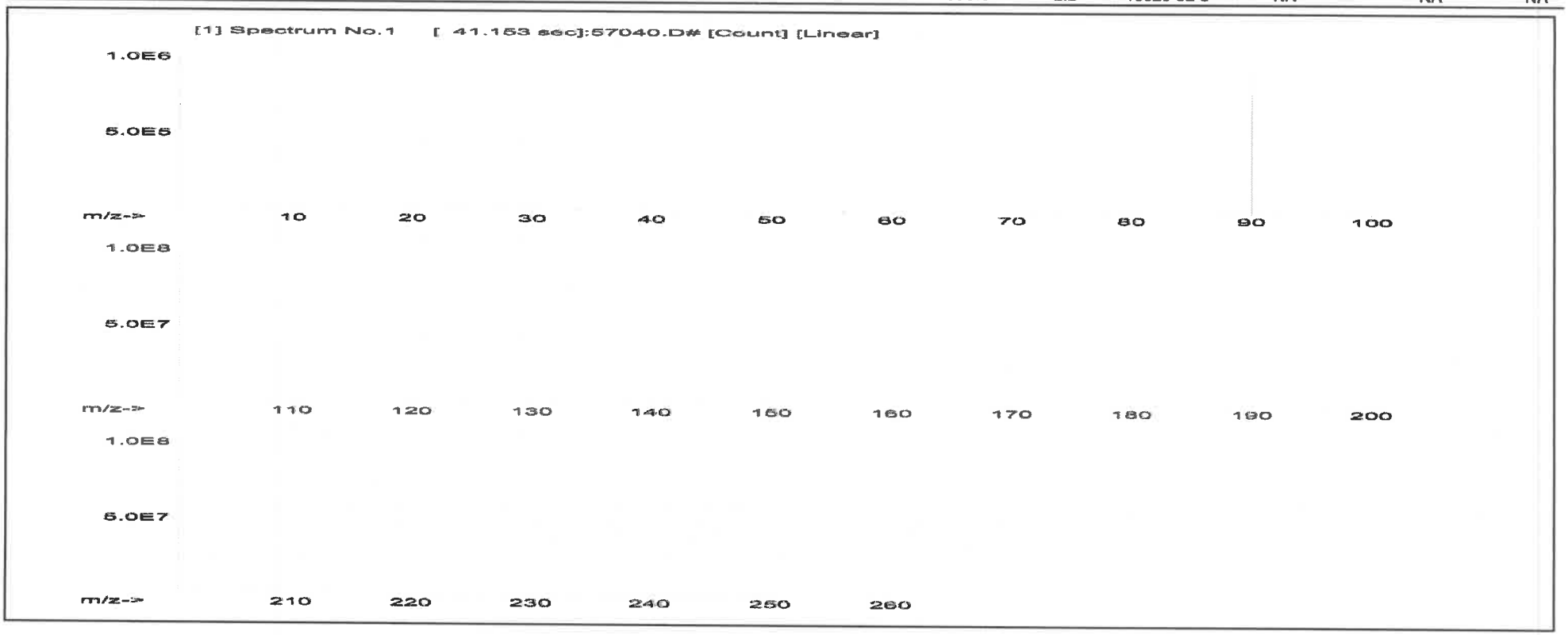
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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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www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	T

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 01/03/24 M6033

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

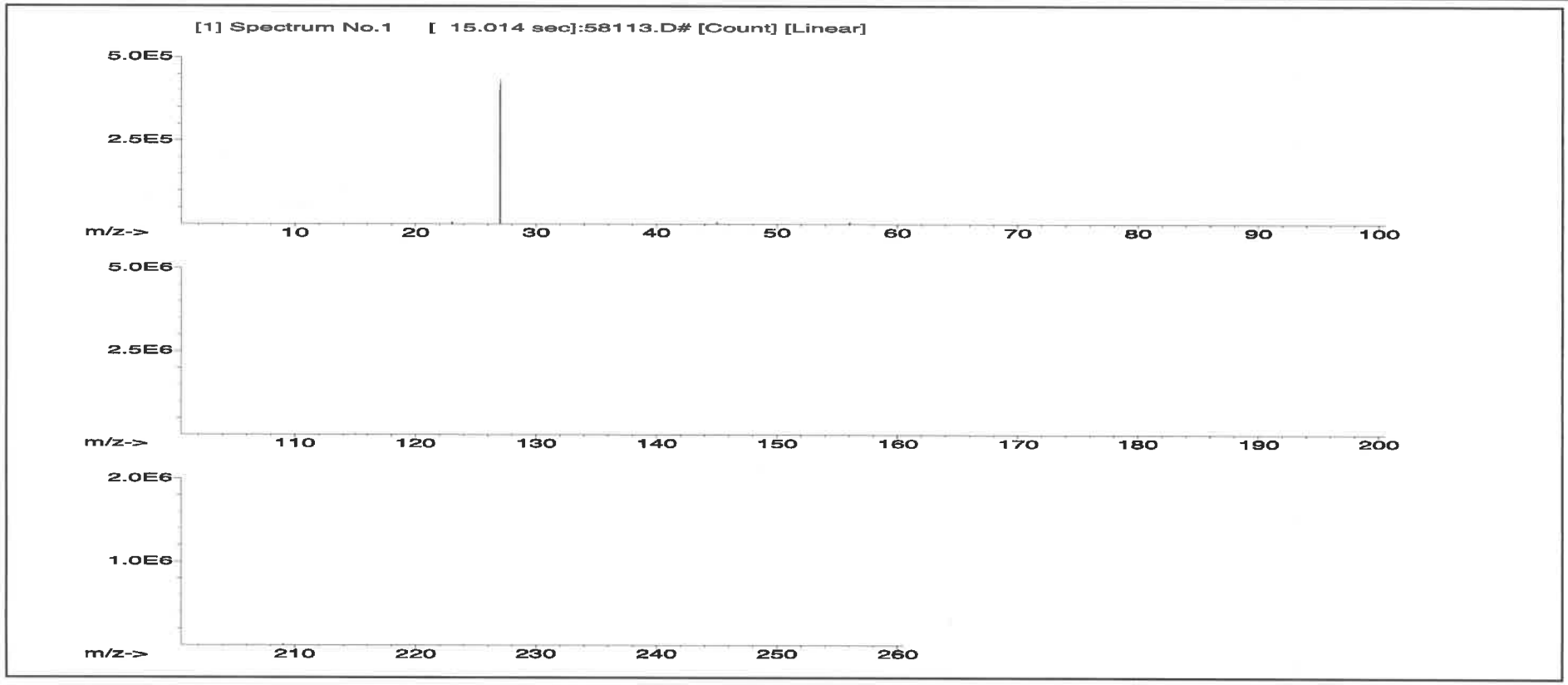
Part Number: 58113
Lot Number: 011623
Description: Aluminum (Al)
Expiration Date: 011626
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Giovanni Esposito
Formulated By: Giovanni Esposito 011623

Pedro Rentas
Reviewed By: Pedro L. Rentas 011623

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Aluminum nitrate nonahydrate (Al)	IN022	ALM112021A1	10000	99.999	0.10	7.30	273.9779	274.0078	**10001.1**	**20.0**	7784-27-2	2 mg/m3	orl-rat 3671 mg/kg	3101a



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

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

R → 10/13/24
Met dig

M 6121

Material No.: 9530-33
Batch No.: 0000275677
Manufactured Date: 2020/12/16
Retest Date: 2025/12/15
Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.6
ACS – Color (APHA)	<= 10	5
ACS – Residue after Ignition	<= 3 ppm	1
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.190
ACS – Bromide (Br)	<= 0.005 %	< 0.005
ACS – Extractable Organic Substances	<= 5 ppm	1
ACS – Free Chlorine (as Cl_2)	<= 0.5 ppm	< 0.5
Phosphate (PO_4)	<= 0.05 ppm	< 0.03
Sulfate (SO_4)	<= 0.5 ppm	< 0.3
Sulfite (SO_3)	<= 0.8 ppm	0.3
Ammonium (NH_4)	<= 3 ppm	< 1
Trace Impurities – Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities – Aluminum (Al)	<= 10.0 ppb	< 0.2
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities – Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities – Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities – Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities – Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities – Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities – Calcium (Ca)	<= 50.0 ppb	29.7
Trace Impurities – Chromium (Cr)	<= 1.0 ppb	< 0.4
Trace Impurities – Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities – Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities – Gallium (Ga)	<= 1.0 ppb	< 0.2

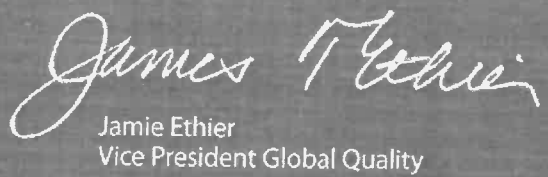
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Material No.: 9530-33
Batch No.: 0000275677

Test	Specification	Result
Trace Impurities - Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities - Gold (Au)	<= 4.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities - Iron (Fe)	<= 15.0 ppb	<1
Trace Impurities - Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities - Lithium (Li)	<= 1.0 ppb	0.2
Trace Impurities - Magnesium (Mg)	<= 10.0 ppb	0.4
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	0.1
Trace Impurities - Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities - Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities - Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities - Potassium (K)	<= 9.0 ppb	< 2.0
Trace Impurities - Selenium (Se), For Information Only	ppb	1.0
Trace Impurities - Silicon (Si)	<= 100.0 ppb	< 10.0
Trace Impurities - Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities - Sodium (Na)	<= 100.0 ppb	< 5.0
Trace Impurities - Strontium (Sr)	<= 1.0 ppb	< 0.2
Trace Impurities - Tantalum (Ta)	<= 1.0 ppb	< 0.9
Trace Impurities - Thallium (Tl)	<= 5.0 ppb	< 2.0
Trace Impurities - Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities - Titanium (Ti)	<= 1.0 ppb	0.2
Trace Impurities - Vanadium (V)	<= 1.0 ppb	< 0.2
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	0.3
Trace Impurities - Zirconium (Zr)	<= 1.0 ppb	< 0.1

For Laboratory, Research or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC



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

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

R -> 11/12/24

M6126

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

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 01/03/24 M5806, M5807

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

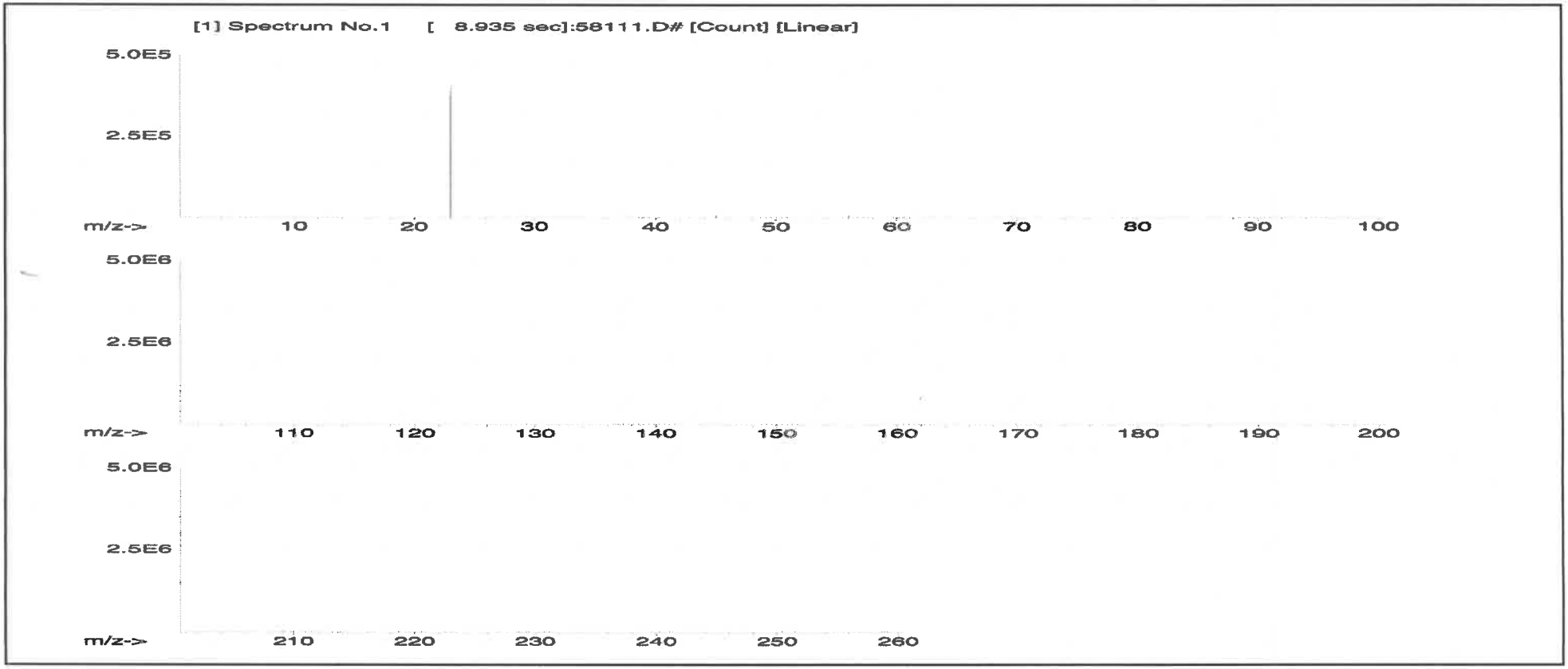
CERTIFIED WEIGHT REPORT:

Part Number:	**58111**		**Lot #**	
Lot Number:	**122223**	**Solvent:**	24002546	Nitric Acid
Description:	**Sodium (Na)**	2%	60.0 (mL)	Nitric Acid
Expiration Date:	122226			
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):	3000.4	0.06	Flask Uncertainty	

Aleah O'Brady

Formulated By:	Aleah O'Brady	122223
Reviewed By:	Pedro L. Rentas	122223

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Sodium nitrate (Na)	IN036	NAV012015I1	10000	99.999	0.10	26.9	111.5406	111.5479	**10000.7**	**20.0**	7631-99-4	5 mg/m3	orl-rat 3430 mg/kg	3152a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	T	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES™
Refine your results. Redefine your industry.

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:

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

ICSA-0803, Inferferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO_3. Analyze this solution by ICP-MS.

ICSB-0803, Analytes, mixed with ICSA-0803, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO_3. Analyze this ICSAB solution by ICP-MS.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-MS ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

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:

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

ICSA-0803, Inferferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO_3. Analyze this solution by ICP-MS.

ICSB-0803, Analytes, mixed with ICSA-0803, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO_3. Analyze this ICSAB solution by ICP-MS.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-MS ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-MS ICSA-0803, AND ICSA-0803 MIXED WITH ICSB-0803

Element	CRQL	Part A (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)	Part A +Part B (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)
Al	20.0	[100000]			[100000]		
Sb	2.0	(1.5)	-2.5	5.5	(22.0)	18.0	26.0
As	1.0	(0.1)	-1.9	2.1	19.0	16.2	21.9
Ba	10.0	(1.2)	-18.8	21.2	(22.0)	2.0	42.0
Be	1.0	(0)	-2.0	2.0	19.0	16.2	21.9
Cd	1.0	(0.7)	-1.3	2.7	20.0	17.0	23.0
Ca	500	[100000]			[100000]		
C		[200000]			[200000]		
Cl		[1000000]			[1000000]		
Cr	2.0	(21.0)	17.0	25.0	40.0	34.0	46.0
Co	1.0	(1.0)	-1.0	3.0	20.0	17.0	23.0
Cu	2.0	(8.0)	4.0	12.0	(25.0)	21.0	29.0
Fe	200	[100000]			[100000]		
Pb	1.0	(4.0)	2.0	6.0	25.0	21.3	28.8
Mg	500	[100000]			[100000]		
Mn	1.0	(7.0)	5.0	9.0	27.0	23.0	31.1
Mo		[2000]			[2000]		
Ni	1.0	(6.0)	4.0	8.0	24.0	20.4	27.6
P		[100000]			[100000]		
K	500	[100000]			[100000]		
Se	5.0	(0.3)	-9.7	10.3	(19.0)	9.0	29.0
Ag	1.0	(0)	-2.0	2.0	18.0	15.3	20.7
Na	500	[100000]			[100000]		
S		[100000]			[100000]		
Tl	1.0	(0)	-2.0	2.0	21.0	17.9	24.2
Ti		[2000]			[2000]		
V	5.0	(0.5)	-9.5	10.5	(19.0)	9.0	29.0
Zn	5.0	(11.0)	1.0	21.0	(29.0)	19.0	39.0

ICSA: M5873

ICSB: M5874

[ ] Indicates analytes that do not require ICP-MS determination in the ICS.
The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 2 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

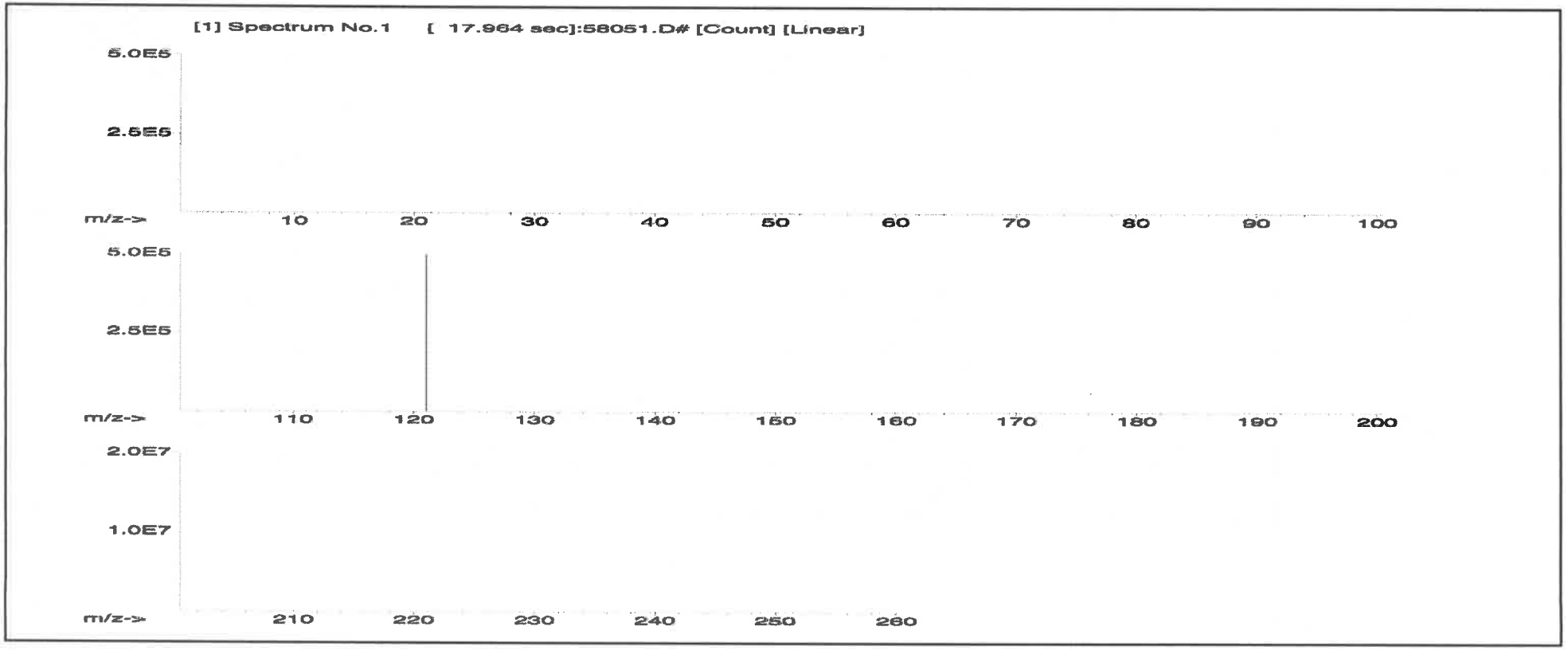
R: 01/03/24 M5802, M5803

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57051**	24002546	Nitric Acid	
Lot Number:	**120523**			
Description:	**Antimony (Sb)**			
		2.0%	60.0 (mL)	Nitric Acid
Expiration Date:	120526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	3000.41	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	120523
Reviewed By:	Pedro L. Rentas	120523

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	100923	0.1000	300.0	0.084	1000	10001.4	**1000.0**	2.1	7440-36-0	0.5 mg/m3	orl-rat 7000 mg/kg	3102a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	T	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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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

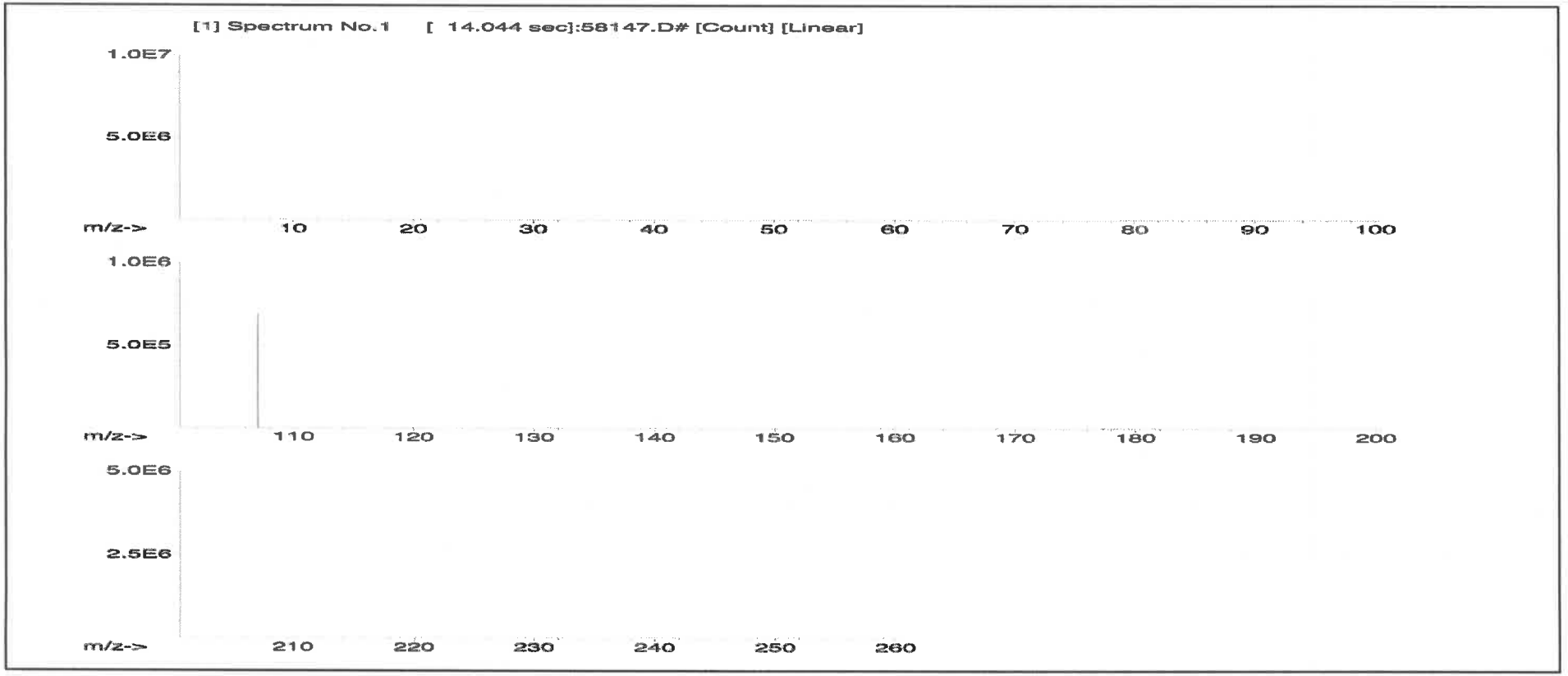
Weight shown below was diluted to (mL): 4000.30 0.058 Flask Uncertainty

		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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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	T	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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Certified Reference Material CRM

R: 03/16/23 M5473, M5474, M5475, M5476

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AR-1539 Certificate Number
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CERTIFIED WEIGHT REPORT:

Part Number: 56138
Lot Number: 082922
Description: Strontium (Sr)

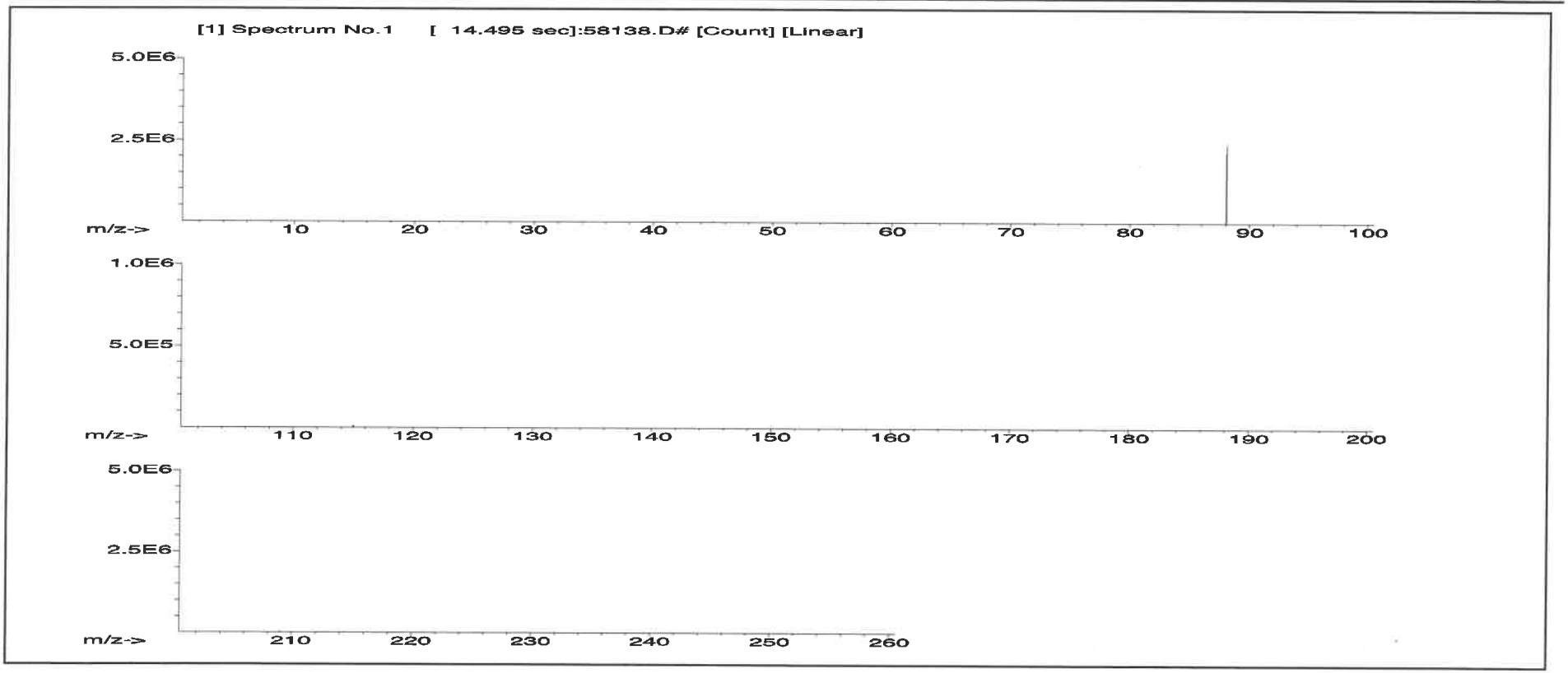
Expiration Date: 082925
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	20.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Lawrence Barry	082922
Reviewed By:	Pedro L. Rentas	082922

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	**Actual Conc. (µg/mL)**	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Strontium nitrate (Sr)	IN017	SRZ022018A1	10000	99.997	0.10	41.2	24.2756	24.2758	**10000.1**	**20.0**	10042-76-9	NA	orl-rat >2000mg/kg	3153a



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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	T	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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M6023

R ! 8/5/24

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CERTIFIED WEIGHT REPORT:

Part Number: 57081
Lot Number: 062724
Description: Thallium (Tl)

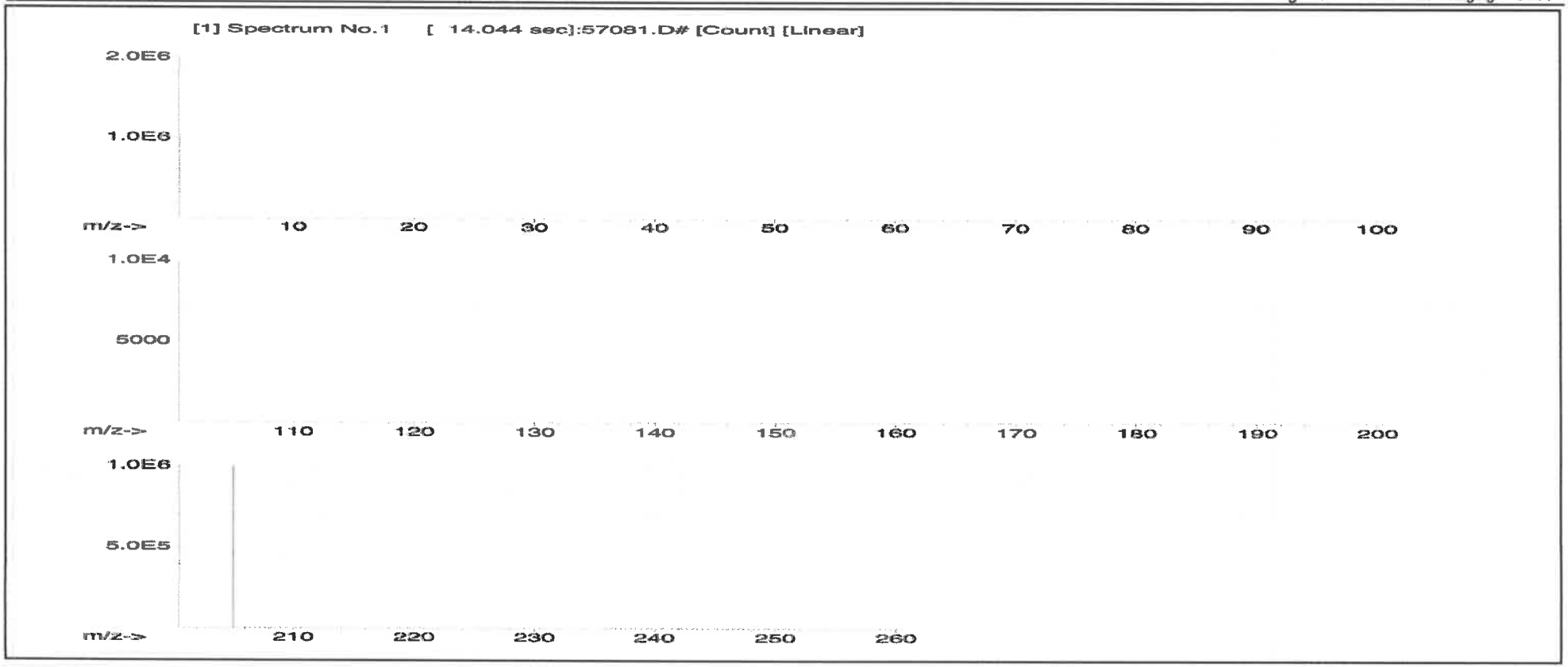
Expiration Date: 062727
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.1

	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

Pedro Rentas
Reviewed By: Pedro L. Rentas 062724

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Thallium nitrate (Tl)	IN037	BCCF4399	1000	99.999	0.10	77.0	2.5975	2.5977	**1000.1**	**2.0**	10102-45-1	0.1 mg/m3	orl-mus 15mg/kg	3158



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	T	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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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	

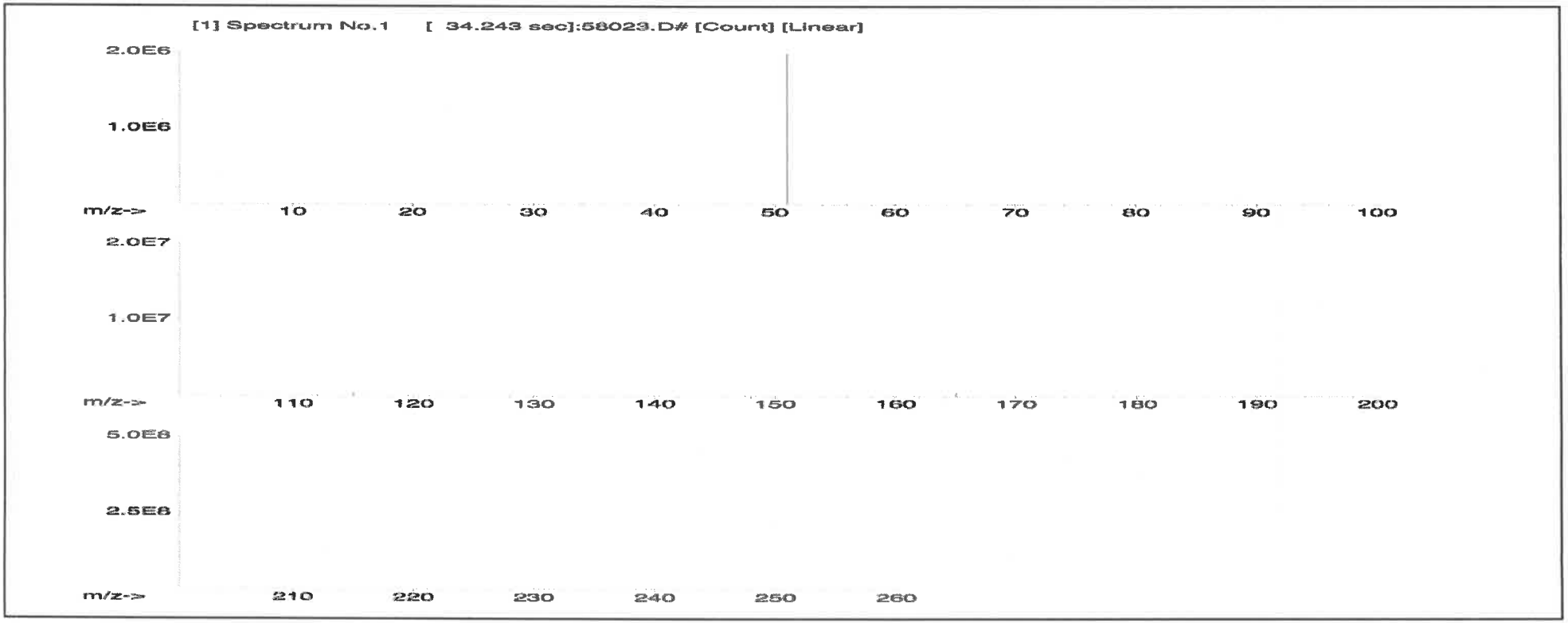
Aleah O'Brady

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



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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	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:

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Certified by:

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284 Sheffield Street, Mountainside, NJ 07092

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CHAIN OF CUSTODY RECORD

Doc # 381 Rev 4_01/08/2020

39 Spruce Street
East Longmeadow, MA 01028

Page __1__ of __1__

Company Name:	Nobis Group
Address:	55 Technology Drive 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:	P. Moran

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	Total and SPLP Vanadium
	004-VSL-07-121224	12/12/24	1000	Grab	S	U	3	2	1				X	X	X	X	X	X	X	X	X	
	004-VSL-08-121224		1010				3	2	1				X	X	X	X	X	X	X	X	X	
	004-VSL-09-121224		1020				3	2	1				X	X	X	X	X	X	X	X	X	
	004-VSL-10-121224		1030				3	2	1				X	X	X	X	X	X	X	X	X	
	004-VSL-11-121224		1040				3	2	1				X	X	X	X	X	X	X	X	X	
	004-VSL-12-121224		1050				3	2	1				X	X	X	X	X	X	X	X	X	
	004-VSL-13-121224		1100				3	2	1				X	X	X	X	X	X	X	X	X	
	004-VSL-14-121224		1110				3	2	1				X	X	X	X	X	X	X	X	X	
	004-VSL-06R-121224	↓	1115	↓	↓	↓	0	2	0													X

[2] Preservation Code

Contest Use Only
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) DI Water

Relinquished by: (signature)	Date/Time: 12/13/24 1130	Client Comments: DI water preserved samples frozen on 12/12/24
Received by: (signature)	Date/Time: 12-17-24 9:50	
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:	

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:

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.

IR Gun #1 2.4°

478 of 481

P5306-METALS

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 : P5306 NOBI03
Client Name : Nobis Group
Client Contact : Adam Roy
Invoice Name : Nobis Group
Invoice Contact : Adam Roy

Order Date : 12/17/2024 10:24:00 AM
Project Name : Raymark Superfund Site
Receive DateTime : 12/17/2024 9:50:00 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
P5306-01	OU4-VSL-07-121224	Solid	12/12/2024	10:00					
					VOCMS Group3		8260D		10 Bus. Days
P5306-03	OU4-VSL-08-121224	Solid	12/12/2024	10:10					
					VOCMS Group3		8260D		10 Bus. Days
P5306-05	OU4-VSL-09-121224	Solid	12/12/2024	10:20					
					VOCMS Group3		8260D		10 Bus. Days
P5306-07	OU4-VSL-10-121224	Solid	12/12/2024	10:30					
					VOCMS Group3		8260D		10 Bus. Days
P5306-09	OU4-VSL-11-121224	Solid	12/12/2024	10:40					
					VOCMS Group3		8260D		10 Bus. Days
P5306-11	OU4-VSL-12-121224	Solid	12/12/2024	10:50					
					VOCMS Group3		8260D		10 Bus. Days
P5306-13	OU4-VSL-13-121224	Solid	12/12/2024	11:00					
					VOCMS Group3		8260D		10 Bus. Days
P5306-15	OU4-VSL-14-121224	Solid	12/12/2024	~~11:15~~ 11:10					

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID :	P5306 NOBI03	**Order Date :**	12/17/2024 10:24:00 AM	**Project Mgr :**	
Client Name :	Nobis Group	**Project Name :**	Raymark Superfund Site	**Report Type :**	Level 4
Client Contact :	Adam Roy	**Receive DateTime :**	12/17/2024 9:50:00 AM	**EDD Type :**	EQUIS
Invoice Name :	Nobis Group	**Purchase Order :**		**Hard Copy Date :**	
Invoice Contact :	Adam Roy			**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		

Relinguished By : _____
Date / Time : 12-17-24 1230

Received By : _____
Date / Time : 12.17.24 12:30

Storage Area : **VOA Refridgerator Room**