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

DATA PACKAGE

METALS

PROJECT NAME : NJ WASTE WATER PT

CHEMTECH CONSULTING GROUP

284 Sheffield St,

Mountainside, NJ - 07092

Phone No: 908-789-8900

ORDER ID : P3847

ATTENTION : QA Officer

Laboratory Certification ID # 20012

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Cover Page

Order ID : P3847

Project ID : NJ Waste Water PT

Client : Chemtech Consulting Group

Lab Sample Number	Client Sample Number
P3847-01	PT-TM1-WP
P3847-02	PT-TM1-WP
P3847-03	PT-SNTI-WP
P3847-04	PT-SNTI-WP
P3847-05	PT-MIN2-WP
P3847-06	PT-MIN2-WP
P3847-07	PT-HG-WP

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

Signature : _____ Date: 11/29/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Chemtech Consulting Group
Project Name: NJ Waste Water PT
Project # N/A
Chemtech Project # P3847
Test Name: Metals Group3,Metals Group4,Metals Group5

A. Number of Samples and Date of Receipt:
7 Water samples were received on 09/05/2024.

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

C. Analytical Techniques:
The analysis of Metals Group3,Metals Group4,Metals Group5 was based on method 6020B.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
Sample PT-TM1-WP was diluted due to high concentrations for Nickel and Vanadium & Sample PT-SNTI-WP was diluted due to high concentrations for Tin.
The Blank Spike met requirements for all samples.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.

E. Additional Comments:
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.

Internal standard 45Sc(1) and (2) was out Side qc limit for samples P3847-05 in Original so for this sample affected parameters are reported from 5X Dilution.

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_____

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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

QA Control # A3040961

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: P3847 MATRIX: Water

METHOD: 6010D,6020B

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

ADDITIONAL COMMENTS:

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.

Internal standard 45Sc(1) and (2) was out Side qc limit for samples P3847-05 in Original so for this sample affected parameters are reported from 5X Dilution.

_____ _____

QA REVIEW Date

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P3847

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)	✓
Check chain-of-custody for proper relinquish/return of samples	✓
Is the chain of custody signed and complete	✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	✓
Collect information for each project id from server. Were all requirements followed	✓
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody	✓
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	✓
Do requested analyses on Chain of Custody agree with the log-in page	✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	✓
Were the samples received within hold time	✓
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	✓
ANALYTICAL:	
Was method requirement followed?	✓
Was client requirement followed?	✓
Does the case narrative summarize all QC failure?	✓
All runlogs and manual integration are reviewed for requirements	✓
All manual calculations and /or hand notations verified	✓

QA Review Signature: SOHIL JODHANI **Date:** 11/29/2024

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LAB CHRONICLE

OrderID:	P3847	**OrderDate:**	9/5/2024 2:21:00 PM
Client:	Chemtech Consulting Group	**Project:**	NJ Waste Water PT
Contact:	QA Officer	**Location:**	QA Office

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3847-02	**PT-TM1-WP**	**Water**			**09/03/24**			**09/05/24**
			Metals Group3	6020B		10/17/24	10/17/24	
P3847-04	**PT-SNTI-WP**	**Water**			**09/03/24**			**09/05/24**
			Metals Group4	6020B		10/17/24	10/17/24	
P3847-06	**PT-MIN2-WP**	**Water**			**09/03/24**			**09/05/24**
			Metals Group5	6020B		10/17/24	10/17/24	

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Hit Summary Sheet
SW-846

SDG No.: P3847 **Order ID:** P3847

Client: Chemtech Consulting Group **Project ID:** NJ Waste Water PT

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : PT-TM1-WP								
P3847-02	PT-TM1-WP	Water	Aluminum	2550		1.98	20.0	ug/L
P3847-02	PT-TM1-WP	Water	Antimony	797		0.11	2.00	ug/L
P3847-02	PT-TM1-WP	Water	Arsenic	541		0.090	1.00	ug/L
P3847-02	PT-TM1-WP	Water	Barium	598		0.30	10.0	ug/L
P3847-02	PT-TM1-WP	Water	Beryllium	300		0.16	1.00	ug/L
P3847-02	PT-TM1-WP	Water	Cadmium	403		0.30	1.00	ug/L
P3847-02	PT-TM1-WP	Water	Calcium	89.4	J	62.5	500	ug/L
P3847-02	PT-TM1-WP	Water	Chromium	563		0.40	2.00	ug/L
P3847-02	PT-TM1-WP	Water	Cobalt	181		0.062	1.00	ug/L
P3847-02	PT-TM1-WP	Water	Copper	657		0.40	2.00	ug/L
P3847-02	PT-TM1-WP	Water	Iron	1370		9.60	50.0	ug/L
P3847-02	PT-TM1-WP	Water	Lead	935		0.11	1.00	ug/L
P3847-02	PT-TM1-WP	Water	Manganese	628		0.24	1.00	ug/L
P3847-02	PT-TM1-WP	Water	Nickel	1650	D	0.36	2.00	ug/L
P3847-02	PT-TM1-WP	Water	Tin	0.33	J	0.12	5.00	ug/L
P3847-02	PT-TM1-WP	Water	Molybdenum	528		0.93	5.00	ug/L
P3847-02	PT-TM1-WP	Water	Selenium	484		1.38	5.00	ug/L
P3847-02	PT-TM1-WP	Water	Silver	601		0.077	1.00	ug/L
P3847-02	PT-TM1-WP	Water	Sodium	94.2	J	85.8	500	ug/L
P3847-02	PT-TM1-WP	Water	Thallium	415		0.085	1.00	ug/L
P3847-02	PT-TM1-WP	Water	Vanadium	1060	D	0.14	10.0	ug/L
P3847-02	PT-TM1-WP	Water	Zinc	613		0.56	5.00	ug/L
P3847-02	PT-TM1-WP	Water	Strontium	443		0.35	1.00	ug/L
P3847-02	PT-TM1-WP	Water	Titanium	0.30	J	0.26	5.00	ug/L
Client ID : PT-SNTI-WP								
P3847-04	PT-SNTI-WP	Water	Tin	1300	D	0.24	10.0	ug/L
P3847-04	PT-SNTI-WP	Water	Titanium	97.1		0.26	5.00	ug/L
Client ID : PT-MIN2-WP								
P3847-06	PT-MIN2-WP	Water	Calcium	67600	D	313	2500	ug/L
P3847-06	PT-MIN2-WP	Water	Magnesium	28500	D	133	2500	ug/L
P3847-06	PT-MIN2-WP	Water	Potassium	23000	D	231	2500	ug/L
P3847-06	PT-MIN2-WP	Water	Sodium	84900	D	429	2500	ug/L

SAMPLE DATA

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	09/03/24
Project:	NJ Waste Water PT	Date Received:	09/05/24
Client Sample ID:	PT-TM1-WP	SDG No.:	P3847
Lab Sample ID:	P3847-02	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	2550		1	1.98	20.0	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7440-36-0	Antimony	797		1	0.11	2.00	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7440-38-2	Arsenic	541		1	0.090	1.00	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7440-39-3	Barium	598		1	0.30	10.0	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7440-41-7	Beryllium	300		1	0.16	1.00	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7440-43-9	Cadmium	403		1	0.30	1.00	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7440-70-2	Calcium	89.4	J	1	62.5	500	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7440-47-3	Chromium	563		1	0.40	2.00	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7440-48-4	Cobalt	181		1	0.062	1.00	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7440-50-8	Copper	657		1	0.40	2.00	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7439-89-6	Iron	1370		1	9.60	50.0	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7439-92-1	Lead	935		1	0.11	1.00	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7439-95-4	Magnesium	26.6	U	1	26.6	500	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7439-96-5	Manganese	628		1	0.24	1.00	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7439-98-7	Molybdenum	528		1	0.93	5.00	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7440-02-0	Nickel	1650	D	2	0.36	2.00	ug/L	10/17/24 11:00	10/17/24 18:45	SW6020	3010A
7440-09-7	Potassium	46.1	U	1	46.1	500	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7782-49-2	Selenium	484		1	1.38	5.00	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7440-22-4	Silver	601		1	0.077	1.00	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7440-23-5	Sodium	94.2	J	1	85.8	500	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7440-24-6	Strontium	443		1	0.35	1.00	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7440-28-0	Thallium	415		1	0.085	1.00	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7440-31-5	Tin	0.33	J	1	0.12	5.00	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7440-32-6	Titanium	0.30	J	1	0.26	5.00	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A
7440-62-2	Vanadium	1060	D	2	0.14	10.0	ug/L	10/17/24 11:00	10/17/24 18:45	SW6020	3010A
7440-66-6	Zinc	613		1	0.56	5.00	ug/L	10/17/24 11:00	10/17/24 18:25	SW6020	3010A

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

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

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

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	09/03/24
Project:	NJ Waste Water PT	Date Received:	09/05/24
Client Sample ID:	PT-SNTI-WP	SDG No.:	P3847
Lab Sample ID:	P3847-04	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-31-5	Tin	1300	D	2	0.24	10.0	ug/L	10/17/24 11:00	10/17/24 18:48	SW6020	3010A
7440-32-6	Titanium	97.1		1	0.26	5.00	ug/L	10/17/24 11:00	10/17/24 18:28	SW6020	3010A

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

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

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

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	09/03/24
Project:	NJ Waste Water PT	Date Received:	09/05/24
Client Sample ID:	PT-MIN2-WP	SDG No.:	P3847
Lab Sample ID:	P3847-06	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-70-2	Calcium	67600	D	5	313	2500	ug/L	10/17/24 11:00	10/17/24 18:51	SW6020	3010A
7439-95-4	Magnesium	28500	D	5	133	2500	ug/L	10/17/24 11:00	10/17/24 18:51	SW6020	3010A
7440-09-7	Potassium	23000	D	5	231	2500	ug/L	10/17/24 11:00	10/17/24 18:51	SW6020	3010A
7440-23-5	Sodium	84900	D	5	429	2500	ug/L	10/17/24 11:00	10/17/24 18:51	SW6020	3010A

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

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

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

METAL CALIBRATION DATA

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

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** P3847

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** P3847 **SAS No.:** P3847

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Aluminum	512	500	102	90 - 110	P	10/17/2024	17:03	LB132993
	Antimony	198	200	99	90 - 110	P	10/17/2024	17:03	LB132993
	Arsenic	199	200	99	90 - 110	P	10/17/2024	17:03	LB132993
	Barium	95.9	100	96	90 - 110	P	10/17/2024	17:03	LB132993
	Beryllium	101	100	101	90 - 110	P	10/17/2024	17:03	LB132993
	Cadmium	110	100	110	90 - 110	P	10/17/2024	17:03	LB132993
	Calcium	2160	2000	108	90 - 110	P	10/17/2024	17:03	LB132993
	Chromium	103	100	103	90 - 110	P	10/17/2024	17:03	LB132993
	Cobalt	102	100	102	90 - 110	P	10/17/2024	17:03	LB132993
	Copper	96.9	100	97	90 - 110	P	10/17/2024	17:03	LB132993
	Iron	2170	2000	108	90 - 110	P	10/17/2024	17:03	LB132993
	Lead	188	200	94	90 - 110	P	10/17/2024	17:03	LB132993
	Magnesium	1220	1200	102	90 - 110	P	10/17/2024	17:03	LB132993
	Manganese	101	100	101	90 - 110	P	10/17/2024	17:03	LB132993
	Molybdenum	4950	5000	99	90 - 110	P	10/17/2024	17:03	LB132993
	Nickel	104	110	95	90 - 110	P	10/17/2024	17:03	LB132993
	Potassium	2130	2000	106	90 - 110	P	10/17/2024	17:03	LB132993
	Selenium	206	200	103	90 - 110	P	10/17/2024	17:03	LB132993
	Silver	51.2	50.0	102	90 - 110	P	10/17/2024	17:03	LB132993
	Sodium	2140	2000	107	90 - 110	P	10/17/2024	17:03	LB132993
	Strontium	508	500	102	90 - 110	P	10/17/2024	17:03	LB132993
	Thallium	212	210	101	90 - 110	P	10/17/2024	17:03	LB132993
	Tin	550	500	110	90 - 110	P	10/17/2024	17:03	LB132993
	Titanium	4950	5000	99	90 - 110	P	10/17/2024	17:03	LB132993
	Vanadium	95.9	100	96	90 - 110	P	10/17/2024	17:03	LB132993
	Zinc	198	200	99	90 - 110	P	10/17/2024	17:03	LB132993

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** P3847

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** P3847 **SAS No.:** P3847

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV	Aluminum	19.6	20.0	98	70 - 130	P	10/17/2024	17:09	LB132993
	Antimony	2.11	2.0	106	70 - 130	P	10/17/2024	17:09	LB132993
	Arsenic	1.03	1.0	103	70 - 130	P	10/17/2024	17:09	LB132993
	Barium	9.51	10.0	95	70 - 130	P	10/17/2024	17:09	LB132993
	Beryllium	1.10	1.0	110	70 - 130	P	10/17/2024	17:09	LB132993
	Cadmium	1.03	1.0	103	70 - 130	P	10/17/2024	17:09	LB132993
	Calcium	541	500	108	70 - 130	P	10/17/2024	17:09	LB132993
	Chromium	2.01	2.0	100	70 - 130	P	10/17/2024	17:09	LB132993
	Cobalt	1.06	1.0	106	70 - 130	P	10/17/2024	17:09	LB132993
	Copper	1.93	2.0	96	70 - 130	P	10/17/2024	17:09	LB132993
	Iron	54.5	50.0	109	70 - 130	P	10/17/2024	17:09	LB132993
	Lead	0.94	1.0	94	70 - 130	P	10/17/2024	17:09	LB132993
	Magnesium	535	500	107	70 - 130	P	10/17/2024	17:09	LB132993
	Manganese	1.06	1.0	106	70 - 130	P	10/17/2024	17:09	LB132993
	Molybdenum	5.10	5.0	102	70 - 130	P	10/17/2024	17:09	LB132993
	Nickel	1.00	1.0	100	70 - 130	P	10/17/2024	17:09	LB132993
	Potassium	514	500	103	70 - 130	P	10/17/2024	17:09	LB132993
	Selenium	5.59	5.0	112	70 - 130	P	10/17/2024	17:09	LB132993
	Silver	1.01	1.0	101	70 - 130	P	10/17/2024	17:09	LB132993
	Sodium	551	500	110	70 - 130	P	10/17/2024	17:09	LB132993
	Strontium	1.05	1.0	105	70 - 130	P	10/17/2024	17:09	LB132993
	Thallium	0.89	1.0	89	70 - 130	P	10/17/2024	17:09	LB132993
	Tin	4.90	5.0	98	70 - 130	P	10/17/2024	17:09	LB132993
	Titanium	5.54	5.0	111	70 - 130	P	10/17/2024	17:09	LB132993
	Vanadium	4.82	5.0	96	70 - 130	P	10/17/2024	17:09	LB132993
	Zinc	5.27	5.0	105	70 - 130	P	10/17/2024	17:09	LB132993

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** P3847

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** P3847 **SAS No.:** P3847

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Aluminum	49400	50000	99	90 - 110	P	10/17/2024	18:04	LB132993
	Antimony	490	500	98	90 - 110	P	10/17/2024	18:04	LB132993
	Arsenic	456	500	91	90 - 110	P	10/17/2024	18:04	LB132993
	Barium	2430	2500	97	90 - 110	P	10/17/2024	18:04	LB132993
	Beryllium	485	500	97	90 - 110	P	10/17/2024	18:04	LB132993
	Cadmium	474	500	95	90 - 110	P	10/17/2024	18:04	LB132993
	Calcium	243000	250000	97	90 - 110	P	10/17/2024	18:04	LB132993
	Chromium	472	500	94	90 - 110	P	10/17/2024	18:04	LB132993
	Cobalt	501	500	100	90 - 110	P	10/17/2024	18:04	LB132993
	Copper	4900	5000	98	90 - 110	P	10/17/2024	18:04	LB132993
	Iron	127000	125000	101	90 - 110	P	10/17/2024	18:04	LB132993
	Lead	2470	2500	99	90 - 110	P	10/17/2024	18:04	LB132993
	Magnesium	243000	250000	97	90 - 110	P	10/17/2024	18:04	LB132993
	Manganese	4590	5000	92	90 - 110	P	10/17/2024	18:04	LB132993
	Molybdenum	5280	5500	96	90 - 110	P	10/17/2024	18:04	LB132993
	Nickel	493	500	99	90 - 110	P	10/17/2024	18:04	LB132993
	Potassium	123000	125000	98	90 - 110	P	10/17/2024	18:04	LB132993
	Selenium	472	500	94	90 - 110	P	10/17/2024	18:04	LB132993
	Silver	475	500	95	90 - 110	P	10/17/2024	18:04	LB132993
	Sodium	250000	250000	100	90 - 110	P	10/17/2024	18:04	LB132993
	Strontium	12100	12500	97	90 - 110	P	10/17/2024	18:04	LB132993
	Thallium	495	500	99	90 - 110	P	10/17/2024	18:04	LB132993
	Tin	502	500	100	90 - 110	P	10/17/2024	18:04	LB132993
	Titanium	5290	5500	96	90 - 110	P	10/17/2024	18:04	LB132993
	Vanadium	466	500	93	90 - 110	P	10/17/2024	18:04	LB132993
	Zinc	4840	5000	97	90 - 110	P	10/17/2024	18:04	LB132993
CCV02	Aluminum	48200	50000	96	90 - 110	P	10/17/2024	18:55	LB132993
	Antimony	480	500	96	90 - 110	P	10/17/2024	18:55	LB132993
	Arsenic	453	500	91	90 - 110	P	10/17/2024	18:55	LB132993
	Barium	2400	2500	96	90 - 110	P	10/17/2024	18:55	LB132993
	Beryllium	483	500	97	90 - 110	P	10/17/2024	18:55	LB132993
	Cadmium	464	500	93	90 - 110	P	10/17/2024	18:55	LB132993
	Calcium	242000	250000	97	90 - 110	P	10/17/2024	18:55	LB132993
	Chromium	464	500	93	90 - 110	P	10/17/2024	18:55	LB132993

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** P3847

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** P3847 **SAS No.:** P3847

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV02	Cobalt	493	500	99	90 - 110	P	10/17/2024	18:55	LB132993
	Copper	4840	5000	97	90 - 110	P	10/17/2024	18:55	LB132993
	Iron	126000	125000	100	90 - 110	P	10/17/2024	18:55	LB132993
	Lead	2440	2500	98	90 - 110	P	10/17/2024	18:55	LB132993
	Magnesium	239000	250000	96	90 - 110	P	10/17/2024	18:55	LB132993
	Manganese	4550	5000	91	90 - 110	P	10/17/2024	18:55	LB132993
	Molybdenum	5250	5500	95	90 - 110	P	10/17/2024	18:55	LB132993
	Nickel	486	500	97	90 - 110	P	10/17/2024	18:55	LB132993
	Potassium	121000	125000	97	90 - 110	P	10/17/2024	18:55	LB132993
	Selenium	460	500	92	90 - 110	P	10/17/2024	18:55	LB132993
	Silver	464	500	93	90 - 110	P	10/17/2024	18:55	LB132993
	Sodium	243000	250000	97	90 - 110	P	10/17/2024	18:55	LB132993
	Strontium	11900	12500	96	90 - 110	P	10/17/2024	18:55	LB132993
	Thallium	492	500	98	90 - 110	P	10/17/2024	18:55	LB132993
	Tin	495	500	99	90 - 110	P	10/17/2024	18:55	LB132993
	Titanium	5320	5500	97	90 - 110	P	10/17/2024	18:55	LB132993
	Vanadium	456	500	91	90 - 110	P	10/17/2024	18:55	LB132993
	Zinc	4770	5000	95	90 - 110	P	10/17/2024	18:55	LB132993
CCV03	Aluminum	49300	50000	99	90 - 110	P	10/17/2024	19:29	LB132993
	Antimony	494	500	99	90 - 110	P	10/17/2024	19:29	LB132993
	Arsenic	460	500	92	90 - 110	P	10/17/2024	19:29	LB132993
	Barium	2480	2500	99	90 - 110	P	10/17/2024	19:29	LB132993
	Beryllium	493	500	99	90 - 110	P	10/17/2024	19:29	LB132993
	Cadmium	475	500	95	90 - 110	P	10/17/2024	19:29	LB132993
	Calcium	251000	250000	100	90 - 110	P	10/17/2024	19:29	LB132993
	Chromium	475	500	95	90 - 110	P	10/17/2024	19:29	LB132993
	Cobalt	499	500	100	90 - 110	P	10/17/2024	19:29	LB132993
	Copper	4900	5000	98	90 - 110	P	10/17/2024	19:29	LB132993
	Iron	128000	125000	102	90 - 110	P	10/17/2024	19:29	LB132993
	Lead	2520	2500	101	90 - 110	P	10/17/2024	19:29	LB132993
	Magnesium	243000	250000	97	90 - 110	P	10/17/2024	19:29	LB132993
	Manganese	4650	5000	93	90 - 110	P	10/17/2024	19:29	LB132993
	Molybdenum	5460	5500	99	90 - 110	P	10/17/2024	19:29	LB132993
	Nickel	490	500	98	90 - 110	P	10/17/2024	19:29	LB132993

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** P3847

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** P3847 **SAS No.:** P3847

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV03	Potassium	125000	125000	100	90 - 110	P	10/17/2024	19:29	LB132993
	Selenium	473	500	95	90 - 110	P	10/17/2024	19:29	LB132993
	Silver	479	500	96	90 - 110	P	10/17/2024	19:29	LB132993
	Sodium	249000	250000	100	90 - 110	P	10/17/2024	19:29	LB132993
	Strontium	12400	12500	99	90 - 110	P	10/17/2024	19:29	LB132993
	Thallium	505	500	101	90 - 110	P	10/17/2024	19:29	LB132993
	Tin	495	500	99	90 - 110	P	10/17/2024	19:29	LB132993
	Titanium	5410	5500	98	90 - 110	P	10/17/2024	19:29	LB132993
	Vanadium	469	500	94	90 - 110	P	10/17/2024	19:29	LB132993
	Zinc	4800	5000	96	90 - 110	P	10/17/2024	19:29	LB132993

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CRDL STANDARD FOR AA & ICP

Client: Chemtech Consulting Group **SDG No.:** P3847

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** P3847 **SAS No.:** P3847

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRI	Aluminum	19.1	20.0	96	70 - 130	P	10/17/2024	18:11	LB132993
	Antimony	2.14	2.0	107	70 - 130	P	10/17/2024	18:11	LB132993
	Arsenic	1.09	1.0	109	70 - 130	P	10/17/2024	18:11	LB132993
	Barium	9.42	10.0	94	70 - 130	P	10/17/2024	18:11	LB132993
	Beryllium	1.29	1.0	129	70 - 130	P	10/17/2024	18:11	LB132993
	Cadmium	1.07	1.0	107	70 - 130	P	10/17/2024	18:11	LB132993
	Calcium	548	500	110	70 - 130	P	10/17/2024	18:11	LB132993
	Chromium	2.02	2.0	101	70 - 130	P	10/17/2024	18:11	LB132993
	Cobalt	1.06	1.0	106	50 - 150	P	10/17/2024	18:11	LB132993
	Copper	2.01	2.0	100	70 - 130	P	10/17/2024	18:11	LB132993
	Iron	59.3	50.0	118	70 - 130	P	10/17/2024	18:11	LB132993
	Lead	1.00	1.0	100	70 - 130	P	10/17/2024	18:11	LB132993
	Magnesium	530	500	106	70 - 130	P	10/17/2024	18:11	LB132993
	Manganese	1.10	1.0	110	50 - 150	P	10/17/2024	18:11	LB132993
	Molybdenum	5.07	5.0	101	70 - 130	P	10/17/2024	18:11	LB132993
	Nickel	1.02	1.0	102	70 - 130	P	10/17/2024	18:11	LB132993
	Potassium	523	500	104	70 - 130	P	10/17/2024	18:11	LB132993
	Selenium	5.82	5.0	116	70 - 130	P	10/17/2024	18:11	LB132993
	Silver	1.02	1.0	102	70 - 130	P	10/17/2024	18:11	LB132993
	Sodium	584	500	117	70 - 130	P	10/17/2024	18:11	LB132993
	Strontium	1.08	1.0	108	70 - 130	P	10/17/2024	18:11	LB132993
	Thallium	0.91	1.0	91	70 - 130	P	10/17/2024	18:11	LB132993
	Tin	4.92	5.0	98	70 - 130	P	10/17/2024	18:11	LB132993
	Titanium	5.31	5.0	106	70 - 130	P	10/17/2024	18:11	LB132993
	Vanadium	4.73	5.0	95	70 - 130	P	10/17/2024	18:11	LB132993
	Zinc	5.19	5.0	104	50 - 150	P	10/17/2024	18:11	LB132993

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Chemtech Consulting Group **SDG No.:** P3847

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** P3847 **SAS No.:** P3847

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Aluminum	20.0	+/-20.0	U	20.0	P	10/17/2024	17:17	LB132993
	Antimony	2.00	+/-2.00	U	2.00	P	10/17/2024	17:17	LB132993
	Arsenic	1.00	+/-1.00	U	1.00	P	10/17/2024	17:17	LB132993
	Barium	10.0	+/-10.0	U	10.0	P	10/17/2024	17:17	LB132993
	Beryllium	1.00	+/-1.00	U	1.00	P	10/17/2024	17:17	LB132993
	Cadmium	1.00	+/-1.00	U	1.00	P	10/17/2024	17:17	LB132993
	Calcium	500	+/-500	U	500	P	10/17/2024	17:17	LB132993
	Chromium	2.00	+/-2.00	U	2.00	P	10/17/2024	17:17	LB132993
	Cobalt	1.00	+/-1.00	U	1.00	P	10/17/2024	17:17	LB132993
	Copper	2.00	+/-2.00	U	2.00	P	10/17/2024	17:17	LB132993
	Iron	50.0	+/-50.0	U	50.0	P	10/17/2024	17:17	LB132993
	Lead	1.00	+/-1.00	U	1.00	P	10/17/2024	17:17	LB132993
	Magnesium	500	+/-500	U	500	P	10/17/2024	17:17	LB132993
	Manganese	1.00	+/-1.00	U	1.00	P	10/17/2024	17:17	LB132993
	Nickel	1.00	+/-1.00	U	1.00	P	10/17/2024	17:17	LB132993
	Potassium	500	+/-500	U	500	P	10/17/2024	17:17	LB132993
	Tin	5.00	+/-5.00	U	5.00	P	10/17/2024	17:17	LB132993
	Molybdenum	5.00	+/-5.00	U	5.00	P	10/17/2024	17:17	LB132993
	Selenium	5.00	+/-5.00	U	5.00	P	10/17/2024	17:17	LB132993
	Silver	1.00	+/-1.00	U	1.00	P	10/17/2024	17:17	LB132993
	Sodium	500	+/-500	U	500	P	10/17/2024	17:17	LB132993
	Thallium	1.00	+/-1.00	U	1.00	P	10/17/2024	17:17	LB132993
	Vanadium	5.00	+/-5.00	U	5.00	P	10/17/2024	17:17	LB132993
	Zinc	5.00	+/-5.00	U	5.00	P	10/17/2024	17:17	LB132993
	Strontium	1.00	+/-1.00	U	1.00	P	10/17/2024	17:17	LB132993
	Titanium	5.00	+/-5.00	U	5.00	P	10/17/2024	17:17	LB132993

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Chemtech Consulting Group **SDG No.:** P3847

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** P3847 **SAS No.:** P3847

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Aluminum	20.0	+/-20.0	U	20.0	P	10/17/2024	18:07	LB132993
	Antimony	0.42	+/-2.00	J	2.00	P	10/17/2024	18:07	LB132993
	Arsenic	1.00	+/-1.00	U	1.00	P	10/17/2024	18:07	LB132993
	Barium	10.0	+/-10.0	U	10.0	P	10/17/2024	18:07	LB132993
	Beryllium	0.47	+/-1.00	J	1.00	P	10/17/2024	18:07	LB132993
	Cadmium	1.00	+/-1.00	U	1.00	P	10/17/2024	18:07	LB132993
	Calcium	500	+/-500	U	500	P	10/17/2024	18:07	LB132993
	Chromium	2.00	+/-2.00	U	2.00	P	10/17/2024	18:07	LB132993
	Cobalt	1.00	+/-1.00	U	1.00	P	10/17/2024	18:07	LB132993
	Copper	2.00	+/-2.00	U	2.00	P	10/17/2024	18:07	LB132993
	Iron	50.0	+/-50.0	U	50.0	P	10/17/2024	18:07	LB132993
	Lead	0.42	+/-1.00	J	1.00	P	10/17/2024	18:07	LB132993
	Magnesium	500	+/-500	U	500	P	10/17/2024	18:07	LB132993
	Manganese	0.28	+/-1.00	J	1.00	P	10/17/2024	18:07	LB132993
	Nickel	1.00	+/-1.00	U	1.00	P	10/17/2024	18:07	LB132993
	Potassium	500	+/-500	U	500	P	10/17/2024	18:07	LB132993
	Tin	5.00	+/-5.00	U	5.00	P	10/17/2024	18:07	LB132993
	Selenium	5.00	+/-5.00	U	5.00	P	10/17/2024	18:07	LB132993
	Molybdenum	5.00	+/-5.00	U	5.00	P	10/17/2024	18:07	LB132993
	Silver	1.00	+/-1.00	U	1.00	P	10/17/2024	18:07	LB132993
	Sodium	97.7	+/-500	J	500	P	10/17/2024	18:07	LB132993
	Thallium	1.00	+/-1.00	U	1.00	P	10/17/2024	18:07	LB132993
	Vanadium	5.00	+/-5.00	U	5.00	P	10/17/2024	18:07	LB132993
	Zinc	5.00	+/-5.00	U	5.00	P	10/17/2024	18:07	LB132993
	Strontium	0.50	+/-1.00	J	1.00	P	10/17/2024	18:07	LB132993
	Titanium	0.40	+/-5.00	J	5.00	P	10/17/2024	18:07	LB132993
CCB02	Aluminum	20.0	+/-20.0	U	20.0	P	10/17/2024	18:58	LB132993
	Antimony	0.38	+/-2.00	J	2.00	P	10/17/2024	18:58	LB132993
	Arsenic	1.00	+/-1.00	U	1.00	P	10/17/2024	18:58	LB132993
	Barium	10.0	+/-10.0	U	10.0	P	10/17/2024	18:58	LB132993
	Beryllium	0.32	+/-1.00	J	1.00	P	10/17/2024	18:58	LB132993
	Cadmium	1.00	+/-1.00	U	1.00	P	10/17/2024	18:58	LB132993
	Calcium	500	+/-500	U	500	P	10/17/2024	18:58	LB132993
	Chromium	2.00	+/-2.00	U	2.00	P	10/17/2024	18:58	LB132993
	Cobalt	1.00	+/-1.00	U	1.00	P	10/17/2024	18:58	LB132993
	Copper	2.00	+/-2.00	U	2.00	P	10/17/2024	18:58	LB132993
	Iron	50.0	+/-50.0	U	50.0	P	10/17/2024	18:58	LB132993
	Lead	0.22	+/-1.00	J	1.00	P	10/17/2024	18:58	LB132993
	Magnesium	500	+/-500	U	500	P	10/17/2024	18:58	LB132993

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Chemtech Consulting Group **SDG No.:** P3847

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** P3847 **SAS No.:** P3847

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Manganese	1.00	+/-1.00	U	1.00	P	10/17/2024	18:58	LB132993
	Nickel	1.00	+/-1.00	U	1.00	P	10/17/2024	18:58	LB132993
	Potassium	500	+/-500	U	500	P	10/17/2024	18:58	LB132993
	Selenium	5.00	+/-5.00	U	5.00	P	10/17/2024	18:58	LB132993
	Tin	0.13	+/-5.00	J	5.00	P	10/17/2024	18:58	LB132993
	Molybdenum	5.00	+/-5.00	U	5.00	P	10/17/2024	18:58	LB132993
	Silver	1.00	+/-1.00	U	1.00	P	10/17/2024	18:58	LB132993
	Sodium	500	+/-500	U	500	P	10/17/2024	18:58	LB132993
	Thallium	1.00	+/-1.00	U	1.00	P	10/17/2024	18:58	LB132993
	Vanadium	5.00	+/-5.00	U	5.00	P	10/17/2024	18:58	LB132993
	Zinc	5.00	+/-5.00	U	5.00	P	10/17/2024	18:58	LB132993
	Strontium	0.46	+/-1.00	J	1.00	P	10/17/2024	18:58	LB132993
	Titanium	0.31	+/-5.00	J	5.00	P	10/17/2024	18:58	LB132993
CCB03	Aluminum	20.0	+/-20.0	U	20.0	P	10/17/2024	19:35	LB132993
	Antimony	0.17	+/-2.00	J	2.00	P	10/17/2024	19:35	LB132993
	Arsenic	1.00	+/-1.00	U	1.00	P	10/17/2024	19:35	LB132993
	Barium	10.0	+/-10.0	U	10.0	P	10/17/2024	19:35	LB132993
	Beryllium	0.25	+/-1.00	J	1.00	P	10/17/2024	19:35	LB132993
	Cadmium	1.00	+/-1.00	U	1.00	P	10/17/2024	19:35	LB132993
	Calcium	500	+/-500	U	500	P	10/17/2024	19:35	LB132993
	Chromium	2.00	+/-2.00	U	2.00	P	10/17/2024	19:35	LB132993
	Cobalt	1.00	+/-1.00	U	1.00	P	10/17/2024	19:35	LB132993
	Copper	2.00	+/-2.00	U	2.00	P	10/17/2024	19:35	LB132993
	Iron	50.0	+/-50.0	U	50.0	P	10/17/2024	19:35	LB132993
	Lead	0.13	+/-1.00	J	1.00	P	10/17/2024	19:35	LB132993
	Magnesium	500	+/-500	U	500	P	10/17/2024	19:35	LB132993
	Manganese	1.00	+/-1.00	U	1.00	P	10/17/2024	19:35	LB132993
	Nickel	1.00	+/-1.00	U	1.00	P	10/17/2024	19:35	LB132993
	Potassium	500	+/-500	U	500	P	10/17/2024	19:35	LB132993
	Molybdenum	5.00	+/-5.00	U	5.00	P	10/17/2024	19:35	LB132993
	Tin	5.00	+/-5.00	U	5.00	P	10/17/2024	19:35	LB132993
	Selenium	5.00	+/-5.00	U	5.00	P	10/17/2024	19:35	LB132993
	Silver	1.00	+/-1.00	U	1.00	P	10/17/2024	19:35	LB132993
	Sodium	500	+/-500	U	500	P	10/17/2024	19:35	LB132993
	Thallium	1.00	+/-1.00	U	1.00	P	10/17/2024	19:35	LB132993
	Vanadium	5.00	+/-5.00	U	5.00	P	10/17/2024	19:35	LB132993
	Zinc	5.00	+/-5.00	U	5.00	P	10/17/2024	19:35	LB132993
	Strontium	1.00	+/-1.00	U	1.00	P	10/17/2024	19:35	LB132993
	Titanium	5.00	+/-5.00	U	5.00	P	10/17/2024	19:35	LB132993

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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Chemtech Consulting Group **SDG No.:** P3847

Instrument: P7

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB164203BL		**WATER**		**Batch Number:**	**PB164203**		**Prep Date:**	**10/17/2024**	
	Aluminum	20.0	<20.0	U	20.0	P	10/17/2024	19:16	LB132993
	Antimony	2.00	<2.00	U	2.00	P	10/17/2024	19:16	LB132993
	Arsenic	1.00	<1.00	U	1.00	P	10/17/2024	19:16	LB132993
	Barium	10.0	<10.0	U	10.0	P	10/17/2024	19:16	LB132993
	Beryllium	1.00	<1.00	U	1.00	P	10/17/2024	19:16	LB132993
	Cadmium	1.00	<1.00	U	1.00	P	10/17/2024	19:16	LB132993
	Calcium	500	<500	U	500	P	10/17/2024	19:16	LB132993
	Chromium	2.00	<2.00	U	2.00	P	10/17/2024	19:16	LB132993
	Cobalt	1.00	<1.00	U	1.00	P	10/17/2024	19:16	LB132993
	Copper	2.00	<2.00	U	2.00	P	10/17/2024	19:16	LB132993
	Iron	50.0	<50.0	U	50.0	P	10/17/2024	19:16	LB132993
	Lead	1.00	<1.00	U	1.00	P	10/17/2024	19:16	LB132993
	Magnesium	500	<500	U	500	P	10/17/2024	19:16	LB132993
	Manganese	1.00	<1.00	U	1.00	P	10/17/2024	19:16	LB132993
	Nickel	1.00	<1.00	U	1.00	P	10/17/2024	19:16	LB132993
	Potassium	500	<500	U	500	P	10/17/2024	19:16	LB132993
	Tin	5.00	<5.00	U	5.00	P	10/17/2024	19:16	LB132993
	Molybdenum	5.00	<5.00	U	5.00	P	10/17/2024	19:16	LB132993
	Selenium	5.00	<5.00	U	5.00	P	10/17/2024	19:16	LB132993
	Silver	1.00	<1.00	U	1.00	P	10/17/2024	19:16	LB132993
	Sodium	500	<500	U	500	P	10/17/2024	19:16	LB132993
	Thallium	1.00	<1.00	U	1.00	P	10/17/2024	19:16	LB132993
	Vanadium	5.00	<5.00	U	5.00	P	10/17/2024	19:16	LB132993
	Zinc	5.00	<5.00	U	5.00	P	10/17/2024	19:16	LB132993
	Strontium	1.00	<1.00	U	1.00	P	10/17/2024	19:16	LB132993
	Titanium	5.00	<5.00	U	5.00	P	10/17/2024	19:16	LB132993

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Chemtech Consulting Group **SDG No.:** P3847

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** P3847 **SAS No.:** P3847

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

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Aluminum	90400	100000	90	0	0	10/17/2024	17:20	LB132993
	Antimony	1.12	1.5	75	-2.5	5.5	10/17/2024	17:20	LB132993
	Arsenic	0.42	0.1	420	-1.9	2.1	10/17/2024	17:20	LB132993
	Barium	1.34	1.2	112	-18.8	21.2	10/17/2024	17:20	LB132993
	Beryllium	0.34			-2	2	10/17/2024	17:20	LB132993
	Cadmium	0.20	0.7	29	-1.3	2.7	10/17/2024	17:20	LB132993
	Calcium	98300	100000	98	0	0	10/17/2024	17:20	LB132993
	Chromium	19.2	21.0	91	17	25	10/17/2024	17:20	LB132993
	Cobalt	1.18	1.0	118	-1	3	10/17/2024	17:20	LB132993
	Copper	7.26	8.0	91	4	12	10/17/2024	17:20	LB132993
	Iron	103000	100000	103	0	0	10/17/2024	17:20	LB132993
	Lead	4.04	4.0	101	2	6	10/17/2024	17:20	LB132993
	Magnesium	92800	100000	93	0	0	10/17/2024	17:20	LB132993
	Manganese	7.73	7.0	110	5	9	10/17/2024	17:20	LB132993
	Nickel	5.29	6.0	88	4	8	10/17/2024	17:20	LB132993
	Potassium	96900	100000	97	0	0	10/17/2024	17:20	LB132993
	Selenium	0.70	0.3	233	-9.7	10	10/17/2024	17:20	LB132993
	Tin	0.16			0	0	10/17/2024	17:20	LB132993
	Molybdenum	1920	2000	96	1600	2400	10/17/2024	17:20	LB132993
	Silver	0.080			-2	2	10/17/2024	17:20	LB132993
	Sodium	97800	100000	98	0	0	10/17/2024	17:20	LB132993
	Thallium	0.17			-2	2	10/17/2024	17:20	LB132993
	Vanadium	0.18	0.5	36	-9.5	10.5	10/17/2024	17:20	LB132993
	Zinc	11.0	11.0	100	7	15	10/17/2024	17:20	LB132993
	Strontium	34.1			0	0	10/17/2024	17:20	LB132993
	Titanium	2070	2000	104	1600	2400	10/17/2024	17:20	LB132993
ICSAB01	Aluminum	89100	100000	89	0	0	10/17/2024	17:23	LB132993
	Antimony	20.3	22.0	92	18	26	10/17/2024	17:23	LB132993
	Arsenic	18.6	19.0	98	16.2	21.9	10/17/2024	17:23	LB132993
	Barium	19.8	22.0	90	2	42	10/17/2024	17:23	LB132993
	Beryllium	19.9	19.0	105	16.2	21.9	10/17/2024	17:23	LB132993
	Cadmium	20.2	20.0	101	17	23	10/17/2024	17:23	LB132993
	Calcium	97700	100000	98	0	0	10/17/2024	17:23	LB132993
	Chromium	38.2	40.0	96	34	46	10/17/2024	17:23	LB132993
	Cobalt	19.8	20.0	99	17	23	10/17/2024	17:23	LB132993
	Copper	24.7	25.0	99	21	29	10/17/2024	17:23	LB132993
	Iron	102000	100000	102	0	0	10/17/2024	17:23	LB132993
	Lead	23.4	25.0	94	21.3	28.8	10/17/2024	17:23	LB132993
	Magnesium	90800	100000	91	0	0	10/17/2024	17:23	LB132993
	Manganese	26.4	27.0	98	23	31.1	10/17/2024	17:23	LB132993
	Nickel	23.9	24.0	100	20.4	27.6	10/17/2024	17:23	LB132993
	Potassium	95800	100000	96	0	0	10/17/2024	17:23	LB132993

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Chemtech Consulting Group **SDG No.:** P3847

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** P3847 **SAS No.:** P3847

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

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSAB01	Selenium	20.7	19.0	109	9	29	10/17/2024	17:23	LB132993
	Tin	49.4			0	0	10/17/2024	17:23	LB132993
	Molybdenum	1960	2000	98	1600	2400	10/17/2024	17:23	LB132993
	Silver	18.3	18.0	102	15.3	20.7	10/17/2024	17:23	LB132993
	Sodium	97400	100000	97	0	0	10/17/2024	17:23	LB132993
	Thallium	22.2	21.0	106	17.9	24.2	10/17/2024	17:23	LB132993
	Vanadium	18.3	19.0	96	9	29	10/17/2024	17:23	LB132993
	Zinc	29.0	29.0	100	25	33	10/17/2024	17:23	LB132993
	Strontium	82.9			0	0	10/17/2024	17:23	LB132993
	Titanium	2120	2000	106	1600	2400	10/17/2024	17:23	LB132993

METAL QC DATA

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Chemtech Consulting Group **SDG No.:** P3847

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** P3847 **SAS No.:** P3847

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB164203BS							
Aluminum	ug/L	10000	10100		101	80 - 120	P
Antimony	ug/L	500	552		110	80 - 120	P
Arsenic	ug/L	500	480		96	80 - 120	P
Barium	ug/L	2500	2690		108	80 - 120	P
Beryllium	ug/L	500	527		105	80 - 120	P
Cadmium	ug/L	500	548		110	80 - 120	P
Calcium	ug/L	50000	56000		112	80 - 120	P
Chromium	ug/L	500	489		98	80 - 120	P
Cobalt	ug/L	500	486		97	80 - 120	P
Copper	ug/L	5000	4900		98	80 - 120	P
Iron	ug/L	25000	27600		110	80 - 120	P
Lead	ug/L	2500	2680		107	80 - 120	P
Magnesium	ug/L	50000	47600		95	80 - 120	P
Manganese	ug/L	5000	4800		96	80 - 120	P
Nickel	ug/L	500	485		97	80 - 120	P
Potassium	ug/L	25000	25300		101	80 - 120	P
Tin	ug/L	500	547		109	80 - 120	P
Molybdenum	ug/L	5000	5890		118	80 - 120	P
Selenium	ug/L	500	543		109	80 - 120	P
Silver	ug/L	500	557		111	80 - 120	P
Sodium	ug/L	50000	50800		102	80 - 120	P
Thallium	ug/L	500	536		107	80 - 120	P
Vanadium	ug/L	500	476		95	80 - 120	P
Zinc	ug/L	5000	4840		97	80 - 120	P
Strontium	ug/L	12500	13400		107	80 - 120	P
Titanium	ug/L	5000	5900		118	80 - 120	P

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FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: Chemtech Consulting Group
Contract: CHEM02
Lab Code: CHEM Case no.: P3847
Sas No.: P3847 SDG No.: P3847
Instrument ID: P7
Start Date : 10/17/2024
Run Number: LB132993
End Date : 10/17/2024

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	1619	100		100		100		100		100	
S2	S2	1623	101		102		101		101		101	
S3	S3	1626	101		102		100		100		102	
S4	S4	1629	100		100		100		98		102	
S5	S5	1633	98		98		98		96		102	
S6	S6	1636	96		96		97		93		103	
S7	S7	1641	99		98		101		94		107	
S8	S8	1644	97		97		96		86		101	
ICV01	ICV01	1703	105		105		105		103		107	
LLICV	LLICV	1709	106		106		105		104		108	
ICB01	ICB01	1717	104		103		102		103		104	
ICSA01	ICSA01	1720	99		98		100		93		106	
ICSAB01	ICSAB01	1723	103		100		102		97		109	
CCV01	CCV01	1804	104		102		101		92		103	
CCB01	CCB01	1807	110		106		105		104		109	
CRI	CRI	1811	108		106		105		104		107	
P3847-02	PT-TM1-WP	1825	109		108		108		107		108	
P3847-04	PT-SNTI-WP	1828	111		109		110		108		108	
P3847-06	PT-MIN2-WP	1832	140	*	151	*	148	*	142	*	148	*
ZZZZZZ	ZZZZZZ	1835										
ZZZZZZ	ZZZZZZ	1838										
ZZZZZZ	ZZZZZZ	1841										
P3847-02	PT-TM1-WP	1845	106		103		103		101		104	
P3847-04	PT-SNTI-WP	1848	106		104		103		104		107	
P3847-06	PT-MIN2-WP	1851	109		109		109		106		111	
CCV02	CCV02	1855	99		99		100		91		103	
CCB02	CCB02	1858	105		104		103		101		105	
ZZZZZZ	ZZZZZZ	1901										
ZZZZZZ	ZZZZZZ	1904										
ZZZZZZ	ZZZZZZ	1908										
PB164203BL	PB164203BL	1916	105		105		104		105		106	
PB164203BS	PB164203BS	1920	97		97		97		94		100	
ZZZZZZ	ZZZZZZ	1922										
ZZZZZZ	ZZZZZZ	1926										
CCV03	CCV03	1929	99		99		100		92		104	
CCB03	CCB03	1935	103		103		103		104		106	

Internal Standard %RI Limit: 70 - 130

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FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: Chemtech Consulting Group
Contract: CHEM02
Lab Code: CHEM Case no.: P3847
Sas No.: P3847 SDG No.: P3847
Instrument ID: P7
Start Date : 10/17/2024
Run Number: LB132993
End Date : 10/17/2024

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	1619	100		100		100		100		100	
S2	S2	1623	104		104		104		105		104	
S3	S3	1626	104		105		104		106		106	
S4	S4	1629	103		103		103		106		105	
S5	S5	1633	101		102		100		107		105	
S6	S6	1636	100		102		99		107		108	
S7	S7	1641	97		98		94		103		102	
S8	S8	1644	101		100		89		104		103	
ICV01	ICV01	1703	105		105		104		108		106	
LLICV	LLICV	1709	109		108		109		109		110	
ICB01	ICB01	1717	106		106		107		107		108	
ICSA01	ICSA01	1720	103		105		99		109		110	
ICSAB01	ICSAB01	1723	105		107		101		111		111	
CCV01	CCV01	1804	103		102		94		105		106	
CCB01	CCB01	1807	111		111		110		112		111	
CRI	CRI	1811	111		111		111		113		112	
P3847-02	PT-TM1-WP	1825	111		111		110		112		111	
P3847-04	PT-SNTI-WP	1828	112		112		112		113		112	
P3847-06	PT-MIN2-WP	1832	149	*	146	*	145	*	148	*	148	*
ZZZZZZ	ZZZZZZ	1835										
ZZZZZZ	ZZZZZZ	1838										
ZZZZZZ	ZZZZZZ	1841										
P3847-02	PT-TM1-WP	1845	106		106		107		109		109	
P3847-04	PT-SNTI-WP	1848	108		109		109		111		109	
P3847-06	PT-MIN2-WP	1851	111		111		110		112		112	
CCV02	CCV02	1855	102		102		94		107		105	
CCB02	CCB02	1858	102		101		101		104		104	
ZZZZZZ	ZZZZZZ	1901										
ZZZZZZ	ZZZZZZ	1904										
ZZZZZZ	ZZZZZZ	1908										
PB164203BL	PB164203BL	1916	107		107		108		109		109	
PB164203BS	PB164203BS	1920	105		106		103		110		110	
ZZZZZZ	ZZZZZZ	1922										
ZZZZZZ	ZZZZZZ	1926										
CCV03	CCV03	1929	103		103		95		107		106	
CCB03	CCB03	1935	106		106		107		110		109	

Internal Standard %RI Limit: 70 - 130

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FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: Chemtech Consulting Group Contract: CHEM02

Lab Code: CHEM Case no.: P3847 Sas No.: P3847 SDG No.: P3847

Instrument ID: P7 Start Date : 10/17/2024

Run Number: LB132993 End Date : 10/17/2024

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	1619	100		100							
S2	S2	1623	101		100							
S3	S3	1626	102		101							
S4	S4	1629	102		101							
S5	S5	1633	102		101							
S6	S6	1636	103		100							
S7	S7	1641	108		104							
S8	S8	1644	100		90							
ICV01	ICV01	1703	107		107							
LLICV	LLICV	1709	107		108							
ICB01	ICB01	1717	104		104							
ICSA01	ICSA01	1720	106		100							
ICSAB01	ICSAB01	1723	109		103							
CCV01	CCV01	1804	105		96							
CCB01	CCB01	1807	108		109							
CRI	CRI	1811	107		107							
P3847-02	PT-TM1-WP	1825	108		108							
P3847-04	PT-SNTI-WP	1828	111		109							
P3847-06	PT-MIN2-WP	1832	150	*	143	*						
ZZZZZZ	ZZZZZZ	1835										
ZZZZZZ	ZZZZZZ	1838										
ZZZZZZ	ZZZZZZ	1841										
P3847-02	PT-TM1-WP	1845	104		103							
P3847-04	PT-SNTI-WP	1848	105		104							
P3847-06	PT-MIN2-WP	1851	110		109							
CCV02	CCV02	1855	103		94							
CCB02	CCB02	1858	106		105							
ZZZZZZ	ZZZZZZ	1901										
ZZZZZZ	ZZZZZZ	1904										
ZZZZZZ	ZZZZZZ	1908										
PB164203BL	PB164203BL	1916	106		107							
PB164203BS	PB164203BS	1920	101		96							
ZZZZZZ	ZZZZZZ	1922										
ZZZZZZ	ZZZZZZ	1926										

Internal Standard %RI Limit: 70 -130

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

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: Chemtech Consulting Group Contract: CHEM02

Lab Code: CHEM Case no.: P3847 Sas No.: P3847 SDG No.: P3847

Instrument ID: P7 Start Date : 10/17/2024

Run Number: LB132993 End Date : 10/17/2024

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 165Ho	Q	Element 209Bi	Q	Element	Q	Element	Q	Element	Q
CCV03	CCV03	1929	105		96							
CCB03	CCB03	1935	106		106							

Internal Standard %RI Limit: 70 -130

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FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: Chemtech Consulting Group Contract: CHEM02

Lab Code: CHEM Case no.: P3847 Sas No.: P3847 SDG No.: P3847

Instrument ID: P7 Start Date : 10/17/2024

Run Number: LB132993 End Date : 10/17/2024

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
S0	S0	1619	100									
S2	S2	1623	104									
S3	S3	1626	105									
S4	S4	1629	105									
S5	S5	1633	104									
S6	S6	1636	106									
S7	S7	1641	99									
S8	S8	1644	84									
ICV01	ICV01	1703	106									
LLICV	LLICV	1709	110									
ICB01	ICB01	1717	110									
ICSA01	ICSA01	1720	105									
ICSAB01	ICSAB01	1723	106									
CCV01	CCV01	1804	88									
CCB01	CCB01	1807	113									
CRI	CRI	1811	113									
P3847-02	PT-TM1-WP	1825	111									
P3847-04	PT-SNTI-WP	1828	114									
P3847-06	PT-MIN2-WP	1832	145	*								
ZZZZZZ	ZZZZZZ	1835										
ZZZZZZ	ZZZZZZ	1838										
ZZZZZZ	ZZZZZZ	1841										
P3847-02	PT-TM1-WP	1845	110									
P3847-04	PT-SNTI-WP	1848	111									
P3847-06	PT-MIN2-WP	1851	112									
CCV02	CCV02	1855	88									
CCB02	CCB02	1858	105									
ZZZZZZ	ZZZZZZ	1901										
ZZZZZZ	ZZZZZZ	1904										
ZZZZZZ	ZZZZZZ	1908										
PB164203BL	PB164203BL	1916	111									
PB164203BS	PB164203BS	1920	106									
ZZZZZZ	ZZZZZZ	1922										
ZZZZZZ	ZZZZZZ	1926										

Internal Standard %RI Limit: 70 -130

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Fax : 908 789 8922

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: Chemtech Consulting Group Contract: CHEM02

Lab Code: CHEM Case no.: P3847 Sas No.: P3847 SDG No.: P3847

Instrument ID: P7 Start Date : 10/17/2024

Run Number: LB132993 End Date : 10/17/2024

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
CCV03	CCV03	1929	89									
CCB03	CCB03	1935	111									

Internal Standard %RI Limit: 70 -130

METAL PREPARATION & INSTRUMENT DATA

METAL PREPARATION & ANALYICAL SUMMARY

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Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Chemtech Consulting Group **SDG No.:** P3847

Contract: CHEM02 **Lab Code:** CHEM **Method:**

Case No.: P3847 **SAS No.:** P3847

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB164203**						
P3847-02	PT-TM1-WP	SAM	WATER	10/17/2024	50.0	50.0	
P3847-04	PT-SNTI-WP	SAM	WATER	10/17/2024	50.0	50.0	
P3847-06	PT-MIN2-WP	SAM	WATER	10/17/2024	50.0	50.0	
PB164203BL	PB164203BL	MB	WATER	10/17/2024	50.0	50.0	
PB164203BS	PB164203BS	LCS	WATER	10/17/2024	50.0	50.0	

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metals
- 14 -
ANALYSIS RUN LOG

Client: Chemtech Consulting Group **Contract:** CHEM02

Lab code: CHEM **Case no.:** P3847 **Sas no.:** P3847 **Sdg no.:** P3847

Instrument id number: **Method:** **Run number:** LB132993

Start date: 10/17/2024 **End date:** 10/17/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1619	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
S2	S2	1	1623	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
S3	S3	1	1626	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
S4	S4	1	1629	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
S5	S5	1	1633	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
S6	S6	1	1636	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
S7	S7	1	1641	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
S8	S8	1	1644	Al,Ca,Fe,K,Mg,Na
ICV01	ICV01	1	1703	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
LLICV	LLICV	1	1709	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
ICB01	ICB01	1	1717	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
ICSA01	ICSA01	1	1720	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
ICSAB01	ICSAB01	1	1723	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
CCV01	CCV01	1	1804	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
CCB01	CCB01	1	1807	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
CRI	CRI	1	1811	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
P3847-02	PT-TM1-WP	1	1825	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Pb,Sb,Se,Sn,Sr,Ti,Tl,Zn
P3847-04	PT-SNTI-WP	1	1828	Ti
P3847-02	PT-TM1-WP	2	1845	Ni,V
P3847-04	PT-SNTI-WP	2	1848	Sn
P3847-06	PT-MIN2-WP	5	1851	Ca,K,Mg,Na
CCV02	CCV02	1	1855	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
CCB02	CCB02	1	1858	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
PB164203BL	PB164203BL	1	1916	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
PB164203BS	PB164203BS	1	1920	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
CCV03	CCV03	1	1929	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
CCB03	CCB03	1	1935	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn

METAL
RAW DATA

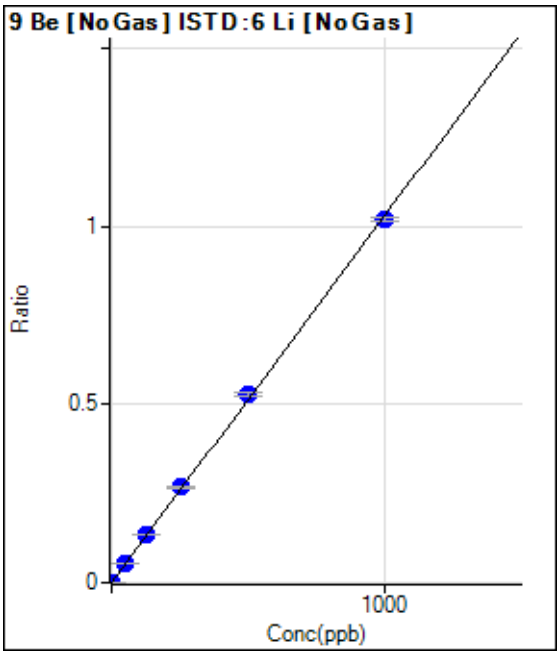
Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

Calibration for 008CALS.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\P7101724-MS1.b\
Analysis File: P7101724-MS1.batch.bin
DA Date-Time: 2024-10-18 00:46:20
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2024-10-17 16:19:52
2	005CALS.d	S02	2024-10-17 16:23:14
3	006CALS.d	S03	2024-10-17 16:26:38
4	007CALS.d	S04	2024-10-17 16:29:55
5	008CALS.d	S05	2024-10-17 16:33:04
6	009CALS.d	S06	2024-10-17 16:36:06
7	011CALS.d	S07	2024-10-17 16:41:54
8	012CALS.d	S08	2024-10-17 16:44:46

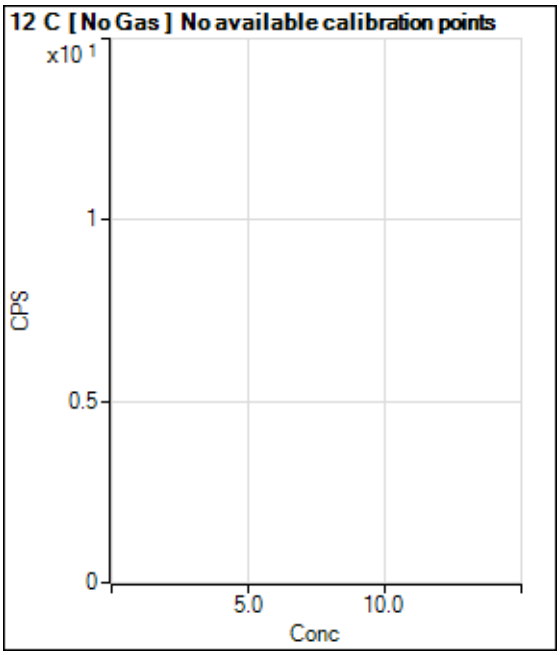
Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	21.11	0.0000	P	8.8
2	☐	1.000	1.114	891.14	0.0012	P	5.1
3	☐	50.000	52.748	41139.82	0.0543	P	1.9
4	☐	125.000	131.059	100883.06	0.1348	P	0.8
5	☐	250.000	260.800	196602.20	0.2682	P	1.1
6	☐	500.000	513.679	380720.33	0.5282	P	1.5
7	☐	1000.000	989.565	753418.05	1.0175	P	1.0
8	☐			465.57	0.0006	P	9.1

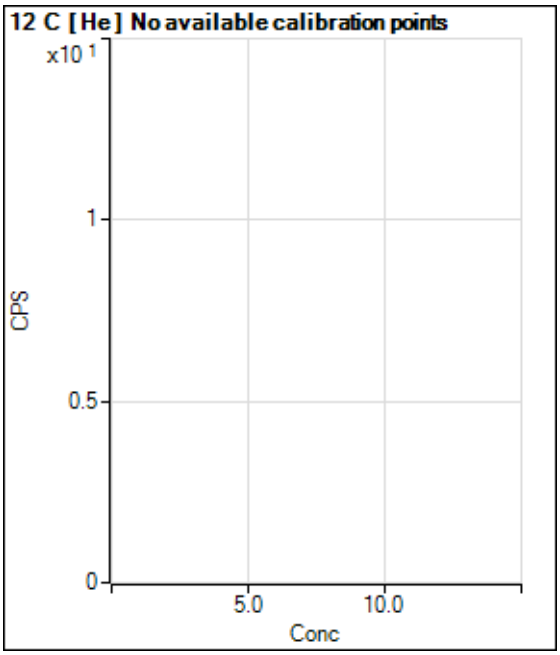
y = 0.0010 * x + 2.8125E-005
R = 0.9998
DL = 0.007191
BEC = 0.02735

Weight: <None>
Min Conc: 0

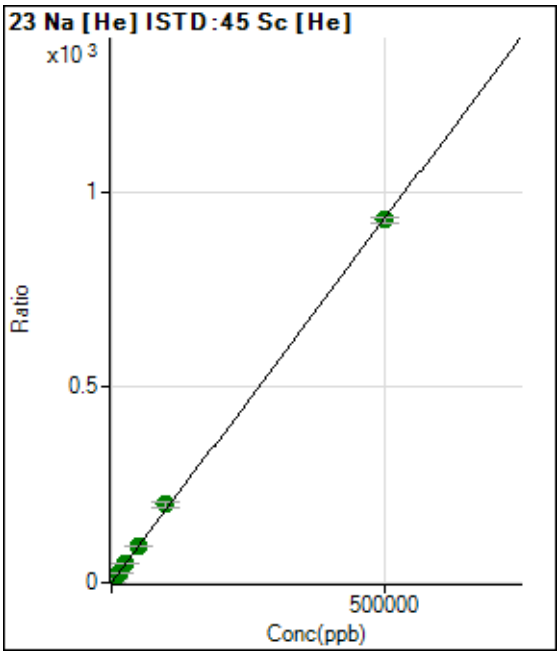


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
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2	☐						
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7	☐						
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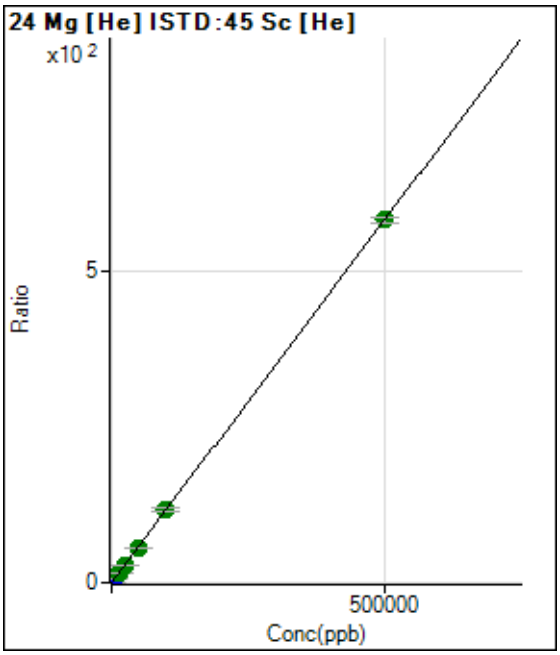


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5076.44	0.0404	P	6.0
2	☐	500.000	530.939	135147.88	1.0282	P	1.1
3	☐	5000.000	5151.925	1261178.90	9.6253	A	0.9
4	☐	12500.000	12777.523	3086671.65	23.8123	A	1.9
5	☐	25000.000	25842.839	6095280.81	48.1196	A	0.5
6	☐	50000.000	50708.272	11927114.41	94.3803	A	1.4
7	☐	100000.00	107128.85	24318460.75	199.3475	A	6.7
8	☐	500000.00	498452.77	118366018.2	927.3832	A	1.7

y = 0.0019 * x + 0.0404
R = 0.9999
DL = 3.895
BEC = 21.74

Weight: <None>
Min Conc: 0

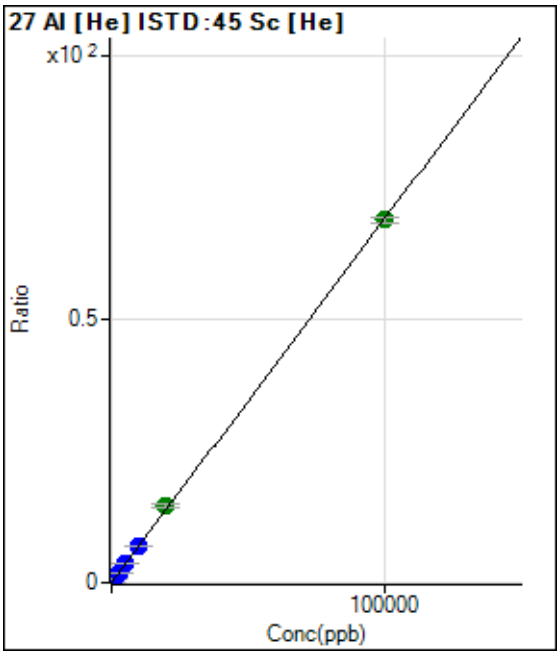
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On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1098.94	0.0087	P	6.1
2	☐	500.000	536.032	83410.01	0.6346	P	1.5
3	☐	5000.000	5086.349	779273.47	5.9475	P	1.2
4	☐	12500.000	12079.299	1829367.51	14.1124	A	1.0
5	☐	25000.000	24101.638	3565687.69	28.1495	A	0.5
6	☐	50000.000	47269.371	6975791.98	55.1999	A	1.4
7	☐	100000.00	100605.83	14327039.65	117.4749	A	7.3
8	☐	500000.00	500206.43	74545447.78	584.0439	A	1.5

y = 0.0012 * x + 0.0087
R = 1.0000
DL = 1.366
BEC = 7.492

Weight: <None>
Min Conc: 0

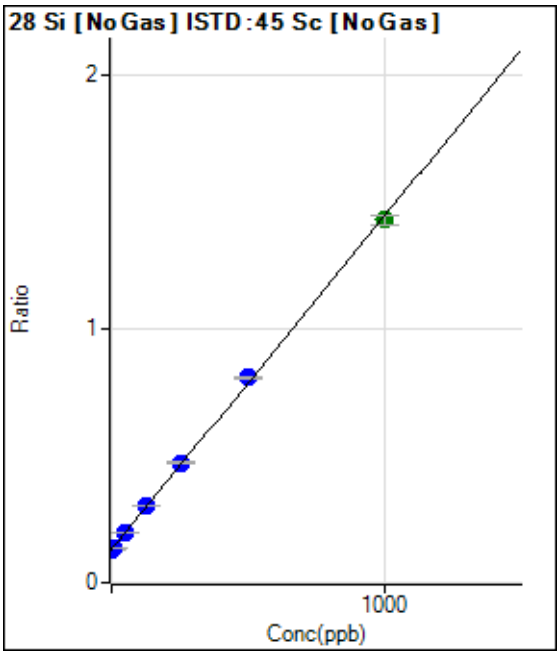


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	71.11	0.0006	P	13.1
2	☐	20.000	20.604	1942.36	0.0148	P	3.5
3	☐	1000.000	1064.438	96309.61	0.7350	P	0.9
4	☐	2500.000	2595.394	232220.44	1.7914	P	0.6
5	☐	5000.000	5212.310	455641.28	3.5971	P	0.5
6	☐	10000.000	10204.111	889855.88	7.0415	P	1.1
7	☐	20000.000	21083.444	1774761.87	14.5483	A	6.8
8	☐	100000.00	99749.255	8785157.86	68.8283	A	1.4

y = 6.9001E-004 * x + 5.6281E-004
R = 0.9999
DL = 0.3208
BEC = 0.8157

Weight: <None>
Min Conc: 0

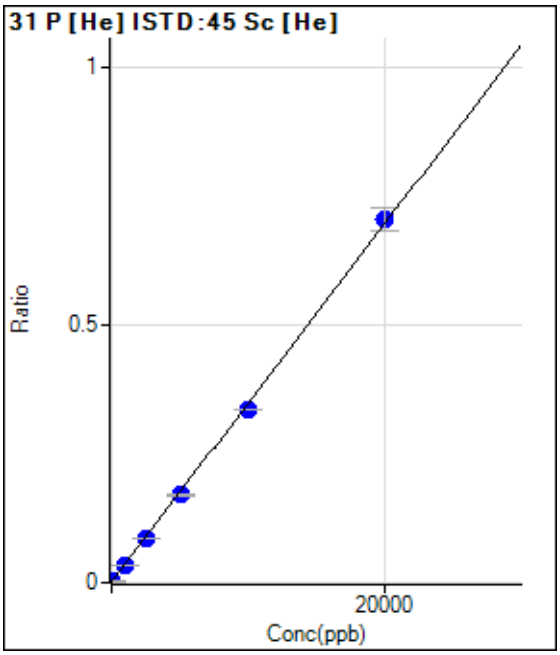
Reviewed By:Mohan
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Inst Id :P7
LB :LB132993



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	192476.41	0.1309	P	0.4
2	☐	10.000	3.457	202346.14	0.1354	P	0.7
3	☐	50.000	51.414	296594.45	0.1985	P	2.0
4	☐	125.000	130.768	445535.95	0.3028	P	1.1
5	☐	250.000	259.889	682508.53	0.4725	P	1.6
6	☐	500.000	516.770	1143821.13	0.8101	P	0.8
7	☐	1000.000	988.416	2062109.29	1.4300	A	2.3
8	☐			198074.08	0.1393	P	1.9

y = 0.0013 * x + 0.1309
R = 0.9997
DL = 1.274
BEC = 99.6

Weight: <None>
Min Conc: 0

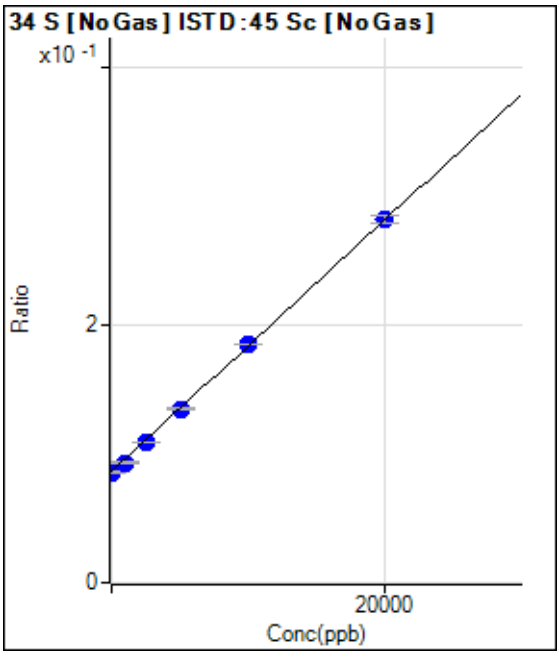


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-14.560	111.11	0.0009	P	0.6
2	☐	0.000	14.560	248.89	0.0019	P	3.6
3	☐	1000.000	965.535	4574.07	0.0349	P	0.9
4	☐	2500.000	2442.512	11171.95	0.0862	P	0.6
5	☐	5000.000	4880.833	21642.03	0.1708	P	1.8
6	☐	10000.000	9606.586	42322.73	0.3349	P	0.5
7	☐	20000.000	20235.408	85875.69	0.7039	P	6.5
8	☐			142.23	0.0011	P	14.1

y = 3.4716E-005 * x + 0.0014
R = 0.9997
DL = 3.213
BEC = 39.99

Weight: <None>
Min Conc: 0

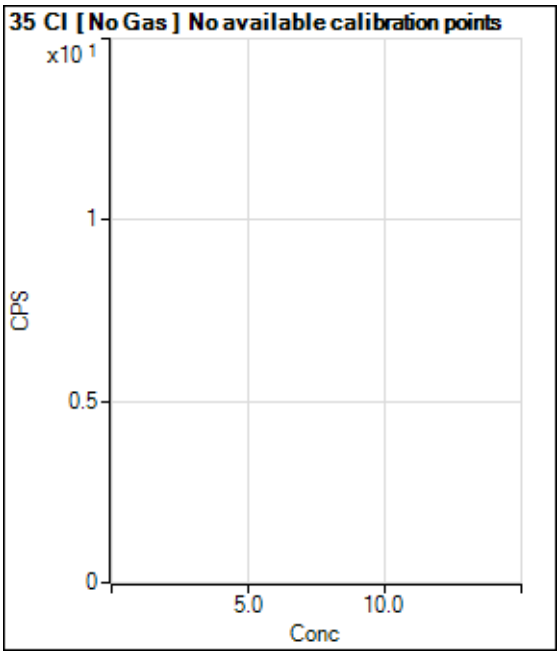
Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	89.429	128443.01	0.0874	P	0.6
2	☐	0.000	-89.429	127891.90	0.0856	P	1.3
3	☐	1000.000	649.710	138710.46	0.0928	P	1.4
4	☐	2500.000	2311.743	160432.05	0.1090	P	0.2
5	☐	5000.000	4975.900	195023.13	0.1350	P	1.1
6	☐	10000.000	10094.949	261105.47	0.1849	P	0.2
7	☐	20000.000	19999.597	405959.33	0.2815	P	2.2
8	☐			109779.56	0.0772	P	2.5

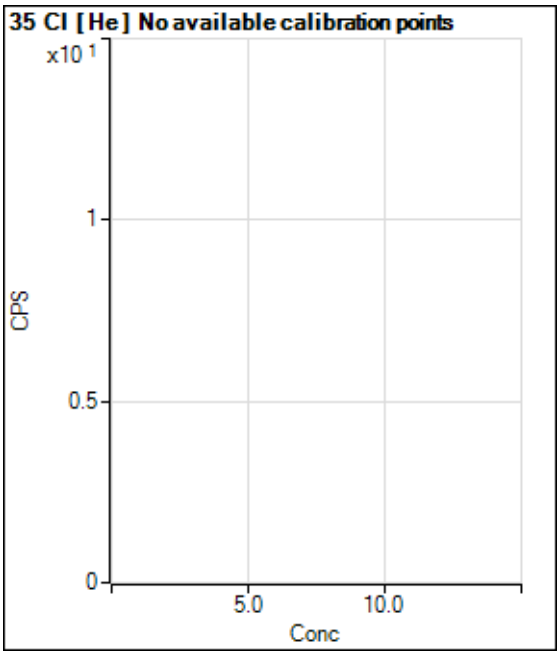
y = 9.7518E-006 * x + 0.0865
R = 0.9998
DL = 251.1
BEC = 8868

Weight: <None>
Min Conc: 0

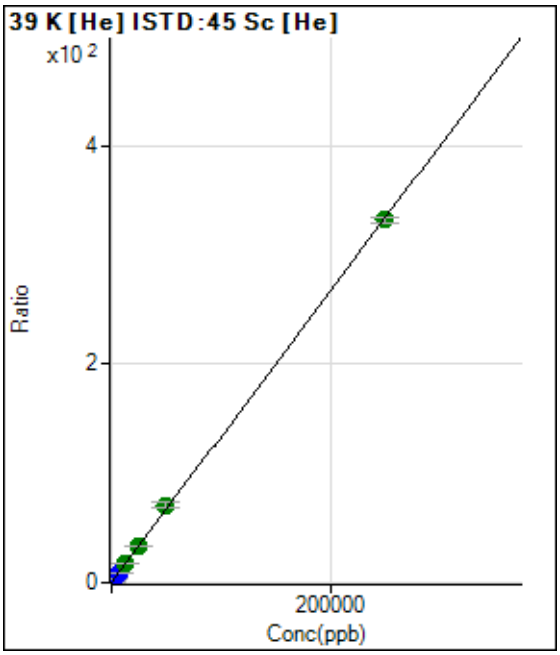


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993



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

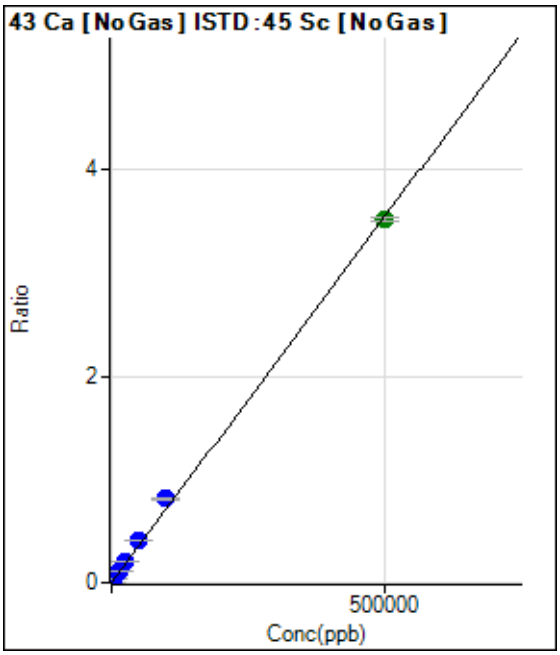


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33717.31	0.2686	P	6.4
2	☐	500.000	539.015	129556.37	0.9857	P	1.6
3	☐	2500.000	2781.056	519970.39	3.9684	P	1.0
4	☐	6250.000	6930.036	1229948.23	9.4881	P	0.5
5	☐	12500.000	12766.131	2185173.28	17.2522	A	1.8
6	☐	25000.000	25253.958	4279750.14	33.8655	A	0.6
7	☐	50000.000	53251.484	8673419.52	71.1124	A	7.2
8	☐	250000.00	249291.11	42364444.37	331.9160	A	1.9

y = 0.0013 * x + 0.2686
R = 0.9999
DL = 38.47
BEC = 201.9

Weight: <None>
Min Conc: 0

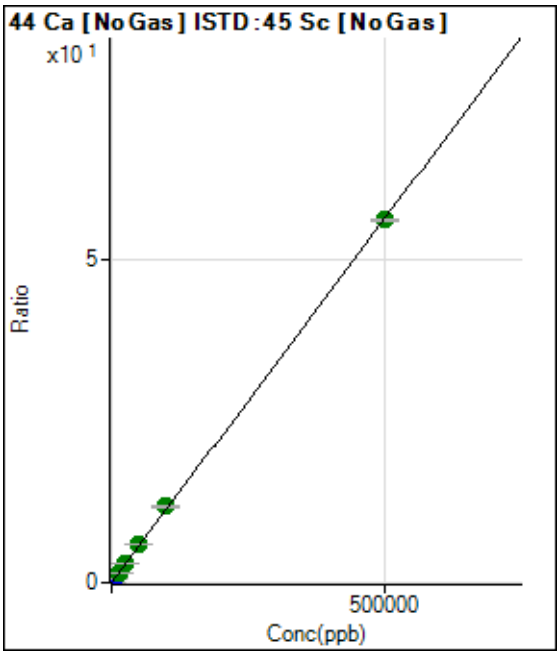
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	151.12	0.0001	P	24.6
2	☐	500.000	542.330	5895.64	0.0039	P	0.9
3	☐	5000.000	5894.725	62586.15	0.0419	P	1.3
4	☐	12500.000	14584.819	152252.38	0.1035	P	0.4
5	☐	25000.000	28932.739	296354.20	0.2052	P	1.0
6	☐	50000.000	57734.091	577862.14	0.4093	P	0.6
7	☐	100000.00	114883.79	1174239.29	0.8143	P	2.3
8	☐	500000.00	495992.08	4998045.48	3.5152	A	0.9

y = 7.0870E-006 * x + 1.0277E-004
R = 0.9995
DL = 10.7
BEC = 14.5

Weight: <None>
Min Conc: 0

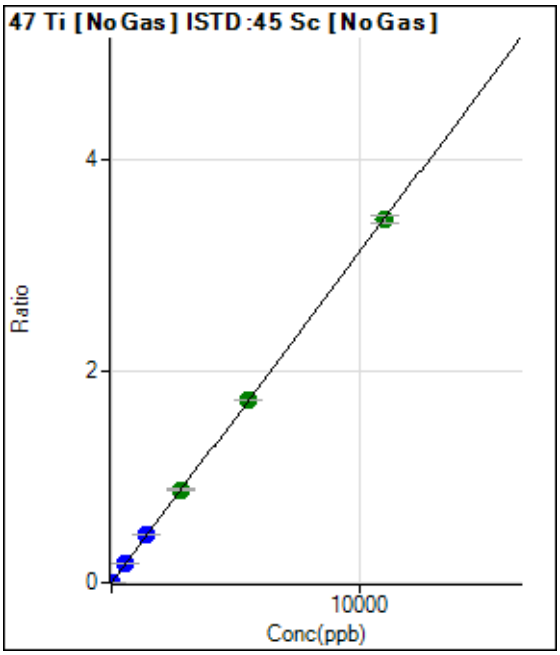


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2566.93	0.0017	P	5.6
2	☐	500.000	546.809	94335.34	0.0631	P	1.8
3	☐	5000.000	5738.427	965596.37	0.6461	P	1.4
4	☐	12500.000	13215.432	2186287.80	1.4857	A	1.1
5	☐	25000.000	26415.034	4287412.16	2.9680	A	1.0
6	☐	50000.000	52852.161	8382245.08	5.9367	A	0.8
7	☐	100000.00	104443.30	16914370.72	11.7300	A	2.6
8	☐	500000.00	498730.05	79630077.14	56.0055	A	0.5

y = 1.1229E-004 * x + 0.0017
R = 1.0000
DL = 2.612
BEC = 15.55

Weight: <None>
Min Conc: 0

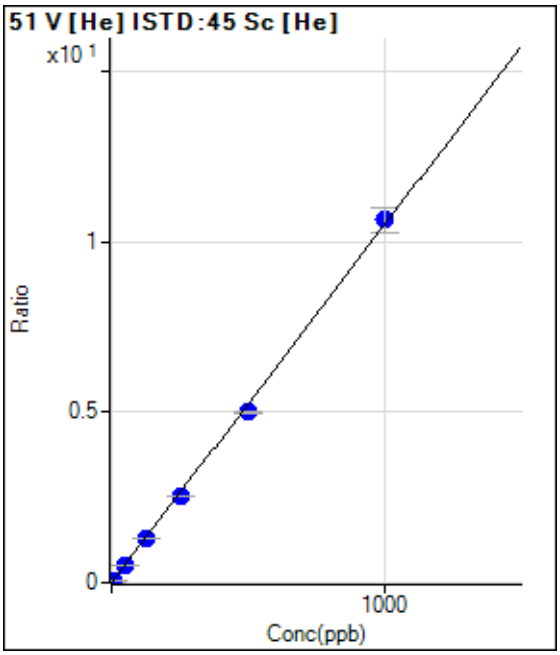
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0000	P	26.5
2	☐	5.000	5.264	2495.79	0.0017	P	7.0
3	☐	550.000	581.643	272045.16	0.1820	P	1.9
4	☐	1375.000	1444.149	665080.79	0.4520	P	0.8
5	☐	2750.000	2802.231	1266800.65	0.8770	A	1.9
6	☐	5500.000	5519.775	2439073.12	1.7274	A	0.6
7	☐	11000.000	10966.829	4949411.25	3.4321	A	2.0
8	☐			642.24	0.0005	P	1.8

y = 3.1295E-004 * x + 2.2671E-005
R = 1.0000
DL = 0.05759
BEC = 0.07244

Weight: <None>
Min Conc: 0

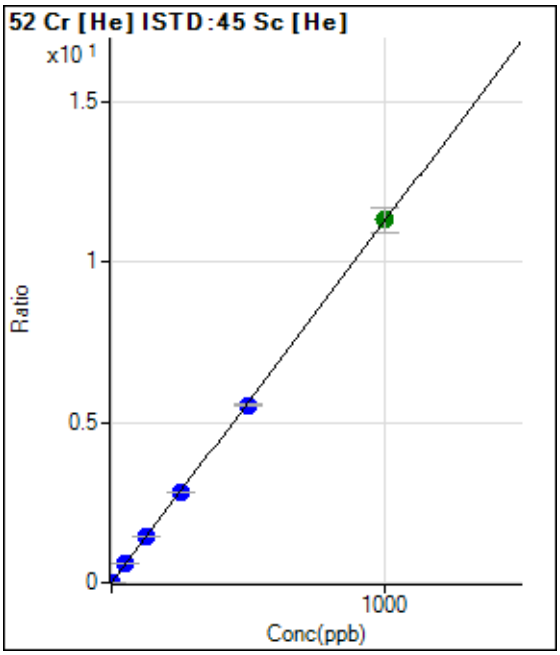


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3.33	0.0000	P	5.8
2	☐	5.000	4.938	6819.39	0.0519	P	0.8
3	☐	50.000	48.768	67091.54	0.5121	P	2.3
4	☐	125.000	121.970	166019.79	1.2807	P	0.4
5	☐	250.000	241.380	321041.57	2.5345	P	0.7
6	☐	500.000	477.033	632991.79	5.0089	P	1.1
7	☐	1000.000	1014.079	1298801.72	10.6479	P	7.0
8	☐			375.56	0.0029	P	9.6

y = 0.0105 * x + 2.6525E-005
R = 0.9996
DL = 0.0004384
BEC = 0.002526

Weight: <None>
Min Conc: 0

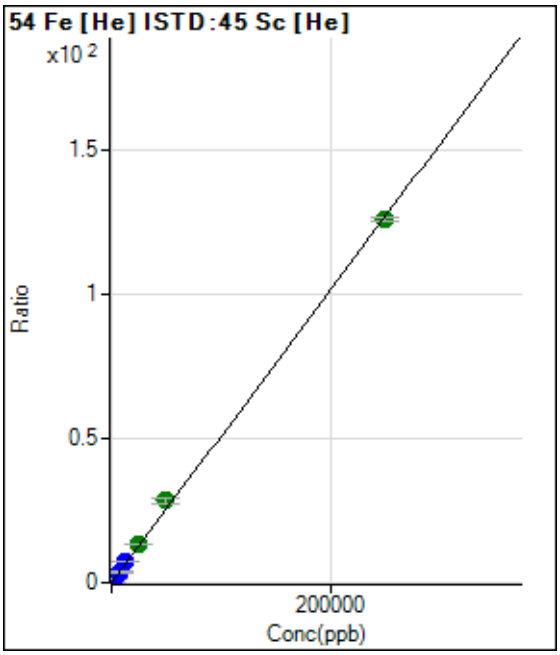
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	184.45	0.0015	P	14.2
2	☐	2.000	2.030	3193.70	0.0243	P	2.5
3	☐	50.000	51.083	75494.38	0.5762	P	0.7
4	☐	125.000	126.066	184045.63	1.4197	P	0.3
5	☐	250.000	250.606	357302.53	2.8208	P	1.0
6	☐	500.000	490.882	698096.23	5.5240	P	0.6
7	☐	1000.000	1004.220	1378501.56	11.2991	A	6.6
8	☐			4520.86	0.0354	P	2.7

y = 0.0113 * x + 0.0015
R = 0.9999
DL = 0.05521
BEC = 0.1299

Weight: <None>
Min Conc: 0

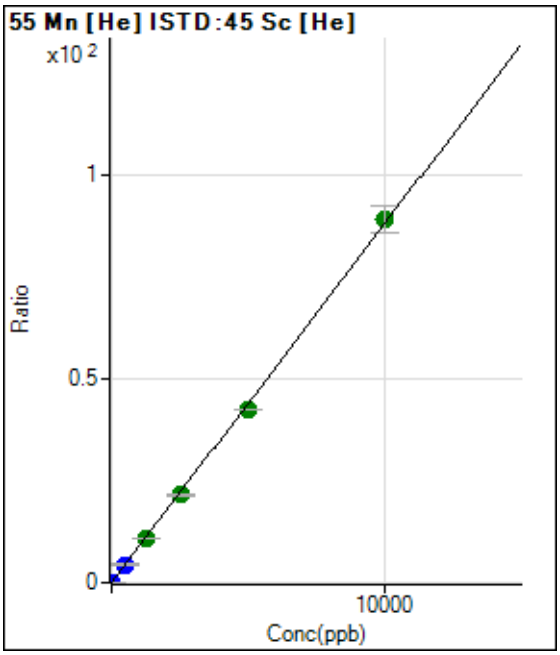


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	808.92	0.0064	P	10.7
2	☐	50.000	59.174	4778.58	0.0364	P	1.6
3	☐	2500.000	2928.896	194826.43	1.4870	P	1.6
4	☐	6250.000	7221.329	474036.81	3.6568	P	0.3
5	☐	12500.000	14402.328	922984.36	7.2867	P	1.0
6	☐	25000.000	26809.580	1713464.47	13.5585	A	1.1
7	☐	50000.000	56380.991	3477118.77	28.5066	A	7.0
8	☐	250000.00	248419.15	16029364.62	125.5806	A	1.0

y = 5.0549E-004 * x + 0.0064
R = 0.9996
DL = 4.077
BEC = 12.75

Weight: <None>
Min Conc: 0

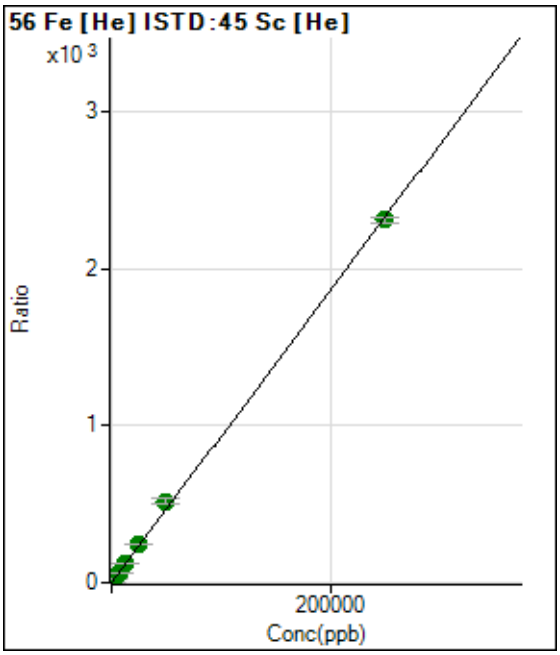
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	82.22	0.0007	P	4.7
2	☐	1.000	0.978	1218.95	0.0093	P	4.4
3	☐	500.000	507.417	585919.55	4.4719	P	1.4
4	☐	1250.000	1214.558	1387424.25	10.7030	A	0.8
5	☐	2500.000	2441.806	2725602.84	21.5171	A	1.0
6	☐	5000.000	4813.642	5360525.96	42.4171	A	0.5
7	☐	10000.000	10111.787	10866742.06	89.1028	A	7.4
8	☐			5801.17	0.0454	P	1.3

y = 0.0088 * x + 6.5319E-004
R = 0.9997
DL = 0.01038
BEC = 0.07413

Weight: <None>
Min Conc: 0

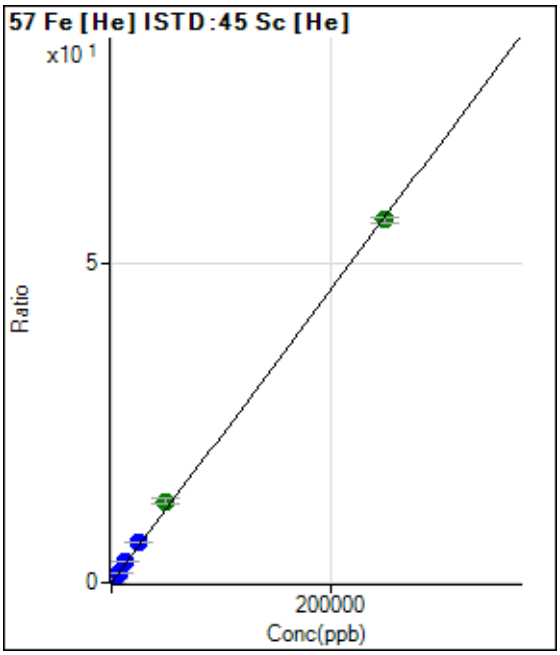


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4445.14	0.0353	P	1.0
2	☐	50.000	56.872	74064.38	0.5635	P	1.0
3	☐	2500.000	2694.175	3282784.43	25.0547	A	1.3
4	☐	6250.000	6729.578	8105899.81	62.5292	A	0.8
5	☐	12500.000	13335.615	15690970.05	123.8758	A	0.9
6	☐	25000.000	26378.100	30961456.20	244.9941	A	0.3
7	☐	50000.000	55608.997	62995862.95	516.4453	A	7.0
8	☐	250000.00	248684.67	294770055.6	2,309.432	A	1.7

y = 0.0093 * x + 0.0353
R = 0.9997
DL = 0.1089
BEC = 3.806

Weight: <None>
Min Conc: 0

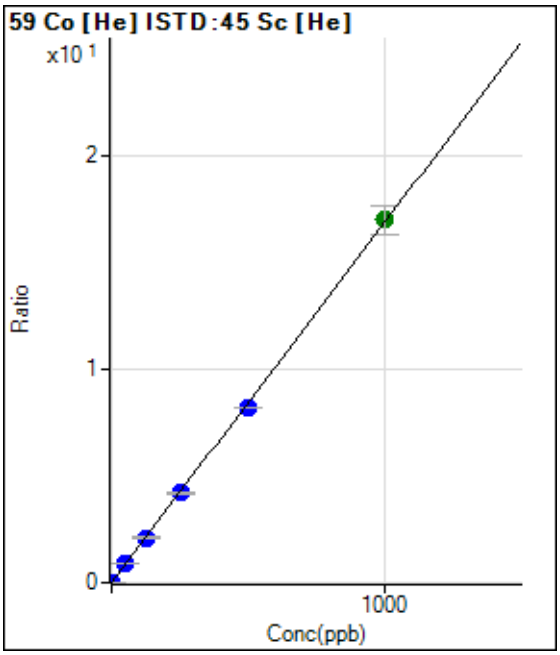
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	570.93	0.0045	P	2.2
2	☐	50.000	56.652	2298.67	0.0175	P	0.8
3	☐	2500.000	2863.185	86324.41	0.6588	P	0.7
4	☐	6250.000	7111.524	211241.44	1.6296	P	0.5
5	☐	12500.000	14174.358	410824.30	3.2435	P	1.3
6	☐	25000.000	27854.965	804946.05	6.3695	P	0.9
7	☐	50000.000	55599.370	1550466.80	12.7093	A	6.7
8	☐	250000.00	248485.74	7247805.38	56.7847	A	1.5

y = 2.2850E-004 * x + 0.0045
R = 0.9997
DL = 1.32
BEC = 19.87

Weight: <None>
Min Conc: 0

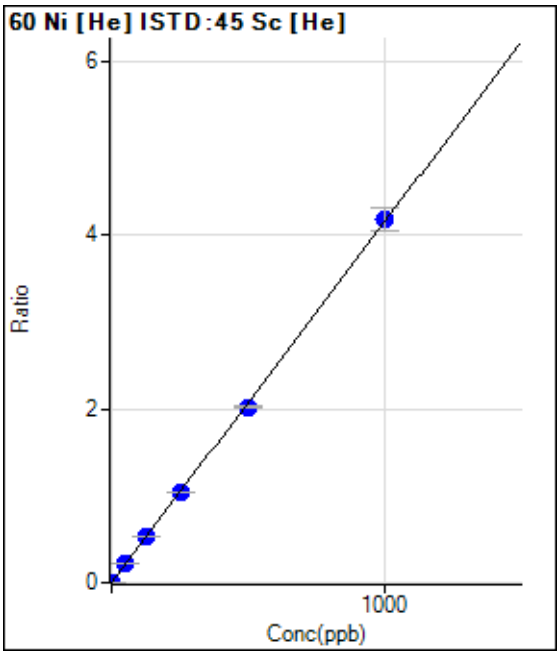


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0001	P	47.6
2	☐	1.000	1.043	2324.64	0.0177	P	3.6
3	☐	50.000	51.013	112743.61	0.8605	P	1.0
4	☐	125.000	125.278	273906.26	2.1130	P	0.7
5	☐	250.000	248.864	531650.91	4.1973	P	1.2
6	☐	500.000	485.548	1034906.57	8.1891	P	0.2
7	☐	1000.000	1007.425	2071870.04	16.9908	A	7.7
8	☐			5369.89	0.0421	P	1.9

y = 0.0169 * x + 1.0469E-004
R = 0.9998
DL = 0.008856
BEC = 0.006207

Weight: <None>
Min Conc: 0

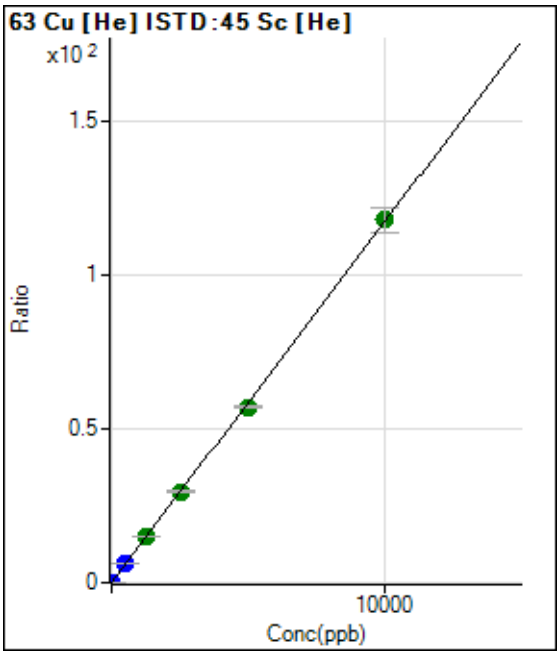
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	56.67	0.0004	P	12.5
2	☐	1.000	1.017	613.35	0.0047	P	3.8
3	☐	50.000	52.529	28603.97	0.2183	P	2.8
4	☐	125.000	126.195	67913.89	0.5239	P	1.1
5	☐	250.000	251.718	132312.77	1.0445	P	0.5
6	☐	500.000	487.434	255566.83	2.0223	P	0.4
7	☐	1000.000	1005.578	508936.76	4.1715	P	6.5
8	☐			1922.37	0.0151	P	5.4

y = 0.0041 * x + 4.4849E-004
R = 0.9999
DL = 0.04045
BEC = 0.1081

Weight: <None>
Min Conc: 0

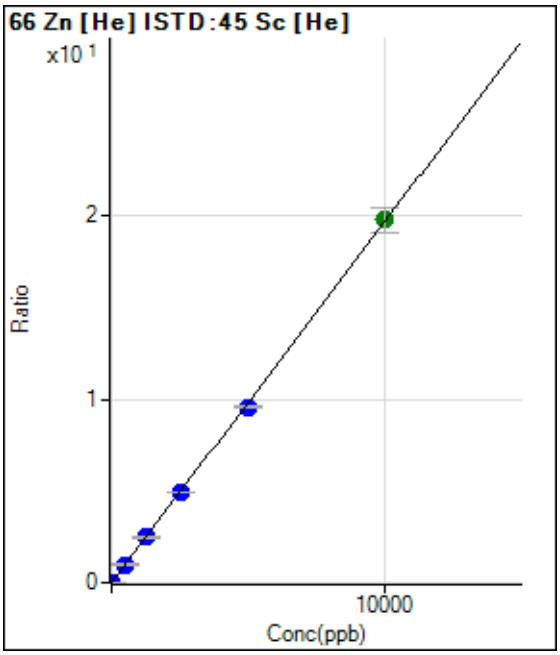


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	544.46	0.0043	P	1.4
2	☐	2.000	1.945	3563.80	0.0271	P	1.9
3	☐	500.000	516.283	793019.97	6.0525	P	1.4
4	☐	1250.000	1274.155	1935512.80	14.9308	A	0.5
5	☐	2500.000	2514.849	3732116.20	29.4654	A	1.5
6	☐	5000.000	4859.559	7194828.37	56.9333	A	1.3
7	☐	10000.000	10062.675	14381484.79	117.8869	A	6.7
8	☐			3308.17	0.0259	P	3.5

y = 0.0117 * x + 0.0043
R = 0.9998
DL = 0.01586
BEC = 0.3694

Weight: <None>
Min Conc: 0

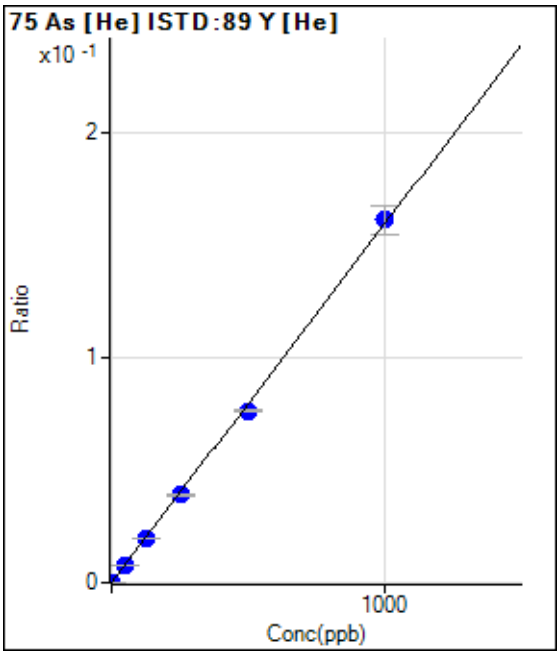
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	73.34	0.0006	P	34.3
2	☐	2.000	5.186	1418.97	0.0108	P	5.4
3	☐	500.000	504.749	130212.59	0.9939	P	2.2
4	☐	1250.000	1254.211	320026.83	2.4687	P	0.3
5	☐	2500.000	2505.769	624678.88	4.9316	P	0.7
6	☐	5000.000	4875.497	1212570.67	9.5949	P	0.3
7	☐	10000.000	10060.045	2415177.79	19.7975	A	6.7
8	☐			904.48	0.0071	P	3.7

y = 0.0020 * x + 5.8993E-004
R = 0.9999
DL = 0.3083
BEC = 0.2998

Weight: <None>
Min Conc: 0

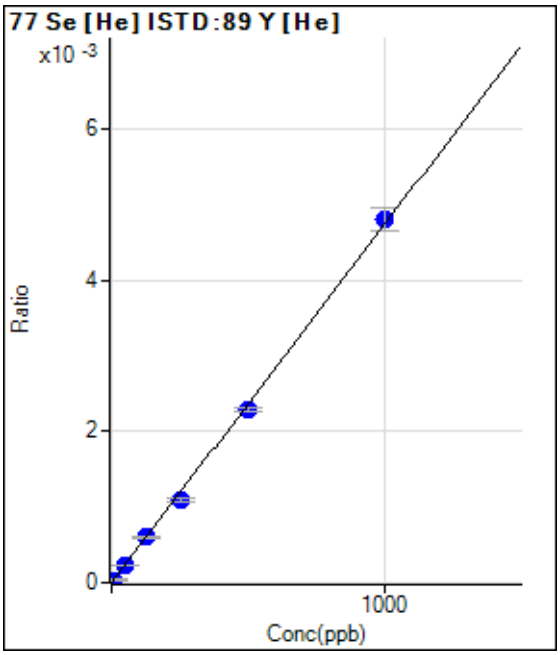


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2.22	0.0000	P	86.9
2	☐	1.000	1.083	203.33	0.0002	P	20.7
3	☐	50.000	48.610	9079.51	0.0078	P	0.2
4	☐	125.000	122.340	22582.83	0.0195	P	0.1
5	☐	250.000	244.153	44251.30	0.0389	P	1.4
6	☐	500.000	479.554	87362.64	0.0765	P	1.2
7	☐	1000.000	1012.086	176299.67	0.1614	P	7.6
8	☐			101.11	0.0001	P	25.1

y = 1.5949E-004 * x + 2.0302E-006
R = 0.9997
DL = 0.03319
BEC = 0.01273

Weight: <None>
Min Conc: 0

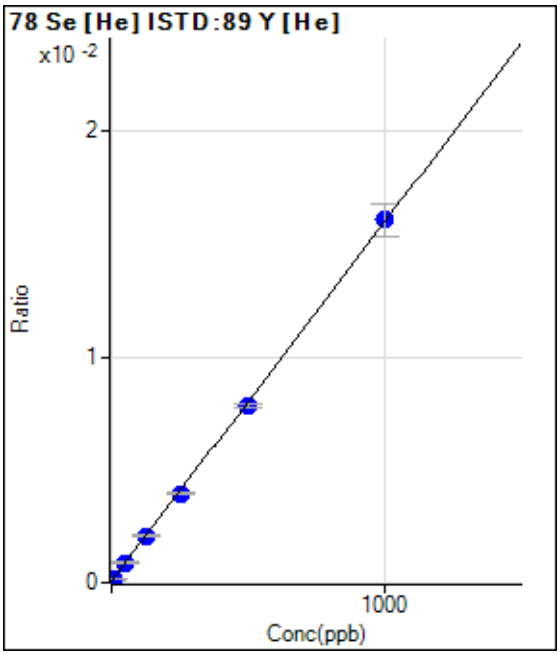
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	7.447	41.11	0.0000	P	25.8
3	☐	50.000	49.446	274.45	0.0002	P	6.2
4	☐	125.000	126.367	693.36	0.0006	P	1.6
5	☐	250.000	233.243	1256.73	0.0011	P	4.5
6	☐	500.000	482.021	2610.25	0.0023	P	1.8
7	☐	1000.000	1013.023	5253.20	0.0048	P	6.5
8	☐			0.00	0.0000	P	

y = 4.7409E-006 * x + 0.0000E+000
R = 0.9996
DL = 0
BEC = 0

Weight: <None>
Min Conc: 0

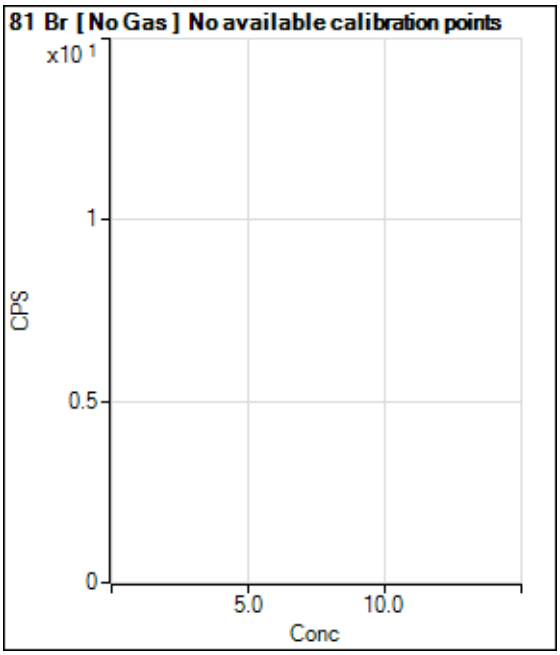


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	90.00	0.0001	P	26.2
2	☐	5.000	5.936	204.45	0.0002	P	18.8
3	☐	50.000	50.812	1041.16	0.0009	P	3.8
4	☐	125.000	125.711	2406.89	0.0021	P	3.9
5	☐	250.000	243.968	4500.73	0.0040	P	1.7
6	☐	500.000	489.765	8989.47	0.0079	P	2.6
7	☐	1000.000	1006.491	17554.91	0.0161	P	9.2
8	☐			90.00	0.0001	P	20.7

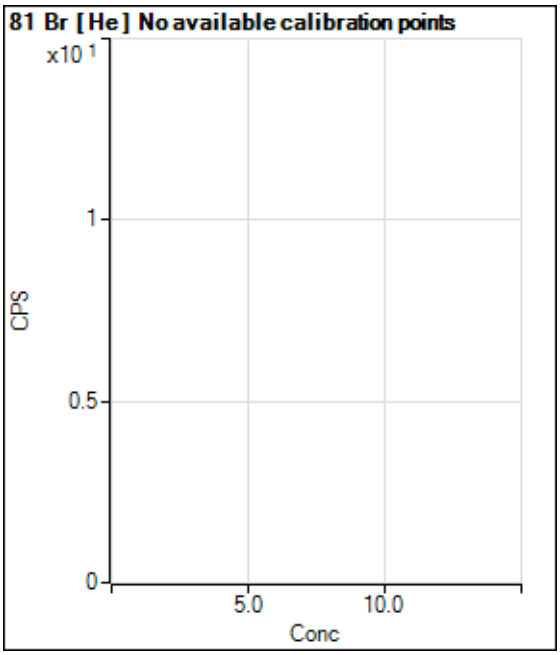
y = 1.5902E-005 * x + 8.1237E-005
R = 0.9999
DL = 4.01
BEC = 5.109

Weight: <None>
Min Conc: 0

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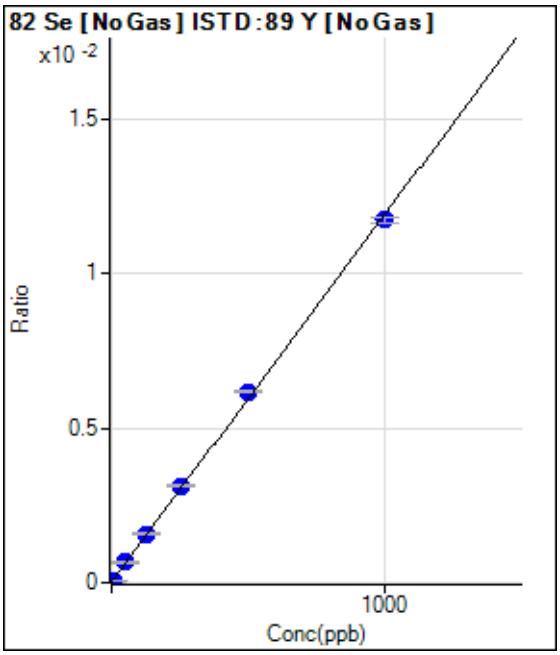


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			6632.67		P	1.3
2	☐			6385.89		P	2.1
3	☐			6500.37		P	1.2
4	☐			6301.41		P	0.8
5	☐			6361.43		P	1.4
6	☐			6198.02		P	2.4
7	☐			6010.17		P	0.3
8	☐			6356.98		P	1.5



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			37.78		P	48.6
2	☐			36.67		P	32.8
3	☐			36.67		P	18.2
4	☐			28.89		P	29.0
5	☐			34.44		P	43.6
6	☐			26.67		P	66.2
7	☐			43.34		P	48.0
8	☐			34.44		P	24.3

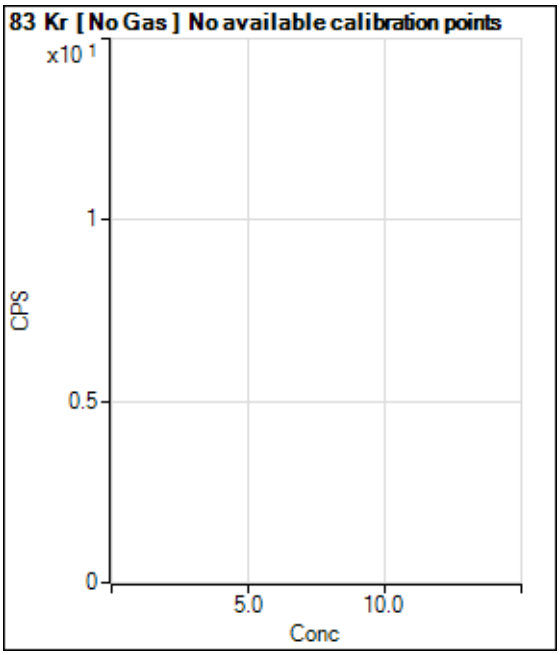
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	91.57	0.0000	P	23.8
2	☐	5.000	5.394	395.20	0.0001	P	5.9
3	☐	50.000	53.622	3068.49	0.0007	P	1.9
4	☐	125.000	131.404	7389.67	0.0016	P	1.9
5	☐	250.000	262.597	14410.96	0.0031	P	2.1
6	☐	500.000	518.789	28140.45	0.0062	P	1.5
7	☐	1000.000	986.473	55581.24	0.0118	P	1.3
8	☐			183.09	0.0000	P	19.7

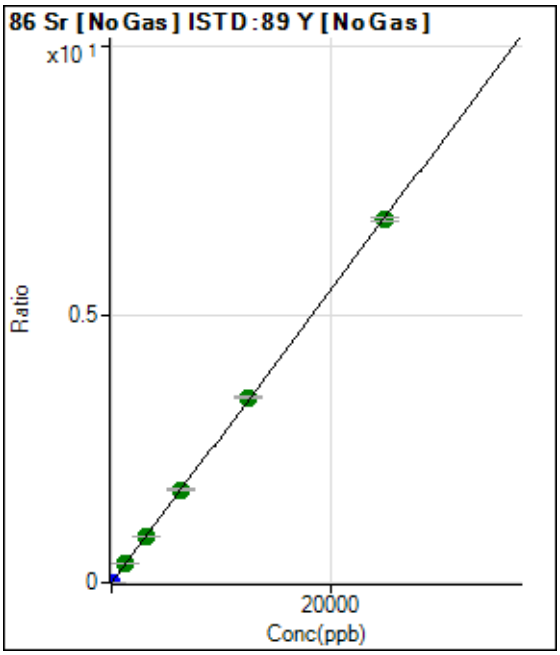
y = 1.1894E-005 * x + 1.9590E-005
R = 0.9996
DL = 1.176
BEC = 1.647

Weight: <None>
Min Conc: 0



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			83.33		P	10.6
2	☐			67.78		P	14.2
3	☐			68.89		P	11.2
4	☐			67.78		P	28.8
5	☐			50.00		P	29.1
6	☐			67.78		P	17.3
7	☐			74.44		P	17.0
8	☐			81.11		P	4.7

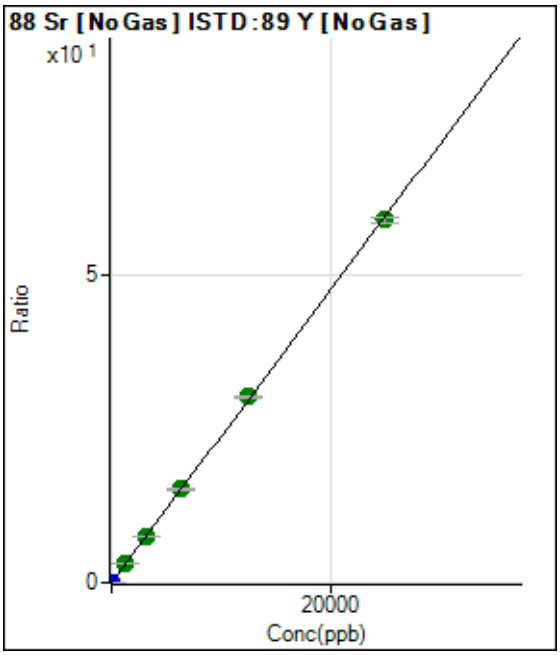
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	120.00	0.0000	P	5.7
2	☐	1.000	1.054	1474.53	0.0003	P	4.1
3	☐	1250.000	1304.327	1656848.74	0.3550	A	1.8
4	☐	3125.000	3175.605	4035164.70	0.8642	A	1.9
5	☐	6250.000	6381.479	7962320.71	1.7365	A	1.8
6	☐	12500.000	12674.830	15680251.99	3.4490	A	0.7
7	☐	25000.000	24870.674	32006184.80	6.7677	A	1.1
8	☐			4994.23	0.0011	P	6.7

y = 2.7211E-004 * x + 2.5691E-005
R = 0.9999
DL = 0.01605
BEC = 0.09441

Weight: <None>
Min Conc: 0

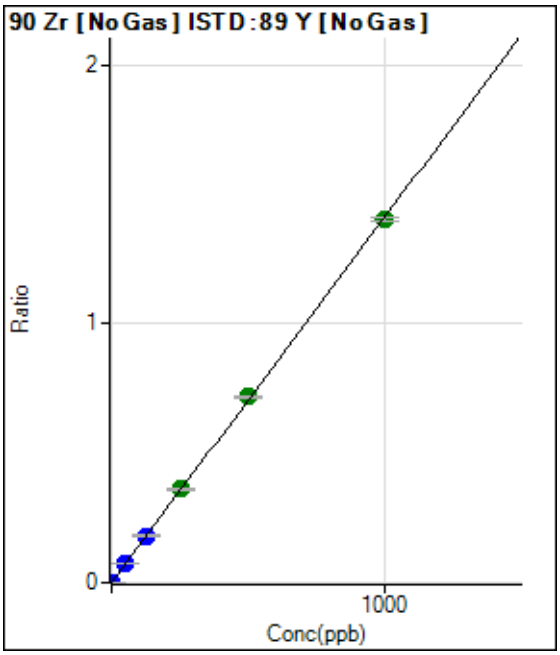


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	90.00	0.0000	P	19.6
2	☐	1.000	1.035	11702.54	0.0025	P	0.3
3	☐	1250.000	1286.094	14277308.54	3.0586	A	1.5
4	☐	3125.000	3174.488	35253965.03	7.5496	A	1.0
5	☐	6250.000	6395.303	69741855.63	15.2094	A	0.9
6	☐	12500.000	12731.620	137650696.8	30.2784	A	1.0
7	☐	25000.000	24839.873	279375858.0	59.0743	A	1.3
8	☐			43971.29	0.0098	P	6.4

y = 0.0024 * x + 1.9268E-005
R = 0.9999
DL = 0.004764
BEC = 0.008102

Weight: <None>
Min Conc: 0

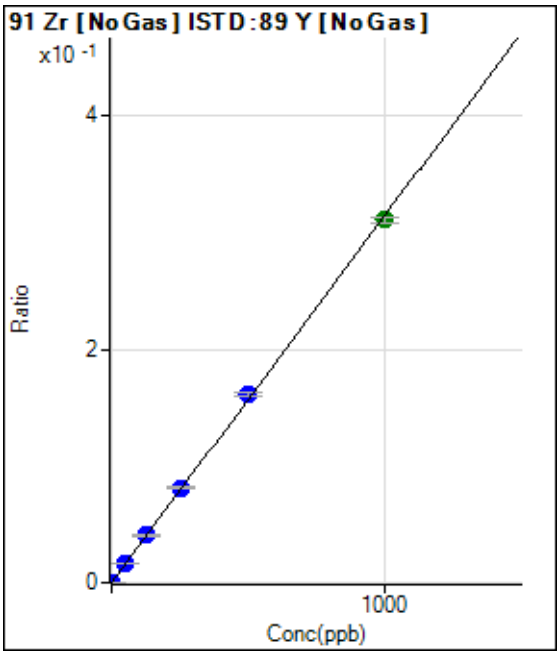
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	153.34	0.0000	P	20.3
2	☐	1.000	0.979	6672.69	0.0014	P	1.0
3	☐	50.000	51.540	339509.41	0.0727	P	1.3
4	☐	125.000	128.259	844939.98	0.1809	P	1.2
5	☐	250.000	255.422	1652147.14	0.3603	A	1.7
6	☐	500.000	509.737	3268884.18	0.7190	A	0.8
7	☐	1000.000	993.291	6626244.55	1.4011	A	1.0
8	☐			4058.41	0.0009	P	5.7

y = 0.0014 * x + 3.2841E-005
R = 0.9999
DL = 0.01418
BEC = 0.02328

Weight: <None>
Min Conc: 0

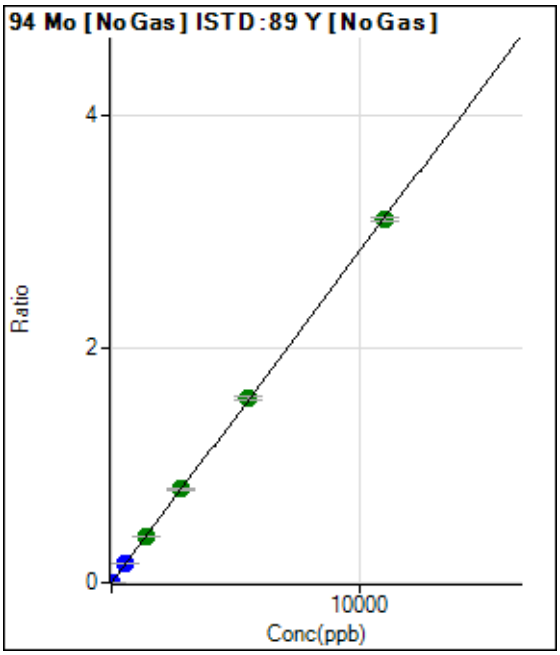


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	31.11	0.0000	P	24.6
2	☐	1.000	1.043	1575.66	0.0003	P	9.6
3	☐	50.000	51.675	75764.18	0.0162	P	1.9
4	☐	125.000	128.602	188580.09	0.0404	P	1.1
5	☐	250.000	258.230	371795.29	0.0811	P	1.4
6	☐	500.000	515.409	735672.70	0.1618	P	1.6
7	☐	1000.000	989.704	1469541.78	0.3107	A	1.8
8	☐			918.93	0.0002	P	9.9

y = 3.1397E-004 * x + 6.6595E-006
R = 0.9998
DL = 0.01567
BEC = 0.02121

Weight: <None>
Min Conc: 0

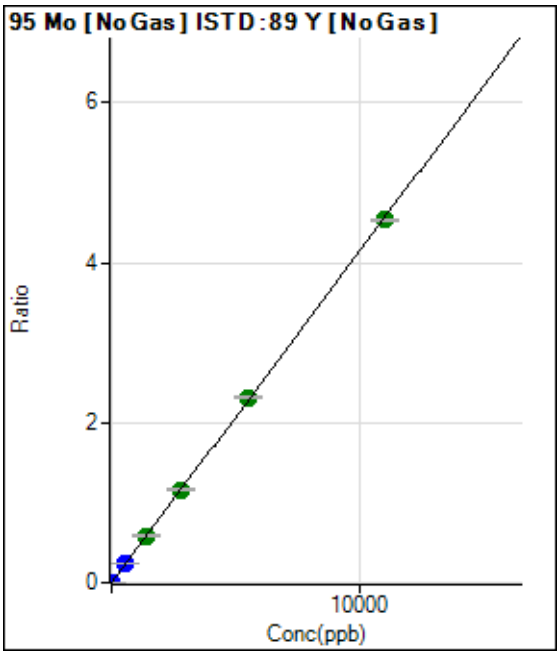
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	68.89	0.0000	P	10.8
2	☐	5.000	6.020	8117.88	0.0017	P	2.0
3	☐	550.000	569.061	752748.14	0.1613	P	1.2
4	☐	1375.000	1409.389	1864871.05	0.3994	A	1.1
5	☐	2750.000	2832.691	3680447.06	0.8027	A	1.5
6	☐	5500.000	5570.951	7175877.88	1.5785	A	1.7
7	☐	11000.000	10938.599	14658173.67	3.0994	A	1.0
8	☐			3680.50	0.0008	P	7.5

y = 2.8335E-004 * x + 1.4743E-005
R = 0.9999
DL = 0.01686
BEC = 0.05203

Weight: <None>
Min Conc: 0

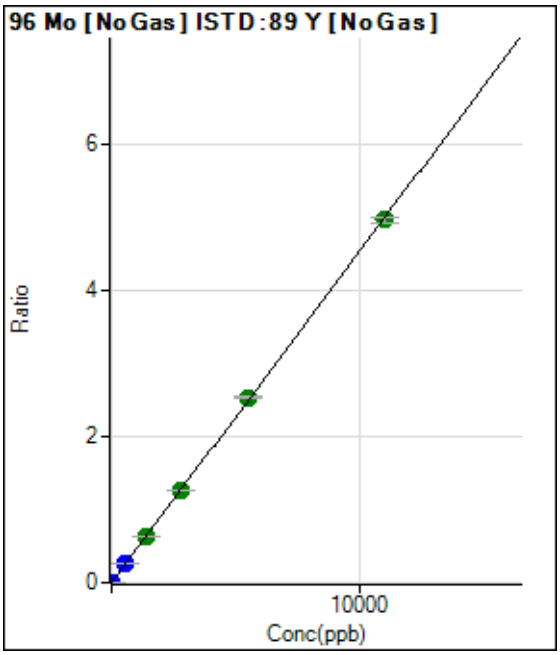


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18.89	0.0000	P	26.6
2	☐	5.000	5.009	9816.72	0.0021	P	2.7
3	☐	550.000	567.157	1097564.40	0.2351	P	1.2
4	☐	1375.000	1418.108	2745215.76	0.5879	A	1.4
5	☐	2750.000	2798.999	5320663.64	1.1604	A	1.7
6	☐	5500.000	5588.005	10531519.91	2.3166	A	1.0
7	☐	11000.000	10937.502	21444151.07	4.5343	A	0.8
8	☐			3920.75	0.0009	P	6.2

y = 4.1456E-004 * x + 4.0402E-006
R = 0.9999
DL = 0.007778
BEC = 0.009746

Weight: <None>
Min Conc: 0

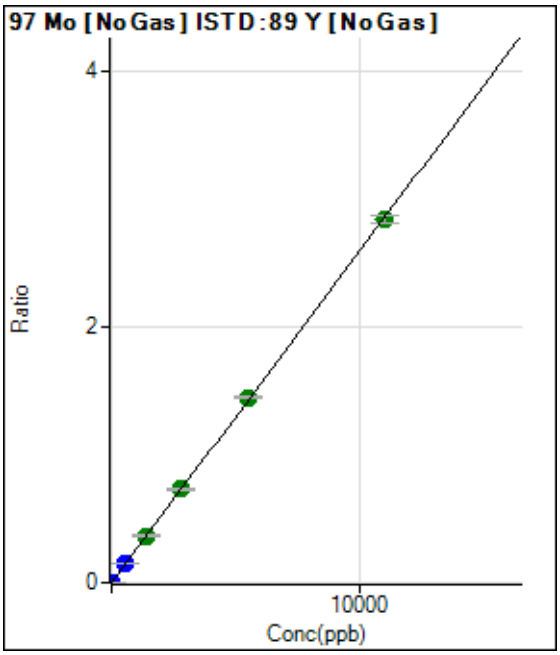
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0000	P	53.3
2	☐	5.000	5.141	11020.90	0.0023	P	3.5
3	☐	550.000	565.770	1196352.73	0.2563	P	0.9
4	☐	1375.000	1396.319	2953552.73	0.6325	A	0.9
5	☐	2750.000	2775.252	5764463.25	1.2571	A	0.7
6	☐	5500.000	5596.565	11523893.72	2.5351	A	2.0
7	☐	11000.000	10941.951	23439394.09	4.9564	A	1.6
8	☐			7840.47	0.0018	P	15.4

y = 4.5297E-004 * x + 7.1454E-006
R = 0.9999
DL = 0.02524
BEC = 0.01577

Weight: <None>
Min Conc: 0

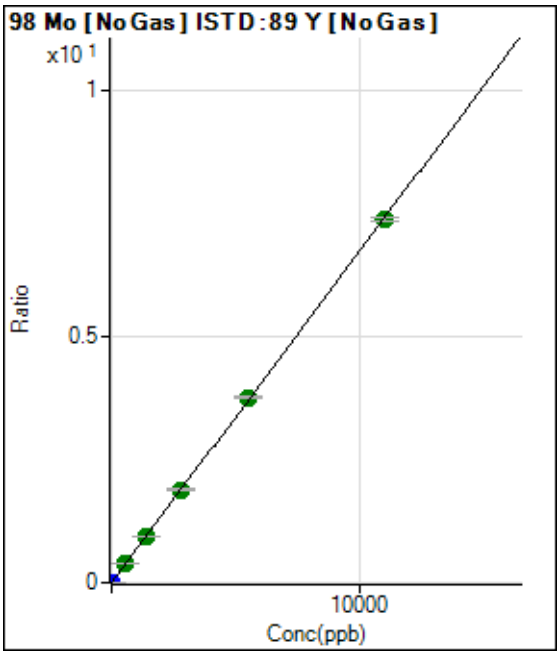


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4.44	0.0000	P	114.
2	☐	5.000	5.106	6249.17	0.0013	P	2.3
3	☐	550.000	573.728	694150.79	0.1487	P	1.0
4	☐	1375.000	1407.436	1703336.31	0.3648	A	2.3
5	☐	2750.000	2817.654	3348797.45	0.7303	A	0.8
6	☐	5500.000	5588.836	6584877.26	1.4485	A	1.9
7	☐	11000.000	10933.427	13400840.91	2.8338	A	2.2
8	☐			3352.10	0.0007	P	58.0

y = 2.5918E-004 * x + 9.5146E-007
R = 0.9999
DL = 0.0126
BEC = 0.003671

Weight: <None>
Min Conc: 0

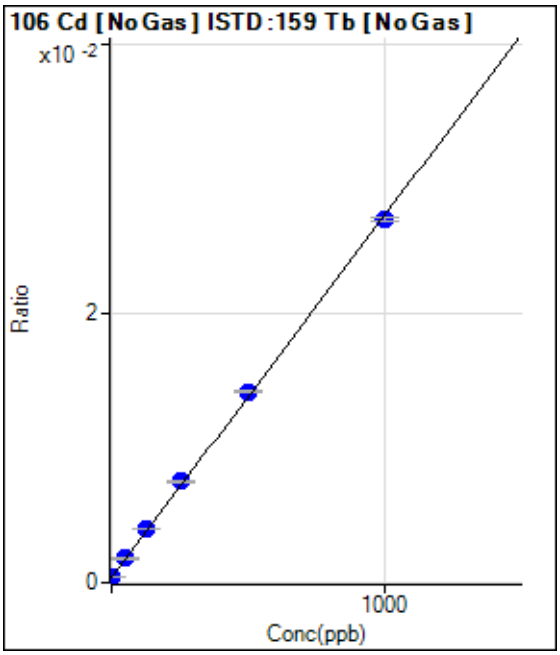
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	24.44	0.0000	P	20.6
2	☐	5.000	5.098	16205.71	0.0034	P	0.7
3	☐	550.000	564.643	1772956.81	0.3798	A	1.8
4	☐	1375.000	1395.553	4383522.89	0.9388	A	1.8
5	☐	2750.000	2809.078	8664640.08	1.8896	A	0.9
6	☐	5500.000	5588.310	17089113.63	3.7591	A	1.7
7	☐	11000.000	10937.774	34796436.15	7.3575	A	0.9
8	☐			8605.85	0.0019	P	61.5

y = 6.7267E-004 * x + 5.2314E-006
R = 0.9999
DL = 0.004808
BEC = 0.007777

Weight: <None>
Min Conc: 0

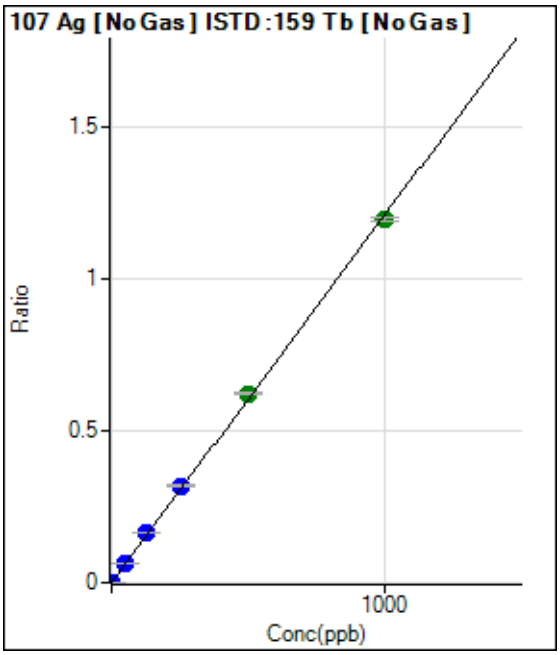


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1370.08	0.0004	P	2.5
2	☐	1.000	1.197	1507.87	0.0004	P	7.1
3	☐	50.000	53.052	6826.10	0.0018	P	1.6
4	☐	125.000	134.759	15248.11	0.0040	P	1.2
5	☐	250.000	265.317	28549.22	0.0075	P	0.2
6	☐	500.000	513.848	54835.19	0.0142	P	1.2
7	☐	1000.000	987.874	107903.65	0.0270	P	0.9
8	☐			1484.54	0.0004	P	5.7

y = 2.6960E-005 * x + 3.6677E-004
R = 0.9997
DL = 1.022
BEC = 13.6

Weight: <None>
Min Conc: 0

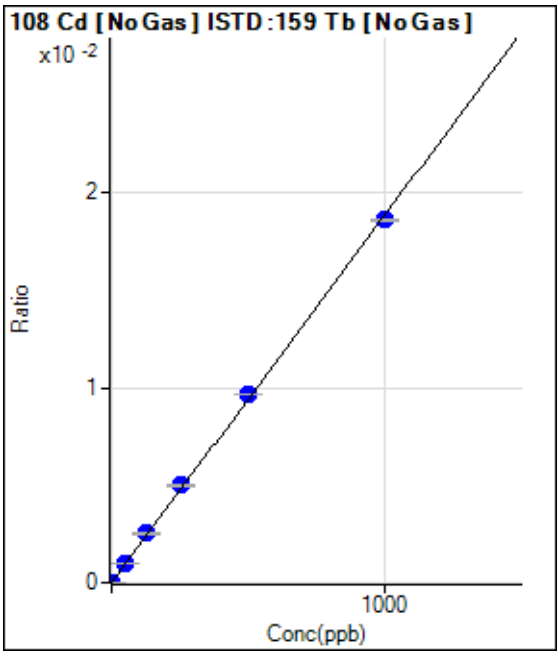
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26.67	0.0000	P	55.5
2	☐	1.000	1.002	4607.44	0.0012	P	0.8
3	☐	50.000	54.617	251186.04	0.0661	P	1.0
4	☐	125.000	133.965	618299.39	0.1622	P	0.4
5	☐	250.000	263.892	1212891.20	0.3195	P	1.1
6	☐	500.000	514.954	2404030.83	0.6234	A	0.7
7	☐	1000.000	987.699	4778714.06	1.1958	A	1.2
8	☐			1074.01	0.0003	P	74.3

y = 0.0012 * x + 7.1634E-006
R = 0.9997
DL = 0.00986
BEC = 0.005917

Weight: <None>
Min Conc: 0

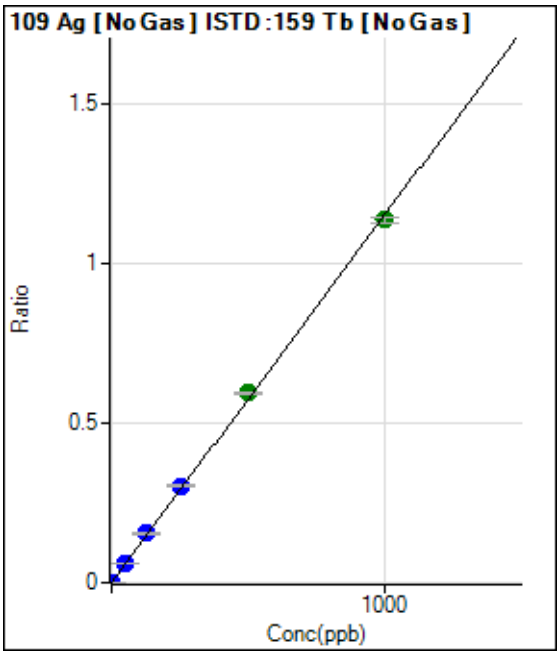


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4.44	0.0000	P	114.
2	☐	1.000	1.409	104.44	0.0000	P	12.5
3	☐	50.000	52.934	3786.09	0.0010	P	2.3
4	☐	125.000	135.123	9691.08	0.0025	P	3.7
5	☐	250.000	265.685	18976.92	0.0050	P	1.1
6	☐	500.000	512.275	37159.77	0.0096	P	0.3
7	☐	1000.000	988.529	74313.44	0.0186	P	0.3
8	☐			54.44	0.0000	P	24.8

y = 1.8809E-005 * x + 1.1829E-006
R = 0.9997
DL = 0.2163
BEC = 0.06289

Weight: <None>
Min Conc: 0

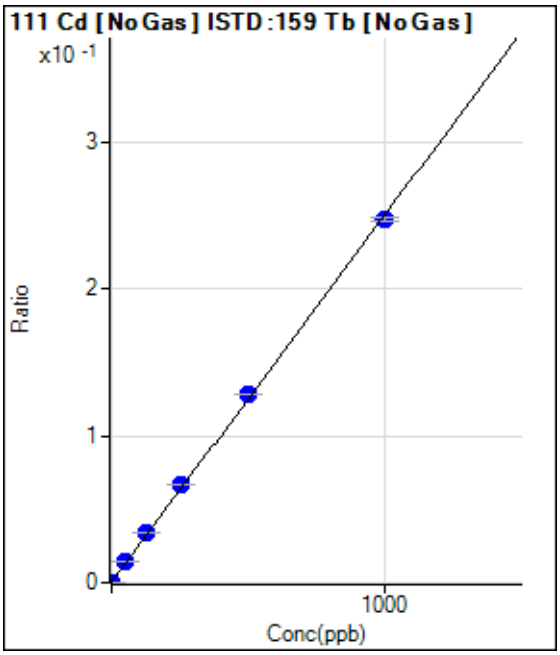
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	12.22	0.0000	P	32.6
2	☐	1.000	1.060	4616.33	0.0012	P	1.4
3	☐	50.000	54.423	237790.28	0.0626	P	1.5
4	☐	125.000	133.911	587194.71	0.1540	P	0.8
5	☐	250.000	263.409	1150296.32	0.3030	P	0.9
6	☐	500.000	516.008	2288757.14	0.5935	A	1.3
7	☐	1000.000	987.309	4538527.81	1.1357	A	1.6
8	☐			771.29	0.0002	P	54.7

y = 0.0012 * x + 3.2787E-006
R = 0.9997
DL = 0.002787
BEC = 0.00285

Weight: <None>
Min Conc: 0

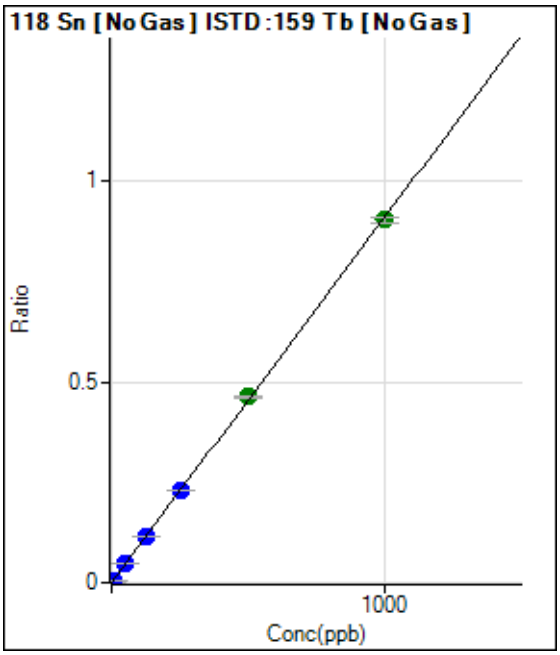


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	955.94	0.0003	P	2.6
2	☐	1.000	1.160	2062.45	0.0005	P	8.2
3	☐	50.000	54.600	52809.55	0.0139	P	1.8
4	☐	125.000	134.835	129455.98	0.0340	P	0.4
5	☐	250.000	266.941	254270.35	0.0670	P	1.4
6	☐	500.000	512.458	494926.21	0.1283	P	0.2
7	☐	1000.000	988.076	988031.65	0.2472	P	1.0
8	☐			1225.52	0.0003	P	10.0

y = 2.4995E-004 * x + 2.5591E-004
R = 0.9997
DL = 0.0791
BEC = 1.024

Weight: <None>
Min Conc: 0

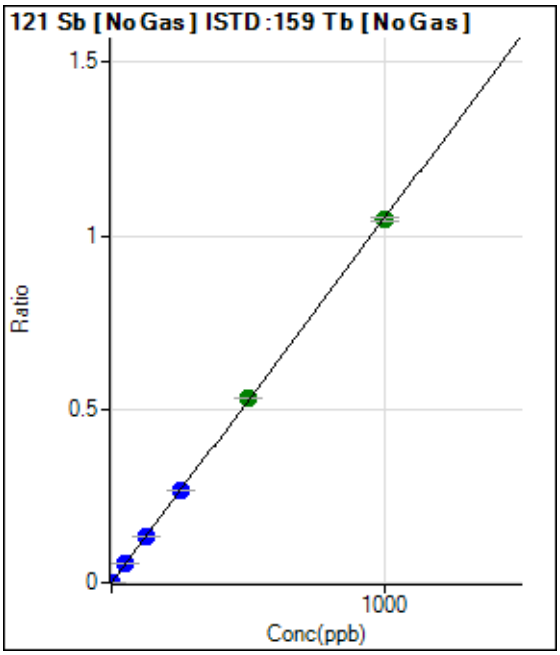
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	785.60	0.0002	P	10.2
2	☐	5.000	5.009	17976.29	0.0048	P	1.9
3	☐	50.000	51.744	179349.84	0.0472	P	1.6
4	☐	125.000	128.255	444972.87	0.1167	P	0.6
5	☐	250.000	252.936	873175.46	0.2300	P	0.6
6	☐	500.000	510.075	1787720.87	0.4636	A	0.8
7	☐	1000.000	993.734	3608686.78	0.9030	A	1.4
8	☐			2052.32	0.0005	P	7.9

y = 9.0847E-004 * x + 2.1041E-004
R = 0.9999
DL = 0.07101
BEC = 0.2316

Weight: <None>
Min Conc: 0

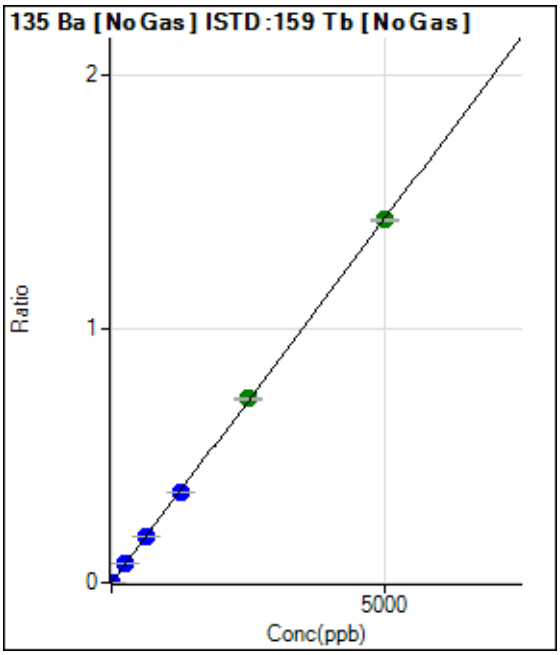


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0000	P	52.4
2	☐	2.000	2.071	8233.53	0.0022	P	1.7
3	☐	50.000	51.126	204075.24	0.0537	P	1.0
4	☐	125.000	126.860	508165.75	0.1333	P	0.7
5	☐	250.000	254.219	1014128.41	0.2671	P	1.1
6	☐	500.000	506.433	2052063.28	0.5321	A	0.8
7	☐	1000.000	995.439	4180128.69	1.0460	A	1.0
8	☐			3139.32	0.0008	P	5.8

y = 0.0011 * x + 4.4463E-006
R = 1.0000
DL = 0.00665
BEC = 0.004232

Weight: <None>
Min Conc: 0

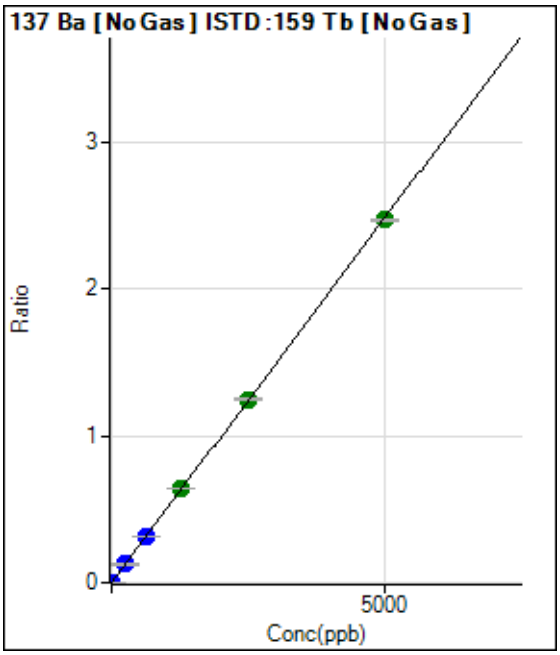
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	15.56	0.0000	P	11.5
2	☐	10.000	9.625	10440.58	0.0028	P	1.0
3	☐	250.000	253.598	276286.02	0.0727	P	1.3
4	☐	625.000	625.739	684145.76	0.1795	P	0.9
5	☐	1250.000	1241.190	1351479.88	0.3560	P	0.7
6	☐	2500.000	2527.226	2795035.62	0.7248	A	0.7
7	☐	5000.000	4988.318	5717707.35	1.4307	A	0.7
8	☐			2222.52	0.0006	P	9.1

y = 2.8681E-004 * x + 4.1610E-006
R = 1.0000
DL = 0.005006
BEC = 0.01451

Weight: <None>
Min Conc: 0

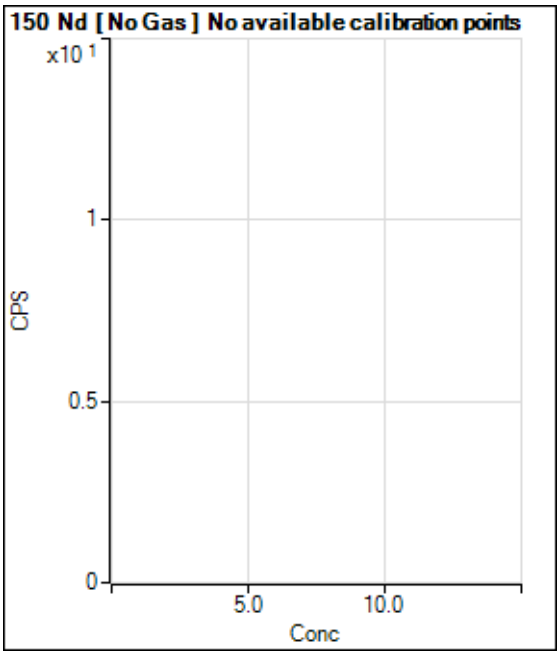


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	31.11	0.0000	P	16.2
2	☐	10.000	9.713	18245.12	0.0048	P	2.8
3	☐	250.000	251.741	474955.60	0.1250	P	1.2
4	☐	625.000	623.083	1179752.48	0.3095	P	0.6
5	☐	1250.000	1297.237	2446078.57	0.6443	A	0.7
6	☐	2500.000	2518.043	4822620.83	1.2506	A	1.1
7	☐	5000.000	4979.323	9883538.32	2.4731	A	0.9
8	☐			3721.73	0.0010	P	7.7

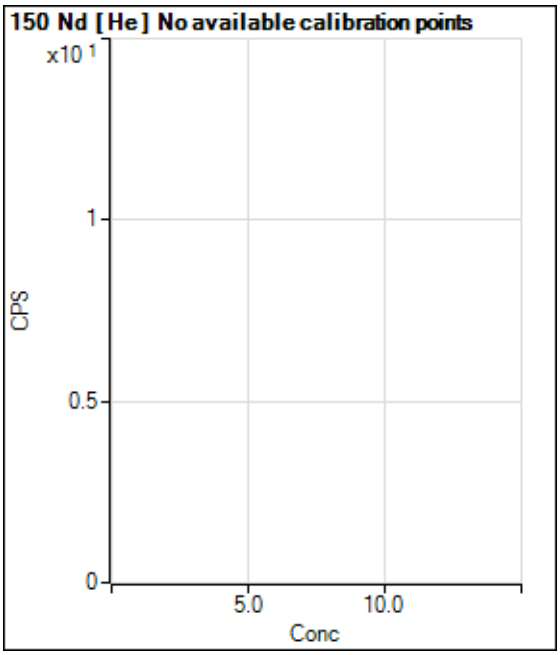
y = 4.9667E-004 * x + 8.3272E-006
R = 0.9999
DL = 0.008125
BEC = 0.01677

Weight: <None>
Min Conc: 0

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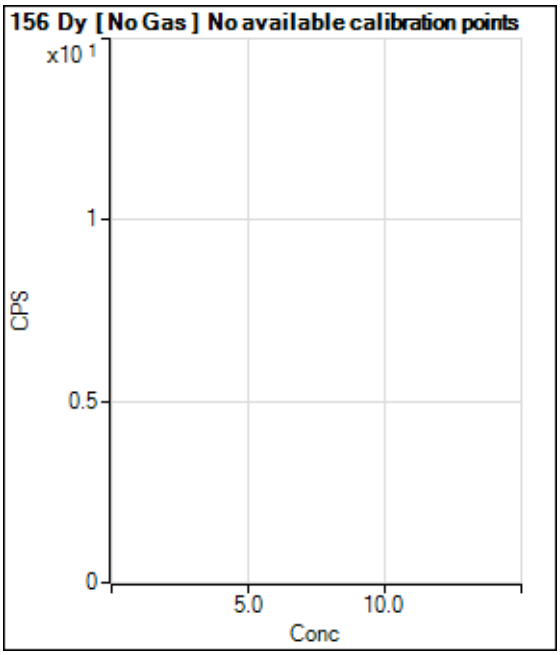


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			2.22		P	86.6
2	☐			2.22		P	86.6
3	☐			26.67		P	54.5
4	☐			43.33		P	20.3
5	☐			113.33		P	15.6
6	☐			198.89		P	5.1
7	☐			428.90		P	10.1
8	☐			81.11		P	18.5

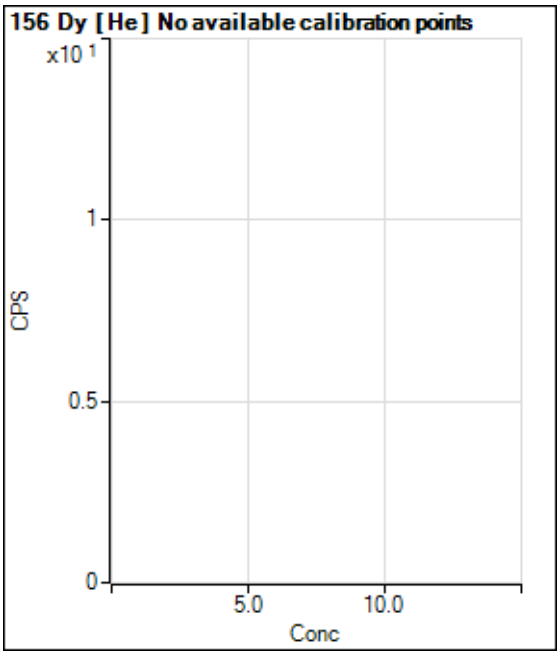


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			0.00		P	
2	☐			1.11		P	173.
3	☐			7.78		P	89.2
4	☐			12.22		P	68.7
5	☐			22.22		P	31.2
6	☐			36.67		P	18.2
7	☐			87.78		P	11.6
8	☐			45.56		P	18.4

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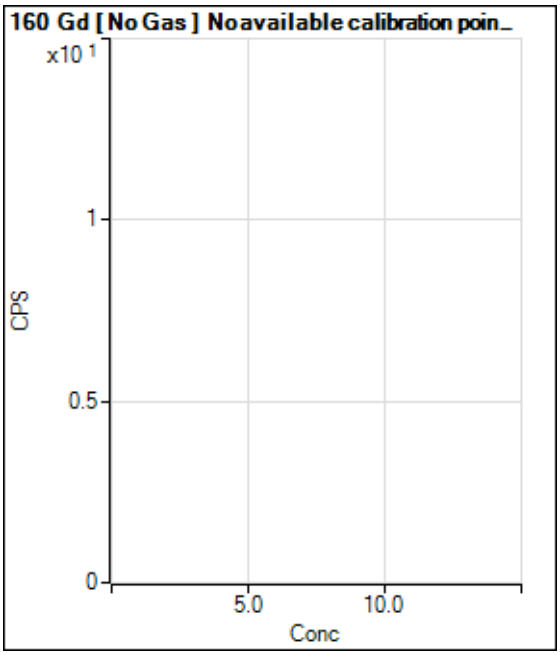


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			17.78		P	65.8
2	☐			11.11		P	96.4
3	☐			16.67		P	52.9
4	☐			27.78		P	84.3
5	☐			34.44		P	29.6
6	☐			54.45		P	12.7
7	☐			106.67		P	10.8
8	☐			173.34		P	6.9

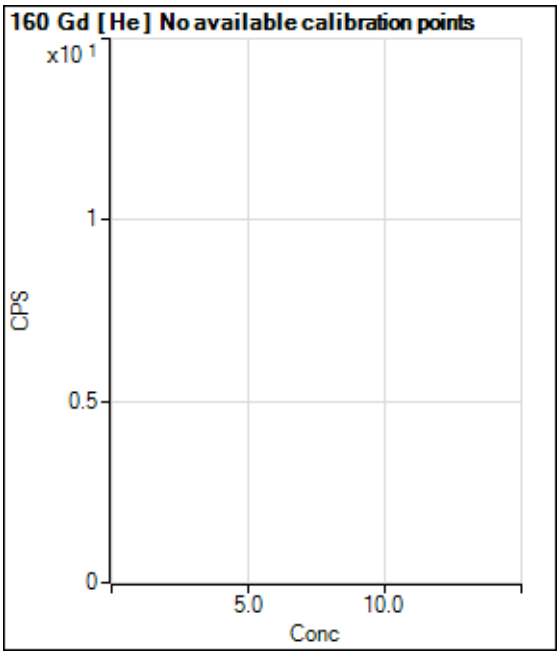


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			4.44		P	114.
2	☐			2.22		P	86.6
3	☐			21.11		P	36.5
4	☐			34.44		P	43.6
5	☐			65.56		P	21.2
6	☐			114.45		P	40.9
7	☐			246.67		P	17.7
8	☐			130.00		P	4.4

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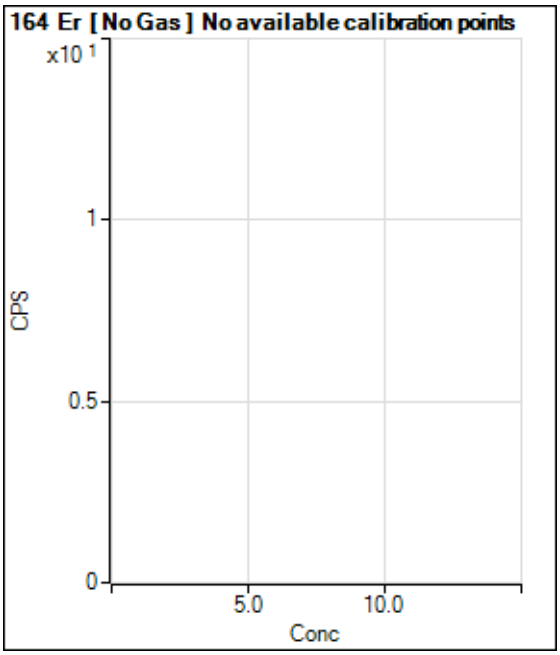


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			14.44		P	13.4
2	☐			13.33		P	86.6
3	☐			14.44		P	66.6
4	☐			20.00		P	44.1
5	☐			20.00		P	33.4
6	☐			23.33		P	14.3
7	☐			45.56		P	11.2
8	☐			141.11		P	7.2

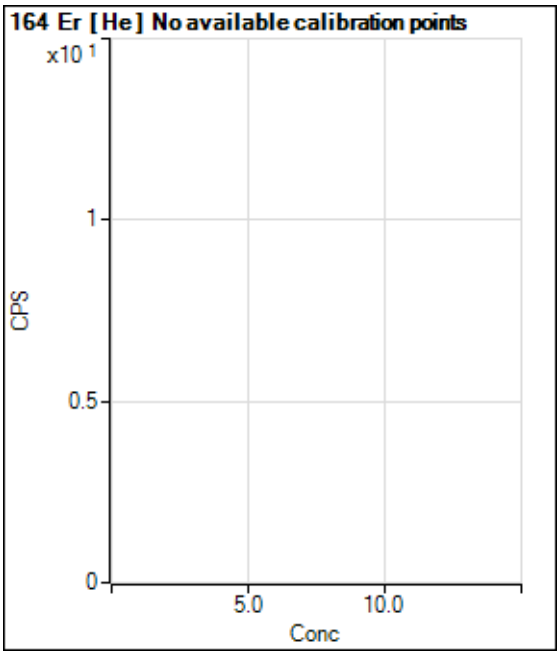


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			107.78		P	17.0
2	☐			116.67		P	12.5
3	☐			120.00		P	22.0
4	☐			101.11		P	8.3
5	☐			116.67		P	24.9
6	☐			118.89		P	10.6
7	☐			163.34		P	18.1
8	☐			195.56		P	14.3

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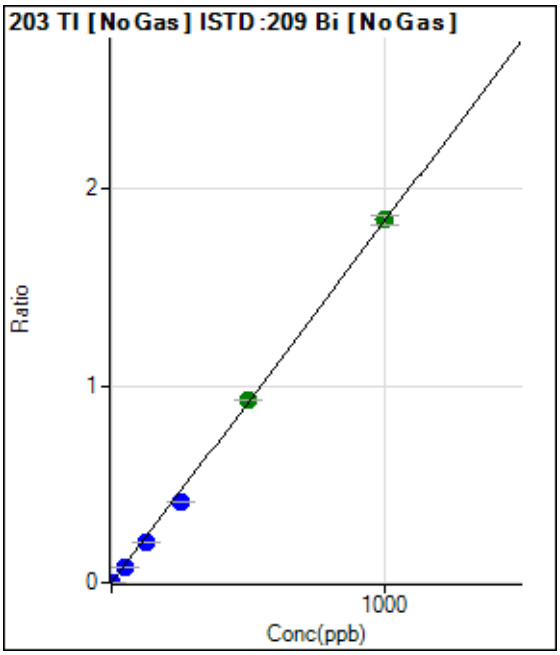


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			11.11		P	34.6
2	☐			8.89		P	21.6
3	☐			22.22		P	37.8
4	☐			30.00		P	22.2
5	☐			24.44		P	20.8
6	☐			30.00		P	48.4
7	☐			63.33		P	22.9
8	☐			157.78		P	24.8



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			5.55		P	124.
2	☐			11.11		P	17.3
3	☐			12.22		P	56.8
4	☐			14.44		P	35.3
5	☐			20.00		P	33.4
6	☐			17.78		P	60.3
7	☐			30.00		P	0.0
8	☐			148.89		P	12.3

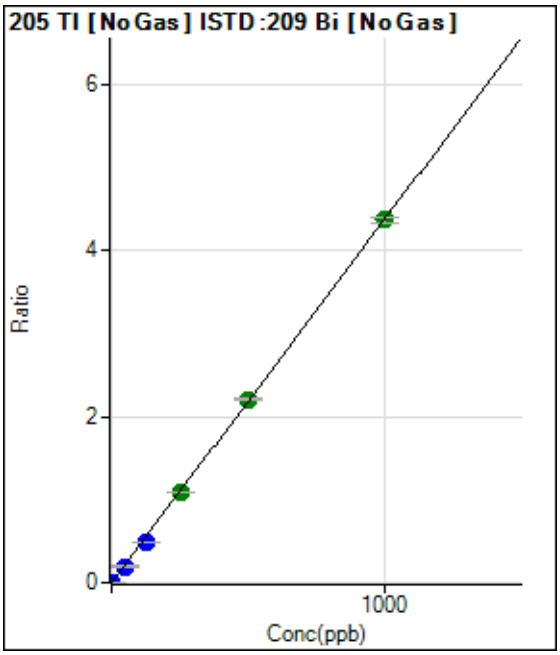
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7.78	0.0000	P	89.1
2	☐	1.000	0.886	3734.99	0.0016	P	2.3
3	☐	50.000	45.096	191353.16	0.0826	P	0.3
4	☐	125.000	112.792	481387.13	0.2066	P	0.8
5	☐	250.000	225.364	959546.26	0.4128	P	0.8
6	☐	500.000	506.146	2140505.47	0.9272	A	0.9
7	☐	1000.000	1004.857	4389842.30	1.8407	A	2.3
8	☐			464.46	0.0002	P	12.7

y = 0.0018 * x + 3.3781E-006
R = 0.9996
DL = 0.004928
BEC = 0.001844

Weight: <None>
Min Conc: 0

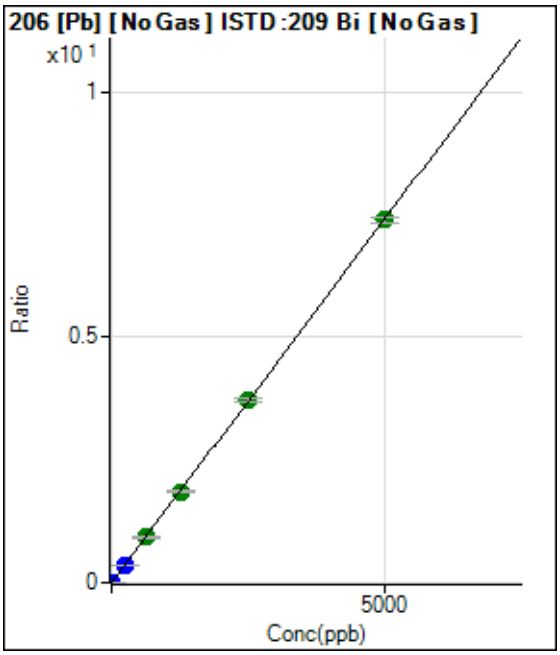


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	31.11	0.0000	P	31.1
2	☐	1.000	0.882	8884.09	0.0039	P	3.8
3	☐	50.000	44.904	454664.07	0.1963	P	0.6
4	☐	125.000	112.543	1146106.99	0.4919	P	0.8
5	☐	250.000	249.251	2532338.26	1.0895	A	1.0
6	☐	500.000	505.387	5099741.42	2.2090	A	1.5
7	☐	1000.000	999.306	10417435.68	4.3679	A	1.9
8	☐			1143.44	0.0006	P	18.6

y = 0.0044 * x + 1.3510E-005
R = 0.9999
DL = 0.002883
BEC = 0.003091

Weight: <None>
Min Conc: 0

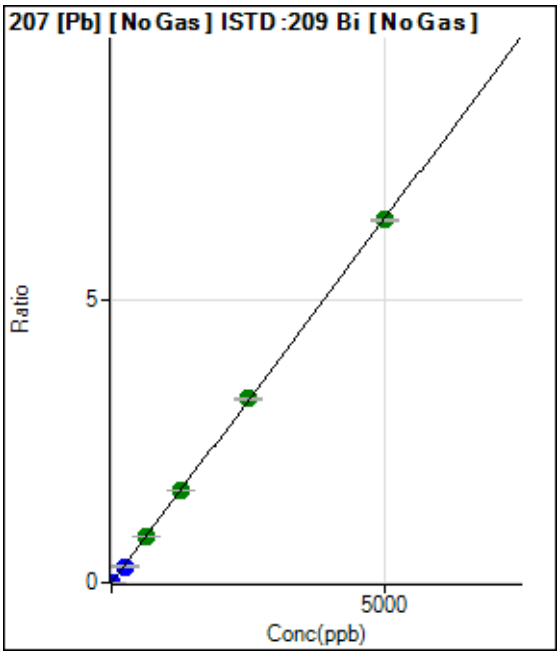
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	92.22	0.0000	P	4.6
2	☐	1.000	0.890	3118.17	0.0014	P	2.1
3	☐	250.000	227.247	779160.68	0.3364	P	0.3
4	☐	625.000	622.874	2147936.10	0.9219	A	0.3
5	☐	1250.000	1251.830	4306510.94	1.8528	A	1.2
6	☐	2500.000	2516.097	8596777.30	3.7239	A	2.0
7	☐	5000.000	4992.897	17624968.21	7.3897	A	1.6
8	☐			3178.23	0.0015	P	11.9

y = 0.0015 * x + 4.0032E-005
R = 1.0000
DL = 0.003764
BEC = 0.02705

Weight: <None>
Min Conc: 0

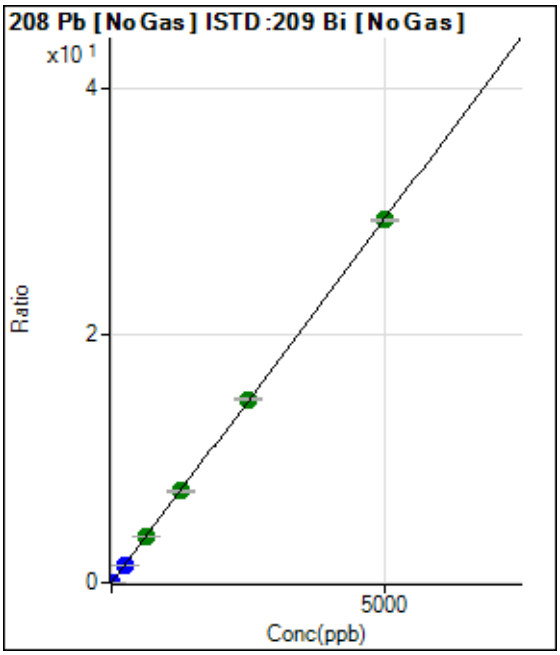


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	94.45	0.0000	P	22.6
2	☐	1.000	0.906	2779.20	0.0012	P	4.4
3	☐	250.000	224.377	671291.26	0.2898	P	0.9
4	☐	625.000	627.170	1887153.60	0.8100	A	2.0
5	☐	1250.000	1269.041	3809552.79	1.6390	A	0.9
6	☐	2500.000	2525.522	7529696.76	3.2616	A	1.4
7	☐	5000.000	4983.488	15351119.63	6.4360	A	0.8
8	☐			2827.01	0.0014	P	5.5

y = 0.0013 * x + 4.1007E-005
R = 1.0000
DL = 0.02155
BEC = 0.03175

Weight: <None>
Min Conc: 0

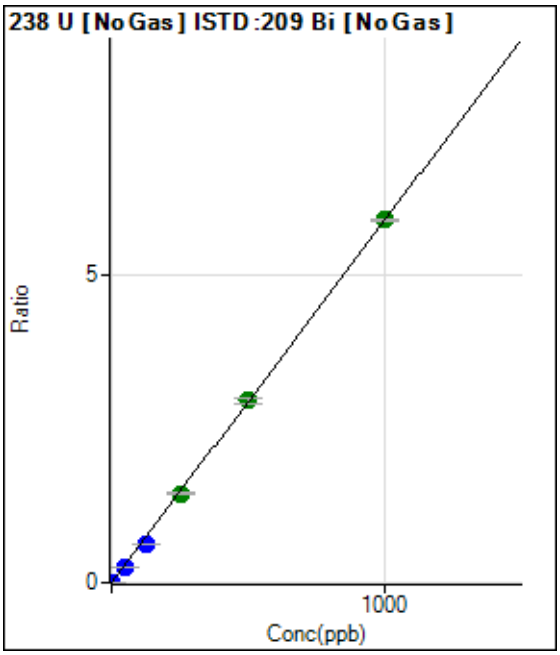
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	395.56	0.0002	P	10.2
2	☐	1.000	0.907	12655.77	0.0055	P	0.5
3	☐	250.000	226.879	3092851.26	1.3352	P	0.7
4	☐	625.000	627.775	8607225.22	3.6943	A	0.8
5	☐	1250.000	1258.357	17211962.83	7.4050	A	0.9
6	☐	2500.000	2519.250	34224577.82	14.8248	A	1.2
7	☐	5000.000	4989.095	70027415.35	29.3587	A	0.7
8	☐			12580.39	0.0061	P	8.2

y = 0.0059 * x + 1.7169E-004
R = 1.0000
DL = 0.008931
BEC = 0.02918

Weight: <None>
Min Conc: 0

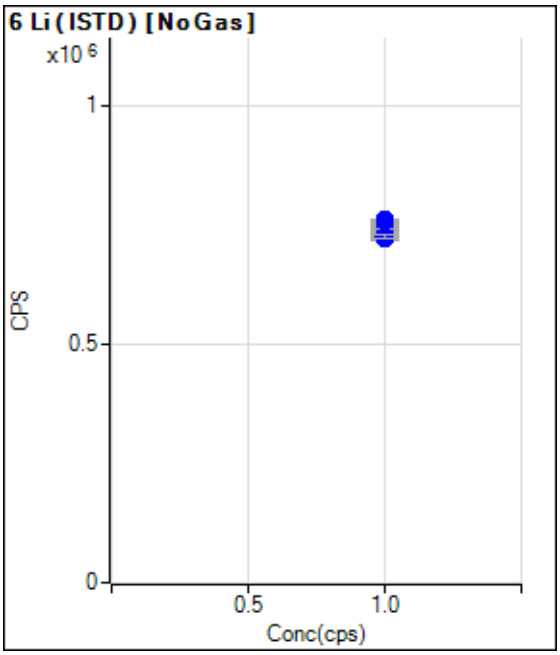


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5.56	0.0000	P	34.9
2	☐	1.000	0.831	11250.40	0.0049	P	1.9
3	☐	50.000	42.759	583659.93	0.2520	P	0.5
4	☐	125.000	107.873	1481071.24	0.6357	P	0.4
5	☐	250.000	246.482	3376055.02	1.4525	A	1.3
6	☐	500.000	502.857	6841336.22	2.9633	A	2.6
7	☐	1000.000	1001.954	14082997.15	5.9044	A	0.8
8	☐			727.83	0.0004	P	19.9

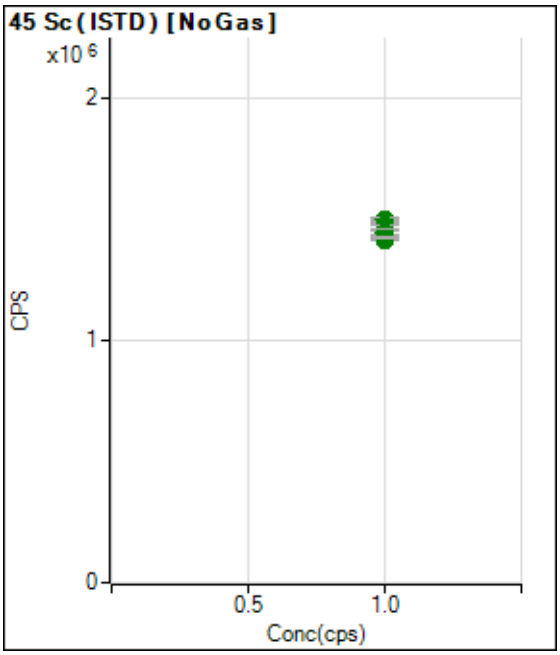
y = 0.0059 * x + 2.4131E-006
R = 0.9999
DL = 0.0004285
BEC = 0.0004095

Weight: <None>
Min Conc: 0

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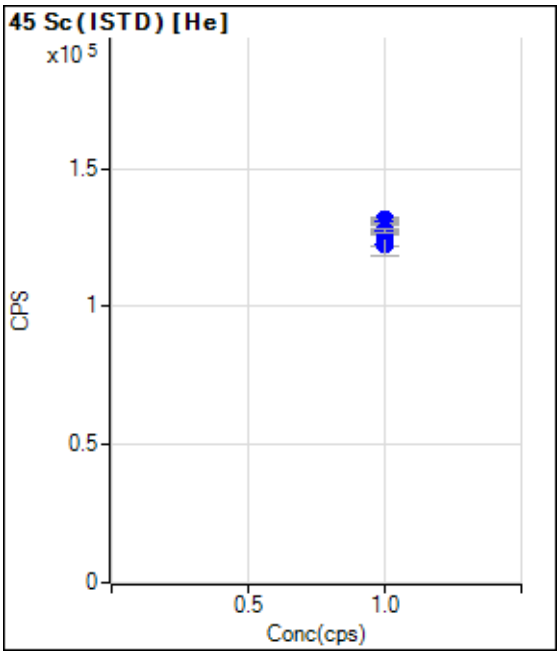


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		750434.34		P	0.5
2	☐	1.000		759616.26		P	0.3
3	☐	1.000		758146.58		P	0.1
4	☐	1.000		748500.47		P	0.6
5	☐	1.000		733110.07		P	0.6
6	☐	1.000		720868.52		P	1.2
7	☐	1.000		740469.87		P	0.4
8	☐	1.000		725341.85		P	1.2

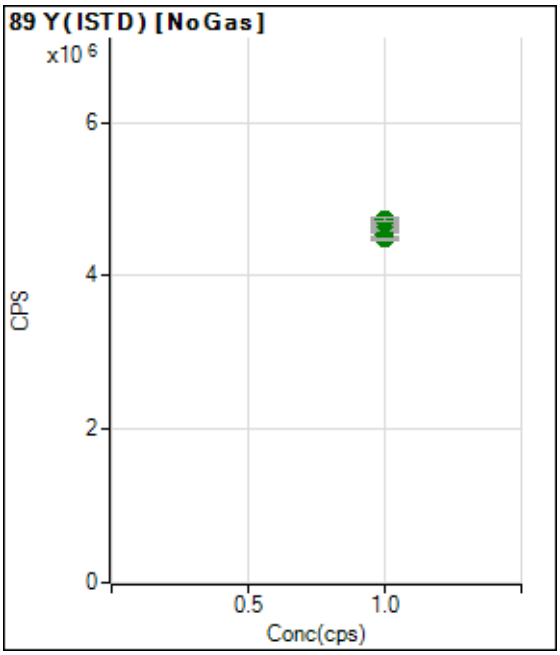


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1470388.34		A	0.1
2	☐	1.000		1493975.88		A	0.6
3	☐	1.000		1494643.03		A	1.5
4	☐	1.000		1471522.93		A	0.1
5	☐	1.000		1444663.19		A	1.0
6	☐	1.000		1411954.63		A	0.2
7	☐	1.000		1442525.41		A	2.3
8	☐	1.000		1421819.65		A	0.3

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
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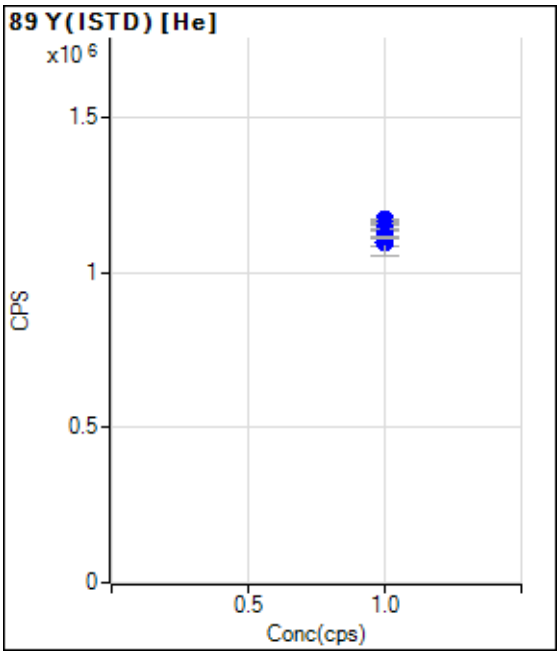


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1	☐	1.000		125813.12		P	5.6
2	☐	1.000		131447.29		P	1.0
3	☐	1.000		131035.73		P	1.1
4	☐	1.000		129633.07		P	0.5
5	☐	1.000		126672.69		P	0.9
6	☐	1.000		126376.63		P	0.3
7	☐	1.000		122356.25		P	6.7
8	☐	1.000		127653.13		P	1.3

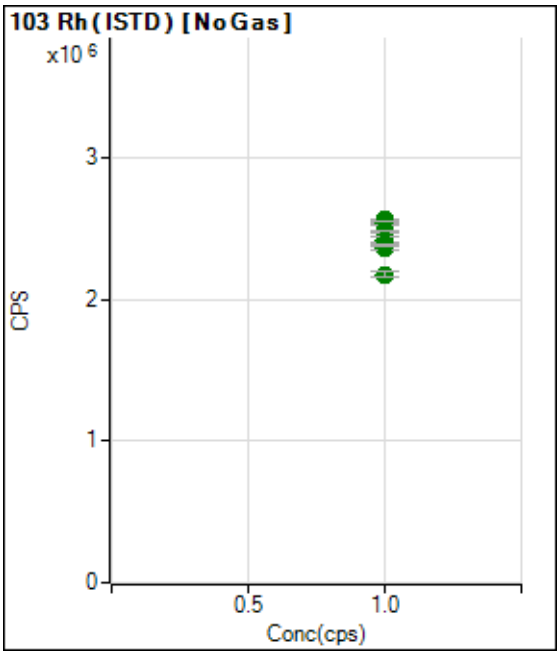


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4671245.63		A	0.4
2	☐	1.000		4718380.17		A	0.3
3	☐	1.000		4668338.47		A	0.9
4	☐	1.000		4669860.04		A	0.7
5	☐	1.000		4585643.85		A	0.7
6	☐	1.000		4546535.38		A	1.3
7	☐	1.000		4729585.03		A	0.9
8	☐	1.000		4479474.38		A	0.2

Reviewed By:Mohan
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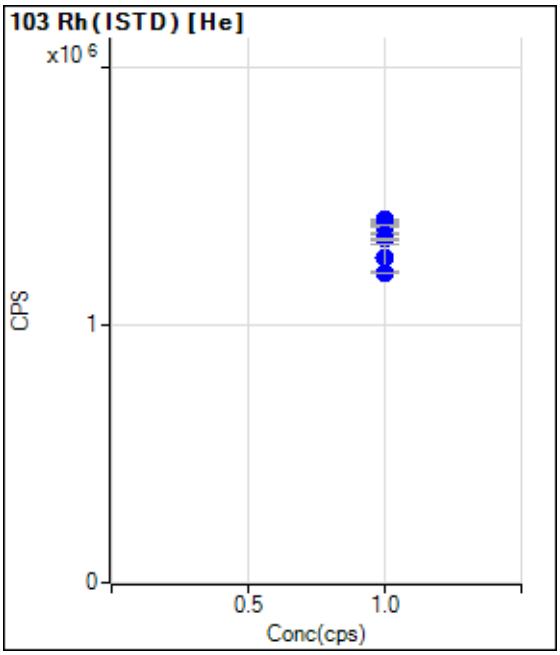


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1119533.27		P	6.0
2	☐	1.000		1163861.48		P	0.3
3	☐	1.000		1170809.35		P	0.1
4	☐	1.000		1157254.86		P	0.9
5	☐	1.000		1136381.89		P	0.6
6	☐	1.000		1142229.29		P	0.5
7	☐	1.000		1096509.66		P	7.8
8	☐	1.000		1115039.65		P	0.4

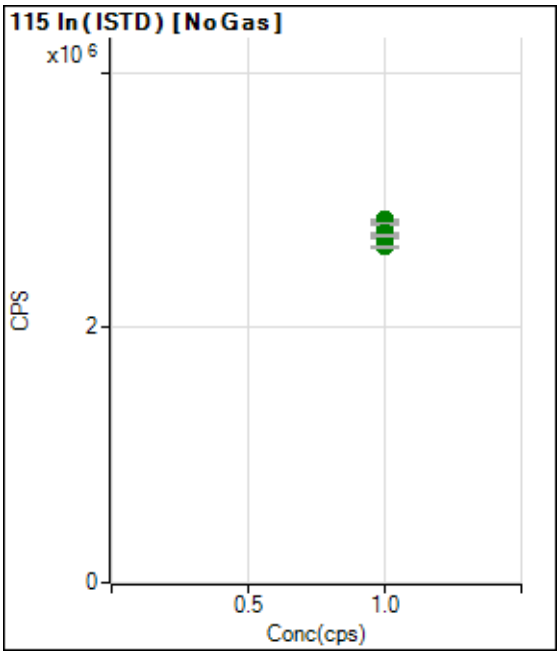


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1	☐	1.000		2527877.70		A	0.6
2	☐	1.000		2559113.66		A	0.5
3	☐	1.000		2535451.32		A	1.0
4	☐	1.000		2478506.09		A	0.3
5	☐	1.000		2416934.84		A	1.6
6	☐	1.000		2360428.24		A	0.7
7	☐	1.000		2381616.75		A	0.7
8	☐	1.000		2176818.77		A	1.4

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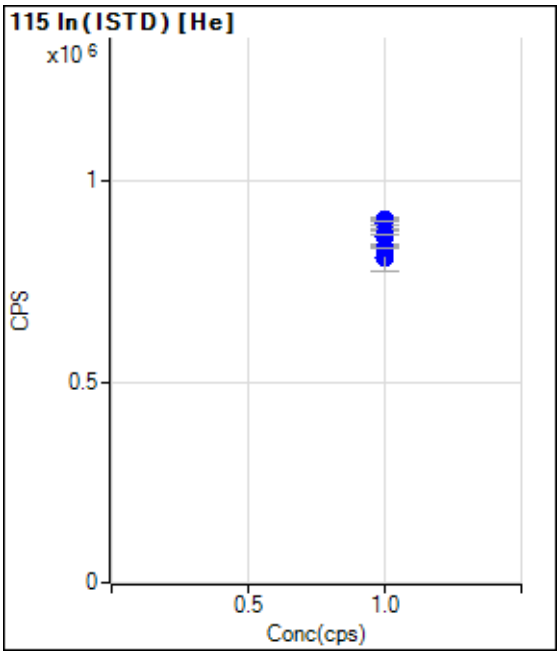


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1349949.43		P	5.6
2	☐	1.000		1409222.26		P	0.3
3	☐	1.000		1400947.69		P	0.5
4	☐	1.000		1386413.33		P	0.7
5	☐	1.000		1354501.35		P	0.5
6	☐	1.000		1334894.37		P	0.4
7	☐	1.000		1262800.10		P	7.9
8	☐	1.000		1201791.76		P	0.3

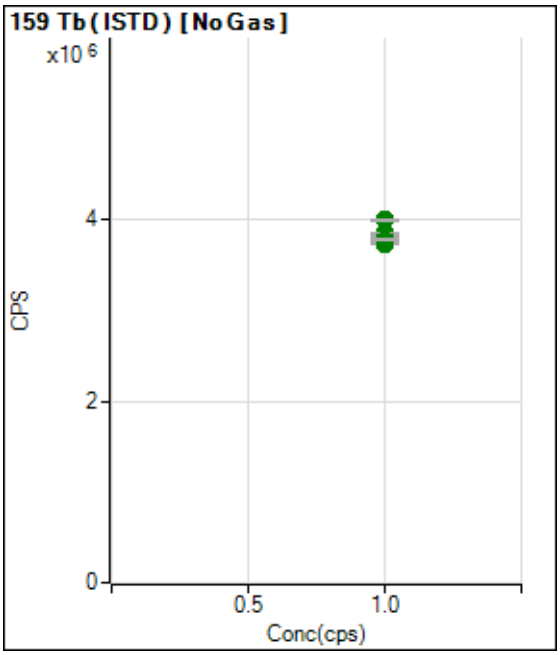


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2830407.65		A	0.8
2	☐	1.000		2845071.79		A	0.7
3	☐	1.000		2844637.28		A	0.5
4	☐	1.000		2817794.56		A	0.6
5	☐	1.000		2750969.74		A	0.1
6	☐	1.000		2704820.96		A	0.8
7	☐	1.000		2720284.72		A	0.6
8	☐	1.000		2633927.46		A	0.8

Reviewed By:Mohan
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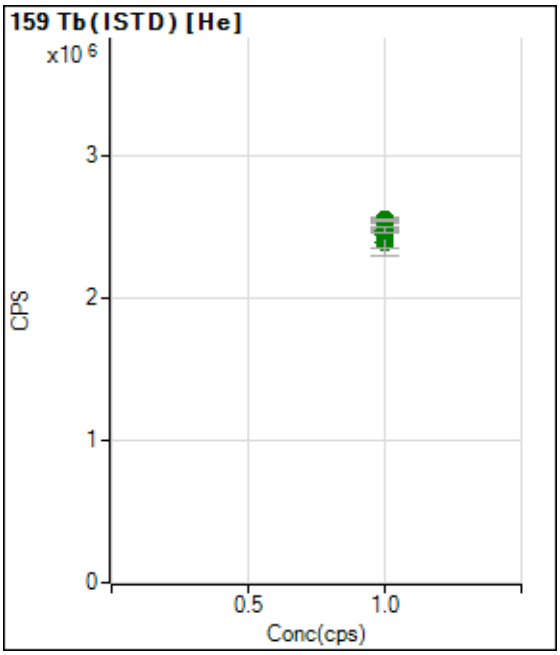


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1	☐	1.000		864491.72		P	6.1
2	☐	1.000		904132.05		P	0.9
3	☐	1.000		904085.62		P	0.6
4	☐	1.000		896438.73		P	0.8
5	☐	1.000		877633.11		P	0.7
6	☐	1.000		867276.03		P	0.3
7	☐	1.000		810212.15		P	7.9
8	☐	1.000		834723.94		P	0.2

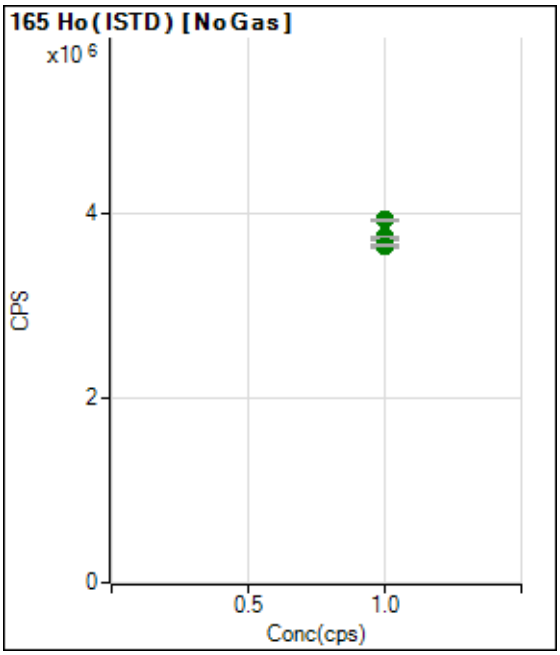


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3735959.53		A	1.0
2	☐	1.000		3776298.73		A	1.3
3	☐	1.000		3798643.31		A	0.8
4	☐	1.000		3812281.75		A	1.0
5	☐	1.000		3796628.00		A	0.9
6	☐	1.000		3856188.62		A	0.3
7	☐	1.000		3996565.50		A	0.5
8	☐	1.000		3779684.80		A	0.7

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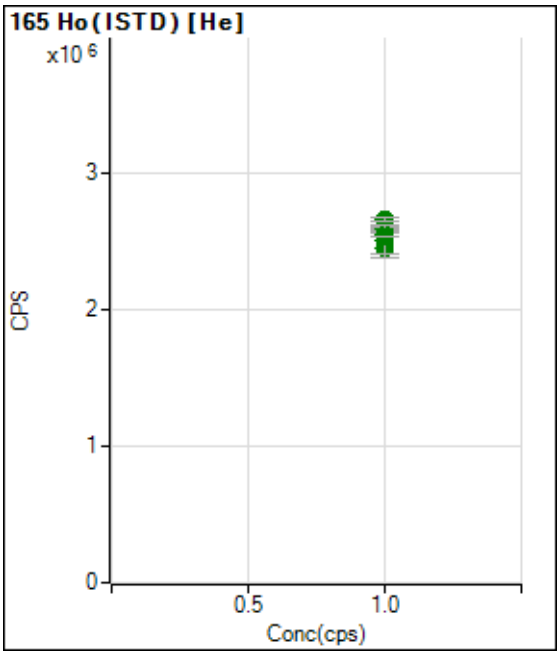


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2389415.50		A	7.1
2	☐	1.000		2497662.24		A	0.8
3	☐	1.000		2538620.59		A	1.0
4	☐	1.000		2536209.36		A	2.1
5	☐	1.000		2553517.57		A	1.9
6	☐	1.000		2548986.06		A	0.7
7	☐	1.000		2451125.87		A	7.8
8	☐	1.000		2483402.15		A	1.9

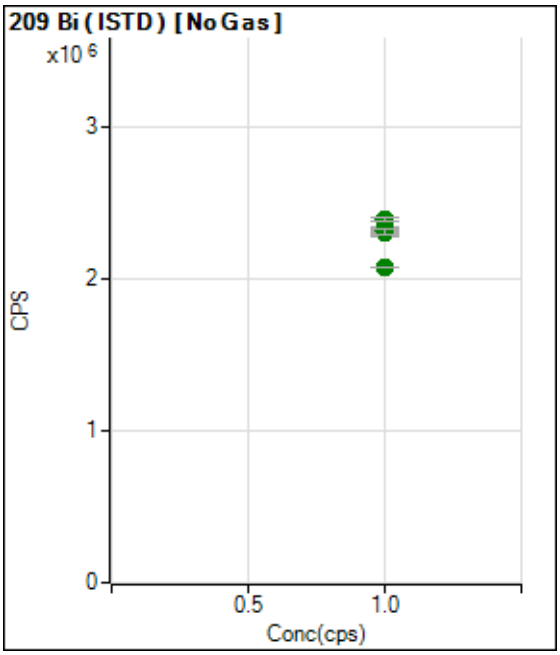


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3646090.95		A	0.4
2	☐	1.000		3668744.18		A	0.7
3	☐	1.000		3732262.10		A	0.9
4	☐	1.000		3722323.90		A	0.7
5	☐	1.000		3730679.91		A	0.4
6	☐	1.000		3751553.83		A	0.8
7	☐	1.000		3938206.05		A	0.7
8	☐	1.000		3660413.66		A	0.6

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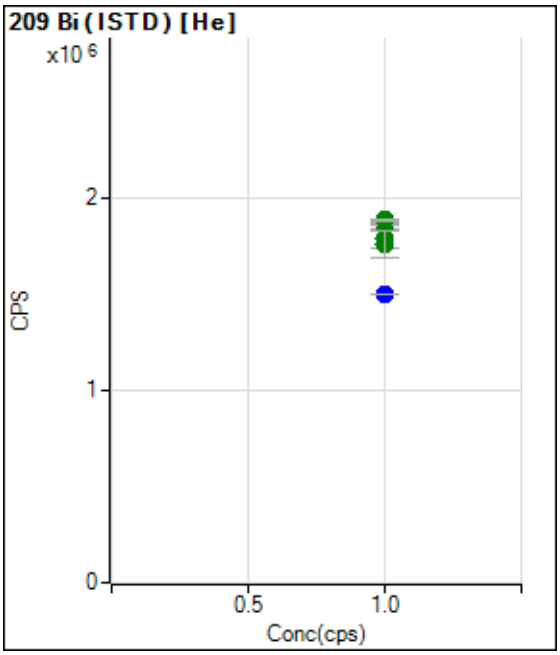


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2452224.79		A	6.3
2	☐	1.000		2544757.97		A	1.0
3	☐	1.000		2588456.74		A	1.3
4	☐	1.000		2577959.33		A	0.4
5	☐	1.000		2584057.01		A	1.3
6	☐	1.000		2654504.42		A	1.2
7	☐	1.000		2510092.95		A	8.6
8	☐	1.000		2535541.09		A	0.3



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2304045.42		A	0.5
2	☐	1.000		2296457.66		A	1.4
3	☐	1.000		2316398.44		A	0.8
4	☐	1.000		2329899.39		A	0.9
5	☐	1.000		2324430.43		A	0.5
6	☐	1.000		2308863.06		A	1.4
7	☐	1.000		2385328.85		A	1.2
8	☐	1.000		2071315.94		A	0.2

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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1788054.33		A	5.4
2	☐	1.000		1867123.53		A	1.1
3	☐	1.000		1882542.49		A	1.0
4	☐	1.000		1878939.30		A	1.2
5	☐	1.000		1860586.47		A	0.3
6	☐	1.000		1886867.59		A	0.4
7	☐	1.000		1761859.59		A	8.3
8	☐	1.000		1498149.94		P	0.4

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

US EPA Tune Check Report

Operator Name	Jaswal
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\P7101724-MS1.b
Acq. Date-Time	2024-10-17 10:45:07
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		1772	17718.54			0.908	5.000
24		59020	590197.22			1.003	5.000
25		7392	73924.68			1.101	5.000
26		8280	82798.10			1.128	5.000
59		14276	142758.39			1.040	5.000
113		1304	13035.42			1.299	5.000
115		28654	286538.59			1.231	5.000
206		6371	63705.28			1.273	5.000
207		5414	54139.68			0.893	5.000
208		13096	130963.62			0.917	5.000
220		0	1.80			50.461	

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

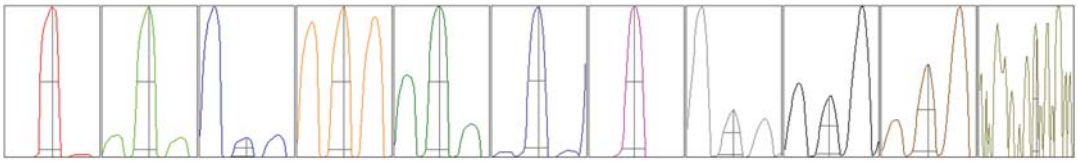
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	1789	1769	1783	1747	1771
24	59289	58934	59183	58061	59632
25	7423	7375	7429	7261	7474
26	8318	8271	8276	8139	8396
59	14356	14328	14318	14012	14364
113	1327	1304	1309	1281	1296
115	28866	28954	28854	28113	28483
206	6343	6384	6376	6263	6488
207	5449	5395	5443	5337	5446
208	13191	13042	13134	12914	13202

US EPA Tune Check Report

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	3184.06	9.05	8.90 - 9.10	
24	106241.54	24.00	23.90 - 24.10	
25	13556.51	25.00	24.90 - 25.10	
26	15093.15	26.00	25.90 - 26.10	
59	24810.23	58.95	58.90 - 59.10	
113	2491.86	113.00	112.90 - 113.10	
115	55871.52	114.95	114.90 - 115.10	
206	12551.02	206.00	205.90 - 206.10	
207	10152.45	206.95	206.90 - 207.10	
208	25199.00	208.00	207.90 - 208.10	
220	0.35	220.35	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.58	0.689	0.900	
24	0.58	0.736	0.900	
25	0.58	0.726	0.900	
26	0.59	0.735	0.900	
59	0.60	0.738	0.900	
113	0.54	0.738	0.900	
115	0.52	0.753	0.900	
206	0.53	0.773	0.900	
207	0.54	0.778	0.900	
208	0.54	0.746	0.900	
220	0.15	0.195		

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

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	7.8 V	Deflect	16.4 V
Extract 2	-110.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-60 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	150 V		

QP Parameters

Mass Gain	135	Axis Gain	0.9976	QP Bias	-3.0 V
Mass Offset	131	Axis Offset	0.11		

Hardware Settings

Torch

Torch H	-0.5 mm	Torch V	0.6 mm

EM

Discriminator	4.8 mV	Analog HV	2399 V	Pulse HV	1788 V

[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		4786	47858.55			0.571	
89		46649	466488.42			0.859	
205		16475	164746.39			1.255	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	4834	4766	4775	4778	4775
89	47313	46393	46292	46567	46679
205	16806	16451	16265	16349	16502

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	8.0 V	Deflect	3.2 V

US EPA Tune Check Report

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

Extract 2	-95.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-60 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	135	Axis Gain	0.9976	QP Bias	-13.0 V
Mass Offset	131	Axis Offset	0.11		

Hardware Settings

Torch

Torch H	-0.5 mm	Torch V	0.6 mm		

EM

Discriminator	4.8 mV	Analog HV	2399 V	Pulse HV	1788 V

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:19:52	DataFile Name :	004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.12	0.09	0.03	0.00	N/A	ppb
Antimony	121-1	0.00	0.00	0.00	0.00	N/A	ppb
Arsenic	75-2	0.01	0.01	-0.01	0.00	N/A	ppb
Barium	135-1	0.00	0.00	0.00	0.00	N/A	ppb
Barium	137-1	0.00	0.00	0.00	0.00	N/A	ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	N/A	ppb
Bismuth	209-1				100		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.06	0.08	-0.02	0.00	N/A	ppb
Cadmium	106-1	0.29	0.09	-0.38	0.00	N/A	ppb
Cadmium	111-1	0.02	0.00	-0.03	0.00	N/A	ppb
Calcium	43-1	-1.37	-2.67	4.05	0.00	N/A	ppb
Calcium	44-1	0.86	-0.88	0.02	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	-0.01	0.02	0.00	N/A	ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	N/A	ppb
Copper	63-2	0.00	-0.01	0.01	0.00	N/A	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				100		%
Indium	115-1				100		%
Indium	115-2				100		%
Iron	56-2	0.04	-0.01	-0.03	0.00	N/A	ppb
Iron	57-2	0.42	0.03	-0.45	0.00	N/A	ppb
Iron	54-2	1.19	-1.48	0.30	0.00	N/A	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:19:52	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	-0.01	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	0.43	-0.48	0.05	0.00	N/A	ppb
Manganese	55-2	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	94-1	-0.01	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	0.01	0.00	-0.01	0.00	N/A	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	N/A	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.01	0.00	0.01	0.00	N/A	ppb
Phosphorus	31-2	-14.74	-14.53	-14.42	-14.56		ppb
Potassium	39-2	14.09	-3.10	-10.99	0.00	N/A	ppb
Rhodium	103-1				100		%
Rhodium	103-2				100		%
Scandium	45-1				100		%
Scandium	45-2				100		%
Selenium	82-1	-0.45	0.19	0.26	0.00	N/A	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	1.52	-0.55	-0.98	0.00	N/A	ppb
Silicon	28-1	0.19	0.30	-0.49	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	1.38	-0.18	-1.20	0.00	N/A	ppb
Strontium	86-1	0.00	-0.01	0.01	0.00	N/A	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	N/A	ppb
Sulfur	34-1	78.28	144.91	45.09	89.43	56.84	ppb
Terbium	159-1				100		%
Terbium	159-2				100		%
Thallium	203-1	0.00	0.00	0.00	0.00	N/A	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	N/A	ppb
Tin	118-1	0.03	-0.02	-0.01	0.00	N/A	ppb
Titanium	47-1	0.01	0.01	-0.02	0.00	N/A	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:19:52	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	0.12	-0.08	-0.04	0.00	N/A	ppb
Zirconium	90-1	0.01	0.00	0.00	0.00	N/A	ppb
Zirconium	91-1	0.00	0.00	0.01	0.00	N/A	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:23:14	DataFile Name :	005CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20.98	19.73	21.10	20.60	3.68	ppb
Antimony	121-1	2.11	2.06	2.04	2.07	1.70	ppb
Arsenic	75-2	1.01	0.90	1.34	1.08	20.90	ppb
Barium	135-1	9.52	9.70	9.66	9.63	0.98	ppb
Barium	137-1	9.47	9.66	10.01	9.71	2.83	ppb
Beryllium	9-1	1.05	1.16	1.13	1.11	5.21	ppb
Bismuth	209-1				100		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	1.39	1.23	1.60	1.41	13.10	ppb
Cadmium	106-1	1.37	2.14	0.07	1.20	87.43	ppb
Cadmium	111-1	1.20	1.31	0.96	1.16	15.46	ppb
Calcium	43-1	539.77	548.38	538.85	542.33	0.97	ppb
Calcium	44-1	534.85	552.11	553.47	546.81	1.90	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.97	2.07	2.05	2.03	2.63	ppb
Cobalt	59-2	1.03	1.02	1.09	1.04	3.65	ppb
Copper	63-2	1.92	2.00	1.91	1.94	2.28	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				104		%
Indium	115-1				101		%
Indium	115-2				105		%
Iron	56-2	57.13	56.20	57.28	56.87	1.03	ppb
Iron	57-2	57.00	56.99	55.96	56.65	1.06	ppb
Iron	54-2	59.85	57.87	59.80	59.17	1.90	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:23:14	DataFile Name :	005CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.91	0.88	0.88	0.89	2.15	ppb
Lead	207-1	0.89	0.88	0.95	0.91	4.54	ppb
Lead	208-1	0.91	0.90	0.91	0.91	0.51	ppb
Lithium	6-1				101		%
Magnesium	24-2	535.18	528.23	544.68	536.03	1.54	ppb
Manganese	55-2	0.99	1.02	0.93	0.98	4.74	ppb
Molybdenum	94-1	5.97	5.94	6.16	6.02	1.97	ppb
Molybdenum	95-1	5.17	4.92	4.94	5.01	2.74	ppb
Molybdenum	96-1	4.98	5.34	5.11	5.14	3.54	ppb
Molybdenum	97-1	4.99	5.12	5.22	5.11	2.25	ppb
Molybdenum	98-1	5.13	5.06	5.11	5.10	0.74	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.03	0.97	1.05	1.02	4.16	ppb
Phosphorus	31-2	13.25	13.59	16.84	14.56	13.61	ppb
Potassium	39-2	537.43	527.79	551.83	539.01	2.24	ppb
Rhodium	103-1				101		%
Rhodium	103-2				104		%
Scandium	45-1				102		%
Scandium	45-2				104		%
Selenium	82-1	5.58	4.92	5.68	5.39	7.69	ppb
Selenium	77-2	6.05	9.63	6.66	7.45	25.76	ppb
Selenium	78-2	3.55	7.28	6.98	5.94	34.89	ppb
Silicon	28-1	2.74	3.47	4.15	3.46	20.40	ppb
Silver	107-1	0.99	1.00	1.01	1.00	0.79	ppb
Silver	109-1	1.07	1.07	1.04	1.06	1.45	ppb
Sodium	23-2	527.70	527.27	537.85	530.94	1.13	ppb
Strontium	86-1	1.02	1.03	1.11	1.05	4.49	ppb
Strontium	88-1	1.03	1.04	1.03	1.03	0.28	ppb
Sulfur	34-1	-217.41	10.77	-61.65	-89.43		ppb
Terbium	159-1				101		%
Terbium	159-2				105		%
Thallium	203-1	0.88	0.87	0.91	0.89	2.35	ppb
Thallium	205-1	0.85	0.89	0.91	0.88	3.84	ppb
Tin	118-1	5.09	4.90	5.04	5.01	2.01	ppb
Titanium	47-1	5.68	4.96	5.15	5.26	7.05	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:23:14	DataFile Name :	005CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.81	0.84	0.84	0.83	1.86	ppb
Vanadium	51-2	4.89	4.95	4.97	4.94	0.85	ppb
Yttrium	89-1				101		%
Yttrium	89-2				104		%
Zinc	66-2	4.85	5.32	5.39	5.19	5.70	ppb
Zirconium	90-1	0.98	0.99	0.97	0.98	1.05	ppb
Zirconium	91-1	0.93	1.10	1.11	1.04	9.77	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:26:38	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1075.28	1058.09	1059.94	1064.44	0.89	ppb
Antimony	121-1	50.67	51.67	51.04	51.13	0.99	ppb
Arsenic	75-2	48.48	48.68	48.67	48.61	0.23	ppb
Barium	135-1	249.90	254.53	256.36	253.60	1.31	ppb
Barium	137-1	248.27	253.24	253.72	251.74	1.20	ppb
Beryllium	9-1	51.68	52.95	53.61	52.75	1.86	ppb
Bismuth	209-1				101		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	51.51	53.61	53.68	52.93	2.33	ppb
Cadmium	106-1	52.72	54.26	52.18	53.05	2.04	ppb
Cadmium	111-1	53.47	55.11	55.22	54.60	1.79	ppb
Calcium	43-1	5830.49	5876.97	5976.71	5894.73	1.27	ppb
Calcium	44-1	5678.71	5706.97	5829.60	5738.43	1.40	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	51.39	51.17	50.69	51.08	0.71	ppb
Cobalt	59-2	51.62	50.59	50.83	51.01	1.05	ppb
Copper	63-2	524.39	512.58	511.87	516.28	1.36	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				106		%
Indium	115-1				101		%
Indium	115-2				105		%
Iron	56-2	2733.23	2686.06	2663.23	2694.17	1.33	ppb
Iron	57-2	2865.20	2841.84	2882.52	2863.18	0.71	ppb
Iron	54-2	2981.17	2895.67	2909.85	2928.90	1.56	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:26:38	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	227.78	227.53	226.42	227.25	0.32	ppb
Lead	207-1	226.53	224.21	222.38	224.38	0.93	ppb
Lead	208-1	228.46	226.80	225.38	226.88	0.68	ppb
Lithium	6-1				101		%
Magnesium	24-2	5155.43	5055.01	5048.61	5086.35	1.18	ppb
Manganese	55-2	514.97	501.56	505.72	507.42	1.35	ppb
Molybdenum	94-1	562.77	568.10	576.32	569.06	1.20	ppb
Molybdenum	95-1	560.05	567.41	574.01	567.16	1.23	ppb
Molybdenum	96-1	561.56	564.40	571.36	565.77	0.89	ppb
Molybdenum	97-1	568.03	573.47	579.68	573.73	1.02	ppb
Molybdenum	98-1	557.64	560.30	575.99	564.64	1.76	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	54.20	51.53	51.85	52.53	2.78	ppb
Phosphorus	31-2	971.05	971.04	954.52	965.54	0.99	ppb
Potassium	39-2	2816.76	2760.82	2765.59	2781.06	1.12	ppb
Rhodium	103-1				100		%
Rhodium	103-2				104		%
Scandium	45-1				102		%
Scandium	45-2				104		%
Selenium	82-1	52.56	53.63	54.67	53.62	1.97	ppb
Selenium	77-2	52.28	49.84	46.21	49.45	6.17	ppb
Selenium	78-2	48.64	50.93	52.87	50.81	4.17	ppb
Silicon	28-1	48.31	51.55	54.38	51.41	5.91	ppb
Silver	107-1	54.06	55.20	54.59	54.62	1.05	ppb
Silver	109-1	53.49	54.81	54.97	54.42	1.50	ppb
Sodium	23-2	5206.77	5128.58	5120.42	5151.92	0.93	ppb
Strontium	86-1	1283.71	1299.71	1329.56	1304.33	1.78	ppb
Strontium	88-1	1268.10	1283.09	1307.09	1286.09	1.53	ppb
Sulfur	34-1	601.63	549.39	798.12	649.71	20.19	ppb
Terbium	159-1				102		%
Terbium	159-2				106		%
Thallium	203-1	45.19	45.18	44.92	45.10	0.34	ppb
Thallium	205-1	45.21	44.72	44.78	44.90	0.59	ppb
Tin	118-1	50.82	52.46	51.95	51.74	1.62	ppb
Titanium	47-1	573.25	577.73	593.94	581.64	1.87	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:26:38	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	42.96	42.80	42.52	42.76	0.52	ppb
Vanadium	51-2	50.08	48.24	47.99	48.77	2.35	ppb
Yttrium	89-1				100		%
Yttrium	89-2				105		%
Zinc	66-2	517.25	495.99	501.00	504.75	2.20	ppb
Zirconium	90-1	50.81	51.76	52.05	51.54	1.26	ppb
Zirconium	91-1	50.79	51.48	52.75	51.68	1.93	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:29:55	DataFile Name :	007CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2584.85	2587.70	2613.63	2595.39	0.61	ppb
Antimony	121-1	127.74	126.85	125.99	126.86	0.69	ppb
Arsenic	75-2	122.15	122.50	122.37	122.34	0.14	ppb
Barium	135-1	632.41	621.93	622.88	625.74	0.93	ppb
Barium	137-1	627.19	622.13	619.93	623.08	0.60	ppb
Beryllium	9-1	130.75	132.24	130.18	131.06	0.81	ppb
Bismuth	209-1				101		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	140.86	131.44	133.07	135.12	3.73	ppb
Cadmium	106-1	135.09	136.37	132.81	134.76	1.34	ppb
Cadmium	111-1	135.39	134.25	134.87	134.84	0.42	ppb
Calcium	43-1	14625.00	14526.06	14603.39	14584.82	0.36	ppb
Calcium	44-1	13272.68	13051.82	13321.80	13215.43	1.09	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	126.51	125.72	125.96	126.07	0.32	ppb
Cobalt	59-2	125.11	124.45	126.27	125.28	0.74	ppb
Copper	63-2	1267.01	1280.45	1275.01	1274.15	0.53	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				105		%
Indium	115-1				100		%
Indium	115-2				104		%
Iron	56-2	6776.01	6671.38	6741.34	6729.58	0.79	ppb
Iron	57-2	7096.35	7085.72	7152.50	7111.52	0.50	ppb
Iron	54-2	7224.56	7199.30	7240.13	7221.33	0.29	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:29:55	DataFile Name :	007CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	624.65	623.30	620.67	622.87	0.33	ppb
Lead	207-1	632.55	635.85	613.11	627.17	1.96	ppb
Lead	208-1	630.73	630.28	622.32	627.77	0.75	ppb
Lithium	6-1				100		%
Magnesium	24-2	11967.01	12063.04	12207.84	12079.30	1.00	ppb
Manganese	55-2	1208.22	1210.26	1225.20	1214.56	0.76	ppb
Molybdenum	94-1	1391.70	1422.16	1414.31	1409.39	1.12	ppb
Molybdenum	95-1	1396.66	1436.91	1420.76	1418.11	1.43	ppb
Molybdenum	96-1	1381.70	1402.08	1405.18	1396.32	0.91	ppb
Molybdenum	97-1	1370.96	1422.42	1428.92	1407.44	2.26	ppb
Molybdenum	98-1	1367.85	1404.05	1414.76	1395.55	1.76	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	125.14	127.79	125.66	126.20	1.11	ppb
Phosphorus	31-2	2440.33	2429.16	2458.05	2442.51	0.60	ppb
Potassium	39-2	6889.48	6937.53	6963.09	6930.04	0.54	ppb
Rhodium	103-1				98		%
Rhodium	103-2				103		%
Scandium	45-1				100		%
Scandium	45-2				103		%
Selenium	82-1	129.98	134.39	129.84	131.40	1.97	ppb
Selenium	77-2	128.13	126.84	124.13	126.37	1.61	ppb
Selenium	78-2	120.26	126.52	130.35	125.71	4.05	ppb
Silicon	28-1	128.92	129.72	133.66	130.77	1.94	ppb
Silver	107-1	134.42	134.20	133.28	133.96	0.45	ppb
Silver	109-1	135.14	133.05	133.55	133.91	0.81	ppb
Sodium	23-2	12506.05	12863.12	12963.40	12777.52	1.88	ppb
Strontium	86-1	3109.83	3187.46	3229.53	3175.60	1.91	ppb
Strontium	88-1	3140.98	3204.72	3177.76	3174.49	1.01	ppb
Sulfur	34-1	2307.10	2287.72	2340.42	2311.74	1.15	ppb
Terbium	159-1				102		%
Terbium	159-2				106		%
Thallium	203-1	112.77	111.93	113.67	112.79	0.77	ppb
Thallium	205-1	113.56	111.93	112.14	112.54	0.79	ppb
Tin	118-1	129.19	127.85	127.72	128.25	0.64	ppb
Titanium	47-1	1439.38	1436.46	1456.60	1444.15	0.75	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:29:55	DataFile Name :	007CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	107.93	107.41	108.28	107.87	0.40	ppb
Vanadium	51-2	121.39	122.09	122.43	121.97	0.44	ppb
Yttrium	89-1				100		%
Yttrium	89-2				103		%
Zinc	66-2	1250.96	1258.31	1253.36	1254.21	0.30	ppb
Zirconium	90-1	126.57	129.63	128.58	128.26	1.21	ppb
Zirconium	91-1	127.04	129.41	129.36	128.60	1.05	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:33:04	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	5198.71	5243.61	5194.61	5212.31	0.52	ppb
Antimony	121-1	253.86	257.12	251.68	254.22	1.08	ppb
Arsenic	75-2	240.37	246.49	245.61	244.15	1.36	ppb
Barium	135-1	1244.25	1248.32	1231.00	1241.19	0.73	ppb
Barium	137-1	1304.41	1300.45	1286.85	1297.24	0.71	ppb
Beryllium	9-1	257.71	263.02	261.67	260.80	1.06	ppb
Bismuth	209-1				101		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	263.10	268.90	265.06	265.68	1.11	ppb
Cadmium	106-1	265.34	265.95	264.66	265.32	0.24	ppb
Cadmium	111-1	268.80	269.50	262.52	266.94	1.44	ppb
Calcium	43-1	28733.66	28808.50	29256.05	28932.74	0.98	ppb
Calcium	44-1	26262.24	26256.01	26726.86	26415.03	1.02	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	248.79	253.39	249.63	250.61	0.98	ppb
Cobalt	59-2	247.00	252.17	247.42	248.86	1.15	ppb
Copper	63-2	2479.53	2556.15	2508.87	2514.85	1.54	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				105		%
Indium	115-1				97		%
Indium	115-2				102		%
Iron	56-2	13292.66	13474.89	13239.29	13335.62	0.93	ppb
Iron	57-2	14026.82	14388.30	14107.95	14174.36	1.34	ppb
Iron	54-2	14352.01	14561.07	14293.90	14402.33	0.98	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:33:04	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1245.24	1241.50	1268.74	1251.83	1.18	ppb
Lead	207-1	1256.12	1275.23	1275.78	1269.04	0.88	ppb
Lead	208-1	1245.60	1261.70	1267.77	1258.36	0.91	ppb
Lithium	6-1				98		%
Magnesium	24-2	24053.03	24238.54	24013.34	24101.64	0.50	ppb
Manganese	55-2	2454.37	2457.36	2413.69	2441.81	1.00	ppb
Molybdenum	94-1	2802.93	2882.78	2812.37	2832.69	1.54	ppb
Molybdenum	95-1	2773.59	2854.36	2769.05	2799.00	1.71	ppb
Molybdenum	96-1	2753.19	2790.23	2782.34	2775.25	0.70	ppb
Molybdenum	97-1	2796.58	2814.82	2841.57	2817.65	0.80	ppb
Molybdenum	98-1	2788.10	2836.00	2803.13	2809.08	0.87	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	251.40	253.05	250.71	251.72	0.48	ppb
Phosphorus	31-2	4970.15	4788.68	4883.67	4880.83	1.86	ppb
Potassium	39-2	12656.83	13040.30	12601.26	12766.13	1.87	ppb
Rhodium	103-1				96		%
Rhodium	103-2				100		%
Scandium	45-1				98		%
Scandium	45-2				101		%
Selenium	82-1	257.15	268.04	262.60	262.60	2.07	ppb
Selenium	77-2	239.04	239.45	221.24	233.24	4.46	ppb
Selenium	78-2	240.23	243.11	248.57	243.97	1.74	ppb
Silicon	28-1	253.92	260.03	265.72	259.89	2.27	ppb
Silver	107-1	264.16	266.74	260.78	263.89	1.13	ppb
Silver	109-1	262.89	266.02	261.31	263.41	0.91	ppb
Sodium	23-2	25706.32	25936.04	25886.16	25842.84	0.47	ppb
Strontium	86-1	6255.83	6482.86	6405.74	6381.48	1.81	ppb
Strontium	88-1	6346.10	6456.78	6383.03	6395.30	0.88	ppb
Sulfur	34-1	4911.74	4868.98	5146.98	4975.90	3.01	ppb
Terbium	159-1				102		%
Terbium	159-2				107		%
Thallium	203-1	223.38	225.83	226.88	225.36	0.80	ppb
Thallium	205-1	246.35	249.98	251.43	249.25	1.05	ppb
Tin	118-1	253.48	254.18	251.15	252.94	0.63	ppb
Titanium	47-1	2746.00	2806.98	2853.71	2802.23	1.93	ppb

Reviewed By:Mohan
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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:33:04	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	243.25	246.37	249.83	246.48	1.33	ppb
Vanadium	51-2	239.41	242.90	241.83	241.38	0.74	ppb
Yttrium	89-1				98		%
Yttrium	89-2				102		%
Zinc	66-2	2495.03	2524.69	2497.59	2505.77	0.66	ppb
Zirconium	90-1	252.85	260.56	252.85	255.42	1.74	ppb
Zirconium	91-1	254.21	261.39	259.09	258.23	1.42	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:36:06	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10309.29	10221.49	10081.55	10204.11	1.13	ppb
Antimony	121-1	507.82	502.08	509.41	506.43	0.76	ppb
Arsenic	75-2	485.66	473.71	479.29	479.55	1.25	ppb
Barium	135-1	2515.30	2546.82	2519.56	2527.23	0.68	ppb
Barium	137-1	2499.22	2551.34	2503.56	2518.04	1.15	ppb
Beryllium	9-1	505.65	520.46	514.93	513.68	1.46	ppb
Bismuth	209-1				100		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	513.72	512.07	511.04	512.27	0.26	ppb
Cadmium	106-1	506.81	519.36	515.37	513.85	1.25	ppb
Cadmium	111-1	511.34	513.42	512.62	512.46	0.21	ppb
Calcium	43-1	57463.49	58100.44	57638.35	57734.09	0.57	ppb
Calcium	44-1	52348.11	53012.62	53195.75	52852.16	0.84	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	494.19	489.53	488.92	490.88	0.59	ppb
Cobalt	59-2	486.39	485.78	484.47	485.55	0.20	ppb
Copper	63-2	4889.59	4903.08	4786.01	4859.56	1.32	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				108		%
Indium	115-1				96		%
Indium	115-2				100		%
Iron	56-2	26475.91	26292.77	26365.62	26378.10	0.35	ppb
Iron	57-2	28137.23	27786.80	27640.87	27854.96	0.92	ppb
Iron	54-2	27132.08	26523.58	26773.08	26809.58	1.14	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:36:06	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2489.20	2572.77	2486.33	2516.10	1.95	ppb
Lead	207-1	2531.58	2557.86	2487.13	2525.52	1.42	ppb
Lead	208-1	2510.45	2554.20	2493.10	2519.25	1.25	ppb
Lithium	6-1				96		%
Magnesium	24-2	47978.46	47113.12	46716.53	47269.37	1.37	ppb
Manganese	55-2	4792.03	4841.39	4807.50	4813.64	0.52	ppb
Molybdenum	94-1	5524.16	5678.98	5509.72	5570.95	1.68	ppb
Molybdenum	95-1	5613.22	5626.79	5524.01	5588.00	1.00	ppb
Molybdenum	96-1	5550.14	5723.36	5516.20	5596.56	1.99	ppb
Molybdenum	97-1	5528.64	5710.32	5527.55	5588.84	1.88	ppb
Molybdenum	98-1	5506.57	5692.30	5566.07	5588.31	1.70	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	486.84	489.64	485.82	487.43	0.40	ppb
Phosphorus	31-2	9600.46	9558.93	9660.36	9606.59	0.53	ppb
Potassium	39-2	25367.05	25328.61	25066.21	25253.96	0.65	ppb
Rhodium	103-1				93		%
Rhodium	103-2				99		%
Scandium	45-1				96		%
Scandium	45-2				100		%
Selenium	82-1	524.37	522.30	509.69	518.79	1.53	ppb
Selenium	77-2	482.76	490.12	473.18	482.02	1.76	ppb
Selenium	78-2	474.93	498.11	496.26	489.77	2.63	ppb
Silicon	28-1	511.00	520.66	518.65	516.77	0.99	ppb
Silver	107-1	517.20	516.72	510.95	514.95	0.68	ppb
Silver	109-1	514.06	523.31	510.66	516.01	1.27	ppb
Sodium	23-2	50995.80	51207.33	49921.68	50708.27	1.36	ppb
Strontium	86-1	12606.99	12783.17	12634.33	12674.83	0.75	ppb
Strontium	88-1	12684.78	12869.83	12640.25	12731.62	0.96	ppb
Sulfur	34-1	10106.42	10124.35	10054.08	10094.95	0.36	ppb
Terbium	159-1				103		%
Terbium	159-2				107		%
Thallium	203-1	504.01	511.36	503.07	506.15	0.90	ppb
Thallium	205-1	501.69	514.14	500.33	505.39	1.51	ppb
Tin	118-1	514.65	507.31	508.26	510.08	0.78	ppb
Titanium	47-1	5555.53	5499.67	5504.13	5519.77	0.56	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:36:06	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	488.93	514.49	505.15	502.86	2.57	ppb
Vanadium	51-2	482.78	475.74	472.57	477.03	1.10	ppb
Yttrium	89-1				97		%
Yttrium	89-2				102		%
Zinc	66-2	4888.53	4874.56	4863.40	4875.50	0.26	ppb
Zirconium	90-1	507.14	514.55	507.52	509.74	0.82	ppb
Zirconium	91-1	511.00	525.19	510.03	515.41	1.65	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:41:54	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	19465.69	22181.42	21603.23	21083.44	6.79	ppb
Antimony	121-1	984.76	998.77	1002.78	995.44	0.95	ppb
Arsenic	75-2	934.24	1088.91	1013.11	1012.09	7.64	ppb
Barium	135-1	4968.74	4965.72	5030.49	4988.32	0.73	ppb
Barium	137-1	4929.85	4996.98	5011.14	4979.32	0.87	ppb
Beryllium	9-1	982.71	985.65	1000.34	989.57	0.95	ppb
Bismuth	209-1				104		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	991.27	988.06	986.26	988.53	0.26	ppb
Cadmium	106-1	977.75	996.62	989.25	987.87	0.96	ppb
Cadmium	111-1	976.92	994.21	993.10	988.08	0.98	ppb
Calcium	43-1	114318.27	112601.12	117732.00	114883.80	2.27	ppb
Calcium	44-1	105396.89	101371.21	106561.83	104443.31	2.61	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	936.33	1069.56	1006.77	1004.22	6.64	ppb
Cobalt	59-2	925.64	1079.56	1017.07	1007.42	7.68	ppb
Copper	63-2	9305.88	10601.09	10281.06	10062.67	6.70	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				102		%
Indium	115-1				96		%
Indium	115-2				94		%
Iron	56-2	51561.02	59300.26	55965.71	55609.00	6.98	ppb
Iron	57-2	51707.96	59127.08	55963.07	55599.37	6.70	ppb
Iron	54-2	52038.19	59773.27	57331.52	56380.99	7.01	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:41:54	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	4970.76	4927.18	5080.74	4992.90	1.58	ppb
Lead	207-1	4974.17	4948.10	5028.20	4983.49	0.82	ppb
Lead	208-1	4970.95	4968.88	5027.46	4989.10	0.67	ppb
Lithium	6-1				99		%
Magnesium	24-2	92718.89	107371.93	101726.69	100605.84	7.35	ppb
Manganese	55-2	9272.21	10702.42	10360.74	10111.79	7.39	ppb
Molybdenum	94-1	10848.15	10900.74	11066.90	10938.60	1.04	ppb
Molybdenum	95-1	10871.44	10904.21	11036.85	10937.50	0.80	ppb
Molybdenum	96-1	10772.93	10925.67	11127.25	10941.95	1.62	ppb
Molybdenum	97-1	10745.90	10855.92	11198.47	10933.43	2.16	ppb
Molybdenum	98-1	10833.80	10951.73	11027.79	10937.77	0.89	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	934.36	1062.64	1019.73	1005.58	6.49	ppb
Phosphorus	31-2	18758.29	21308.60	20639.34	20235.41	6.53	ppb
Potassium	39-2	49067.74	56570.99	54115.73	53251.48	7.18	ppb
Rhodium	103-1				94		%
Rhodium	103-2				94		%
Scandium	45-1				98		%
Scandium	45-2				97		%
Selenium	82-1	978.69	979.54	1001.19	986.47	1.29	ppb
Selenium	77-2	994.55	1086.03	958.49	1013.02	6.49	ppb
Selenium	78-2	910.72	1097.00	1011.76	1006.49	9.26	ppb
Silicon	28-1	996.15	960.17	1008.94	988.42	2.56	ppb
Silver	107-1	975.63	987.62	999.85	987.70	1.23	ppb
Silver	109-1	975.04	982.18	1004.70	987.31	1.57	ppb
Sodium	23-2	99315.55	113574.10	108496.92	107128.86	6.75	ppb
Strontium	86-1	24620.62	24822.45	25168.95	24870.67	1.12	ppb
Strontium	88-1	24549.39	24787.21	25183.03	24839.87	1.29	ppb
Sulfur	34-1	20190.02	19290.89	20517.88	19999.60	3.18	ppb
Terbium	159-1				107		%
Terbium	159-2				103		%
Thallium	203-1	1013.96	978.61	1022.01	1004.86	2.30	ppb
Thallium	205-1	1000.95	979.27	1017.69	999.31	1.93	ppb
Tin	118-1	979.90	993.98	1007.32	993.73	1.38	ppb
Titanium	47-1	10971.72	10749.35	11179.42	10966.83	1.96	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:41:54	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1004.00	993.02	1008.85	1001.95	0.81	ppb
Vanadium	51-2	937.81	1077.62	1026.80	1014.08	6.98	ppb
Yttrium	89-1				101		%
Yttrium	89-2				98		%
Zinc	66-2	9318.17	10626.17	10235.79	10060.04	6.67	ppb
Zirconium	90-1	982.28	995.30	1002.29	993.29	1.02	ppb
Zirconium	91-1	979.15	980.05	1009.91	989.70	1.77	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:44:46	DataFile Name :	012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	101375.80	98892.19	98979.78	99749.26	1.41	ppb
Antimony	121-1	0.76	0.84	0.75	0.79	5.81	ppb
Arsenic	75-2	0.72	0.47	0.47	0.56	25.69	ppb
Barium	135-1	1.94	2.25	1.91	2.03	9.15	ppb
Barium	137-1	1.89	2.14	1.86	1.97	7.82	ppb
Beryllium	9-1	0.66	0.55	0.58	0.60	9.47	ppb
Bismuth	209-1				90		%
Bismuth	209-2				84		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.64	0.91	0.55	0.70	26.99	ppb
Cadmium	106-1	0.41	1.91	0.57	0.96	85.78	ppb
Cadmium	111-1	0.18	0.42	0.21	0.27	47.45	ppb
Calcium	43-1	493926.10	501079.86	492970.29	495992.08	0.89	ppb
Calcium	44-1	497150.49	501360.60	497679.07	498730.05	0.46	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3.00	3.11	2.94	3.02	2.79	ppb
Cobalt	59-2	2.54	2.46	2.46	2.49	1.87	ppb
Copper	63-2	1.90	1.88	1.75	1.84	4.21	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				103		%
Indium	115-1				93		%
Indium	115-2				97		%
Iron	56-2	253556.89	247050.63	245446.51	248684.68	1.73	ppb
Iron	57-2	252486.04	245057.30	247913.88	248485.74	1.51	ppb
Iron	54-2	251086.14	246114.14	248057.19	248419.15	1.01	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:44:46	DataFile Name :	012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.09	1.08	0.87	1.01	12.22	ppb
Lead	207-1	1.05	1.07	0.96	1.03	5.70	ppb
Lead	208-1	1.06	1.04	0.91	1.00	8.47	ppb
Lithium	6-1				97		%
Magnesium	24-2	508159.75	493367.74	499091.81	500206.43	1.49	ppb
Manganese	55-2	5.14	5.01	5.10	5.08	1.37	ppb
Molybdenum	94-1	3.04	2.89	2.61	2.85	7.59	ppb
Molybdenum	95-1	2.13	2.22	1.96	2.10	6.21	ppb
Molybdenum	96-1	3.60	4.53	3.42	3.85	15.50	ppb
Molybdenum	97-1	2.04	4.81	1.80	2.88	58.08	ppb
Molybdenum	98-1	1.91	4.87	1.76	2.85	61.66	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	3.61	3.66	3.30	3.52	5.56	ppb
Phosphorus	31-2	-9.49	-2.83	-11.46	-7.93		ppb
Potassium	39-2	252196.65	243937.22	251739.47	249291.11	1.86	ppb
Rhodium	103-1				86		%
Rhodium	103-2				89		%
Scandium	45-1				97		%
Scandium	45-2				101		%
Selenium	82-1	1.16	1.70	2.51	1.79	37.84	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.20	-0.99	1.09	-0.03		ppb
Silicon	28-1	8.69	5.56	4.96	6.40	31.27	ppb
Silver	107-1	0.16	0.43	0.10	0.23	76.21	ppb
Silver	109-1	0.13	0.29	0.11	0.17	55.58	ppb
Sodium	23-2	507391.48	490547.57	497419.26	498452.77	1.70	ppb
Strontium	86-1	4.26	4.04	3.71	4.00	6.88	ppb
Strontium	88-1	4.42	4.03	3.91	4.12	6.43	ppb
Sulfur	34-1	-1169.02	-775.01	-908.97	-951.00		ppb
Terbium	159-1				101		%
Terbium	159-2				104		%
Thallium	203-1	0.13	0.12	0.10	0.12	12.88	ppb
Thallium	205-1	0.14	0.13	0.10	0.12	19.02	ppb
Tin	118-1	0.31	0.41	0.37	0.37	12.95	ppb
Titanium	47-1	1.39	1.39	1.34	1.37	1.91	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:44:46	DataFile Name :	012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.06	0.07	0.05	0.06	20.02	ppb
Vanadium	51-2	0.31	0.26	0.27	0.28	9.65	ppb
Yttrium	89-1				96		%
Yttrium	89-2				100		%
Zinc	66-2	3.16	3.32	3.42	3.30	4.05	ppb
Zirconium	90-1	0.63	0.65	0.58	0.62	5.88	ppb
Zirconium	91-1	0.58	0.70	0.61	0.63	10.25	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:03:58	DataFile Name :	013ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	485.86	507.90	541.95	511.90	5.52	ppb
Antimony	121-1	198.71	196.83	199.38	198.30	0.67	ppb
Arsenic	75-2	193.14	189.99	212.57	198.57	6.16	ppb
Barium	135-1	96.04	94.82	96.43	95.76	0.88	ppb
Barium	137-1	95.95	95.20	96.60	95.92	0.73	ppb
Beryllium	9-1	101.08	101.94	100.90	101.31	0.55	ppb
Bismuth	209-1				107		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	162.26	158.52	162.12	160.96	1.32	ppb
Cadmium	106-1	168.67	166.42	173.17	169.42	2.03	ppb
Cadmium	111-1	109.11	109.71	111.01	109.94	0.88	ppb
Calcium	43-1	2189.83	2170.58	2266.73	2209.05	2.30	ppb
Calcium	44-1	2142.05	2164.02	2183.94	2163.34	0.97	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	98.25	100.59	109.43	102.76	5.74	ppb
Cobalt	59-2	98.08	100.10	107.73	101.97	4.99	ppb
Copper	63-2	92.54	95.69	102.52	96.92	5.26	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				106		%
Indium	115-1				103		%
Indium	115-2				103		%
Iron	56-2	2069.14	2108.32	2224.01	2133.82	3.77	ppb
Iron	57-2	2103.20	2099.33	2295.69	2166.07	5.18	ppb
Iron	54-2	2224.07	2288.40	2477.47	2329.98	5.65	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:03:58	DataFile Name :	013ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	190.12	192.33	195.12	192.53	1.30	ppb
Lead	207-1	180.07	183.03	187.03	183.38	1.90	ppb
Lead	208-1	185.13	188.07	191.63	188.28	1.73	ppb
Lithium	6-1				105		%
Magnesium	24-2	1163.24	1203.15	1288.54	1218.31	5.25	ppb
Manganese	55-2	96.93	99.81	107.44	101.39	5.36	ppb
Molybdenum	94-1	4996.47	5130.25	5047.94	5058.22	1.33	ppb
Molybdenum	95-1	4909.74	4954.68	5027.24	4963.89	1.19	ppb
Molybdenum	96-1	4958.67	4937.12	5026.94	4974.24	0.94	ppb
Molybdenum	97-1	4961.00	4919.34	5048.95	4976.43	1.33	ppb
Molybdenum	98-1	4896.73	4996.29	4958.65	4950.56	1.02	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	100.22	101.71	110.15	104.03	5.15	ppb
Phosphorus	31-2	-3.82	-8.29	-12.22	-8.11		ppb
Potassium	39-2	2024.59	2082.87	2282.07	2129.84	6.34	ppb
Rhodium	103-1				103		%
Rhodium	103-2				104		%
Scandium	45-1				105		%
Scandium	45-2				105		%
Selenium	82-1	203.21	205.32	208.95	205.83	1.41	ppb
Selenium	77-2	193.80	213.60	205.91	204.44	4.88	ppb
Selenium	78-2	196.27	198.86	221.28	205.47	6.69	ppb
Silicon	28-1	524.56	529.71	535.25	529.84	1.01	ppb
Silver	107-1	51.25	50.88	51.51	51.21	0.62	ppb
Silver	109-1	50.56	50.65	50.75	50.65	0.18	ppb
Sodium	23-2	2051.82	2101.23	2260.80	2137.95	5.11	ppb
Strontium	86-1	496.61	502.62	507.87	502.37	1.12	ppb
Strontium	88-1	500.04	510.36	514.31	508.24	1.45	ppb
Sulfur	34-1	-1202.78	-1145.59	-1260.14	-1202.83		ppb
Terbium	159-1				107		%
Terbium	159-2				108		%
Thallium	203-1	186.99	189.00	193.56	189.85	1.77	ppb
Thallium	205-1	209.21	215.04	211.30	211.85	1.39	ppb
Tin	118-1	553.74	546.60	548.70	549.68	0.67	ppb
Titanium	47-1	4909.64	4974.31	4970.54	4951.50	0.73	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:03:58	DataFile Name :	013ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	505.96	510.47	518.02	511.48	1.19	ppb
Vanadium	51-2	91.21	95.74	100.64	95.86	4.92	ppb
Yttrium	89-1				105		%
Yttrium	89-2				105		%
Zinc	66-2	188.30	194.03	211.34	197.89	6.06	ppb
Zirconium	90-1	502.38	505.09	512.33	506.60	1.02	ppb
Zirconium	91-1	497.38	508.86	514.39	506.88	1.71	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P7
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:09:27	DataFile Name :	014LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20.07	19.89	18.77	19.58	3.60	ppb
Antimony	121-1	2.10	2.10	2.13	2.11	0.92	ppb
Arsenic	75-2	1.02	1.12	0.97	1.03	7.39	ppb
Barium	135-1	9.68	9.45	9.52	9.55	1.24	ppb
Barium	137-1	9.50	9.56	9.47	9.51	0.45	ppb
Beryllium	9-1	1.19	0.99	1.11	1.10	9.37	ppb
Bismuth	209-1				108		%
Bismuth	209-2				110		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.99	0.86	0.73	0.86	15.14	ppb
Cadmium	106-1	-0.98	0.01	-0.75	-0.57		ppb
Cadmium	111-1	1.05	1.06	0.99	1.03	3.93	ppb
Calcium	43-1	526.84	546.27	527.90	533.67	2.05	ppb
Calcium	44-1	543.86	544.55	535.67	541.36	0.91	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.96	2.00	2.08	2.01	3.21	ppb
Cobalt	59-2	1.04	1.12	1.03	1.06	4.91	ppb
Copper	63-2	2.02	1.82	1.96	1.93	5.36	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				110		%
Indium	115-1				106		%
Indium	115-2				109		%
Iron	56-2	57.97	56.45	58.32	57.58	1.73	ppb
Iron	57-2	52.52	57.90	52.95	54.46	5.48	ppb
Iron	54-2	58.68	57.65	58.66	58.33	1.01	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P7
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:09:27	DataFile Name :	014LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.92	0.91	0.95	0.93	2.53	ppb
Lead	207-1	1.01	0.96	0.90	0.96	5.67	ppb
Lead	208-1	0.95	0.94	0.93	0.94	1.28	ppb
Lithium	6-1				106		%
Magnesium	24-2	536.28	527.40	542.22	535.30	1.39	ppb
Manganese	55-2	1.04	1.12	1.02	1.06	5.28	ppb
Molybdenum	94-1	6.12	6.38	6.12	6.21	2.46	ppb
Molybdenum	95-1	4.97	5.28	5.07	5.10	3.07	ppb
Molybdenum	96-1	5.23	5.46	5.26	5.31	2.33	ppb
Molybdenum	97-1	5.16	5.09	5.16	5.14	0.79	ppb
Molybdenum	98-1	5.21	4.98	5.11	5.10	2.29	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.94	1.00	1.06	1.00	5.93	ppb
Phosphorus	31-2	13.48	10.83	8.84	11.05	21.09	ppb
Potassium	39-2	514.80	504.80	522.84	514.14	1.76	ppb
Rhodium	103-1				104		%
Rhodium	103-2				109		%
Scandium	45-1				106		%
Scandium	45-2				109		%
Selenium	82-1	5.50	5.44	5.84	5.59	3.89	ppb
Selenium	77-2	1.74	4.67	5.19	3.87	48.22	ppb
Selenium	78-2	7.14	4.82	3.84	5.26	32.17	ppb
Silicon	28-1	-1.88	-1.92	-3.11	-2.30		ppb
Silver	107-1	1.02	1.00	1.00	1.01	0.90	ppb
Silver	109-1	1.07	1.02	1.02	1.04	2.93	ppb
Sodium	23-2	556.36	542.90	552.37	550.55	1.26	ppb
Strontium	86-1	1.03	1.16	1.07	1.09	6.15	ppb
Strontium	88-1	1.04	1.08	1.03	1.05	2.47	ppb
Sulfur	34-1	-1067.80	-1216.06	-1192.65	-1158.84		ppb
Terbium	159-1				108		%
Terbium	159-2				109		%
Thallium	203-1	0.86	0.90	0.91	0.89	2.96	ppb
Thallium	205-1	0.89	0.89	0.90	0.89	0.64	ppb
Tin	118-1	5.01	4.86	4.82	4.90	2.08	ppb
Titanium	47-1	5.53	5.85	5.22	5.54	5.72	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P7
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:09:27	DataFile Name :	014LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.84	0.82	0.82	0.83	1.10	ppb
Vanadium	51-2	4.87	4.71	4.89	4.82	2.02	ppb
Yttrium	89-1				105		%
Yttrium	89-2				108		%
Zinc	66-2	5.29	5.45	5.08	5.27	3.49	ppb
Zirconium	90-1	1.08	1.11	1.11	1.10	1.47	ppb
Zirconium	91-1	1.09	1.07	1.16	1.10	4.01	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:17:04	DataFile Name :	015CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.13	-0.14	-0.01	-0.09		ppb
Antimony	121-1	0.01	0.02	0.02	0.02	25.71	ppb
Arsenic	75-2	0.02	0.00	0.00	0.01	96.07	ppb
Barium	135-1	0.00	-0.01	0.01	0.00	2038.84	ppb
Barium	137-1	0.00	0.00	-0.01	0.00		ppb
Beryllium	9-1	0.09	0.08	0.05	0.07	27.80	ppb
Bismuth	209-1				104		%
Bismuth	209-2				110		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.03	-0.02	-0.02	0.00		ppb
Cadmium	106-1	-1.32	-0.66	-2.08	-1.35		ppb
Cadmium	111-1	-0.10	-0.05	-0.15	-0.10		ppb
Calcium	43-1	3.74	-1.38	-4.56	-0.73		ppb
Calcium	44-1	0.53	0.29	-0.80	0.01	8292.49	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.00	-0.02	-0.01	-0.01		ppb
Cobalt	59-2	0.01	0.01	0.00	0.00	167.99	ppb
Copper	63-2	0.09	0.01	0.10	0.07	77.99	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				108		%
Indium	115-1				103		%
Indium	115-2				107		%
Iron	56-2	0.38	0.06	0.36	0.27	67.76	ppb
Iron	57-2	-4.43	-4.16	-2.41	-3.67		ppb
Iron	54-2	-0.06	-1.01	-0.17	-0.41		ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:17:04	DataFile Name :	015CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.05	0.05	0.02	0.04	39.07	ppb
Lead	207-1	0.06	0.03	0.04	0.04	33.50	ppb
Lead	208-1	0.05	0.04	0.04	0.04	14.69	ppb
Lithium	6-1				104		%
Magnesium	24-2	0.99	0.46	0.65	0.70	38.17	ppb
Manganese	55-2	0.01	0.05	0.02	0.02	73.59	ppb
Molybdenum	94-1	0.04	0.09	0.05	0.06	40.69	ppb
Molybdenum	95-1	0.04	0.02	0.04	0.03	41.06	ppb
Molybdenum	96-1	0.04	0.04	0.04	0.04	7.43	ppb
Molybdenum	97-1	0.02	0.03	0.03	0.03	24.66	ppb
Molybdenum	98-1	0.04	0.04	0.03	0.04	15.52	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.02	0.00	0.00	0.01	246.66	ppb
Phosphorus	31-2	-19.22	-21.55	-17.29	-19.35		ppb
Potassium	39-2	-13.07	-18.60	-12.41	-14.69		ppb
Rhodium	103-1				103		%
Rhodium	103-2				107		%
Scandium	45-1				103		%
Scandium	45-2				106		%
Selenium	82-1	-0.12	0.98	-0.09	0.26	243.77	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	1.08	0.15	1.92	1.05	83.98	ppb
Silicon	28-1	-7.38	-6.52	-6.87	-6.93		ppb
Silver	107-1	0.01	0.00	0.01	0.01	47.97	ppb
Silver	109-1	0.01	0.01	0.01	0.01	9.87	ppb
Sodium	23-2	12.95	12.80	14.19	13.31	5.71	ppb
Strontium	86-1	0.04	0.04	0.02	0.03	43.04	ppb
Strontium	88-1	0.01	0.01	0.01	0.01	20.39	ppb
Sulfur	34-1	-655.29	-558.26	-577.27	-596.94		ppb
Terbium	159-1				104		%
Terbium	159-2				107		%
Thallium	203-1	0.02	0.01	0.01	0.02	42.87	ppb
Thallium	205-1	0.02	0.02	0.01	0.02	18.30	ppb
Tin	118-1	0.02	0.01	0.01	0.01	65.21	ppb
Titanium	47-1	0.03	0.00	0.03	0.02	93.49	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:17:04	DataFile Name :	015CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	116.92	ppb
Vanadium	51-2	0.00	0.00	0.00	0.00	421.82	ppb
Yttrium	89-1				102		%
Yttrium	89-2				106		%
Zinc	66-2	0.09	0.16	0.06	0.11	49.17	ppb
Zirconium	90-1	0.02	0.03	0.02	0.02	18.23	ppb
Zirconium	91-1	0.02	0.02	0.01	0.02	15.14	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:20:27	DataFile Name :	016ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	91273.87	90342.67	89545.96	90387.50	0.96	ppb
Antimony	121-1	1.13	1.12	1.13	1.12	0.59	ppb
Arsenic	75-2	0.47	0.33	0.45	0.42	18.89	ppb
Barium	135-1	1.32	1.36	1.44	1.37	4.57	ppb
Barium	137-1	1.36	1.33	1.33	1.34	1.40	ppb
Beryllium	9-1	0.33	0.30	0.39	0.34	13.13	ppb
Bismuth	209-1				100		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	8.64	9.27	8.16	8.69	6.41	ppb
Cadmium	106-1	-0.39	-1.87	-2.75	-1.67		ppb
Cadmium	111-1	0.32	0.13	0.15	0.20	54.68	ppb
Calcium	43-1	101936.91	102519.92	106213.22	103556.69	2.24	ppb
Calcium	44-1	96414.92	97628.44	100906.67	98316.67	2.36	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	19.19	19.09	19.43	19.24	0.91	ppb
Cobalt	59-2	1.15	1.18	1.21	1.18	2.68	ppb
Copper	63-2	7.15	7.23	7.40	7.26	1.79	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				110		%
Indium	115-1				98		%
Indium	115-2				103		%
Iron	56-2	102947.00	101919.49	102134.57	102333.68	0.53	ppb
Iron	57-2	103428.01	102992.31	102863.54	103094.62	0.29	ppb
Iron	54-2	103424.06	101372.08	102176.95	102324.37	1.01	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:20:27	DataFile Name :	016ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	4.29	4.45	4.24	4.33	2.52	ppb
Lead	207-1	3.80	3.85	3.86	3.84	0.79	ppb
Lead	208-1	4.01	4.09	4.03	4.04	0.96	ppb
Lithium	6-1				99		%
Magnesium	24-2	93467.81	92114.07	92680.60	92754.16	0.73	ppb
Manganese	55-2	7.97	7.78	7.43	7.73	3.52	ppb
Molybdenum	94-1	1613.75	1601.17	1642.14	1619.02	1.30	ppb
Molybdenum	95-1	1909.87	1908.84	1958.28	1925.66	1.47	ppb
Molybdenum	96-1	1885.99	1884.01	1904.40	1891.46	0.59	ppb
Molybdenum	97-1	1923.41	1938.96	1924.94	1929.10	0.44	ppb
Molybdenum	98-1	1919.81	1892.76	1938.73	1917.10	1.21	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	5.12	5.19	5.55	5.29	4.31	ppb
Phosphorus	31-2	94592.12	93634.71	94271.37	94166.06	0.52	ppb
Potassium	39-2	97347.59	96741.96	96462.45	96850.67	0.47	ppb
Rhodium	103-1				93		%
Rhodium	103-2				99		%
Scandium	45-1				98		%
Scandium	45-2				103		%
Selenium	82-1	0.66	0.76	0.67	0.70	8.13	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.07	1.68	0.77	0.80	110.34	ppb
Silicon	28-1	15.75	17.66	21.85	18.42	16.95	ppb
Silver	107-1	0.07	0.08	0.09	0.08	16.77	ppb
Silver	109-1	0.08	0.06	0.09	0.08	15.39	ppb
Sodium	23-2	98303.62	97259.31	97874.34	97812.42	0.54	ppb
Strontium	86-1	33.40	33.60	33.87	33.62	0.70	ppb
Strontium	88-1	34.08	33.93	34.35	34.12	0.62	ppb
Sulfur	34-1	98652.57	101098.92	102387.01	100712.83	1.88	ppb
Terbium	159-1				106		%
Terbium	159-2				109		%
Thallium	203-1	0.17	0.16	0.15	0.16	4.91	ppb
Thallium	205-1	0.17	0.17	0.17	0.17	0.54	ppb
Tin	118-1	0.17	0.15	0.16	0.16	4.42	ppb
Titanium	47-1	2040.78	2049.76	2116.46	2069.00	2.00	ppb

Reviewed By:Mohan
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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:20:27	DataFile Name :	016ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.01	0.02	0.02	0.02	15.65	ppb
Vanadium	51-2	0.19	0.18	0.17	0.18	3.26	ppb
Yttrium	89-1				100		%
Yttrium	89-2				105		%
Zinc	66-2	10.77	11.32	11.03	11.04	2.50	ppb
Zirconium	90-1	0.06	0.06	0.05	0.06	9.70	ppb
Zirconium	91-1	0.03	0.05	0.07	0.05	37.02	ppb

Reviewed By:Mohan
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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:23:38	DataFile Name :	017ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	90184.61	87345.63	89878.13	89136.12	1.75	ppb
Antimony	121-1	20.16	20.78	19.96	20.30	2.11	ppb
Arsenic	75-2	18.63	18.61	18.69	18.64	0.24	ppb
Barium	135-1	19.86	20.45	19.62	19.97	2.15	ppb
Barium	137-1	19.48	20.45	19.51	19.81	2.79	ppb
Beryllium	9-1	20.09	19.86	19.72	19.89	0.93	ppb
Bismuth	209-1				103		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	29.01	26.91	28.63	28.18	3.96	ppb
Cadmium	106-1	23.14	22.55	22.30	22.66	1.91	ppb
Cadmium	111-1	20.09	20.33	20.14	20.19	0.62	ppb
Calcium	43-1	102480.01	103789.95	104397.91	103555.96	0.95	ppb
Calcium	44-1	96770.26	98469.69	97719.24	97653.07	0.87	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	38.67	37.37	38.42	38.15	1.80	ppb
Cobalt	59-2	20.16	19.78	19.52	19.82	1.63	ppb
Copper	63-2	24.85	24.41	24.95	24.74	1.17	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				111		%
Indium	115-1				102		%
Indium	115-2				105		%
Iron	56-2	101144.82	101202.24	101598.78	101315.28	0.24	ppb
Iron	57-2	102237.54	102494.91	100454.57	101729.00	1.09	ppb
Iron	54-2	101536.28	100774.24	100606.95	100972.49	0.49	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:23:38	DataFile Name :	017ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	23.79	23.89	24.45	24.04	1.47	ppb
Lead	207-1	22.90	22.75	23.49	23.05	1.70	ppb
Lead	208-1	23.20	23.19	23.76	23.38	1.39	ppb
Lithium	6-1				103		%
Magnesium	24-2	92758.84	89663.99	90103.36	90842.06	1.84	ppb
Manganese	55-2	27.15	25.66	26.33	26.38	2.82	ppb
Molybdenum	94-1	1719.88	1717.03	1744.62	1727.18	0.88	ppb
Molybdenum	95-1	1939.53	1940.94	1985.75	1955.41	1.34	ppb
Molybdenum	96-1	1933.18	1923.29	1966.06	1940.84	1.15	ppb
Molybdenum	97-1	1980.96	1986.46	2025.75	1997.72	1.22	ppb
Molybdenum	98-1	1972.45	1931.61	1974.99	1959.69	1.24	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	24.51	23.07	24.03	23.87	3.07	ppb
Phosphorus	31-2	94431.91	93071.52	93921.94	93808.46	0.73	ppb
Potassium	39-2	96429.01	95740.38	95183.22	95784.21	0.65	ppb
Rhodium	103-1				97		%
Rhodium	103-2				101		%
Scandium	45-1				100		%
Scandium	45-2				105		%
Selenium	82-1	20.72	20.64	20.60	20.65	0.30	ppb
Selenium	77-2	23.89	19.97	20.16	21.34	10.35	ppb
Selenium	78-2	14.52	19.06	18.94	17.51	14.77	ppb
Silicon	28-1	70.47	73.36	73.66	72.50	2.43	ppb
Silver	107-1	18.25	18.59	18.09	18.31	1.39	ppb
Silver	109-1	18.13	18.36	18.08	18.19	0.80	ppb
Sodium	23-2	98425.83	95133.13	98516.61	97358.53	1.98	ppb
Strontium	86-1	82.43	80.86	83.36	82.21	1.54	ppb
Strontium	88-1	82.88	82.16	83.54	82.86	0.84	ppb
Sulfur	34-1	99226.70	101140.32	101115.91	100494.31	1.09	ppb
Terbium	159-1				109		%
Terbium	159-2				111		%
Thallium	203-1	21.86	21.97	22.34	22.06	1.15	ppb
Thallium	205-1	22.01	21.96	22.71	22.23	1.88	ppb
Tin	118-1	48.64	50.16	49.30	49.37	1.55	ppb
Titanium	47-1	2094.29	2139.52	2135.24	2123.01	1.18	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:23:38	DataFile Name :	017ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	43.30	43.90	44.44	43.88	1.30	ppb
Vanadium	51-2	18.54	18.12	18.23	18.30	1.18	ppb
Yttrium	89-1				102		%
Yttrium	89-2				107		%
Zinc	66-2	29.73	28.72	28.47	28.97	2.31	ppb
Zirconium	90-1	49.72	49.56	51.03	50.10	1.62	ppb
Zirconium	91-1	50.02	50.02	50.90	50.31	1.00	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:04:58	DataFile Name :	024CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	49030.62	48284.45	50845.21	49386.76	2.67	ppb
Antimony	121-1	495.65	486.11	486.98	489.58	1.08	ppb
Arsenic	75-2	454.70	442.10	469.72	455.51	3.04	ppb
Barium	135-1	2514.65	2506.76	2415.72	2479.04	2.22	ppb
Barium	137-1	2461.97	2429.36	2393.66	2428.33	1.41	ppb
Beryllium	9-1	479.17	486.18	490.17	485.17	1.15	ppb
Bismuth	209-1				96		%
Bismuth	209-2				88		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	478.08	483.67	472.48	478.08	1.17	ppb
Cadmium	106-1	477.55	481.84	470.96	476.78	1.15	ppb
Cadmium	111-1	476.78	472.81	471.63	473.74	0.57	ppb
Calcium	43-1	238788.62	242935.92	250815.87	244180.14	2.50	ppb
Calcium	44-1	240612.60	240094.16	249243.39	243316.71	2.11	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	462.77	465.75	487.95	472.16	2.91	ppb
Cobalt	59-2	490.19	494.05	517.34	500.53	2.93	ppb
Copper	63-2	4832.94	4835.60	5025.08	4897.87	2.25	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				106		%
Indium	115-1				97		%
Indium	115-2				98		%
Iron	56-2	124207.12	124096.19	130014.01	126105.77	2.68	ppb
Iron	57-2	124143.08	125516.24	129864.95	126508.09	2.36	ppb
Iron	54-2	124087.21	122250.48	129133.84	125157.18	2.85	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:04:58	DataFile Name :	024CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2454.55	2458.79	2497.93	2470.42	0.97	ppb
Lead	207-1	2429.78	2493.39	2468.26	2463.81	1.30	ppb
Lead	208-1	2438.53	2478.32	2489.26	2468.71	1.08	ppb
Lithium	6-1				104		%
Magnesium	24-2	239980.33	239876.70	249767.24	243208.09	2.34	ppb
Manganese	55-2	4531.72	4527.32	4712.15	4590.39	2.30	ppb
Molybdenum	94-1	5257.57	5358.94	5375.39	5330.63	1.20	ppb
Molybdenum	95-1	5227.69	5365.92	5340.11	5311.24	1.38	ppb
Molybdenum	96-1	5227.45	5435.25	5349.58	5337.43	1.96	ppb
Molybdenum	97-1	5229.86	5393.86	5382.26	5335.33	1.72	ppb
Molybdenum	98-1	5217.00	5317.17	5298.97	5277.71	1.01	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	486.50	485.83	506.79	493.04	2.42	ppb
Phosphorus	31-2	9253.34	9224.35	9504.99	9327.56	1.65	ppb
Potassium	39-2	120590.48	120811.66	127183.18	122861.77	3.05	ppb
Rhodium	103-1				92		%
Rhodium	103-2				94		%
Scandium	45-1				102		%
Scandium	45-2				103		%
Selenium	82-1	466.79	478.55	469.39	471.58	1.31	ppb
Selenium	77-2	449.24	433.37	450.55	444.39	2.15	ppb
Selenium	78-2	451.85	438.03	464.28	451.39	2.91	ppb
Silicon	28-1	506.36	513.95	538.92	519.74	3.28	ppb
Silver	107-1	481.38	479.74	464.86	475.33	1.91	ppb
Silver	109-1	479.96	477.50	472.35	476.60	0.82	ppb
Sodium	23-2	247600.56	245354.87	257771.06	250242.16	2.64	ppb
Strontium	86-1	11925.24	12142.86	12275.87	12114.66	1.46	ppb
Strontium	88-1	11934.98	12059.16	12221.31	12071.81	1.19	ppb
Sulfur	34-1	8948.54	8735.20	9360.77	9014.84	3.53	ppb
Terbium	159-1				103		%
Terbium	159-2				105		%
Thallium	203-1	492.68	489.78	502.11	494.86	1.30	ppb
Thallium	205-1	483.87	493.00	506.75	494.54	2.33	ppb
Tin	118-1	505.34	495.02	504.61	501.66	1.15	ppb
Titanium	47-1	5217.02	5289.24	5367.04	5291.10	1.42	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:04:58	DataFile Name :	024CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	497.21	499.92	513.08	503.40	1.69	ppb
Vanadium	51-2	458.98	456.58	481.68	465.75	2.97	ppb
Yttrium	89-1				101		%
Yttrium	89-2				102		%
Zinc	66-2	4756.92	4787.26	4983.87	4842.68	2.54	ppb
Zirconium	90-1	478.92	495.14	492.54	488.87	1.78	ppb
Zirconium	91-1	479.90	497.70	494.16	490.59	1.92	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:07:52	DataFile Name :	025CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.11	1.56	1.69	1.46	20.92	ppb
Antimony	121-1	0.43	0.40	0.42	0.42	3.20	ppb
Arsenic	75-2	0.02	0.00	0.04	0.02	80.75	ppb
Barium	135-1	0.09	0.06	0.09	0.08	19.90	ppb
Barium	137-1	0.13	0.09	0.07	0.09	32.93	ppb
Beryllium	9-1	0.57	0.48	0.37	0.47	21.26	ppb
Bismuth	209-1				109		%
Bismuth	209-2				113		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.02	0.11	0.11	0.07	111.21	ppb
Cadmium	106-1	0.01	-0.96	-2.16	-1.04		ppb
Cadmium	111-1	0.04	-0.05	-0.16	-0.06		ppb
Calcium	43-1	19.16	6.74	3.76	9.89	82.58	ppb
Calcium	44-1	32.12	8.74	7.24	16.04	87.01	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.02	-0.02	-0.03	-0.02		ppb
Cobalt	59-2	0.03	0.04	0.03	0.03	22.95	ppb
Copper	63-2	0.28	0.29	0.28	0.28	2.20	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				111		%
Indium	115-1				107		%
Indium	115-2				111		%
Iron	56-2	7.47	7.77	9.27	8.17	11.81	ppb
Iron	57-2	0.78	3.25	10.73	4.92	105.34	ppb
Iron	54-2	7.51	8.49	8.58	8.20	7.25	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:07:52	DataFile Name :	025CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.44	0.28	0.23	0.32	35.75	ppb
Lead	207-1	0.88	0.28	0.21	0.45	81.10	ppb
Lead	208-1	0.76	0.27	0.23	0.42	69.96	ppb
Lithium	6-1				110		%
Magnesium	24-2	10.40	12.27	12.55	11.74	9.95	ppb
Manganese	55-2	0.30	0.27	0.27	0.28	5.75	ppb
Molybdenum	94-1	0.66	0.56	0.57	0.60	9.60	ppb
Molybdenum	95-1	0.45	0.32	0.32	0.37	20.84	ppb
Molybdenum	96-1	0.50	0.35	0.37	0.41	20.86	ppb
Molybdenum	97-1	0.48	0.34	0.39	0.41	17.29	ppb
Molybdenum	98-1	0.45	0.34	0.34	0.38	17.23	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.05	0.00	-0.02	-0.02		ppb
Phosphorus	31-2	-8.51	-14.67	-11.88	-11.69		ppb
Potassium	39-2	8.20	6.76	9.42	8.13	16.40	ppb
Rhodium	103-1				104		%
Rhodium	103-2				110		%
Scandium	45-1				106		%
Scandium	45-2				111		%
Selenium	82-1	0.69	0.00	0.34	0.34	101.36	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.37	-0.04	-1.36	-0.59		ppb
Silicon	28-1	-6.27	-7.96	-7.67	-7.30		ppb
Silver	107-1	0.09	0.06	0.06	0.07	27.93	ppb
Silver	109-1	0.08	0.06	0.05	0.07	24.24	ppb
Sodium	23-2	99.18	96.57	97.33	97.69	1.37	ppb
Strontium	86-1	0.71	0.40	0.39	0.50	37.44	ppb
Strontium	88-1	0.82	0.36	0.32	0.50	55.21	ppb
Sulfur	34-1	-1390.86	-1477.23	-1359.42	-1409.17		ppb
Terbium	159-1				109		%
Terbium	159-2				112		%
Thallium	203-1	0.09	0.07	0.06	0.07	17.81	ppb
Thallium	205-1	0.10	0.06	0.06	0.08	27.98	ppb
Tin	118-1	0.08	0.09	0.13	0.10	26.96	ppb
Titanium	47-1	0.69	0.23	0.29	0.40	62.27	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:07:52	DataFile Name :	025CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.12	0.01	0.01	0.05	129.72	ppb
Vanadium	51-2	0.01	0.01	0.03	0.02	68.20	ppb
Yttrium	89-1				105		%
Yttrium	89-2				111		%
Zinc	66-2	0.53	0.58	0.51	0.54	7.06	ppb
Zirconium	90-1	0.18	0.14	0.14	0.15	15.12	ppb
Zirconium	91-1	0.14	0.16	0.16	0.15	8.11	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P7
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:11:51	DataFile Name :	026LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	19.78	17.44	20.12	19.12	7.63	ppb
Antimony	121-1	2.07	2.16	2.18	2.14	2.79	ppb
Arsenic	75-2	1.10	0.97	1.19	1.09	10.02	ppb
Barium	135-1	9.12	9.71	9.77	9.53	3.76	ppb
Barium	137-1	9.17	9.48	9.61	9.42	2.41	ppb
Beryllium	9-1	1.22	1.27	1.39	1.29	6.66	ppb
Bismuth	209-1				107		%
Bismuth	209-2				113		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.98	1.14	1.31	1.14	14.34	ppb
Cadmium	106-1	1.27	1.37	0.02	0.89	84.75	ppb
Cadmium	111-1	1.07	1.11	1.03	1.07	3.70	ppb
Calcium	43-1	538.23	529.83	529.97	532.68	0.90	ppb
Calcium	44-1	535.39	556.89	550.81	547.70	2.02	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.07	2.06	1.93	2.02	3.96	ppb
Cobalt	59-2	1.04	1.09	1.06	1.06	2.81	ppb
Copper	63-2	2.00	1.93	2.10	2.01	4.40	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				112		%
Indium	115-1				106		%
Indium	115-2				111		%
Iron	56-2	60.51	58.57	58.63	59.24	1.86	ppb
Iron	57-2	57.70	59.85	60.24	59.26	2.31	ppb
Iron	54-2	63.37	57.90	60.66	60.64	4.51	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P7
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:11:51	DataFile Name :	026LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.07	1.01	1.04	1.04	2.98	ppb
Lead	207-1	0.96	0.99	1.00	0.98	2.16	ppb
Lead	208-1	1.01	1.00	0.98	1.00	1.33	ppb
Lithium	6-1				108		%
Magnesium	24-2	537.07	523.51	529.81	530.13	1.28	ppb
Manganese	55-2	1.15	1.08	1.07	1.10	4.23	ppb
Molybdenum	94-1	6.16	6.53	6.30	6.33	2.91	ppb
Molybdenum	95-1	4.98	5.06	5.23	5.09	2.45	ppb
Molybdenum	96-1	4.92	5.38	5.00	5.10	4.83	ppb
Molybdenum	97-1	5.08	5.09	5.15	5.10	0.78	ppb
Molybdenum	98-1	4.90	5.13	5.18	5.07	2.94	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.07	1.01	1.00	1.02	3.49	ppb
Phosphorus	31-2	6.73	9.12	9.20	8.35	16.79	ppb
Potassium	39-2	538.94	509.92	518.86	522.57	2.84	ppb
Rhodium	103-1				104		%
Rhodium	103-2				111		%
Scandium	45-1				106		%
Scandium	45-2				111		%
Selenium	82-1	5.44	5.92	6.11	5.82	5.98	ppb
Selenium	77-2	5.11	6.18	2.28	4.52	44.59	ppb
Selenium	78-2	6.24	6.11	2.53	4.96	42.46	ppb
Silicon	28-1	-5.53	-1.89	-2.26	-3.23		ppb
Silver	107-1	1.01	1.03	1.03	1.02	1.36	ppb
Silver	109-1	1.00	1.07	1.06	1.04	3.78	ppb
Sodium	23-2	595.87	573.79	581.88	583.85	1.91	ppb
Strontium	86-1	1.11	1.14	1.03	1.10	5.23	ppb
Strontium	88-1	1.04	1.12	1.07	1.08	3.55	ppb
Sulfur	34-1	-1234.07	-957.83	-1078.74	-1090.22		ppb
Terbium	159-1				107		%
Terbium	159-2				113		%
Thallium	203-1	0.93	0.93	0.89	0.92	2.46	ppb
Thallium	205-1	0.90	0.93	0.89	0.91	2.53	ppb
Tin	118-1	4.59	5.14	5.05	4.92	6.00	ppb
Titanium	47-1	5.36	5.34	5.24	5.31	1.23	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P7
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:11:51	DataFile Name :	026LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.82	0.82	0.82	0.82	0.11	ppb
Vanadium	51-2	4.78	4.76	4.65	4.73	1.41	ppb
Yttrium	89-1				105		%
Yttrium	89-2				111		%
Zinc	66-2	5.63	4.80	5.12	5.19	8.05	ppb
Zirconium	90-1	1.06	1.15	1.09	1.10	3.96	ppb
Zirconium	91-1	0.98	1.19	1.07	1.08	9.43	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-02	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:25:28	DataFile Name :	027SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2539.80	2553.29	2549.19	2547.43	0.27	ppb
Antimony	121-1	811.82	788.67	789.12	796.54	1.66	ppb
Arsenic	75-2	544.34	533.76	545.65	541.25	1.20	ppb
Barium	135-1	604.38	590.38	608.52	601.09	1.58	ppb
Barium	137-1	602.25	590.15	601.76	598.05	1.14	ppb
Beryllium	9-1	300.28	298.46	300.52	299.75	0.38	ppb
Bismuth	209-1				108		%
Bismuth	209-2				111		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	363.69	352.22	349.73	355.21	2.10	ppb
Cadmium	106-1	338.08	318.63	330.48	329.06	2.98	ppb
Cadmium	111-1	405.37	396.46	405.94	402.59	1.32	ppb
Calcium	43-1	163.25	171.98	178.84	171.36	4.56	ppb
Calcium	44-1	88.43	89.03	90.69	89.38	1.31	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	561.25	566.09	561.85	563.06	0.47	ppb
Cobalt	59-2	179.84	181.30	180.59	180.58	0.41	ppb
Copper	63-2	651.33	662.27	658.04	657.21	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				108		%
Holmium	165-2				111		%
Indium	115-1				108		%
Indium	115-2				111		%
Iron	56-2	1477.70	1520.46	1483.85	1494.01	1.55	ppb
Iron	57-2	1359.12	1361.45	1377.98	1366.18	0.75	ppb
Iron	54-2	1955.77	1973.98	1974.46	1968.07	0.54	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-02	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:25:28	DataFile Name :	027SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	959.66	940.28	947.98	949.31	1.03	ppb
Lead	207-1	932.06	932.98	922.55	929.20	0.62	ppb
Lead	208-1	939.31	936.42	929.56	935.10	0.54	ppb
Lithium	6-1				109		%
Magnesium	24-2	2.67	2.05	2.46	2.40	13.17	ppb
Manganese	55-2	623.25	631.43	630.37	628.35	0.71	ppb
Molybdenum	94-1	441.81	440.35	446.73	442.96	0.75	ppb
Molybdenum	95-1	529.88	528.21	532.41	530.17	0.40	ppb
Molybdenum	96-1	515.93	519.55	523.63	519.70	0.74	ppb
Molybdenum	97-1	530.85	529.39	539.36	533.20	1.01	ppb
Molybdenum	98-1	529.99	524.88	530.09	528.32	0.56	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1600.51	1613.12	1615.89	1609.84	0.51	ppb
Phosphorus	31-2	-22.90	-21.39	-17.27	-20.52		ppb
Potassium	39-2	-17.08	-17.31	-19.44	-17.94		ppb
Rhodium	103-1				107		%
Rhodium	103-2				110		%
Scandium	45-1				108		%
Scandium	45-2				111		%
Selenium	82-1	479.85	484.37	487.40	483.87	0.78	ppb
Selenium	77-2	484.53	451.02	477.86	471.14	3.77	ppb
Selenium	78-2	458.52	465.11	454.75	459.46	1.14	ppb
Silicon	28-1	311.37	311.98	313.86	312.40	0.42	ppb
Silver	107-1	612.75	585.49	605.81	601.35	2.36	ppb
Silver	109-1	608.11	599.81	610.87	606.26	0.95	ppb
Sodium	23-2	92.39	94.81	95.41	94.20	1.70	ppb
Strontium	86-1	439.30	441.75	443.26	441.44	0.45	ppb
Strontium	88-1	444.55	437.02	447.43	443.00	1.21	ppb
Sulfur	34-1	-1249.11	-1549.28	-1558.23	-1452.21		ppb
Terbium	159-1				108		%
Terbium	159-2				112		%
Thallium	203-1	423.08	413.05	405.85	413.99	2.09	ppb
Thallium	205-1	422.25	415.54	405.90	414.57	1.98	ppb
Tin	118-1	0.34	0.36	0.29	0.33	10.58	ppb
Titanium	47-1	0.33	0.28	0.28	0.30	9.25	ppb

Reviewed By:Mohan
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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-02	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:25:28	DataFile Name :	027SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	93.81	ppb
Vanadium	51-2	1027.38	1034.28	1029.99	1030.55	0.34	ppb
Yttrium	89-1				108		%
Yttrium	89-2				111		%
Zinc	66-2	609.62	612.77	615.23	612.54	0.46	ppb
Zirconium	90-1	0.31	0.32	0.34	0.32	4.92	ppb
Zirconium	91-1	0.48	0.49	0.45	0.47	3.62	ppb

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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-04	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:28:38	DataFile Name :	028SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	73.50	75.05	73.59	74.05	1.17	ppb
Antimony	121-1	0.38	0.37	0.39	0.38	1.91	ppb
Arsenic	75-2	0.04	0.00	0.05	0.03	80.56	ppb
Barium	135-1	0.25	0.22	0.20	0.22	9.53	ppb
Barium	137-1	0.21	0.23	0.16	0.20	17.81	ppb
Beryllium	9-1	0.27	0.22	0.20	0.23	15.56	ppb
Bismuth	209-1				109		%
Bismuth	209-2				114		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.12	0.11	0.20	0.14	35.68	ppb
Cadmium	106-1	0.60	-1.24	-1.59	-0.74		ppb
Cadmium	111-1	0.07	-0.06	-0.11	-0.04		ppb
Calcium	43-1	2.82	1.38	-0.23	1.33	114.93	ppb
Calcium	44-1	8.98	9.37	8.08	8.81	7.50	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.05	0.05	0.04	0.05	12.23	ppb
Cobalt	59-2	0.04	0.04	0.04	0.04	4.42	ppb
Copper	63-2	0.13	0.12	0.18	0.14	20.67	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				111		%
Holmium	165-2				112		%
Indium	115-1				104		%
Indium	115-2				108		%
Iron	56-2	1.92	2.34	2.31	2.19	10.68	ppb
Iron	57-2	-2.08	-2.30	-2.98	-2.46		ppb
Iron	54-2	1.90	0.70	2.72	1.77	57.16	ppb
Krypton	83-1						cps

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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-04	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:28:38	DataFile Name :	028SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.18	0.19	0.20	0.19	3.43	ppb
Lead	207-1	0.17	0.17	0.17	0.17	1.64	ppb
Lead	208-1	0.20	0.19	0.17	0.19	9.28	ppb
Lithium	6-1				111		%
Magnesium	24-2	3.06	4.09	3.89	3.68	14.82	ppb
Manganese	55-2	0.07	0.11	0.07	0.09	28.01	ppb
Molybdenum	94-1	3.17	2.92	3.12	3.07	4.34	ppb
Molybdenum	95-1	0.07	0.08	0.06	0.07	10.42	ppb
Molybdenum	96-1	0.40	0.41	0.36	0.39	6.54	ppb
Molybdenum	97-1	0.09	0.05	0.05	0.07	37.24	ppb
Molybdenum	98-1	0.09	0.09	0.07	0.08	11.90	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.26	0.24	0.27	0.26	6.25	ppb
Phosphorus	31-2	-8.94	-16.79	-21.40	-15.71		ppb
Potassium	39-2	-16.83	-11.74	-14.92	-14.50		ppb
Rhodium	103-1				108		%
Rhodium	103-2				112		%
Scandium	45-1				109		%
Scandium	45-2				112		%
Selenium	82-1	-0.30	-0.13	0.64	0.07	735.33	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-1.11	0.57	0.43	-0.04		ppb
Silicon	28-1	1839.60	1845.69	1811.57	1832.29	0.99	ppb
Silver	107-1	0.13	0.10	0.07	0.10	31.22	ppb
Silver	109-1	0.13	0.08	0.07	0.10	34.51	ppb
Sodium	23-2	231.94	234.12	234.77	233.61	0.63	ppb
Strontium	86-1	0.04	0.04	0.04	0.04	3.34	ppb
Strontium	88-1	0.06	0.05	0.05	0.05	8.89	ppb
Sulfur	34-1	-1820.16	-2045.38	-2064.11	-1976.55		ppb
Terbium	159-1				108		%
Terbium	159-2				113		%
Thallium	203-1	0.08	0.09	0.07	0.08	6.87	ppb
Thallium	205-1	0.08	0.07	0.07	0.07	9.86	ppb
Tin	118-1	1303.80	1274.73	1281.45	1286.66	1.18	ppb
Titanium	47-1	97.49	97.72	96.13	97.11	0.89	ppb

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LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-04	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:28:38	DataFile Name :	028SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	32.75	ppb
Vanadium	51-2	0.06	0.03	0.04	0.04	31.90	ppb
Yttrium	89-1				110		%
Yttrium	89-2				112		%
Zinc	66-2	0.25	0.30	0.48	0.34	35.06	ppb
Zirconium	90-1	1.64	1.61	1.53	1.59	3.51	ppb
Zirconium	91-1	1.60	1.67	1.52	1.59	4.79	ppb

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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-06	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:32:00	DataFile Name :	029SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.36	-0.32	-0.19	-0.29		ppb
Antimony	121-1	0.19	0.12	0.08	0.13	46.68	ppb
Arsenic	75-2	0.10	0.06	0.04	0.07	46.02	ppb
Barium	135-1	0.29	0.34	0.25	0.29	14.86	ppb
Barium	137-1	0.24	0.30	0.24	0.26	13.77	ppb
Beryllium	9-1	0.12	0.12	0.09	0.11	16.42	ppb
Bismuth	209-1				143		%
Bismuth	209-2				145		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.03	-0.03	0.10	0.01	623.98	ppb
Cadmium	106-1	-1.07	-1.98	-1.12	-1.39		ppb
Cadmium	111-1	0.02	-0.09	-0.07	-0.05		ppb
Calcium	43-1	71049.10	82300.67	69808.81	74386.19	9.25	ppb
Calcium	44-1	66702.88	77504.21	65859.07	70022.05	9.27	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.09	-0.09	-0.07	-0.08		ppb
Cobalt	59-2	0.08	0.05	0.07	0.07	18.77	ppb
Copper	63-2	0.04	0.04	0.02	0.03	25.01	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				150		%
Holmium	165-2				148		%
Indium	115-1				146		%
Indium	115-2				144		%
Iron	56-2	-0.41	-0.26	-0.30	-0.32		ppb
Iron	57-2	360.09	378.84	379.15	372.69	2.93	ppb
Iron	54-2	-8.15	-7.56	-8.31	-8.01		ppb
Krypton	83-1						cps

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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-06	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:32:00	DataFile Name :	029SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.22	1.32	1.15	1.23	7.17	ppb
Lead	207-1	1.18	1.40	1.13	1.24	11.55	ppb
Lead	208-1	1.20	1.37	1.11	1.22	10.79	ppb
Lithium	6-1				140		%
Magnesium	24-2	27673.46	27937.62	27827.75	27812.94	0.48	ppb
Manganese	55-2	0.13	0.10	0.12	0.12	11.78	ppb
Molybdenum	94-1	0.59	0.71	0.60	0.63	10.24	ppb
Molybdenum	95-1	0.70	0.82	0.71	0.74	9.33	ppb
Molybdenum	96-1	0.71	0.85	0.70	0.76	10.93	ppb
Molybdenum	97-1	0.71	0.86	0.71	0.76	10.80	ppb
Molybdenum	98-1	0.74	0.84	0.71	0.76	8.59	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.00	0.03	0.02	0.02	78.42	ppb
Phosphorus	31-2	-31.88	-30.23	-32.75	-31.62		ppb
Potassium	39-2	21709.47	21837.50	21918.92	21821.97	0.48	ppb
Rhodium	103-1				142		%
Rhodium	103-2				145		%
Scandium	45-1				151		%
Scandium	45-2				149		%
Selenium	82-1	0.56	-0.39	0.68	0.28	209.24	ppb
Selenium	77-2	0.00	0.43	0.00	0.14	173.21	ppb
Selenium	78-2	-2.44	-0.98	0.08	-1.11		ppb
Silicon	28-1	-50.98	-42.26	-49.61	-47.62		ppb
Silver	107-1	0.02	0.02	0.02	0.02	5.56	ppb
Silver	109-1	0.01	0.02	0.01	0.01	13.94	ppb
Sodium	23-2	85530.67	86714.65	86548.37	86264.56	0.74	ppb
Strontium	86-1	6.63	8.09	6.79	7.17	11.19	ppb
Strontium	88-1	6.73	7.97	6.77	7.16	9.81	ppb
Sulfur	34-1	-4116.38	-2995.30	-3431.13	-3514.27		ppb
Terbium	159-1				148		%
Terbium	159-2				148		%
Thallium	203-1	0.60	0.42	0.23	0.42	44.12	ppb
Thallium	205-1	0.65	0.41	0.22	0.43	50.79	ppb
Tin	118-1	0.41	0.30	0.12	0.28	51.49	ppb
Titanium	47-1	-0.02	0.00	-0.02	-0.01		ppb

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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-06	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:32:00	DataFile Name :	029SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	36.33	ppb
Vanadium	51-2	0.00	0.00	0.01	0.00	71.28	ppb
Yttrium	89-1				148		%
Yttrium	89-2				146		%
Zinc	66-2	0.87	0.84	0.73	0.82	9.10	ppb
Zirconium	90-1	-0.01	0.00	0.00	0.00		ppb
Zirconium	91-1	-0.01	-0.01	0.00	-0.01		ppb

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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-02	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:35:16	DataFile Name :	030SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2605.47	2581.15	2636.73	2607.78	1.07	ppb
Antimony	121-1	788.50	813.54	815.56	805.87	1.87	ppb
Arsenic	75-2	551.46	544.74	553.50	549.90	0.83	ppb
Barium	135-1	604.12	613.50	615.96	611.19	1.02	ppb
Barium	137-1	600.19	608.63	615.41	608.08	1.25	ppb
Beryllium	9-1	296.77	304.71	307.21	302.90	1.80	ppb
Bismuth	209-1				106		%
Bismuth	209-2				110		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	352.48	352.26	358.40	354.38	0.98	ppb
Cadmium	106-1	336.64	342.02	342.13	340.26	0.92	ppb
Cadmium	111-1	404.25	407.96	415.24	409.15	1.37	ppb
Calcium	43-1	189.12	172.92	175.88	179.31	4.81	ppb
Calcium	44-1	87.87	88.46	87.99	88.11	0.35	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	569.17	571.84	579.59	573.53	0.94	ppb
Cobalt	59-2	183.54	184.05	186.12	184.57	0.74	ppb
Copper	63-2	668.30	670.48	675.94	671.57	0.59	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				108		%
Indium	115-1				103		%
Indium	115-2				107		%
Iron	56-2	1528.14	1512.34	1518.17	1519.55	0.53	ppb
Iron	57-2	1386.15	1405.44	1410.02	1400.54	0.90	ppb
Iron	54-2	2001.57	2010.26	2034.24	2015.36	0.84	ppb
Krypton	83-1						cps

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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-02	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:35:16	DataFile Name :	030SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	947.28	972.68	981.89	967.28	1.85	ppb
Lead	207-1	915.00	933.30	942.86	930.39	1.52	ppb
Lead	208-1	928.97	948.89	958.89	945.58	1.61	ppb
Lithium	6-1				105		%
Magnesium	24-2	2.87	2.17	2.67	2.57	14.00	ppb
Manganese	55-2	641.35	638.64	647.04	642.34	0.67	ppb
Molybdenum	94-1	448.73	449.32	447.91	448.65	0.16	ppb
Molybdenum	95-1	538.94	536.03	535.18	536.72	0.37	ppb
Molybdenum	96-1	526.41	526.61	528.93	527.32	0.27	ppb
Molybdenum	97-1	541.82	539.90	542.04	541.25	0.22	ppb
Molybdenum	98-1	536.27	540.14	534.52	536.97	0.54	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1629.02	1656.17	1660.06	1648.42	1.03	ppb
Phosphorus	31-2	-11.37	-18.47	-14.60	-14.81		ppb
Potassium	39-2	-11.38	-6.00	-6.92	-8.10		ppb
Rhodium	103-1				101		%
Rhodium	103-2				107		%
Scandium	45-1				103		%
Scandium	45-2				106		%
Selenium	82-1	500.80	498.41	490.78	496.66	1.05	ppb
Selenium	77-2	468.36	466.39	464.98	466.58	0.36	ppb
Selenium	78-2	489.51	487.95	477.63	485.03	1.33	ppb
Silicon	28-1	308.96	313.74	314.74	312.48	0.99	ppb
Silver	107-1	594.75	606.82	607.48	603.01	1.19	ppb
Silver	109-1	598.21	607.68	615.58	607.15	1.43	ppb
Sodium	23-2	98.96	101.80	101.57	100.78	1.57	ppb
Strontium	86-1	447.68	448.38	446.96	447.67	0.16	ppb
Strontium	88-1	453.20	454.77	451.98	453.32	0.31	ppb
Sulfur	34-1	-659.25	-1002.90	-1359.48	-1007.21		ppb
Terbium	159-1				105		%
Terbium	159-2				111		%
Thallium	203-1	412.56	417.38	422.09	417.34	1.14	ppb
Thallium	205-1	411.61	416.17	425.64	417.81	1.71	ppb
Tin	118-1	0.36	0.37	0.40	0.38	5.97	ppb
Titanium	47-1	0.20	0.30	0.23	0.24	21.25	ppb

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On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-02	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:35:16	DataFile Name :	030SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	82.82	ppb
Vanadium	51-2	1031.40	1028.19	1053.90	1037.83	1.35	ppb
Yttrium	89-1				103		%
Yttrium	89-2				107		%
Zinc	66-2	623.39	623.97	625.88	624.41	0.21	ppb
Zirconium	90-1	0.30	0.29	0.28	0.29	3.73	ppb
Zirconium	91-1	0.45	0.47	0.41	0.45	6.17	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-04	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:38:28	DataFile Name :	031SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	73.44	74.51	74.49	74.15	0.82	ppb
Antimony	121-1	0.35	0.36	0.40	0.37	7.12	ppb
Arsenic	75-2	0.13	0.02	0.02	0.06	105.58	ppb
Barium	135-1	0.22	0.20	0.17	0.20	11.76	ppb
Barium	137-1	0.20	0.25	0.18	0.21	16.88	ppb
Beryllium	9-1	0.34	0.28	0.20	0.27	25.93	ppb
Bismuth	209-1				104		%
Bismuth	209-2				111		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.07	0.12	0.16	0.12	38.49	ppb
Cadmium	106-1	0.63	-0.23	-0.52	-0.04		ppb
Cadmium	111-1	0.07	0.01	-0.02	0.02	277.06	ppb
Calcium	43-1	-0.16	5.21	0.80	1.95	146.89	ppb
Calcium	44-1	10.70	9.39	8.84	9.64	9.90	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.01	0.07	0.06	0.05	68.02	ppb
Cobalt	59-2	0.04	0.04	0.06	0.05	25.12	ppb
Copper	63-2	0.16	0.18	0.23	0.19	18.81	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				106		%
Holmium	165-2				109		%
Indium	115-1				101		%
Indium	115-2				103		%
Iron	56-2	1.88	1.80	1.85	1.84	2.03	ppb
Iron	57-2	-0.39	-0.49	-1.78	-0.89		ppb
Iron	54-2	2.08	1.50	2.16	1.91	18.99	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-04	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:38:28	DataFile Name :	031SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.24	0.18	0.19	0.20	15.19	ppb
Lead	207-1	0.21	0.19	0.18	0.19	8.11	ppb
Lead	208-1	0.22	0.18	0.19	0.20	10.54	ppb
Lithium	6-1				105		%
Magnesium	24-2	2.82	2.92	3.09	2.94	4.72	ppb
Manganese	55-2	0.06	0.09	0.11	0.09	32.35	ppb
Molybdenum	94-1	2.90	2.93	2.97	2.93	1.07	ppb
Molybdenum	95-1	0.09	0.07	0.04	0.06	41.70	ppb
Molybdenum	96-1	0.41	0.37	0.42	0.40	7.04	ppb
Molybdenum	97-1	0.07	0.06	0.06	0.06	6.80	ppb
Molybdenum	98-1	0.07	0.06	0.06	0.06	8.69	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.33	0.27	0.20	0.26	24.72	ppb
Phosphorus	31-2	-19.39	-9.45	-17.93	-15.59		ppb
Potassium	39-2	-8.85	-6.37	-10.05	-8.42		ppb
Rhodium	103-1				103		%
Rhodium	103-2				108		%
Scandium	45-1				104		%
Scandium	45-2				107		%
Selenium	82-1	1.26	0.65	0.29	0.73	66.90	ppb
Selenium	77-2	0.58	1.17	0.00	0.58	100.36	ppb
Selenium	78-2	1.99	1.53	-0.06	1.15	93.33	ppb
Silicon	28-1	1872.92	1858.09	1874.10	1868.37	0.48	ppb
Silver	107-1	0.12	0.08	0.07	0.09	32.40	ppb
Silver	109-1	0.11	0.07	0.06	0.08	32.34	ppb
Sodium	23-2	248.77	251.88	249.64	250.09	0.64	ppb
Strontium	86-1	0.07	0.06	0.05	0.06	12.07	ppb
Strontium	88-1	0.06	0.06	0.05	0.06	10.16	ppb
Sulfur	34-1	-1603.12	-1676.56	-1509.72	-1596.46		ppb
Terbium	159-1				105		%
Terbium	159-2				110		%
Thallium	203-1	0.06	0.05	0.06	0.06	10.38	ppb
Thallium	205-1	0.07	0.07	0.06	0.07	11.93	ppb
Tin	118-1	1327.63	1322.07	1301.09	1316.93	1.06	ppb
Titanium	47-1	98.54	96.36	98.80	97.90	1.37	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-04	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:38:28	DataFile Name :	031SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	21.76	ppb
Vanadium	51-2	0.04	0.05	0.05	0.05	9.67	ppb
Yttrium	89-1				104		%
Yttrium	89-2				108		%
Zinc	66-2	0.38	0.26	0.34	0.33	17.60	ppb
Zirconium	90-1	1.64	1.57	1.66	1.62	3.03	ppb
Zirconium	91-1	1.59	1.65	1.68	1.64	2.89	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-06	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:41:49	DataFile Name :	032SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.27	-0.29	-0.52	-0.36		ppb
Antimony	121-1	0.08	0.06	0.05	0.06	23.66	ppb
Arsenic	75-2	0.03	0.03	0.04	0.03	24.43	ppb
Barium	135-1	0.25	0.27	0.31	0.28	11.05	ppb
Barium	137-1	0.25	0.22	0.31	0.26	17.95	ppb
Beryllium	9-1	0.09	0.13	0.13	0.12	18.09	ppb
Bismuth	209-1				145		%
Bismuth	209-2				141		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.00	0.10	-0.06	0.01	798.79	ppb
Cadmium	106-1	-0.30	-1.85	-0.94	-1.03		ppb
Cadmium	111-1	0.03	-0.11	-0.06	-0.05		ppb
Calcium	43-1	71357.58	71565.85	72043.14	71655.52	0.49	ppb
Calcium	44-1	66428.34	68599.07	68447.36	67824.93	1.79	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.07	-0.07	-0.08	-0.07		ppb
Cobalt	59-2	0.06	0.08	0.08	0.07	11.00	ppb
Copper	63-2	0.03	0.00	0.09	0.04	108.18	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				153		%
Holmium	165-2				146		%
Indium	115-1				148		%
Indium	115-2				142		%
Iron	56-2	-0.58	-0.35	-0.50	-0.48		ppb
Iron	57-2	378.77	386.99	389.27	385.01	1.44	ppb
Iron	54-2	-8.64	-7.65	-8.87	-8.39		ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-06	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:41:49	DataFile Name :	032SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.71	0.66	0.67	0.68	3.65	ppb
Lead	207-1	0.67	0.63	0.63	0.64	3.56	ppb
Lead	208-1	0.69	0.63	0.63	0.65	5.06	ppb
Lithium	6-1				144		%
Magnesium	24-2	28159.96	28161.94	28555.36	28292.42	0.80	ppb
Manganese	55-2	0.09	0.07	0.10	0.09	18.25	ppb
Molybdenum	94-1	0.64	0.65	0.61	0.64	3.41	ppb
Molybdenum	95-1	0.72	0.71	0.65	0.69	5.96	ppb
Molybdenum	96-1	0.69	0.75	0.64	0.69	7.71	ppb
Molybdenum	97-1	0.75	0.76	0.74	0.75	0.85	ppb
Molybdenum	98-1	0.78	0.71	0.72	0.74	4.52	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.05	0.03	0.02	0.03	50.36	ppb
Phosphorus	31-2	-34.31	-27.97	-27.34	-29.87		ppb
Potassium	39-2	21908.04	22026.17	22068.49	22000.90	0.38	ppb
Rhodium	103-1				144		%
Rhodium	103-2				141		%
Scandium	45-1				153		%
Scandium	45-2				146		%
Selenium	82-1	0.04	0.63	0.29	0.32	94.04	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-1.75	-0.80	-1.02	-1.19		ppb
Silicon	28-1	-51.18	-49.31	-48.43	-49.64		ppb
Silver	107-1	0.01	0.01	0.01	0.01	6.08	ppb
Silver	109-1	0.01	0.01	0.01	0.01	7.10	ppb
Sodium	23-2	85959.38	87654.76	88821.17	87478.44	1.64	ppb
Strontium	86-1	6.82	6.85	7.00	6.89	1.41	ppb
Strontium	88-1	6.96	6.81	6.85	6.87	1.08	ppb
Sulfur	34-1	-4087.49	-3623.16	-3260.16	-3656.94		ppb
Terbium	159-1				151		%
Terbium	159-2				147		%
Thallium	203-1	0.18	0.09	0.09	0.12	42.55	ppb
Thallium	205-1	0.17	0.09	0.08	0.11	42.94	ppb
Tin	118-1	0.11	0.08	0.04	0.07	47.86	ppb
Titanium	47-1	-0.01	-0.03	-0.02	-0.02		ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-06	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:41:49	DataFile Name :	032SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	86.42	ppb
Vanadium	51-2	0.01	0.01	0.00	0.01	67.42	ppb
Yttrium	89-1				151		%
Yttrium	89-2				142		%
Zinc	66-2	0.67	0.49	0.48	0.55	19.68	ppb
Zirconium	90-1	0.00	-0.01	0.00	0.00		ppb
Zirconium	91-1	-0.01	0.00	-0.01	-0.01		ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-02DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 18:45:08	DataFile Name :	033SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1313.85	1316.70	1298.93	1309.83	0.73	ppb
Antimony	121-1	395.98	398.68	399.60	398.09	0.47	ppb
Arsenic	75-2	277.74	271.05	272.94	273.91	1.26	ppb
Barium	135-1	300.00	301.89	298.61	300.17	0.55	ppb
Barium	137-1	299.33	303.79	302.30	301.80	0.75	ppb
Beryllium	9-1	147.38	151.17	148.65	149.07	1.29	ppb
Bismuth	209-1				103		%
Bismuth	209-2				110		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	180.01	173.97	174.46	176.15	1.91	ppb
Cadmium	106-1	165.05	166.90	164.07	165.34	0.87	ppb
Cadmium	111-1	200.89	204.15	200.34	201.79	1.02	ppb
Calcium	43-1	96.82	81.94	89.84	89.53	8.32	ppb
Calcium	44-1	49.04	47.71	45.86	47.54	3.36	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	285.61	293.27	282.93	287.27	1.87	ppb
Cobalt	59-2	91.22	92.79	90.50	91.50	1.28	ppb
Copper	63-2	336.58	336.73	332.13	335.15	0.78	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				109		%
Indium	115-1				103		%
Indium	115-2				107		%
Iron	56-2	797.20	806.76	787.30	797.09	1.22	ppb
Iron	57-2	689.48	708.51	687.11	695.04	1.69	ppb
Iron	54-2	1004.58	1014.54	1010.18	1009.77	0.49	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-02DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 18:45:08	DataFile Name :	033SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	425.12	440.81	445.49	437.14	2.44	ppb
Lead	207-1	407.16	423.32	425.09	418.52	2.36	ppb
Lead	208-1	438.82	457.06	459.26	451.72	2.48	ppb
Lithium	6-1				106		%
Magnesium	24-2	3.05	2.23	2.50	2.60	16.05	ppb
Manganese	55-2	320.00	324.63	320.53	321.72	0.79	ppb
Molybdenum	94-1	221.15	225.92	228.08	225.05	1.58	ppb
Molybdenum	95-1	263.91	268.38	270.92	267.74	1.33	ppb
Molybdenum	96-1	259.26	265.01	265.72	263.33	1.34	ppb
Molybdenum	97-1	263.44	271.56	272.77	269.26	1.88	ppb
Molybdenum	98-1	263.48	269.20	272.68	268.45	1.73	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	824.48	831.71	811.76	822.65	1.23	ppb
Phosphorus	31-2	-14.77	-23.20	-17.82	-18.59		ppb
Potassium	39-2	-7.54	-6.29	-12.02	-8.62		ppb
Rhodium	103-1				101		%
Rhodium	103-2				107		%
Scandium	45-1				103		%
Scandium	45-2				106		%
Selenium	82-1	243.16	245.39	250.68	246.41	1.57	ppb
Selenium	77-2	249.50	211.72	211.21	224.15	9.80	ppb
Selenium	78-2	227.24	230.20	228.68	228.70	0.65	ppb
Silicon	28-1	157.45	153.92	151.95	154.44	1.81	ppb
Silver	107-1	294.22	295.99	291.44	293.88	0.78	ppb
Silver	109-1	295.22	295.78	292.45	294.48	0.60	ppb
Sodium	23-2	86.41	85.54	83.21	85.05	1.95	ppb
Strontium	86-1	221.27	224.68	226.76	224.24	1.24	ppb
Strontium	88-1	224.70	226.69	229.81	227.06	1.14	ppb
Sulfur	34-1	-420.48	-849.79	-993.56	-754.61		ppb
Terbium	159-1				104		%
Terbium	159-2				109		%
Thallium	203-1	185.74	191.32	192.78	189.95	1.96	ppb
Thallium	205-1	208.29	213.67	211.67	211.21	1.29	ppb
Tin	118-1	0.24	0.25	0.25	0.25	3.79	ppb
Titanium	47-1	0.20	0.20	0.17	0.19	8.62	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-02DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 18:45:08	DataFile Name :	033SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	79.58	ppb
Vanadium	51-2	525.42	536.54	530.83	530.93	1.05	ppb
Yttrium	89-1				103		%
Yttrium	89-2				106		%
Zinc	66-2	312.68	312.57	306.64	310.63	1.11	ppb
Zirconium	90-1	0.16	0.17	0.17	0.17	4.13	ppb
Zirconium	91-1	0.22	0.25	0.25	0.24	8.18	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-04DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 18:48:27	DataFile Name :	034SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	39.24	38.89	36.96	38.36	3.20	ppb
Antimony	121-1	0.24	0.23	0.27	0.25	9.62	ppb
Arsenic	75-2	-0.01	0.07	0.06	0.04	116.92	ppb
Barium	135-1	0.12	0.13	0.12	0.12	5.80	ppb
Barium	137-1	0.15	0.13	0.14	0.14	4.94	ppb
Beryllium	9-1	0.21	0.15	0.12	0.16	27.36	ppb
Bismuth	209-1				104		%
Bismuth	209-2				111		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.03	0.12	0.07	0.07	62.71	ppb
Cadmium	106-1	0.04	-0.39	-1.60	-0.65		ppb
Cadmium	111-1	0.02	-0.02	-0.11	-0.04		ppb
Calcium	43-1	7.18	-0.30	3.80	3.56	105.37	ppb
Calcium	44-1	8.53	8.30	6.49	7.77	14.35	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.08	0.00	0.04	0.04	108.40	ppb
Cobalt	59-2	0.04	0.04	0.03	0.04	8.89	ppb
Copper	63-2	0.16	0.10	0.14	0.13	23.29	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				109		%
Indium	115-1				104		%
Indium	115-2				107		%
Iron	56-2	0.94	0.87	0.93	0.91	3.88	ppb
Iron	57-2	-3.00	-1.34	-0.42	-1.59		ppb
Iron	54-2	0.66	-0.03	1.06	0.57	97.15	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-04DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 18:48:27	DataFile Name :	034SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.13	0.14	0.12	0.13	7.84	ppb
Lead	207-1	0.13	0.12	0.12	0.12	6.58	ppb
Lead	208-1	0.15	0.13	0.12	0.13	8.87	ppb
Lithium	6-1				106		%
Magnesium	24-2	1.90	2.56	2.34	2.27	14.78	ppb
Manganese	55-2	0.08	0.08	0.06	0.07	14.41	ppb
Molybdenum	94-1	1.60	1.49	1.53	1.54	3.55	ppb
Molybdenum	95-1	0.03	0.06	0.06	0.05	30.79	ppb
Molybdenum	96-1	0.22	0.20	0.17	0.20	11.20	ppb
Molybdenum	97-1	0.06	0.07	0.07	0.06	6.72	ppb
Molybdenum	98-1	0.06	0.04	0.06	0.05	23.78	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.15	0.04	0.09	0.09	56.67	ppb
Phosphorus	31-2	-16.02	-23.02	-21.46	-20.17		ppb
Potassium	39-2	-12.16	-11.67	-12.00	-11.95		ppb
Rhodium	103-1				104		%
Rhodium	103-2				109		%
Scandium	45-1				104		%
Scandium	45-2				108		%
Selenium	82-1	0.13	-0.03	0.38	0.16	130.43	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.51	-0.11	-0.26	-0.29		ppb
Silicon	28-1	926.03	928.52	927.49	927.34	0.13	ppb
Silver	107-1	0.07	0.07	0.05	0.06	20.28	ppb
Silver	109-1	0.09	0.05	0.05	0.06	34.43	ppb
Sodium	23-2	141.13	141.55	145.48	142.72	1.68	ppb
Strontium	86-1	0.07	0.05	0.08	0.07	29.60	ppb
Strontium	88-1	0.03	0.03	0.03	0.03	1.27	ppb
Sulfur	34-1	-1560.79	-1636.85	-1820.02	-1672.56		ppb
Terbium	159-1				107		%
Terbium	159-2				111		%
Thallium	203-1	0.04	0.04	0.03	0.04	11.68	ppb
Thallium	205-1	0.04	0.05	0.04	0.04	10.53	ppb
Tin	118-1	647.26	665.41	639.62	650.76	2.04	ppb
Titanium	47-1	48.06	48.57	48.45	48.36	0.56	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-04DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 18:48:27	DataFile Name :	034SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	80.71	ppb
Vanadium	51-2	0.05	0.04	0.04	0.04	13.23	ppb
Yttrium	89-1				103		%
Yttrium	89-2				109		%
Zinc	66-2	0.24	0.24	0.19	0.22	11.80	ppb
Zirconium	90-1	0.79	0.82	0.84	0.82	2.97	ppb
Zirconium	91-1	0.82	0.85	0.81	0.82	2.94	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-06DLX5	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WPDL	Dilution Factor :	5
Date & Time Acquired :	2024-10-17 18:51:49	DataFile Name :	035SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.25	0.85	1.28	1.13	21.46	ppb
Antimony	121-1	0.06	0.06	0.08	0.06	15.46	ppb
Arsenic	75-2	-0.01	0.02	0.02	0.01	199.01	ppb
Barium	135-1	0.06	0.08	0.07	0.07	15.75	ppb
Barium	137-1	0.07	0.09	0.08	0.08	9.94	ppb
Beryllium	9-1	0.17	0.14	0.16	0.16	10.26	ppb
Bismuth	209-1				109		%
Bismuth	209-2				112		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.06	-0.02	0.07	-0.01		ppb
Cadmium	106-1	-0.94	0.68	-2.56	-0.94		ppb
Cadmium	111-1	-0.06	0.06	-0.19	-0.07		ppb
Calcium	43-1	14227.82	14206.72	14363.47	14266.00	0.60	ppb
Calcium	44-1	13332.10	13484.33	13749.76	13522.06	1.56	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.03	-0.03	-0.01	-0.03		ppb
Cobalt	59-2	0.02	0.02	0.01	0.02	22.97	ppb
Copper	63-2	-0.05	0.01	0.00	-0.01		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				110		%
Holmium	165-2				112		%
Indium	115-1				109		%
Indium	115-2				111		%
Iron	56-2	0.22	0.22	0.16	0.20	18.12	ppb
Iron	57-2	76.53	72.04	73.59	74.05	3.08	ppb
Iron	54-2	-3.30	-0.87	-2.48	-2.22		ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-06DLX5	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WPDL	Dilution Factor :	5
Date & Time Acquired :	2024-10-17 18:51:49	DataFile Name :	035SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.12	0.07	0.07	0.09	28.92	ppb
Lead	207-1	0.10	0.08	0.09	0.09	8.97	ppb
Lead	208-1	0.11	0.09	0.09	0.09	12.35	ppb
Lithium	6-1				109		%
Magnesium	24-2	5690.89	5707.90	5722.95	5707.25	0.28	ppb
Manganese	55-2	0.04	0.04	0.02	0.03	33.34	ppb
Molybdenum	94-1	0.14	0.16	0.16	0.15	8.65	ppb
Molybdenum	95-1	0.16	0.17	0.16	0.16	4.07	ppb
Molybdenum	96-1	0.16	0.18	0.18	0.17	8.34	ppb
Molybdenum	97-1	0.14	0.20	0.20	0.18	19.90	ppb
Molybdenum	98-1	0.16	0.17	0.16	0.16	4.73	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.03	0.01	0.00	0.00		ppb
Phosphorus	31-2	-19.46	-18.63	-18.44	-18.84		ppb
Potassium	39-2	4582.05	4585.86	4604.72	4590.87	0.26	ppb
Rhodium	103-1				106		%
Rhodium	103-2				110		%
Scandium	45-1				109		%
Scandium	45-2				111		%
Selenium	82-1	0.38	-0.22	-0.05	0.04	785.60	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.40	1.29	0.52	0.47	181.37	ppb
Silicon	28-1	-18.44	-19.00	-16.55	-18.00		ppb
Silver	107-1	0.02	0.01	0.01	0.01	31.71	ppb
Silver	109-1	0.01	0.02	0.01	0.01	25.23	ppb
Sodium	23-2	16855.42	17009.54	17062.55	16975.84	0.63	ppb
Strontium	86-1	1.48	1.40	1.39	1.42	3.35	ppb
Strontium	88-1	1.38	1.35	1.34	1.36	1.34	ppb
Sulfur	34-1	-1678.66	-1525.19	-1357.69	-1520.51		ppb
Terbium	159-1				111		%
Terbium	159-2				112		%
Thallium	203-1	0.03	0.03	0.02	0.03	14.23	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	2.74	ppb
Tin	118-1	0.11	0.12	0.15	0.13	17.82	ppb
Titanium	47-1	0.01	0.03	0.09	0.04	96.58	ppb

Reviewed By:Mohan
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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-06DLX5	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WPDL	Dilution Factor :	5
Date & Time Acquired :	2024-10-17 18:51:49	DataFile Name :	035SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00		ppb
Vanadium	51-2	0.00	0.01	0.01	0.01	47.47	ppb
Yttrium	89-1				109		%
Yttrium	89-2				111		%
Zinc	66-2	0.03	0.19	-0.04	0.06	206.40	ppb
Zirconium	90-1	0.01	0.00	0.00	0.00	128.49	ppb
Zirconium	91-1	-0.01	0.01	0.00	0.00	2009.37	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:55:08	DataFile Name :	036CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	47877.20	48054.39	48654.70	48195.43	0.85	ppb
Antimony	121-1	464.21	483.75	493.21	480.39	3.08	ppb
Arsenic	75-2	456.26	450.02	453.42	453.23	0.69	ppb
Barium	135-1	2383.24	2420.18	2498.95	2434.12	2.43	ppb
Barium	137-1	2343.69	2411.62	2452.50	2402.61	2.29	ppb
Beryllium	9-1	474.18	482.42	492.73	483.11	1.92	ppb
Bismuth	209-1				94		%
Bismuth	209-2				88		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	460.62	479.02	479.20	472.95	2.26	ppb
Cadmium	106-1	456.42	473.74	472.32	467.50	2.06	ppb
Cadmium	111-1	450.76	468.78	473.64	464.39	2.60	ppb
Calcium	43-1	236714.37	241380.58	256072.75	244722.57	4.13	ppb
Calcium	44-1	234237.84	241570.15	251629.92	242479.30	3.60	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	469.02	458.25	464.60	463.95	1.17	ppb
Cobalt	59-2	495.19	492.36	492.64	493.40	0.32	ppb
Copper	63-2	4900.00	4754.81	4869.45	4841.42	1.58	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				103		%
Holmium	165-2				105		%
Indium	115-1				95		%
Indium	115-2				97		%
Iron	56-2	123881.96	123512.61	124641.08	124011.88	0.46	ppb
Iron	57-2	125492.67	124865.83	126193.73	125517.41	0.53	ppb
Iron	54-2	124228.99	123127.50	125135.30	124163.93	0.81	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:55:08	DataFile Name :	036CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2391.13	2443.50	2480.61	2438.41	1.84	ppb
Lead	207-1	2382.11	2452.47	2482.63	2439.07	2.11	ppb
Lead	208-1	2385.50	2449.30	2498.96	2444.59	2.33	ppb
Lithium	6-1				99		%
Magnesium	24-2	239560.13	237775.19	240908.81	239414.71	0.66	ppb
Manganese	55-2	4530.45	4526.46	4583.42	4546.77	0.70	ppb
Molybdenum	94-1	5223.74	5265.53	5294.06	5261.11	0.67	ppb
Molybdenum	95-1	5217.69	5310.29	5245.14	5257.70	0.90	ppb
Molybdenum	96-1	5173.12	5342.11	5284.16	5266.46	1.63	ppb
Molybdenum	97-1	5198.53	5322.57	5342.32	5287.81	1.47	ppb
Molybdenum	98-1	5173.36	5275.71	5300.05	5249.71	1.28	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	487.20	484.44	486.08	485.91	0.29	ppb
Phosphorus	31-2	9287.16	9080.57	9077.04	9148.25	1.32	ppb
Potassium	39-2	120707.55	120379.76	121832.36	120973.22	0.63	ppb
Rhodium	103-1				91		%
Rhodium	103-2				94		%
Scandium	45-1				99		%
Scandium	45-2				102		%
Selenium	82-1	450.16	465.47	465.53	460.39	1.92	ppb
Selenium	77-2	437.57	425.71	451.60	438.29	2.96	ppb
Selenium	78-2	449.91	442.68	450.74	447.78	0.99	ppb
Silicon	28-1	479.98	496.20	527.23	501.14	4.79	ppb
Silver	107-1	453.61	463.61	474.02	463.75	2.20	ppb
Silver	109-1	456.57	477.91	471.80	468.76	2.34	ppb
Sodium	23-2	244673.01	243250.62	241653.41	243192.35	0.62	ppb
Strontium	86-1	11740.78	11898.30	12164.44	11934.51	1.79	ppb
Strontium	88-1	11742.53	12009.98	12073.15	11941.89	1.47	ppb
Sulfur	34-1	8595.12	9177.85	9862.04	9211.67	6.88	ppb
Terbium	159-1				103		%
Terbium	159-2				107		%
Thallium	203-1	472.05	493.15	500.20	488.47	3.00	ppb
Thallium	205-1	485.31	488.50	501.71	491.84	1.77	ppb
Tin	118-1	486.78	496.00	501.92	494.90	1.54	ppb
Titanium	47-1	5162.59	5279.98	5517.89	5320.15	3.40	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:55:08	DataFile Name :	036CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	490.00	505.13	507.00	500.71	1.86	ppb
Vanadium	51-2	458.09	453.11	458.09	456.43	0.63	ppb
Yttrium	89-1				100		%
Yttrium	89-2				102		%
Zinc	66-2	4779.36	4751.38	4779.71	4770.15	0.34	ppb
Zirconium	90-1	471.90	483.91	487.99	481.27	1.74	ppb
Zirconium	91-1	476.00	483.39	485.56	481.65	1.04	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:58:04	DataFile Name :	037CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.03	1.91	0.92	1.29	42.45	ppb
Antimony	121-1	0.36	0.34	0.43	0.38	12.37	ppb
Arsenic	75-2	0.06	0.11	0.06	0.08	41.85	ppb
Barium	135-1	0.14	0.08	0.05	0.09	47.39	ppb
Barium	137-1	0.14	0.07	0.08	0.10	39.69	ppb
Beryllium	9-1	0.36	0.34	0.26	0.32	15.88	ppb
Bismuth	209-1				105		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.07	-0.02	0.07	0.04	123.12	ppb
Cadmium	106-1	0.68	-1.61	1.05	0.04	3555.71	ppb
Cadmium	111-1	0.06	-0.08	0.12	0.03	318.74	ppb
Calcium	43-1	6.76	7.01	3.98	5.92	28.47	ppb
Calcium	44-1	12.40	7.54	5.86	8.60	39.56	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.04	0.03	0.00	0.02	80.51	ppb
Cobalt	59-2	0.04	0.04	0.04	0.04	10.00	ppb
Copper	63-2	0.22	0.33	0.29	0.28	20.79	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				104		%
Indium	115-1				104		%
Indium	115-2				102		%
Iron	56-2	5.24	6.36	5.10	5.57	12.38	ppb
Iron	57-2	1.27	2.34	0.88	1.49	50.54	ppb
Iron	54-2	3.69	6.28	4.61	4.86	26.96	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:58:04	DataFile Name :	037CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.25	0.22	0.17	0.22	17.75	ppb
Lead	207-1	0.22	0.19	0.18	0.20	12.76	ppb
Lead	208-1	0.26	0.21	0.19	0.22	16.80	ppb
Lithium	6-1				105		%
Magnesium	24-2	8.84	11.58	9.38	9.93	14.61	ppb
Manganese	55-2	0.18	0.22	0.19	0.20	9.54	ppb
Molybdenum	94-1	0.66	0.50	0.47	0.55	18.58	ppb
Molybdenum	95-1	0.45	0.39	0.31	0.39	18.31	ppb
Molybdenum	96-1	0.50	0.37	0.37	0.41	17.85	ppb
Molybdenum	97-1	0.39	0.37	0.32	0.36	10.10	ppb
Molybdenum	98-1	0.43	0.36	0.30	0.37	18.19	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.00	-0.02	-0.04	-0.02		ppb
Phosphorus	31-2	-16.99	-12.88	-22.44	-17.44		ppb
Potassium	39-2	2.90	36.86	-2.05	12.57	168.56	ppb
Rhodium	103-1				101		%
Rhodium	103-2				101		%
Scandium	45-1				104		%
Scandium	45-2				102		%
Selenium	82-1	0.10	0.36	0.05	0.17	97.83	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	1.38	1.56	-0.38	0.85	125.20	ppb
Silicon	28-1	-11.49	-13.38	-11.65	-12.18		ppb
Silver	107-1	0.08	0.06	0.05	0.06	26.41	ppb
Silver	109-1	0.06	0.05	0.04	0.05	20.13	ppb
Sodium	23-2	68.43	83.95	64.71	72.36	14.10	ppb
Strontium	86-1	0.64	0.42	0.33	0.46	33.76	ppb
Strontium	88-1	0.60	0.43	0.36	0.46	27.06	ppb
Sulfur	34-1	-962.50	-1183.93	-1108.00	-1084.81		ppb
Terbium	159-1				105		%
Terbium	159-2				104		%
Thallium	203-1	0.07	0.07	0.06	0.07	10.18	ppb
Thallium	205-1	0.08	0.06	0.05	0.06	22.24	ppb
Tin	118-1	0.09	0.16	0.15	0.13	29.74	ppb
Titanium	47-1	0.41	0.26	0.26	0.31	27.91	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:58:04	DataFile Name :	037CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.02	0.02	0.01	0.02	33.42	ppb
Vanadium	51-2	0.01	0.01	0.02	0.02	37.31	ppb
Yttrium	89-1				103		%
Yttrium	89-2				101		%
Zinc	66-2	0.40	0.40	0.28	0.36	18.85	ppb
Zirconium	90-1	0.11	0.10	0.10	0.10	6.52	ppb
Zirconium	91-1	0.11	0.12	0.11	0.11	2.37	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-02DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 19:01:26	DataFile Name :	038SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1268.68	1330.40	1251.88	1283.65	3.22	ppb
Antimony	121-1	387.89	397.85	399.18	394.98	1.56	ppb
Arsenic	75-2	270.88	276.71	263.54	270.38	2.44	ppb
Barium	135-1	296.20	300.61	303.31	300.04	1.20	ppb
Barium	137-1	295.24	301.81	303.64	300.23	1.47	ppb
Beryllium	9-1	146.33	148.89	150.21	148.48	1.33	ppb
Bismuth	209-1				108		%
Bismuth	209-2				113		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	173.20	179.62	176.76	176.53	1.82	ppb
Cadmium	106-1	166.43	166.72	170.77	167.97	1.44	ppb
Cadmium	111-1	199.78	203.96	204.42	202.72	1.26	ppb
Calcium	43-1	127.71	88.79	96.88	104.46	19.66	ppb
Calcium	44-1	80.30	45.43	44.38	56.70	36.05	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	281.94	295.81	279.31	285.69	3.10	ppb
Cobalt	59-2	90.29	92.88	88.16	90.44	2.61	ppb
Copper	63-2	328.76	342.01	322.78	331.18	2.97	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				107		%
Holmium	165-2				111		%
Indium	115-1				106		%
Indium	115-2				110		%
Iron	56-2	784.59	823.07	768.87	792.18	3.52	ppb
Iron	57-2	701.39	694.41	651.23	682.34	3.98	ppb
Iron	54-2	989.36	1024.30	953.44	989.03	3.58	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-02DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 19:01:26	DataFile Name :	038SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	426.96	426.26	427.03	426.75	0.10	ppb
Lead	207-1	410.42	407.72	411.74	409.96	0.50	ppb
Lead	208-1	444.63	445.01	440.93	443.53	0.51	ppb
Lithium	6-1				108		%
Magnesium	24-2	2.46	3.18	1.29	2.31	41.26	ppb
Manganese	55-2	312.45	327.95	311.48	317.29	2.91	ppb
Molybdenum	94-1	219.22	226.64	223.14	223.00	1.66	ppb
Molybdenum	95-1	264.22	271.33	265.04	266.86	1.46	ppb
Molybdenum	96-1	260.48	266.98	260.07	262.51	1.48	ppb
Molybdenum	97-1	268.09	274.38	268.43	270.30	1.31	ppb
Molybdenum	98-1	261.55	270.17	263.65	265.12	1.70	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	804.43	841.44	796.45	814.10	2.95	ppb
Phosphorus	31-2	-6.58	-7.42	-13.82	-9.27		ppb
Potassium	39-2	-12.76	-10.04	-17.64	-13.48		ppb
Rhodium	103-1				104		%
Rhodium	103-2				110		%
Scandium	45-1				105		%
Scandium	45-2				109		%
Selenium	82-1	241.64	249.79	238.17	243.20	2.45	ppb
Selenium	77-2	215.19	257.70	243.45	238.78	9.06	ppb
Selenium	78-2	224.28	245.88	225.97	232.04	5.18	ppb
Silicon	28-1	145.30	148.64	152.09	148.68	2.28	ppb
Silver	107-1	287.92	294.76	295.31	292.67	1.41	ppb
Silver	109-1	287.70	294.88	293.99	292.19	1.34	ppb
Sodium	23-2	69.63	71.89	65.77	69.09	4.48	ppb
Strontium	86-1	221.11	227.82	221.76	223.56	1.66	ppb
Strontium	88-1	222.17	229.73	226.71	226.20	1.68	ppb
Sulfur	34-1	-1317.49	-1494.14	-1543.60	-1451.75		ppb
Terbium	159-1				107		%
Terbium	159-2				111		%
Thallium	203-1	185.64	185.85	185.44	185.64	0.11	ppb
Thallium	205-1	207.92	206.96	203.99	206.29	0.99	ppb
Tin	118-1	0.19	0.19	0.22	0.20	7.43	ppb
Titanium	47-1	0.74	0.25	0.22	0.40	72.95	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-02DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 19:01:26	DataFile Name :	038SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	45.59	ppb
Vanadium	51-2	516.52	544.58	515.65	525.58	3.13	ppb
Yttrium	89-1				105		%
Yttrium	89-2				110		%
Zinc	66-2	306.87	321.99	302.36	310.41	3.31	ppb
Zirconium	90-1	0.23	0.23	0.22	0.23	2.30	ppb
Zirconium	91-1	0.27	0.26	0.30	0.28	7.34	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-04DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 19:04:46	DataFile Name :	039SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	36.11	36.98	37.27	36.79	1.64	ppb
Antimony	121-1	0.23	0.25	0.26	0.25	5.56	ppb
Arsenic	75-2	0.02	0.11	0.00	0.04	124.17	ppb
Barium	135-1	0.12	0.16	0.13	0.14	16.02	ppb
Barium	137-1	0.10	0.14	0.13	0.12	15.23	ppb
Beryllium	9-1	0.22	0.20	0.14	0.19	21.84	ppb
Bismuth	209-1				106		%
Bismuth	209-2				111		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.02	0.07	-0.06	0.00		ppb
Cadmium	106-1	-1.05	-0.91	-1.59	-1.18		ppb
Cadmium	111-1	-0.06	-0.06	-0.10	-0.07		ppb
Calcium	43-1	0.90	1.82	4.91	2.54	82.78	ppb
Calcium	44-1	7.30	8.24	6.68	7.41	10.62	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.03	0.04	0.01	0.02	52.91	ppb
Cobalt	59-2	0.04	0.03	0.03	0.03	9.62	ppb
Copper	63-2	0.04	0.08	0.17	0.09	70.69	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				106		%
Holmium	165-2				109		%
Indium	115-1				105		%
Indium	115-2				107		%
Iron	56-2	1.19	1.56	1.41	1.39	13.38	ppb
Iron	57-2	-3.60	-2.26	-0.27	-2.05		ppb
Iron	54-2	-0.76	0.61	1.10	0.32	301.25	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-04DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 19:04:46	DataFile Name :	039SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.15	0.15	0.17	0.16	6.44	ppb
Lead	207-1	0.15	0.12	0.12	0.13	14.39	ppb
Lead	208-1	0.15	0.14	0.15	0.14	3.89	ppb
Lithium	6-1				108		%
Magnesium	24-2	2.40	2.06	2.62	2.36	11.86	ppb
Manganese	55-2	0.04	0.08	0.06	0.06	27.97	ppb
Molybdenum	94-1	1.63	1.49	1.55	1.56	4.57	ppb
Molybdenum	95-1	0.08	0.06	0.06	0.07	16.31	ppb
Molybdenum	96-1	0.21	0.24	0.23	0.23	7.27	ppb
Molybdenum	97-1	0.06	0.05	0.06	0.06	12.53	ppb
Molybdenum	98-1	0.05	0.07	0.06	0.06	14.54	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.13	0.16	0.07	0.12	35.95	ppb
Phosphorus	31-2	-11.58	-20.04	-16.80	-16.14		ppb
Potassium	39-2	-17.18	-9.58	-14.22	-13.66		ppb
Rhodium	103-1				104		%
Rhodium	103-2				109		%
Scandium	45-1				106		%
Scandium	45-2				109		%
Selenium	82-1	-0.03	0.51	0.16	0.21	126.15	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	0.88	0.35	1.37	0.87	59.15	ppb
Silicon	28-1	918.61	949.42	922.83	930.29	1.80	ppb
Silver	107-1	0.07	0.06	0.05	0.06	20.11	ppb
Silver	109-1	0.08	0.05	0.05	0.06	32.96	ppb
Sodium	23-2	137.89	142.14	137.51	139.18	1.85	ppb
Strontium	86-1	0.06	0.04	0.04	0.04	25.19	ppb
Strontium	88-1	0.06	0.04	0.05	0.05	18.75	ppb
Sulfur	34-1	-1757.33	-1560.19	-1817.57	-1711.70		ppb
Terbium	159-1				108		%
Terbium	159-2				112		%
Thallium	203-1	0.06	0.04	0.04	0.05	23.41	ppb
Thallium	205-1	0.05	0.04	0.04	0.05	7.80	ppb
Tin	118-1	643.52	659.82	660.82	654.72	1.48	ppb
Titanium	47-1	48.92	50.75	49.71	49.80	1.84	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-04DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 19:04:46	DataFile Name :	039SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	134.87	ppb
Vanadium	51-2	0.03	0.02	0.04	0.03	25.13	ppb
Yttrium	89-1				106		%
Yttrium	89-2				110		%
Zinc	66-2	0.19	0.34	0.33	0.29	29.68	ppb
Zirconium	90-1	0.86	0.83	0.86	0.85	1.92	ppb
Zirconium	91-1	0.79	0.84	0.82	0.82	3.00	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-06DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 19:08:06	DataFile Name :	040SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.64	0.15	0.35	0.38	65.54	ppb
Antimony	121-1	0.06	0.06	0.07	0.07	10.05	ppb
Arsenic	75-2	0.02	0.00	0.02	0.01	68.26	ppb
Barium	135-1	0.14	0.12	0.12	0.13	5.43	ppb
Barium	137-1	0.11	0.14	0.14	0.13	13.55	ppb
Beryllium	9-1	0.15	0.11	0.08	0.11	28.89	ppb
Bismuth	209-1				116		%
Bismuth	209-2				119		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.01	-0.02	0.14	0.04	195.52	ppb
Cadmium	106-1	-1.15	-0.91	-0.85	-0.97		ppb
Cadmium	111-1	-0.07	-0.04	-0.07	-0.06		ppb
Calcium	43-1	34106.70	35350.42	35369.01	34942.04	2.07	ppb
Calcium	44-1	32484.44	33093.12	34059.06	33212.20	2.39	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.03	-0.04	-0.06	-0.04		ppb
Cobalt	59-2	0.02	0.03	0.04	0.03	24.09	ppb
Copper	63-2	0.02	0.02	0.01	0.02	39.93	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				120		%
Holmium	165-2				121		%
Indium	115-1				118		%
Indium	115-2				117		%
Iron	56-2	0.44	0.19	0.32	0.32	40.59	ppb
Iron	57-2	179.67	175.90	198.68	184.75	6.61	ppb
Iron	54-2	-3.72	-3.91	-3.84	-3.82		ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-06DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 19:08:06	DataFile Name :	040SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.21	0.21	0.19	0.20	5.05	ppb
Lead	207-1	0.21	0.18	0.17	0.19	10.62	ppb
Lead	208-1	0.19	0.20	0.19	0.19	2.51	ppb
Lithium	6-1				121		%
Magnesium	24-2	13685.84	13478.78	13252.84	13472.49	1.61	ppb
Manganese	55-2	0.09	0.07	0.08	0.08	10.70	ppb
Molybdenum	94-1	0.32	0.30	0.32	0.32	3.79	ppb
Molybdenum	95-1	0.40	0.40	0.35	0.38	7.99	ppb
Molybdenum	96-1	0.40	0.40	0.40	0.40	1.23	ppb
Molybdenum	97-1	0.41	0.40	0.49	0.44	11.20	ppb
Molybdenum	98-1	0.38	0.42	0.41	0.40	4.46	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.03	0.03	0.04	0.03	19.00	ppb
Phosphorus	31-2	-17.54	-16.42	-19.44	-17.80		ppb
Potassium	39-2	10721.28	10494.98	10551.15	10589.14	1.11	ppb
Rhodium	103-1				114		%
Rhodium	103-2				117		%
Scandium	45-1				119		%
Scandium	45-2				119		%
Selenium	82-1	0.56	0.14	0.33	0.34	61.33	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	0.43	-0.56	-0.79	-0.31		ppb
Silicon	28-1	-30.96	-28.37	-26.88	-28.74		ppb
Silver	107-1	0.01	0.01	0.01	0.01	15.63	ppb
Silver	109-1	0.01	0.01	0.01	0.01	18.62	ppb
Sodium	23-2	41356.02	41403.62	41438.70	41399.44	0.10	ppb
Strontium	86-1	3.43	3.46	3.37	3.42	1.34	ppb
Strontium	88-1	3.38	3.42	3.41	3.40	0.66	ppb
Sulfur	34-1	-2648.44	-2139.13	-1754.63	-2180.73		ppb
Terbium	159-1				120		%
Terbium	159-2				121		%
Thallium	203-1	0.06	0.05	0.04	0.05	17.09	ppb
Thallium	205-1	0.06	0.04	0.03	0.04	29.06	ppb
Tin	118-1	0.04	0.06	0.09	0.06	41.95	ppb
Titanium	47-1	-0.01	0.03	0.09	0.04	138.04	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-06DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 19:08:06	DataFile Name :	040SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	46.17	ppb
Vanadium	51-2	0.00	0.01	0.01	0.01	36.60	ppb
Yttrium	89-1				118		%
Yttrium	89-2				118		%
Zinc	66-2	0.24	0.26	0.33	0.28	17.20	ppb
Zirconium	90-1	0.00	0.00	-0.01	0.00		ppb
Zirconium	91-1	0.00	-0.01	0.01	0.00		ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164203BL	Instrumnet Name :	P7
Client Sample ID :	PB164203BL	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:16:39	DataFile Name :	041CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.18	-0.02	-0.13	-0.11		ppb
Antimony	121-1	0.03	0.03	0.04	0.03	17.15	ppb
Arsenic	75-2	-0.01	0.00	0.02	0.00	369.92	ppb
Barium	135-1	0.00	-0.01	0.00	0.00		ppb
Barium	137-1	0.00	-0.01	0.01	0.00	2817.00	ppb
Beryllium	9-1	0.10	0.14	0.11	0.12	17.48	ppb
Bismuth	209-1				107		%
Bismuth	209-2				111		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.06	0.03	-0.02	-0.02		ppb
Cadmium	106-1	-1.36	-2.70	-1.12	-1.73		ppb
Cadmium	111-1	-0.09	-0.21	-0.08	-0.13		ppb
Calcium	43-1	-2.76	0.34	-1.38	-1.27		ppb
Calcium	44-1	0.20	-0.17	-1.41	-0.46		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.03	-0.02	-0.02	-0.02		ppb
Cobalt	59-2	0.00	0.00	0.01	0.00	206.93	ppb
Copper	63-2	0.04	-0.01	0.00	0.01	270.39	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				109		%
Indium	115-1				105		%
Indium	115-2				107		%
Iron	56-2	0.10	0.03	-0.01	0.04	143.73	ppb
Iron	57-2	-4.70	-4.86	-3.81	-4.46		ppb
Iron	54-2	-2.38	-0.60	1.06	-0.64		ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164203BL	Instrumnet Name :	P7
Client Sample ID :	PB164203BL	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:16:39	DataFile Name :	041CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.06	0.07	0.04	0.06	28.56	ppb
Lead	207-1	0.05	0.04	0.05	0.05	9.26	ppb
Lead	208-1	0.05	0.05	0.04	0.05	9.66	ppb
Lithium	6-1				105		%
Magnesium	24-2	1.57	2.51	2.46	2.18	24.40	ppb
Manganese	55-2	-0.01	-0.02	-0.01	-0.01		ppb
Molybdenum	94-1	0.03	0.01	0.03	0.02	43.30	ppb
Molybdenum	95-1	0.01	0.02	0.02	0.02	59.27	ppb
Molybdenum	96-1	0.02	0.01	0.01	0.01	5.90	ppb
Molybdenum	97-1	0.02	0.01	0.03	0.02	42.88	ppb
Molybdenum	98-1	0.02	0.02	0.01	0.02	28.00	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.00	-0.05	-0.03	-0.03		ppb
Phosphorus	31-2	-13.44	-15.65	-22.11	-17.06		ppb
Potassium	39-2	-19.45	-11.85	-13.70	-15.00		ppb
Rhodium	103-1				105		%
Rhodium	103-2				108		%
Scandium	45-1				105		%
Scandium	45-2				107		%
Selenium	82-1	-0.44	-0.32	0.59	-0.06		ppb
Selenium	77-2	0.00	1.17	0.00	0.39	173.21	ppb
Selenium	78-2	-0.76	-0.24	-1.59	-0.86		ppb
Silicon	28-1	-15.16	-13.76	-12.07	-13.66		ppb
Silver	107-1	0.01	0.01	0.01	0.01	29.71	ppb
Silver	109-1	0.01	0.01	0.01	0.01	12.82	ppb
Sodium	23-2	23.75	25.02	25.25	24.68	3.27	ppb
Strontium	86-1	-0.01	0.03	-0.02	0.00	37314.30	ppb
Strontium	88-1	0.01	0.00	0.00	0.00	42.44	ppb
Sulfur	34-1	-929.50	-641.00	-816.71	-795.74		ppb
Terbium	159-1				106		%
Terbium	159-2				109		%
Thallium	203-1	0.03	0.02	0.02	0.02	17.09	ppb
Thallium	205-1	0.03	0.02	0.02	0.02	13.84	ppb
Tin	118-1	0.01	0.02	0.05	0.03	86.64	ppb
Titanium	47-1	0.01	0.05	0.03	0.03	70.42	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164203BL	Instrumnet Name :	P7
Client Sample ID :	PB164203BL	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:16:39	DataFile Name :	041CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	6.53	ppb
Vanadium	51-2	0.00	0.01	0.00	0.00	157.41	ppb
Yttrium	89-1				104		%
Yttrium	89-2				107		%
Zinc	66-2	-0.02	-0.07	0.08	0.00		ppb
Zirconium	90-1	0.01	0.00	0.02	0.01	114.84	ppb
Zirconium	91-1	0.03	0.01	0.02	0.02	67.63	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164203BS	Instrumnet Name :	P7
Client Sample ID :	PB164203BS	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:20:02	DataFile Name :	042LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10104.33	10101.57	10047.66	10084.52	0.32	ppb
Antimony	121-1	518.66	624.94	511.21	551.60	11.53	ppb
Arsenic	75-2	476.32	481.69	480.50	479.50	0.59	ppb
Barium	135-1	2606.15	3084.88	2524.52	2738.52	11.05	ppb
Barium	137-1	2539.46	3035.23	2507.38	2694.02	10.98	ppb
Beryllium	9-1	495.85	595.37	490.06	527.10	11.23	ppb
Bismuth	209-1				96		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	508.33	616.92	504.45	543.23	11.75	ppb
Cadmium	106-1	508.03	610.93	503.40	540.79	11.24	ppb
Cadmium	111-1	515.67	619.61	507.53	547.60	11.41	ppb
Calcium	43-1	56014.81	70276.84	56038.19	60776.62	13.54	ppb
Calcium	44-1	51930.28	64272.61	51865.23	56022.70	12.75	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	489.91	492.37	486.18	489.49	0.64	ppb
Cobalt	59-2	486.02	487.09	483.49	485.53	0.38	ppb
Copper	63-2	4899.21	4936.27	4861.20	4898.89	0.77	ppb
Dysprosium	156-1						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				110		%
Indium	115-1				95		%
Indium	115-2				104		%
Iron	56-2	26475.14	26663.58	26363.86	26500.86	0.57	ppb
Iron	57-2	27590.88	27742.61	27492.08	27608.52	0.46	ppb
Iron	54-2	26836.20	26764.55	27321.85	26974.20	1.12	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164203BS	Instrumnet Name :	P7
Client Sample ID :	PB164203BS	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:20:02	DataFile Name :	042LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2507.29	3074.06	2486.63	2689.33	12.40	ppb
Lead	207-1	2489.55	3044.30	2492.39	2675.41	11.94	ppb
Lead	208-1	2497.01	3049.18	2486.16	2677.45	12.03	ppb
Lithium	6-1				97		%
Magnesium	24-2	47431.11	48182.67	47333.76	47649.18	0.97	ppb
Manganese	55-2	4821.42	4811.97	4758.48	4797.29	0.71	ppb
Molybdenum	94-1	5477.22	6869.39	5392.02	5912.88	14.03	ppb
Molybdenum	95-1	5432.19	6769.00	5423.03	5874.74	13.18	ppb
Molybdenum	96-1	5446.31	6930.24	5408.54	5928.36	14.64	ppb
Molybdenum	97-1	5461.06	6943.85	5463.89	5956.27	14.36	ppb
Molybdenum	98-1	5463.39	6813.28	5407.59	5894.75	13.50	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	483.40	488.93	481.28	484.54	0.82	ppb
Phosphorus	31-2	9629.11	9636.88	9672.39	9646.13	0.24	ppb
Potassium	39-2	25469.25	25223.91	25208.40	25300.52	0.58	ppb
Rhodium	103-1				94		%
Rhodium	103-2				103		%
Scandium	45-1				97		%
Scandium	45-2				105		%
Selenium	82-1	504.91	619.05	505.80	543.26	12.08	ppb
Selenium	77-2	490.44	482.55	471.19	481.39	2.01	ppb
Selenium	78-2	480.52	493.63	466.59	480.25	2.82	ppb
Silicon	28-1	501.03	654.50	509.48	555.00	15.54	ppb
Silver	107-1	526.28	627.19	517.34	556.94	10.95	ppb
Silver	109-1	539.61	636.22	521.33	565.72	10.91	ppb
Sodium	23-2	50688.49	51106.78	50521.25	50772.17	0.59	ppb
Strontium	86-1	12475.30	15316.04	12397.05	13396.13	12.42	ppb
Strontium	88-1	12418.41	15289.95	12370.60	13359.65	12.51	ppb
Sulfur	34-1	9238.11	13365.62	9032.10	10545.27	23.18	ppb
Terbium	159-1				100		%
Terbium	159-2				110		%
Thallium	203-1	500.48	608.09	503.74	537.44	11.39	ppb
Thallium	205-1	500.80	610.85	497.39	536.34	12.03	ppb
Tin	118-1	516.11	622.95	501.45	546.84	12.13	ppb
Titanium	47-1	5467.50	6791.35	5441.97	5900.27	13.08	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164203BS	Instrumnet Name :	P7
Client Sample ID :	PB164203BS	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:20:02	DataFile Name :	042LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	498.46	599.91	485.77	528.05	11.85	ppb
Vanadium	51-2	478.27	479.66	471.04	476.32	0.97	ppb
Yttrium	89-1				97		%
Yttrium	89-2				106		%
Zinc	66-2	4846.39	4839.31	4819.50	4835.07	0.29	ppb
Zirconium	90-1	489.13	614.55	495.41	533.03	13.26	ppb
Zirconium	91-1	495.81	624.16	494.13	538.04	13.86	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164204BL	Instrumnet Name :	P7
Client Sample ID :	PB164204BL	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:22:59	DataFile Name :	043CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.03	0.27	0.13	0.12	120.78	ppb
Antimony	121-1	0.32	0.30	0.35	0.32	9.11	ppb
Arsenic	75-2	0.02	0.07	0.02	0.04	75.87	ppb
Barium	135-1	0.11	0.06	0.06	0.08	40.53	ppb
Barium	137-1	0.07	0.06	0.03	0.05	35.86	ppb
Beryllium	9-1	0.32	0.26	0.21	0.26	21.28	ppb
Bismuth	209-1				106		%
Bismuth	209-2				110		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.03	-0.02	0.12	0.04	166.15	ppb
Cadmium	106-1	0.30	-1.21	-1.02	-0.64		ppb
Cadmium	111-1	0.03	-0.07	-0.05	-0.03		ppb
Calcium	43-1	-1.50	0.85	-1.46	-0.70		ppb
Calcium	44-1	2.08	0.70	0.98	1.25	58.18	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.01	0.02	0.03	0.02	60.33	ppb
Cobalt	59-2	0.02	0.01	0.02	0.02	36.64	ppb
Copper	63-2	0.16	0.15	0.09	0.13	31.33	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				107		%
Holmium	165-2				109		%
Indium	115-1				104		%
Indium	115-2				107		%
Iron	56-2	0.65	0.89	0.99	0.84	20.86	ppb
Iron	57-2	-2.92	-4.32	-1.86	-3.03		ppb
Iron	54-2	1.48	0.25	-0.14	0.53	159.70	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164204BL	Instrumnet Name :	P7
Client Sample ID :	PB164204BL	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:22:59	DataFile Name :	043CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.23	0.19	0.17	0.20	15.38	ppb
Lead	207-1	0.25	0.15	0.13	0.18	36.60	ppb
Lead	208-1	0.23	0.18	0.17	0.19	17.32	ppb
Lithium	6-1				103		%
Magnesium	24-2	2.27	2.08	1.82	2.06	11.03	ppb
Manganese	55-2	0.12	0.18	0.17	0.15	21.11	ppb
Molybdenum	94-1	0.53	0.48	0.47	0.49	6.99	ppb
Molybdenum	95-1	0.41	0.33	0.29	0.34	17.93	ppb
Molybdenum	96-1	0.41	0.33	0.36	0.37	11.79	ppb
Molybdenum	97-1	0.40	0.27	0.28	0.32	22.84	ppb
Molybdenum	98-1	0.37	0.30	0.30	0.32	12.96	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.02	-0.02	0.01	0.00	551.84	ppb
Phosphorus	31-2	-20.05	-12.74	-14.08	-15.63		ppb
Potassium	39-2	-15.95	-14.10	-12.62	-14.22		ppb
Rhodium	103-1				102		%
Rhodium	103-2				107		%
Scandium	45-1				102		%
Scandium	45-2				107		%
Selenium	82-1	0.38	0.49	0.76	0.54	35.43	ppb
Selenium	77-2	0.00	0.00	1.17	0.39	173.21	ppb
Selenium	78-2	-0.01	-0.75	-0.04	-0.27		ppb
Silicon	28-1	-8.21	-9.96	-10.80	-9.65		ppb
Silver	107-1	0.08	0.07	0.05	0.07	23.24	ppb
Silver	109-1	0.08	0.06	0.06	0.06	16.55	ppb
Sodium	23-2	30.10	29.95	28.25	29.43	3.49	ppb
Strontium	86-1	0.49	0.29	0.27	0.35	35.19	ppb
Strontium	88-1	0.50	0.32	0.25	0.35	35.79	ppb
Sulfur	34-1	-1051.56	-1310.37	-1352.06	-1238.00		ppb
Terbium	159-1				106		%
Terbium	159-2				110		%
Thallium	203-1	0.04	0.05	0.05	0.05	9.78	ppb
Thallium	205-1	0.06	0.04	0.04	0.05	26.21	ppb
Tin	118-1	0.06	0.06	0.07	0.06	9.47	ppb
Titanium	47-1	0.36	0.26	0.24	0.29	21.44	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164204BL	Instrumnet Name :	P7
Client Sample ID :	PB164204BL	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:22:59	DataFile Name :	043CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.02	0.01	0.01	0.01	25.47	ppb
Vanadium	51-2	0.00	0.01	0.01	0.01	64.46	ppb
Yttrium	89-1				103		%
Yttrium	89-2				107		%
Zinc	66-2	0.29	0.36	0.32	0.32	10.40	ppb
Zirconium	90-1	0.11	0.08	0.09	0.09	13.25	ppb
Zirconium	91-1	0.13	0.08	0.10	0.10	20.85	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164204BS	Instrumnet Name :	P7
Client Sample ID :	PB164204BS	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:26:21	DataFile Name :	044DLCW.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10297.58	10406.75	10043.39	10249.24	1.82	ppb
Antimony	121-1	520.46	511.09	519.71	517.09	1.01	ppb
Arsenic	75-2	480.62	488.74	478.58	482.65	1.11	ppb
Barium	135-1	2599.50	2539.90	2589.72	2576.37	1.24	ppb
Barium	137-1	2547.27	2521.16	2543.20	2537.21	0.55	ppb
Beryllium	9-1	502.63	486.92	497.51	495.69	1.62	ppb
Bismuth	209-1				103		%
Bismuth	209-2				107		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	512.46	503.80	510.48	508.91	0.89	ppb
Cadmium	106-1	508.19	492.95	504.94	502.03	1.60	ppb
Cadmium	111-1	514.56	505.14	514.39	511.37	1.05	ppb
Calcium	43-1	58647.29	57588.47	57176.40	57804.05	1.31	ppb
Calcium	44-1	54701.49	53134.52	53114.30	53650.10	1.70	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	500.13	507.14	491.68	499.65	1.55	ppb
Cobalt	59-2	492.50	499.61	484.98	492.36	1.49	ppb
Copper	63-2	4971.89	5040.62	4903.84	4972.12	1.38	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				109		%
Indium	115-1				102		%
Indium	115-2				103		%
Iron	56-2	27173.89	27404.97	26629.52	27069.46	1.47	ppb
Iron	57-2	28370.33	28563.71	27529.19	28154.41	1.95	ppb
Iron	54-2	27653.53	27867.06	26545.31	27355.30	2.59	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164204BS	Instrumnet Name :	P7
Client Sample ID :	PB164204BS	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:26:21	DataFile Name :	044DLCW.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2546.81	2465.60	2543.28	2518.56	1.82	ppb
Lead	207-1	2541.95	2449.04	2526.11	2505.70	1.98	ppb
Lead	208-1	2553.12	2474.02	2541.65	2522.93	1.69	ppb
Lithium	6-1				103		%
Magnesium	24-2	48203.47	49037.98	47027.58	48089.68	2.10	ppb
Manganese	55-2	4963.80	4900.91	4809.68	4891.46	1.58	ppb
Molybdenum	94-1	5646.14	5504.49	5553.71	5568.12	1.29	ppb
Molybdenum	95-1	5583.40	5455.39	5559.25	5532.68	1.23	ppb
Molybdenum	96-1	5609.00	5475.30	5578.65	5554.31	1.26	ppb
Molybdenum	97-1	5612.22	5496.86	5636.15	5581.74	1.33	ppb
Molybdenum	98-1	5600.81	5488.72	5556.30	5548.61	1.02	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	495.78	499.15	485.78	493.57	1.41	ppb
Phosphorus	31-2	9869.58	9920.54	9585.40	9791.84	1.84	ppb
Potassium	39-2	25391.60	25824.27	25165.49	25460.45	1.31	ppb
Rhodium	103-1				99		%
Rhodium	103-2				103		%
Scandium	45-1				102		%
Scandium	45-2				105		%
Selenium	82-1	506.68	498.74	507.83	504.42	0.98	ppb
Selenium	77-2	501.81	487.55	443.83	477.73	6.32	ppb
Selenium	78-2	486.71	484.32	460.65	477.23	3.02	ppb
Silicon	28-1	524.92	514.60	524.73	521.42	1.13	ppb
Silver	107-1	515.63	516.22	515.94	515.93	0.06	ppb
Silver	109-1	530.90	506.85	526.77	521.51	2.47	ppb
Sodium	23-2	51299.11	52177.06	50568.32	51348.16	1.57	ppb
Strontium	86-1	12821.27	12382.91	12711.62	12638.60	1.80	ppb
Strontium	88-1	12807.60	12456.19	12851.98	12705.26	1.71	ppb
Sulfur	34-1	9493.99	8957.48	8927.99	9126.48	3.49	ppb
Terbium	159-1				107		%
Terbium	159-2				110		%
Thallium	203-1	510.00	502.11	503.20	505.10	0.85	ppb
Thallium	205-1	514.47	502.42	506.63	507.84	1.20	ppb
Tin	118-1	514.41	517.05	513.72	515.06	0.34	ppb
Titanium	47-1	5717.55	5551.21	5555.53	5608.10	1.69	ppb

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On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164204BS	Instrumnet Name :	P7
Client Sample ID :	PB164204BS	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:26:21	DataFile Name :	044DLCW.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	499.32	487.27	493.52	493.37	1.22	ppb
Vanadium	51-2	488.78	493.52	475.95	486.08	1.87	ppb
Yttrium	89-1				104		%
Yttrium	89-2				106		%
Zinc	66-2	4926.12	4963.36	4840.86	4910.11	1.28	ppb
Zirconium	90-1	509.38	499.04	506.60	505.01	1.06	ppb
Zirconium	91-1	511.38	501.10	508.32	506.94	1.04	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:29:17	DataFile Name :	045CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	49897.41	49248.51	48808.55	49318.16	1.11	ppb
Antimony	121-1	495.72	487.54	498.37	493.88	1.14	ppb
Arsenic	75-2	466.25	459.77	453.74	459.92	1.36	ppb
Barium	135-1	2522.87	2510.14	2482.27	2505.09	0.83	ppb
Barium	137-1	2478.47	2462.12	2502.08	2480.89	0.81	ppb
Beryllium	9-1	491.04	490.23	499.01	493.42	0.98	ppb
Bismuth	209-1				96		%
Bismuth	209-2				89		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	476.83	481.83	479.66	479.44	0.52	ppb
Cadmium	106-1	474.43	476.48	482.09	477.67	0.83	ppb
Cadmium	111-1	475.47	474.72	476.20	475.46	0.16	ppb
Calcium	43-1	247824.81	253584.42	258415.84	253275.02	2.09	ppb
Calcium	44-1	246602.21	252629.81	254440.99	251224.34	1.63	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	479.23	477.29	469.79	475.43	1.05	ppb
Cobalt	59-2	504.12	500.28	492.99	499.13	1.13	ppb
Copper	63-2	4982.12	4886.18	4818.73	4895.68	1.68	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				106		%
Indium	115-1				96		%
Indium	115-2				98		%
Iron	56-2	129848.30	127991.52	126151.48	127997.10	1.44	ppb
Iron	57-2	129090.11	127466.92	126967.43	127841.49	0.87	ppb
Iron	54-2	128904.90	128175.75	126838.11	127972.92	0.82	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:29:17	DataFile Name :	045CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2541.54	2477.80	2516.47	2511.94	1.28	ppb
Lead	207-1	2533.93	2475.00	2510.01	2506.31	1.18	ppb
Lead	208-1	2540.22	2489.83	2519.71	2516.59	1.01	ppb
Lithium	6-1				99		%
Magnesium	24-2	245597.32	241787.15	241918.08	243100.85	0.89	ppb
Manganese	55-2	4679.74	4687.21	4589.96	4652.31	1.16	ppb
Molybdenum	94-1	5442.38	5511.98	5544.22	5499.53	0.95	ppb
Molybdenum	95-1	5457.18	5506.18	5555.74	5506.37	0.89	ppb
Molybdenum	96-1	5433.11	5489.05	5523.36	5481.84	0.83	ppb
Molybdenum	97-1	5449.66	5453.89	5573.64	5492.40	1.28	ppb
Molybdenum	98-1	5432.40	5463.67	5495.30	5463.79	0.58	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	499.08	486.07	484.28	489.81	1.65	ppb
Phosphorus	31-2	9295.70	9353.13	9024.09	9224.30	1.91	ppb
Potassium	39-2	125890.27	124023.42	123645.55	124519.75	0.97	ppb
Rhodium	103-1				92		%
Rhodium	103-2				95		%
Scandium	45-1				99		%
Scandium	45-2				103		%
Selenium	82-1	463.29	475.65	479.48	472.81	1.79	ppb
Selenium	77-2	448.71	477.59	477.63	467.97	3.56	ppb
Selenium	78-2	448.97	458.96	432.13	446.69	3.03	ppb
Silicon	28-1	498.60	509.86	528.58	512.35	2.96	ppb
Silver	107-1	482.75	475.14	477.89	478.60	0.81	ppb
Silver	109-1	490.60	480.35	480.01	483.65	1.24	ppb
Sodium	23-2	252671.60	246583.95	247358.76	248871.44	1.33	ppb
Strontium	86-1	12202.40	12349.31	12365.72	12305.81	0.73	ppb
Strontium	88-1	12279.76	12491.37	12398.07	12389.73	0.86	ppb
Sulfur	34-1	8831.04	9264.36	9467.19	9187.53	3.54	ppb
Terbium	159-1				104		%
Terbium	159-2				107		%
Thallium	203-1	509.71	502.03	501.11	504.29	0.94	ppb
Thallium	205-1	507.10	500.07	508.38	505.18	0.89	ppb
Tin	118-1	491.93	495.31	496.62	494.62	0.49	ppb
Titanium	47-1	5297.22	5449.77	5492.51	5413.17	1.90	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:29:17	DataFile Name :	045CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	521.03	512.63	512.79	515.48	0.93	ppb
Vanadium	51-2	472.84	468.12	465.86	468.94	0.76	ppb
Yttrium	89-1				100		%
Yttrium	89-2				103		%
Zinc	66-2	4863.48	4782.56	4763.35	4803.13	1.11	ppb
Zirconium	90-1	494.29	501.23	501.76	499.10	0.84	ppb
Zirconium	91-1	495.23	502.05	505.95	501.08	1.08	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:35:42	DataFile Name :	046CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.23	1.09	2.18	1.50	39.69	ppb
Antimony	121-1	0.13	0.18	0.20	0.17	19.63	ppb
Arsenic	75-2	0.00	0.15	0.06	0.07	102.75	ppb
Barium	135-1	0.02	0.02	0.02	0.02	1.39	ppb
Barium	137-1	0.04	0.01	0.03	0.03	48.61	ppb
Beryllium	9-1	0.26	0.28	0.21	0.25	12.79	ppb
Bismuth	209-1				106		%
Bismuth	209-2				111		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.06	-0.02	-0.06	-0.05		ppb
Cadmium	106-1	-1.75	-1.49	-0.44	-1.23		ppb
Cadmium	111-1	-0.12	-0.10	-0.01	-0.08		ppb
Calcium	43-1	3.83	1.16	0.05	1.68	115.82	ppb
Calcium	44-1	1.93	0.98	2.47	1.79	42.00	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.01	-0.02	-0.01	-0.01		ppb
Cobalt	59-2	0.02	0.03	0.03	0.03	30.58	ppb
Copper	63-2	0.10	0.23	0.23	0.19	38.54	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				109		%
Indium	115-1				104		%
Indium	115-2				107		%
Iron	56-2	3.94	4.63	5.00	4.52	11.89	ppb
Iron	57-2	0.97	3.32	3.53	2.61	54.41	ppb
Iron	54-2	3.83	3.85	5.83	4.50	25.56	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:35:42	DataFile Name :	046CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.13	0.13	0.14	0.13	2.92	ppb
Lead	207-1	0.15	0.12	0.14	0.14	9.54	ppb
Lead	208-1	0.13	0.13	0.14	0.13	2.80	ppb
Lithium	6-1				103		%
Magnesium	24-2	6.88	7.75	8.34	7.66	9.61	ppb
Manganese	55-2	0.15	0.21	0.15	0.17	19.03	ppb
Molybdenum	94-1	0.26	0.24	0.25	0.25	3.74	ppb
Molybdenum	95-1	0.11	0.10	0.18	0.13	29.62	ppb
Molybdenum	96-1	0.13	0.12	0.17	0.14	17.60	ppb
Molybdenum	97-1	0.14	0.11	0.14	0.13	9.75	ppb
Molybdenum	98-1	0.12	0.11	0.15	0.13	16.07	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.05	0.00	-0.01	0.01	242.17	ppb
Phosphorus	31-2	-20.77	-11.59	-5.54	-12.64		ppb
Potassium	39-2	-12.92	-5.56	-10.56	-9.68		ppb
Rhodium	103-1				104		%
Rhodium	103-2				107		%
Scandium	45-1				103		%
Scandium	45-2				106		%
Selenium	82-1	0.28	0.63	0.70	0.53	42.07	ppb
Selenium	77-2	0.59	0.00	0.00	0.20	173.21	ppb
Selenium	78-2	-0.92	-0.87	-1.57	-1.12		ppb
Silicon	28-1	-14.00	-11.88	-13.17	-13.02		ppb
Silver	107-1	0.03	0.04	0.03	0.03	15.61	ppb
Silver	109-1	0.03	0.02	0.04	0.03	20.36	ppb
Sodium	23-2	42.59	45.81	45.06	44.49	3.78	ppb
Strontium	86-1	0.15	0.12	0.12	0.13	13.15	ppb
Strontium	88-1	0.13	0.12	0.17	0.14	17.95	ppb
Sulfur	34-1	-1109.53	-874.86	-998.57	-994.32		ppb
Terbium	159-1				106		%
Terbium	159-2				110		%
Thallium	203-1	0.04	0.04	0.04	0.04	1.33	ppb
Thallium	205-1	0.05	0.03	0.04	0.04	21.08	ppb
Tin	118-1	0.01	0.06	0.04	0.04	62.09	ppb
Titanium	47-1	0.08	0.13	0.16	0.12	35.05	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:35:42	DataFile Name :	046CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.01	0.00	36.53	ppb
Vanadium	51-2	0.01	0.02	0.02	0.02	29.69	ppb
Yttrium	89-1				103		%
Yttrium	89-2				106		%
Zinc	66-2	0.15	0.23	0.35	0.24	40.40	ppb
Zirconium	90-1	0.08	0.09	0.10	0.09	8.08	ppb
Zirconium	91-1	0.06	0.08	0.08	0.07	15.07	ppb

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:19:52	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	57	80	77	71	17.74	cps
Antimony	121-1	7	20	23	17	52.90	cps
Arsenic	75-2	3	3	0	2	86.60	cps
Barium	135-1	13	17	17	16	12.40	cps
Barium	137-1	30	37	27	31	16.37	cps
Beryllium	9-1	20	20	23	21	9.11	cps
Bismuth	209-1	2309641	2292032	2310463	2304045	0.45	cps
Bismuth	209-2	1677392	1830947	1855824	1788054	5.40	cps
Bromine	81-1	6728	6552	6618	6633	1.35	cps
Bromine	81-2	37	57	20	38	48.60	cps
Cadmium	108-1	0	10	3	4	114.60	cps
Cadmium	106-1	1383	1387	1340	1370	1.90	cps
Cadmium	111-1	968	964	936	956	1.85	cps
Calcium	43-1	137	123	193	151	24.60	cps
Calcium	44-1	2707	2424	2570	2567	5.52	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	160	170	223	184	18.46	cps
Cobalt	59-2	7	20	13	13	49.99	cps
Copper	63-2	510	547	577	544	6.13	cps
Dysprosium	156-1	17	30	7	18	65.83	cps
Dysprosium	156-2	3	10	0	4	114.60	cps
Erbium	164-1	13	7	13	11	34.61	cps
Erbium	164-2	3	0	13	6	124.93	cps
Gadolinium	160-1	17	13	13	14	13.35	cps
Gadolinium	160-2	90	107	127	108	17.03	cps
Holmium	165-1	3629252	3660820	3648201	3646091	0.44	cps
Holmium	165-2	2273322	2528936	2554417	2452225	6.34	cps
Indium	115-1	2810973	2826135	2854114	2830408	0.77	cps
Indium	115-2	805012	884408	904056	864492	6.07	cps
Iron	56-2	4207	4524	4604	4445	4.72	cps
Iron	57-2	547	583	583	571	3.69	cps
Iron	54-2	830	730	867	809	8.75	cps
Krypton	83-1	73	87	90	83	10.59	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:19:52	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	90	97	90	92	4.18	cps
Lead	207-1	107	107	70	94	22.42	cps
Lead	208-1	433	400	353	396	10.16	cps
Lithium	6-1	751308	746668	753327	750434	0.46	cps
Magnesium	24-2	1090	1050	1157	1099	4.90	cps
Manganese	55-2	77	80	90	82	8.44	cps
Molybdenum	94-1	60	73	73	69	11.17	cps
Molybdenum	95-1	13	23	20	19	26.96	cps
Molybdenum	96-1	53	27	20	33	52.91	cps
Molybdenum	97-1	3	0	10	4	114.60	cps
Molybdenum	98-1	23	30	20	24	20.83	cps
Neodymium	150-1	0	3	3	2	86.60	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	47	57	67	57	17.65	cps
Phosphorus	31-2	103	113	117	111	6.25	cps
Potassium	39-2	33864	33908	33380	33717	0.87	cps
Rhodium	103-1	2536796	2510479	2536358	2527878	0.60	cps
Rhodium	103-2	1263722	1378868	1407258	1349949	5.63	cps
Scandium	45-1	1469072	1471410	1470683	1470388	0.08	cps
Scandium	45-2	117839	128190	131411	125813	5.64	cps
Selenium	82-1	66	102	106	92	24.11	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	110	83	77	90	19.60	cps
Silicon	28-1	192669	193186	191575	192476	0.43	cps
Silver	107-1	43	20	17	27	54.47	cps
Silver	109-1	17	10	10	12	31.50	cps
Sodium	23-2	5068	5141	5021	5076	1.19	cps
Strontium	86-1	120	113	127	120	5.55	cps
Strontium	88-1	97	103	70	90	19.60	cps
Sulfur	34-1	128168	129328	127833	128443	0.61	cps
Terbium	159-1	3694262	3755794	3757822	3735960	0.97	cps
Terbium	159-2	2197942	2455389	2514916	2389416	7.05	cps
Thallium	203-1	13	10	0	8	89.21	cps
Thallium	205-1	20	37	37	31	30.93	cps
Tin	118-1	867	727	763	786	9.24	cps
Titanium	47-1	40	37	23	33	26.47	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:19:52	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	7	7	3	6	34.70	cps
Vanadium	51-2	3	3	3	3	0.00	cps
Yttrium	89-1	4649575	4687281	4676881	4671246	0.42	cps
Yttrium	89-2	1042976	1149102	1166521	1119533	5.97	cps
Zinc	66-2	97	57	67	73	28.39	cps
Zirconium	90-1	187	147	127	153	19.92	cps
Zirconium	91-1	27	27	40	31	24.74	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:23:14	DataFile Name :	005CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1980	1880	1967	1942	2.80	cps
Antimony	121-1	8399	8292	8009	8234	2.45	cps
Arsenic	75-2	190	170	250	203	20.48	cps
Barium	135-1	10337	10651	10334	10441	1.74	cps
Barium	137-1	17805	18385	18546	18245	2.14	cps
Beryllium	9-1	843	927	903	891	4.82	cps
Bismuth	209-1	2325909	2301126	2262338	2296458	1.40	cps
Bismuth	209-2	1851179	1889274	1860918	1867124	1.06	cps
Bromine	81-1	6518	6395	6245	6386	2.14	cps
Bromine	81-2	23	47	40	37	32.79	cps
Cadmium	108-1	103	93	117	104	11.21	cps
Cadmium	106-1	1527	1623	1373	1508	8.36	cps
Cadmium	111-1	2103	2234	1850	2062	9.48	cps
Calcium	43-1	5908	5951	5828	5896	1.06	cps
Calcium	44-1	92956	95096	94955	94335	1.27	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3110	3287	3184	3194	2.78	cps
Cobalt	59-2	2290	2287	2397	2325	2.69	cps
Copper	63-2	3537	3674	3480	3564	2.79	cps
Dysprosium	156-1	23	3	7	11	96.43	cps
Dysprosium	156-2	0	3	3	2	86.60	cps
Erbium	164-1	10	10	7	9	21.63	cps
Erbium	164-2	10	13	10	11	17.30	cps
Gadolinium	160-1	0	20	20	13	86.60	cps
Gadolinium	160-2	107	110	133	117	12.46	cps
Holmium	165-1	3687146	3677481	3641605	3668744	0.65	cps
Holmium	165-2	2520472	2571580	2542223	2544758	1.01	cps
Indium	115-1	2860030	2854410	2820775	2845072	0.75	cps
Indium	115-2	897035	913665	901696	904132	0.95	cps
Iron	56-2	74496	73897	73800	74064	0.51	cps
Iron	57-2	2313	2329	2254	2299	1.71	cps
Iron	54-2	4831	4734	4771	4779	1.02	cps
Krypton	83-1	73	73	57	68	14.19	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:23:14	DataFile Name :	005CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3234	3084	3037	3118	3.30	cps
Lead	207-1	2757	2704	2877	2779	3.20	cps
Lead	208-1	12853	12609	12506	12656	1.41	cps
Lithium	6-1	762354	759142	757353	759616	0.33	cps
Magnesium	24-2	83411	82949	83870	83410	0.55	cps
Manganese	55-2	1237	1273	1147	1219	5.35	cps
Molybdenum	94-1	8076	7982	8296	8118	1.98	cps
Molybdenum	95-1	10160	9610	9680	9817	3.05	cps
Molybdenum	96-1	10704	11405	10954	11021	3.22	cps
Molybdenum	97-1	6125	6241	6381	6249	2.06	cps
Molybdenum	98-1	16363	16026	16229	16206	1.05	cps
Neodymium	150-1	0	3	3	2	86.60	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	620	593	627	613	2.88	cps
Phosphorus	31-2	243	247	257	249	2.79	cps
Potassium	39-2	129485	128735	130449	129556	0.66	cps
Rhodium	103-1	2564904	2545586	2566851	2559114	0.46	cps
Rhodium	103-2	1410606	1412204	1404857	1409222	0.27	cps
Scandium	45-1	1503994	1491853	1486080	1493976	0.61	cps
Scandium	45-2	131642	132610	130089	131447	0.97	cps
Selenium	82-1	407	367	411	395	6.11	cps
Selenium	77-2	33	53	37	41	26.06	cps
Selenium	78-2	160	230	223	204	18.90	cps
Silicon	28-1	202299	202095	202644	202346	0.14	cps
Silver	107-1	4577	4664	4581	4607	1.07	cps
Silver	109-1	4651	4721	4477	4616	2.71	cps
Sodium	23-2	134565	135446	135432	135148	0.37	cps
Strontium	86-1	1437	1443	1543	1475	4.05	cps
Strontium	88-1	11728	11705	11675	11703	0.23	cps
Sulfur	34-1	126878	129173	127624	127892	0.92	cps
Terbium	159-1	3780636	3823673	3724587	3776299	1.32	cps
Terbium	159-2	2519066	2490318	2483602	2497662	0.75	cps
Thallium	203-1	3754	3674	3777	3735	1.45	cps
Thallium	205-1	8623	8986	9043	8884	2.57	cps
Tin	118-1	18279	17813	17837	17976	1.46	cps
Titanium	47-1	2707	2350	2430	2496	7.50	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:23:14	DataFile Name :	005CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	11151	11388	11211	11250	1.09	cps
Vanadium	51-2	6765	6898	6795	6819	1.03	cps
Yttrium	89-1	4734590	4704415	4716136	4718380	0.32	cps
Yttrium	89-2	1161943	1167570	1162071	1163861	0.28	cps
Zinc	66-2	1333	1467	1457	1419	5.23	cps
Zirconium	90-1	6688	6725	6605	6673	0.92	cps
Zirconium	91-1	1407	1650	1670	1576	9.31	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:26:38	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	96129	96467	96333	96310	0.18	cps
Antimony	121-1	204023	205108	203095	204075	0.49	cps
Arsenic	75-2	9049	9093	9096	9080	0.29	cps
Barium	135-1	274646	275796	278416	276286	0.70	cps
Barium	137-1	472518	475173	477176	474956	0.49	cps
Beryllium	9-1	40349	41231	41839	41140	1.82	cps
Bismuth	209-1	2297024	2317481	2334690	2316398	0.81	cps
Bismuth	209-2	1878586	1902627	1866414	1882542	0.98	cps
Bromine	81-1	6415	6575	6511	6500	1.24	cps
Bromine	81-2	43	30	37	37	18.18	cps
Cadmium	108-1	3717	3814	3827	3786	1.59	cps
Cadmium	106-1	6852	6912	6715	6826	1.48	cps
Cadmium	111-1	52197	53001	53231	52810	1.03	cps
Calcium	43-1	62662	62712	62384	62586	0.28	cps
Calcium	44-1	967260	965164	964365	965596	0.15	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	75045	76191	75246	75494	0.81	cps
Cobalt	59-2	112715	112672	112843	112744	0.08	cps
Copper	63-2	795879	793382	789798	793020	0.39	cps
Dysprosium	156-1	23	20	7	17	52.90	cps
Dysprosium	156-2	30	17	17	21	36.45	cps
Erbium	164-1	23	30	13	22	37.76	cps
Erbium	164-2	7	20	10	12	56.76	cps
Gadolinium	160-1	20	3	20	14	66.64	cps
Gadolinium	160-2	100	110	150	120	22.05	cps
Holmium	165-1	3767668	3696983	3732135	3732262	0.95	cps
Holmium	165-2	2555967	2620800	2588603	2588457	1.25	cps
Indium	115-1	2862531	2837820	2833561	2844637	0.55	cps
Indium	115-2	899387	909473	903397	904086	0.56	cps
Iron	56-2	3290615	3297991	3259748	3282784	0.62	cps
Iron	57-2	85349	86336	87289	86324	1.12	cps
Iron	54-2	195930	194107	194442	194826	0.50	cps
Krypton	83-1	73	60	73	69	11.17	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:26:38	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	774486	780524	782472	779161	0.53	cps
Lead	207-1	672112	671150	670612	671291	0.11	cps
Lead	208-1	3088472	3093279	3096803	3092851	0.14	cps
Lithium	6-1	758939	756876	758624	758147	0.15	cps
Magnesium	24-2	780427	780411	776982	779273	0.25	cps
Manganese	55-2	587561	583604	586593	585920	0.35	cps
Molybdenum	94-1	750187	753502	754555	752748	0.30	cps
Molybdenum	95-1	1092197	1101012	1099484	1097564	0.43	cps
Molybdenum	96-1	1196618	1196639	1195801	1196353	0.04	cps
Molybdenum	97-1	692575	695699	694178	694151	0.23	cps
Molybdenum	98-1	1764593	1764127	1790151	1772957	0.84	cps
Neodymium	150-1	37	10	33	27	54.49	cps
Neodymium	150-2	10	13	0	8	89.21	cps
Nickel	60-2	29165	28280	28367	28604	1.71	cps
Phosphorus	31-2	4544	4634	4544	4574	1.14	cps
Potassium	39-2	519918	520394	519599	519970	0.08	cps
Rhodium	103-1	2536270	2508830	2561254	2535451	1.03	cps
Rhodium	103-2	1392561	1406600	1403682	1400948	0.53	cps
Scandium	45-1	1512706	1501976	1469247	1494643	1.51	cps
Scandium	45-2	129463	132029	131615	131036	1.05	cps
Selenium	82-1	3033	3077	3095	3068	1.04	cps
Selenium	77-2	290	277	257	274	6.11	cps
Selenium	78-2	1000	1043	1080	1041	3.85	cps
Silicon	28-1	294066	298381	297337	296594	0.76	cps
Silver	107-1	250795	252488	250275	251186	0.46	cps
Silver	109-1	235760	238186	239425	237790	0.78	cps
Sodium	23-2	1259335	1265083	1259120	1261179	0.27	cps
Strontium	86-1	1643349	1655495	1671702	1656849	0.86	cps
Strontium	88-1	14186919	14282637	14362369	14277309	0.62	cps
Sulfur	34-1	139695	137939	138497	138710	0.65	cps
Terbium	159-1	3831803	3777726	3786401	3798643	0.76	cps
Terbium	159-2	2514522	2537317	2564023	2538621	0.98	cps
Thallium	203-1	190133	191808	192118	191353	0.56	cps
Thallium	205-1	453939	453001	457052	454664	0.47	cps
Tin	118-1	177711	180835	179503	179350	0.87	cps
Titanium	47-1	271412	271593	273130	272045	0.35	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:26:38	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	581493	584496	584991	583660	0.32	cps
Vanadium	51-2	68082	66874	66318	67092	1.34	cps
Yttrium	89-1	4704154	4680565	4620296	4668338	0.93	cps
Yttrium	89-2	1170083	1170863	1171482	1170809	0.06	cps
Zinc	66-2	131856	128944	129838	130213	1.15	cps
Zirconium	90-1	337297	341887	339344	339509	0.68	cps
Zirconium	91-1	75051	75684	76558	75764	1.00	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:29:55	DataFile Name :	007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	232427	231720	232514	232220	0.19	cps
Antimony	121-1	505749	509819	508929	508166	0.42	cps
Arsenic	75-2	22774	22531	22444	22583	0.76	cps
Barium	135-1	683417	682249	686772	684146	0.34	cps
Barium	137-1	1173735	1181856	1183667	1179752	0.45	cps
Beryllium	9-1	100669	101176	100804	100883	0.26	cps
Bismuth	209-1	2305982	2342649	2341067	2329899	0.89	cps
Bismuth	209-2	1853381	1899047	1884390	1878939	1.24	cps
Bromine	81-1	6361	6268	6275	6301	0.83	cps
Bromine	81-2	37	30	20	29	29.04	cps
Cadmium	108-1	9987	9460	9627	9691	2.78	cps
Cadmium	106-1	15105	15465	15175	15248	1.25	cps
Cadmium	111-1	128472	129322	130575	129456	0.82	cps
Calcium	43-1	152572	151810	152376	152252	0.26	cps
Calcium	44-1	2194321	2161685	2202858	2186288	0.99	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	185607	183690	182840	184046	0.77	cps
Cobalt	59-2	274908	272313	274498	273906	0.51	cps
Copper	63-2	1934196	1946630	1925713	1935513	0.54	cps
Dysprosium	156-1	3	30	50	28	84.29	cps
Dysprosium	156-2	33	20	50	34	43.64	cps
Erbium	164-1	37	30	23	30	22.23	cps
Erbium	164-2	13	10	20	14	35.26	cps
Gadolinium	160-1	23	10	27	20	44.10	cps
Gadolinium	160-2	100	110	93	101	8.30	cps
Holmium	165-1	3752265	3707792	3706915	3722324	0.70	cps
Holmium	165-2	2586220	2582846	2564812	2577959	0.45	cps
Indium	115-1	2838550	2806052	2808781	2817795	0.64	cps
Indium	115-2	904452	893261	891603	896439	0.78	cps
Iron	56-2	8202126	8042146	8073428	8105900	1.05	cps
Iron	57-2	211838	210647	211239	211241	0.28	cps
Iron	54-2	476597	472969	472544	474037	0.47	cps
Krypton	83-1	53	90	60	68	28.82	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:29:55	DataFile Name :	007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	2131996	2161201	2150612	2147936	0.69	cps
Lead	207-1	1883892	1923808	1853761	1887154	1.86	cps
Lead	208-1	8559120	8689027	8573528	8607225	0.83	cps
Lithium	6-1	748639	743942	752920	748500	0.60	cps
Magnesium	24-2	1821404	1828418	1838281	1829368	0.46	cps
Manganese	55-2	1387045	1383646	1391582	1387424	0.29	cps
Molybdenum	94-1	1855969	1871535	1867109	1864871	0.43	cps
Molybdenum	95-1	2725018	2766517	2744112	2745216	0.76	cps
Molybdenum	96-1	2945609	2949581	2965468	2953553	0.36	cps
Molybdenum	97-1	1672341	1712194	1725474	1703336	1.62	cps
Molybdenum	98-1	4330425	4386333	4433811	4383523	1.18	cps
Neodymium	150-1	37	53	40	43	20.34	cps
Neodymium	150-2	20	13	3	12	68.66	cps
Nickel	60-2	67678	68824	67240	67914	1.20	cps
Phosphorus	31-2	11218	11121	11178	11172	0.44	cps
Potassium	39-2	1229026	1232237	1228582	1229948	0.16	cps
Rhodium	103-1	2487986	2475828	2471704	2478506	0.34	cps
Rhodium	103-2	1396718	1377695	1384827	1386413	0.69	cps
Scandium	45-1	1470556	1473171	1470841	1471523	0.10	cps
Scandium	45-2	130274	129736	128889	129633	0.54	cps
Selenium	82-1	7368	7514	7286	7390	1.56	cps
Selenium	77-2	710	693	677	693	2.40	cps
Selenium	78-2	2330	2414	2477	2407	3.06	cps
Silicon	28-1	441672	444017	450920	445536	1.08	cps
Silver	107-1	613165	621402	620332	618299	0.72	cps
Silver	109-1	585689	585341	590554	587195	0.50	cps
Sodium	23-2	3036334	3109960	3113721	3086672	1.41	cps
Strontium	86-1	3982788	4028298	4094408	4035165	1.39	cps
Strontium	88-1	35156304	35396005	35209585	35253965	0.36	cps
Sulfur	34-1	160260	160267	160769	160432	0.18	cps
Terbium	159-1	3767849	3824743	3844253	3812282	1.04	cps
Terbium	159-2	2580335	2476874	2551419	2536209	2.10	cps
Thallium	203-1	476372	480343	487447	481387	1.17	cps
Thallium	205-1	1144611	1146165	1147545	1146107	0.13	cps
Tin	118-1	443020	445054	446845	444973	0.43	cps
Titanium	47-1	662452	662283	670507	665081	0.71	cps

Reviewed By:Mohan
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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:29:55	DataFile Name :	007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	1466656	1482818	1493740	1481071	0.92	cps
Vanadium	51-2	166049	166312	165698	166020	0.19	cps
Yttrium	89-1	4706387	4644228	4658965	4669860	0.70	cps
Yttrium	89-2	1168869	1153041	1149855	1157255	0.88	cps
Zinc	66-2	320777	321327	317976	320027	0.56	cps
Zirconium	90-1	840408	849302	845109	844940	0.53	cps
Zirconium	91-1	187758	188730	189253	188580	0.40	cps

Reviewed By:Mohan
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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:33:04	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	458186	454002	454736	455641	0.49	cps
Antimony	121-1	1006108	1021436	1014842	1014128	0.76	cps
Arsenic	75-2	43868	44563	44323	44251	0.80	cps
Barium	135-1	1345982	1353605	1354852	1351480	0.36	cps
Barium	137-1	2443571	2441965	2452699	2446079	0.24	cps
Beryllium	9-1	195506	197351	196950	196602	0.49	cps
Bismuth	209-1	2333937	2328947	2310407	2324430	0.53	cps
Bismuth	209-2	1864293	1853449	1864017	1860586	0.33	cps
Bromine	81-1	6275	6451	6358	6361	1.39	cps
Bromine	81-2	50	20	33	34	43.64	cps
Cadmium	108-1	18669	19126	19136	18977	1.41	cps
Cadmium	106-1	28364	28495	28789	28549	0.76	cps
Cadmium	111-1	254380	255644	252788	254270	0.56	cps
Calcium	43-1	296260	296556	296247	296354	0.06	cps
Calcium	44-1	4290789	4282914	4288533	4287412	0.09	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	357640	357837	356431	357303	0.21	cps
Cobalt	59-2	532016	533600	529337	531651	0.41	cps
Copper	63-2	3710179	3757433	3728736	3732116	0.64	cps
Dysprosium	156-1	43	37	23	34	29.57	cps
Dysprosium	156-2	50	70	77	66	21.17	cps
Erbium	164-1	20	23	30	24	20.83	cps
Erbium	164-2	27	13	20	20	33.35	cps
Gadolinium	160-1	13	20	27	20	33.35	cps
Gadolinium	160-2	83	130	137	117	24.91	cps
Holmium	165-1	3747595	3716141	3728303	3730680	0.43	cps
Holmium	165-2	2621574	2561114	2569483	2584057	1.27	cps
Indium	115-1	2749416	2753369	2750124	2750970	0.08	cps
Indium	115-2	883681	871715	877504	877633	0.68	cps
Iron	56-2	15769209	15703764	15599937	15690970	0.54	cps
Iron	57-2	409915	413058	409501	410824	0.47	cps
Iron	54-2	927337	924262	917354	922984	0.55	cps
Krypton	83-1	43	40	67	50	29.06	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:33:04	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4301546	4279446	4338541	4306511	0.69	cps
Lead	207-1	3786256	3835641	3806761	3809553	0.65	cps
Lead	208-1	17107652	17291708	17236529	17211963	0.55	cps
Lithium	6-1	737721	729674	731935	733110	0.57	cps
Magnesium	24-2	3587723	3551703	3557637	3565688	0.54	cps
Manganese	55-2	2762087	2716740	2697982	2725603	1.21	cps
Molybdenum	94-1	3670974	3720958	3649410	3680447	1.00	cps
Molybdenum	95-1	5314621	5390310	5257060	5320664	1.26	cps
Molybdenum	96-1	5764305	5757395	5771690	5764463	0.12	cps
Molybdenum	97-1	3350247	3323348	3372797	3348797	0.74	cps
Molybdenum	98-1	8668672	8690118	8635130	8664640	0.32	cps
Neodymium	150-1	127	120	93	113	15.57	cps
Neodymium	150-2	17	20	30	22	31.22	cps
Nickel	60-2	133229	131742	131968	132313	0.61	cps
Phosphorus	31-2	22213	21031	21682	21642	2.73	cps
Potassium	39-2	2184705	2210228	2160586	2185173	1.14	cps
Rhodium	103-1	2459686	2383032	2408086	2416935	1.62	cps
Rhodium	103-2	1361240	1346530	1355735	1354501	0.55	cps
Scandium	45-1	1454110	1451785	1428095	1444663	1.00	cps
Scandium	45-2	127710	125460	126848	126673	0.90	cps
Selenium	82-1	14228	14612	14393	14411	1.34	cps
Selenium	77-2	1297	1287	1187	1257	4.84	cps
Selenium	78-2	4464	4474	4564	4501	1.22	cps
Silicon	28-1	675623	686211	685691	682509	0.87	cps
Silver	107-1	1206236	1220896	1211542	1212891	0.61	cps
Silver	109-1	1140560	1156886	1153443	1150296	0.75	cps
Sodium	23-2	6112900	6058846	6114096	6095281	0.52	cps
Strontium	86-1	7868314	8035980	7982669	7962321	1.08	cps
Strontium	88-1	69758394	69948912	69518261	69741856	0.31	cps
Sulfur	34-1	195402	194485	195183	195023	0.25	cps
Terbium	159-1	3771717	3780711	3837455	3796628	0.94	cps
Terbium	159-2	2603525	2506586	2550442	2553518	1.90	cps
Thallium	203-1	955002	963432	960205	959546	0.44	cps
Thallium	205-1	2513178	2544725	2539112	2532338	0.66	cps
Tin	118-1	869333	873820	876373	873175	0.41	cps
Titanium	47-1	1249638	1275347	1275418	1266801	1.17	cps

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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:33:04	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3345566	3381236	3401363	3376055	0.84	cps
Vanadium	51-2	321035	319989	322100	321042	0.33	cps
Yttrium	89-1	4622106	4555284	4579541	4585644	0.74	cps
Yttrium	89-2	1144226	1133497	1131423	1136382	0.60	cps
Zinc	66-2	627117	623394	623526	624679	0.34	cps
Zirconium	90-1	1648648	1674326	1633468	1652147	1.25	cps
Zirconium	91-1	368951	373874	372561	371795	0.69	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:36:06	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	896692	890288	882588	889856	0.79	cps
Antimony	121-1	2055964	2028479	2071747	2052063	1.07	cps
Arsenic	75-2	88005	86611	87472	87363	0.81	cps
Barium	135-1	2779614	2808560	2796933	2795036	0.52	cps
Barium	137-1	4782780	4872307	4812776	4822621	0.94	cps
Beryllium	9-1	378937	381057	382168	380720	0.43	cps
Bismuth	209-1	2305384	2278233	2342971	2308863	1.41	cps
Bismuth	209-2	1890860	1878196	1891547	1886868	0.40	cps
Bromine	81-1	6081	6151	6361	6198	2.35	cps
Bromine	81-2	20	47	13	27	66.16	cps
Cadmium	108-1	37234	37037	37208	37160	0.29	cps
Cadmium	106-1	54060	55248	55198	54835	1.23	cps
Cadmium	111-1	493445	494415	496918	494926	0.36	cps
Calcium	43-1	575979	580177	577430	577862	0.37	cps
Calcium	44-1	8314214	8388130	8444391	8382245	0.78	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	700969	695318	698002	698096	0.40	cps
Cobalt	59-2	1033989	1034116	1036614	1034907	0.14	cps
Copper	63-2	7220506	7250457	7113522	7194828	1.00	cps
Dysprosium	156-1	57	60	47	54	12.74	cps
Dysprosium	156-2	163	70	110	114	40.92	cps
Erbium	164-1	13	37	40	30	48.44	cps
Erbium	164-2	10	30	13	18	60.28	cps
Gadolinium	160-1	27	23	20	23	14.29	cps
Gadolinium	160-2	133	110	113	119	10.62	cps
Holmium	165-1	3779373	3722299	3752990	3751554	0.76	cps
Holmium	165-2	2683899	2622402	2657213	2654504	1.16	cps
Indium	115-1	2725305	2707481	2681678	2704821	0.81	cps
Indium	115-2	865799	869799	866229	867276	0.25	cps
Iron	56-2	30994814	30823103	31066452	30961456	0.40	cps
Iron	57-2	810979	801995	801864	804946	0.65	cps
Iron	54-2	1729532	1693104	1717757	1713464	1.08	cps
Krypton	83-1	67	80	57	68	17.27	cps

Reviewed By:Mohan
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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:36:06	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	8493342	8675118	8621872	8596777	1.09	cps
Lead	207-1	7537378	7525940	7525772	7529697	0.09	cps
Lead	208-1	34057467	34242782	34373484	34224578	0.46	cps
Lithium	6-1	728807	712029	721770	720869	1.17	cps
Magnesium	24-2	7062038	6944296	6921042	6975792	1.08	cps
Manganese	55-2	5322463	5384742	5374373	5360526	0.62	cps
Molybdenum	94-1	7117900	7216759	7192974	7175878	0.72	cps
Molybdenum	95-1	10581875	10461573	10551111	10531520	0.59	cps
Molybdenum	96-1	11432320	11626999	11512362	11523894	0.85	cps
Molybdenum	97-1	6516122	6637702	6600808	6584877	0.95	cps
Molybdenum	98-1	16843995	17172675	17250671	17089114	1.26	cps
Neodymium	150-1	190	210	197	199	5.12	cps
Neodymium	150-2	30	43	37	37	18.18	cps
Nickel	60-2	254589	256404	255707	255567	0.36	cps
Phosphorus	31-2	42185	42061	42723	42323	0.83	cps
Potassium	39-2	4287551	4287038	4264661	4279750	0.31	cps
Rhodium	103-1	2359785	2376646	2344854	2360428	0.67	cps
Rhodium	103-2	1328387	1336397	1339899	1334894	0.44	cps
Scandium	45-1	1413969	1408663	1413231	1411955	0.20	cps
Scandium	45-2	126045	126220	126865	126377	0.34	cps
Selenium	82-1	28451	27949	28022	28140	0.96	cps
Selenium	77-2	2600	2664	2567	2610	1.88	cps
Selenium	78-2	8673	9173	9123	8989	3.07	cps
Silicon	28-1	1134740	1148372	1148351	1143821	0.69	cps
Silver	107-1	2412569	2405310	2394213	2404031	0.38	cps
Silver	109-1	2278308	2314451	2273512	2288757	0.98	cps
Sodium	23-2	11963602	12029853	11787888	11927114	1.05	cps
Strontium	86-1	15600045	15600531	15840179	15680252	0.88	cps
Strontium	88-1	137180805	137268125	138503161	137650697	0.54	cps
Sulfur	34-1	261637	260901	260779	261105	0.18	cps
Terbium	159-1	3853059	3845004	3870503	3856189	0.34	cps
Terbium	159-2	2558460	2528661	2559837	2548986	0.69	cps
Thallium	203-1	2128417	2134035	2159064	2140505	0.76	cps
Thallium	205-1	5055436	5119872	5123916	5099741	0.75	cps
Tin	118-1	1802285	1772894	1787983	1787721	0.82	cps
Titanium	47-1	2458360	2424513	2434346	2439073	0.71	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:36:06	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	6642263	6907187	6974559	6841336	2.57	cps
Vanadium	51-2	638956	630511	629508	632992	0.82	cps
Yttrium	89-1	4547378	4484843	4607385	4546535	1.35	cps
Yttrium	89-2	1136116	1146312	1144260	1142229	0.47	cps
Zinc	66-2	1212630	1210839	1214242	1212571	0.14	cps
Zirconium	90-1	3253043	3255197	3298412	3268884	0.78	cps
Zirconium	91-1	729613	739563	737842	735673	0.72	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:41:54	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1762891	1764159	1797236	1774762	1.10	cps
Antimony	121-1	4159095	4187330	4193961	4180129	0.44	cps
Arsenic	75-2	175743	175211	177945	176300	0.82	cps
Barium	135-1	5727964	5682491	5742667	5717707	0.55	cps
Barium	137-1	9841640	9902498	9906478	9883538	0.37	cps
Beryllium	9-1	748906	753276	758072	753418	0.61	cps
Bismuth	209-1	2376732	2416424	2362830	2385329	1.17	cps
Bismuth	209-2	1915011	1623963	1746604	1761860	8.29	cps
Bromine	81-1	6031	6001	5998	6010	0.31	cps
Bromine	81-2	67	27	37	43	48.03	cps
Cadmium	108-1	74946	74155	73840	74313	0.77	cps
Cadmium	106-1	107427	108669	107615	107904	0.62	cps
Cadmium	111-1	982514	992546	989035	988032	0.52	cps
Calcium	43-1	1168181	1177714	1176823	1174239	0.45	cps
Calcium	44-1	17065426	16799954	16877733	16914371	0.81	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1382713	1387065	1365727	1378502	0.82	cps
Cobalt	59-2	2048935	2098584	2068091	2071870	1.21	cps
Copper	63-2	14308519	14314635	14521301	14381485	0.84	cps
Dysprosium	156-1	100	120	100	107	10.83	cps
Dysprosium	156-2	277	197	267	247	17.67	cps
Erbium	164-1	73	70	47	63	22.94	cps
Erbium	164-2	30	30	30	30	0.00	cps
Gadolinium	160-1	40	50	47	46	11.18	cps
Gadolinium	160-2	187	130	173	163	18.14	cps
Holmium	165-1	3936300	3967601	3910717	3938206	0.72	cps
Holmium	165-2	2737904	2307874	2484500	2510093	8.61	cps
Indium	115-1	2705013	2735085	2720756	2720285	0.55	cps
Indium	115-2	874207	746357	810073	810212	7.89	cps
Iron	56-2	62847297	63476442	62663849	62995863	0.68	cps
Iron	57-2	1551326	1557781	1542293	1550467	0.50	cps
Iron	54-2	3453245	3483321	3494791	3477119	0.62	cps
Krypton	83-1	83	80	60	74	16.95	cps

Reviewed By:Mohan
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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:41:54	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	17485471	17621626	17767807	17624968	0.80	cps
Lead	207-1	15268056	15441669	15343634	15351120	0.57	cps
Lead	208-1	69523894	70655475	69902877	70027415	0.82	cps
Lithium	6-1	741151	743254	737004	740470	0.43	cps
Magnesium	24-2	14209428	14450715	14320976	14327040	0.84	cps
Manganese	55-2	10723348	10869853	11007026	10866742	1.31	cps
Molybdenum	94-1	14624688	14677104	14672729	14658174	0.20	cps
Molybdenum	95-1	21442938	21480521	21408995	21444151	0.17	cps
Molybdenum	96-1	23217269	23516820	23584093	23439394	0.83	cps
Molybdenum	97-1	13251360	13370200	13580963	13400841	1.25	cps
Molybdenum	98-1	34673026	35006374	34709908	34796436	0.53	cps
Neodymium	150-1	463	380	443	429	10.14	cps
Neodymium	150-2	97	90	77	88	11.60	cps
Nickel	60-2	508717	508086	510008	508937	0.19	cps
Phosphorus	31-2	85651	85423	86553	85876	0.70	cps
Potassium	39-2	8602664	8705416	8712179	8673420	0.71	cps
Rhodium	103-1	2378874	2400489	2365487	2381617	0.74	cps
Rhodium	103-2	1361493	1163211	1263696	1262800	7.85	cps
Scandium	45-1	1441697	1475624	1410256	1442525	2.27	cps
Scandium	45-2	131245	115260	120564	122356	6.65	cps
Selenium	82-1	55477	55455	55811	55581	0.36	cps
Selenium	77-2	5561	5194	5004	5253	5.39	cps
Selenium	78-2	17177	17681	17807	17555	1.90	cps
Silicon	28-1	2076272	2055354	2054701	2062109	0.60	cps
Silver	107-1	4747533	4770619	4817990	4778714	0.75	cps
Silver	109-1	4508011	4507697	4599875	4538528	1.17	cps
Sodium	23-2	24255604	24358876	24340902	24318461	0.23	cps
Strontium	86-1	31875636	32096529	32046390	32006185	0.36	cps
Strontium	88-1	277778143	280116369	280233062	279375858	0.50	cps
Sulfur	34-1	408534	405210	404134	405959	0.57	cps
Terbium	159-1	4019442	3989962	3980292	3996565	0.51	cps
Terbium	159-2	2634244	2252639	2466494	2451126	7.80	cps
Thallium	203-1	4414413	4331684	4423430	4389842	1.15	cps
Thallium	205-1	10398499	10343199	10510608	10417436	0.82	cps
Tin	118-1	3579005	3603777	3643278	3608687	0.90	cps
Titanium	47-1	4950242	4964042	4933949	4949411	0.30	cps

Reviewed By:Mohan
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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:41:54	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	14061719	14140213	14047060	14082997	0.36	cps
Vanadium	51-2	1292375	1304178	1299853	1298802	0.46	cps
Yttrium	89-1	4757820	4751837	4679098	4729585	0.93	cps
Yttrium	89-2	1179435	1008844	1101250	1096510	7.79	cps
Zinc	66-2	2406719	2410263	2428551	2415178	0.49	cps
Zirconium	90-1	6592260	6671217	6615257	6626245	0.61	cps
Zirconium	91-1	1462716	1462213	1483697	1469542	0.83	cps

Reviewed By:Mohan
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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:44:46	DataFile Name :	012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	8807305	8815639	8732529	8785158	0.52	cps
Antimony	121-1	3037	3374	3007	3139	6.49	cps
Arsenic	75-2	130	87	87	101	24.74	cps
Barium	135-1	2110	2474	2084	2223	9.81	cps
Barium	137-1	3567	4084	3514	3722	8.47	cps
Beryllium	9-1	507	433	457	466	8.05	cps
Bismuth	209-1	2068789	2070272	2074886	2071316	0.15	cps
Bismuth	209-2	1504699	1495788	1493963	1498150	0.38	cps
Bromine	81-1	6461	6271	6338	6357	1.52	cps
Bromine	81-2	33	27	43	34	24.35	cps
Cadmium	108-1	50	70	43	54	25.49	cps
Cadmium	106-1	1420	1593	1440	1485	6.39	cps
Cadmium	111-1	1136	1376	1164	1226	10.73	cps
Calcium	43-1	4959408	5057449	4977279	4998045	1.04	cps
Calcium	44-1	79093797	80179165	79617269	79630077	0.68	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	4434	4708	4421	4521	3.58	cps
Cobalt	59-2	5411	5374	5324	5370	0.81	cps
Copper	63-2	3340	3404	3180	3308	3.48	cps
Dysprosium	156-1	170	187	163	173	6.93	cps
Dysprosium	156-2	133	133	123	130	4.45	cps
Erbium	164-1	173	113	187	158	24.76	cps
Erbium	164-2	170	137	140	149	12.33	cps
Gadolinium	160-1	143	150	130	141	7.22	cps
Gadolinium	160-2	163	213	210	196	14.29	cps
Holmium	165-1	3669437	3676795	3635009	3660414	0.61	cps
Holmium	165-2	2528621	2533911	2544091	2535541	0.31	cps
Indium	115-1	2658910	2625665	2617207	2633927	0.84	cps
Indium	115-2	835078	836112	832982	834724	0.19	cps
Iron	56-2	296471356	296398822	291439989	294770056	0.98	cps
Iron	57-2	7264708	7234899	7243809	7247805	0.21	cps
Iron	54-2	15981271	16073431	16033391	16029365	0.29	cps
Krypton	83-1	83	83	77	81	4.74	cps

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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:44:46	DataFile Name :	012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3410	3377	2747	3178	11.76	cps
Lead	207-1	2887	2940	2654	2827	5.39	cps
Lead	208-1	13309	13013	11419	12580	8.08	cps
Lithium	6-1	715984	726661	733380	725342	1.21	cps
Magnesium	24-2	74704657	74422006	74509681	74545448	0.19	cps
Manganese	55-2	5788	5785	5831	5801	0.45	cps
Molybdenum	94-1	3931	3737	3374	3681	7.68	cps
Molybdenum	95-1	3977	4135	3650	3921	6.30	cps
Molybdenum	96-1	7352	9218	6952	7840	15.43	cps
Molybdenum	97-1	2380	5589	2087	3352	57.96	cps
Molybdenum	98-1	5808	14705	5304	8606	61.45	cps
Neodymium	150-1	80	97	67	81	18.53	cps
Neodymium	150-2	53	37	47	46	18.41	cps
Nickel	60-2	1940	2020	1807	1922	5.61	cps
Phosphorus	31-2	133	167	127	142	15.07	cps
Potassium	39-2	42277371	41960583	42855379	42364444	1.07	cps
Rhodium	103-1	2151896	2210954	2167607	2176819	1.41	cps
Rhodium	103-2	1202678	1205261	1197436	1201792	0.33	cps
Scandium	45-1	1416739	1424120	1424600	1421820	0.31	cps
Scandium	45-2	125907	129192	127860	127653	1.29	cps
Selenium	82-1	150	178	221	183	19.48	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	87	73	110	90	20.62	cps
Silicon	28-1	201630	196819	195773	198074	1.58	cps
Silver	107-1	763	1989	470	1074	75.01	cps
Silver	109-1	557	1264	493	771	55.46	cps
Sodium	23-2	118858248	117910082	118329725	118366018	0.40	cps
Strontium	86-1	5318	5038	4627	4994	6.95	cps
Strontium	88-1	47262	43003	41649	43971	6.66	cps
Sulfur	34-1	106370	112396	110573	109780	2.82	cps
Terbium	159-1	3759324	3810379	3769351	3779685	0.72	cps
Terbium	159-2	2436691	2530238	2483277	2483402	1.88	cps
Thallium	203-1	513	480	400	464	12.54	cps
Thallium	205-1	1327	1190	913	1143	18.42	cps
Tin	118-1	1866	2216	2075	2052	8.56	cps
Titanium	47-1	647	650	630	642	1.67	cps

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 16:44:46	DataFile Name :	012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	790	830	563	728	19.76	cps
Vanadium	51-2	410	350	367	376	8.25	cps
Yttrium	89-1	4491364	4477279	4469780	4479474	0.24	cps
Yttrium	89-2	1110672	1118529	1115918	1115040	0.36	cps
Zinc	66-2	857	920	937	904	4.67	cps
Zirconium	90-1	4151	4234	3791	4058	5.81	cps
Zirconium	91-1	847	1020	890	919	9.82	cps

Reviewed By:Mohan
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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:03:58	DataFile Name :	013ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	46353	46781	46607	46580	0.46	cps
Antimony	121-1	828554	828963	831134	829550	0.17	cps
Arsenic	75-2	37554	36411	37050	37005	1.55	cps
Barium	135-1	109318	109017	109735	109357	0.33	cps
Barium	137-1	189130	189553	190379	189687	0.34	cps
Beryllium	9-1	81978	82403	82196	82192	0.26	cps
Bismuth	209-1	2474130	2459643	2434545	2456106	0.82	cps
Bismuth	209-2	1998339	1947509	1759090	1901646	6.63	cps
Bromine	81-1	6428	6375	6572	6458	1.58	cps
Bromine	81-2	50	23	53	42	38.95	cps
Cadmium	108-1	12115	11955	12102	12057	0.74	cps
Cadmium	106-1	19500	19453	19977	19643	1.48	cps
Cadmium	111-1	109233	110937	111094	110422	0.93	cps
Calcium	43-1	24259	23992	24847	24366	1.79	cps
Calcium	44-1	376235	379195	379587	378339	0.48	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	152778	151014	153388	152393	0.81	cps
Cobalt	59-2	228355	225011	226129	226498	0.75	cps
Copper	63-2	150245	149972	150003	150074	0.10	cps
Dysprosium	156-1	20	13	13	16	24.76	cps
Dysprosium	156-2	27	3	7	12	103.26	cps
Erbium	164-1	17	13	13	14	13.35	cps
Erbium	164-2	13	10	10	11	17.30	cps
Gadolinium	160-1	10	7	13	10	33.30	cps
Gadolinium	160-2	90	107	103	100	8.82	cps
Holmium	165-1	3912738	3847390	3918533	3892887	1.01	cps
Holmium	165-2	2682545	2676617	2409358	2589507	6.03	cps
Indium	115-1	2953595	2911351	2884917	2916621	1.19	cps
Indium	115-2	927849	917492	837896	894412	5.50	cps
Iron	56-2	2657213	2614033	2574609	2615285	1.58	cps
Iron	57-2	66965	64537	65847	65783	1.85	cps
Iron	54-2	156075	155025	156652	155917	0.53	cps
Krypton	83-1	67	43	57	56	21.08	cps

Reviewed By:Mohan
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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:03:58	DataFile Name :	013ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	696298	700261	703144	699901	0.49	cps
Lead	207-1	575481	581501	588154	581712	1.09	cps
Lead	208-1	2695789	2722466	2745788	2721347	0.92	cps
Lithium	6-1	788569	785932	792047	788849	0.39	cps
Magnesium	24-2	188685	188385	188317	188462	0.10	cps
Manganese	55-2	117984	117306	117897	117729	0.31	cps
Molybdenum	94-1	6981268	7108024	6910863	7000052	1.43	cps
Molybdenum	95-1	10036777	10043628	10069590	10049998	0.17	cps
Molybdenum	96-1	11075950	10935266	11001866	11004361	0.64	cps
Molybdenum	97-1	6340530	6234508	6322723	6299254	0.90	cps
Molybdenum	98-1	16242593	16433721	16116084	16264133	0.98	cps
Neodymium	150-1	10	13	10	11	17.30	cps
Neodymium	150-2	3	0	7	3	100.05	cps
Nickel	60-2	57446	56285	56914	56882	1.02	cps
Phosphorus	31-2	173	147	120	147	18.18	cps
Potassium	39-2	408868	405097	411249	408405	0.76	cps
Rhodium	103-1	2629399	2597642	2598502	2608515	0.69	cps
Rhodium	103-2	1462412	1439586	1318998	1406999	5.48	cps
Scandium	45-1	1552879	1549318	1536877	1546358	0.54	cps
Scandium	45-2	138035	133273	124447	131918	5.23	cps
Selenium	82-1	12015	12037	12103	12051	0.38	cps
Selenium	77-2	1120	1217	1067	1135	6.70	cps
Selenium	78-2	3904	3897	3934	3912	0.50	cps
Silicon	28-1	1273885	1281462	1282350	1279232	0.36	cps
Silver	107-1	246236	246909	247411	246852	0.24	cps
Silver	109-1	230803	233542	231584	231976	0.61	cps
Sodium	23-2	532500	526383	528467	529117	0.59	cps
Strontium	86-1	666495	668898	667847	667747	0.18	cps
Strontium	88-1	5864154	5934961	5909849	5902988	0.61	cps
Sulfur	34-1	116080	116678	114024	115594	1.20	cps
Terbium	159-1	3968162	4008138	3967261	3981187	0.59	cps
Terbium	159-2	2687759	2642281	2391570	2573870	6.20	cps
Thallium	203-1	847446	851547	863195	854063	0.96	cps
Thallium	205-1	2262471	2311910	2248520	2274300	1.46	cps
Tin	118-1	1997029	1991160	1978417	1988869	0.48	cps
Titanium	47-1	2385990	2411875	2390694	2396187	0.58	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:03:58	DataFile Name :	013ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	7376754	7398999	7431688	7402480	0.37	cps
Vanadium	51-2	132196	133975	131503	132558	0.96	cps
Yttrium	89-1	4931127	4889736	4831619	4884161	1.02	cps
Yttrium	89-2	1219057	1201550	1092717	1171108	5.84	cps
Zinc	66-2	51231	50966	51830	51342	0.86	cps
Zirconium	90-1	3494414	3483775	3491714	3489968	0.16	cps
Zirconium	91-1	770102	781262	780359	777241	0.80	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P7
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:09:27	DataFile Name :	014LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1967	1970	1833	1923	4.05	cps
Antimony	121-1	8903	8899	9023	8942	0.79	cps
Arsenic	75-2	200	217	190	202	6.66	cps
Barium	135-1	11218	10921	11001	11047	1.39	cps
Barium	137-1	19066	19136	18956	19053	0.48	cps
Beryllium	9-1	993	833	927	918	8.76	cps
Bismuth	209-1	2485149	2497734	2505473	2496119	0.41	cps
Bismuth	209-2	2013249	1966667	1934298	1971404	2.01	cps
Bromine	81-1	6802	6431	6635	6623	2.80	cps
Bromine	81-2	17	30	30	26	30.11	cps
Cadmium	108-1	80	70	60	70	14.29	cps
Cadmium	106-1	1373	1477	1393	1415	3.88	cps
Cadmium	111-1	2095	2095	2020	2070	2.09	cps
Calcium	43-1	5895	6171	6041	6036	2.29	cps
Calcium	44-1	96514	97665	97279	97153	0.60	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3207	3297	3380	3295	2.63	cps
Cobalt	59-2	2407	2630	2370	2469	5.70	cps
Copper	63-2	3814	3530	3704	3683	3.88	cps
Dysprosium	156-1	10	20	10	13	43.30	cps
Dysprosium	156-2	7	3	7	6	34.70	cps
Erbium	164-1	17	20	20	19	10.18	cps
Erbium	164-2	7	7	17	10	57.72	cps
Gadolinium	160-1	10	10	7	9	21.63	cps
Gadolinium	160-2	120	120	103	114	8.40	cps
Holmium	165-1	3951722	3909364	3888604	3916563	0.82	cps
Holmium	165-2	2724560	2698882	2640721	2688055	1.60	cps
Indium	115-1	2959734	3028373	2990184	2992764	1.15	cps
Indium	115-2	945570	940168	940703	942147	0.32	cps
Iron	56-2	78285	77173	78282	77914	0.82	cps
Iron	57-2	2257	2451	2258	2322	4.80	cps
Iron	54-2	4928	4908	4898	4911	0.31	cps
Krypton	83-1	63	80	90	78	17.32	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P7
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:09:27	DataFile Name :	014LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3501	3454	3637	3531	2.70	cps
Lead	207-1	3344	3200	3020	3188	5.08	cps
Lead	208-1	14390	14190	14176	14252	0.84	cps
Lithium	6-1	793112	799165	793049	795109	0.44	cps
Magnesium	24-2	86642	86129	87084	86618	0.55	cps
Manganese	55-2	1337	1453	1303	1365	5.77	cps
Molybdenum	94-1	8599	8843	8626	8689	1.54	cps
Molybdenum	95-1	10154	10631	10390	10392	2.30	cps
Molybdenum	96-1	11678	12022	11795	11832	1.48	cps
Molybdenum	97-1	6588	6405	6602	6532	1.68	cps
Molybdenum	98-1	17260	16262	16980	16834	3.06	cps
Neodymium	150-1	0	3	3	2	86.60	cps
Neodymium	150-2	3	0	3	2	86.60	cps
Nickel	60-2	593	633	657	628	5.10	cps
Phosphorus	31-2	253	243	230	242	4.83	cps
Potassium	39-2	130120	129663	130823	130202	0.45	cps
Rhodium	103-1	2631978	2672981	2594818	2633259	1.48	cps
Rhodium	103-2	1477223	1465035	1460693	1467651	0.58	cps
Scandium	45-1	1536424	1552830	1571608	1553621	1.13	cps
Scandium	45-2	136465	137911	135681	136686	0.83	cps
Selenium	82-1	418	409	440	422	3.73	cps
Selenium	77-2	10	27	30	22	48.22	cps
Selenium	78-2	237	190	173	200	16.41	cps
Silicon	28-1	197323	199348	199309	198660	0.58	cps
Silver	107-1	5008	4914	4918	4946	1.07	cps
Silver	109-1	4991	4737	4727	4819	3.10	cps
Sodium	23-2	146772	144870	144920	145521	0.74	cps
Strontium	86-1	1503	1657	1570	1577	4.88	cps
Strontium	88-1	12295	12572	12212	12360	1.53	cps
Sulfur	34-1	116873	115875	117635	116794	0.76	cps
Terbium	159-1	4034783	4024343	4021019	4026715	0.18	cps
Terbium	159-2	2598624	2655406	2571642	2608557	1.64	cps
Thallium	203-1	3931	4127	4194	4084	3.35	cps
Thallium	205-1	9697	9704	9857	9752	0.93	cps
Tin	118-1	19222	18615	18451	18763	2.17	cps
Titanium	47-1	2694	2880	2604	2726	5.18	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P7
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:09:27	DataFile Name :	014LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	12249	12056	12156	12153	0.80	cps
Vanadium	51-2	6985	6825	6965	6925	1.26	cps
Yttrium	89-1	4919161	4851149	4935218	4901843	0.91	cps
Yttrium	89-2	1215330	1203689	1218181	1212400	0.63	cps
Zinc	66-2	1500	1560	1437	1499	4.11	cps
Zirconium	90-1	7645	7739	7855	7747	1.36	cps
Zirconium	91-1	1710	1667	1823	1733	4.67	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:17:04	DataFile Name :	015CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	63	63	73	67	8.66	cps
Antimony	121-1	70	107	100	92	21.18	cps
Arsenic	75-2	7	3	3	4	43.40	cps
Barium	135-1	17	7	27	17	59.99	cps
Barium	137-1	30	30	20	27	21.65	cps
Beryllium	9-1	97	83	63	81	20.69	cps
Bismuth	209-1	2388961	2398396	2409495	2398950	0.43	cps
Bismuth	209-2	2004805	1961289	1931459	1965851	1.88	cps
Bromine	81-1	6698	6455	6755	6636	2.40	cps
Bromine	81-2	20	30	43	31	37.62	cps
Cadmium	108-1	7	3	3	4	43.40	cps
Cadmium	106-1	1283	1360	1210	1285	5.84	cps
Cadmium	111-1	897	953	851	900	5.66	cps
Calcium	43-1	197	140	107	148	30.79	cps
Calcium	44-1	2747	2677	2507	2644	4.67	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	203	170	180	184	9.28	cps
Cobalt	59-2	27	33	7	22	62.43	cps
Copper	63-2	727	597	723	682	10.86	cps
Dysprosium	156-1	20	7	10	12	56.76	cps
Dysprosium	156-2	13	3	0	6	124.93	cps
Erbium	164-1	27	17	13	19	36.75	cps
Erbium	164-2	13	27	7	16	65.47	cps
Gadolinium	160-1	13	3	7	8	65.47	cps
Gadolinium	160-2	137	93	107	112	19.78	cps
Holmium	165-1	3804212	3772396	3826306	3800972	0.71	cps
Holmium	165-2	2665065	2669678	2578137	2637627	1.96	cps
Indium	115-1	2941388	2924900	2853637	2906642	1.60	cps
Indium	115-2	919825	928288	921071	923061	0.49	cps
Iron	56-2	5204	4858	5078	5046	3.48	cps
Iron	57-2	473	486	523	494	5.28	cps
Iron	54-2	860	803	833	832	3.41	cps
Krypton	83-1	80	43	77	67	30.42	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:17:04	DataFile Name :	015CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	263	290	180	244	23.48	cps
Lead	207-1	280	190	233	234	19.20	cps
Lead	208-1	1107	990	943	1013	8.30	cps
Lithium	6-1	779720	782883	773026	778543	0.65	cps
Magnesium	24-2	1327	1257	1247	1277	3.41	cps
Manganese	55-2	103	143	103	117	19.80	cps
Molybdenum	94-1	130	197	140	156	23.11	cps
Molybdenum	95-1	90	50	90	77	30.12	cps
Molybdenum	96-1	123	120	110	118	5.89	cps
Molybdenum	97-1	30	47	43	40	22.05	cps
Molybdenum	98-1	157	143	120	140	13.26	cps
Neodymium	150-1	0	3	0	1	173.21	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	73	60	57	63	13.92	cps
Phosphorus	31-2	97	87	103	96	8.78	cps
Potassium	39-2	33674	33016	33056	33249	1.11	cps
Rhodium	103-1	2619082	2601730	2560342	2593718	1.16	cps
Rhodium	103-2	1452690	1450673	1424200	1442521	1.10	cps
Scandium	45-1	1521208	1505391	1513622	1513407	0.52	cps
Scandium	45-2	134029	135375	131108	133504	1.63	cps
Selenium	82-1	87	151	88	108	33.82	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	117	100	133	117	14.29	cps
Silicon	28-1	184368	184152	184459	184326	0.09	cps
Silver	107-1	90	50	70	70	28.57	cps
Silver	109-1	47	43	50	47	7.15	cps
Sodium	23-2	8649	8699	8763	8704	0.65	cps
Strontium	86-1	177	180	143	167	12.16	cps
Strontium	88-1	197	187	227	203	10.24	cps
Sulfur	34-1	121835	121992	122379	122068	0.23	cps
Terbium	159-1	3873883	3898030	3895495	3889136	0.34	cps
Terbium	159-2	2626982	2570252	2492252	2563162	2.64	cps
Thallium	203-1	113	53	73	80	38.19	cps
Thallium	205-1	230	207	170	202	14.96	cps
Tin	118-1	893	843	853	863	3.06	cps
Titanium	47-1	50	33	50	44	21.66	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:17:04	DataFile Name :	015CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	7	23	10	13	66.12	cps
Vanadium	51-2	0	7	7	4	86.60	cps
Yttrium	89-1	4770503	4816149	4725216	4770623	0.95	cps
Yttrium	89-2	1185793	1194740	1193022	1191185	0.40	cps
Zinc	66-2	103	123	93	107	14.32	cps
Zirconium	90-1	283	343	317	314	9.56	cps
Zirconium	91-1	57	57	50	54	7.07	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:20:27	DataFile Name :	016ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	8180782	8104399	8002195	8095792	1.11	cps
Antimony	121-1	4657	4654	4744	4685	1.09	cps
Arsenic	75-2	90	63	87	80	18.17	cps
Barium	135-1	1493	1557	1663	1571	5.47	cps
Barium	137-1	2674	2634	2664	2657	0.78	cps
Beryllium	9-1	273	253	320	282	12.12	cps
Bismuth	209-1	2298370	2299212	2323834	2307139	0.63	cps
Bismuth	209-2	1846687	1870210	1896126	1871008	1.32	cps
Bromine	81-1	6368	6555	6558	6494	1.68	cps
Bromine	81-2	97	113	97	102	9.41	cps
Cadmium	108-1	640	693	617	650	6.05	cps
Cadmium	106-1	1393	1250	1167	1270	9.03	cps
Cadmium	111-1	1317	1136	1165	1206	8.07	cps
Calcium	43-1	1061364	1058124	1058885	1059457	0.16	cps
Calcium	44-1	15906372	15966077	15939818	15937423	0.19	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	28236	28113	28504	28284	0.71	cps
Cobalt	59-2	2524	2590	2654	2589	2.51	cps
Copper	63-2	11444	11571	11795	11603	1.53	cps
Dysprosium	156-1	60	10	7	26	116.90	cps
Dysprosium	156-2	20	3	33	19	79.59	cps
Erbium	164-1	23	50	17	30	58.79	cps
Erbium	164-2	13	30	23	22	37.76	cps
Gadolinium	160-1	20	43	7	23	79.53	cps
Gadolinium	160-2	120	120	130	123	4.68	cps
Holmium	165-1	3904407	3830843	3895943	3877065	1.04	cps
Holmium	165-2	2674119	2706183	2724446	2701583	0.94	cps
Indium	115-1	2808294	2795345	2751094	2784911	1.08	cps
Indium	115-2	881315	890774	892634	888241	0.68	cps
Iron	56-2	124185185	123053218	122841098	123359834	0.59	cps
Iron	57-2	3070488	3060229	3044710	3058476	0.42	cps
Iron	54-2	6791737	6662822	6690023	6714861	1.01	cps
Krypton	83-1	67	57	77	67	15.00	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:20:27	DataFile Name :	016ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	14698	15242	14685	14875	2.14	cps
Lead	207-1	11388	11525	11688	11534	1.30	cps
Lead	208-1	54650	55674	55484	55269	0.99	cps
Lithium	6-1	746906	745739	745673	746106	0.09	cps
Magnesium	24-2	14176765	13983665	14015834	14058755	0.74	cps
Manganese	55-2	9210	8993	8569	8924	3.65	cps
Molybdenum	94-1	2120536	2131046	2161526	2137703	1.00	cps
Molybdenum	95-1	3671721	3716908	3771208	3719945	1.34	cps
Molybdenum	96-1	3961758	4008434	4007236	3992476	0.67	cps
Molybdenum	97-1	2311844	2360472	2317620	2329979	1.14	cps
Molybdenum	98-1	5988779	5980250	6058114	6009048	0.71	cps
Neodymium	150-1	10	20	20	17	34.64	cps
Neodymium	150-2	13	17	40	23	62.27	cps
Nickel	60-2	2817	2857	3037	2904	4.04	cps
Phosphorus	31-2	426735	422787	424032	424518	0.48	cps
Potassium	39-2	16857199	16767188	16654880	16759756	0.60	cps
Rhodium	103-1	2360610	2341731	2347170	2349837	0.41	cps
Rhodium	103-2	1325544	1341340	1346808	1337897	0.83	cps
Scandium	45-1	1468945	1456134	1406518	1443866	2.28	cps
Scandium	45-2	129894	130008	129511	129804	0.20	cps
Selenium	82-1	127	135	128	130	3.13	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	93	127	110	110	15.15	cps
Silicon	28-1	222699	224400	224513	223871	0.45	cps
Silver	107-1	337	403	470	403	16.53	cps
Silver	109-1	360	303	413	359	15.33	cps
Sodium	23-2	23761415	23529598	23587765	23626259	0.51	cps
Strontium	86-1	42271	43063	42936	42756	1.00	cps
Strontium	88-1	375985	379131	379592	378236	0.52	cps
Sulfur	34-1	1540224	1561530	1525990	1542581	1.16	cps
Terbium	159-1	3911850	3950193	3987502	3949848	0.96	cps
Terbium	159-2	2585574	2632216	2588109	2601966	1.01	cps
Thallium	203-1	727	693	667	696	4.32	cps
Thallium	205-1	1747	1743	1780	1757	1.15	cps
Tin	118-1	1415	1379	1426	1407	1.74	cps
Titanium	47-1	938192	934101	931634	934642	0.35	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:20:27	DataFile Name :	016ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	180	227	247	218	15.71	cps
Vanadium	51-2	257	250	240	249	3.37	cps
Yttrium	89-1	4637414	4696997	4645320	4659910	0.69	cps
Yttrium	89-2	1164723	1172551	1176601	1171292	0.52	cps
Zinc	66-2	2830	2974	2887	2897	2.49	cps
Zirconium	90-1	553	533	483	523	6.89	cps
Zirconium	91-1	80	107	137	108	26.30	cps

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:23:38	DataFile Name :	017ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	8163651	8023603	8189702	8125652	1.10	cps
Antimony	121-1	86414	87397	85928	86580	0.86	cps
Arsenic	75-2	3587	3554	3537	3559	0.72	cps
Barium	135-1	23249	23486	23059	23265	0.92	cps
Barium	137-1	39491	40671	39719	39960	1.57	cps
Beryllium	9-1	16058	15791	15618	15823	1.40	cps
Bismuth	209-1	2383743	2399448	2331413	2371534	1.50	cps
Bismuth	209-2	1904914	1879331	1897996	1894080	0.70	cps
Bromine	81-1	6678	6438	7028	6715	4.42	cps
Bromine	81-2	183	127	143	151	19.27	cps
Cadmium	108-1	2230	2030	2210	2157	5.11	cps
Cadmium	106-1	4041	3901	3964	3968	1.77	cps
Cadmium	111-1	21532	21357	21665	21518	0.72	cps
Calcium	43-1	1075911	1076922	1084555	1079130	0.44	cps
Calcium	44-1	16098051	16189203	16085502	16124252	0.35	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	57265	56171	57268	56901	1.11	cps
Cobalt	59-2	44620	44422	43479	44174	1.38	cps
Copper	63-2	38760	38643	39171	38858	0.71	cps
Dysprosium	156-1	23	30	23	26	15.07	cps
Dysprosium	156-2	23	37	10	23	57.15	cps
Erbium	164-1	37	40	43	40	8.32	cps
Erbium	164-2	43	30	20	31	37.62	cps
Gadolinium	160-1	37	30	23	30	22.23	cps
Gadolinium	160-2	110	90	100	100	10.00	cps
Holmium	165-1	4018900	3935099	4016441	3990146	1.20	cps
Holmium	165-2	2684051	2741736	2725513	2717100	1.09	cps
Indium	115-1	2884232	2898717	2867835	2883595	0.54	cps
Indium	115-2	913340	903158	899543	905347	0.79	cps
Iron	56-2	123226355	125119848	124597818	124314674	0.79	cps
Iron	57-2	3065379	3118545	3031846	3071923	1.42	cps
Iron	54-2	6734187	6782503	6716676	6744455	0.51	cps
Krypton	83-1	67	83	90	80	15.02	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:23:38	DataFile Name :	017ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	84017	84940	84447	84468	0.55	cps
Lead	207-1	70598	70585	70823	70669	0.19	cps
Lead	208-1	325847	327844	326332	326674	0.32	cps
Lithium	6-1	776300	772122	769076	772499	0.47	cps
Magnesium	24-2	14209350	13938445	13893863	14013886	1.22	cps
Manganese	55-2	31470	30194	30725	30796	2.08	cps
Molybdenum	94-1	2327703	2351554	2341939	2340399	0.51	cps
Molybdenum	95-1	3840472	3889068	3899935	3876492	0.82	cps
Molybdenum	96-1	4182549	4210745	4219000	4204098	0.45	cps
Molybdenum	97-1	2452347	2488469	2487353	2476057	0.83	cps
Molybdenum	98-1	6337344	6280105	6293762	6303737	0.47	cps
Neodymium	150-1	17	43	23	28	49.95	cps
Neodymium	150-2	10	13	13	12	15.73	cps
Nickel	60-2	13396	12799	13223	13139	2.34	cps
Phosphorus	31-2	430255	430331	430762	430449	0.06	cps
Potassium	39-2	16864758	16992224	16757403	16871461	0.70	cps
Rhodium	103-1	2450387	2475178	2422947	2449504	1.07	cps
Rhodium	103-2	1371051	1370624	1362174	1367949	0.37	cps
Scandium	45-1	1481188	1463872	1465663	1470241	0.65	cps
Scandium	45-2	131188	133128	132055	132124	0.74	cps
Selenium	82-1	1270	1281	1253	1268	1.10	cps
Selenium	77-2	137	113	113	121	11.13	cps
Selenium	78-2	377	460	453	430	10.77	cps
Silicon	28-1	331072	332771	333758	332534	0.41	cps
Silver	107-1	90154	90080	89738	89991	0.25	cps
Silver	109-1	85064	84498	85202	84921	0.44	cps
Sodium	23-2	24027875	23567718	24209048	23934880	1.38	cps
Strontium	86-1	107253	106468	107580	107100	0.53	cps
Strontium	88-1	941583	944427	941319	942443	0.18	cps
Sulfur	34-1	1561355	1570418	1571991	1567921	0.37	cps
Terbium	159-1	4079040	4001435	4095602	4058692	1.24	cps
Terbium	159-2	2684566	2648515	2647688	2660256	0.79	cps
Thallium	203-1	95451	96552	95421	95808	0.67	cps
Thallium	205-1	229392	230310	231430	230377	0.44	cps
Tin	118-1	181086	183175	184302	182854	0.89	cps
Titanium	47-1	970815	980187	979421	976808	0.53	cps

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 17:23:38	DataFile Name :	017ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	608208	620757	610533	613166	1.09	cps
Vanadium	51-2	25538	25335	25278	25384	0.54	cps
Yttrium	89-1	4776356	4833282	4737410	4782349	1.01	cps
Yttrium	89-2	1206674	1196761	1185611	1196349	0.88	cps
Zinc	66-2	7752	7602	7475	7610	1.82	cps
Zirconium	90-1	335130	338020	341177	338109	0.89	cps
Zirconium	91-1	75050	75932	75734	75572	0.61	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:04:58	DataFile Name :	024CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4468175	4391437	4425019	4428210	0.87	cps
Antimony	121-1	1988132	1969680	1991323	1983045	0.59	cps
Arsenic	75-2	83661	82377	83600	83212	0.87	cps
Barium	135-1	2753156	2772447	2696241	2740614	1.45	cps
Barium	137-1	4667845	4652884	4626517	4649082	0.45	cps
Beryllium	9-1	384691	390480	391841	389004	0.98	cps
Bismuth	209-1	2225213	2217615	2182849	2208559	1.02	cps
Bismuth	209-2	1593262	1608232	1517552	1573015	3.09	cps
Bromine	81-1	6318	6165	6168	6217	1.41	cps
Bromine	81-2	50	30	30	37	31.49	cps
Cadmium	108-1	34331	35086	34588	34668	1.11	cps
Cadmium	106-1	50548	51508	50839	50965	0.97	cps
Cadmium	111-1	455899	456710	459753	457454	0.44	cps
Calcium	43-1	2551837	2625037	2631007	2602627	1.69	cps
Calcium	44-1	40742266	41106762	41426524	41091851	0.83	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	687783	690837	692551	690390	0.35	cps
Cobalt	59-2	1091865	1098290	1100481	1096879	0.41	cps
Copper	63-2	7477945	7467194	7425325	7456821	0.37	cps
Dysprosium	156-1	157	140	117	138	14.58	cps
Dysprosium	156-2	123	160	170	151	16.26	cps
Erbium	164-1	117	117	120	118	1.63	cps
Erbium	164-2	67	60	63	63	5.27	cps
Gadolinium	160-1	77	100	97	91	13.85	cps
Gadolinium	160-2	197	187	147	177	14.98	cps
Holmium	165-1	3837306	3865881	3775789	3826325	1.20	cps
Holmium	165-2	2645239	2648251	2479258	2590916	3.73	cps
Indium	115-1	2787257	2719510	2726242	2744337	1.36	cps
Indium	115-2	855779	862531	821939	846750	2.57	cps
Iron	56-2	152338941	151900561	152284794	152174766	0.16	cps
Iron	57-2	3747046	3780960	3743328	3757111	0.55	cps
Iron	54-2	8284923	8146090	8233838	8221617	0.85	cps
Krypton	83-1	110	73	97	93	19.89	cps

Reviewed By:Mohan
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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:04:58	DataFile Name :	024CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	8083897	8070194	8070110	8074733	0.10	cps
Lead	207-1	6982707	7141041	6958256	7027335	1.41	cps
Lead	208-1	31931359	32341509	31975068	32082646	0.70	cps
Lithium	6-1	780756	781074	777426	779752	0.26	cps
Magnesium	24-2	37006715	36917258	36782597	36902190	0.31	cps
Manganese	55-2	5273896	5258311	5237092	5256433	0.35	cps
Molybdenum	94-1	7097887	7102409	7162644	7120980	0.51	cps
Molybdenum	95-1	10325667	10404847	10410649	10380388	0.46	cps
Molybdenum	96-1	11281822	11515726	11395360	11397636	1.03	cps
Molybdenum	97-1	6458319	6539000	6560139	6519153	0.82	cps
Molybdenum	98-1	16720280	16729582	16762285	16737382	0.13	cps
Neodymium	150-1	253	303	237	264	13.12	cps
Neodymium	150-2	67	53	70	63	13.93	cps
Nickel	60-2	266569	265673	265188	265810	0.26	cps
Phosphorus	31-2	42609	42392	41793	42265	1.00	cps
Potassium	39-2	21223208	21219835	21374334	21272459	0.41	cps
Rhodium	103-1	2295219	2326993	2323765	2315326	0.76	cps
Rhodium	103-2	1291697	1286206	1244642	1274182	2.02	cps
Scandium	45-1	1507813	1524587	1480050	1504150	1.50	cps
Scandium	45-2	132069	131807	126126	130001	2.58	cps
Selenium	82-1	26546	26715	26347	26536	0.69	cps
Selenium	77-2	2457	2400	2384	2414	1.59	cps
Selenium	78-2	8382	8232	8329	8315	0.92	cps
Silicon	28-1	1200851	1229434	1242087	1224124	1.73	cps
Silver	107-1	2224715	2239705	2190128	2218183	1.15	cps
Silver	109-1	2107497	2118028	2114362	2113296	0.25	cps
Sodium	23-2	60842579	60171037	60491061	60501559	0.56	cps
Strontium	86-1	15461081	15455260	15708848	15541730	0.93	cps
Strontium	88-1	135235391	134143068	136680205	135352888	0.94	cps
Sulfur	34-1	261976	261718	263102	262265	0.28	cps
Terbium	159-1	3817364	3856214	3891552	3855043	0.96	cps
Terbium	159-2	2570102	2549917	2440897	2520305	2.76	cps
Thallium	203-1	2008222	1989575	2007697	2001831	0.53	cps
Thallium	205-1	4706325	4778704	4834989	4773339	1.35	cps
Tin	118-1	1753315	1734979	1784792	1757696	1.43	cps
Titanium	47-1	2461789	2523633	2485946	2490456	1.25	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:04:58	DataFile Name :	024CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	6519793	6533054	6599891	6550913	0.66	cps
Vanadium	51-2	636479	631895	637909	635428	0.49	cps
Yttrium	89-1	4764520	4677370	4702605	4714832	0.95	cps
Yttrium	89-2	1153576	1168233	1115879	1145896	2.36	cps
Zinc	66-2	1236379	1241792	1237069	1238413	0.24	cps
Zirconium	90-1	3218748	3266865	3267202	3250938	0.86	cps
Zirconium	91-1	717923	730938	729659	726173	0.99	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:07:52	DataFile Name :	025CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	187	230	237	218	12.47	cps
Antimony	121-1	1830	1747	1843	1807	2.90	cps
Arsenic	75-2	7	3	10	7	50.03	cps
Barium	135-1	123	90	120	111	16.52	cps
Barium	137-1	293	210	173	226	27.26	cps
Beryllium	9-1	510	427	340	426	19.97	cps
Bismuth	209-1	2492320	2502151	2539852	2511441	1.00	cps
Bismuth	209-2	2047635	2015857	1982947	2015479	1.60	cps
Bromine	81-1	6088	6408	6418	6305	2.98	cps
Bromine	81-2	47	37	23	36	32.93	cps
Cadmium	108-1	3	13	13	10	57.75	cps
Cadmium	106-1	1483	1393	1263	1380	8.02	cps
Cadmium	111-1	1076	993	885	985	9.73	cps
Calcium	43-1	367	237	200	268	32.71	cps
Calcium	44-1	8228	4287	3954	5490	43.30	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	180	177	160	172	6.22	cps
Cobalt	59-2	97	117	77	97	20.69	cps
Copper	63-2	1067	1087	1043	1066	2.04	cps
Dysprosium	156-1	7	7	3	6	34.70	cps
Dysprosium	156-2	0	0	3	1	173.21	cps
Erbium	164-1	13	20	27	20	33.35	cps
Erbium	164-2	13	27	10	17	52.93	cps
Gadolinium	160-1	3	3	0	2	86.60	cps
Gadolinium	160-2	107	110	100	106	4.82	cps
Holmium	165-1	3913272	3956259	3929437	3932989	0.55	cps
Holmium	165-2	2727115	2754985	2717945	2733348	0.71	cps
Indium	115-1	3060303	3021177	2977068	3019516	1.38	cps
Indium	115-2	962310	955631	952720	956887	0.51	cps
Iron	56-2	14687	15088	16593	15456	6.50	cps
Iron	57-2	662	742	956	786	19.31	cps
Iron	54-2	1437	1507	1473	1472	2.38	cps
Krypton	83-1	57	103	87	82	28.76	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:07:52	DataFile Name :	025CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1737	1137	953	1276	32.13	cps
Lead	207-1	2921	993	787	1567	75.12	cps
Lead	208-1	11636	4410	3944	6663	64.73	cps
Lithium	6-1	827050	821258	829974	826094	0.54	cps
Magnesium	24-2	2930	3237	3197	3121	5.34	cps
Manganese	55-2	463	427	420	437	5.34	cps
Molybdenum	94-1	990	857	873	907	8.01	cps
Molybdenum	95-1	940	680	683	768	19.43	cps
Molybdenum	96-1	1150	817	860	942	19.24	cps
Molybdenum	97-1	613	443	510	522	16.40	cps
Molybdenum	98-1	1503	1140	1163	1269	16.03	cps
Neodymium	150-1	3	0	3	2	86.60	cps
Neodymium	150-2	0	3	0	1	173.21	cps
Nickel	60-2	37	63	50	50	26.66	cps
Phosphorus	31-2	153	123	133	137	11.18	cps
Potassium	39-2	39214	38957	38415	38862	1.05	cps
Rhodium	103-1	2635610	2657506	2624258	2639125	0.64	cps
Rhodium	103-2	1505188	1487233	1473159	1488527	1.08	cps
Scandium	45-1	1537079	1572059	1545002	1551380	1.18	cps
Scandium	45-2	140275	140322	136629	139075	1.52	cps
Selenium	82-1	136	97	117	117	16.85	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	93	100	73	89	15.61	cps
Silicon	28-1	188544	189334	186678	188185	0.72	cps
Silver	107-1	487	330	317	378	25.02	cps
Silver	109-1	407	317	260	328	22.56	cps
Sodium	23-2	31556	30884	30266	30902	2.09	cps
Strontium	86-1	1074	660	647	793	30.59	cps
Strontium	88-1	9577	4281	3921	5926	53.44	cps
Sulfur	34-1	112080	113306	113131	112839	0.59	cps
Terbium	159-1	4042820	4088448	4093179	4074816	0.68	cps
Terbium	159-2	2715042	2688209	2647820	2683690	1.26	cps
Thallium	203-1	413	337	300	350	16.52	cps
Thallium	205-1	1117	720	737	858	26.16	cps
Tin	118-1	1135	1198	1341	1225	8.61	cps
Titanium	47-1	367	147	177	230	51.88	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:07:52	DataFile Name :	025CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	1749	177	190	705	128.19	cps
Vanadium	51-2	23	13	43	27	57.29	cps
Yttrium	89-1	4880623	4940321	4956916	4925954	0.81	cps
Yttrium	89-2	1239080	1240555	1231625	1237087	0.39	cps
Zinc	66-2	230	243	217	230	5.80	cps
Zirconium	90-1	1403	1123	1163	1230	12.31	cps
Zirconium	91-1	247	280	287	271	7.90	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P7
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:11:51	DataFile Name :	026LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1957	1773	2030	1920	6.89	cps
Antimony	121-1	8869	9050	9176	9032	1.71	cps
Arsenic	75-2	220	197	237	218	9.23	cps
Barium	135-1	10671	11071	11235	10992	2.64	cps
Barium	137-1	18572	18732	19126	18810	1.52	cps
Beryllium	9-1	1057	1060	1190	1102	6.90	cps
Bismuth	209-1	2483842	2450926	2467095	2467288	0.67	cps
Bismuth	209-2	1989151	2044573	2040554	2024760	1.53	cps
Bromine	81-1	6492	6418	6735	6548	2.53	cps
Bromine	81-2	67	27	63	52	42.50	cps
Cadmium	108-1	80	90	103	91	12.85	cps
Cadmium	106-1	1633	1603	1470	1569	5.54	cps
Cadmium	111-1	2131	2116	2053	2100	1.96	cps
Calcium	43-1	6195	5925	5945	6021	2.50	cps
Calcium	44-1	97836	98719	97977	98177	0.48	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3414	3474	3257	3382	3.31	cps
Cobalt	59-2	2420	2614	2517	2517	3.84	cps
Copper	63-2	3824	3784	4067	3892	3.94	cps
Dysprosium	156-1	7	10	10	9	21.63	cps
Dysprosium	156-2	7	0	0	2	173.21	cps
Erbium	164-1	27	3	17	16	75.27	cps
Erbium	164-2	13	3	10	9	57.30	cps
Gadolinium	160-1	7	13	10	10	33.30	cps
Gadolinium	160-2	143	147	120	137	10.63	cps
Holmium	165-1	3960109	3854500	3931134	3915248	1.39	cps
Holmium	165-2	2707403	2792348	2741526	2747093	1.56	cps
Indium	115-1	3035058	2954366	3007742	2999055	1.37	cps
Indium	115-2	952486	970846	953614	958982	1.07	cps
Iron	56-2	82233	81543	81482	81753	0.51	cps
Iron	57-2	2441	2564	2573	2526	2.93	cps
Iron	54-2	5298	5028	5214	5180	2.67	cps
Krypton	83-1	87	93	57	79	24.75	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P7
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:11:51	DataFile Name :	026LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4021	3744	3894	3886	3.56	cps
Lead	207-1	3184	3234	3294	3237	1.70	cps
Lead	208-1	15197	14820	14710	14909	1.71	cps
Lithium	6-1	824578	792740	817915	811744	2.07	cps
Magnesium	24-2	87544	87279	88157	87660	0.51	cps
Manganese	55-2	1490	1433	1413	1446	2.75	cps
Molybdenum	94-1	8843	8903	8809	8852	0.53	cps
Molybdenum	95-1	10394	10047	10631	10357	2.83	cps
Molybdenum	96-1	11221	11671	11124	11339	2.57	cps
Molybdenum	97-1	6615	6301	6542	6486	2.53	cps
Molybdenum	98-1	16583	16513	17087	16727	1.87	cps
Neodymium	150-1	3	7	7	6	34.70	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	670	650	647	656	1.92	cps
Phosphorus	31-2	223	240	240	234	4.10	cps
Potassium	39-2	135705	133314	134750	134589	0.89	cps
Rhodium	103-1	2661875	2599379	2662892	2641382	1.38	cps
Rhodium	103-2	1477062	1512523	1492338	1493974	1.19	cps
Scandium	45-1	1581396	1535757	1540570	1552575	1.62	cps
Scandium	45-2	137685	140774	140524	139661	1.23	cps
Selenium	82-1	423	430	452	435	3.45	cps
Selenium	77-2	30	37	13	27	45.08	cps
Selenium	78-2	223	223	150	199	21.29	cps
Silicon	28-1	195504	197214	197079	196599	0.48	cps
Silver	107-1	4991	4991	5011	4998	0.23	cps
Silver	109-1	4694	4918	4888	4833	2.51	cps
Sodium	23-2	158203	155970	157809	157327	0.76	cps
Strontium	86-1	1650	1607	1500	1586	4.87	cps
Strontium	88-1	12545	12789	12555	12630	1.09	cps
Sulfur	34-1	117729	118469	117024	117741	0.61	cps
Terbium	159-1	4072412	3971204	4002036	4015217	1.29	cps
Terbium	159-2	2665696	2746718	2663987	2692134	1.76	cps
Thallium	203-1	4237	4184	4034	4152	2.54	cps
Thallium	205-1	9814	10030	9617	9820	2.11	cps
Tin	118-1	17824	19369	19185	18793	4.49	cps
Titanium	47-1	2687	2604	2560	2617	2.46	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P7
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:11:51	DataFile Name :	026LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	11965	11785	11862	11871	0.76	cps
Vanadium	51-2	6908	7045	6872	6942	1.32	cps
Yttrium	89-1	5022972	4777105	4897219	4899099	2.51	cps
Yttrium	89-2	1237387	1251953	1234968	1241436	0.74	cps
Zinc	66-2	1607	1413	1500	1507	6.43	cps
Zirconium	90-1	7675	7879	7695	7750	1.45	cps
Zirconium	91-1	1587	1813	1677	1692	6.74	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-02	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:25:28	DataFile Name :	027SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	246173	245655	245296	245708	0.18	cps
Antimony	121-1	3400763	3399178	3355023	3384988	0.77	cps
Arsenic	75-2	108610	105122	107700	107144	1.69	cps
Barium	135-1	691062	694557	706196	697272	1.14	cps
Barium	137-1	1192521	1202323	1209346	1201397	0.70	cps
Beryllium	9-1	250160	251386	253357	251635	0.64	cps
Bismuth	209-1	2448943	2490124	2509541	2482869	1.25	cps
Bismuth	209-2	2047832	1966967	1963604	1992801	2.39	cps
Bromine	81-1	6682	6562	6778	6674	1.63	cps
Bromine	81-2	27	17	37	27	37.50	cps
Cadmium	108-1	27276	27179	26621	27025	1.31	cps
Cadmium	106-1	37799	36740	37535	37358	1.48	cps
Cadmium	111-1	404967	407523	411586	408025	0.82	cps
Calcium	43-1	1997	2100	2177	2091	4.32	cps
Calcium	44-1	18508	18662	18952	18707	1.21	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	886885	887926	881404	885405	0.40	cps
Cobalt	59-2	425930	426237	424620	425596	0.20	cps
Copper	63-2	1072092	1082055	1075292	1076480	0.47	cps
Dysprosium	156-1	13	20	33	22	45.83	cps
Dysprosium	156-2	37	23	33	31	22.31	cps
Erbium	164-1	17	13	23	18	28.64	cps
Erbium	164-2	10	0	7	6	91.64	cps
Gadolinium	160-1	7	0	10	6	91.64	cps
Gadolinium	160-2	123	120	100	114	11.03	cps
Holmium	165-1	3945412	3926387	3975169	3948989	0.62	cps
Holmium	165-2	2709729	2707651	2748656	2722012	0.85	cps
Indium	115-1	3024193	3079892	3079428	3061171	1.05	cps
Indium	115-2	965389	953488	957009	958629	0.64	cps
Iron	56-2	1931977	1973078	1925962	1943672	1.32	cps
Iron	57-2	44249	43997	44530	44259	0.60	cps
Iron	54-2	139734	139987	140041	139921	0.12	cps
Krypton	83-1	100	67	100	89	21.65	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-02	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:25:28	DataFile Name :	027SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3478395	3465464	3521092	3488317	0.83	cps
Lead	207-1	2947946	3000465	2990056	2979489	0.93	cps
Lead	208-1	13536705	13722037	13727691	13662144	0.80	cps
Lithium	6-1	810171	819097	819856	816374	0.66	cps
Magnesium	24-2	1667	1553	1620	1613	3.53	cps
Manganese	55-2	771291	775662	774469	773808	0.29	cps
Molybdenum	94-1	626799	629753	635221	630591	0.68	cps
Molybdenum	95-1	1099735	1105107	1107517	1104120	0.36	cps
Molybdenum	96-1	1170023	1187699	1190187	1182636	0.93	cps
Molybdenum	97-1	688815	692452	701449	694239	0.94	cps
Molybdenum	98-1	1784805	1781856	1789237	1785299	0.21	cps
Neodymium	150-1	43	70	47	53	27.24	cps
Neodymium	150-2	10	7	20	12	56.76	cps
Nickel	60-2	932315	932733	934465	933171	0.12	cps
Phosphorus	31-2	83	90	110	94	14.70	cps
Potassium	39-2	34533	34235	33844	34204	1.01	cps
Rhodium	103-1	2688175	2728528	2681771	2699491	0.94	cps
Rhodium	103-2	1499208	1481070	1492915	1491065	0.62	cps
Scandium	45-1	1585151	1589084	1588672	1587636	0.14	cps
Scandium	45-2	140426	139390	139410	139742	0.42	cps
Selenium	82-1	28671	29173	29187	29010	1.01	cps
Selenium	77-2	2874	2640	2804	2773	4.32	cps
Selenium	78-2	9223	9233	9049	9168	1.13	cps
Silicon	28-1	856207	859605	863309	859707	0.41	cps
Silver	107-1	2957434	2907465	2967586	2944161	1.09	cps
Silver	109-1	2788632	2829990	2843111	2820578	1.01	cps
Sodium	23-2	29816	30223	30383	30141	0.97	cps
Strontium	86-1	598586	606770	605353	603570	0.72	cps
Strontium	88-1	5292965	5245123	5339365	5292485	0.89	cps
Sulfur	34-1	117776	113417	113249	114814	2.24	cps
Terbium	159-1	3986695	4101817	4046237	4044916	1.42	cps
Terbium	159-2	2695213	2661565	2660438	2672405	0.74	cps
Thallium	203-1	1897895	1884082	1865658	1882545	0.86	cps
Thallium	205-1	4519931	4522864	4452435	4498410	0.89	cps
Tin	118-1	2055	2212	1928	2065	6.90	cps
Titanium	47-1	200	177	177	184	7.30	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-02	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:25:28	DataFile Name :	027SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	20	70	20	37	78.73	cps
Vanadium	51-2	1514856	1513770	1507717	1512114	0.25	cps
Yttrium	89-1	5006312	5046626	5017723	5023554	0.41	cps
Yttrium	89-2	1250977	1234790	1237524	1241097	0.70	cps
Zinc	66-2	168546	168168	168866	168527	0.21	cps
Zirconium	90-1	2340	2414	2560	2438	4.60	cps
Zirconium	91-1	787	807	750	781	3.68	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-04	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:28:38	DataFile Name :	028SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	7295	7365	7158	7273	1.45	cps
Antimony	121-1	1590	1633	1667	1630	2.36	cps
Arsenic	75-2	10	3	13	9	57.30	cps
Barium	135-1	297	277	253	276	7.87	cps
Barium	137-1	450	497	353	433	16.87	cps
Beryllium	9-1	250	207	193	217	13.67	cps
Bismuth	209-1	2503115	2485483	2523601	2504066	0.76	cps
Bismuth	209-2	2061757	2062180	1964953	2029630	2.76	cps
Bromine	81-1	6665	6465	7075	6735	4.62	cps
Bromine	81-2	37	57	47	47	21.43	cps
Cadmium	108-1	13	13	20	16	24.76	cps
Cadmium	106-1	1523	1373	1313	1403	7.71	cps
Cadmium	111-1	1084	992	922	999	8.11	cps
Calcium	43-1	193	180	163	179	8.40	cps
Calcium	44-1	4337	4474	4284	4365	2.25	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	290	280	267	279	4.20	cps
Cobalt	59-2	113	117	120	117	2.86	cps
Copper	63-2	830	813	893	846	4.99	cps
Dysprosium	156-1	10	17	23	17	39.99	cps
Dysprosium	156-2	7	13	10	10	33.30	cps
Erbium	164-1	13	20	40	24	56.78	cps
Erbium	164-2	13	43	17	24	67.26	cps
Gadolinium	160-1	33	23	17	24	34.31	cps
Gadolinium	160-2	120	90	120	110	15.75	cps
Holmium	165-1	3967372	4091854	4086059	4048428	1.74	cps
Holmium	165-2	2774257	2765317	2708185	2749253	1.30	cps
Indium	115-1	2913333	2934045	2955342	2934240	0.72	cps
Indium	115-2	935044	931092	924870	930335	0.55	cps
Iron	56-2	7562	8026	7915	7834	3.09	cps
Iron	57-2	578	565	538	560	3.64	cps
Iron	54-2	1053	957	1090	1033	6.67	cps
Krypton	83-1	117	93	60	90	31.65	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-04	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:28:38	DataFile Name :	028SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	783	813	837	811	3.30	cps
Lead	207-1	647	660	663	657	1.34	cps
Lead	208-1	3384	3220	2913	3172	7.52	cps
Lithium	6-1	828930	825847	834958	829911	0.56	cps
Magnesium	24-2	1753	1903	1853	1837	4.16	cps
Manganese	55-2	183	233	180	199	15.02	cps
Molybdenum	94-1	4604	4301	4674	4526	4.39	cps
Molybdenum	95-1	160	183	157	167	8.72	cps
Molybdenum	96-1	960	980	890	943	5.01	cps
Molybdenum	97-1	127	73	73	91	33.80	cps
Molybdenum	98-1	317	323	270	303	9.58	cps
Neodymium	150-1	10	7	7	8	24.71	cps
Neodymium	150-2	10	10	3	8	49.52	cps
Nickel	60-2	217	203	220	213	4.13	cps
Phosphorus	31-2	153	113	90	119	26.94	cps
Potassium	39-2	35030	35598	34686	35105	1.31	cps
Rhodium	103-1	2768566	2706825	2683508	2719633	1.62	cps
Rhodium	103-2	1524838	1513691	1514434	1517654	0.41	cps
Scandium	45-1	1574683	1598867	1614455	1596002	1.26	cps
Scandium	45-2	142257	140699	139421	140792	1.01	cps
Selenium	82-1	81	92	141	105	30.73	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	80	113	110	101	18.16	cps
Silicon	28-1	4013438	4087885	4055341	4052221	0.92	cps
Silver	107-1	663	507	373	514	28.22	cps
Silver	109-1	630	403	353	462	31.90	cps
Sodium	23-2	67139	66975	66533	66882	0.47	cps
Strontium	86-1	180	183	183	182	1.06	cps
Strontium	88-1	807	700	777	761	7.23	cps
Sulfur	34-1	108230	106380	107122	107244	0.87	cps
Terbium	159-1	3979447	4118566	4055231	4051081	1.72	cps
Terbium	159-2	2685036	2666127	2713558	2688240	0.89	cps
Thallium	203-1	367	397	353	372	5.96	cps
Thallium	205-1	930	810	783	841	9.29	cps
Tin	118-1	4714330	4770370	4721781	4735494	0.64	cps
Titanium	47-1	48080	48932	48604	48539	0.89	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-04	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:28:38	DataFile Name :	028SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	30	40	53	41	28.47	cps
Vanadium	51-2	93	53	60	69	31.11	cps
Yttrium	89-1	5039372	5107188	5200240	5115600	1.58	cps
Yttrium	89-2	1256582	1255718	1249078	1253792	0.33	cps
Zinc	66-2	153	167	213	178	17.72	cps
Zirconium	90-1	11791	11735	11374	11634	1.94	cps
Zirconium	91-1	2560	2710	2510	2594	4.01	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-06	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:32:00	DataFile Name :	029SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	60	63	80	68	15.81	cps
Antimony	121-1	1243	640	470	784	51.81	cps
Arsenic	75-2	30	20	13	21	39.75	cps
Barium	135-1	513	517	430	487	10.09	cps
Barium	137-1	753	793	700	749	6.25	cps
Beryllium	9-1	167	150	127	148	13.60	cps
Bismuth	209-1	3580600	3034619	3282552	3299257	8.29	cps
Bismuth	209-2	2642338	2577025	2561532	2593632	1.65	cps
Bromine	81-1	8249	8286	8539	8358	1.89	cps
Bromine	81-2	357	387	397	380	5.48	cps
Cadmium	108-1	3	3	17	8	99.04	cps
Cadmium	106-1	2013	1587	1873	1825	11.92	cps
Cadmium	111-1	1560	1182	1326	1356	14.09	cps
Calcium	43-1	1205409	1168890	1118193	1164164	3.76	cps
Calcium	44-1	17931600	17441827	16715542	17362989	3.52	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	83	87	120	97	20.98	cps
Cobalt	59-2	260	187	253	233	17.38	cps
Copper	63-2	897	893	853	881	2.74	cps
Dysprosium	156-1	7	20	10	12	56.76	cps
Dysprosium	156-2	10	3	0	4	114.60	cps
Erbium	164-1	27	23	13	21	32.88	cps
Erbium	164-2	23	13	17	18	28.64	cps
Gadolinium	160-1	20	30	7	19	61.96	cps
Gadolinium	160-2	150	173	170	164	7.68	cps
Holmium	165-1	5908920	4890822	5652198	5483980	9.66	cps
Holmium	165-2	3690997	3646256	3550865	3629373	1.97	cps
Indium	115-1	4409320	3724811	4280292	4138141	8.79	cps
Indium	115-2	1264589	1247710	1233904	1248734	1.23	cps
Iron	56-2	5968	6158	6038	6055	1.59	cps
Iron	57-2	16428	17030	16919	16793	1.91	cps
Iron	54-2	440	490	417	449	8.35	cps
Krypton	83-1	83	127	90	100	23.34	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-06	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:32:00	DataFile Name :	029SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	6602	6058	5701	6120	7.41	cps
Lead	207-1	5618	5625	4944	5396	7.24	cps
Lead	208-1	25806	24919	21940	24222	8.36	cps
Lithium	6-1	1137249	958346	1050657	1048750	8.53	cps
Magnesium	24-2	6115550	6099024	6030745	6081773	0.74	cps
Manganese	55-2	337	290	323	317	7.59	cps
Molybdenum	94-1	1370	1340	1290	1333	3.03	cps
Molybdenum	95-1	2217	2150	2067	2145	3.51	cps
Molybdenum	96-1	2504	2450	2264	2406	5.24	cps
Molybdenum	97-1	1407	1390	1293	1363	4.49	cps
Molybdenum	98-1	3804	3554	3384	3580	5.90	cps
Neodymium	150-1	17	10	23	17	39.99	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	87	107	100	98	10.41	cps
Phosphorus	31-2	53	63	47	54	15.40	cps
Potassium	39-2	5515751	5480686	5460819	5485752	0.51	cps
Rhodium	103-1	3870795	3246387	3653799	3590327	8.83	cps
Rhodium	103-2	1988866	1945116	1919854	1951279	1.79	cps
Scandium	45-1	2393437	2003680	2259701	2218939	8.93	cps
Scandium	45-2	189219	186924	185561	187235	0.99	cps
Selenium	82-1	198	93	193	161	36.67	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	70	107	133	103	30.77	cps
Silicon	28-1	152928	150986	148444	150786	1.49	cps
Silver	107-1	183	143	163	163	12.24	cps
Silver	109-1	107	113	107	109	3.53	cps
Sodium	23-2	30117111	30163545	29886183	30055613	0.49	cps
Strontium	86-1	13850	13910	13046	13602	3.55	cps
Strontium	88-1	121265	118432	112385	117361	3.86	cps
Sulfur	34-1	110909	114753	119812	115158	3.88	cps
Terbium	159-1	5958280	5065208	5565015	5529501	8.09	cps
Terbium	159-2	3597598	3493198	3486682	3525826	1.77	cps
Thallium	203-1	3941	2324	1407	2557	50.17	cps
Thallium	205-1	10224	5545	3154	6308	57.02	cps
Tin	118-1	3458	2454	1799	2570	32.50	cps
Titanium	47-1	40	43	40	41	4.68	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-06	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:32:00	DataFile Name :	029SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	13	10	10	11	17.30	cps
Vanadium	51-2	7	13	17	12	41.65	cps
Yttrium	89-1	7564063	6242101	6967100	6924421	9.56	cps
Yttrium	89-2	1647171	1623657	1617383	1629404	0.96	cps
Zinc	66-2	437	420	377	411	7.53	cps
Zirconium	90-1	160	183	193	179	9.56	cps
Zirconium	91-1	33	30	40	34	14.78	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-02	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:35:16	DataFile Name :	030SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	241256	238413	240846	240172	0.64	cps
Antimony	121-1	3269080	3350487	3318700	3312756	1.24	cps
Arsenic	75-2	105112	104273	105068	104818	0.45	cps
Barium	135-1	683662	689662	684162	685829	0.49	cps
Barium	137-1	1176221	1184836	1183728	1181595	0.40	cps
Beryllium	9-1	244254	246399	247300	245984	0.64	cps
Bismuth	209-1	2466857	2454361	2428296	2449838	0.80	cps
Bismuth	209-2	1966357	1972239	1957831	1965476	0.37	cps
Bromine	81-1	6718	7052	6968	6913	2.51	cps
Bromine	81-2	100	50	93	81	33.47	cps
Cadmium	108-1	26164	25973	26110	26082	0.38	cps
Cadmium	106-1	37258	37579	37141	37326	0.61	cps
Cadmium	111-1	399696	400669	402929	401098	0.41	cps
Calcium	43-1	2214	2017	2040	2090	5.14	cps
Calcium	44-1	17814	17734	17580	17709	0.67	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	859216	861112	863108	861146	0.23	cps
Cobalt	59-2	415279	415407	415413	415366	0.02	cps
Copper	63-2	1050880	1051681	1048497	1050353	0.16	cps
Dysprosium	156-1	30	17	13	20	44.10	cps
Dysprosium	156-2	17	30	20	22	31.22	cps
Erbium	164-1	7	23	13	14	58.06	cps
Erbium	164-2	10	7	3	7	50.03	cps
Gadolinium	160-1	0	20	7	9	114.55	cps
Gadolinium	160-2	97	93	110	100	8.82	cps
Holmium	165-1	3863689	3800628	3835380	3833232	0.82	cps
Holmium	165-2	2677703	2658088	2631037	2655609	0.88	cps
Indium	115-1	2942184	2913201	2889741	2915042	0.90	cps
Indium	115-2	926920	932376	921150	926816	0.61	cps
Iron	56-2	1908516	1884154	1870437	1887702	1.02	cps
Iron	57-2	43101	43584	43240	43309	0.57	cps
Iron	54-2	136599	136848	136935	136794	0.13	cps
Krypton	83-1	63	83	80	76	14.18	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-02	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:35:16	DataFile Name :	030SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3458633	3533395	3528988	3507005	1.20	cps
Lead	207-1	2915149	2958384	2956936	2943490	0.83	cps
Lead	208-1	13485630	13705044	13702301	13630992	0.92	cps
Lithium	6-1	800392	786377	782820	789863	1.18	cps
Magnesium	24-2	1623	1510	1570	1568	3.62	cps
Manganese	55-2	758242	753165	754614	755340	0.35	cps
Molybdenum	94-1	610070	617189	615346	614202	0.60	cps
Molybdenum	95-1	1071914	1077157	1075609	1074893	0.25	cps
Molybdenum	96-1	1143990	1156284	1161553	1153942	0.78	cps
Molybdenum	97-1	673728	678293	681084	677702	0.55	cps
Molybdenum	98-1	1730661	1761191	1743124	1744992	0.88	cps
Neodymium	150-1	67	70	60	66	7.77	cps
Neodymium	150-2	10	7	10	9	21.63	cps
Nickel	60-2	906540	919364	911311	912405	0.71	cps
Phosphorus	31-2	133	100	117	117	14.28	cps
Potassium	39-2	34008	34880	34332	34407	1.28	cps
Rhodium	103-1	2570360	2547323	2541165	2552950	0.60	cps
Rhodium	103-2	1442858	1454000	1424313	1440390	1.04	cps
Scandium	45-1	1533902	1518413	1512053	1521456	0.74	cps
Scandium	45-2	134154	133821	132338	133438	0.72	cps
Selenium	82-1	28671	28830	28394	28632	0.77	cps
Selenium	77-2	2654	2654	2624	2644	0.66	cps
Selenium	78-2	9400	9410	9136	9315	1.67	cps
Silicon	28-1	823667	824895	823426	823996	0.10	cps
Silver	107-1	2841006	2879422	2848100	2856176	0.72	cps
Silver	109-1	2714989	2739642	2742136	2732256	0.55	cps
Sodium	23-2	30123	30757	30360	30413	1.05	cps
Strontium	86-1	584560	591531	589751	588614	0.62	cps
Strontium	88-1	5170877	5242590	5211187	5208218	0.69	cps
Sulfur	34-1	122792	116464	110718	116658	5.18	cps
Terbium	159-1	3945686	3919455	3872644	3912595	0.95	cps
Terbium	159-2	2657528	2680492	2592052	2643357	1.74	cps
Thallium	203-1	1864271	1876493	1877498	1872754	0.39	cps
Thallium	205-1	4438227	4464693	4517751	4473557	0.91	cps
Tin	118-1	2118	2129	2226	2157	2.76	cps
Titanium	47-1	130	177	143	150	16.02	cps

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On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-02	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:35:16	DataFile Name :	030SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	10	7	13	10	33.30	cps
Vanadium	51-2	1452844	1444734	1464447	1454009	0.68	cps
Yttrium	89-1	4797548	4847237	4847954	4830913	0.60	cps
Yttrium	89-2	1195062	1200128	1190152	1195114	0.42	cps
Zinc	66-2	164653	164397	163072	164041	0.52	cps
Zirconium	90-1	2220	2124	2107	2150	2.85	cps
Zirconium	91-1	717	743	663	708	5.76	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-04	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:38:28	DataFile Name :	031SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6925	7025	7008	6986	0.77	cps
Antimony	121-1	1473	1513	1680	1556	7.05	cps
Arsenic	75-2	27	7	7	13	86.58	cps
Barium	135-1	267	240	213	240	11.11	cps
Barium	137-1	430	513	380	441	15.27	cps
Beryllium	9-1	293	247	183	241	22.90	cps
Bismuth	209-1	2383594	2386167	2423138	2397633	0.92	cps
Bismuth	209-2	1968770	1994386	1995433	1986196	0.76	cps
Bromine	81-1	6778	7155	7052	6995	2.78	cps
Bromine	81-2	53	50	73	59	21.43	cps
Cadmium	108-1	10	13	17	13	25.01	cps
Cadmium	106-1	1513	1410	1387	1437	4.69	cps
Cadmium	111-1	1076	1008	982	1022	4.72	cps
Calcium	43-1	153	217	167	179	18.66	cps
Calcium	44-1	4447	4344	4207	4333	2.78	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	213	303	293	270	18.27	cps
Cobalt	59-2	110	97	147	118	21.98	cps
Copper	63-2	833	867	940	880	6.20	cps
Dysprosium	156-1	7	17	13	12	41.65	cps
Dysprosium	156-2	0	7	0	2	173.21	cps
Erbium	164-1	27	33	27	29	13.31	cps
Erbium	164-2	3	27	23	18	71.00	cps
Gadolinium	160-1	7	13	23	14	58.06	cps
Gadolinium	160-2	137	137	83	119	25.90	cps
Holmium	165-1	3773159	3925796	3842148	3847034	1.99	cps
Holmium	165-2	2712684	2631742	2667791	2670739	1.52	cps
Indium	115-1	2875053	2854407	2877111	2868857	0.44	cps
Indium	115-2	894803	888362	895813	892992	0.45	cps
Iron	56-2	7135	7042	7078	7085	0.66	cps
Iron	57-2	602	599	558	586	4.18	cps
Iron	54-2	1013	973	1017	1001	2.41	cps
Krypton	83-1	43	93	103	80	40.18	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-04	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:38:28	DataFile Name :	031SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	933	730	780	814	13.01	cps
Lead	207-1	743	680	660	694	6.26	cps
Lead	208-1	3480	2937	3094	3170	8.82	cps
Lithium	6-1	786874	788335	798049	791086	0.77	cps
Magnesium	24-2	1627	1643	1667	1646	1.22	cps
Manganese	55-2	157	200	223	193	17.50	cps
Molybdenum	94-1	4007	4147	4137	4097	1.91	cps
Molybdenum	95-1	193	160	90	148	35.69	cps
Molybdenum	96-1	913	850	957	907	5.92	cps
Molybdenum	97-1	90	87	80	86	5.95	cps
Molybdenum	98-1	247	217	233	232	6.47	cps
Neodymium	150-1	10	7	10	9	21.63	cps
Neodymium	150-2	7	3	7	6	34.70	cps
Nickel	60-2	243	213	170	209	17.65	cps
Phosphorus	31-2	97	143	103	114	22.06	cps
Potassium	39-2	34716	35164	34429	34770	1.07	cps
Rhodium	103-1	2602783	2607503	2626311	2612199	0.48	cps
Rhodium	103-2	1458183	1445874	1460080	1454712	0.53	cps
Scandium	45-1	1509163	1551334	1536507	1532335	1.40	cps
Scandium	45-2	135153	135160	134877	135063	0.12	cps
Selenium	82-1	165	134	111	137	19.75	cps
Selenium	77-2	3	7	0	3	100.05	cps
Selenium	78-2	137	127	97	120	17.35	cps
Silicon	28-1	3912542	3991627	3985815	3963328	1.11	cps
Silver	107-1	593	387	340	440	30.64	cps
Silver	109-1	520	340	290	383	31.56	cps
Sodium	23-2	68016	68803	68096	68305	0.63	cps
Strontium	86-1	210	207	193	203	4.34	cps
Strontium	88-1	783	753	663	733	8.52	cps
Sulfur	34-1	106921	108797	110257	108658	1.54	cps
Terbium	159-1	3942569	3909991	3932317	3928292	0.42	cps
Terbium	159-2	2655537	2620706	2595789	2624011	1.14	cps
Thallium	203-1	260	233	290	261	10.86	cps
Thallium	205-1	790	780	650	740	10.55	cps
Tin	118-1	4756018	4696965	4648832	4700605	1.14	cps
Titanium	47-1	46575	46819	47544	46979	1.07	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-04	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:38:28	DataFile Name :	031SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	47	37	33	39	17.85	cps
Vanadium	51-2	67	73	80	73	9.09	cps
Yttrium	89-1	4783822	4907636	4837243	4842900	1.28	cps
Yttrium	89-2	1210378	1199312	1204403	1204698	0.46	cps
Zinc	66-2	180	150	170	167	9.17	cps
Zirconium	90-1	11241	10998	11461	11233	2.06	cps
Zirconium	91-1	2420	2570	2590	2527	3.68	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-06	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:41:49	DataFile Name :	032SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	70	67	37	58	31.77	cps
Antimony	121-1	510	403	300	404	25.96	cps
Arsenic	75-2	10	10	13	11	17.30	cps
Barium	135-1	450	453	510	471	7.16	cps
Barium	137-1	777	657	890	774	15.07	cps
Beryllium	9-1	137	173	167	159	12.29	cps
Bismuth	209-1	3476561	3378724	3172269	3342518	4.65	cps
Bismuth	209-2	2523550	2565391	2496168	2528370	1.38	cps
Bromine	81-1	8216	8379	8102	8232	1.69	cps
Bromine	81-2	407	373	430	403	7.06	cps
Cadmium	108-1	7	17	0	8	107.84	cps
Cadmium	106-1	2117	1770	1867	1918	9.33	cps
Cadmium	111-1	1560	1271	1323	1385	11.14	cps
Calcium	43-1	1182564	1142926	1106556	1144016	3.32	cps
Calcium	44-1	17443650	17359090	16658444	17153728	2.51	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	130	123	107	120	10.01	cps
Cobalt	59-2	217	253	257	242	9.16	cps
Copper	63-2	870	800	973	881	9.90	cps
Dysprosium	156-1	27	10	7	14	74.18	cps
Dysprosium	156-2	3	0	0	1	173.21	cps
Erbium	164-1	23	27	20	23	14.29	cps
Erbium	164-2	20	23	13	19	26.96	cps
Gadolinium	160-1	27	13	10	17	52.93	cps
Gadolinium	160-2	130	113	163	136	18.78	cps
Holmium	165-1	5763774	5496568	5445517	5568620	3.07	cps
Holmium	165-2	3625020	3564438	3543659	3577706	1.18	cps
Indium	115-1	4330725	4129475	4115712	4191970	2.87	cps
Indium	115-2	1238518	1218446	1222974	1226646	0.86	cps
Iron	56-2	5578	5888	5598	5688	3.05	cps
Iron	57-2	16943	17073	17026	17014	0.39	cps
Iron	54-2	387	473	357	406	14.94	cps
Krypton	83-1	103	90	83	92	11.04	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-06	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:41:49	DataFile Name :	032SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3774	3430	3274	3493	7.32	cps
Lead	207-1	3147	2897	2700	2915	7.68	cps
Lead	208-1	14733	13196	12362	13430	8.96	cps
Lithium	6-1	1112954	1073939	1048052	1078315	3.03	cps
Magnesium	24-2	6117164	6039776	6073323	6076754	0.64	cps
Manganese	55-2	273	237	287	266	9.75	cps
Molybdenum	94-1	1440	1420	1277	1379	6.46	cps
Molybdenum	95-1	2214	2130	1847	2064	9.32	cps
Molybdenum	96-1	2320	2470	2030	2274	9.84	cps
Molybdenum	97-1	1427	1403	1317	1382	4.19	cps
Molybdenum	98-1	3847	3457	3344	3549	7.44	cps
Neodymium	150-1	0	17	10	9	94.38	cps
Neodymium	150-2	3	7	0	3	100.05	cps
Nickel	60-2	123	103	97	108	12.88	cps
Phosphorus	31-2	37	77	80	64	37.42	cps
Potassium	39-2	5471049	5430315	5395520	5432295	0.70	cps
Rhodium	103-1	3774193	3623902	3556143	3651413	3.06	cps
Rhodium	103-2	1915355	1901094	1900617	1905689	0.44	cps
Scandium	45-1	2337928	2252989	2166845	2252587	3.80	cps
Scandium	45-2	186000	183634	182111	183915	1.07	cps
Selenium	82-1	146	193	156	165	14.88	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	87	107	103	99	10.83	cps
Silicon	28-1	148770	148912	145725	147802	1.22	cps
Silver	107-1	130	133	123	129	3.95	cps
Silver	109-1	107	113	103	108	4.73	cps
Sodium	23-2	29753094	29953837	30100533	29935821	0.58	cps
Strontium	86-1	13737	13450	13123	13436	2.29	cps
Strontium	88-1	120905	115559	110867	115777	4.34	cps
Sulfur	34-1	108995	115237	118501	114244	4.23	cps
Terbium	159-1	5902963	5585087	5466848	5651633	3.99	cps
Terbium	159-2	3542337	3494963	3506173	3514491	0.70	cps
Thallium	203-1	1157	560	553	757	45.78	cps
Thallium	205-1	2624	1340	1193	1719	45.77	cps
Tin	118-1	1818	1577	1332	1575	15.41	cps
Titanium	47-1	47	27	37	37	27.27	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-06	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WP	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:41:49	DataFile Name :	032SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	23	10	13	16	44.60	cps
Vanadium	51-2	23	33	10	22	52.68	cps
Yttrium	89-1	7297851	7121985	6795912	7071916	3.60	cps
Yttrium	89-2	1623857	1555677	1591043	1590192	2.14	cps
Zinc	66-2	357	287	280	308	13.80	cps
Zirconium	90-1	240	113	203	186	35.13	cps
Zirconium	91-1	37	37	23	32	23.90	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-02DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 18:45:08	DataFile Name :	033SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	120841	119547	120378	120255	0.55	cps
Antimony	121-1	1615341	1628661	1651698	1631900	1.13	cps
Arsenic	75-2	52683	51114	51884	51894	1.51	cps
Barium	135-1	334055	336632	336907	335865	0.47	cps
Barium	137-1	577198	586627	590643	584823	1.18	cps
Beryllium	9-1	121826	122910	122272	122336	0.45	cps
Bismuth	209-1	2410989	2361693	2360333	2377672	1.21	cps
Bismuth	209-2	2009605	1943677	1965567	1972950	1.70	cps
Bromine	81-1	6318	6545	6595	6486	2.27	cps
Bromine	81-2	80	67	57	68	17.27	cps
Cadmium	108-1	13149	12726	12912	12929	1.64	cps
Cadmium	106-1	18699	18919	18842	18820	0.59	cps
Cadmium	111-1	195938	199379	197988	197768	0.88	cps
Calcium	43-1	1177	1033	1127	1112	6.54	cps
Calcium	44-1	10817	10741	10507	10688	1.51	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	428229	434056	427440	429908	0.84	cps
Cobalt	59-2	204959	205808	204876	205214	0.25	cps
Copper	63-2	525825	519304	522836	522655	0.62	cps
Dysprosium	156-1	7	10	7	8	24.71	cps
Dysprosium	156-2	3	10	13	9	57.30	cps
Erbium	164-1	33	10	3	16	101.28	cps
Erbium	164-2	3	13	13	10	57.75	cps
Gadolinium	160-1	0	13	7	7	99.98	cps
Gadolinium	160-2	100	113	113	109	7.07	cps
Holmium	165-1	3781928	3823885	3768869	3791561	0.76	cps
Holmium	165-2	2694364	2626881	2660978	2660741	1.27	cps
Indium	115-1	2880349	2923958	2915695	2906667	0.80	cps
Indium	115-2	926952	914105	923278	921445	0.72	cps
Iron	56-2	990896	989849	986089	988945	0.26	cps
Iron	57-2	21593	21887	21684	21721	0.69	cps
Iron	54-2	68505	68287	69405	68732	0.86	cps
Krypton	83-1	103	77	63	81	25.11	cps

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-02DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 18:45:08	DataFile Name :	033SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1517086	1540903	1556373	1538120	1.29	cps
Lead	207-1	1267866	1291229	1295892	1284996	1.17	cps
Lead	208-1	6226185	6352429	6379331	6319315	1.29	cps
Lithium	6-1	803771	790617	799827	798072	0.85	cps
Magnesium	24-2	1640	1493	1567	1567	4.68	cps
Manganese	55-2	375708	376247	379192	377049	0.50	cps
Molybdenum	94-1	304101	307081	307555	306246	0.61	cps
Molybdenum	95-1	530834	533633	534387	532951	0.35	cps
Molybdenum	96-1	569811	575749	572699	572753	0.52	cps
Molybdenum	97-1	331287	337566	336372	335075	1.00	cps
Molybdenum	98-1	859939	868506	872717	867054	0.75	cps
Neodymium	150-1	47	30	30	36	27.07	cps
Neodymium	150-2	10	3	3	6	69.34	cps
Nickel	60-2	455625	453720	452005	453784	0.40	cps
Phosphorus	31-2	117	77	103	99	20.59	cps
Potassium	39-2	34449	34225	33911	34195	0.79	cps
Rhodium	103-1	2522971	2548973	2573220	2548388	0.99	cps
Rhodium	103-2	1448303	1419648	1445267	1437739	1.09	cps
Scandium	45-1	1491482	1512001	1523643	1509042	1.08	cps
Scandium	45-2	133212	131501	134225	132979	1.04	cps
Selenium	82-1	14127	14092	14279	14166	0.70	cps
Selenium	77-2	1407	1187	1193	1262	9.91	cps
Selenium	78-2	4394	4424	4431	4416	0.44	cps
Silicon	28-1	503892	503802	503730	503808	0.02	cps
Silver	107-1	1382890	1393138	1387941	1387990	0.37	cps
Silver	109-1	1318334	1322700	1323274	1321436	0.20	cps
Sodium	23-2	26803	26246	26206	26418	1.26	cps
Strontium	86-1	292252	293350	293701	293101	0.26	cps
Strontium	88-1	2592761	2585682	2600427	2592956	0.28	cps
Sulfur	34-1	122869	118229	117003	119367	2.59	cps
Terbium	159-1	3882295	3887740	3933688	3901241	0.72	cps
Terbium	159-2	2611662	2556920	2648984	2605856	1.78	cps
Thallium	203-1	820303	827684	833513	827166	0.80	cps
Thallium	205-1	2195038	2205719	2183861	2194873	0.50	cps
Tin	118-1	1655	1714	1737	1702	2.47	cps
Titanium	47-1	127	130	117	124	5.57	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-02DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 18:45:08	DataFile Name :	033SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	23	7	23	18	54.11	cps
Vanadium	51-2	734925	740835	748137	741299	0.89	cps
Yttrium	89-1	4851785	4796048	4757853	4801895	0.98	cps
Yttrium	89-2	1189261	1182319	1191795	1187792	0.41	cps
Zinc	66-2	82047	80964	81075	81362	0.73	cps
Zirconium	90-1	1257	1333	1297	1296	2.96	cps
Zirconium	91-1	363	407	410	393	6.62	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-04DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 18:48:27	DataFile Name :	034SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3764	3720	3510	3665	3.70	cps
Antimony	121-1	1010	963	1180	1051	10.85	cps
Arsenic	75-2	0	17	13	10	88.20	cps
Barium	135-1	150	167	157	158	5.32	cps
Barium	137-1	320	297	313	310	3.88	cps
Beryllium	9-1	193	143	123	153	23.52	cps
Bismuth	209-1	2415385	2366990	2420516	2400963	1.23	cps
Bismuth	209-2	1982754	1950970	2008252	1980659	1.45	cps
Bromine	81-1	6642	6375	6568	6528	2.11	cps
Bromine	81-2	50	67	70	62	17.22	cps
Cadmium	108-1	7	13	10	10	33.30	cps
Cadmium	106-1	1447	1417	1313	1392	5.02	cps
Cadmium	111-1	1021	999	926	982	5.10	cps
Calcium	43-1	237	153	200	197	21.24	cps
Calcium	44-1	4164	4081	3817	4021	4.50	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	327	197	250	258	25.35	cps
Cobalt	59-2	110	103	93	102	8.21	cps
Copper	63-2	847	747	803	799	6.28	cps
Dysprosium	156-1	20	13	27	20	33.35	cps
Dysprosium	156-2	7	3	0	3	100.05	cps
Erbium	164-1	30	10	17	19	53.91	cps
Erbium	164-2	23	3	13	13	75.02	cps
Gadolinium	160-1	13	20	7	13	49.99	cps
Gadolinium	160-2	87	127	97	103	20.14	cps
Holmium	165-1	3856826	3821846	3860620	3846430	0.56	cps
Holmium	165-2	2681535	2659822	2669525	2670294	0.41	cps
Indium	115-1	2896970	2922435	3005657	2941687	1.93	cps
Indium	115-2	928750	924130	917650	923510	0.60	cps
Iron	56-2	6001	5901	5921	5941	0.89	cps
Iron	57-2	525	575	599	566	6.64	cps
Iron	54-2	923	873	940	912	3.80	cps
Krypton	83-1	80	57	67	68	17.27	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-04DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 18:48:27	DataFile Name :	034SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	563	597	537	566	5.32	cps
Lead	207-1	510	450	487	482	6.27	cps
Lead	208-1	2490	2210	2170	2290	7.61	cps
Lithium	6-1	799762	793770	799552	797695	0.43	cps
Magnesium	24-2	1493	1593	1547	1545	3.24	cps
Manganese	55-2	183	183	160	176	7.68	cps
Molybdenum	94-1	2267	2107	2154	2176	3.78	cps
Molybdenum	95-1	83	137	133	118	25.37	cps
Molybdenum	96-1	513	470	413	466	10.77	cps
Molybdenum	97-1	80	87	90	86	5.95	cps
Molybdenum	98-1	210	153	233	199	20.68	cps
Neodymium	150-1	3	3	7	4	43.40	cps
Neodymium	150-2	3	10	0	4	114.60	cps
Nickel	60-2	143	83	113	113	26.48	cps
Phosphorus	31-2	113	80	87	93	18.90	cps
Potassium	39-2	34379	34372	34028	34260	0.59	cps
Rhodium	103-1	2633996	2635312	2651225	2640177	0.36	cps
Rhodium	103-2	1469260	1462845	1470465	1467523	0.28	cps
Scandium	45-1	1540082	1524012	1542378	1535490	0.65	cps
Scandium	45-2	136179	135802	134675	135552	0.58	cps
Selenium	82-1	103	93	116	104	11.28	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	90	97	93	93	3.57	cps
Silicon	28-1	2076032	2059354	2082085	2072490	0.57	cps
Silver	107-1	347	357	257	320	17.21	cps
Silver	109-1	410	257	237	301	31.49	cps
Sodium	23-2	41262	41255	41897	41471	0.89	cps
Strontium	86-1	213	183	233	210	11.98	cps
Strontium	88-1	477	483	480	480	0.69	cps
Sulfur	34-1	109747	107471	106011	107743	1.75	cps
Terbium	159-1	3932448	3977663	4059024	3989712	1.61	cps
Terbium	159-2	2646994	2675441	2614002	2645479	1.16	cps
Thallium	203-1	187	183	153	174	10.52	cps
Thallium	205-1	467	500	420	462	8.69	cps
Tin	118-1	2313159	2405372	2359437	2359322	1.95	cps
Titanium	47-1	23198	23201	23422	23274	0.55	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-04DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 18:48:27	DataFile Name :	034SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	23	23	7	18	54.11	cps
Vanadium	51-2	73	63	57	64	13.01	cps
Yttrium	89-1	4856953	4829451	4817241	4834548	0.42	cps
Yttrium	89-2	1230589	1216638	1209328	1218851	0.89	cps
Zinc	66-2	143	143	130	139	5.55	cps
Zirconium	90-1	5594	5721	5878	5731	2.48	cps
Zirconium	91-1	1277	1323	1250	1283	2.89	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-06DLX5	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WPDL	Dilution Factor :	5
Date & Time Acquired :	2024-10-17 18:51:49	DataFile Name :	035SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	200	160	200	187	12.37	cps
Antimony	121-1	293	260	343	299	14.03	cps
Arsenic	75-2	0	7	7	4	86.60	cps
Barium	135-1	90	117	103	103	12.90	cps
Barium	137-1	183	213	207	201	7.83	cps
Beryllium	9-1	167	140	160	156	8.92	cps
Bismuth	209-1	2501894	2538138	2473538	2504523	1.29	cps
Bismuth	209-2	2003060	1993138	1985062	1993753	0.45	cps
Bromine	81-1	7312	7509	6868	7230	4.54	cps
Bromine	81-2	143	103	113	120	17.35	cps
Cadmium	108-1	0	3	10	4	114.60	cps
Cadmium	106-1	1420	1593	1223	1412	13.11	cps
Cadmium	111-1	997	1120	856	991	13.31	cps
Calcium	43-1	162243	161461	160960	161555	0.40	cps
Calcium	44-1	2409219	2428549	2441706	2426492	0.67	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	153	150	187	163	12.41	cps
Cobalt	59-2	60	67	47	58	17.62	cps
Copper	63-2	530	617	597	581	7.81	cps
Dysprosium	156-1	13	7	7	9	43.25	cps
Dysprosium	156-2	3	7	0	3	100.05	cps
Erbium	164-1	13	10	10	11	17.30	cps
Erbium	164-2	7	3	10	7	50.03	cps
Gadolinium	160-1	10	23	7	13	66.12	cps
Gadolinium	160-2	137	140	93	123	21.11	cps
Holmium	165-1	4018690	4030147	3965485	4004774	0.86	cps
Holmium	165-2	2756205	2776869	2709062	2747379	1.27	cps
Indium	115-1	3091543	3075746	3054219	3073836	0.61	cps
Indium	115-2	962208	964398	945273	957293	1.09	cps
Iron	56-2	5241	5204	5081	5175	1.62	cps
Iron	57-2	3089	2926	2950	2988	2.96	cps
Iron	54-2	670	837	717	741	11.60	cps
Krypton	83-1	83	97	67	82	18.28	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-06DLX5	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WPDL	Dilution Factor :	5
Date & Time Acquired :	2024-10-17 18:51:49	DataFile Name :	035SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	533	383	360	426	22.10	cps
Lead	207-1	423	377	387	396	6.21	cps
Lead	208-1	1993	1727	1680	1800	9.39	cps
Lithium	6-1	822219	816328	811309	816619	0.67	cps
Magnesium	24-2	933147	929646	924059	928951	0.49	cps
Manganese	55-2	137	137	113	129	10.45	cps
Molybdenum	94-1	273	307	303	294	6.23	cps
Molybdenum	95-1	350	373	350	358	3.76	cps
Molybdenum	96-1	397	447	457	433	7.42	cps
Molybdenum	97-1	187	263	270	240	19.29	cps
Molybdenum	98-1	587	617	563	589	4.54	cps
Neodymium	150-1	7	7	10	8	24.71	cps
Neodymium	150-2	0	3	3	2	86.60	cps
Nickel	60-2	47	70	63	60	20.03	cps
Phosphorus	31-2	100	103	103	102	1.88	cps
Potassium	39-2	892622	887332	883148	887701	0.53	cps
Rhodium	103-1	2688455	2699789	2650032	2679426	0.97	cps
Rhodium	103-2	1481748	1496825	1477380	1485317	0.69	cps
Scandium	45-1	1607386	1602013	1579633	1596344	0.92	cps
Scandium	45-2	140252	139310	138109	139224	0.77	cps
Selenium	82-1	123	86	96	102	18.67	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	93	127	110	110	15.15	cps
Silicon	28-1	171450	169695	172411	171186	0.80	cps
Silver	107-1	110	97	70	92	22.08	cps
Silver	109-1	73	87	57	72	20.81	cps
Sodium	23-2	4403768	4414135	4389703	4402535	0.28	cps
Strontium	86-1	2174	2060	2044	2092	3.38	cps
Strontium	88-1	16753	16373	16259	16462	1.57	cps
Sulfur	34-1	112695	114716	115694	114368	1.34	cps
Terbium	159-1	4159988	4138263	4107994	4135415	0.63	cps
Terbium	159-2	2716375	2695401	2649003	2686926	1.28	cps
Thallium	203-1	150	160	120	143	14.52	cps
Thallium	205-1	333	340	317	330	3.64	cps
Tin	118-1	1287	1330	1437	1351	5.71	cps
Titanium	47-1	40	53	80	58	35.25	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3847-06DLX5	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WPDL	Dilution Factor :	5
Date & Time Acquired :	2024-10-17 18:51:49	DataFile Name :	035SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3	10	3	6	69.34	cps
Vanadium	51-2	10	20	13	14	35.26	cps
Yttrium	89-1	5083306	5065814	5060043	5069721	0.24	cps
Yttrium	89-2	1247721	1244827	1229377	1240642	0.79	cps
Zinc	66-2	90	133	70	98	33.11	cps
Zirconium	90-1	217	197	157	190	16.08	cps
Zirconium	91-1	23	50	30	34	40.30	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:55:08	DataFile Name :	036CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4258921	4293810	4304473	4285734	0.56	cps
Antimony	121-1	1901929	1943002	1965068	1936666	1.65	cps
Arsenic	75-2	82796	82041	81864	82234	0.60	cps
Barium	135-1	2665213	2653274	2717632	2678706	1.28	cps
Barium	137-1	4538833	4578502	4618742	4578692	0.87	cps
Beryllium	9-1	367265	368254	373075	369531	0.84	cps
Bismuth	209-1	2181523	2168332	2156435	2168763	0.58	cps
Bismuth	209-2	1573392	1575058	1586034	1578161	0.44	cps
Bromine	81-1	6318	6415	5945	6226	3.99	cps
Bromine	81-2	43	47	37	42	12.06	cps
Cadmium	108-1	33786	34444	34180	34137	0.97	cps
Cadmium	106-1	49410	50223	49675	49769	0.83	cps
Cadmium	111-1	440319	448868	449870	446352	1.18	cps
Calcium	43-1	2499790	2495616	2545542	2513650	1.10	cps
Calcium	44-1	39194408	39573685	39633943	39467345	0.60	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	680421	667779	670339	672846	0.99	cps
Cobalt	59-2	1076685	1075319	1065284	1072429	0.58	cps
Copper	63-2	7400722	7213588	7314473	7309594	1.28	cps
Dysprosium	156-1	157	133	147	146	8.04	cps
Dysprosium	156-2	157	157	183	166	9.30	cps
Erbium	164-1	120	103	120	114	8.41	cps
Erbium	164-2	70	73	97	80	18.17	cps
Gadolinium	160-1	87	77	80	81	6.28	cps
Gadolinium	160-2	123	183	183	163	21.21	cps
Holmium	165-1	3828422	3691073	3736901	3752132	1.86	cps
Holmium	165-2	2615253	2568186	2577203	2586881	0.97	cps
Indium	115-1	2709938	2667243	2670507	2682563	0.89	cps
Indium	115-2	842411	840112	841692	841405	0.14	cps
Iron	56-2	148313384	148532891	148408191	148418156	0.07	cps
Iron	57-2	3697361	3695358	3697731	3696817	0.03	cps
Iron	54-2	8096404	8060532	8110978	8089305	0.32	cps
Krypton	83-1	53	77	90	73	25.31	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:55:08	DataFile Name :	036CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	7720386	7841793	7917202	7826461	1.27	cps
Lead	207-1	6711312	6867756	6914077	6831048	1.56	cps
Lead	208-1	30623618	31252509	31711158	31195762	1.75	cps
Lithium	6-1	753234	742368	736345	743982	1.15	cps
Magnesium	24-2	36060128	35951614	36065321	36025688	0.18	cps
Manganese	55-2	5146567	5165046	5178341	5163318	0.31	cps
Molybdenum	94-1	6947886	6940051	6961811	6949916	0.16	cps
Molybdenum	95-1	10153441	10240078	10091487	10161669	0.73	cps
Molybdenum	96-1	10999372	11255858	11108462	11121231	1.16	cps
Molybdenum	97-1	6324643	6416928	6426119	6389230	0.88	cps
Molybdenum	98-1	16335100	16507444	16545948	16462831	0.68	cps
Neodymium	150-1	263	263	260	262	0.74	cps
Neodymium	150-2	80	93	93	89	8.66	cps
Nickel	60-2	260580	260265	258560	259802	0.42	cps
Phosphorus	31-2	41743	41001	40580	41108	1.43	cps
Potassium	39-2	20736696	20773017	20815437	20775050	0.19	cps
Rhodium	103-1	2345521	2323208	2238295	2302341	2.46	cps
Rhodium	103-2	1262458	1282568	1269933	1271653	0.80	cps
Scandium	45-1	1490002	1458761	1402578	1450447	3.05	cps
Scandium	45-2	128917	129494	128214	128875	0.50	cps
Selenium	82-1	25225	25843	25788	25619	1.34	cps
Selenium	77-2	2360	2307	2424	2364	2.47	cps
Selenium	78-2	8232	8139	8206	8192	0.59	cps
Silicon	28-1	1135013	1142316	1155513	1144281	0.91	cps
Silver	107-1	2141322	2145462	2176003	2154262	0.88	cps
Silver	109-1	2047768	2101271	2057787	2068942	1.37	cps
Sodium	23-2	58688136	58608074	57647721	58314644	0.99	cps
Strontium	86-1	14996733	15060326	15362226	15139762	1.29	cps
Strontium	88-1	131086291	132858035	133253525	132399284	0.87	cps
Sulfur	34-1	253746	256715	256186	255549	0.62	cps
Terbium	159-1	3899194	3822471	3791790	3837818	1.44	cps
Terbium	159-2	2558895	2550574	2538237	2549235	0.41	cps
Thallium	203-1	1886339	1958768	1975862	1940323	2.45	cps
Thallium	205-1	4627639	4629881	4728957	4662159	1.24	cps
Tin	118-1	1725129	1723220	1729762	1726037	0.19	cps
Titanium	47-1	2407327	2410444	2422034	2413268	0.32	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:55:08	DataFile Name :	036CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	6299175	6454416	6442738	6398776	1.35	cps
Vanadium	51-2	620081	616092	616705	617626	0.35	cps
Yttrium	89-1	4694030	4651531	4640967	4662176	0.60	cps
Yttrium	89-2	1137748	1142996	1131986	1137577	0.48	cps
Zinc	66-2	1212561	1210857	1206034	1209817	0.28	cps
Zirconium	90-1	3124636	3175099	3194625	3164787	1.14	cps
Zirconium	91-1	701564	705997	707558	705040	0.44	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:58:04	DataFile Name :	037CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	170	213	163	182	14.90	cps
Antimony	121-1	1493	1450	1807	1583	12.29	cps
Arsenic	75-2	13	20	13	16	24.76	cps
Barium	135-1	170	110	77	119	39.78	cps
Barium	137-1	303	170	190	221	32.52	cps
Beryllium	9-1	310	300	233	281	14.83	cps
Bismuth	209-1	2396857	2427638	2460395	2428297	1.31	cps
Bismuth	209-2	1967148	1658240	1986908	1870765	9.85	cps
Bromine	81-1	6558	6845	6325	6576	3.96	cps
Bromine	81-2	30	30	27	29	6.65	cps
Cadmium	108-1	10	3	10	8	49.52	cps
Cadmium	106-1	1487	1280	1550	1439	9.81	cps
Cadmium	111-1	1050	930	1118	1033	9.20	cps
Calcium	43-1	227	237	200	221	8.57	cps
Calcium	44-1	4721	4024	3671	4138	12.91	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	253	203	203	220	13.12	cps
Cobalt	59-2	97	97	103	99	3.89	cps
Copper	63-2	917	930	1053	967	7.80	cps
Dysprosium	156-1	0	0	17	6	173.21	cps
Dysprosium	156-2	0	0	3	1	173.21	cps
Erbium	164-1	7	13	3	8	65.47	cps
Erbium	164-2	13	7	33	18	78.05	cps
Gadolinium	160-1	13	7	13	11	34.61	cps
Gadolinium	160-2	117	97	133	116	15.89	cps
Holmium	165-1	3841061	3921564	3792946	3851857	1.69	cps
Holmium	165-2	2688607	2280469	2679476	2549517	9.14	cps
Indium	115-1	2906286	2997859	2885156	2929767	2.04	cps
Indium	115-2	925445	785238	929733	880139	9.34	cps
Iron	56-2	11221	10701	11314	11079	2.99	cps
Iron	57-2	645	575	648	623	6.64	cps
Iron	54-2	1110	1090	1200	1133	5.17	cps
Krypton	83-1	47	53	73	58	24.02	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:58:04	DataFile Name :	037CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	977	903	730	870	14.56	cps
Lead	207-1	793	693	660	716	9.70	cps
Lead	208-1	4037	3377	3117	3510	13.51	cps
Lithium	6-1	786376	800725	787983	791695	0.99	cps
Magnesium	24-2	2547	2524	2694	2588	3.56	cps
Manganese	55-2	300	290	317	302	4.46	cps
Molybdenum	94-1	963	767	717	816	15.99	cps
Molybdenum	95-1	917	813	643	791	17.45	cps
Molybdenum	96-1	1113	860	843	939	16.12	cps
Molybdenum	97-1	483	470	400	451	9.92	cps
Molybdenum	98-1	1413	1217	997	1209	17.24	cps
Neodymium	150-1	0	0	0	0	0.00	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	60	43	40	48	22.43	cps
Phosphorus	31-2	107	107	83	99	13.63	cps
Potassium	39-2	36397	36006	36360	36254	0.60	cps
Rhodium	103-1	2559272	2579097	2544920	2561096	0.67	cps
Rhodium	103-2	1430102	1223627	1454850	1369527	9.27	cps
Scandium	45-1	1504021	1552429	1527207	1527886	1.58	cps
Scandium	45-2	133572	113342	136743	127886	9.93	cps
Selenium	82-1	99	117	97	104	10.56	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	123	107	90	107	15.63	cps
Silicon	28-1	174162	175917	176521	175533	0.70	cps
Silver	107-1	407	330	253	330	23.23	cps
Silver	109-1	270	233	187	230	18.16	cps
Sodium	23-2	22406	22286	21992	22228	0.96	cps
Strontium	86-1	950	687	560	732	27.17	cps
Strontium	88-1	6902	5084	4181	5389	25.72	cps
Sulfur	34-1	115952	116332	115573	115952	0.33	cps
Terbium	159-1	3860758	3957816	3923623	3914066	1.26	cps
Terbium	159-2	2589029	2210691	2645247	2481656	9.52	cps
Thallium	203-1	330	333	283	316	8.86	cps
Thallium	205-1	827	713	550	697	19.96	cps
Tin	118-1	1118	1394	1378	1297	11.95	cps
Titanium	47-1	227	160	160	182	21.12	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 18:58:04	DataFile Name :	037CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	343	280	177	267	31.55	cps
Vanadium	51-2	23	17	37	26	39.85	cps
Yttrium	89-1	4762597	4891953	4804313	4819621	1.37	cps
Yttrium	89-2	1194942	1006632	1196013	1132529	9.63	cps
Zinc	66-2	183	157	157	166	9.30	cps
Zirconium	90-1	907	873	823	868	4.83	cps
Zirconium	91-1	200	213	203	206	3.38	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-02DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 19:01:26	DataFile Name :	038SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	120817	121842	120511	121057	0.58	cps
Antimony	121-1	1648356	1671927	1674773	1665019	0.87	cps
Arsenic	75-2	53506	52867	52934	53102	0.66	cps
Barium	135-1	343582	344824	347351	345252	0.56	cps
Barium	137-1	593074	599528	602181	598261	0.78	cps
Beryllium	9-1	121880	123828	124973	123560	1.27	cps
Bismuth	209-1	2475032	2504573	2488838	2489481	0.59	cps
Bismuth	209-2	2036381	1968359	2040996	2015245	2.02	cps
Bromine	81-1	6518	6582	6358	6486	1.78	cps
Bromine	81-2	30	47	43	40	22.05	cps
Cadmium	108-1	13179	13516	13280	13325	1.30	cps
Cadmium	106-1	19630	19443	19847	19640	1.03	cps
Cadmium	111-1	202984	204911	205035	204310	0.56	cps
Calcium	43-1	1567	1140	1213	1307	17.47	cps
Calcium	44-1	16733	10664	10344	12580	28.62	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	437686	441637	438308	439210	0.48	cps
Cobalt	59-2	210038	207805	207319	208387	0.70	cps
Copper	63-2	531798	532032	527804	530544	0.45	cps
Dysprosium	156-1	7	13	20	13	49.99	cps
Dysprosium	156-2	23	7	10	13	66.12	cps
Erbium	164-1	17	27	17	20	28.86	cps
Erbium	164-2	13	7	10	10	33.30	cps
Gadolinium	160-1	7	10	13	10	33.30	cps
Gadolinium	160-2	113	127	127	122	6.30	cps
Holmium	165-1	3916360	3896077	3858008	3890148	0.76	cps
Holmium	165-2	2728106	2633240	2774829	2712059	2.66	cps
Indium	115-1	2994935	2973596	3000369	2989633	0.47	cps
Indium	115-2	953588	922347	969116	948350	2.51	cps
Iron	56-2	1009810	1018560	1000406	1009592	0.90	cps
Iron	57-2	22732	21650	21380	21921	3.26	cps
Iron	54-2	69868	69536	68093	69166	1.36	cps
Krypton	83-1	97	60	87	81	23.37	cps

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-02DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 19:01:26	DataFile Name :	038SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1564096	1580186	1573104	1572462	0.51	cps
Lead	207-1	1311967	1318882	1323541	1318130	0.44	cps
Lead	208-1	6476199	6559155	6458198	6497851	0.83	cps
Lithium	6-1	809898	808704	809032	809211	0.08	cps
Magnesium	24-2	1603	1653	1430	1562	7.50	cps
Manganese	55-2	379833	383406	382753	381997	0.50	cps
Molybdenum	94-1	307019	313114	314007	311380	1.22	cps
Molybdenum	95-1	541279	548345	545597	545074	0.65	cps
Molybdenum	96-1	583070	589558	584969	585865	0.57	cps
Molybdenum	97-1	343363	346667	345459	345163	0.48	cps
Molybdenum	98-1	869406	885937	880630	878658	0.96	cps
Neodymium	150-1	30	27	23	27	12.51	cps
Neodymium	150-2	3	3	7	4	43.40	cps
Nickel	60-2	460275	463020	460651	461315	0.32	cps
Phosphorus	31-2	160	150	127	146	11.75	cps
Potassium	39-2	34710	33861	34182	34251	1.25	cps
Rhodium	103-1	2637294	2645856	2627662	2636937	0.35	cps
Rhodium	103-2	1484677	1446729	1504939	1478781	2.00	cps
Scandium	45-1	1554716	1557452	1537129	1549766	0.71	cps
Scandium	45-2	137925	132646	139421	136664	2.60	cps
Selenium	82-1	14299	14578	14163	14347	1.47	cps
Selenium	77-2	1263	1463	1453	1393	8.09	cps
Selenium	78-2	4517	4781	4627	4642	2.85	cps
Silicon	28-1	500415	508142	508477	505678	0.90	cps
Silver	107-1	1409726	1427204	1427514	1421481	0.72	cps
Silver	109-1	1338378	1356561	1350218	1348386	0.68	cps
Sodium	23-2	23445	23104	22697	23082	1.62	cps
Strontium	86-1	297436	302319	299751	299836	0.81	cps
Strontium	88-1	2610995	2663417	2677189	2650534	1.32	cps
Sulfur	34-1	114478	111997	109794	112090	2.09	cps
Terbium	159-1	4044228	3999369	3992798	4012132	0.70	cps
Terbium	159-2	2648289	2619479	2723040	2663603	2.01	cps
Thallium	203-1	841663	852635	845438	846578	0.66	cps
Thallium	205-1	2249382	2265733	2219169	2244761	1.05	cps
Tin	118-1	1559	1529	1625	1571	3.13	cps
Titanium	47-1	397	157	140	231	62.15	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-02DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-TM1-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 19:01:26	DataFile Name :	038SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	57	27	37	40	38.18	cps
Vanadium	51-2	748044	758489	754867	753800	0.70	cps
Yttrium	89-1	4941462	4874705	4965328	4927165	0.95	cps
Yttrium	89-2	1238420	1197825	1259298	1231848	2.54	cps
Zinc	66-2	83371	84128	83039	83513	0.67	cps
Zirconium	90-1	1767	1717	1703	1729	1.93	cps
Zirconium	91-1	457	433	503	464	7.67	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-04DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 19:04:46	DataFile Name :	039SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3530	3514	3590	3545	1.14	cps
Antimony	121-1	1020	1043	1130	1064	5.45	cps
Arsenic	75-2	7	23	3	11	96.43	cps
Barium	135-1	160	200	167	176	12.21	cps
Barium	137-1	243	303	300	282	11.95	cps
Beryllium	9-1	207	187	140	178	19.24	cps
Bismuth	209-1	2438584	2456093	2437831	2444169	0.42	cps
Bismuth	209-2	1964791	1971889	1994910	1977197	0.80	cps
Bromine	81-1	6391	6101	6565	6353	3.69	cps
Bromine	81-2	37	60	80	59	36.83	cps
Cadmium	108-1	3	10	0	4	114.60	cps
Cadmium	106-1	1393	1353	1323	1357	2.59	cps
Cadmium	111-1	993	957	940	963	2.82	cps
Calcium	43-1	170	177	217	188	13.44	cps
Calcium	44-1	3997	4081	3931	4003	1.88	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	243	253	217	238	7.97	cps
Cobalt	59-2	97	80	90	89	9.44	cps
Copper	63-2	660	707	860	742	14.10	cps
Dysprosium	156-1	10	3	7	7	50.03	cps
Dysprosium	156-2	13	7	10	10	33.30	cps
Erbium	164-1	20	30	27	26	19.92	cps
Erbium	164-2	27	13	17	19	36.75	cps
Gadolinium	160-1	30	13	20	21	39.75	cps
Gadolinium	160-2	127	117	113	119	5.84	cps
Holmium	165-1	3867730	3861115	3854348	3861064	0.17	cps
Holmium	165-2	2686282	2691028	2660814	2679375	0.61	cps
Indium	115-1	3045615	2916425	2973709	2978583	2.17	cps
Indium	115-2	927411	924033	930247	927230	0.34	cps
Iron	56-2	6428	6712	6618	6586	2.19	cps
Iron	57-2	515	542	612	556	8.98	cps
Iron	54-2	840	910	957	902	6.51	cps
Krypton	83-1	87	80	83	83	4.00	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-04DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 19:04:46	DataFile Name :	039SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	637	643	700	660	5.27	cps
Lead	207-1	583	483	480	516	11.39	cps
Lead	208-1	2527	2397	2507	2477	2.83	cps
Lithium	6-1	813702	811467	809869	811679	0.24	cps
Magnesium	24-2	1600	1503	1613	1572	3.82	cps
Manganese	55-2	143	180	167	163	11.36	cps
Molybdenum	94-1	2347	2194	2257	2266	3.40	cps
Molybdenum	95-1	177	137	150	154	13.19	cps
Molybdenum	96-1	500	580	563	548	7.71	cps
Molybdenum	97-1	83	70	87	80	11.02	cps
Molybdenum	98-1	197	260	227	228	13.91	cps
Neodymium	150-1	7	7	17	10	57.72	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	137	150	103	130	18.49	cps
Phosphorus	31-2	137	93	110	113	19.29	cps
Potassium	39-2	34055	34476	34122	34217	0.66	cps
Rhodium	103-1	2623679	2630732	2656313	2636908	0.65	cps
Rhodium	103-2	1485815	1467494	1469566	1474291	0.68	cps
Scandium	45-1	1557959	1527710	1575035	1553568	1.54	cps
Scandium	45-2	138560	134732	136639	136644	1.40	cps
Selenium	82-1	95	129	107	110	15.58	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	117	107	127	117	8.57	cps
Silicon	28-1	2084951	2106323	2116535	2102603	0.77	cps
Silver	107-1	400	333	273	336	18.88	cps
Silver	109-1	400	240	230	290	32.89	cps
Sodium	23-2	41148	41078	40483	40903	0.89	cps
Strontium	86-1	203	180	180	188	7.18	cps
Strontium	88-1	800	613	630	681	15.17	cps
Sulfur	34-1	108035	108874	108294	108401	0.40	cps
Terbium	159-1	4116294	3953648	4087415	4052452	2.14	cps
Terbium	159-2	2714253	2605196	2683271	2667573	2.11	cps
Thallium	203-1	280	187	203	223	22.29	cps
Thallium	205-1	573	513	503	530	7.14	cps
Tin	118-1	2407344	2370769	2454692	2410935	1.75	cps
Titanium	47-1	23889	24300	24540	24243	1.36	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-04DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-SNTI-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 19:04:46	DataFile Name :	039SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	23	13	3	13	75.02	cps
Vanadium	51-2	53	37	60	50	24.03	cps
Yttrium	89-1	4918183	5020478	4962394	4967018	1.03	cps
Yttrium	89-2	1224617	1229491	1228881	1227663	0.22	cps
Zinc	66-2	133	170	170	158	13.41	cps
Zirconium	90-1	6128	6048	6168	6115	1.00	cps
Zirconium	91-1	1257	1360	1310	1309	3.95	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-06DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 19:08:06	DataFile Name :	040SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	150	100	120	123	20.40	cps
Antimony	121-1	317	313	357	329	7.33	cps
Arsenic	75-2	7	3	7	6	34.70	cps
Barium	135-1	197	177	173	182	6.92	cps
Barium	137-1	283	343	337	321	10.24	cps
Beryllium	9-1	167	123	103	131	24.69	cps
Bismuth	209-1	2766373	2621979	2618004	2668785	3.17	cps
Bismuth	209-2	2124863	2127954	2117489	2123435	0.25	cps
Bromine	81-1	7132	7315	7312	7253	1.45	cps
Bromine	81-2	257	210	237	234	9.99	cps
Cadmium	108-1	7	3	17	9	78.08	cps
Cadmium	106-1	1537	1533	1503	1525	1.20	cps
Cadmium	111-1	1091	1101	1041	1078	3.00	cps
Calcium	43-1	436368	437473	430045	434629	0.92	cps
Calcium	44-1	6585636	6489419	6561903	6545652	0.77	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	170	160	123	151	16.26	cps
Cobalt	59-2	73	93	110	92	19.91	cps
Copper	63-2	687	687	663	679	1.98	cps
Dysprosium	156-1	10	10	13	11	17.30	cps
Dysprosium	156-2	3	10	7	7	50.03	cps
Erbium	164-1	13	13	13	13	0.00	cps
Erbium	164-2	10	23	10	14	53.28	cps
Gadolinium	160-1	10	10	7	9	21.63	cps
Gadolinium	160-2	130	110	130	123	9.36	cps
Holmium	165-1	4473362	4277089	4321391	4357281	2.36	cps
Holmium	165-2	2973561	2958387	2964201	2965383	0.26	cps
Indium	115-1	3390775	3313891	3285817	3330161	1.63	cps
Indium	115-2	1016173	1017551	1003498	1012407	0.77	cps
Iron	56-2	5905	5588	5731	5741	2.76	cps
Iron	57-2	6824	6743	7467	7011	5.66	cps
Iron	54-2	683	673	673	677	0.85	cps
Krypton	83-1	63	97	73	78	22.00	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-06DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 19:08:06	DataFile Name :	040SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	967	910	843	907	6.81	cps
Lead	207-1	863	733	683	760	12.23	cps
Lead	208-1	3510	3464	3344	3439	2.50	cps
Lithium	6-1	920551	905081	895400	907011	1.40	cps
Magnesium	24-2	2392739	2373675	2314896	2360437	1.72	cps
Manganese	55-2	210	190	197	199	5.12	cps
Molybdenum	94-1	593	547	580	573	4.19	cps
Molybdenum	95-1	950	917	803	890	8.64	cps
Molybdenum	96-1	1063	1013	1033	1037	2.43	cps
Molybdenum	97-1	603	573	700	626	10.58	cps
Molybdenum	98-1	1460	1550	1513	1508	3.00	cps
Neodymium	150-1	20	0	7	9	114.55	cps
Neodymium	150-2	0	3	3	2	86.60	cps
Nickel	60-2	87	83	90	87	3.85	cps
Phosphorus	31-2	117	123	107	116	7.26	cps
Potassium	39-2	2174785	2145200	2138897	2152960	0.89	cps
Rhodium	103-1	2918225	2865818	2846238	2876760	1.29	cps
Rhodium	103-2	1594213	1573773	1554147	1574045	1.27	cps
Scandium	45-1	1804527	1745472	1714935	1754978	2.60	cps
Scandium	45-2	149657	150744	149516	149972	0.45	cps
Selenium	82-1	147	116	128	130	11.95	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	117	97	90	101	13.73	cps
Silicon	28-1	162790	163400	163910	163367	0.34	cps
Silver	107-1	83	100	90	91	9.21	cps
Silver	109-1	73	87	63	74	15.73	cps
Sodium	23-2	11520721	11617754	11532870	11557115	0.46	cps
Strontium	86-1	5358	5261	5134	5251	2.13	cps
Strontium	88-1	44969	44343	44337	44550	0.81	cps
Sulfur	34-1	109451	114539	118965	114318	4.16	cps
Terbium	159-1	4576875	4480549	4372337	4476587	2.29	cps
Terbium	159-2	2885349	2916763	2903638	2901916	0.54	cps
Thallium	203-1	300	253	203	252	19.17	cps
Thallium	205-1	713	517	390	540	30.17	cps
Tin	118-1	1112	1179	1262	1185	6.34	cps
Titanium	47-1	37	53	87	59	43.23	cps

Reviewed By:Mohan
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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	P3846-06DLX2	Instrumnet Name :	P7
Client Sample ID :	PT-MIN2-WPDL	Dilution Factor :	2
Date & Time Acquired :	2024-10-17 19:08:06	DataFile Name :	040SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	17	17	10	14	26.66	cps
Vanadium	51-2	10	17	17	14	26.66	cps
Yttrium	89-1	5585277	5441640	5448226	5491714	1.48	cps
Yttrium	89-2	1324808	1336926	1311669	1324468	0.95	cps
Zinc	66-2	160	167	187	171	8.11	cps
Zirconium	90-1	173	170	140	161	11.40	cps
Zirconium	91-1	30	17	47	31	48.31	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164203BL	Instrumnet Name :	P7
Client Sample ID :	PB164203BL	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:16:39	DataFile Name :	041CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	60	73	63	66	10.58	cps
Antimony	121-1	137	153	180	157	13.95	cps
Arsenic	75-2	0	3	7	3	100.05	cps
Barium	135-1	13	3	17	11	62.48	cps
Barium	137-1	27	23	50	33	43.59	cps
Beryllium	9-1	100	133	113	116	14.52	cps
Bismuth	209-1	2479236	2454958	2444651	2459615	0.72	cps
Bismuth	209-2	1970454	1989468	1980928	1980283	0.48	cps
Bromine	81-1	6918	6898	6775	6864	1.13	cps
Bromine	81-2	27	37	40	34	20.14	cps
Cadmium	108-1	0	7	3	3	100.05	cps
Cadmium	106-1	1313	1173	1310	1266	6.31	cps
Cadmium	111-1	926	817	915	886	6.79	cps
Calcium	43-1	130	160	143	144	10.41	cps
Calcium	44-1	2764	2627	2447	2613	6.08	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	153	160	170	161	5.20	cps
Cobalt	59-2	23	7	30	20	60.08	cps
Copper	63-2	663	563	580	602	8.90	cps
Dysprosium	156-1	10	3	17	10	66.70	cps
Dysprosium	156-2	7	0	7	4	86.60	cps
Erbium	164-1	30	37	17	28	36.66	cps
Erbium	164-2	10	13	17	13	25.01	cps
Gadolinium	160-1	20	10	17	16	32.73	cps
Gadolinium	160-2	127	97	127	117	14.85	cps
Holmium	165-1	3886069	3875717	3871733	3877840	0.19	cps
Holmium	165-2	2683975	2686129	2639349	2669818	0.99	cps
Indium	115-1	2997549	3018852	2939524	2985308	1.38	cps
Indium	115-2	933666	930727	922462	928952	0.63	cps
Iron	56-2	4981	4774	4731	4829	2.77	cps
Iron	57-2	476	460	493	476	3.46	cps
Iron	54-2	720	823	937	827	13.11	cps
Krypton	83-1	97	110	70	92	22.08	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164203BL	Instrumnet Name :	P7
Client Sample ID :	PB164203BL	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:16:39	DataFile Name :	041CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	320	363	243	309	19.67	cps
Lead	207-1	267	237	247	250	6.11	cps
Lead	208-1	1163	1197	1057	1139	6.42	cps
Lithium	6-1	781832	787640	783732	784401	0.38	cps
Magnesium	24-2	1453	1567	1560	1527	4.17	cps
Manganese	55-2	73	67	80	73	9.09	cps
Molybdenum	94-1	110	90	117	106	13.15	cps
Molybdenum	95-1	30	63	63	52	36.85	cps
Molybdenum	96-1	70	67	67	68	2.84	cps
Molybdenum	97-1	27	20	40	29	35.25	cps
Molybdenum	98-1	80	103	70	84	20.26	cps
Neodymium	150-1	3	3	0	2	86.60	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	60	33	43	46	29.58	cps
Phosphorus	31-2	127	113	83	108	20.60	cps
Potassium	39-2	33353	33908	33614	33625	0.82	cps
Rhodium	103-1	2640259	2660436	2625469	2642055	0.66	cps
Rhodium	103-2	1463634	1451891	1446619	1454048	0.60	cps
Scandium	45-1	1562465	1521367	1540922	1541585	1.33	cps
Scandium	45-2	137396	134090	134235	135240	1.38	cps
Selenium	82-1	70	78	129	92	34.67	cps
Selenium	77-2	0	7	0	2	173.21	cps
Selenium	78-2	83	93	67	81	16.60	cps
Silicon	28-1	173405	171626	177262	174097	1.66	cps
Silver	107-1	83	60	83	76	17.83	cps
Silver	109-1	43	40	47	43	7.70	cps
Sodium	23-2	11628	11665	11735	11676	0.46	cps
Strontium	86-1	110	167	100	126	28.64	cps
Strontium	88-1	167	127	137	143	14.52	cps
Sulfur	34-1	120961	122059	120988	121336	0.52	cps
Terbium	159-1	3979072	3992291	3893599	3954987	1.35	cps
Terbium	159-2	2617739	2620537	2605121	2614466	0.31	cps
Thallium	203-1	140	103	110	118	16.58	cps
Thallium	205-1	310	243	260	271	12.80	cps
Tin	118-1	870	900	997	922	7.18	cps
Titanium	47-1	40	60	50	50	20.00	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164203BL	Instrumnet Name :	P7
Client Sample ID :	PB164203BL	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:16:39	DataFile Name :	041CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	7	7	7	7	0.00	cps
Vanadium	51-2	0	17	10	9	94.38	cps
Yttrium	89-1	4880966	4912347	4838906	4877406	0.76	cps
Yttrium	89-2	1205972	1206300	1190697	1200990	0.74	cps
Zinc	66-2	77	60	100	79	25.47	cps
Zirconium	90-1	203	170	327	233	35.37	cps
Zirconium	91-1	80	43	57	60	30.93	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164203BS	Instrumnet Name :	P7
Client Sample ID :	PB164203BS	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:20:02	DataFile Name :	042LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	924246	916800	920880	920642	0.41	cps
Antimony	121-1	2128795	2162759	2143491	2145015	0.79	cps
Arsenic	75-2	91060	90571	91268	90966	0.39	cps
Barium	135-1	2919699	2914024	2889243	2907655	0.56	cps
Barium	137-1	4926753	4965077	4969425	4953752	0.47	cps
Beryllium	9-1	391489	394794	392662	392982	0.43	cps
Bismuth	209-1	2324065	1934665	2384213	2214314	11.02	cps
Bismuth	209-2	1893864	1903757	1897451	1898358	0.26	cps
Bromine	81-1	6421	6131	6361	6305	2.43	cps
Bromine	81-2	43	37	40	40	8.32	cps
Cadmium	108-1	37351	38221	37866	37813	1.16	cps
Cadmium	106-1	54933	55455	55619	55336	0.65	cps
Cadmium	111-1	504478	510927	507239	507548	0.64	cps
Calcium	43-1	604877	611917	602945	606580	0.78	cps
Calcium	44-1	8885630	8867623	8842472	8865242	0.24	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	730768	728726	726645	728713	0.28	cps
Cobalt	59-2	1086549	1080471	1083023	1083348	0.28	cps
Copper	63-2	7608277	7606133	7564177	7592862	0.33	cps
Dysprosium	156-1	90	47	47	61	40.93	cps
Dysprosium	156-2	147	110	173	143	22.19	cps
Erbium	164-1	30	40	33	34	14.78	cps
Erbium	164-2	33	40	33	36	10.83	cps
Gadolinium	160-1	37	23	17	26	39.85	cps
Gadolinium	160-2	117	167	140	141	17.73	cps
Holmium	165-1	3849925	3242102	3971242	3687756	10.59	cps
Holmium	165-2	2684109	2703915	2680963	2689662	0.46	cps
Indium	115-1	2847039	2328273	2883910	2686407	11.57	cps
Indium	115-2	896802	895126	892859	894929	0.22	cps
Iron	56-2	32594286	32570660	32521450	32562132	0.11	cps
Iron	57-2	836305	834354	834960	835206	0.12	cps
Iron	54-2	1799011	1780240	1835171	1804807	1.55	cps
Krypton	83-1	83	50	73	69	24.83	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164203BS	Instrumnet Name :	P7
Client Sample ID :	PB164203BS	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:20:02	DataFile Name :	042LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	8624400	8802248	8774717	8733788	1.10	cps
Lead	207-1	7472316	7606387	7674430	7584378	1.36	cps
Lead	208-1	34149615	34713979	34881099	34581564	1.11	cps
Lithium	6-1	767820	644879	779228	730643	10.20	cps
Magnesium	24-2	7341973	7400220	7341388	7361194	0.46	cps
Manganese	55-2	5631616	5576812	5569089	5592506	0.61	cps
Molybdenum	94-1	7492536	7626785	7418474	7512599	1.41	cps
Molybdenum	95-1	10871978	10995461	10916166	10927868	0.57	cps
Molybdenum	96-1	11910106	12300351	11895647	12035368	1.91	cps
Molybdenum	97-1	6833300	7051957	6876234	6920497	1.67	cps
Molybdenum	98-1	17742278	17958023	17662211	17787504	0.86	cps
Neodymium	150-1	230	270	183	228	19.04	cps
Neodymium	150-2	37	53	33	41	26.06	cps
Nickel	60-2	265841	266790	265200	265943	0.30	cps
Phosphorus	31-2	44495	44184	44782	44487	0.67	cps
Potassium	39-2	4526961	4448787	4489818	4488522	0.87	cps
Rhodium	103-1	2510374	2041948	2548446	2366923	11.92	cps
Rhodium	103-2	1397874	1386910	1389006	1391263	0.42	cps
Scandium	45-1	1523303	1228358	1517805	1423155	11.86	cps
Scandium	45-2	132553	131521	132815	132297	0.52	cps
Selenium	82-1	29087	28928	29306	29107	0.65	cps
Selenium	77-2	2787	2697	2660	2715	2.40	cps
Selenium	78-2	9256	9350	8933	9180	2.38	cps
Silicon	28-1	1202520	1217461	1215042	1211674	0.66	cps
Silver	107-1	2488794	2500844	2499259	2496299	0.26	cps
Silver	109-1	2424539	2410300	2392920	2409253	0.66	cps
Sodium	23-2	12505555	12510537	12488949	12501681	0.09	cps
Strontium	86-1	16388839	16330479	16379865	16366394	0.19	cps
Strontium	88-1	142580258	142480348	142849455	142636687	0.13	cps
Sulfur	34-1	268969	266333	264949	266750	0.77	cps
Terbium	159-1	3906160	3293561	3990394	3730038	10.20	cps
Terbium	159-2	2628742	2626283	2595507	2616844	0.71	cps
Thallium	203-1	2130629	2155010	2200026	2161888	1.63	cps
Thallium	205-1	5087308	5165575	5183471	5145451	0.99	cps
Tin	118-1	1832303	1864622	1818679	1838535	1.28	cps
Titanium	47-1	2606487	2610723	2584952	2600721	0.53	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164203BS	Instrumnet Name :	P7
Client Sample ID :	PB164203BS	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:20:02	DataFile Name :	042LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	6826636	6839363	6825012	6830337	0.12	cps
Vanadium	51-2	665663	662406	656905	661658	0.67	cps
Yttrium	89-1	4827739	3918316	4855551	4533869	11.76	cps
Yttrium	89-2	1198620	1178885	1190889	1189465	0.84	cps
Zinc	66-2	1264252	1252576	1259721	1258850	0.47	cps
Zirconium	90-1	3330956	3396670	3393118	3373581	1.10	cps
Zirconium	91-1	751577	767891	753345	757604	1.18	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164204BL	Instrumnet Name :	P7
Client Sample ID :	PB164204BL	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:22:59	DataFile Name :	043CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	73	100	87	87	15.39	cps
Antimony	121-1	1367	1243	1483	1365	8.80	cps
Arsenic	75-2	7	17	7	10	57.72	cps
Barium	135-1	147	87	80	104	35.16	cps
Barium	137-1	173	143	97	138	28.04	cps
Beryllium	9-1	280	227	190	232	19.49	cps
Bismuth	209-1	2432858	2427871	2479921	2446883	1.17	cps
Bismuth	209-2	1961207	1994994	1960792	1972331	1.00	cps
Bromine	81-1	6635	6328	6368	6444	2.59	cps
Bromine	81-2	33	47	23	34	34.00	cps
Cadmium	108-1	7	3	13	8	65.47	cps
Cadmium	106-1	1503	1320	1337	1387	7.31	cps
Cadmium	111-1	1061	942	956	986	6.60	cps
Calcium	43-1	137	163	140	147	9.91	cps
Calcium	44-1	2937	2740	2810	2829	3.52	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	210	223	243	226	7.44	cps
Cobalt	59-2	70	40	53	54	27.61	cps
Copper	63-2	837	820	710	789	8.73	cps
Dysprosium	156-1	0	3	0	1	173.21	cps
Dysprosium	156-2	3	0	3	2	86.60	cps
Erbium	164-1	13	7	20	13	49.99	cps
Erbium	164-2	23	10	3	12	83.33	cps
Gadolinium	160-1	3	3	10	6	69.34	cps
Gadolinium	160-2	123	97	140	120	18.21	cps
Holmium	165-1	3912433	3887251	3876995	3892226	0.47	cps
Holmium	165-2	2691562	2673681	2677322	2680855	0.35	cps
Indium	115-1	2967191	2937278	2945540	2950003	0.52	cps
Indium	115-2	928507	928529	929374	928803	0.05	cps
Iron	56-2	5574	5835	5938	5782	3.24	cps
Iron	57-2	522	476	549	516	7.17	cps
Iron	54-2	970	880	850	900	6.94	cps
Krypton	83-1	60	67	50	59	14.25	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164204BL	Instrumnet Name :	P7
Client Sample ID :	PB164204BL	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:22:59	DataFile Name :	043CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	927	780	727	811	12.77	cps
Lead	207-1	890	570	520	660	30.42	cps
Lead	208-1	3744	3037	2873	3218	14.37	cps
Lithium	6-1	777560	772342	775326	775076	0.34	cps
Magnesium	24-2	1537	1497	1450	1495	2.90	cps
Manganese	55-2	227	297	283	269	13.82	cps
Molybdenum	94-1	800	730	707	746	6.52	cps
Molybdenum	95-1	833	677	590	700	17.62	cps
Molybdenum	96-1	933	743	817	831	11.53	cps
Molybdenum	97-1	503	337	357	399	22.81	cps
Molybdenum	98-1	1237	990	1003	1077	12.89	cps
Neodymium	150-1	7	3	0	3	100.05	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	73	50	63	62	18.81	cps
Phosphorus	31-2	93	127	120	113	15.57	cps
Potassium	39-2	33357	33460	33594	33470	0.36	cps
Rhodium	103-1	2580887	2577939	2602678	2587168	0.52	cps
Rhodium	103-2	1452463	1446869	1436168	1445166	0.57	cps
Scandium	45-1	1483580	1501675	1514493	1499916	1.04	cps
Scandium	45-2	134820	133905	133387	134037	0.54	cps
Selenium	82-1	117	122	138	125	8.71	cps
Selenium	77-2	0	0	7	2	173.21	cps
Selenium	78-2	97	83	97	92	8.35	cps
Silicon	28-1	178202	176911	176760	177291	0.45	cps
Silver	107-1	433	347	277	352	22.28	cps
Silver	109-1	363	270	280	304	16.83	cps
Sodium	23-2	13002	12875	12405	12761	2.47	cps
Strontium	86-1	763	497	473	578	27.89	cps
Strontium	88-1	5775	3754	2934	4154	35.20	cps
Sulfur	34-1	113088	110677	111006	111590	1.17	cps
Terbium	159-1	4010129	3950174	3940992	3967098	0.95	cps
Terbium	159-2	2626358	2634991	2603037	2621462	0.63	cps
Thallium	203-1	207	243	250	233	10.00	cps
Thallium	205-1	690	510	437	546	23.90	cps
Tin	118-1	1058	1044	1077	1060	1.57	cps
Titanium	47-1	200	157	150	169	16.07	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164204BL	Instrumnet Name :	P7
Client Sample ID :	PB164204BL	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:22:59	DataFile Name :	043CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	243	193	150	196	23.89	cps
Vanadium	51-2	7	20	20	16	49.47	cps
Yttrium	89-1	4825001	4804134	4811095	4813410	0.22	cps
Yttrium	89-2	1191922	1201707	1199805	1197811	0.43	cps
Zinc	66-2	157	173	163	164	5.10	cps
Zirconium	90-1	883	723	753	787	10.81	cps
Zirconium	91-1	223	157	190	190	17.54	cps

Reviewed By:Mohan
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Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164204BS	Instrumnet Name :	P7
Client Sample ID :	PB164204BS	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:26:21	DataFile Name :	044DLCW.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	932532	933150	925618	930433	0.45	cps
Antimony	121-1	2170531	2176239	2168578	2171783	0.18	cps
Arsenic	75-2	90661	91741	91305	91236	0.60	cps
Barium	135-1	2959055	2951980	2949529	2953521	0.17	cps
Barium	137-1	5021328	5074319	5016022	5037223	0.64	cps
Beryllium	9-1	396110	392791	394745	394549	0.42	cps
Bismuth	209-1	2332442	2419872	2364176	2372164	1.87	cps
Bismuth	209-2	1902274	1873810	1937508	1904530	1.68	cps
Bromine	81-1	6288	6125	6221	6211	1.32	cps
Bromine	81-2	40	23	33	32	26.04	cps
Cadmium	108-1	38260	38404	38133	38266	0.35	cps
Cadmium	106-1	55833	55342	55516	55564	0.45	cps
Cadmium	111-1	511483	512696	511592	511924	0.13	cps
Calcium	43-1	613359	612368	610927	612218	0.20	cps
Calcium	44-1	9065003	8952764	8992627	9003465	0.63	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	738584	741565	738961	739703	0.22	cps
Cobalt	59-2	1090060	1094926	1092429	1092472	0.22	cps
Copper	63-2	7644170	7673617	7673042	7663609	0.22	cps
Dysprosium	156-1	63	53	70	62	13.48	cps
Dysprosium	156-2	130	140	117	129	9.08	cps
Erbium	164-1	30	47	40	39	21.57	cps
Erbium	164-2	27	40	43	37	24.04	cps
Gadolinium	160-1	40	43	30	38	18.36	cps
Gadolinium	160-2	117	147	123	129	12.22	cps
Holmium	165-1	3853814	4007938	3890129	3917294	2.06	cps
Holmium	165-2	2675797	2633172	2683498	2664156	1.02	cps
Indium	115-1	2851434	2965794	2863505	2893578	2.17	cps
Indium	115-2	886894	881855	901680	890143	1.16	cps
Iron	56-2	33120918	33074046	33032181	33075715	0.13	cps
Iron	57-2	851342	848711	840745	846933	0.65	cps
Iron	54-2	1835296	1831274	1792974	1819848	1.28	cps
Krypton	83-1	77	80	67	74	9.32	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164204BS	Instrumnet Name :	P7
Client Sample ID :	PB164204BS	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:26:21	DataFile Name :	044DLCW.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	8791909	8830616	8899173	8840566	0.61	cps
Lead	207-1	7657073	7653757	7712901	7674577	0.43	cps
Lead	208-1	35042802	35229931	35359931	35210888	0.45	cps
Lithium	6-1	766405	784502	771626	774177	1.20	cps
Magnesium	24-2	7387129	7441093	7334556	7387593	0.72	cps
Manganese	55-2	5740125	5611666	5660372	5670721	1.14	cps
Molybdenum	94-1	7692212	7657882	7546764	7632286	1.00	cps
Molybdenum	95-1	11129170	11104077	11052449	11095232	0.35	cps
Molybdenum	96-1	12216010	12177113	12118571	12170565	0.40	cps
Molybdenum	97-1	6993892	6995057	7005593	6998181	0.09	cps
Molybdenum	98-1	18114590	18127638	17924268	18055499	0.63	cps
Neodymium	150-1	250	260	233	248	5.44	cps
Neodymium	150-2	30	50	47	42	25.38	cps
Nickel	60-2	269933	269094	269171	269399	0.17	cps
Phosphorus	31-2	45147	44932	44628	44902	0.58	cps
Potassium	39-2	4468276	4499130	4507215	4491541	0.46	cps
Rhodium	103-1	2465701	2558693	2484337	2502910	1.97	cps
Rhodium	103-2	1387729	1365060	1401768	1384852	1.34	cps
Scandium	45-1	1475347	1500037	1507290	1494225	1.12	cps
Scandium	45-2	131232	129942	133556	131576	1.39	cps
Selenium	82-1	29070	29222	29061	29118	0.31	cps
Selenium	77-2	2814	2720	2517	2684	5.65	cps
Selenium	78-2	9250	9160	8859	9090	2.25	cps
Silicon	28-1	1210988	1210916	1236835	1219579	1.23	cps
Silver	107-1	2477610	2532590	2480429	2496876	1.24	cps
Silver	109-1	2423715	2362576	2406172	2397488	1.31	cps
Sodium	23-2	12529975	12618998	12570244	12573072	0.35	cps
Strontium	86-1	16774865	16544109	16588495	16635823	0.74	cps
Strontium	88-1	146450804	145446018	146579128	146158650	0.42	cps
Sulfur	34-1	264182	260756	261583	262174	0.68	cps
Terbium	159-1	3968932	4052358	3971091	3997461	1.19	cps
Terbium	159-2	2603577	2581443	2674130	2619717	1.85	cps
Thallium	203-1	2178999	2225681	2179200	2194627	1.23	cps
Thallium	205-1	5245036	5314230	5235376	5264881	0.82	cps
Tin	118-1	1855623	1904349	1854135	1871369	1.53	cps
Titanium	47-1	2639881	2605977	2620612	2622157	0.65	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	PB164204BS	Instrumnet Name :	P7
Client Sample ID :	PB164204BS	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:26:21	DataFile Name :	044DLCW.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	6863046	6948469	6875567	6895694	0.67	cps
Vanadium	51-2	673514	673356	667450	671440	0.51	cps
Yttrium	89-1	4808112	4909836	4795706	4837885	1.29	cps
Yttrium	89-2	1182672	1176877	1196170	1185240	0.84	cps
Zinc	66-2	1272238	1269249	1272357	1271281	0.14	cps
Zirconium	90-1	3454735	3456197	3427044	3445992	0.48	cps
Zirconium	91-1	772017	772512	765426	769985	0.51	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:29:17	DataFile Name :	045CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4427470	4413539	4386222	4409077	0.48	cps
Antimony	121-1	2016716	1998896	2035107	2016907	0.90	cps
Arsenic	75-2	84954	84757	83637	84449	0.84	cps
Barium	135-1	2801484	2809075	2766735	2792432	0.81	cps
Barium	137-1	4766031	4771504	4829469	4789001	0.73	cps
Beryllium	9-1	374972	376400	379907	377093	0.67	cps
Bismuth	209-1	2158895	2249095	2208920	2205637	2.05	cps
Bismuth	209-2	1578160	1600087	1598156	1592134	0.76	cps
Bromine	81-1	6165	6385	6605	6385	3.45	cps
Bromine	81-2	30	43	47	40	22.05	cps
Cadmium	108-1	34728	35366	35066	35053	0.91	cps
Cadmium	106-1	50942	51555	51936	51477	0.97	cps
Cadmium	111-1	461122	463987	463568	462892	0.33	cps
Calcium	43-1	2599655	2594117	2650850	2614874	1.20	cps
Calcium	44-1	40987905	40948623	41356254	41097594	0.55	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	693483	697573	688518	693191	0.65	cps
Cobalt	59-2	1093337	1095858	1082863	1090686	0.63	cps
Copper	63-2	7505841	7434838	7352510	7431063	1.03	cps
Dysprosium	156-1	160	107	110	126	23.79	cps
Dysprosium	156-2	180	157	203	180	12.96	cps
Erbium	164-1	147	107	150	134	17.93	cps
Erbium	164-2	80	87	80	82	4.68	cps
Gadolinium	160-1	80	97	83	87	10.18	cps
Gadolinium	160-2	180	150	133	154	15.31	cps
Holmium	165-1	3865118	3802325	3807815	3825086	0.91	cps
Holmium	165-2	2606717	2615424	2604501	2608881	0.22	cps
Indium	115-1	2686724	2754321	2704393	2715146	1.29	cps
Indium	115-2	842107	854393	856641	851047	0.92	cps
Iron	56-2	155065494	154374784	152576768	154005682	0.83	cps
Iron	57-2	3793777	3783496	3779106	3785460	0.20	cps
Iron	54-2	8380005	8415832	8351070	8382302	0.39	cps
Krypton	83-1	70	67	83	73	12.02	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:29:17	DataFile Name :	045CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	8120912	8248022	8227133	8198689	0.83	cps
Lead	207-1	7065001	7188998	7160455	7138152	0.91	cps
Lead	208-1	32271548	32953010	32752676	32659078	1.07	cps
Lithium	6-1	742639	746695	740398	743244	0.43	cps
Magnesium	24-2	36875953	36666474	36787895	36776774	0.29	cps
Manganese	55-2	5302807	5364313	5267566	5311562	0.92	cps
Molybdenum	94-1	7265584	7301137	7273664	7280128	0.26	cps
Molybdenum	95-1	10658958	10670824	10663990	10664591	0.06	cps
Molybdenum	96-1	11595111	11623175	11584082	11600789	0.17	cps
Molybdenum	97-1	6654820	6608062	6688629	6650504	0.61	cps
Molybdenum	98-1	17216784	17180892	17115222	17170966	0.30	cps
Neodymium	150-1	247	273	337	286	16.19	cps
Neodymium	150-2	90	53	67	70	26.51	cps
Nickel	60-2	266261	261913	261673	263282	0.98	cps
Phosphorus	31-2	41677	42352	40981	41670	1.64	cps
Potassium	39-2	21571216	21464104	21458057	21497792	0.30	cps
Rhodium	103-1	2315501	2353118	2309290	2325970	1.02	cps
Rhodium	103-2	1274412	1296128	1288887	1286476	0.86	cps
Scandium	45-1	1480063	1443367	1447359	1456930	1.38	cps
Scandium	45-2	128593	129877	130237	129569	0.67	cps
Selenium	82-1	26054	26539	26496	26363	1.02	cps
Selenium	77-2	2430	2617	2617	2555	4.22	cps
Selenium	78-2	8249	8529	8036	8271	2.99	cps
Silicon	28-1	1163663	1156166	1194979	1171603	1.76	cps
Silver	107-1	2262821	2244490	2248422	2251911	0.43	cps
Silver	109-1	2184877	2155895	2145726	2162166	0.94	cps
Sodium	23-2	60454231	59587079	59939782	59993697	0.73	cps
Strontium	86-1	15644281	15709200	15579781	15644420	0.41	cps
Strontium	88-1	137592891	138872928	136518601	137661474	0.86	cps
Sulfur	34-1	255458	255224	258793	256492	0.78	cps
Terbium	159-1	3871723	3901898	3886238	3886620	0.39	cps
Terbium	159-2	2550837	2585912	2554235	2563661	0.75	cps
Thallium	203-1	2015726	2068301	2027643	2037223	1.35	cps
Thallium	205-1	4785284	4916085	4908478	4869949	1.51	cps
Tin	118-1	1731099	1756591	1754134	1747275	0.80	cps
Titanium	47-1	2453628	2461704	2487872	2467735	0.73	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:29:17	DataFile Name :	045CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	6628612	6794153	6674890	6699219	1.27	cps
Vanadium	51-2	638439	638386	637054	637960	0.12	cps
Yttrium	89-1	4711474	4674745	4630078	4672099	0.87	cps
Yttrium	89-2	1142402	1155791	1155692	1151295	0.67	cps
Zinc	66-2	1230800	1222412	1220873	1224695	0.44	cps
Zirconium	90-1	3285041	3305194	3277086	3289107	0.44	cps
Zirconium	91-1	732611	736910	735537	735019	0.30	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:35:42	DataFile Name :	046CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	190	173	277	213	26.00	cps
Antimony	121-1	577	760	853	730	19.28	cps
Arsenic	75-2	3	30	13	16	86.63	cps
Barium	135-1	43	43	43	43	0.00	cps
Barium	137-1	107	57	100	88	30.93	cps
Beryllium	9-1	227	243	193	221	11.51	cps
Bismuth	209-1	2422975	2476760	2408990	2436242	1.47	cps
Bismuth	209-2	2017885	1958658	1989416	1988653	1.49	cps
Bromine	81-1	6738	6718	6845	6767	1.01	cps
Bromine	81-2	40	27	53	40	33.33	cps
Cadmium	108-1	0	3	0	1	173.21	cps
Cadmium	106-1	1267	1280	1413	1320	6.14	cps
Cadmium	111-1	897	900	1006	934	6.65	cps
Calcium	43-1	197	167	157	173	12.01	cps
Calcium	44-1	2970	2787	3074	2944	4.93	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	210	163	177	183	13.11	cps
Cobalt	59-2	53	87	77	72	23.69	cps
Copper	63-2	747	923	933	868	12.10	cps
Dysprosium	156-1	3	3	13	7	86.65	cps
Dysprosium	156-2	0	0	3	1	173.21	cps
Erbium	164-1	27	23	13	21	32.88	cps
Erbium	164-2	7	13	0	7	99.98	cps
Gadolinium	160-1	7	10	10	9	21.63	cps
Gadolinium	160-2	140	107	113	120	14.70	cps
Holmium	165-1	3905875	3847447	3849220	3867514	0.86	cps
Holmium	165-2	2690151	2638853	2708795	2679266	1.35	cps
Indium	115-1	2922291	2972646	2919734	2938223	1.02	cps
Indium	115-2	924963	919649	921131	921914	0.30	cps
Iron	56-2	9700	10327	10937	10321	6.00	cps
Iron	57-2	643	699	716	686	5.57	cps
Iron	54-2	1130	1107	1257	1165	6.93	cps
Krypton	83-1	63	67	73	68	7.51	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:35:42	DataFile Name :	046CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	560	593	583	579	2.95	cps
Lead	207-1	557	490	537	528	6.48	cps
Lead	208-1	2323	2343	2383	2350	1.30	cps
Lithium	6-1	776082	776848	776875	776602	0.06	cps
Magnesium	24-2	2264	2347	2474	2361	4.48	cps
Manganese	55-2	270	327	263	287	12.14	cps
Molybdenum	94-1	430	400	413	414	3.63	cps
Molybdenum	95-1	247	227	370	281	27.62	cps
Molybdenum	96-1	323	303	407	344	15.91	cps
Molybdenum	97-1	177	147	173	166	9.93	cps
Molybdenum	98-1	430	373	507	437	15.32	cps
Neodymium	150-1	0	3	0	1	173.21	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	90	60	53	68	28.82	cps
Phosphorus	31-2	90	130	160	127	27.73	cps
Potassium	39-2	33914	34446	34058	34139	0.80	cps
Rhodium	103-1	2653804	2611503	2609380	2624896	0.95	cps
Rhodium	103-2	1453221	1437025	1438891	1443046	0.61	cps
Scandium	45-1	1513574	1501668	1519451	1511565	0.60	cps
Scandium	45-2	134877	131857	133781	133505	1.14	cps
Selenium	82-1	111	130	134	125	9.92	cps
Selenium	77-2	3	0	0	1	173.21	cps
Selenium	78-2	80	80	67	76	10.19	cps
Silicon	28-1	170274	173120	172599	171997	0.88	cps
Silver	107-1	157	200	173	177	12.37	cps
Silver	109-1	160	123	183	156	19.44	cps
Sodium	23-2	16142	16569	16626	16446	1.61	cps
Strontium	86-1	317	273	280	290	8.04	cps
Strontium	88-1	1617	1443	2007	1689	17.08	cps
Sulfur	34-1	114518	117054	116607	116060	1.17	cps
Terbium	159-1	3965064	3917765	3983428	3955419	0.86	cps
Terbium	159-2	2656889	2619598	2588409	2621632	1.31	cps
Thallium	203-1	187	193	183	188	2.71	cps
Thallium	205-1	560	393	433	462	18.82	cps
Tin	118-1	880	1037	990	969	8.30	cps
Titanium	47-1	70	93	110	91	22.05	cps

Reviewed By:Mohan
On:10/24/2024 4:11:21 AM
Inst Id :P7
LB :LB132993

LB Number :	LB132993	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2024-10-17 19:35:42	DataFile Name :	046CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	53	50	87	63	32.02	cps
Vanadium	51-2	20	33	30	28	24.98	cps
Yttrium	89-1	4838417	4787294	4812872	4812861	0.53	cps
Yttrium	89-2	1200321	1185773	1186101	1190732	0.70	cps
Zinc	66-2	120	137	170	142	17.90	cps
Zirconium	90-1	733	757	827	772	6.29	cps
Zirconium	91-1	123	153	147	141	11.16	cps

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB164203

SOP ID : M3010A-Digestion-17

SDG No : N/A

Matrix : WATER

Pippete ID: ICP B

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: 10/17/2024 **Time :** 11:00 **Temp :** 95 °C

End Digest Date: 10/17/2024 **Time :** 14:00 **Temp :** 95 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: JSP

Supervisor Signature: SJ

Temp : 1. 95°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
Spike Sol 1	0.25	MP82855
Spike Sol 2	1.00	MP82856
Spike Sol 3	1.00	MP82857
Spike Sol 4	1.00	MP82858
Spike Sol 5	0.50	MP82859

Chemical Used	ML/SAMPLE USED	Lot Number
Conc. HNO3	3.00	M6088
1:1 HCL	5.00	MP82127
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
10/17/24 14:10	JSP / Met dig	SJ (Metals Lab)
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB164203

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
P3847-02	PT-TM1-WP	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	11
P3847-04	PT-SNTI-WP	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	12
P3847-06	PT-MIN2-WP	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	13
PB164203BL	PBW203	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	14
PB164203BS	LCS203	<2	50	50	Colorless	Colorless	Clear	Clear	MP82855,MP82856,MP82857,N	15

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB164203 **WorkList ID :** 184537 **Department :** Digestion **Date :** 10-17-2024 10:21:12

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P3847-02	PT-TM1-WP	Water	Metals Group3	Cool 4 deg C	CHEM02	QA Of	09/03/2024	6020B
P3847-04	PT-SNTI-WP	Water	Metals Group4	Cool 4 deg C	CHEM02	QA Of	09/03/2024	6020B
P3847-06	PT-MIN2-WP	Water	Metals Group5	Cool 4 deg C	CHEM02	QA Of	09/03/2024	6020B

Date/Time 10/17/24 10:30
Raw Sample Received by: jsp (Met dig)
Raw Sample Relinquished by: Metals Cage

Date/Time 10/17/24 11:30
Raw Sample Received by: Metals Cage
Raw Sample Relinquished by: jsp (Met dig)

304 of 448
P3847-METALS

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

Instrument ID: P7

Daily Analysis Runlog For Sequence/QCBatch ID # LB132993

Review By	jaswal	Review On	10/24/2024 4:10:34 AM
Supervise By	Mohan	Supervise On	10/24/2024 4:11:21 AM

STD. NAME	STD REF.#
ICAL Standard	MP82568,MP82577,MP82576,MP82574,MP82573,MP82572,MP82571,MP82570,MP82569
ICV Standard	MP82578
CCV Standard	MP82579
ICSA Standard	MP82580,MP82581
CRI Standard	
LCS Standard	
Chk Standard	MP82587,MP82586

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	TUNE	TUNE	TUNE	10/17/24 10:48		Jaswal	OK
2	S0	S0	CAL1	10/17/24 16:19		Jaswal	OK
3	S2	S2	CAL3	10/17/24 16:23		Jaswal	OK
4	S3	S3	CAL4	10/17/24 16:26		Jaswal	OK
5	S4	S4	CAL5	10/17/24 16:29		Jaswal	OK
6	S5	S5	CAL6	10/17/24 16:33		Jaswal	OK
7	S6	S6	CAL7	10/17/24 16:36		Jaswal	OK
8	S7	S7	CAL8	10/17/24 16:41		Jaswal	OK
9	S8	S8	CAL9	10/17/24 16:44		Jaswal	OK
10	ICV01	ICV01	ICV	10/17/24 17:03		Jaswal	OK
11	LLICV	LLICV	LLICV	10/17/24 17:09		Jaswal	OK
12	ICB01	ICB01	ICB	10/17/24 17:17		Jaswal	OK
13	ICSA01	ICSA01	ICSA	10/17/24 17:20		Jaswal	OK
14	ICSAB01	ICSAB01	ICSAB	10/17/24 17:23		Jaswal	OK
15	CCV01	CCV01	CCV	10/17/24 18:04		Jaswal	OK
16	CCB01	CCB01	CCB	10/17/24 18:07		Jaswal	OK
17	CRI	CRI	CRDL	10/17/24 18:11		Jaswal	OK
18	P3847-02	PT-TM1-WP	SAM	10/17/24 18:25	Ni,V High	Jaswal	Dilution

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

Instrument ID: P7

Daily Analysis Runlog For Sequence/QCBatch ID # LB132993

Review By	jaswal	Review On	10/24/2024 4:10:34 AM
Supervise By	Mohan	Supervise On	10/24/2024 4:11:21 AM

STD. NAME	STD REF.#
ICAL Standard	MP82568,MP82577,MP82576,MP82574,MP82573,MP82572,MP82571,MP82570,MP82569
ICV Standard	MP82578
CCV Standard	MP82579
ICSA Standard	MP82580,MP82581
CRI Standard	
LCS Standard	
Chk Standard	MP82587,MP82586

19	P3847-04	PT-SNTI-WP	SAM	10/17/24 18:28	Sn High	Jaswal	Dilution
20	P3847-06	PT-MIN2-WP	SAM	10/17/24 18:32	INT_STD 45Sc(1&2) Fail	Jaswal	Dilution
21	P3846-02	PT-TM1-WP	SAM	10/17/24 18:35	Ni,V High	Jaswal	Dilution
22	P3846-04	PT-SNTI-WP	SAM	10/17/24 18:38	Sn High	Jaswal	Dilution
23	P3846-06	PT-MIN2-WP	SAM	10/17/24 18:41	INT_STD 45Sc(1&2) Fail	Jaswal	Dilution
24	P3847-02DL	PT-TM1-WPDL	SAM	10/17/24 18:45	2X for Ni,V	Jaswal	Confirms
25	P3847-04DL	PT-SNTI-WPDL	SAM	10/17/24 18:48	2X For Sn	Jaswal	Confirms
26	P3847-06DL	PT-MIN2-WPDL	SAM	10/17/24 18:51	5X For INT_STD 45Sc(1&2)	Jaswal	Confirms
27	CCV02	CCV02	CCV	10/17/24 18:55		Jaswal	OK
28	CCB02	CCB02	CCB	10/17/24 18:58		Jaswal	OK
29	P3846-02DL	PT-TM1-WPDL	SAM	10/17/24 19:01	2X for Ni,V	Jaswal	Confirms
30	P3846-04DL	PT-SNTI-WPDL	SAM	10/17/24 19:04	2X For Sn	Jaswal	Confirms
31	P3846-06DL	PT-MIN2-WPDL	SAM	10/17/24 19:08	2X For INT_STD 45Sc(1&2)	Jaswal	Confirms
32	PB164203BL	PB164203BL	MB	10/17/24 19:16		Jaswal	OK
33	PB164203BS	PB164203BS	LCS	10/17/24 19:20		Jaswal	OK
34	PB164204BL	PB164204BL	MB	10/17/24 19:22		Jaswal	OK
35	PB164204BS	PB164204BS	LCS	10/17/24 19:26		Jaswal	OK
36	CCV03	CCV03	CCV	10/17/24 19:29		Jaswal	OK
37	CCB03	CCB03	CCB	10/17/24 19:35		Jaswal	OK

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

Prep Standard - Chemical Standard Summary

Order ID : P3847

Test : Metals Group3,Metals Group4,Metals Group5

Prepbatch ID : PB164203,PB164214,

Sequence ID/Qc Batch ID: LB132993,LB132993,

Standard ID :
MP82127,MP82568,MP82569,MP82570,MP82571,MP82572,MP82573,MP82574,MP82575,MP82576,MP82577,MP82578,MP82579,MP82580,MP82581,MP82585,MP82586,MP82587,MP82855,MP82856,MP82857,MP82858,MP82859,

Chemical ID :
M5192,M5288,M5295,M5304,M5390,M5473,M5476,M5496,M5498,M5513,M5515,M5519,M5658,M5697,M5698,M5739,M5751,M5768,M5769,M5798,M5799,M5800,M5801,M5802,M5806,M5815,M5817,M5818,M5819,M5873,M5874,M5961,M5962,M5976,M5978,M5981,M5982,M5983,M6000,M6009,M6021,M6023,M6025,M6028,M6030,M6033,M6037,M6040,M6055,M6088,W3112,

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
170	1:1HCL	MP82127	09/03/2024	02/08/2025	Janvi Patel	None	None	Sarabjit Jaswal 09/03/2024

FROM 1250.00000ml of M6040 + 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)	MP82568	09/28/2024	10/31/2024	Sarabjit Jaswal	None	None	Mohan Bera 09/30/2024

FROM 25.00000ml of M6040 + 4925.00000ml of W3112 + 50.00000ml of M6037 = Final Quantity: 5000.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2902	S8 ICPMS	MP82569	09/28/2024	10/31/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/30/2024

FROM 1.00000ml of M6033 + 2.50000ml of M5288 + 2.50000ml of M5515 + 5.00000ml of M5498 + 5.00000ml of M5768 + 5.00000ml of M5806 + 79.00000ml of MP82568 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3947	S7(SFAM,6020,200.8)	MP82570	09/28/2024	10/31/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/30/2024

FROM 1.00000ml of M5818 + 1.00000ml of M5981 + 1.00000ml of M5983 + 1.90000ml of M6033 + 10.00000ml of M5976 + 10.00000ml of M5978 + 10.00000ml of M6037 + 2.00000ml of M5815 + 2.00000ml of M5817 + 2.50000ml of M5476 + 4.00000ml of M5390 + 4.00000ml of M6025 + 4.90000ml of M5515 + 4.90000ml of M5519 + 5.00000ml of M6040 + 50.00000ml of M5304 + 829.10000ml of W3112 + 9.00000ml of M5697 + 9.00000ml of M5698 + 9.00000ml of M5819 + 9.90000ml of M5498 + 9.90000ml of M5768 + 9.90000ml of M5806 = Final Quantity: 1000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3948	S6(SFAM,6020,200.8)	MP82571	09/28/2024	10/31/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/30/2024

FROM 0.50000ml of M6040 + 1.00000ml of M6037 + 88.50000ml of W3112 + 25.00000ml of MP82570 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3949	S5(SFAM,6020,200.8)	MP82572	09/28/2024	10/31/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/30/2024

FROM 0.50000ml of M6040 + 1.00000ml of M6037 + 73.50000ml of W3112 + 25.00000ml of MP82570 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3954	S4(SFAM,6020,200.8)	MP82573	09/28/2024	10/31/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/30/2024

FROM 0.50000ml of M6040 + 1.00000ml of M6037 + 88.50000ml of W3112 + 12.50000ml of MP82570 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3951	S3(SFAM, 6020,200.8)	MP82574	09/28/2024	10/31/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/30/2024

FROM 0.50000ml of M6040 + 1.00000ml of M6037 + 88.50000ml of W3112 + 10.00000ml of MP82571 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3955	S2CONC(SFAM,6020,200.8)	MP82575	09/28/2024	10/31/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/30/2024

FROM 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 M5982 + 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 M5697 + 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 M6040 + 226.25000ml of W3112 + 5.00000ml of M6037 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3956	S2(SFAM,6020,200.8)	MP82576	09/28/2024	10/31/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/30/2024

FROM 0.50000ml of M6040 + 1.00000ml of M6037 + 88.50000ml of W3112 + 0.50000ml of MP82575 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3957	S1(SFAM,6020,200.8)	MP82577	09/28/2024	10/31/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/30/2024

FROM 0.50000ml of M6040 + 1.00000ml of M6037 + 88.50000ml of W3112 + 10.00000ml of MP82576 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3958	ICV(SFAM)	MP82578	09/28/2024	10/31/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/30/2024

FROM 2.00000ml of M5295 + 98.00000ml of MP82568 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3961	CCV	MP82579	09/28/2024	10/31/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/30/2024

FROM 0.20000ml of M5513 + 0.50000ml of M5799 + 0.50000ml of M5818 + 0.50000ml of M5981 + 0.50000ml of M5983 + 1.00000ml of M5815 + 1.00000ml of M5817 + 1.25000ml of M5473 + 10.00000ml of M6037 + 12.45000ml of M5515 + 12.45000ml of M5519 + 2.00000ml of M5390 + 24.95000ml of M5498 + 24.95000ml of M5769 + 24.95000ml of M5806 + 25.00000ml of M5304 + 4.50000ml of M5697 + 4.50000ml of M5698 + 4.50000ml of M5819 + 4.95000ml of M6033 + 5.00000ml of M5976 + 5.00000ml of M5978 + 5.00000ml of M6040 + 824.35000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1142	ICSA ICPMS	MP82580	09/28/2024	10/31/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/30/2024

FROM 10.00000ml of M5873 + 90.00000ml of MP82568 = 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	MP82581	09/28/2024	10/31/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/30/2024

FROM 10.00000ml of M5873 + 10.00000ml of M5874 + 80.00000ml of MP82568 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3962	MG 10PPM FOR TUNE	MP82585	09/28/2024	10/31/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/30/2024

FROM 0.01000ml of M5768 + 9.99000ml of MP82568 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3894	TUNE 200PPB	MP82586	09/28/2024	10/31/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/30/2024

FROM 2.00000ml of M6055 + 2.00000ml of MP82585 + 96.00000ml of MP82568 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3903	ISS 3PPM	MP82587	09/28/2024	10/31/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/30/2024

FROM 5.00000ml of M6037 + 75.00000ml of M5739 + 170.00000ml of MP82568 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3880	M&B SPIKE-1	MP82855	10/17/2024	11/01/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 10/21/2024

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 + 20.00000ml of MP82568 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3881	M&B SPIKE-2	MP82856	10/17/2024	11/01/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 10/21/2024

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 + 11.87500ml of MP82568 = Final Quantity: 50.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3882	M&B SPIKE-3	MP82857	10/17/2024	11/01/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 10/21/2024

FROM 0.62500ml of M5513 + 12.50000ml of M5698 + 12.50000ml of M5751 + 12.50000ml of M5819 + 11.87500ml of MP82568 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3900	M&B SPIKE-4	MP82858	10/17/2024	11/01/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 10/21/2024

FROM 6.25000ml of M5498 + 6.25000ml of M5769 + 6.25000ml of M5806 + 6.25000ml of MP82568 = Final Quantity: 25.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4025	M&B SPIKE-5	MP82859	10/17/2024	11/01/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 10/21/2024

FROM 15.00000ml of M5192 + 15.00000ml of M5978 + 20.00000ml of MP82568 = Final Quantity: 50.000 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 #
Absolute Standards, Inc.	57042 / Mo, 1000 PPM, 125 ml	051722	05/17/2025	07/01/2022 / bin	06/17/2022 / jaswal	M5192

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	02/20/2020 / 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	03/16/2023 / jaswal	03/16/2023 / jaswal	M5473

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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.	57138 / Sr, 10000 PPM, 125 ml	082922	08/09/2025	07/29/2024 / jaswal	03/16/2023 / jaswal	M5476

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.	57119 / Potassium (K) 10,000PPM	120822	12/08/2025	01/08/2024 / bin	03/17/2023 / bin	M5519

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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	01/08/2024 / bin	01/03/2024 / bin	M5768

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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

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

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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

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

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART B / ICSB (ICPMS) STOCK SOLUTION	CP-MS ICSB-0803	04/30/2025	04/17/2024 / jaswal	07/14/2022 / jaswal	M5874

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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

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

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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 #
Inorganic Ventures	WW-LFS-1 / Laboratory Fortified Stock Solution 1, 125 ml	T2-MEB723367	08/30/2026	08/13/2024 / Jaswal	05/14/2024 / Jaswal	M6000

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	WW-LFS-2 / Laboratory Fortified Stock Solution 2, 125 ml	U2-MEB731108	03/17/2028	08/13/2024 / Jaswal	05/14/2024 / Jaswal	M6009

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

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.	57082 / Pb, 1000 PPM, 125 ml	061224	06/12/2027	08/05/2024 / Jaswal	08/05/2024 / Jaswal	M6025

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57048 / Cd, 1000 PPM, 125 ml	070124	07/01/2027	08/05/2024 / kareem	01/25/2019 / 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 #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	02/02/2025	08/24/2024 / Janvi	08/01/2024 / Janvi	M6037

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	24D1562005	02/08/2025	08/09/2024 / Janvi	08/01/2024 / Janvi	M6040

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Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	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-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	03/25/2029	10/15/2024 / Janvi	09/10/2024 / Janvi	M6088

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

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6028

R: 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57048
Lot Number: 070124
Description: Cadmium (Cd)

Expiration Date: 070127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 2000.07 ± 0.100 Flask Uncertainty

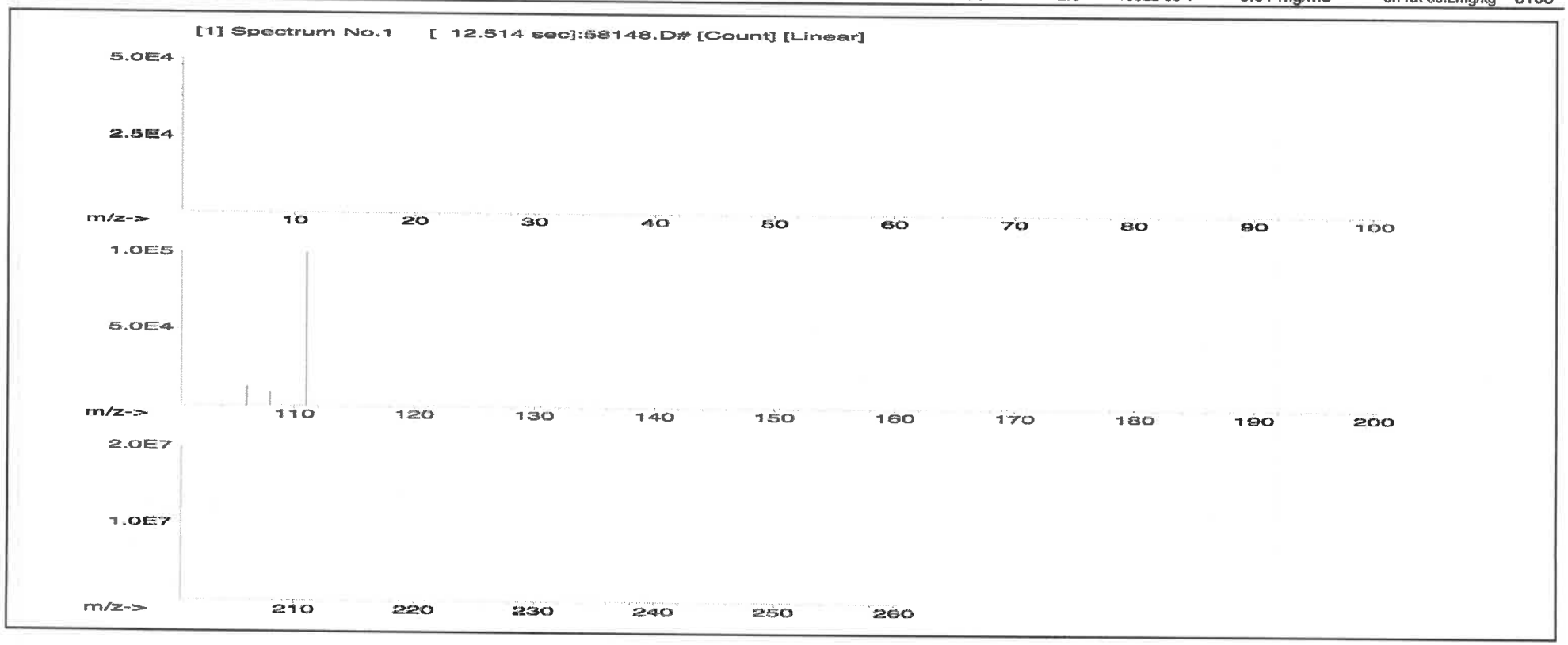
	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Aleah O'Brady
Formulated By: Aleah O'Brady 070124

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).

Absolute Standards, Inc.
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ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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R: 8/5/24

CERTIFIED WEIGHT REPORT:

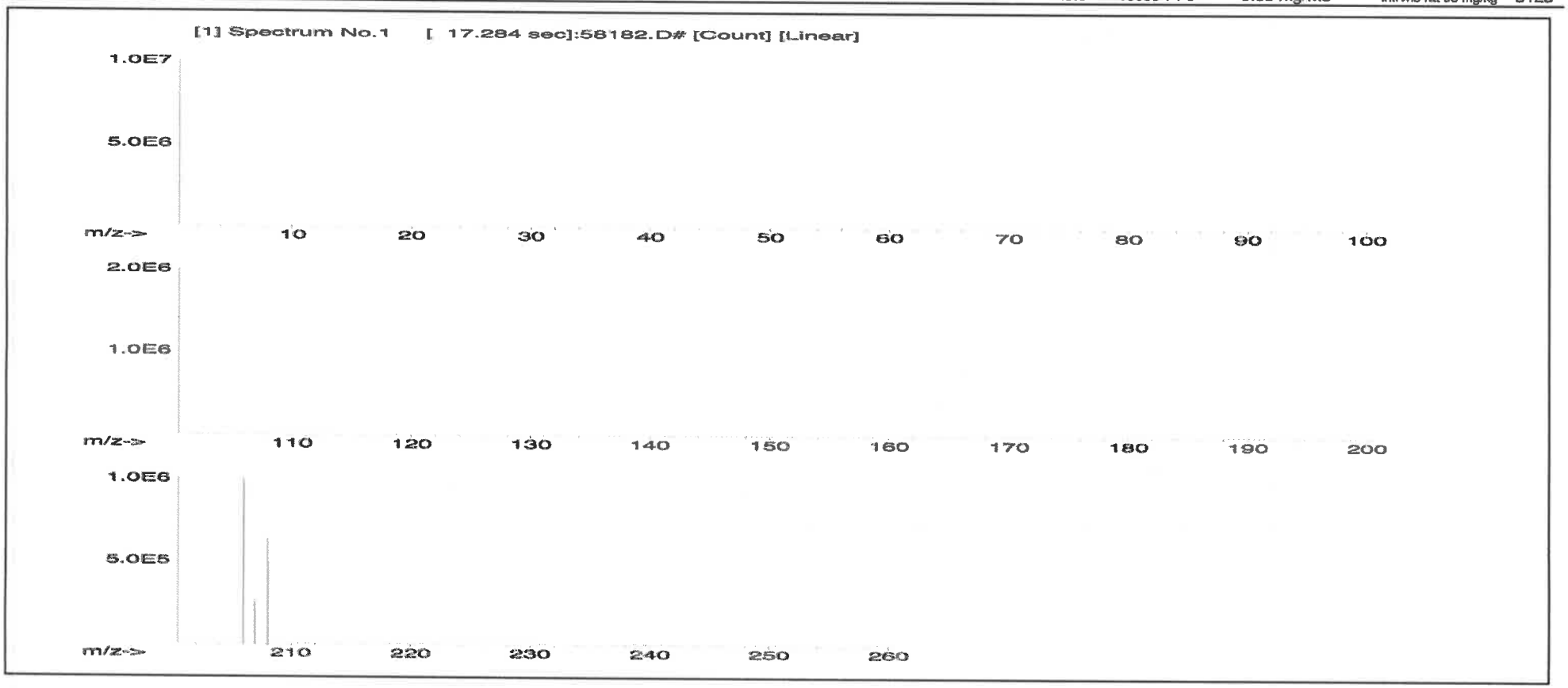
Part Number: 57182
Lot Number: 110923
Description: Lead (Pb)

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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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<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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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:	WW-LFS-1
Lot Number:	T2-MEB723367
Matrix:	5% (v/v) HNO3

Value / Analyte(s):	1 000 µg/mL ea: Potassium,	
	600 µg/mL ea: Phosphorus,	
	300 µg/mL ea: Sodium,	Iron,
	200 µg/mL ea: Magnesium, Cerium, Thallium,	Aluminum, Selenium,
	100 µg/mL ea: Lead,	Calcium,
	80 µg/mL ea: Arsenic,	
	70 µg/mL ea: Mercury,	
	50 µg/mL ea: Nickel,	
	40 µg/mL ea: Chromium,	
	30 µg/mL ea: Copper, Vanadium,	Boron,
	20 µg/mL ea: Zinc, Barium, Cadmium, Manganese,	Strontium, Beryllium, Cobalt, Lithium,
	7.5 µg/mL ea: Silver	

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	200.0 ± 0.7 µg/mL	Arsenic, As	80.0 ± 0.7 µg/mL
Barium, Ba	20.00 ± 0.09 µg/mL	Beryllium, Be	20.00 ± 0.13 µg/mL
Boron, B	30.00 ± 0.18 µg/mL	Cadmium, Cd	20.00 ± 0.09 µg/mL
Calcium, Ca	100.0 ± 0.4 µg/mL	Cerium, Ce	200.0 ± 0.8 µg/mL
Chromium, Cr	40.00 ± 0.30 µg/mL	Cobalt, Co	20.00 ± 0.10 µg/mL
Copper, Cu	30.00 ± 0.13 µg/mL	Iron, Fe	300.0 ± 1.3 µg/mL
Lead, Pb	100.0 ± 0.4 µg/mL	Lithium, Li	20.00 ± 0.08 µg/mL
Magnesium, Mg	200.0 ± 0.8 µg/mL	Manganese, Mn	20.00 ± 0.08 µg/mL
Mercury, Hg	70.0 ± 0.3 µg/mL	Nickel, Ni	50.00 ± 0.22 µg/mL
Phosphorus, P	600.0 ± 2.7 µg/mL	Potassium, K	1 000 ± 4 µg/mL
Selenium, Se	200.0 ± 1.3 µg/mL	Silver, Ag	7.50 ± 0.03 µg/mL
Sodium, Na	300.0 ± 1.4 µg/mL	Strontium, Sr	20.01 ± 0.08 µg/mL
Thallium, Tl	200.0 ± 1.4 µg/mL	Vanadium, V	30.00 ± 0.13 µg/mL
Zinc, Zn	20.00 ± 0.09 µg/mL		

Density: 1.034 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
B	ICP Assay	3107	190605
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
Ce	ICP Assay	3110	090504
Ce	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
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	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	Traceable to 3152A	S2-NA700842
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Tl	ICP Assay	3158	151215
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

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

August 30, 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

- **August 30, 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:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 863.01 ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-2
Lot Number:	U2-MEB731108
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	200 µg/mL ea: Silica, 80 µg/mL ea: Antimony, 70 µg/mL ea: Tin, 40 µg/mL ea: Molybdenum, 20 µg/mL ea: Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	80.1 ± 0.6 µg/mL	Molybdenum, Mo	40.03 ± 0.18 µg/mL
Silica, SiO2	200.2 ± 1.3 µg/mL	Tin, Sn	70.0 ± 0.4 µg/mL
Titanium, Ti	20.01 ± 0.13 µg/mL		

Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
SiO2	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925
Ti	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

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 17, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- March 17, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5192 R: 06/17/22

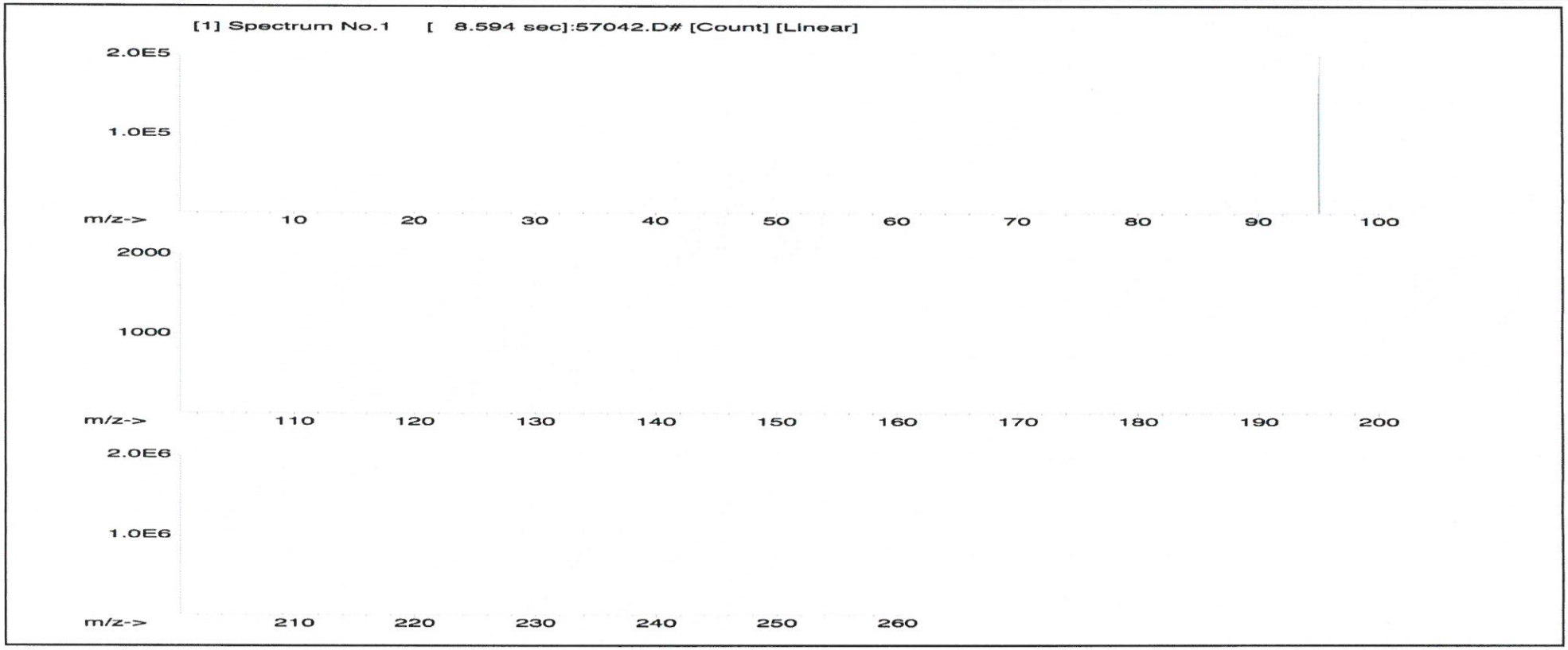
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:
Part Number:	**57042**		
Lot Number:	**051722**	MKBQ8597V	Ammonium hydroxide
Description:	**Molybdenum (Mo)**		
		0.5%	15.0 (mL) Ammonium hydroxide
Expiration Date:	051725		
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	051722
Reviewed By:	Pedro L. Rentas	051722

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium molybdate (Mo)	58142	022222	0.1000	300.0	0.084	1000	10001.0	**1000.0**	**2.1**	13106-76-8	5 mg(Mo)/m3	orl-rat 333 mg/kg	3134



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	T	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

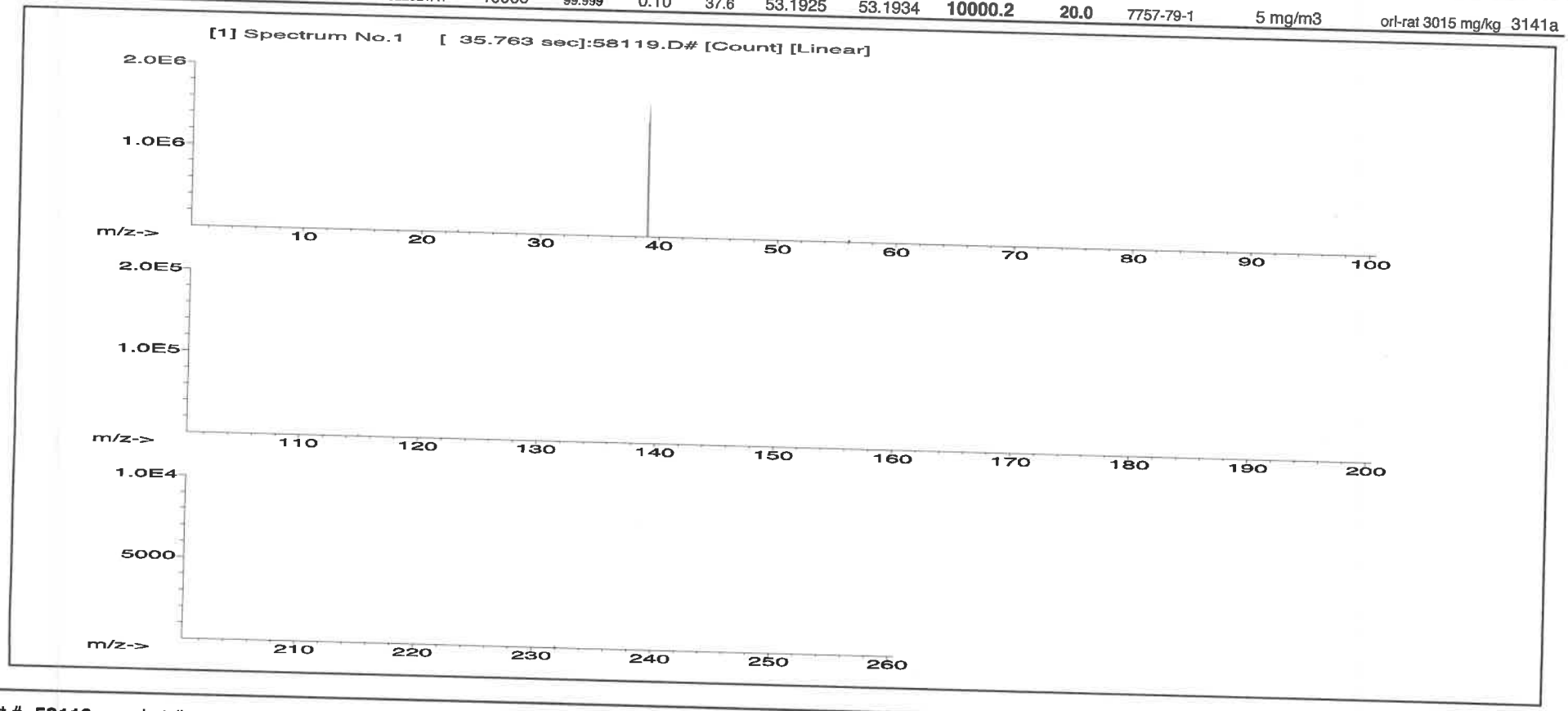
CERTIFIED WEIGHT REPORT:

Part Number:	**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



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

M5291
M5292
M5293
M5294
M5295

(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



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www.absolutestandards.com

R: 09/08/22 (BA)

Certified Reference Material CRM

M5387 . M5389 . M5390 . M5391 . M5392

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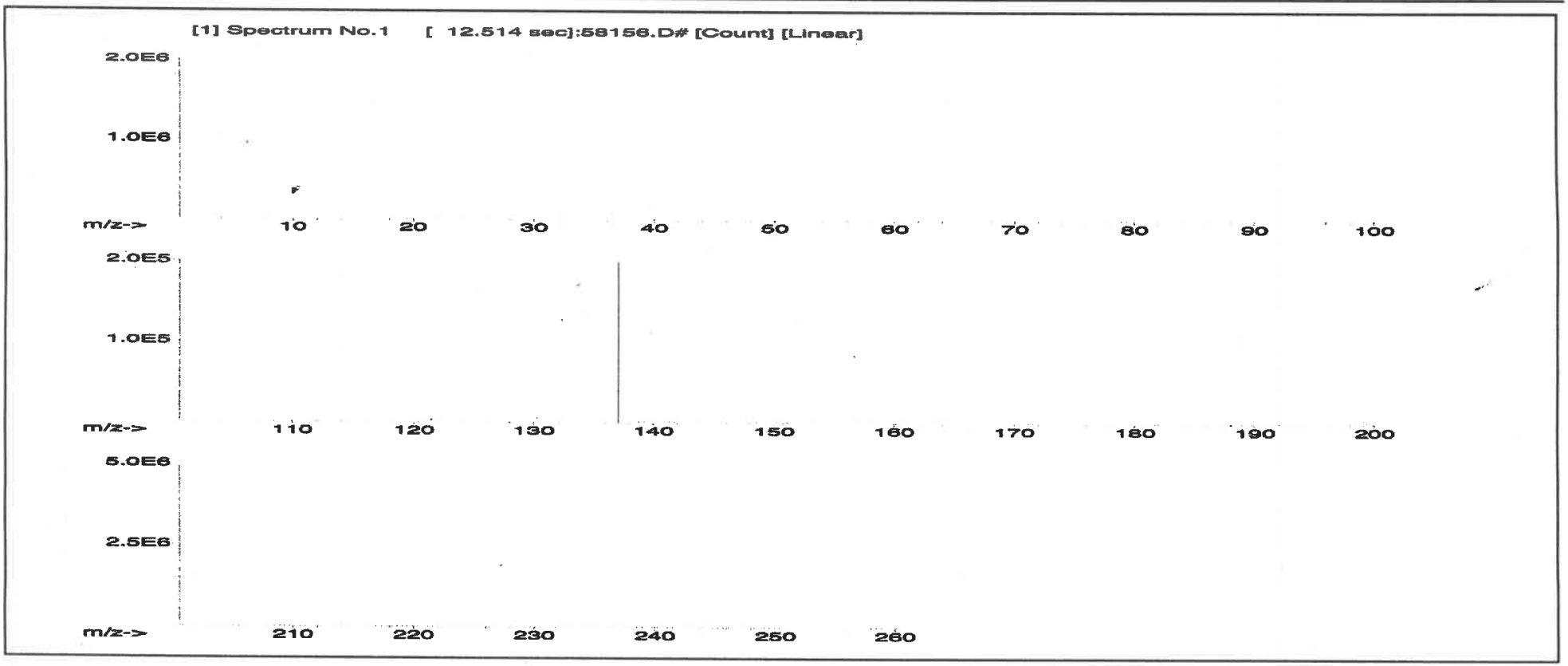
CERTIFIED WEIGHT REPORT:

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.
* 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

M5497 - M5498 R: 03/17/23 (BH)

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CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 031523
Description: Calcium (Ca)

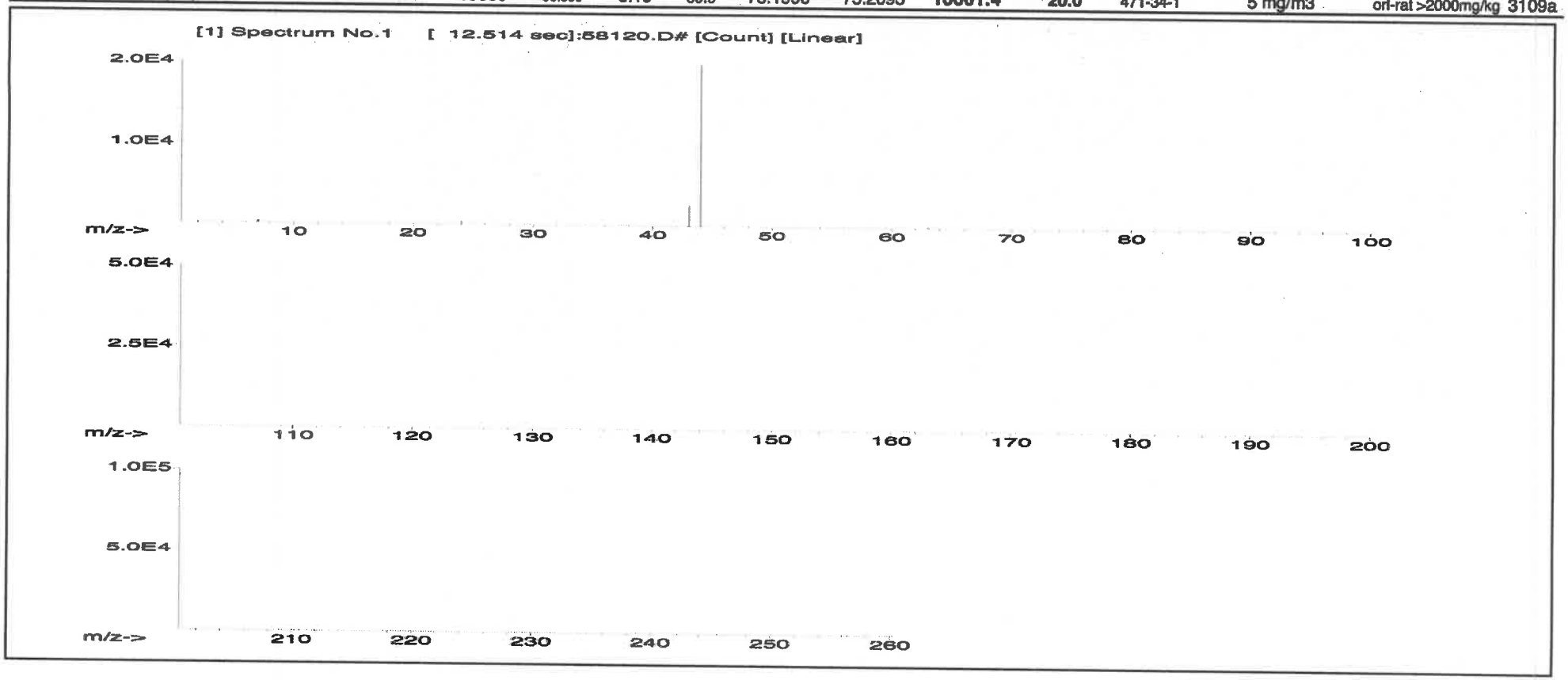
Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41

	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

Pedro Rentas
Reviewed By: Pedro L. Rentas 031523

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD072022A1	10000	99.999	0.10	39.9	75.1990	75.2093	**10001.4**	**20.0**	471-34-1	5 mg/m3	orl-rat >2000mg/kg	3109a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* 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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Certified Reference Material CRM

MS513 R:03/17/23 BE

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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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

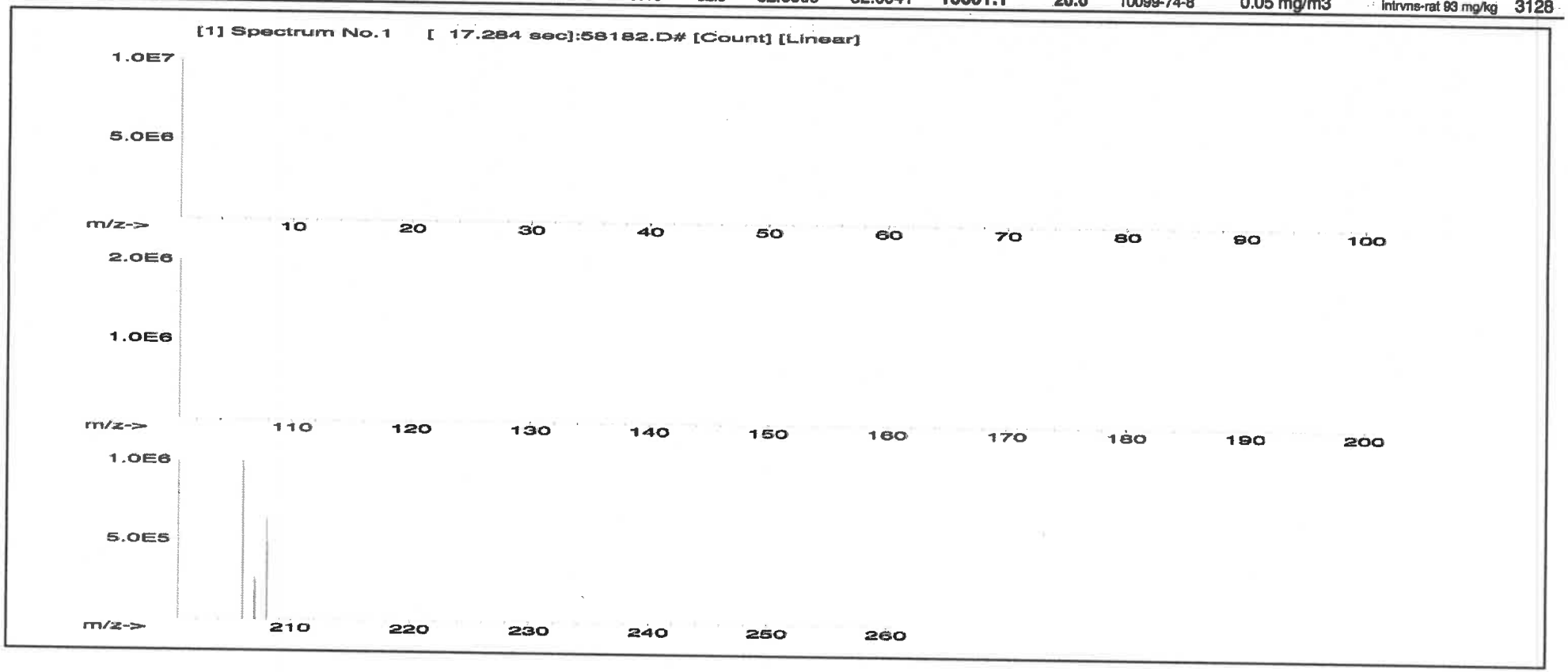
	Lot #		
Solvent:	20510011	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

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



3347-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<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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Certified Reference Material CRM

MS514 - MS515 R: 03/17/22

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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

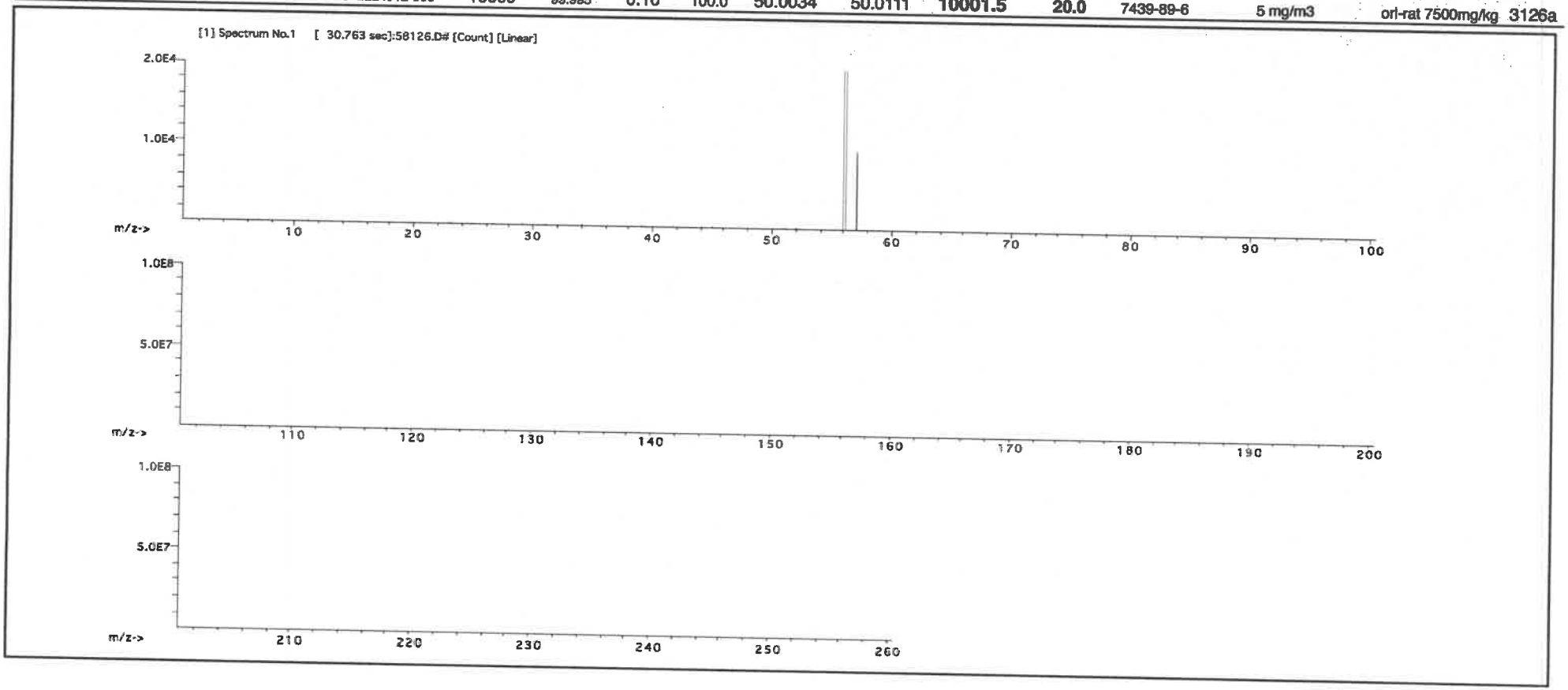
Weight shown below was diluted to (mL): 5000.1 | 0.12 Flask Uncertainty | 5E-05 Balance Uncertainty

	Lot #	
Solvent:	20510011	Nitric Acid
7.0%	350.0 (mL)	Nitric Acid

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



PRINT 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.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

M519. M520 BH R:03/17/23

ANAB ISO 17034 Accredited
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CERTIFIED WEIGHT REPORT:

Part Number: 58119
Lot Number: 120822
Description: Potassium (K)

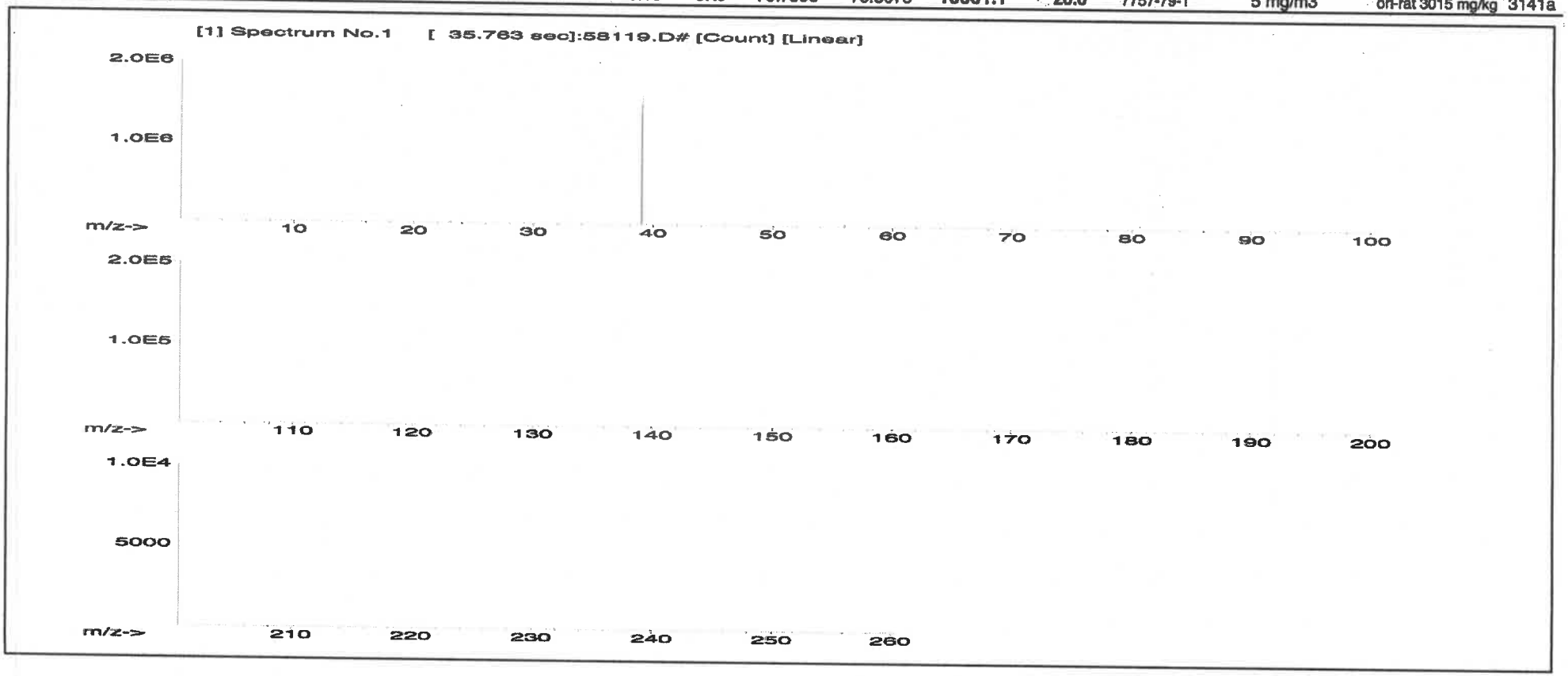
Expiration Date: 120825
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.4

	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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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:

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* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M5658 R ! 8/25/23

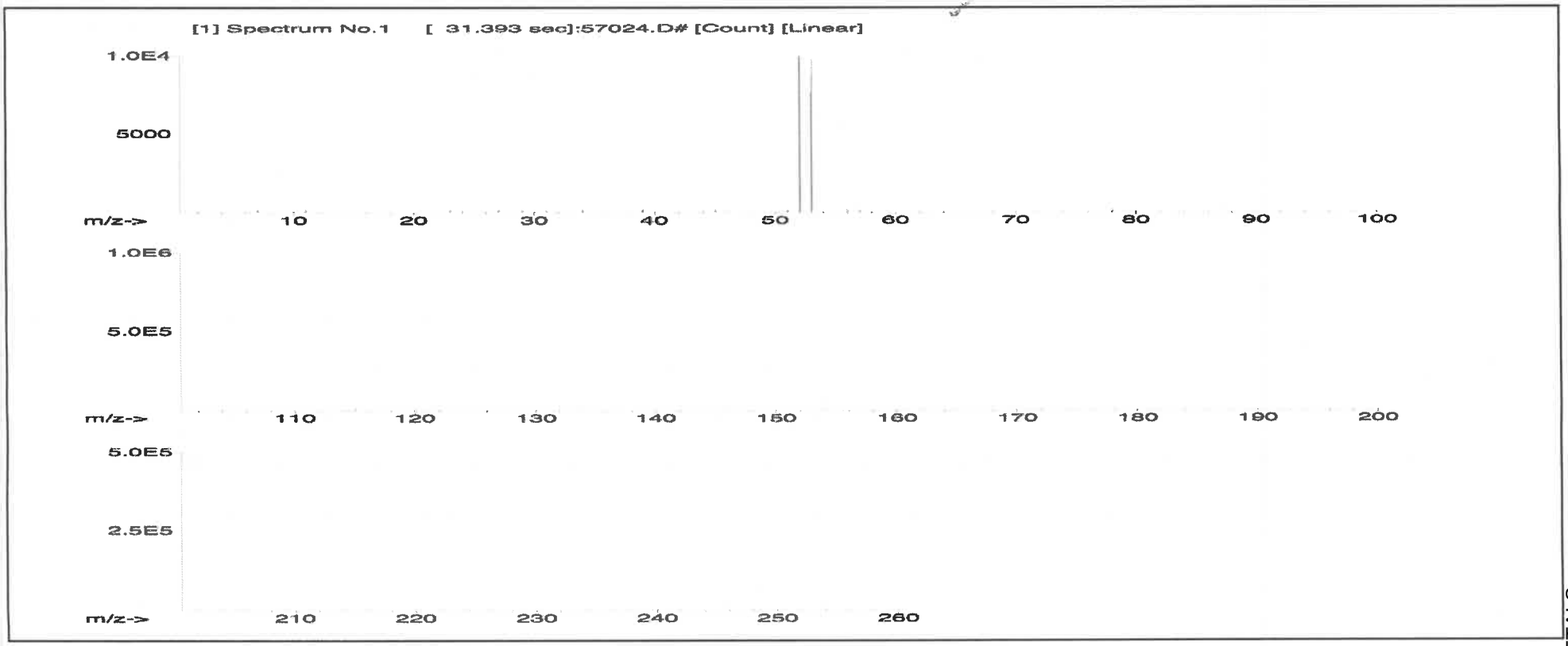
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CERTIFIED WEIGHT REPORT:

		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).
* 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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M5697 R: 10/27/23

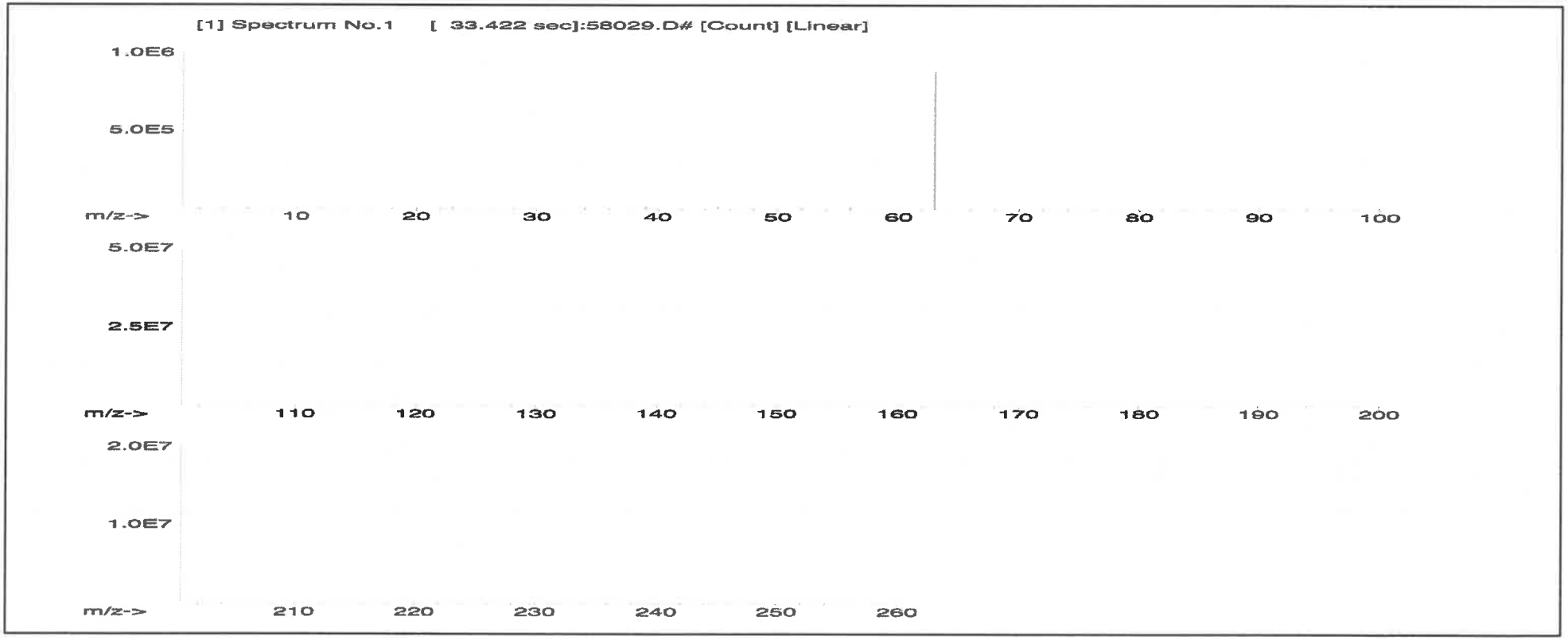
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CERTIFIED WEIGHT REPORT:

		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.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
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M5648 R: 10/27/23

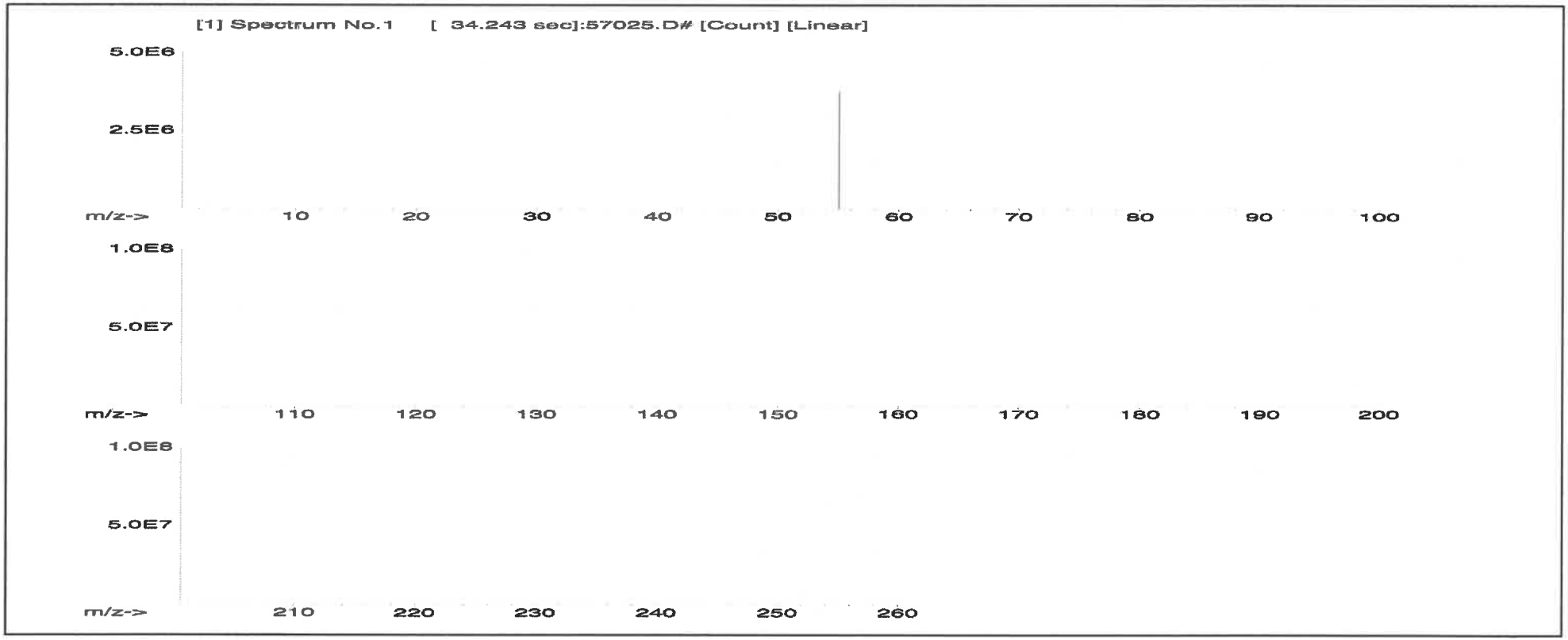
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CERTIFIED WEIGHT REPORT:

		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).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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R: 8/25/23 M5751

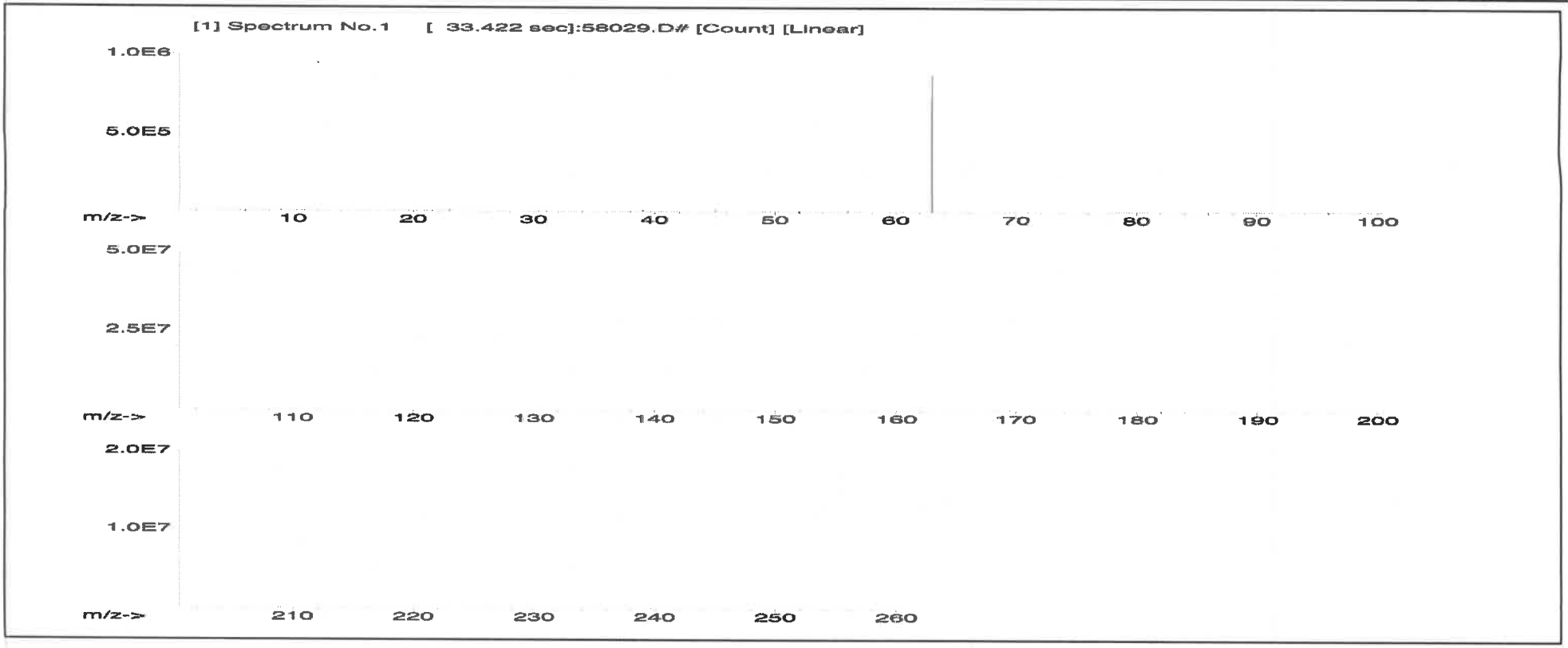
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CERTIFIED WEIGHT REPORT:

Part Number:	**58029**			**Lot #**	**Solvent:**	
Lot Number:	**071723**			21110221	Nitric Acid	
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.
* 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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M5768 M5769 BH R:1/3/24

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CERTIFIED WEIGHT REPORT:

Part Number: 58112
Lot Number: 091823
Description: Magnesium (Mg)

Expiration Date: 091826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 2000.02 ± 0.058 Flask Uncertainty

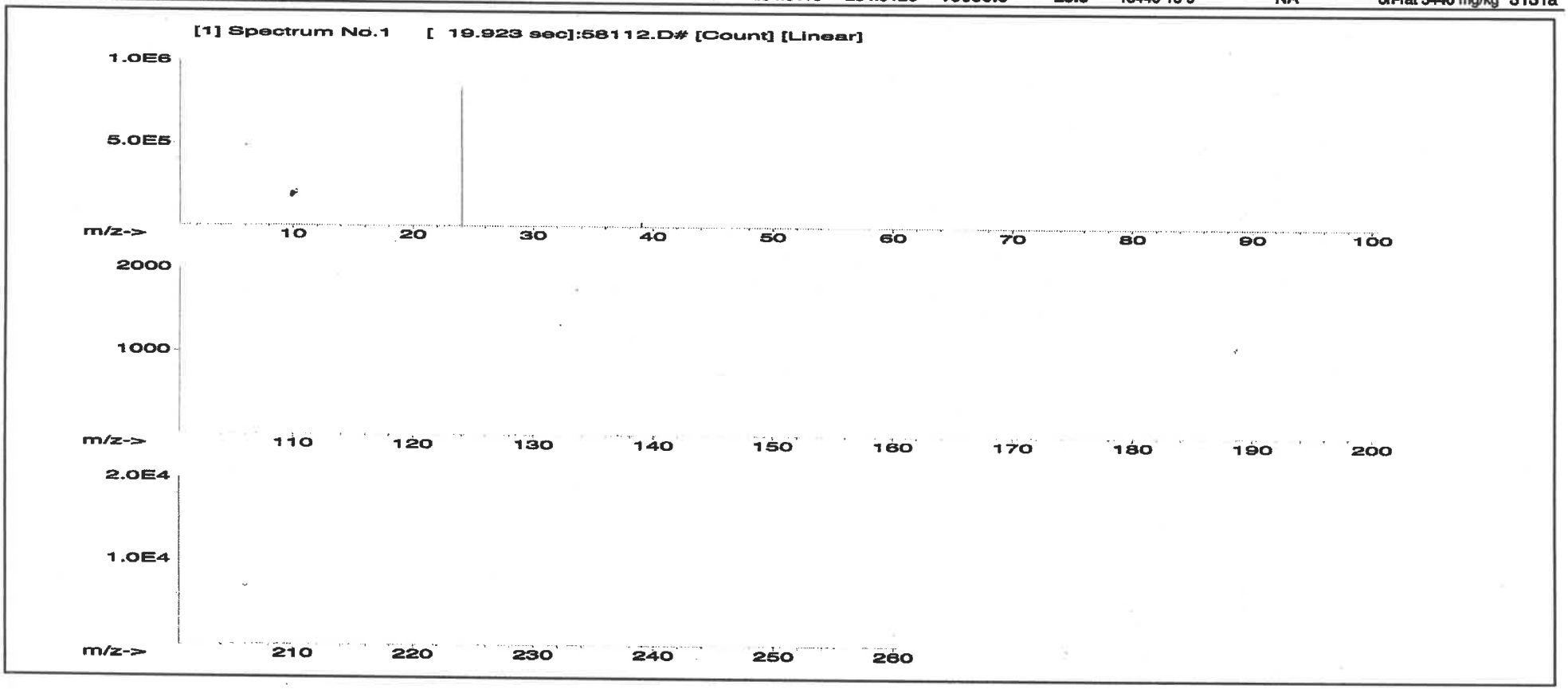
		Lot #	
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

M5768, M5769 BH 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.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
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* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M5768 M5769 BP R:1/3/24

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CERTIFIED WEIGHT REPORT:

Part Number: 58112
Lot Number: 091823
Description: Magnesium (Mg)

Expiration Date: 091826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 2000.02 ± 0.058 Flask Uncertainty

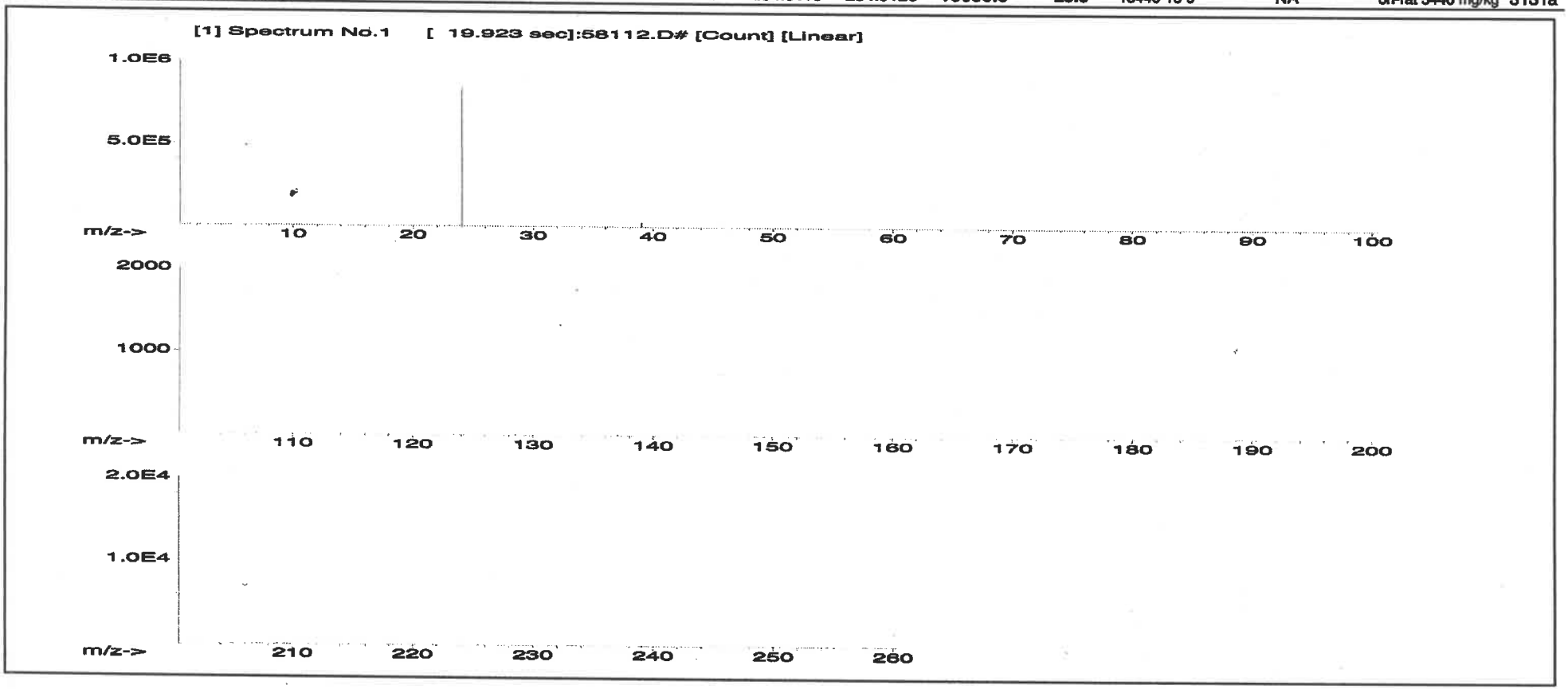
		Lot #		
Solvent:	24002546	Nitric Acid		
	2%	40.0 (mL)	Nitric Acid	

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	ort-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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* 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 M5798

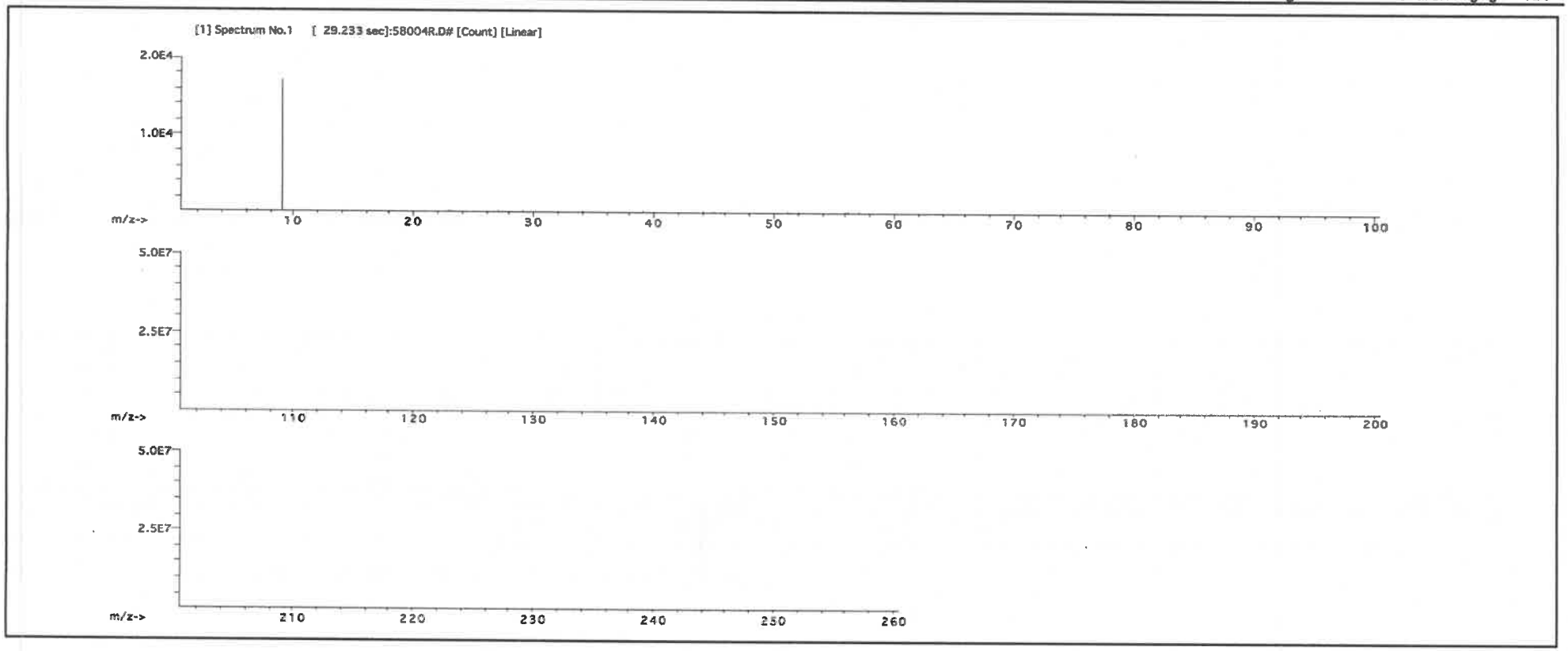
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57004**			
Lot Number:	**102523**	24002546	Nitric Acid	
Description:	**Beryllium (Be)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	102526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Beryllium nitrate (Be)	58104	091423	0.1000	200.0	0.084	1000	10001.5	**1000.0**	**2.2**	13597-99-4	0.2ug/m3	intrvns-rat 3.16mg/kg	NA



A3647-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	T	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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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)

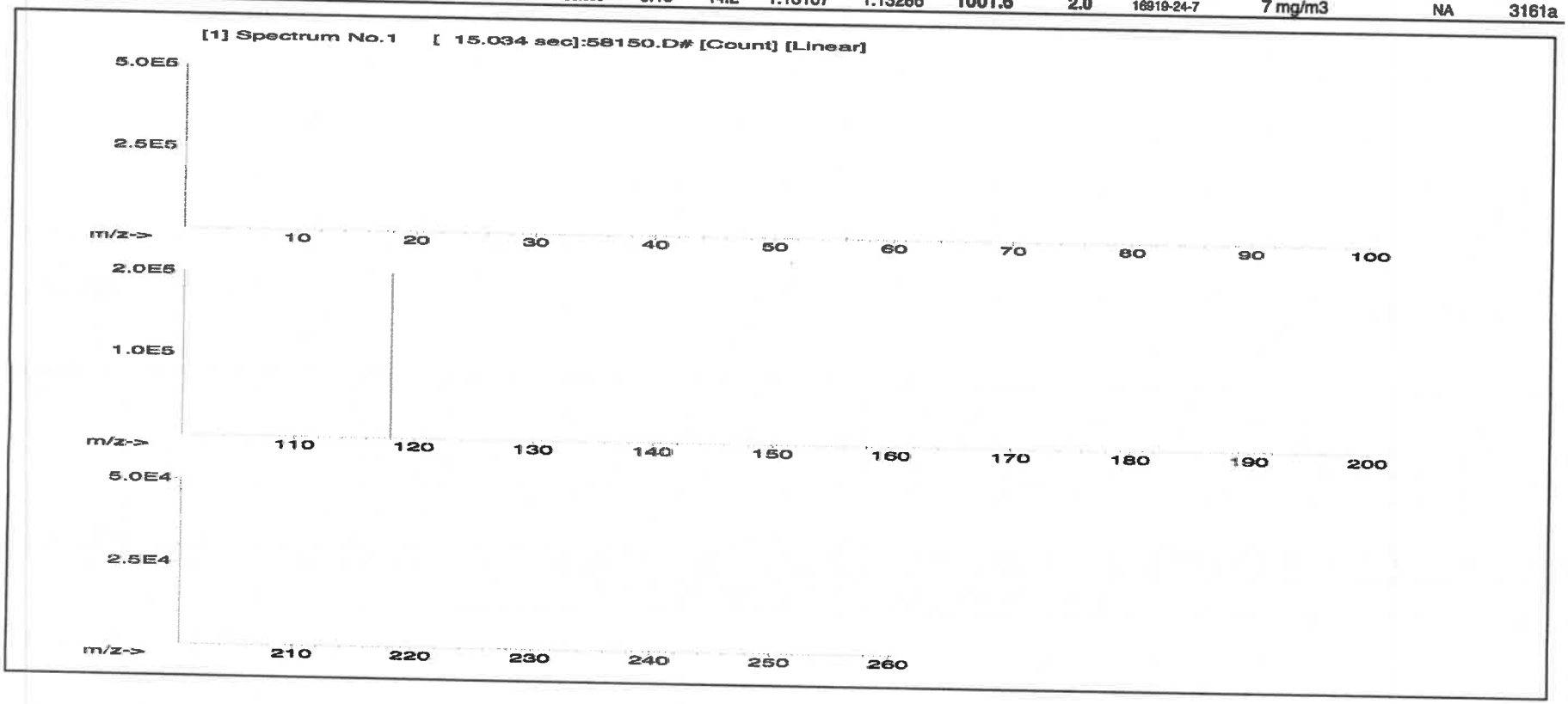
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<500	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	T	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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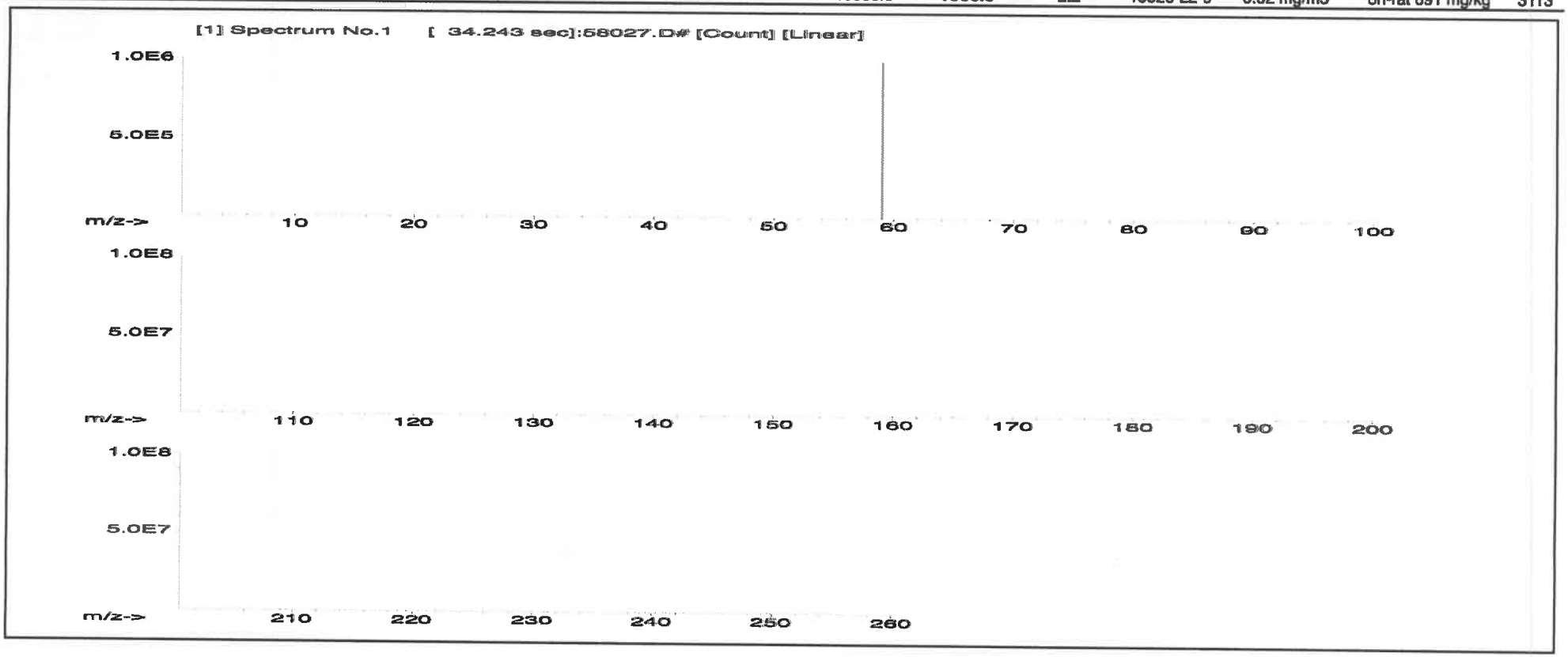
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CERTIFIED WEIGHT REPORT:

		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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R: 02/09/24 M5801 BH

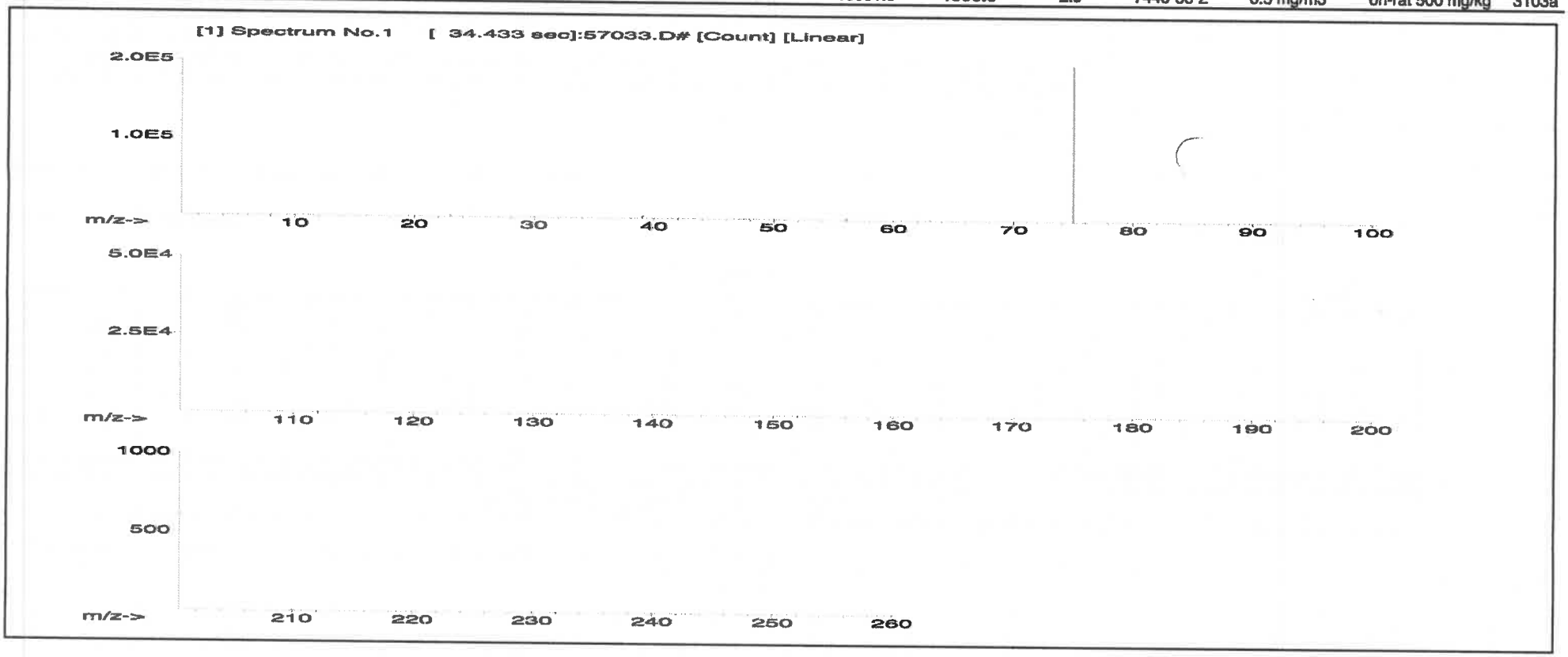
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57033**	24002546	Nitric Acid		
Lot Number:	**111323**				
Description:	**Arsenic (As)**	2.0%	80.0 (mL)	Nitric Acid	
Expiration Date:	111326				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty		

Formulated By:	Lawrence Barry	111323
Reviewed By:	Pedro L. Rentas	111323

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Arsenic (As)	58133	020522	0.1000	400.0	0.084	1000	10001.0	**1000.0**	2.0	7440-38-2	0.5 mg/m3	orl-rat 500 mg/kg	3103a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	T	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge*	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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R1 02/09/24. M58165

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CERTIFIED WEIGHT REPORT:

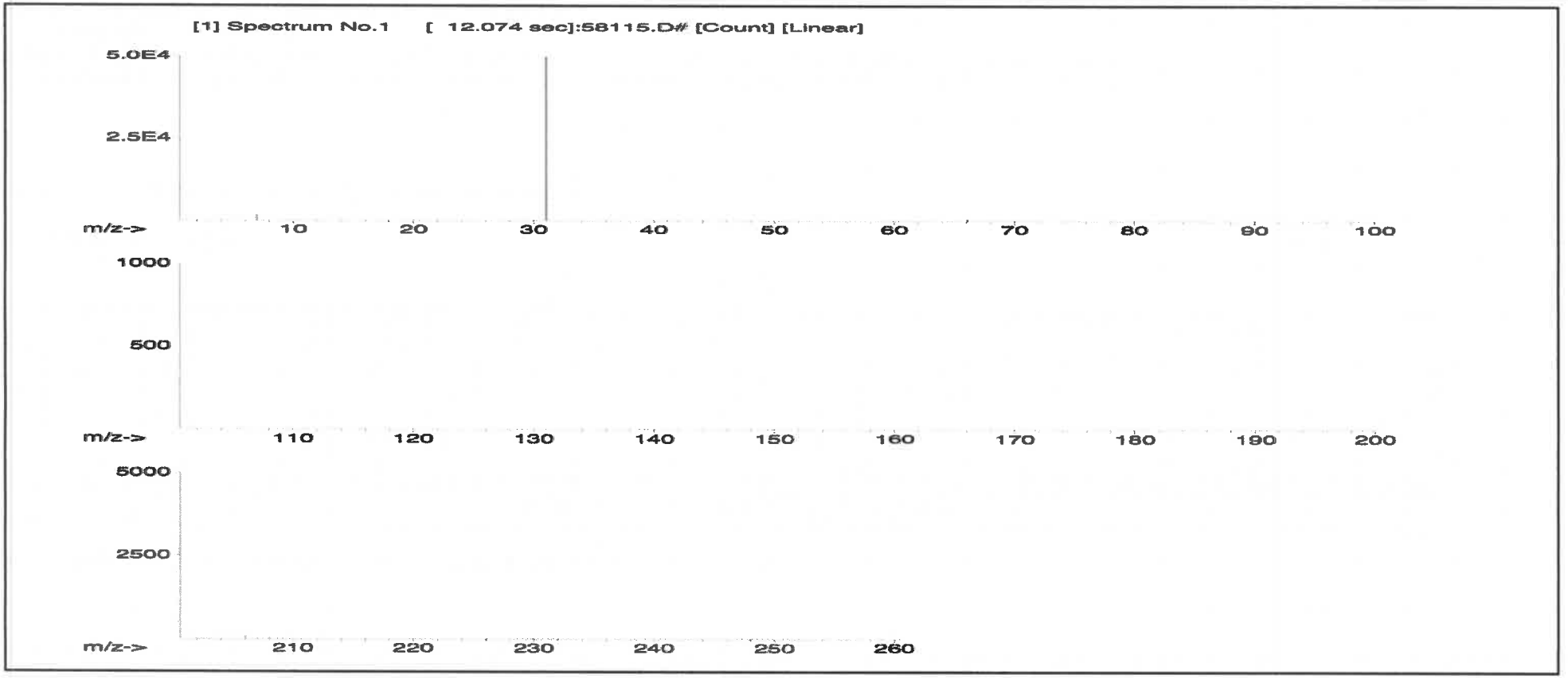
Part Number: 57115
Lot Number: 041723
Description: Phosphorous (P)

Expiration Date: 041726
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty

		Lot #	
Solvent:	21110221		Nitric Acid
	2%	40.0 (mL)	Nitric Acid
		5E-05	Balance 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:

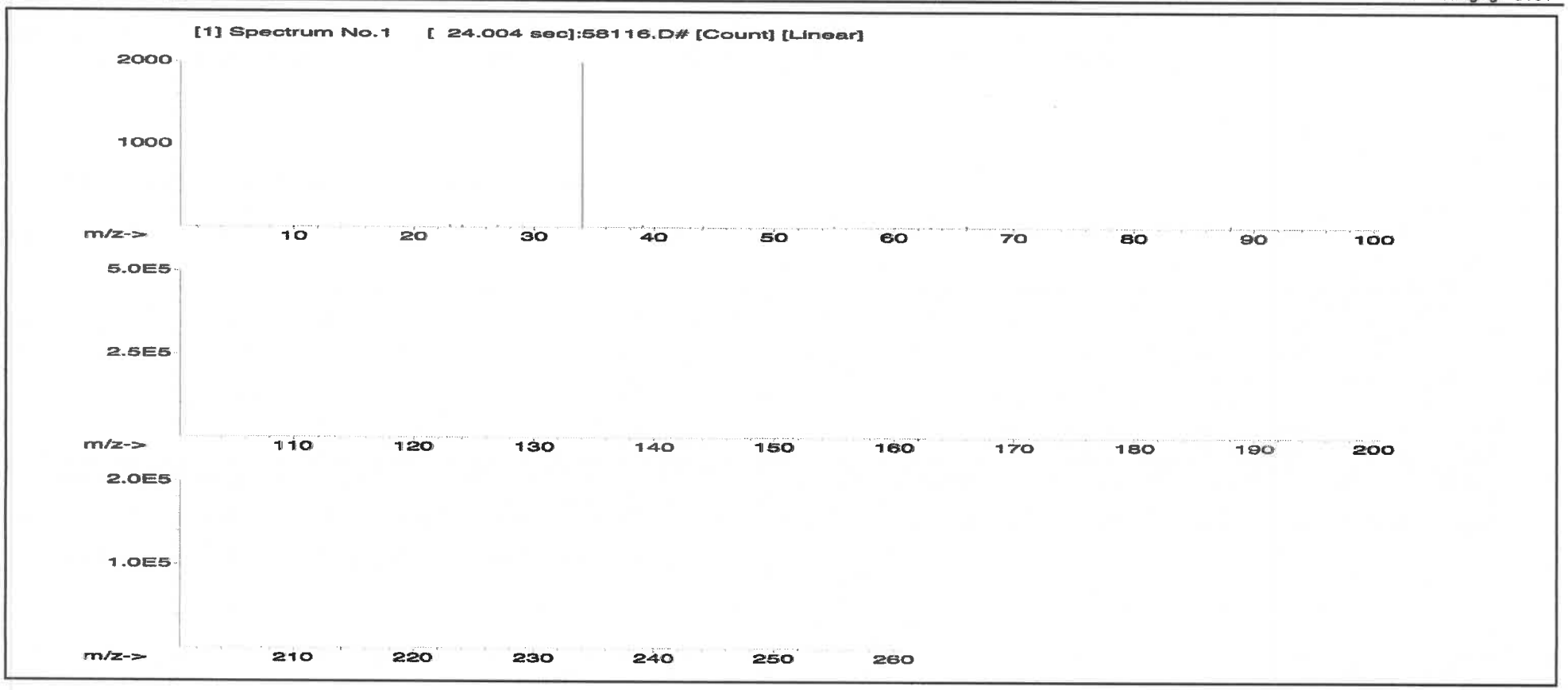
Part Number: 57116
Lot Number: 071123
Description: Sulfur (S)

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	orl-rat 4250mg/kg	3181



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	T	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* 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 M.5818

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CERTIFIED WEIGHT REPORT:

Part Number: 57014
Lot Number: 122023
Description: Silicon (Si)

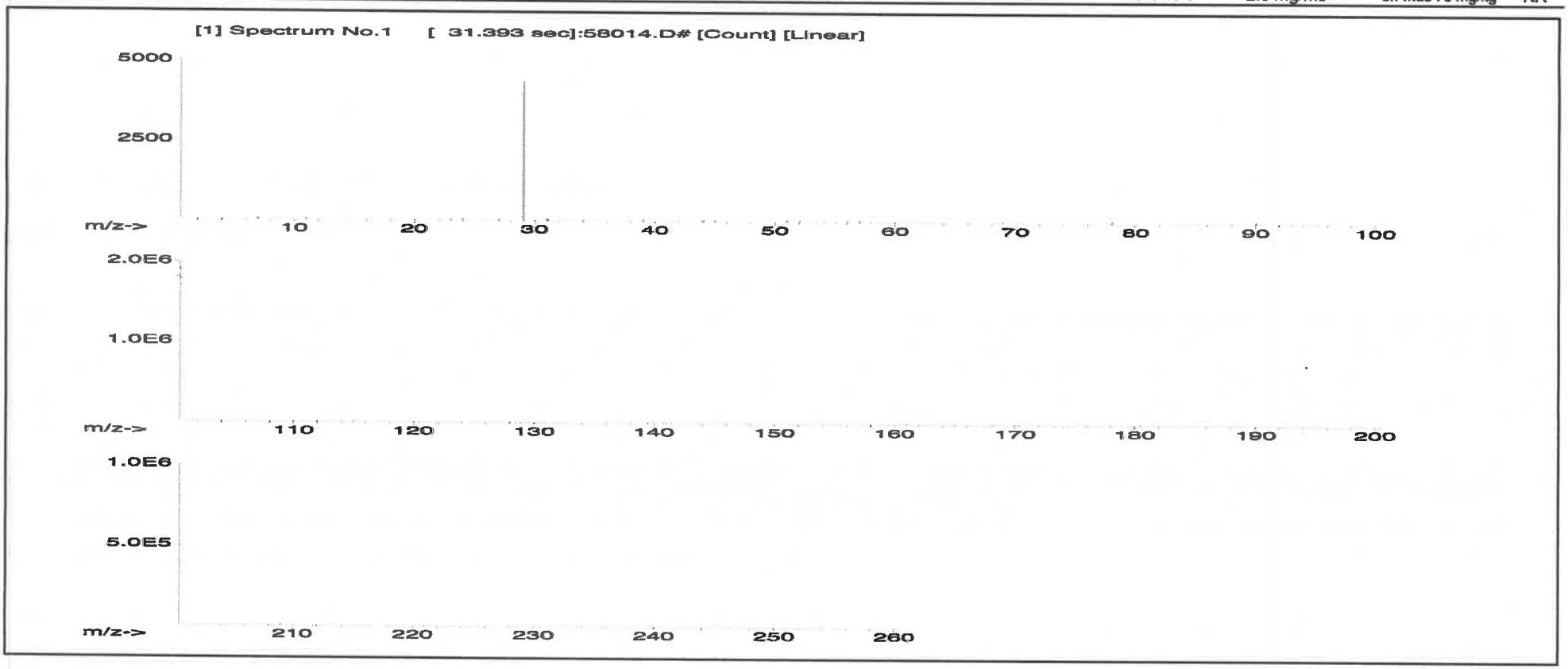
Expiration Date: 122026
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1999.48 ± 0.058 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	± 5E-05 Balance Uncertainty

Aleah O'Brady

Formulated By:	Aleah O'Brady	122023
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.
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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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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

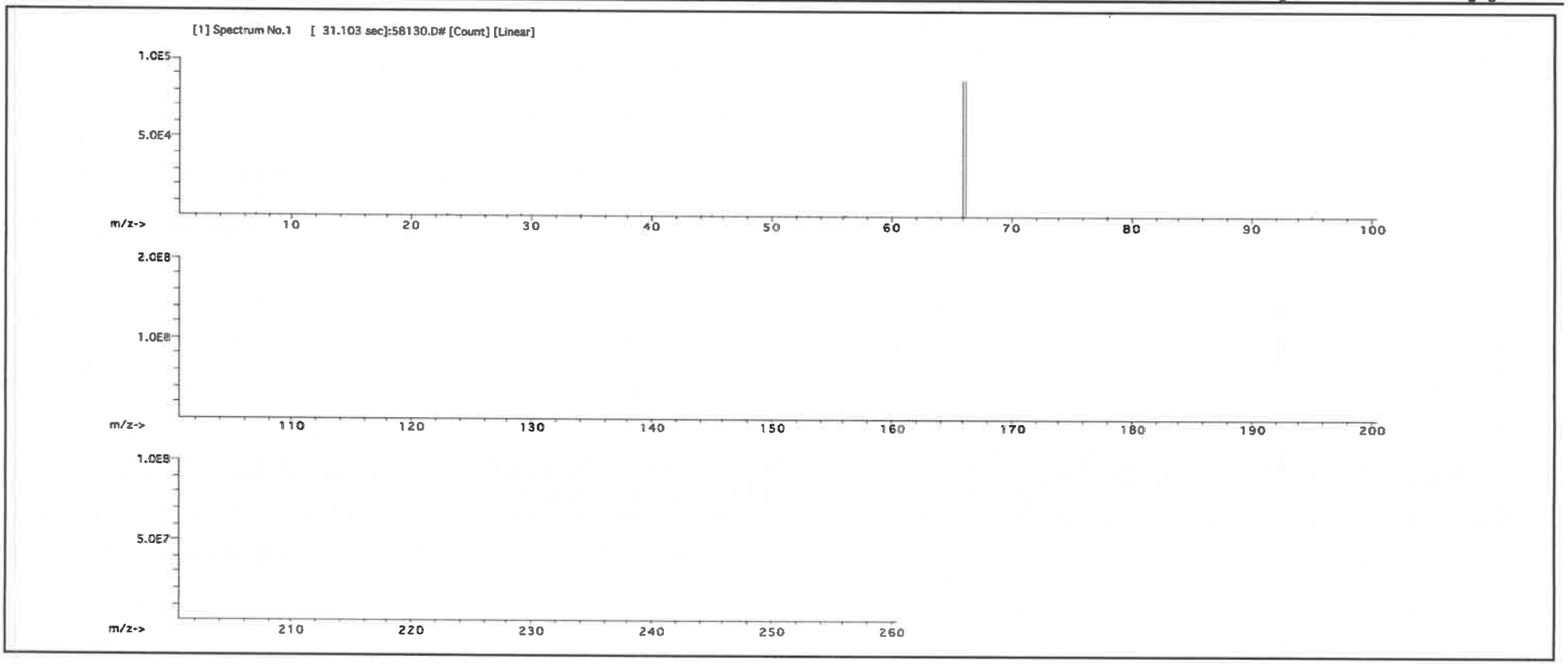
Weight shown below was diluted to (mL): 3000.4 0.06 Flask Uncertainty

	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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M5961 R: 6/11/24

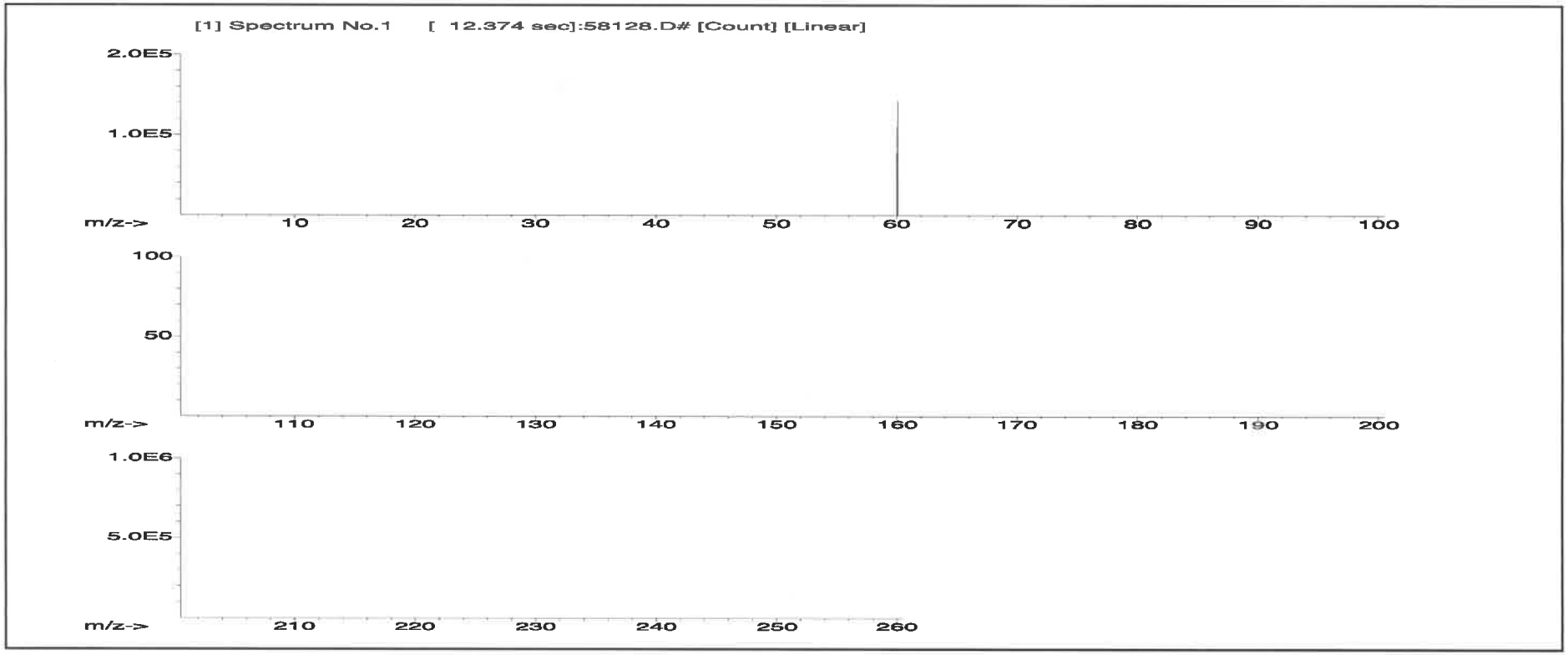
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CERTIFIED WEIGHT REPORT:

			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:

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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M5962 R! 06/14/24.

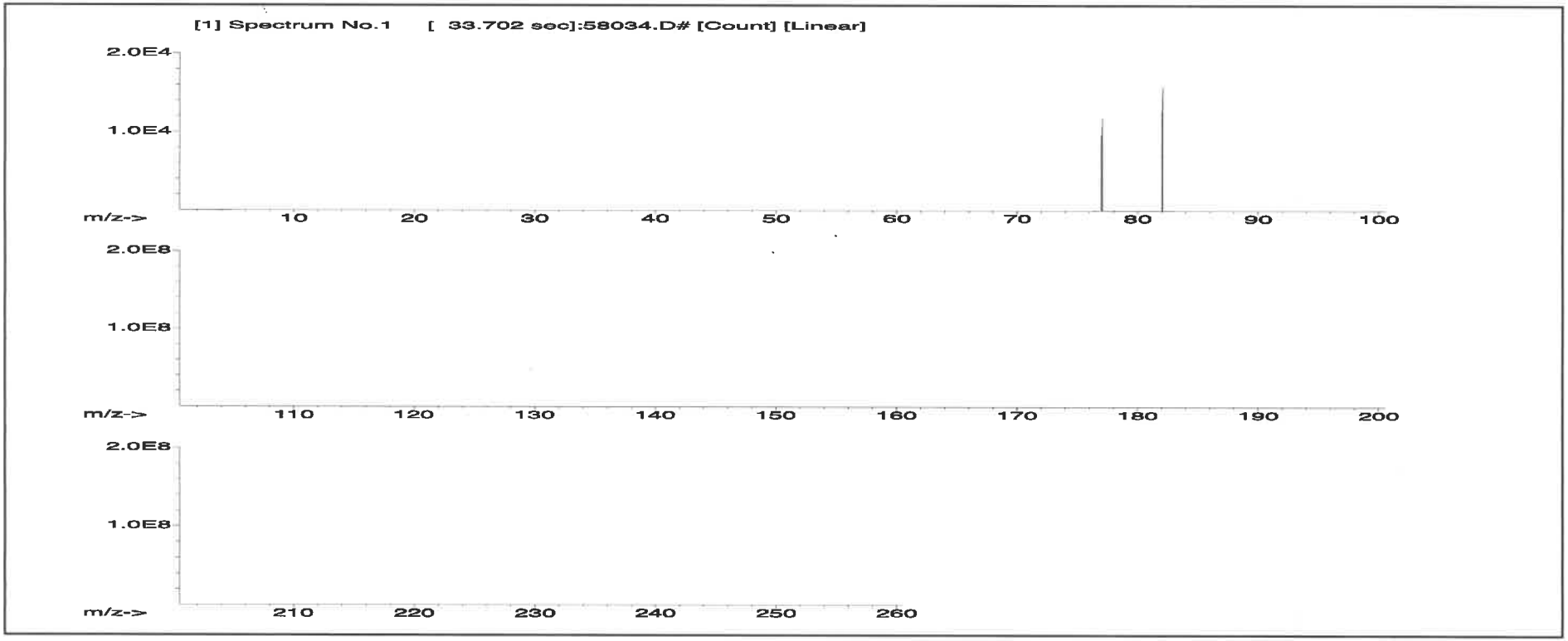
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CERTIFIED WEIGHT REPORT:

		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:

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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M5976, M5977
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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	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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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:	CGT11
Lot Number:	T2-TI719972
Matrix:	2% (v/v) HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Titanium Ti Metal
Starting Material:	
Starting Material Lot#:	2094
Starting Material Purity:	99.9975%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 5 µg/mL

Density: 1.012 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **1002 ± 4 µg/mL**

ICP Assay NIST SRM 3162a Lot Number: 130925

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/MM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \Sigma(w_i)\,(x_i)$$

x_i = mean of Assay Method i with standard uncertainty $u_{Char\,i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance

$$w_i = (1/u_{Char\,i})^2 \,/\, (\Sigma(1/u_{Char\,i})^2)$$

CRM/RM Expanded Uncertainty ($\pm$) = $U_{CRM/RM} = k\,(u^2_{Char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

$u_{Char} = [\Sigma(w_i)^2\,(u_{Char\,i})^2]^{½}$ 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

k = coverage factor = 2

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (\Sigma x_a)\,(v_{Char\,a})$$

X_a = mean of Assay Method A with $u_{Char\,a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty ($\pm$) = $U_{CRM/RM} = k\,(u^2_{Char\,a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

$u_{Char\,a}$ = 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

k = coverage factor = 2

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000536	M	Eu	<	0.000268	O	Na	<	0.032670	M	Se		0.001204	O	Zn	<	0.003267
O	Al		0.000872	O	Fe		0.003225	O	Nb	<	0.043560	O	Si		0.004735	O	Zr	<	0.043560
M	As	<	0.008586	M	Ga	<	0.000268	M	Nd	<	0.000268	M	Sm	<	0.000268				
M	Au	<	0.004577	M	Gd	<	0.000268	O	Ni	<	0.010890	M	Sn		0.000096				
O	B	<	0.008929	M	Ge	<	0.002146	M	Os	<	0.000269	O	Sr		0.000096				
M	Ba	<	0.002683	M	Hf		0.002161	O	P	<	0.054450	M	Ta		0.010560				
M	Be	<	0.005366	M	Hg	<	0.003231	M	Pb	<	0.001073	M	Tb	<	0.000268				
M	Bi	<	0.001609	M	Ho	<	0.000268	M	Pd	<	0.000268	M	Te	<	0.001341				
O	Ca		0.000676	M	In	<	0.002683	M	Pr	<	0.000268	M	Th	<	0.053663				
M	Cd	<	0.000268	M	Ir	<	0.000269	M	Pt	<	0.000536	s	Ti	<					
M	Ce	<	0.000268	M	K		0.001172	M	Rb	<	0.000268	M	Tl	<	0.000268				
M	Co	<	0.004293	M	La	<	0.000268	M	Re	<	0.000268	M	Tm	<	0.000268				
M	Cr		0.000752	O	Li	<	0.027225	M	Rh	<	0.000268	M	U	<	0.000268				
M	Cs	<	0.000268	M	Lu	<	0.000268	M	Ru	<	0.000269	M	V	<	0.019855				
O	Cu	<	0.010890	O	Mg	<	0.005445	i	S	<		M	W		0.000473				
M	Dy	<	0.000268	O	Mn	<	0.003267	M	Sb	<	0.006976	M	Y	<	0.002146				
M	Er	<	0.000268	M	Mo		0.000774	O	Sc	<	0.004900	M	Yb	<	0.000536				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 47.87 +4 6 Ti(F)6-2

Chemical Compatibility - Soluble in concentrated HCl, HF, H3PO4 H2SO4 and HNO3. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths or high levels of transition elements unless they are fluorinated). Stable with most inorganic anions with a tendency to hydrolyze forming the hydrated oxide in all dilute acids except HF.

Stability - 2-100 ppb levels stable (Alone or mixed with all other metals) as the Ti(F)6-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the Ti(F)6-2 chemically stable for years in 2-5% HNO3 / trace HF in an LDPE container.

Ti Containing Samples (Preparation and Solution) - Metal (Soluble in H2O / HF caution -powder reacts violently); Oxide - low temperature history anatase or rutile (Dissolved by heating in 1:1:1 H2O / HF / H2SO4); Oxide - high temperature history (~800EC) brookite (fuse in Pt0 with K2S2O7); Ores (fuse in Pt0 with KF + K2S2O7 - no KF if silica not present); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve by heating with 1:1:1 H2O / HF / H2SO4 or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite crystalline form).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 48 amu	14 ppt	N/A	32S16O, 32S14N, 14N16O18O, 14N17N2, 36Ar12C, 48Ca, [96X=2 (where X = Zr, Mo, Ru)]
ICP-OES 323.452 nm	0.0054 / 0.00092 µg/mL	1	Ce, Ar, Ni
ICP-OES 334.941 nm	0.0038 / 0.000028 µg/mL	1	Nb, Ta, Cr, U
ICP-OES 336.121 nm	0.0053 / 0.000034 µg/mL	1	W, Mo, Co

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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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

M5981 R:6/11/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57092
Lot Number: 060724
Description: Uranium (U)

Expiration Date: 060727
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 2000.07

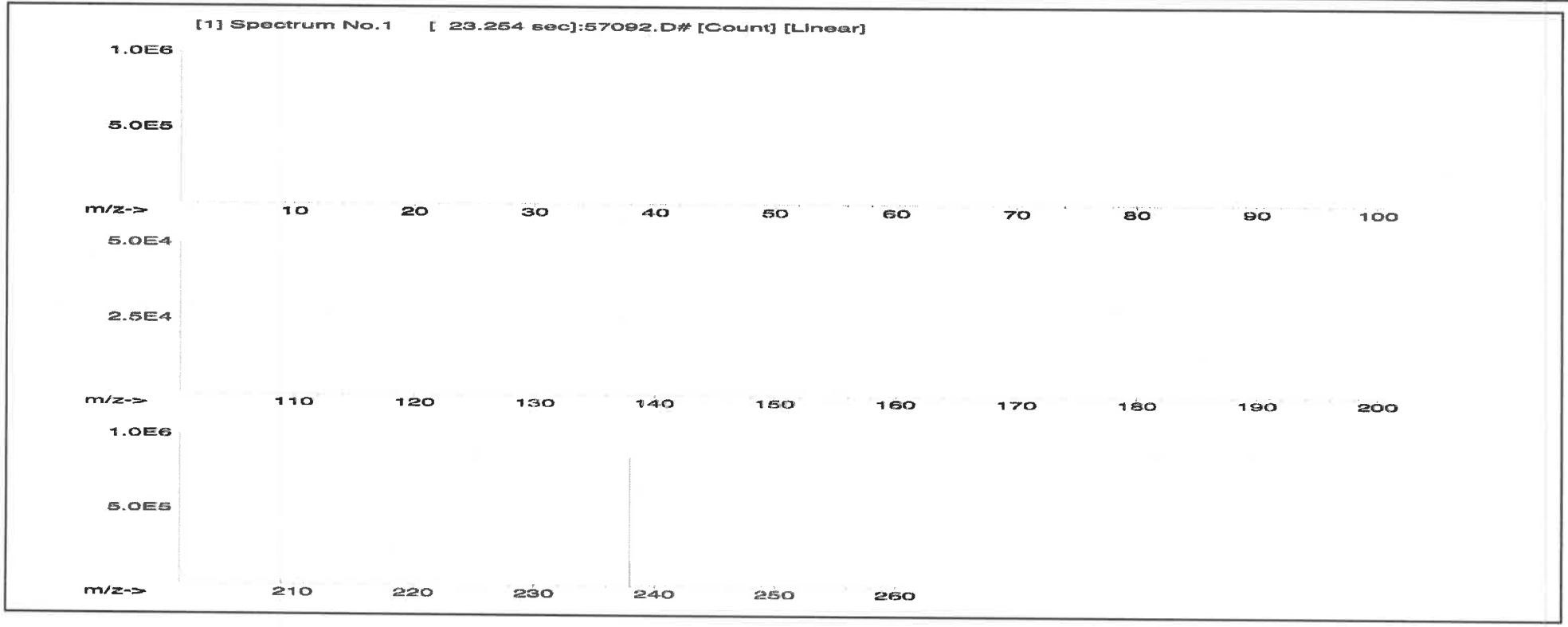
Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.100 Flask Uncertainty

Giovanni Esposito
Formulated By: Giovanni Esposito 060724

Pedro Rentas
Reviewed By: Pedro L. Rentas 060724

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Uranyl nitrate hexahydrate (U)	58192	041524	0.1000	200.0	0.084	1000	10001.5	**1000.0**	**2.2**	13520-83-7	0.05 mg/m3	orl-rat 1040 mg/kg	3164



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Certified Reference Material CRM

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AR-1539 Certificate Number
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	T
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Part # **57092** Lot # **060724**

Printed: 6/7/2024, 3:58:45 PM

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www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

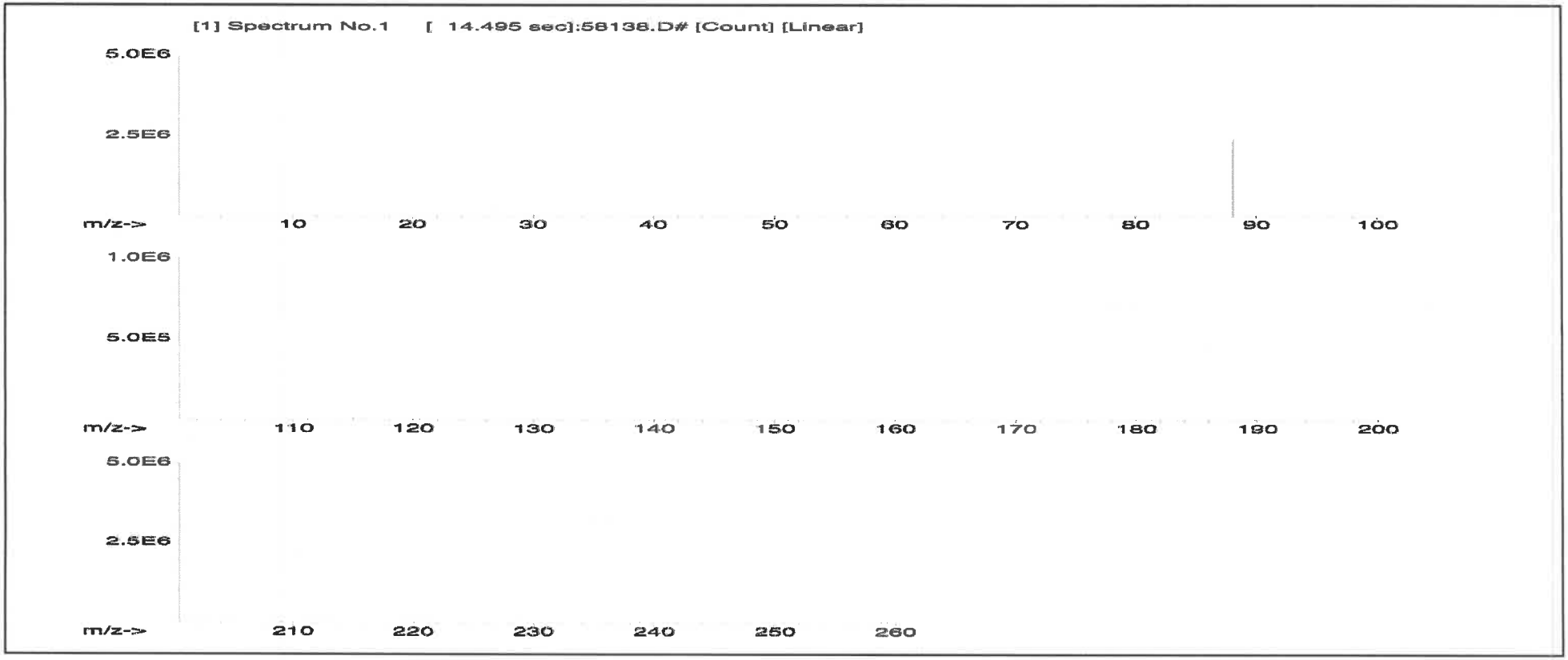
45982 R: 6/11/24

CERTIFIED WEIGHT REPORT:

Part Number:	**57038**			**Lot #**	
Lot Number:	**031524**		**Solvent:**	24002546	Nitric Acid
Description:	**Strontium (Sr)**				
			2%	40.0 (mL)	Nitric Acid
Expiration Date:	031527				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty		

Formulated By:	Benson Chan	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



P-3847-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<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:

Part Number: 57040
Lot Number: 071423
Description: Zirconium (Zr)

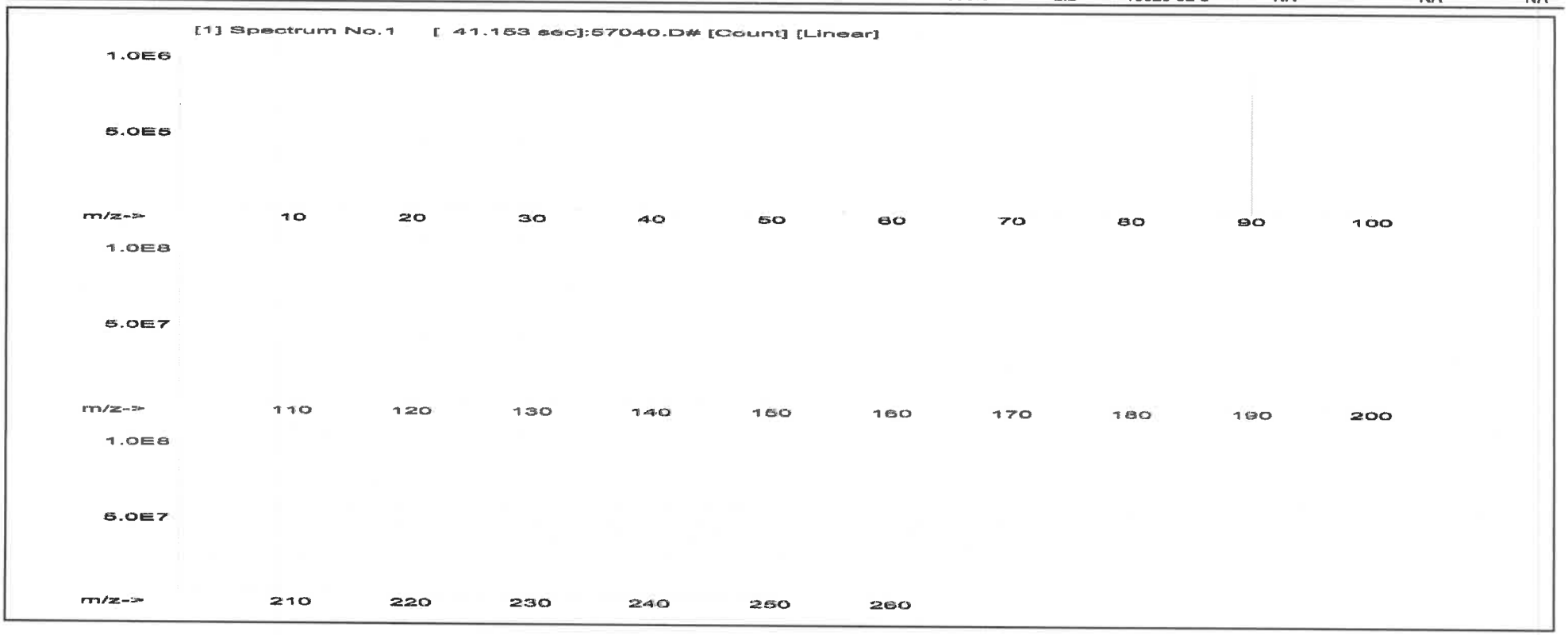
Expiration Date: 071426
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 2000.02

Lot #	Solvent:		
21110221	Nitric Acid		
2.0%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
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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Certified Reference Material CRM



ANAB ISO 17034 Accredited
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https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	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:

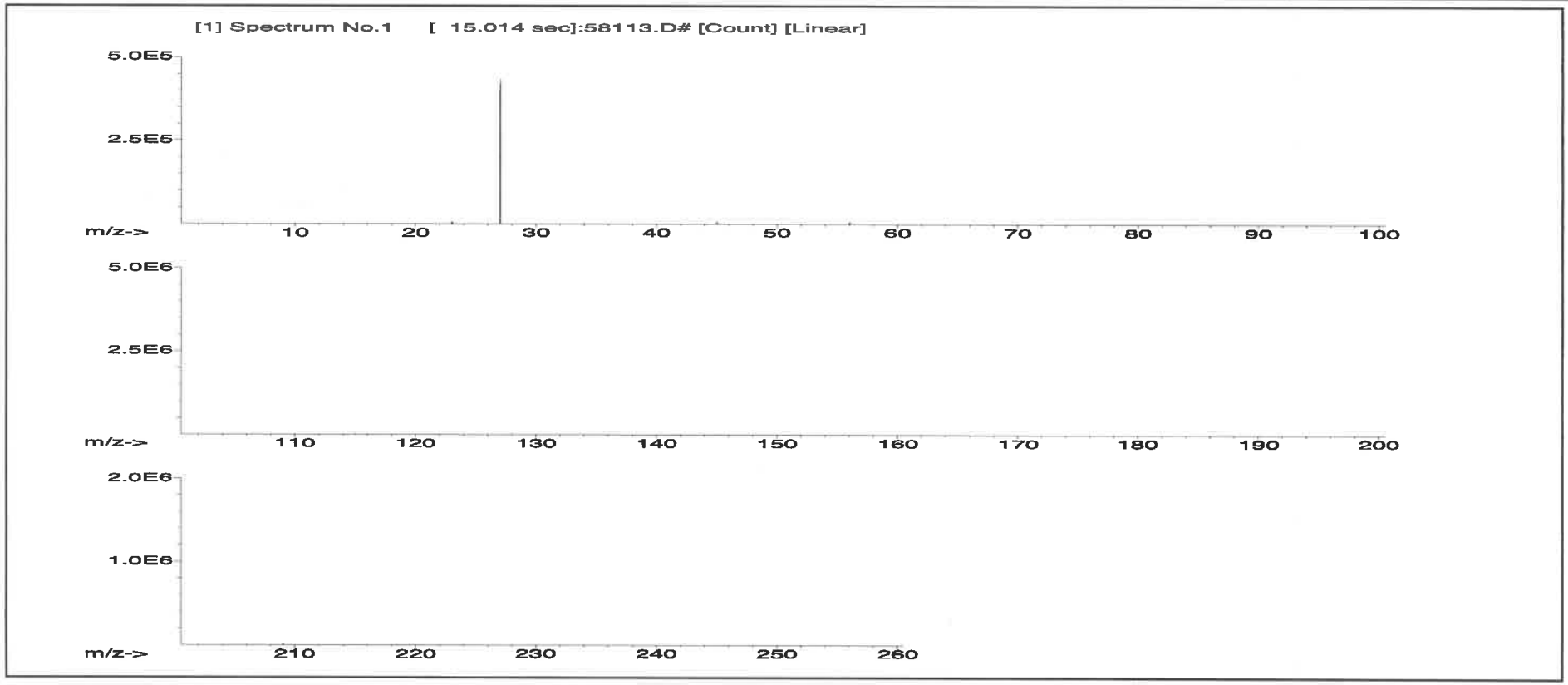
Part Number: 58113
Lot Number: 011623
Description: Aluminum (Al)
Expiration Date: 011626
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

	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



Nitric Acid 69%
CMOS

Recv date: 1.1.—08/01/2023

M6034, M6037
M6035, M6038,
M6036,

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 – 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities – Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities – Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Received — 08/01/2024
paper
M6039
M6040

Material No.: 9530-33
Batch No.: 24D1562005
Manufactured Date: 2024-03-18
Retest Date: 2029-03-17
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS - Assay (as HCl) (by acid-base titrn)	36.5 - 38.0 %	37.6 %
ACS - Color (APHA)	≤ 10	5
ACS - Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS - Specific Gravity at 60°/60°F	1.185 - 1.192	1.192
ACS - Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS - Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS - Free Chlorine (as Cl_2)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO_4)	≤ 0.05 ppm	0.03 ppm
Sulfate (SO_4)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO_3)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH_4)	≤ 3 ppm	< 1 ppm
Trace Impurities - Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities - Aluminum (Al)	≤ 10.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities - Barium (Ba)	≤ 1.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 1.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 10.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 20.0 ppb	2.2 ppb
Trace Impurities - Cadmium (Cd)	≤ 1.0 ppb	< 1.0 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	31.0 ppb
Trace Impurities - Chromium (Cr)	≤ 1.0 ppb	0.5 ppb
Trace Impurities - Cobalt (Co)	≤ 1.0 ppb	0.2 ppb
Trace Impurities - Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities - Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities - Gold (Au)	≤ 4.0 ppb	< 0.2 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities - Iron (Fe)	≤ 15 ppb	3 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 24D1562005

Test	Specification	Result
Trace Impurities – Lead (Pb)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Lithium (Li)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	2.2 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Nickel (Ni)	≤ 4.0 ppb	0.2 ppb
Trace Impurities – Niobium (Nb)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Potassium (K)	≤ 9.0 ppb	< 1.0 ppb
Trace Impurities – Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	2.0 ppb
Trace Impurities – Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Tantalum (Ta)	≤ 1.0 ppb	< 0.9 ppb
Trace Impurities – Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	< 0.4 ppb
Trace Impurities – Titanium (Ti)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities – Zirconium (Zr)	≤ 1.0 ppb	< 0.1 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 24D1562005

Test	Specification	Result

For Laboratory,Research,or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

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



Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

R: 9/10/24

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

M6088, M6089, M6090, M6091, M6092, M6093

Test	Specification	Result
Assay (HNO_3)	69.0 – 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities – Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities – Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

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 Number: 122223
Description: Sodium (Na)

Expiration Date: 122226
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

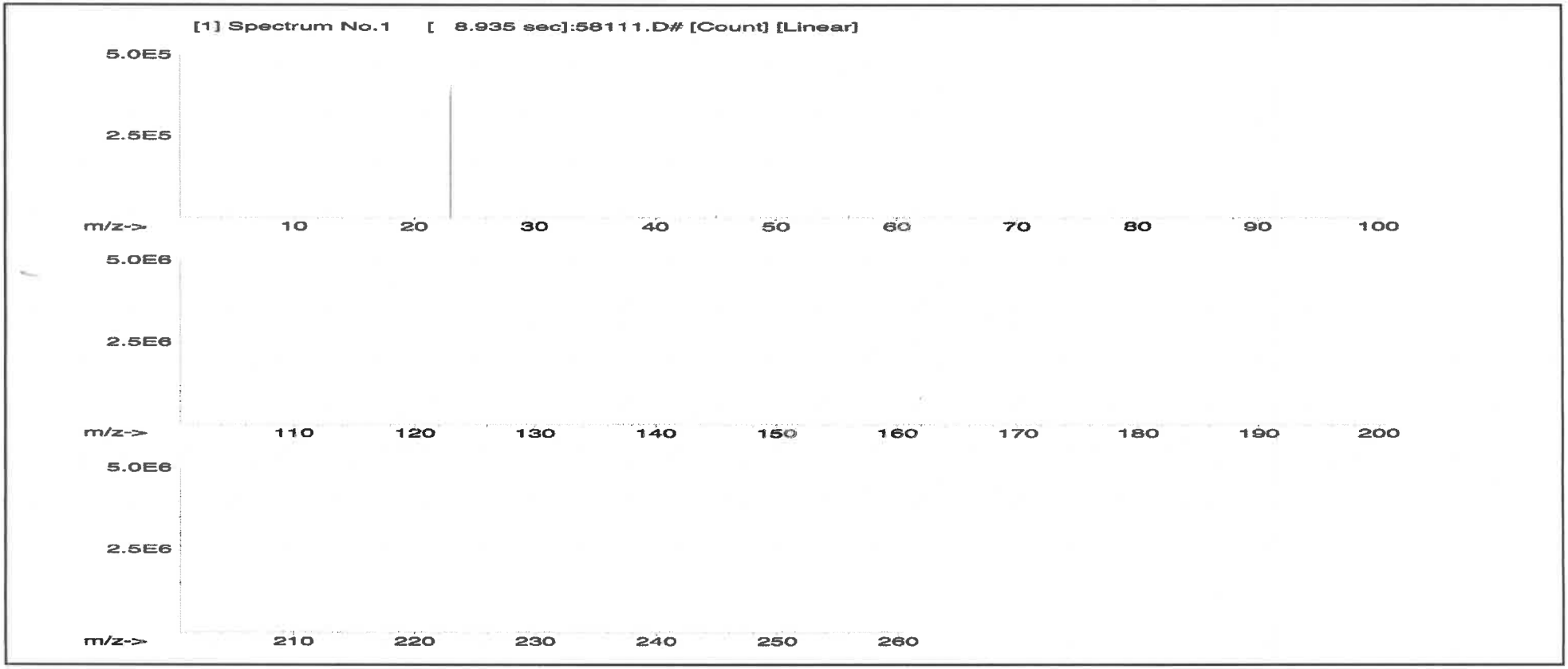
Weight shown below was diluted to (mL): 3000.4 | 0.06 Flask Uncertainty

	Lot #	
Solvent:	24002546	Nitric Acid
2%	60.0 (mL)	Nitric Acid
	5E-05	Balance 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



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	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:

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)
		ICSA: M5873			ICSB: M5874		
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

ICSA: M5873

ICSB: M5874

Element	CRQL	Part A (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)	Part A +Part B (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)
Al	20.0	[100000]			[100000]		
Sb	2.0	(1.5)	-2.5	5.5	(22.0)	18.0	26.0
As	1.0	(0.1)	-1.9	2.1	19.0	16.2	21.9
Ba	10.0	(1.2)	-18.8	21.2	(22.0)	2.0	42.0
Be	1.0	(0)	-2.0	2.0	19.0	16.2	21.9
Cd	1.0	(0.7)	-1.3	2.7	20.0	17.0	23.0
Ca	500	[100000]			[100000]		
C		[200000]			[200000]		
Cl		[1000000]			[1000000]		
Cr	2.0	(21.0)	17.0	25.0	40.0	34.0	46.0
Co	1.0	(1.0)	-1.0	3.0	20.0	17.0	23.0
Cu	2.0	(8.0)	4.0	12.0	(25.0)	21.0	29.0
Fe	200	[100000]			[100000]		
Pb	1.0	(4.0)	2.0	6.0	25.0	21.3	28.8
Mg	500	[100000]			[100000]		
Mn	1.0	(7.0)	5.0	9.0	27.0	23.0	31.1
Mo		[2000]			[2000]		
Ni	1.0	(6.0)	4.0	8.0	24.0	20.4	27.6
P		[100000]			[100000]		
K	500	[100000]			[100000]		
Se	5.0	(0.3)	-9.7	10.3	(19.0)	9.0	29.0
Ag	1.0	(0)	-2.0	2.0	18.0	15.3	20.7
Na	500	[100000]			[100000]		
S		[100000]			[100000]		
Tl	1.0	(0)	-2.0	2.0	21.0	17.9	24.2
Ti		[2000]			[2000]		
V	5.0	(0.5)	-9.5	10.5	(19.0)	9.0	29.0
Zn	5.0	(11.0)	1.0	21.0	(29.0)	19.0	39.0

[ ] Indicates analytes that do not require ICP-MS determination in the ICS.
The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 2 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

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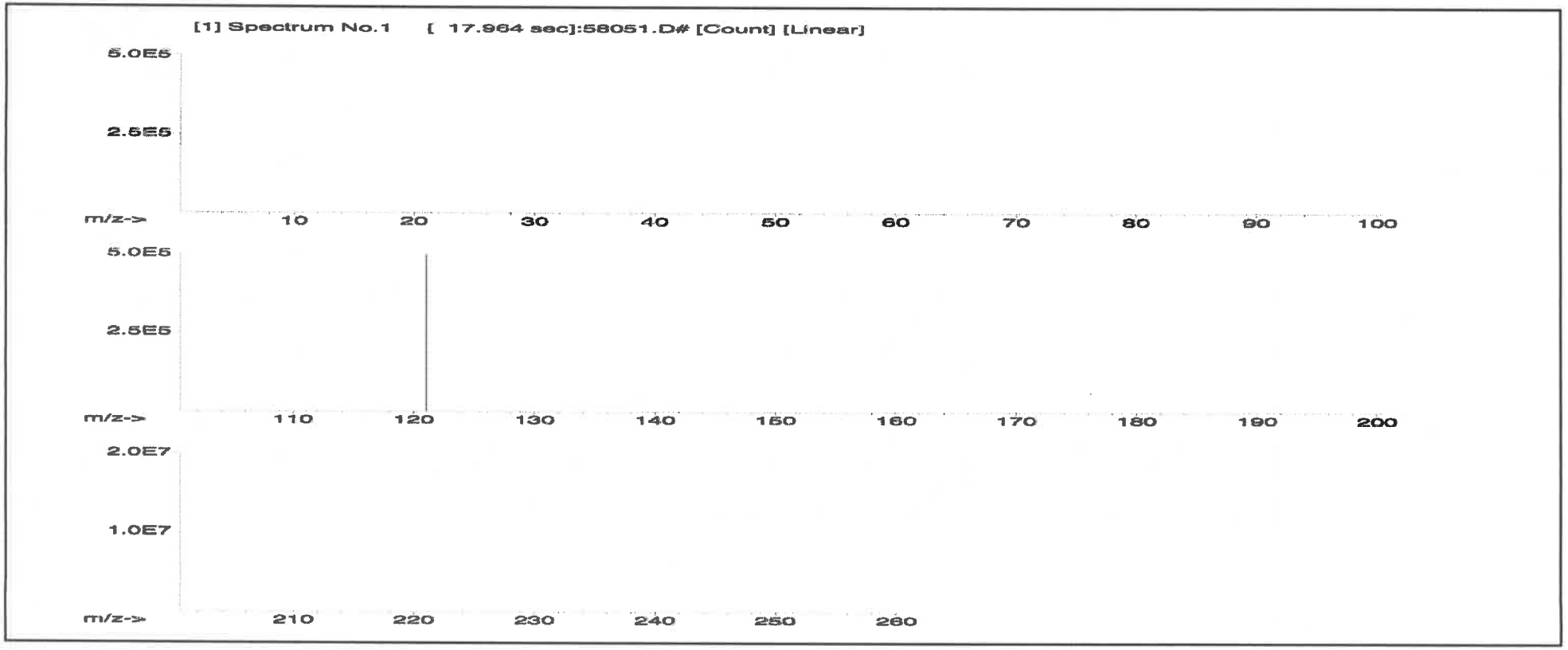
R: 01/03/24 M5802, M5803

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.
* 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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M6030

R: 8/5/24

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CERTIFIED WEIGHT REPORT:

Part Number: 57047
Lot Number: 122823
Description: Silver (Ag)

Expiration Date: 122826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

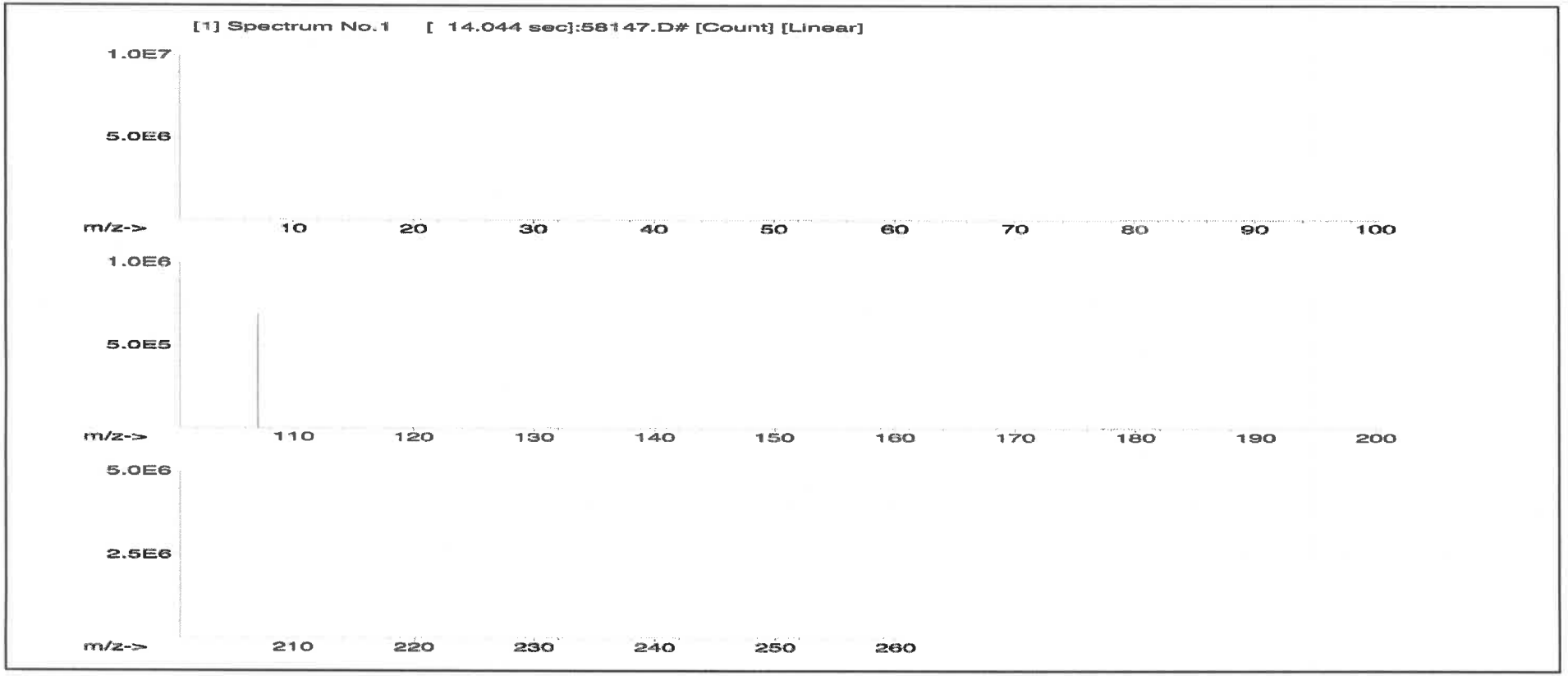
Weight shown below was diluted to (mL): 4000.30 0.058 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	80.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Benson Chan	122823
Reviewed By:	Pedro L. Rentas	122823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Silver nitrate (Ag)	IN035	J0612AGA1	1000.0	99.9999	0.10	63.7	6.27992	6.27998	**1000.0**	**2.0**	7761-88-8	10 ug/m3	NA	3151



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	T	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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R: 03/16/23 M5473, M5474, M5475, M5476

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CERTIFIED WEIGHT REPORT:

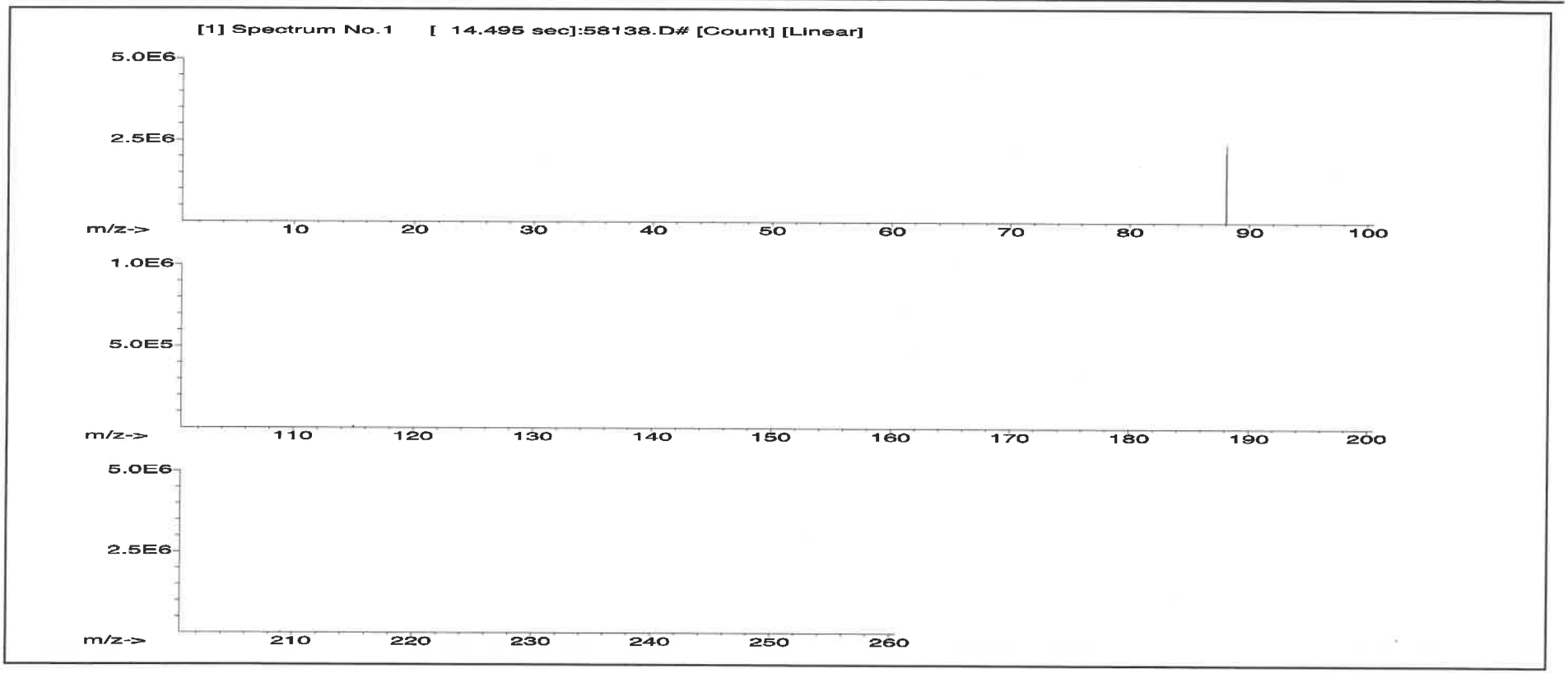
Part Number: 56138
Lot Number: 082922
Description: Strontium (Sr)

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.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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R: 03/16/23 M5473, M5474, M5475, M5476

CERTIFIED WEIGHT REPORT:

Part Number: 56138
Lot Number: 082922
Description: Strontium (Sr)

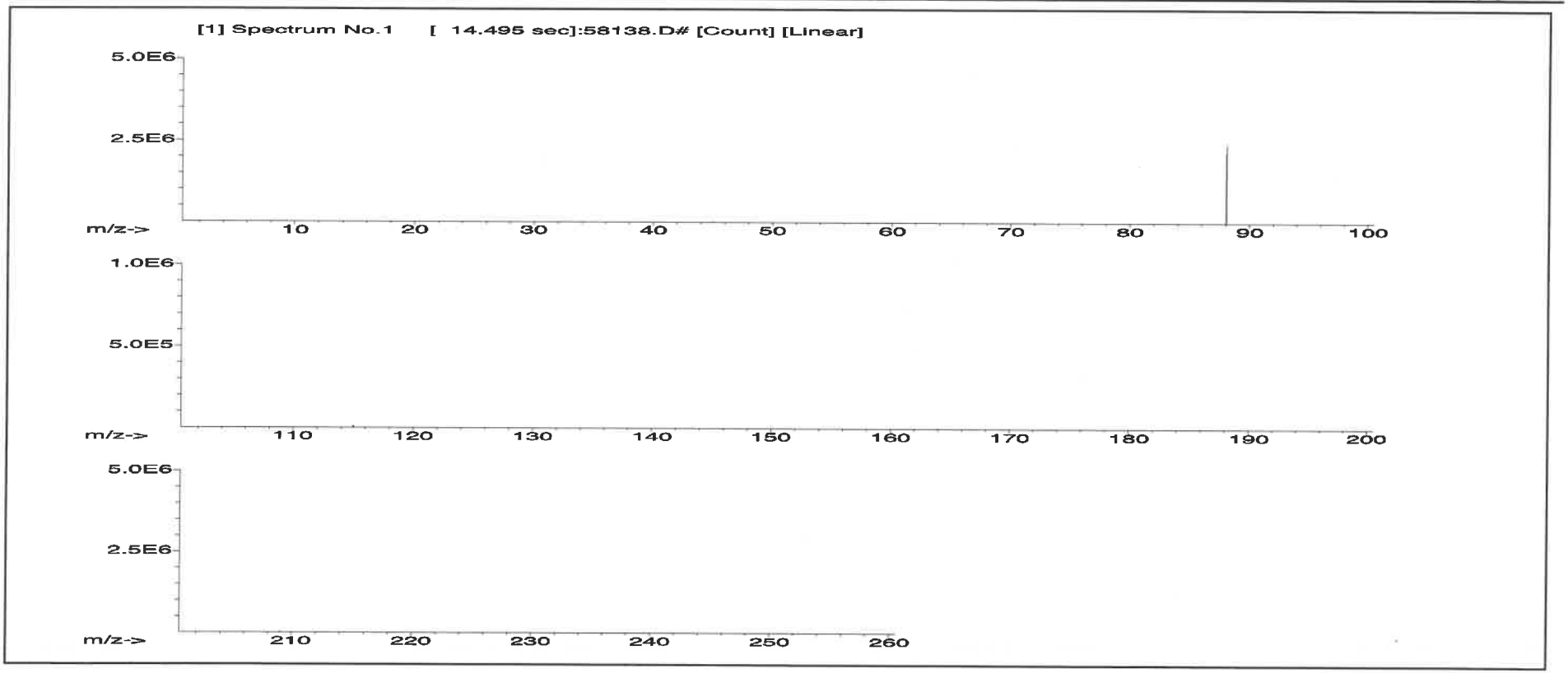
Expiration Date: 082925
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12

	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)

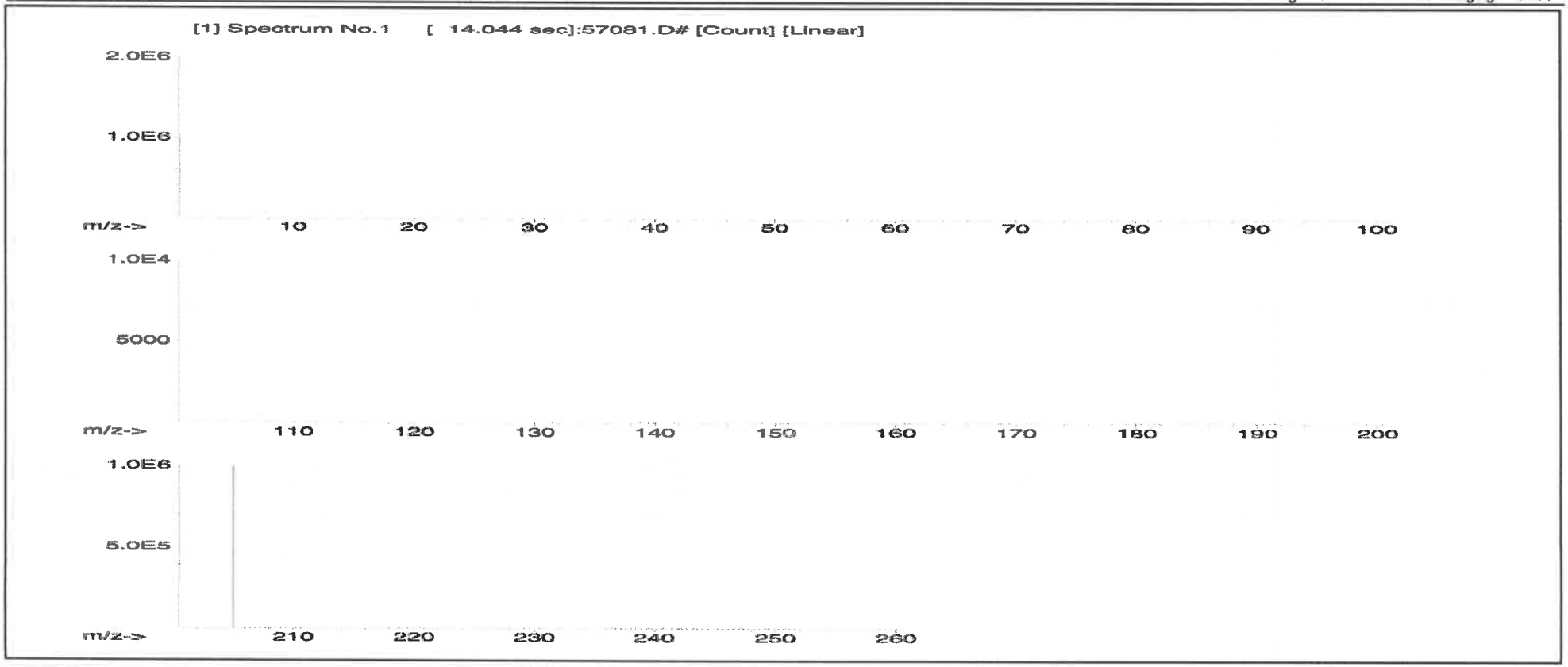
Expiration Date: 062727
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.1

	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
Reviewed By:	Pedro L. Rentas	062724

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Thallium nitrate (Tl)	IN037	BCCF4399	1000	99.999	0.10	77.0	2.5975	2.5977	**1000.1**	**2.0**	10102-45-1	0.1 mg/m3	orl-mus 15mg/kg	3158



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	T	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6021

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AR-1539 Certificate Number
https://Absolutestandards.com

Rc. 8/5/24

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57023**			
Lot Number:	**062424**	24002546	Nitric Acid	
Description:	**Vanadium (V)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	062427			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.3	0.06	Flask Uncertainty	

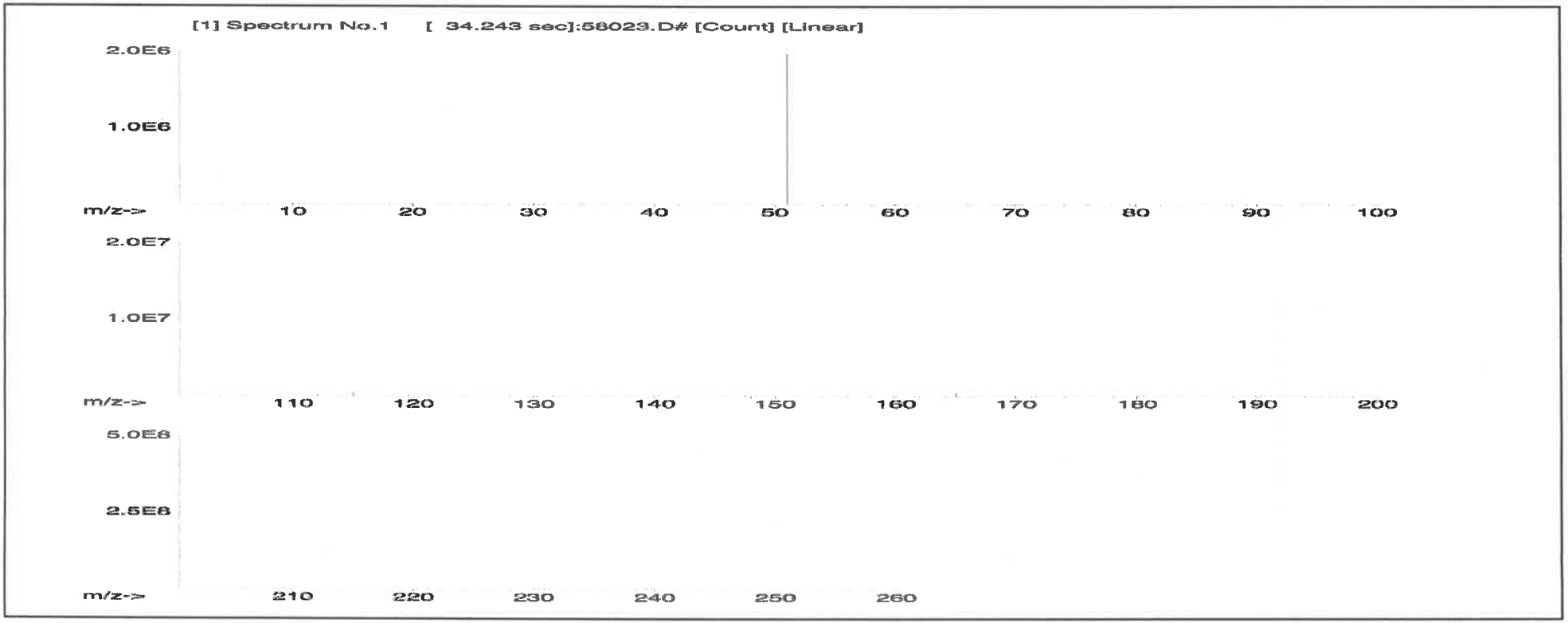
Aleah O'Brady

Formulated By:	Aleah O'Brady	062424

Pedro Rentas

Reviewed By:	Pedro L. Rentas	062424

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium metavanadate (V)	58123	021224	0.1000	200.0	0.084	1000	10000.3	**1000.0**	**2.2**	7803-55-6	0.05 mg/m3	orl-rat 58.1mg/kg	3165



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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
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SHIPPING DOCUMENTS

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Certified Reference Materials

Packing List

Date	Order #
09/03/2024	318988

6390 Joyce Dr., #100
Golden, CO 80403

Tel: +1-303-940-0033
Fax: +1-303-940-0043
info@phenova.com
www.phenova.com

For terms and conditions of your order, please visit:
www.phenova.com/home/termsofsale

Ship To

Chemtech - NJ
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Received by: SJ
9/5/2024
9:50

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
240802-01	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
			PT-TMSET-WP	WP Trace Metals Set : (TM1, HG and SNTI)		
1	1	0	PT-TM1-WP	WP Trace Metals 1	WP0924	8259-04
1	1	0	PT-HG-WP	WP Mercury	WP0924	8259-05
1	1	0	PT-SNTI-WP	WP Tin & Titanium	WP0924	8259-38
1	1	0	PT-CR6-WP	WP Hexavalent Chromium	WP0924	8259-06
1	1	0	PT-DEM-WP	WP Demand	WP0924	8259-07
			PT-MINSET-WP	WP Minerals Set : (MIN1, MIN2 and COND)		
1	1	0	PT-MIN1-WP	WP Minerals 1 Only	WP0924	8259-08
1	1	0	PT-MIN2-WP	WP Minerals 2 Only	WP0924	8259-102
1	1	0	PT-COND-WP	WP Conductivity Only	WP0924	8259-72
1	1	0	PT-SOL-WP	WP Solids	WP0924	8259-09
			PT-NUTSET-WP	WP Nutrients Set : (NUT1, NUT2 and NUT3)		
1	1	0	PT-NUT1-WP	WP NUT1 Simple Nutrients Only	WP0924	8259-10
1	1	0	PT-NUT2-WP	WP NUT2 - Complex Nutrients	WP0924	8259-11
1	1	0	PT-NUT3-WP	WP NUT3 - Nitrite Only	WP0924	8259-69
1	1	0	PT-OGR1L-WP	WP Oil and Grease 1L	WP0924	8259-103
1	1	0	PT-CL-WP	WP Residual Chlorine	WP0924	8259-13
1	1	0	PT-PH-WP	WP pH	WP0924	8259-15
1	1	0	PT-CN-WP	WP Cyanide	WP0924	8259-14
1	1	0	PT-PHEN-WP	WP Phenolics	WP0924	8259-16

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info@phenova.com
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For terms and conditions of your order, please visit:
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Ship To

Received by: SJ
9/5/2024
9:50

Chemtech - NJ
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
240802-01	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
1	1	0	PT-S2-WP	WP Sulfide	WP0924	8259-22
1	1	0	PT-SSOL-WP	WP Settleable Solids	WP0924	8259-17
1	1	0	PT-VSOL-WP	WP Volatile Solids	WP0924	8259-18
1	1	0	PT-TURB-WP	WP Turbidity	WP0924	8259-20
1	1	0	PT-SIO2-WP	WP Silica	WP0924	8259-21
1	1	0	PT-COL-WP	WP Color	WP0924	8259-51
1	1	0	PT-VOA-WP	WP Volatiles	WP0924	8259-26
1	1	0	PT-BN-WP	WP Base Neutrals	WP0924	8259-27
1	1	0	PT-ACIDS-WP	WP Acids	WP0924	8259-28
1	1	0	PT-PEST-WP	WP Pesticides	WP0924	8259-29
1	1	0	PT-CHLR-WP	WP Chlordane	WP0924	8259-30
1	1	0	PT-TXP-WP	WP Toxaphene	WP0924	8259-31
1	1	0	PT-PCBW-WP	WP PCBs in Water	WP0924	8259-32
1	1	0	PT-HERB-WP	WP Herbicides	WP0924	8259-36
1	1	0	RR-TPH1L-WP	WP TPH 1L	R39151	R39151-104
1	1	0	RR-PAH-WP	WP PAH-Low Level	R39151	R39151-37
1	1	0	RR-GAS-WP	WP Gasoline Range Organics	R39151	R39151-62
1	1	0	RR-DIES-WP	WP Diesel Range Organics	R39151	R39151-63
1	1	0	RR-8011-WP	WP EDB/DBCP/TCP	R39151	R39151-98
1	1	0	RR-TRIAZINE-WP	WP Triazine Pesticides	R39151	R39151-108

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488