

Cover Page

Order ID : Q2234

Project ID : Former Schlumberger STC PTC Site D3868221

Client : JACOBS Engineering Group, Inc.

Lab Sample Number

Q2234-01
Q2234-02
Q2234-03
Q2234-04
Q2234-05
Q2234-06
Q2234-07
Q2234-08
Q2234-09
Q2234-10
Q2234-11
Q2234-12
Q2234-13

Client Sample Number

MW-17B-55-060425
Q2234-01MS
Q2234-01MSD
MW-17B-55-060425-SIM
MW-18B-56-060425
MW-18B-56-060425-FD
MW-19B-72-060425
MW-17B-55-060425
Q2234-08MS
Q2234-08MSD
MW-18B-56-060425
MW-18B-56-060425-FD
MW-19B-72-060425

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: 6/17/2025



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

CASE NARRATIVE

JACOBS Engineering Group, Inc.

Project Name: Former Schlumberger STC PTC Site D3868221

Project # N/A

Order ID # Q2234

Test Name: Dissolved ICP-Group2, Metals Group4

A. Number of Samples and Date of Receipt:

13 Water samples were received on 06/05/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Alkalinity, Anions Group1, Dissolved ICP-Group2, Dissolved Metals Group3, Mercury, Metals Group4, Metals ICP-TAL, METALS-TAL, SVOC-SIMGroup1, TDS, VOC-TRACE-SFAM and VOCMS Group3. This data package contains results for Dissolved ICP-Group2, Metals Group4.

C. Analytical Techniques:

The analysis of Dissolved ICP-Group2, Metals Group4 was based on method 6020B and digestion based on method 3010 (waters).

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike (MW-17B-55-060425MS) analysis met criteria for all samples except for Silver due to Chemical Interference during Digestion Process.

The Matrix Spike Duplicate (MW-17B-55-060425MSD) analysis met criteria for all samples except for Silver due to Chemical Interference during Digestion Process.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

The Serial Dilution met the acceptable requirements.

E. Additional Comments:

The Post Digest Spike (MW-17B-55-060425A) analysis met criteria for all elements except for Silver due to unknown chemical interference of matrix with the addition of spike amount after digestion and before analysis; matrix has suppression effect during addition of spike.

Sample Q2234-01, Q2234-05, Q2234-06, Q2234-07 analyzed as Total Metal and Sample Q2234-08, Q2234-11, Q2234-12, Q2234-13 analyzed as Dissolved Metal.



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

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

Signature_____

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2234

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 Custody

✓

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: MAHESH PATEL

Date: 06/17/2025

LAB CHRONICLE

OrderID:	Q2234	OrderDate:	6/5/2025 10:52:00 AM
Client:	JACOBS Engineering Group, Inc.	Project:	Former Schlumberger STC PTC Site D3868221
Contact:	John Ynfante	Location:	N31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2234-01	MW-17B-55-060425	Water	Metals Group4	6020B	06/04/25	06/09/25	06/11/25	06/05/25
Q2234-05	MW-18B-56-060425	Water	Metals Group4	6020B	06/04/25	06/09/25	06/11/25	06/05/25
Q2234-06	MW-18B-56-060425-F D	Water	Metals Group4	6020B	06/04/25	06/09/25	06/11/25	06/05/25
Q2234-07	MW-19B-72-060425	Water	Metals Group4	6020B	06/04/25	06/09/25	06/11/25	06/05/25
Q2234-08	MW-17B-55-060425	Water	Dissolved ICP-Group2	6020B	06/04/25	06/09/25	06/11/25	06/05/25
Q2234-11	MW-18B-56-060425	Water	Dissolved ICP-Group2	6020B	06/04/25	06/09/25	06/11/25	06/05/25
Q2234-12	MW-18B-56-060425-F D	Water	Dissolved ICP-Group2	6020B	06/04/25	06/09/25	06/11/25	06/05/25
Q2234-13	MW-19B-72-060425	Water	Dissolved ICP-Group2	6020B	06/04/25	06/09/25	06/11/25	06/05/25



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Hit Summary Sheet
SW-846

SDG No.:	Q2234	Order ID:	Q2234
Client:	JACOBS Engineering Group, Inc.	Project ID:	Former Schlumberger STC PTC Site D386

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : Q2234-08	MW-17B-55-060425 MW-17B-55-060425	Water	Iron	6980		7.81	50.0	ug/L
Client ID : Q2234-11	MW-18B-56-060425 MW-18B-56-060425	Water	Iron	640		7.81	50.0	ug/L
Client ID : Q2234-12	MW-18B-56-060425-FD MW-18B-56-060425-FD	Water	Iron	673		7.81	50.0	ug/L
Client ID : Q2234-13	MW-19B-72-060425 MW-19B-72-060425	Water	Iron	22400		7.81	50.0	ug/L



SAMPLE DATA

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	06/04/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	06/05/25
Client Sample ID:	MW-17B-55-060425	SDG No.:	Q2234
Lab Sample ID:	Q2234-01	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.
7440-22-4	Silver	0.060	UN	1	0.060	1.00	ug/L	06/09/25 12:20	06/11/25 20:09	6020B	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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	06/04/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	06/05/25
Client Sample ID:	MW-18B-56-060425	SDG No.:	Q2234
Lab Sample ID:	Q2234-05	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.
7440-22-4	Silver	0.060	UN	1	0.060	1.00	ug/L	06/09/25 12:20	06/11/25 20:28	6020B	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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	06/04/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	06/05/25
Client Sample ID:	MW-18B-56-060425-FD	SDG No.:	Q2234
Lab Sample ID:	Q2234-06	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.
7440-22-4	Silver	0.060	UN	1	0.060	1.00	ug/L	06/09/25 12:20	06/11/25 20:31	6020B	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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	06/04/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	06/05/25
Client Sample ID:	MW-19B-72-060425	SDG No.:	Q2234
Lab Sample ID:	Q2234-07	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.
7440-22-4	Silver	0.060	UN	1	0.060	1.00	ug/L	06/09/25 12:20	06/11/25 20:44	6020B	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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	06/04/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	06/05/25
Client Sample ID:	MW-17B-55-060425	SDG No.:	Q2234
Lab Sample ID:	Q2234-08	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.
7439-89-6	Iron	6980	1	7.81		50.0	ug/L	06/09/25 12:20	06/11/25 20:47	6020B	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	Dissolved 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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	06/04/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	06/05/25
Client Sample ID:	MW-18B-56-060425	SDG No.:	Q2234
Lab Sample ID:	Q2234-11	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.
7439-89-6	Iron	640		1	7.81	50.0	ug/L	06/09/25 12:20	06/11/25 21:06	6020B	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	Dissolved 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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	06/04/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	06/05/25
Client Sample ID:	MW-18B-56-060425-FD	SDG No.:	Q2234
Lab Sample ID:	Q2234-12	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.
7439-89-6	Iron	673	1	7.81		50.0	ug/L	06/09/25 12:20	06/11/25 21:10	6020B	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	Dissolved 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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	06/04/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	06/05/25
Client Sample ID:	MW-19B-72-060425	SDG No.:	Q2234
Lab Sample ID:	Q2234-13	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.
7439-89-6	Iron	22400	1	7.81		50.0	ug/L	06/09/25 12:20	06/11/25 21:13	6020B	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	Dissolved 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



METAL CALIBRATION DATA

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q2234

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q2234 **SAS No.:** Q2234

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	Iron	2000	2000	100	90 - 110	P	06/11/2025	18:48	LB136121
	Silver	46.7	50.0	93	90 - 110	P	06/11/2025	18:48	LB136121

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q2234
Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q2234 **SAS No.:** Q2234
Initial Calibration Source: EPA
Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Iron	52.6	50.0	105	80 - 120	P	06/11/2025	19:00	LB136121
	Silver	1.07	1.0	107	80 - 120	P	06/11/2025	19:00	LB136121

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. SDG No.: Q2234
Contract: JACO05 Lab Code: CHEM Case No.: Q2234 SAS No.: Q2234
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	Iron	127000	125000	102	90 - 110	P	06/11/2025	19:29	LB136121
	Silver	536	500	107	90 - 110	P	06/11/2025	19:29	LB136121
CCV02	Iron	130000	125000	104	90 - 110	P	06/11/2025	19:52	LB136121
	Silver	515	500	103	90 - 110	P	06/11/2025	19:52	LB136121
CCV03	Iron	129000	125000	103	90 - 110	P	06/11/2025	20:35	LB136121
	Silver	505	500	101	90 - 110	P	06/11/2025	20:35	LB136121
CCV04	Iron	128000	125000	103	90 - 110	P	06/11/2025	21:16	LB136121
	Silver	509	500	102	90 - 110	P	06/11/2025	21:16	LB136121
CCV05	Iron	128000	125000	103	90 - 110	P	06/11/2025	21:34	LB136121
	Silver	525	500	105	90 - 110	P	06/11/2025	21:34	LB136121



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Metals

- 2b -

CRDL STANDARD FOR AA & ICP

Client: JACOBS Engineering Group, Inc.

SDG No.: Q2234

Contract: JACO05

Lab Code: CHEM

Case No.: Q2234

SAS No.: Q2234

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	Iron	51.8	50.0	104	70 - 130	P	06/11/2025	19:39	LB136121
	Silver	1.02	1.0	102	70 - 130	P	06/11/2025	19:39	LB136121



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Fax : 908 789 8922

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc.

SDG No.: Q2234

Contract: JACO05

Lab Code: CHEM

Case No.: Q2234

SAS No.: Q2234

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Iron	7.81	+/-25	U	50.0	P	06/11/2025	19:07	LB136121
	Silver	0.060	+/-0.5	U	1.00	P	06/11/2025	19:07	LB136121

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc.

SDG No.: Q2234

Contract: JACO05

Lab Code: CHEM

Case No.: Q2234

SAS No.: Q2234

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Iron	7.81	+/-25	U	50.0	P	06/11/2025	19:35	LB136121
	Silver	0.060	+/-0.5	U	1.00	P	06/11/2025	19:35	LB136121
CCB02	Iron	7.81	+/-25	U	50.0	P	06/11/2025	19:58	LB136121
	Silver	0.060	+/-0.5	U	1.00	P	06/11/2025	19:58	LB136121
CCB03	Iron	7.81	+/-25	U	50.0	P	06/11/2025	20:41	LB136121
	Silver	0.060	+/-0.5	U	1.00	P	06/11/2025	20:41	LB136121
CCB04	Iron	7.81	+/-25	U	50.0	P	06/11/2025	21:23	LB136121
	Silver	0.060	+/-0.5	U	1.00	P	06/11/2025	21:23	LB136121
CCB05	Iron	7.81	+/-25	U	50.0	P	06/11/2025	21:45	LB136121
	Silver	0.060	+/-0.5	U	1.00	P	06/11/2025	21:45	LB136121

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc.

SDG No.: Q2234

Instrument: P7

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB168360BL		WATER		Batch Number:	PB168360		Prep Date:	06/09/2025	
	Iron	7.81	<25	U	50.0	P	06/11/2025	20:02	LB136121
	Silver	0.060	<0.5	U	1.00	P	06/11/2025	20:02	LB136121

Metals

- 4 -

INTERFERENCE CHECK SAMPLE

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q2234
Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q2234 **SAS No.:** Q2234
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	Iron	103000	100000	103	0	0	06/11/2025	19:10	LB136121
	Silver	0.050			-2	2	06/11/2025	19:10	LB136121
ICSAB01	Iron	102000	100000	102	0	0	06/11/2025	19:13	LB136121
	Silver	20.3	18.0	113	15.3	20.7	06/11/2025	19:13	LB136121



METAL QC DATA

metals
- 5a -
MATRIX SPIKE SUMMARY

client: <u>JACOBS Engineering Group, Inc.</u>	level: <u>low</u>	sdg no.: <u>Q2234</u>
contract: <u>JACO05</u>	lab code: <u>CHEM</u>	case no.: <u>Q2234</u> sas no.: <u>Q2234</u>
matrix: <u>Water</u>	sample id: <u>Q2234-01</u>	client id: <u>MW-17B-55-060425MS</u>
Percent Solids for Sample: <u>NA</u>	Spiked ID: <u>Q2234-02</u>	Percent Solids for Spike Sample: <u>NA</u>

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Iron	ug/L	75 - 125	26600		6790		25000	79		P
Silver	ug/L	75 - 125	82.8		1.00	U	500	17	N	P

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: JACOBS Engineering Group, Inc. **level:** low **sdg no.:** Q2234
contract: JACO05 **lab code:** CHEM **case no.:** Q2234 **sas no.:** Q2234
matrix: Water **sample id:** Q2234-01 **client id:** MW-17B-55-060425MSD
Percent Solids for Sample: NA **Spiked ID:** Q2234-03 **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Iron	ug/L	75 - 125	26600		6790		25000	79		P
Silver	ug/L	75 - 125	82.4		1.00	U	500	16	N	P

metals
- 5a -
MATRIX SPIKE SUMMARY

client: <u>JACOBS Engineering Group, Inc.</u>	level: <u>low</u>	sdg no.: <u>Q2234</u>
contract: <u>JACO05</u>	lab code: <u>CHEM</u>	case no.: <u>Q2234</u> sas no.: <u>Q2234</u>
matrix: <u>Water</u>	sample id: <u>Q2234-08</u>	client id: <u>MW-17B-55-060425MS</u>
Percent Solids for Sample: <u>NA</u>	Spiked ID: <u>Q2234-09</u>	Percent Solids for Spike Sample: <u>NA</u>

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Iron	ug/L	75 - 125	27300		6980		25000	81		P
Silver	ug/L	75 - 125	85.4		1.00	U	500	17	N	P

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: <u>JACOBS Engineering Group, Inc.</u>	level: <u>low</u>	sdg no.: <u>Q2234</u>
contract: <u>JACO05</u>	lab code: <u>CHEM</u>	case no.: <u>Q2234</u> sas no.: <u>Q2234</u>
matrix: <u>Water</u>	sample id: <u>Q2234-08</u>	client id: <u>MW-17B-55-060425MSD</u>
Percent Solids for Sample: <u>NA</u>	Spiked ID: <u>Q2234-10</u>	Percent Solids for Spike Sample: <u>NA</u>

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Iron	ug/L	75 - 125	26900		6980		25000	80		P
Silver	ug/L	75 - 125	85.7		1.00	U	500	17	N	P

Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q2234
Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q2234 **SAS No.:** Q2234
Matrix: Water **Level:** LOW **Client ID:** MW-17B-55-060425A
Sample ID: Q2234-01 **Spiked ID:** Q2234-01A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Silver	ug/L	75 - 125	82.0		1.00	U	500	16	N	P

Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q2234
Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q2234 **SAS No.:** Q2234
Matrix: Water **Level:** LOW **Client ID:** MW-17B-55-060425A
Sample ID: Q2234-08 **Spiked ID:** Q2234-08A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Silver	ug/L	75 - 125	84.7		1.00	U	500	17	N	P

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: JACOBS Engineering Group, Inc. **Level:** LOW **SDG No.:** Q2234
Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q2234 **SAS No.:** Q2234
Matrix: Water **Sample ID:** Q2234-01 **Client ID:** MW-17B-55-060425DUP
Percent Solids for Sample: NA **Duplicate ID** Q2234-01DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	6790		6740		1		P
Silver	ug/L	20	1.00	U	1.00	U			P

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: JACOBS Engineering Group, Inc. **Level:** LOW **SDG No.:** Q2234
Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q2234 **SAS No.:** Q2234
Matrix: Water **Sample ID:** Q2234-02 **Client ID:** MW-17B-55-060425MSD
Percent Solids for Sample: NA **Duplicate ID** Q2234-03 **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	26600		26600		0		P
Silver	ug/L	20	82.8		82.4		0		P

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: JACOBS Engineering Group, Inc. **Level:** LOW **SDG No.:** Q2234
Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q2234 **SAS No.:** Q2234
Matrix: Water **Sample ID:** Q2234-08 **Client ID:** MW-17B-55-060425DUP
Percent Solids for Sample: NA **Duplicate ID** Q2234-08DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	6980		7010		0		P
Silver	ug/L	20	1.00	U	1.00	U			P

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: JACOBS Engineering Group, Inc. **Level:** LOW **SDG No.:** Q2234
Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q2234 **SAS No.:** Q2234
Matrix: Water **Sample ID:** Q2234-09 **Client ID:** MW-17B-55-060425MSD
Percent Solids for Sample: NA **Duplicate ID** Q2234-10 **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	27300		26900		1		P
Silver	ug/L	20	85.4		85.7		0		P

Metals

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: JACOBS Engineering Group, Inc.

SDG No.: Q2234

Contract: JACO05

Lab Code: CHEM

Case No.: Q2234

SAS No.: Q2234

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB168360BS							
Iron	ug/L	25000	23800		95	80 - 120	P
Silver	ug/L	500	493		99	80 - 120	P

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: JACOBS Engineering Group, Inc.

Contract: JACO05

Lab Code: CHEM Case no.: Q2234

Sas No.: Q2234 SDG No.: Q2234

Instrument ID: P7

Start Date : 06/11/2025

Run Number: LB136121

End Date : 06/11/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 6Li	Q	Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q
S0	S0	1800	100		100		100		100		100	
S2	S2	1807	100		104		100		100		101	
S3	S3	1814	104		105		103		104		103	
S4	S4	1818	103		105		103		102		103	
S5	S5	1821	103		103		101		99		102	
S6	S6	1824	102		101		103		101		107	
S7	S7	1827	100		101		103		99		107	
S8	S8	1830	101		105		103		96		104	
ICV01	ICV01	1848	97		103		103		103		104	
LLICV01	LLICV01	1900	96		105		104		103		102	
ICB01	ICB01	1907	96		103		104		102		103	
ICSA01	ICSA01	1910	97		104		103		101		107	
ICSAB01	ICSAB01	1913	96		103		105		101		110	
CCV01	CCV01	1929	93		102		103		98		104	
CCB01	CCB01	1935	97		104		105		103		105	
CRI	CRI	1939	97		103		104		103		105	
ZZZZZZ	ZZZZZZ	1942										
ZZZZZZ	ZZZZZZ	1948										
CCV02	CCV02	1952	103		109		108		102		110	
CCB02	CCB02	1958	99		104		106		104		106	
PB168360BL	PB168360BL	2002	99		104		106		105		108	
PB168360BS	PB168360BS	2005	100		107		108		104		110	
Q2234-01	MW-17B-55-0	2009	107		119		118		117		121	
Q2234-01DUP	MW-17B-55-0	2012	104		118		119		118		121	
Q2234-01L	MW-17B-55-0	2016	96		109		110		109		112	
Q2234-02	MW-17B-55-0	2019	104		120		120		114		122	
Q2234-03	MW-17B-55-0	2022	104		117		119		117		121	
Q2234-01A	MW-17B-55-0	2025	103		118		120		115		122	
Q2234-05	MW-18B-56-0	2028	102		119		119		119		120	
Q2234-06	MW-18B-56-0	2031	102		117		122		118		122	
CCV03	CCV03	2035	95		107		110		102		113	
CCB03	CCB03	2041	95		103		106		105		108	
Q2234-07	MW-19B-72-0	2044	97		109		110		108		113	
Q2234-08	MW-17B-55-0	2047	101		120		122		115		124	
Q2234-08DUP	MW-17B-55-0	2051	105		119		121		117		122	
Q2234-08L	MW-17B-55-0	2054	93		108		110		108		112	

Internal Standard %RI Limit: 70 - 130

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: JACOBS Engineering Group, Inc.

Contract: JACO05

Lab Code: CHEM Case no.: Q2234

Sas No.: Q2234 SDG No.: Q2234

Instrument ID: P7

Start Date : 06/11/2025

Run Number: LB136121

End Date : 06/11/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 6Li	Q	Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q
Q2234-09	MW-17B-55-0	2057	105		121		121		117		122	
Q2234-10	MW-17B-55-0	2100	104		117		120		114		121	
Q2234-08A	MW-17B-55-0	2103	104		117		122		117		124	
Q2234-11	MW-18B-56-0	2106	101		121		121		121		125	
Q2234-12	MW-18B-56-0	2110	101		119		122		119		124	
Q2234-13	MW-19B-72-0	2113	101		117		121		117		122	
CCV04	CCV04	2116	93		108		112		104		115	
CCB04	CCB04	2123	93		107		109		108		110	

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: JACOBS Engineering Group, Inc.

Contract: JACO05

Lab Code: CHEM Case no.: Q2234

Sas No.: Q2234 SDG No.: Q2234

Instrument ID: P7

Start Date : 06/11/2025

Run Number: LB136121

End Date : 06/11/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q	Element 165Ho	Q
S0	S0	1800	100		100		100		100		100	
S2	S2	1807	101		100		100		99		101	
S3	S3	1814	103		102		102		105		104	
S4	S4	1818	100		100		100		103		101	
S5	S5	1821	100		100		99		103		104	
S6	S6	1824	102		100		99		104		103	
S7	S7	1827	102		103		100		106		107	
S8	S8	1830	103		102		95		105		105	
ICV01	ICV01	1848	102		103		103		105		105	
LLICV01	LLICV01	1900	101		103		103		105		104	
ICB01	ICB01	1907	101		102		103		104		105	
ICSA01	ICSA01	1910	101		102		100		105		106	
ICSAB01	ICSAB01	1913	101		102		100		106		106	
CCV01	CCV01	1929	104		104		98		106		106	
CCB01	CCB01	1935	101		103		103		104		105	
CRI	CRI	1939	100		103		103		104		104	
ZZZZZZ	ZZZZZZ	1942										
ZZZZZZ	ZZZZZZ	1948										
CCV02	CCV02	1952	106		107		100		107		109	
CCB02	CCB02	1958	103		104		104		105		105	
PB168360BL	PB168360BL	2002	102		104		104		105		106	
PB168360BS	PB168360BS	2005	105		105		103		109		109	
Q2234-01	MW-17B-55-0	2009	114		115		114		116		117	
Q2234-01DUP	MW-17B-55-0	2012	114		116		115		117		118	
Q2234-01L	MW-17B-55-0	2016	105		108		107		108		109	
Q2234-02	MW-17B-55-0	2019	114		114		112		117		117	
Q2234-03	MW-17B-55-0	2022	113		115		112		117		116	
Q2234-01A	MW-17B-55-0	2025	114		115		113		118		118	
Q2234-05	MW-18B-56-0	2028	113		115		114		118		118	
Q2234-06	MW-18B-56-0	2031	112		116		114		118		117	
CCV03	CCV03	2035	105		106		100		108		109	
CCB03	CCB03	2041	102		104		103		105		106	
Q2234-07	MW-19B-72-0	2044	86		88		87		90		89	
Q2234-08	MW-17B-55-0	2047	115		117		115		118		119	
Q2234-08DUP	MW-17B-55-0	2051	114		117		115		119		120	
Q2234-08L	MW-17B-55-0	2054	105		109		108		110		110	

Internal Standard %RI Limit: 70 - 130

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: JACOBS Engineering Group, Inc.

Contract: JACO05

Lab Code: CHEM Case no.: Q2234

Sas No.: Q2234 SDG No.: Q2234

Instrument ID: P7

Start Date : 06/11/2025

Run Number: LB136121

End Date : 06/11/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q	Element 165Ho	Q
Q2234-09	MW-17B-55-0	2057	113		116		113		119		119	
Q2234-10	MW-17B-55-0	2100	115		115		113		118		118	
Q2234-08A	MW-17B-55-0	2103	115		116		113		119		118	
Q2234-11	MW-18B-56-0	2106	116		117		116		120		120	
Q2234-12	MW-18B-56-0	2110	114		117		115		120		119	
Q2234-13	MW-19B-72-0	2113	113		116		114		119		120	
CCV04	CCV04	2116	106		109		103		109		111	
CCB04	CCB04	2123	105		106		107		110		110	

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: JACOBS Engineering Group, Inc.

Contract: JACO05

Lab Code: CHEM Case no.: Q2234

Sas No.: Q2234 SDG No.: Q2234

Instrument ID: P7

Start Date : 06/11/2025

Run Number: LB136121

End Date : 06/11/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 165Ho	Q	Element 209Bi	Q	Element	Q	Element	Q	Element	Q
S0	S0	1800	100		100							
S2	S2	1807	99		101							
S3	S3	1814	103		105							
S4	S4	1818	102		105							
S5	S5	1821	105		105							
S6	S6	1824	105		106							
S7	S7	1827	106		105							
S8	S8	1830	105		98							
ICV01	ICV01	1848	103		104							
LLICV01	LLICV01	1900	105		104							
ICB01	ICB01	1907	101		103							
ICSA01	ICSA01	1910	105		103							
ICSAB01	ICSAB01	1913	108		106							
CCV01	CCV01	1929	104		99							
CCB01	CCB01	1935	105		104							
CRI	CRI	1939	105		104							
ZZZZZZ	ZZZZZZ	1942										
ZZZZZZ	ZZZZZZ	1948										
CCV02	CCV02	1952	111		104							
CCB02	CCB02	1958	106		104							
PB168360BL	PB168360BL	2002	109		107							
PB168360BS	PB168360BS	2005	109		107							
Q2234-01	MW-17B-55-06	2009	120		118							
Q2234-01DUP	MW-17B-55-06	2012	119		117							
Q2234-01L	MW-17B-55-06	2016	110		110							
Q2234-02	MW-17B-55-06	2019	122		117							
Q2234-03	MW-17B-55-06	2022	123		117							
Q2234-01A	MW-17B-55-06	2025	120		118							
Q2234-05	MW-18B-56-06	2028	123		118							
Q2234-06	MW-18B-56-06	2031	122		117							
CCV03	CCV03	2035	112		105							
CCB03	CCB03	2041	108		107							
Q2234-07	MW-19B-72-06	2044	112		110							
Q2234-08	MW-17B-55-06	2047	123		119							

Internal Standard %RI Limit: 70 -130

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: JACOBS Engineering Group, Inc.

Contract: JACO05

Lab Code: CHEM Case no.: Q2234

Sas No.: Q2234 SDG No.: Q2234

Instrument ID: P7

Start Date : 06/11/2025

Run Number: LB136121

End Date : 06/11/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 165Ho	Q	Element 209Bi	Q	Element	Q	Element	Q	Element	Q
Q2234-08DUP	MW-17B-55-06	2051	123		121							
Q2234-08L	MW-17B-55-06	2054	111		110							
Q2234-09	MW-17B-55-06	2057	124		120							
Q2234-10	MW-17B-55-06	2100	122		119							
Q2234-08A	MW-17B-55-06	2103	123		120							
Q2234-11	MW-18B-56-06	2106	125		121							
Q2234-12	MW-18B-56-06	2110	125		120							
Q2234-13	MW-19B-72-06	2113	123		120							
CCV04	CCV04	2116	114		106							
CCB04	CCB04	2123	110		109							

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: JACOBS Engineering Group, Inc.

Contract: JAC005

Lab Code: CHEM Case no.: Q2234

Sas No.: Q2234 SDG No.: Q2234

Instrument ID: P7

Start Date : 06/11/2025

Run Number: LB136121

End Date : 06/11/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
S0	S0	1800	100									
S2	S2	1807	100									
S3	S3	1814	103									
S4	S4	1818	103									
S5	S5	1821	103									
S6	S6	1824	102									
S7	S7	1827	103									
S8	S8	1830	95									
ICV01	ICV01	1848	104									
LLICV01	LLICV01	1900	103									
ICB01	ICB01	1907	103									
ICSA01	ICSA01	1910	102									
ICSAB01	ICSAB01	1913	103									
CCV01	CCV01	1929	98									
CCB01	CCB01	1935	103									
CRI	CRI	1939	103									
ZZZZZZ	ZZZZZZ	1942										
ZZZZZZ	ZZZZZZ	1948										
CCV02	CCV02	1952	101									
CCB02	CCB02	1958	104									
PB168360BL	PB168360BL	2002	105									
PB168360BS	PB168360BS	2005	104									
Q2234-01	MW-17B-55-06	2009	116									
Q2234-01DUP	MW-17B-55-06	2012	115									
Q2234-01L	MW-17B-55-06	2016	108									
Q2234-02	MW-17B-55-06	2019	113									
Q2234-03	MW-17B-55-06	2022	114									
Q2234-01A	MW-17B-55-06	2025	114									
Q2234-05	MW-18B-56-06	2028	114									
Q2234-06	MW-18B-56-06	2031	113									
CCV03	CCV03	2035	100									
CCB03	CCB03	2041	105									
Q2234-07	MW-19B-72-06	2044	88									
Q2234-08	MW-17B-55-06	2047	116									

Internal Standard %RI Limit: 70 -130

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: JACOBS Engineering Group, Inc.

Contract: JACO05

Lab Code: CHEM Case no.: Q2234

Sas No.: Q2234 SDG No.: Q2234

Instrument ID: P7

Start Date : 06/11/2025

Run Number: LB136121

End Date : 06/11/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
Q2234-08DUP	MW-17B-55-06	2051	117									
Q2234-08L	MW-17B-55-06	2054	109									
Q2234-09	MW-17B-55-06	2057	115									
Q2234-10	MW-17B-55-06	2100	115									
Q2234-08A	MW-17B-55-06	2103	114									
Q2234-11	MW-18B-56-06	2106	116									
Q2234-12	MW-18B-56-06	2110	115									
Q2234-13	MW-19B-72-06	2113	115									
CCV04	CCV04	2116	103									
CCB04	CCB04	2123	107									

Metals

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ICP SERIAL DILUTIONS

SAMPLE NO.

MW-17B-55-060425L

Lab Name: Chemtech Consulting Group

Contract: JACO05

Lab Code: CHEM **Lb No.:** lb136121 **Lab Sample ID :** Q2234-01L **SDG No.:** Q2234

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

Concentration Units: ug/L

Analyte	Initial Sample Result (I)		Serial Dilution Result (S)		% Differ- ence	Q	M
Iron	6790	C	6620	C	3		P
Silver	1.00	U	5.00	U			P

Metals

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ICP SERIAL DILUTIONS

SAMPLE NO.

MW-17B-55-060425L

Lab Name: Chemtech Consulting Group

Contract: JACO05

Lab Code: CHEM **Lb No.:** lb136121 **Lab Sample ID :** Q2234-08L **SDG No.:** Q2234

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

Concentration Units: ug/L

Analyte	Initial Sample Result (I)		C	Serial Dilution Result (S)		C	% Differ- ence	Q	M
Iron		6980			6960		0		P
Silver		1.00	U		5.00	U			P



METAL PREPARATION & INSTRUMENT DATA



METAL PREPARATION & ANALYICAL SUMMARY

Metals

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SAMPLE PREPARATION SUMMARY

Client:	<u>JACOBS Engineering Group, Inc.</u>	SDG No.:	<u>Q2234</u>
Contract:	<u>JACO05</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>Q2234</u>
		SAS No.:	<u>Q2234</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB168360							
PB168360BL	PB168360BL	MB	WATER	06/09/2025	50.0	50.0	
PB168360BS	PB168360BS	LCS	WATER	06/09/2025	50.0	50.0	
Q2234-01	MW-17B-55-060425	SAM	WATER	06/09/2025	50.0	50.0	
Q2234-01DUP	MW-17B-55-060425DUP	DUP	WATER	06/09/2025	50.0	50.0	
Q2234-02	MW-17B-55-060425MS	MS	WATER	06/09/2025	50.0	50.0	
Q2234-03	MW-17B-55-060425MSD	MSD	WATER	06/09/2025	50.0	50.0	
Q2234-05	MW-18B-56-060425	SAM	WATER	06/09/2025	50.0	50.0	
Q2234-06	MW-18B-56-060425-FD	SAM	WATER	06/09/2025	50.0	50.0	
Q2234-07	MW-19B-72-060425	SAM	WATER	06/09/2025	50.0	50.0	
Q2234-08	MW-17B-55-060425	SAM	WATER	06/09/2025	50.0	50.0	
Q2234-08DUP	MW-17B-55-060425DUP	DUP	WATER	06/09/2025	50.0	50.0	
Q2234-09	MW-17B-55-060425MS	MS	WATER	06/09/2025	50.0	50.0	
Q2234-10	MW-17B-55-060425MSD	MSD	WATER	06/09/2025	50.0	50.0	
Q2234-11	MW-18B-56-060425	SAM	WATER	06/09/2025	50.0	50.0	
Q2234-12	MW-18B-56-060425-FD	SAM	WATER	06/09/2025	50.0	50.0	
Q2234-13	MW-19B-72-060425	SAM	WATER	06/09/2025	50.0	50.0	

metals
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ANALYSIS RUN LOG

Client: JACOBS Engineering Group, Inc.

Contract: JACO05

Lab code: CHEM **Case no.:** Q2234 **Sas no.:** Q2234

Sdg no.: Q2234

Instrument id number: **Method:**

Run number: LB136121

Start date: 06/11/2025 **End date:** 06/11/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1800	Fe,Ag
S2	S2	1	1807	Fe,Ag
S3	S3	1	1814	Fe,Ag
S4	S4	1	1818	Fe,Ag
S5	S5	1	1821	Fe,Ag
S6	S6	1	1824	Fe,Ag
S7	S7	1	1827	Fe,Ag
S8	S8	1	1830	Fe
ICV01	ICV01	1	1848	Fe,Ag
LLICV01	LLICV01	1	1900	Fe,Ag
ICB01	ICB01	1	1907	Fe,Ag
ICSA01	ICSA01	1	1910	Fe,Ag
ICSAB01	ICSAB01	1	1913	Fe,Ag
CCV01	CCV01	1	1929	Fe,Ag
CCB01	CCB01	1	1935	Fe,Ag
CRI	CRI	1	1939	Fe,Ag
CCV02	CCV02	1	1952	Fe,Ag
CCB02	CCB02	1	1958	Fe,Ag
PB168360BL	PB168360BL	1	2002	Ag,Fe
PB168360BS	PB168360BS	1	2005	Ag,Fe
Q2234-01	MW-17B-55-060425	1	2009	Ag
Q2234-01DUP	MW-17B-55-060425DUP	1	2012	Ag,Fe
Q2234-01L	MW-17B-55-060425L	5	2016	Ag,Fe
Q2234-02	MW-17B-55-060425MS	1	2019	Ag,Fe
Q2234-03	MW-17B-55-060425MSD	1	2022	Ag,Fe
Q2234-01A	MW-17B-55-060425A	1	2025	Ag
Q2234-05	MW-18B-56-060425	1	2028	Ag
Q2234-06	MW-18B-56-060425-FD	1	2031	Ag
CCV03	CCV03	1	2035	Fe,Ag
CCB03	CCB03	1	2041	Fe,Ag
Q2234-07	MW-19B-72-060425	1	2044	Ag
Q2234-08	MW-17B-55-060425	1	2047	Fe
Q2234-08DUP	MW-17B-55-060425DUP	1	2051	Ag,Fe
Q2234-08L	MW-17B-55-060425L	5	2054	Ag,Fe
Q2234-09	MW-17B-55-060425MS	1	2057	Ag,Fe
Q2234-10	MW-17B-55-060425MSD	1	2100	Ag,Fe
Q2234-08A	MW-17B-55-060425A	1	2103	Ag
Q2234-11	MW-18B-56-060425	1	2106	Fe
Q2234-12	MW-18B-56-060425-FD	1	2110	Fe
Q2234-13	MW-19B-72-060425	1	2113	Fe
CCV04	CCV04	1	2116	Fe,Ag

metals
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ANALYSIS RUN LOG

Client: JACOBS Engineering Group, Inc.

Contract: JACO05

Lab code: CHEM **Case no.:** Q2234 **Sas no.:** Q2234

Sdg no.: Q2234

Instrument id number: **Method:**

Run number: LB136121

Start date: 06/11/2025 **End date:** 06/11/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
CCB04	CCB04	1	2123	Fe,Ag
CCV05	CCV05	1	2134	Fe,Ag
CCB05	CCB05	1	2145	Fe,Ag



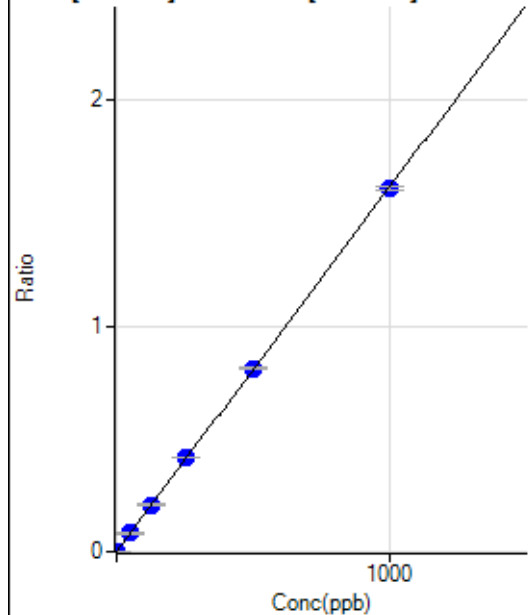
METAL RAW DATA

Batch Folder: D:\Agilent\ICPMH\1\DATA\P7032125 MS.b\
Analysis File: P7032125 MS.batch.bin
DA Date-Time: 2025-06-11 19:51:10
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	012CALB.d	S00	2025-06-11 18:00:35
2	014CALS.d	S02	2025-06-11 18:07:26
3	016CALS.d	S03	2025-06-11 18:14:41
4	017CALS.d	S04	2025-06-11 18:18:04
5	018CALS.d	S05	2025-06-11 18:21:13
6	019CALS.d	S06	2025-06-11 18:24:17
7	020CALS.d	S07	2025-06-11 18:27:13
8	021CALS.d	S08	2025-06-11 18:30:05

Calibration for 029ICSA.d

9 Be [No Gas] ISTD:6 Li [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	23.42	0.0001	P	43.3
2	☐	1.000	1.160	683.44	0.0019	P	8.6
3	☐	50.000	50.212	29532.09	0.0812	P	1.3
4	☐	125.000	128.746	75494.75	0.2081	P	1.0
5	☐	250.000	259.059	150869.69	0.4186	P	1.3
6	☐	500.000	503.783	292587.56	0.8139	P	0.6
7	☐	1000.000	995.365	561983.89	1.6081	P	1.0
8	☐			97.30	0.0003	P	12.4

$$y = 0.0016 * x + 6.6829E-005$$

$$R = 0.9999$$

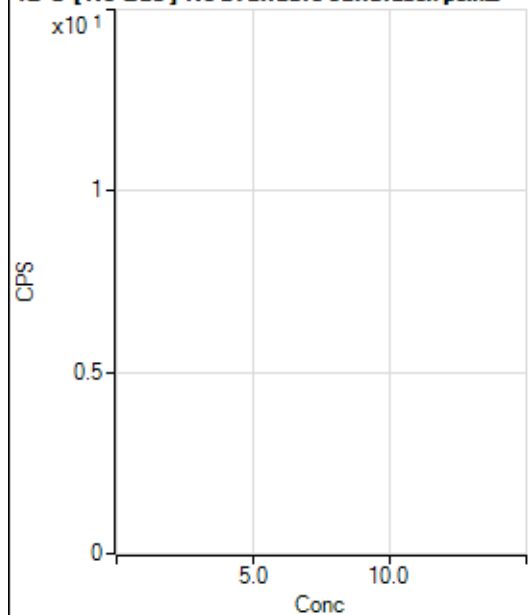
$$DL = 0.05374$$

$$BEC = 0.04137$$

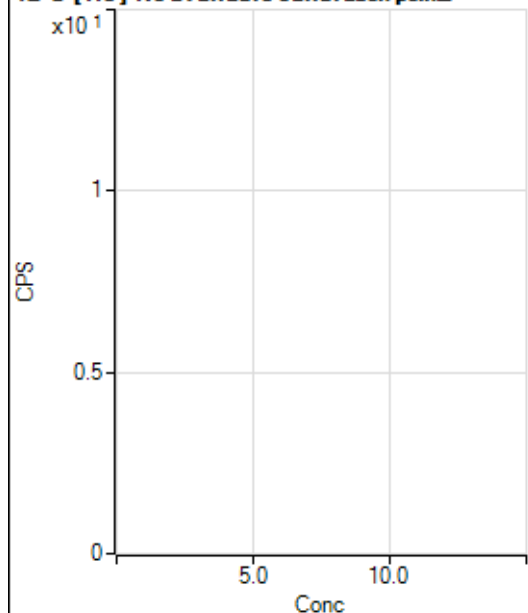
Weight: <None>

Min Conc: 0

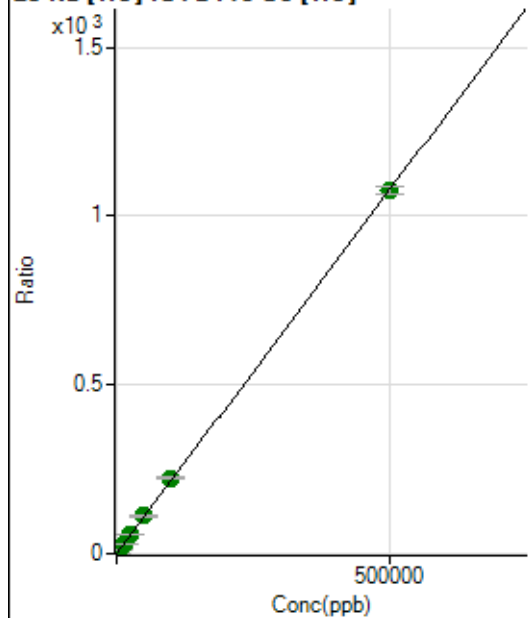
12 C [No Gas] No available calibration points



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

12 C [He] No available calibration points

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

23 Na [He] ISTD: 45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	10391.56	0.1013	P	1.5
2	☐	500.000	526.034	127478.00	1.2344	P	1.6
3	☐	5000.000	5215.725	1202760.58	11.3361	A	2.2
4	☐	12500.000	13605.961	3012866.27	29.4088	A	2.0
5	☐	25000.000	27159.050	6029285.75	58.6024	A	1.0
6	☐	50000.000	51620.320	11620476.49	111.2925	A	1.6
7	☐	100000.00	104214.88	23416273.26	224.5823	A	1.2
8	☐	500000.00	498857.20	113411413.8	1,074.650	A	2.2

$$y = 0.0022 * x + 0.1013$$

$$R = 1.0000$$

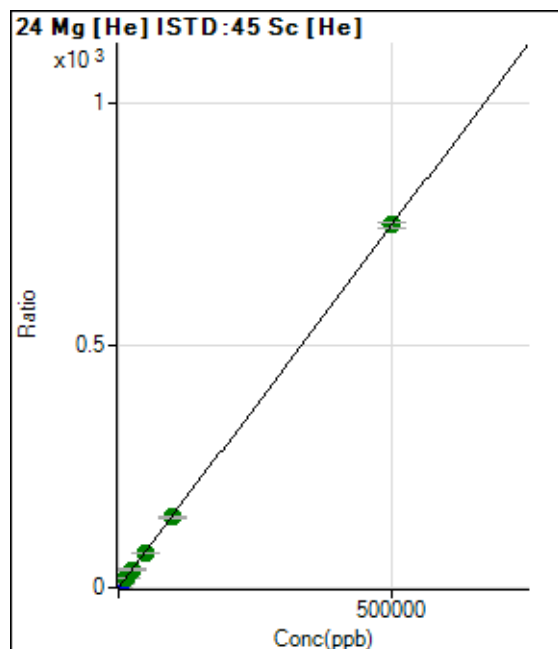
$$DL = 2.165$$

$$BEC = 47.01$$

Weight: <None>

Min Conc: 0

Calibration for 029ICSA.d



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	143.33	0.0014	P	3.7
2	☐	500.000	485.117	75077.83	0.7270	P	1.5
3	☐	5000.000	4436.243	704187.26	6.6365	P	1.2
4	☐	12500.000	12787.905	1959597.28	19.1278	A	1.3
5	☐	25000.000	25158.554	3871376.16	37.6301	A	1.2
6	☐	50000.000	48546.047	7581816.14	72.6099	A	1.2
7	☐	100000.00	97027.206	15129858.94	145.1213	A	0.8
8	☐	500000.00	500730.48	79027625.49	748.9249	A	1.5

$$y = 0.0015 * x + 0.0014$$

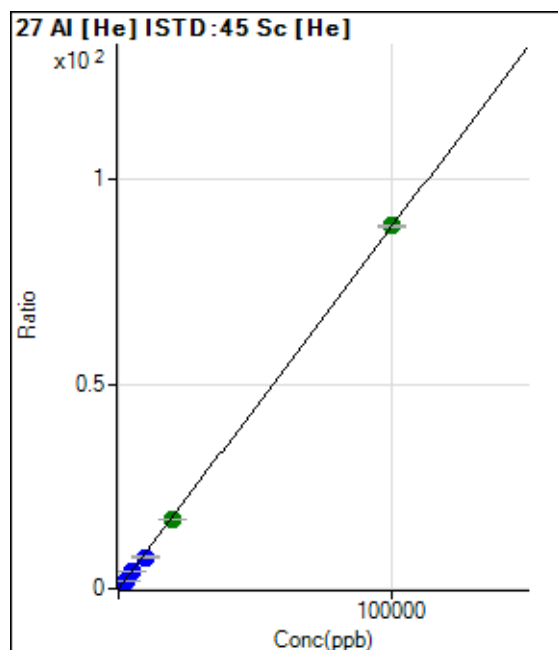
$$R = 1.0000$$

$$DL = 0.1036$$

$$BEC = 0.9338$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	170.44	0.0017	P	19.4
2	☐	20.000	19.019	1907.32	0.0185	P	4.3
3	☐	1000.000	894.144	83965.14	0.7914	P	1.8
4	☐	2500.000	2288.932	207267.52	2.0232	P	0.7
5	☐	5000.000	4552.040	413771.32	4.0220	P	1.4
6	☐	10000.000	8766.544	808627.02	7.7442	P	0.2
7	☐	20000.000	19158.233	1764338.44	16.9220	A	0.8
8	☐	100000.00	100320.43	9349186.10	88.6034	A	0.9

$$y = 8.8319E-004 * x + 0.0017$$

$$R = 0.9999$$

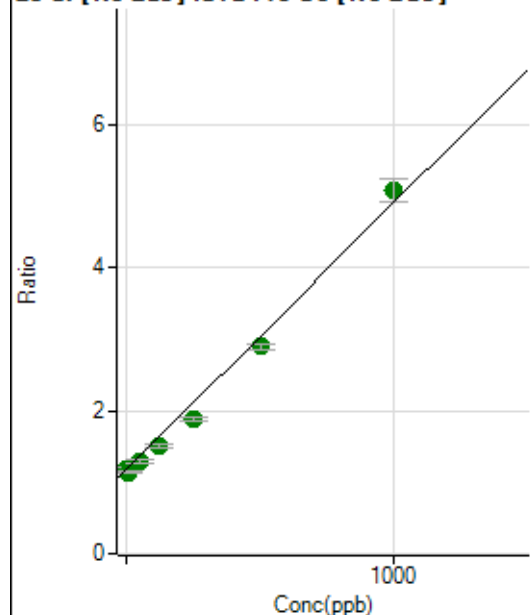
$$DL = 1.093$$

$$BEC = 1.882$$

Weight: <None>

Min Conc: 0

28 Si [No Gas] ISTD : 45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1418275.24	1.1732	A	5.5
2	☐	10.000	-10.102	1426983.61	1.1354	A	1.4
3	☐	50.000	31.229	1644636.97	1.2900	A	2.6
4	☐	125.000	88.365	1911102.19	1.5036	A	3.6
5	☐	250.000	188.403	2334242.08	1.8776	A	2.5
6	☐	500.000	458.849	3519265.78	2.8889	A	2.6
7	☐	1000.000	1041.694	6166325.54	5.0682	A	6.3
8	☐			1355043.47	1.0654	A	1.0

$$y = 0.0037 * x + 1.1732$$

$$R = 0.9972$$

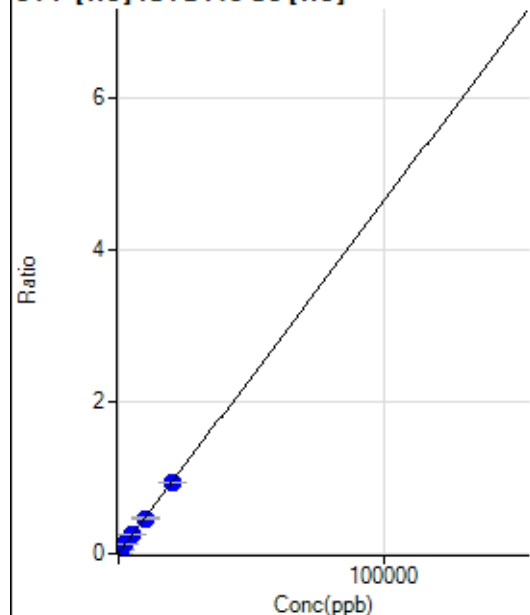
$$DL = 51.93$$

$$BEC = 313.8$$

Weight: <None>

Min Conc: 0

31 P [He] ISTD : 45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-18.649	441.12	0.0043	P	9.4
2	☐	0.000	18.649	623.35	0.0060	P	4.7
3	☐	1000.000	987.806	5428.79	0.0512	P	2.1
4	☐	2500.000	2589.622	12883.31	0.1258	P	1.0
5	☐	5000.000	5265.684	25757.34	0.2504	P	1.8
6	☐	10000.000	9931.817	48830.05	0.4677	P	1.8
7	☐	20000.000	19957.077	97421.31	0.9345	P	1.1
8	☐			492.24	0.0047	P	6.1

$$y = 4.6567E-005 * x + 0.0052$$

$$R = 0.9999$$

$$DL = 22.29$$

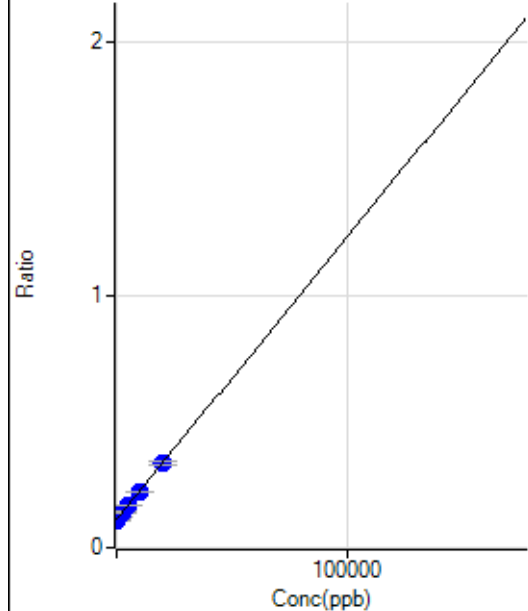
$$BEC = 111$$

Weight: <None>

Min Conc: 0

Calibration for 029ICSA.d

34 S [No Gas] ISTD : 45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	122.507	136264.20	0.1127	P	5.7
2	☐	0.000	-122.507	138224.66	0.1100	P	1.9
3	☐	1000.000	813.408	153599.20	0.1205	P	0.2
4	☐	2500.000	2498.429	177090.52	0.1393	P	2.3
5	☐	5000.000	5041.695	208551.05	0.1677	P	0.4
6	☐	10000.000	10006.995	272015.75	0.2233	P	0.6
7	☐	20000.000	19995.604	407748.88	0.3350	P	3.3
8	☐			117280.17	0.0922	P	2.1

$$y = 1.1184E-005 * x + 0.1114$$

R = 0.9999

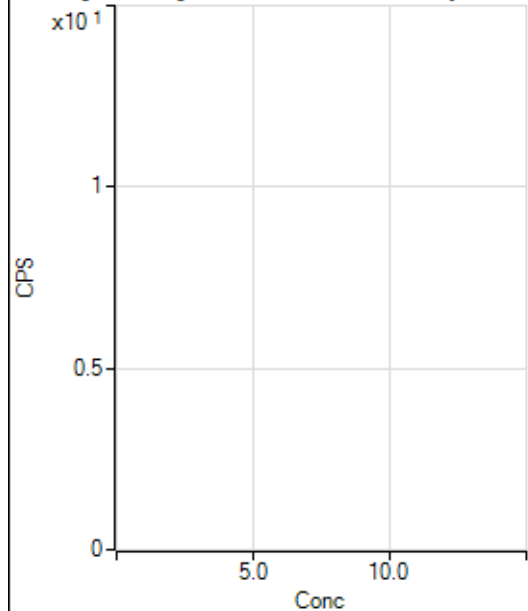
DL = 1141

BEC = 9957

Weight: <None>

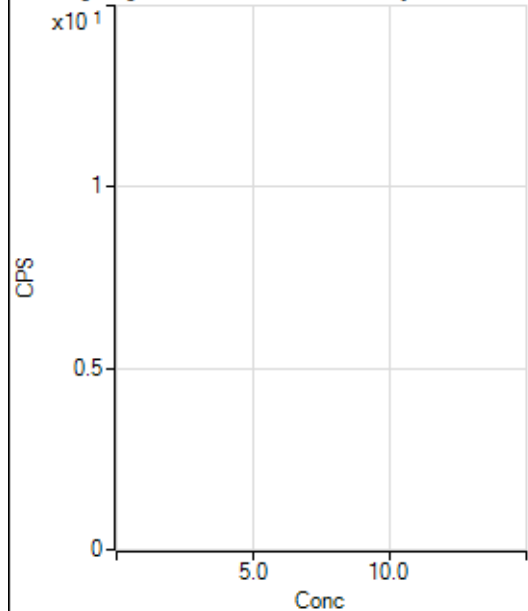
Min Conc: 0

35 Cl [No Gas] No available calibration points



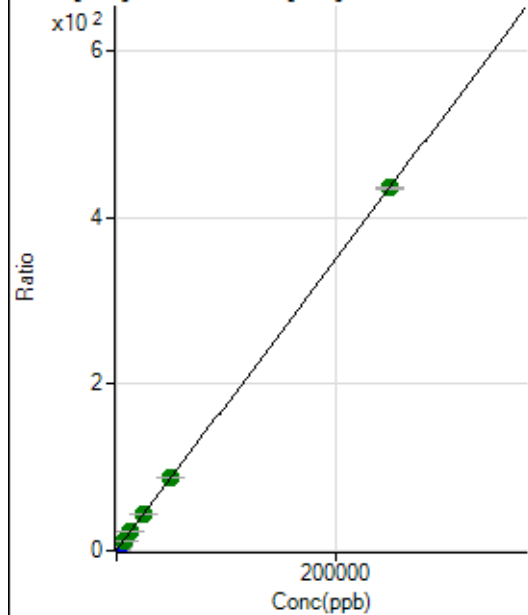
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

35 Cl [He] No available calibration points



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

39 K [He] ISTD : 45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	52763.25	0.5142	P	1.3
2	☐	500.000	534.643	149290.84	1.4455	P	1.0
3	☐	2500.000	2449.575	507342.72	4.7811	P	0.3
4	☐	6250.000	6487.049	1210272.70	11.8141	A	0.8
5	☐	12500.000	13045.972	2390957.51	23.2392	A	1.4
6	☐	25000.000	24898.929	4582568.85	43.8861	A	0.5
7	☐	50000.000	49833.480	9102871.46	87.3200	A	0.9
8	☐	250000.00	250010.62	46008030.43	436.0121	A	0.4

$$y = 0.0017 * x + 0.5142$$

$$R = 1.0000$$

$$DL = 11.55$$

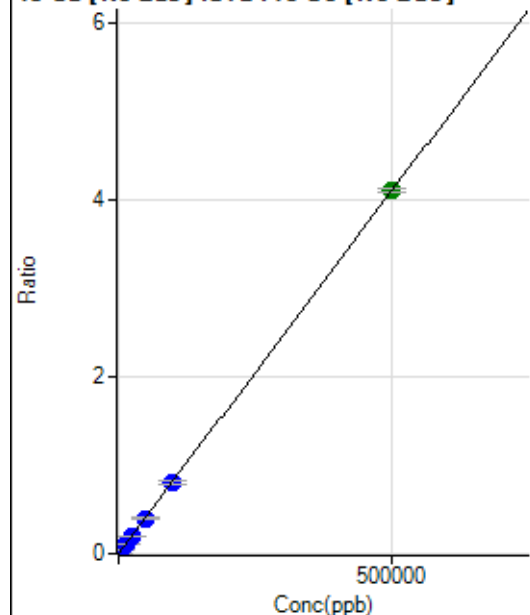
$$BEC = 295.2$$

Weight: <None>

Min Conc: 0

Calibration for 029ICSA.d

43 Ca [No Gas] ISTD:45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	302.23	0.0002	P	7.6
2	☐	500.000	519.057	5661.11	0.0045	P	4.3
3	☐	5000.000	4857.522	51104.60	0.0401	P	0.5
4	☐	12500.000	12387.352	129427.88	0.1018	P	2.5
5	☐	25000.000	24739.947	252492.37	0.2031	P	0.8
6	☐	50000.000	48973.475	489478.97	0.4018	P	1.2
7	☐	100000.00	98303.861	981241.77	0.8062	P	4.1
8	☐	500000.00	500459.10	5219054.47	4.1034	A	1.2

$$y = 8.1988E-006 * x + 2.4972E-004$$

$$R = 1.0000$$

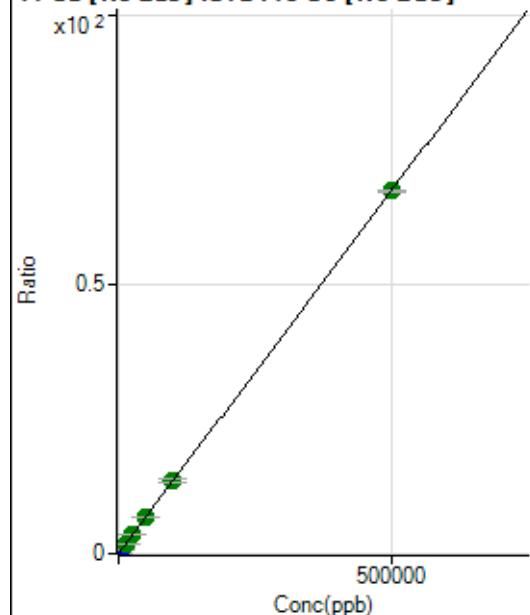
$$DL = 6.95$$

$$BEC = 30.46$$

Weight: <None>

Min Conc: 0

44 Ca [No Gas] ISTD:45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9712.11	0.0080	P	7.7
2	☐	500.000	528.650	99700.95	0.0793	P	2.2
3	☐	5000.000	4832.799	841263.63	0.6598	P	1.2
4	☐	12500.000	12666.526	2181978.70	1.7162	A	2.2
5	☐	25000.000	25504.429	4286115.32	3.4474	A	0.8
6	☐	50000.000	49953.575	8217861.89	6.7445	A	1.5
7	☐	100000.00	101075.04	16595415.17	13.6385	A	5.0
8	☐	500000.00	499761.89	85725913.16	67.4034	A	0.7

$$y = 1.3485E-004 * x + 0.0080$$

$$R = 1.0000$$

$$DL = 13.71$$

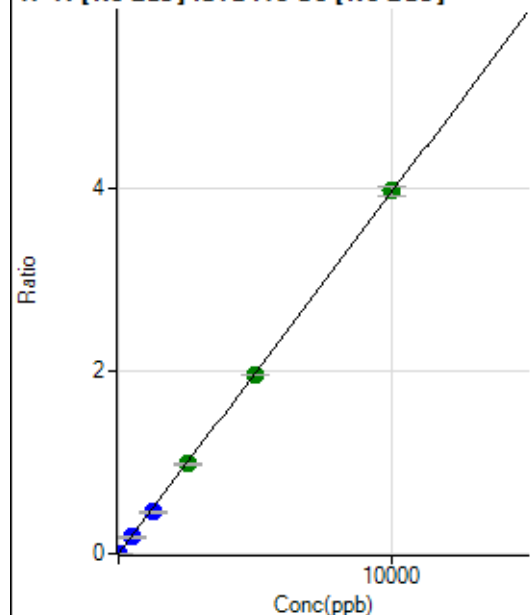
$$BEC = 59.62$$

Weight: <None>

Min Conc: 0

Calibration for 029ICSA.d

47 Ti [No Gas] ISTD:45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	67.78	0.0001	P	16.3
2	☐	5.000	4.749	2437.99	0.0019	P	2.7
3	☐	500.000	453.219	229251.83	0.1798	P	1.6
4	☐	1250.000	1147.346	578569.18	0.4551	P	2.1
5	☐	2500.000	2486.848	1226209.61	0.9863	A	1.5
6	☐	5000.000	4960.405	2396894.98	1.9673	A	0.3
7	☐	10000.000	10038.257	4846820.73	3.9811	A	2.5
8	☐			355.56	0.0003	P	13.5

$$y = 3.9659E-004 * x + 5.6106E-005$$

$$R = 0.9999$$

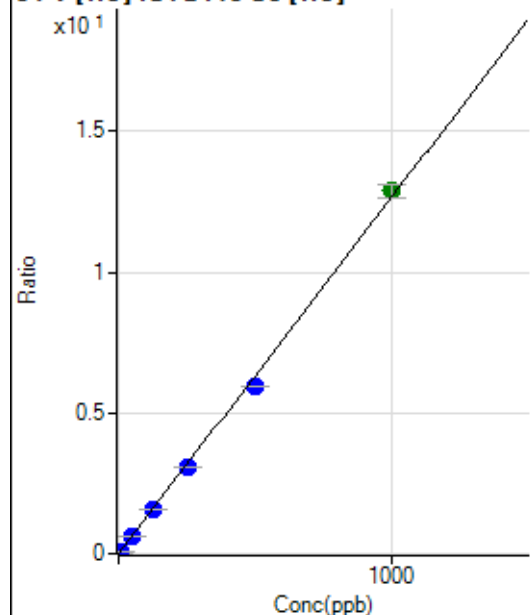
$$DL = 0.06915$$

$$BEC = 0.1415$$

Weight: <None>

Min Conc: 0

51 V [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0001	P	65.9
2	☐	5.000	5.367	7022.81	0.0680	P	2.2
3	☐	50.000	47.946	64348.80	0.6064	P	1.1
4	☐	125.000	122.429	158602.15	1.5482	P	0.8
5	☐	250.000	242.727	315783.73	3.0694	P	0.8
6	☐	500.000	467.463	617234.78	5.9112	P	0.1
7	☐	1000.000	1018.509	1342243.18	12.8791	A	4.0
8	☐			332.23	0.0031	P	2.8

$$y = 0.0126 * x + 1.2948E-004$$

$$R = 0.9992$$

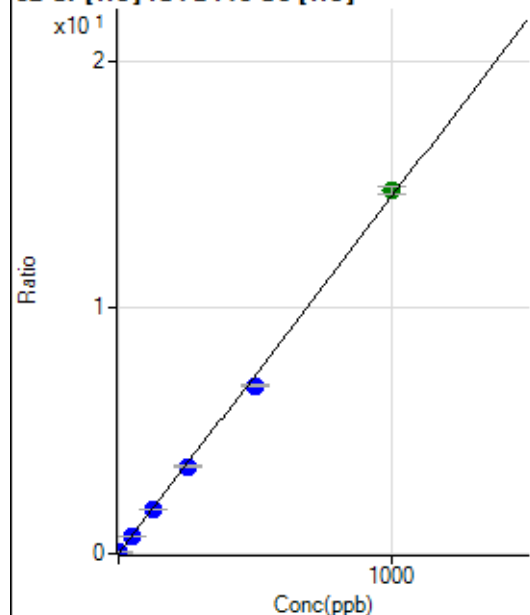
$$DL = 0.02024$$

$$BEC = 0.01024$$

Weight: <None>

Min Conc: 0

52 Cr [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	910.04	0.0089	P	8.4
2	☐	2.000	2.191	4196.18	0.0406	P	3.4
3	☐	50.000	48.108	74938.57	0.7063	P	2.2
4	☐	125.000	123.062	183671.79	1.7929	P	1.3
5	☐	250.000	244.626	365782.09	3.5553	P	0.8
6	☐	500.000	470.347	712913.20	6.8276	P	0.9
7	☐	1000.000	1016.507	1537012.02	14.7455	A	2.2
8	☐			3147.03	0.0298	P	5.3

$$y = 0.0145 * x + 0.0089$$

$$R = 0.9993$$

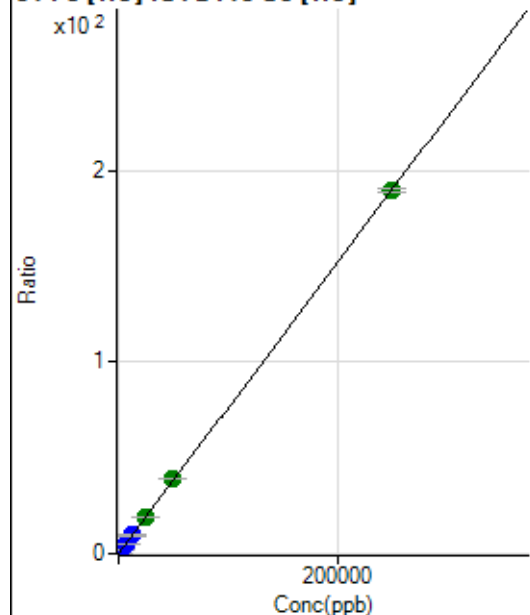
$$DL = 0.154$$

$$BEC = 0.6118$$

Weight: <None>

Min Conc: 0

54 Fe [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2002.38	0.0195	P	6.2
2	☐	50.000	56.993	6475.89	0.0627	P	2.5
3	☐	2500.000	2492.714	202439.36	1.9079	P	1.8
4	☐	6250.000	6377.461	496910.13	4.8508	P	1.1
5	☐	12500.000	12603.259	984294.67	9.5671	P	0.9
6	☐	25000.000	25414.581	2012393.13	19.2723	A	0.2
7	☐	50000.000	51205.701	4046039.24	38.8104	A	0.7
8	☐	250000.00	249709.12	19964014.70	189.1866	A	1.1

$$y = 7.5755E-004 * x + 0.0195$$

$$R = 1.0000$$

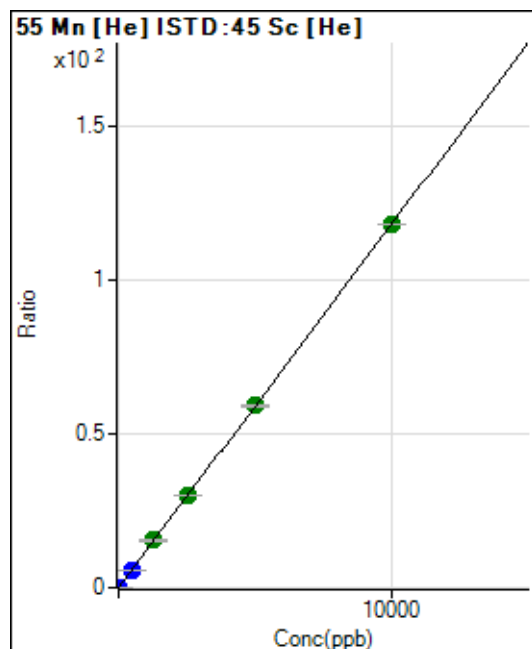
$$DL = 4.818$$

$$BEC = 25.76$$

Weight: <None>

Min Conc: 0

Calibration for 029ICSA.d



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	428.90	0.0042	P	4.5
2	☐	1.000	1.024	1683.45	0.0163	P	1.7
3	☐	500.000	466.700	586287.31	5.5254	P	1.2
4	☐	1250.000	1296.859	1572045.95	15.3466	A	1.8
5	☐	2500.000	2542.478	3094873.70	30.0828	A	1.3
6	☐	5000.000	5007.283	6185769.84	59.2424	A	1.8
7	☐	10000.000	9981.547	12311551.07	118.0900	A	0.2
8	☐			5698.91	0.0540	P	0.8

$$y = 0.0118 * x + 0.0042$$

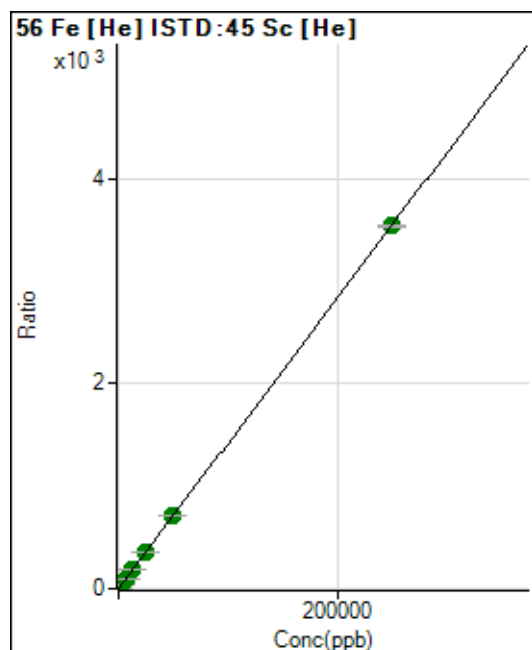
$$R = 1.0000$$

$$DL = 0.0479$$

$$BEC = 0.3532$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	15856.25	0.1545	P	0.1
2	☐	50.000	53.617	94281.57	0.9129	P	0.8
3	☐	2500.000	2506.142	3777423.56	35.6008	A	1.7
4	☐	6250.000	6386.535	9268891.67	90.4841	A	1.7
5	☐	12500.000	12773.525	18604051.67	180.8202	A	0.6
6	☐	25000.000	25047.526	37006471.12	354.4208	A	1.5
7	☐	50000.000	50169.333	73989137.23	709.7376	A	1.9
8	☐	250000.00	249944.22	373017056.6	3,535.306	A	0.7

$$y = 0.0141 * x + 0.1545$$

$$R = 1.0000$$

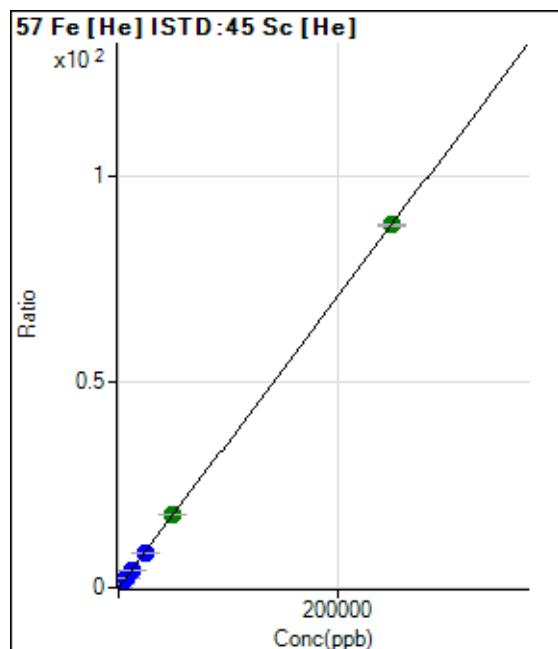
$$DL = 0.02203$$

$$BEC = 10.92$$

Weight: <None>

Min Conc: 0

Calibration for 029ICSA.d



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1538.98	0.0150	P	5.1
2	☐	50.000	55.124	3552.69	0.0344	P	3.4
3	☐	2500.000	2431.650	92412.02	0.8710	P	1.8
4	☐	6250.000	6238.752	226500.68	2.2111	P	1.2
5	☐	12500.000	12368.383	449462.58	4.3688	P	1.2
6	☐	25000.000	23754.955	874694.77	8.3769	P	0.5
7	☐	50000.000	50720.555	1862813.95	17.8690	A	1.0
8	☐	250000.00	249987.93	9286566.87	88.0127	A	0.7

$$y = 3.5201\text{E-}004 * x + 0.0150$$

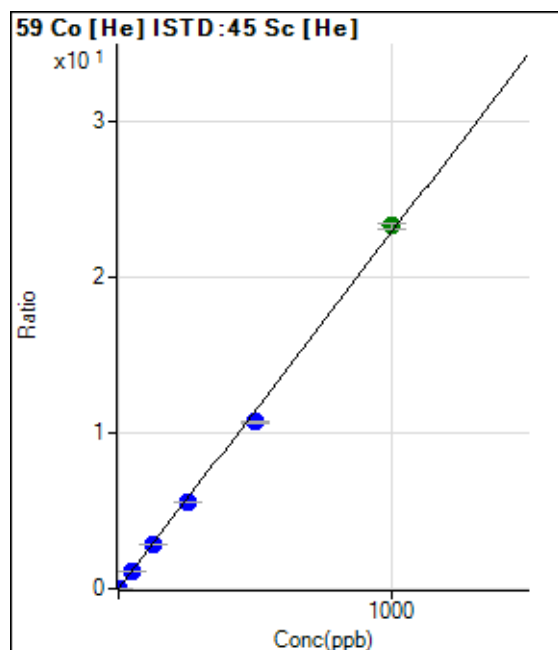
$$R = 1.0000$$

$$DL = 6.464$$

$$BEC = 42.59$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	86.67	0.0008	P	17.6
2	☐	1.000	1.137	2770.29	0.0268	P	4.7
3	☐	50.000	47.831	115979.43	1.0931	P	1.9
4	☐	125.000	123.192	288267.35	2.8140	P	1.3
5	☐	250.000	242.923	570795.07	5.5482	P	1.1
6	☐	500.000	467.738	1115386.99	10.6820	P	0.6
7	☐	1000.000	1018.235	2423891.98	23.2529	A	1.9
8	☐			4136.17	0.0392	P	1.5

$$y = 0.0228 * x + 8.4534\text{E-}004$$

$$R = 0.9992$$

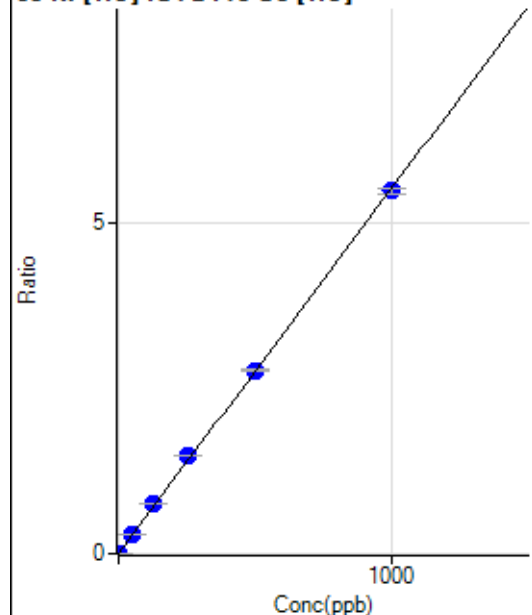
$$DL = 0.01956$$

$$BEC = 0.03702$$

Weight: <None>

Min Conc: 0

60 Ni [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	274.45	0.0027	P	9.5
2	☐	1.000	1.160	936.70	0.0091	P	10.5
3	☐	50.000	51.893	30682.53	0.2892	P	1.2
4	☐	125.000	137.505	78039.65	0.7618	P	0.8
5	☐	250.000	266.277	151518.81	1.4727	P	0.4
6	☐	500.000	500.971	289064.16	2.7684	P	1.1
7	☐	1000.000	993.787	572191.90	5.4890	P	1.5
8	☐			2087.95	0.0198	P	3.4

$$y = 0.0055 * x + 0.0027$$

$$R = 0.9998$$

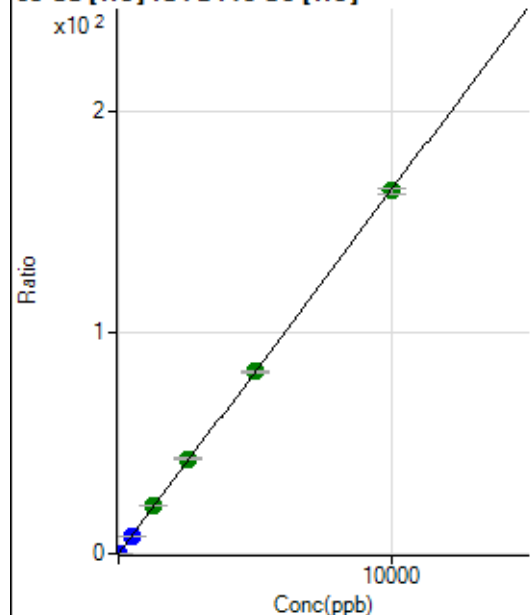
$$DL = 0.1382$$

$$BEC = 0.4846$$

Weight: <None>

Min Conc: 0

63 Cu [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1156.72	0.0113	P	8.2
2	☐	2.000	2.177	4860.83	0.0471	P	2.1
3	☐	500.000	473.692	827307.26	7.7972	P	1.7
4	☐	1250.000	1303.758	2196365.23	21.4408	A	1.3
5	☐	2500.000	2598.762	4395453.68	42.7264	A	2.8
6	☐	5000.000	5004.033	8589538.14	82.2611	A	0.7
7	☐	10000.000	9967.889	17080787.66	163.8506	A	1.2
8	☐			4088.37	0.0387	P	1.2

$$y = 0.0164 * x + 0.0113$$

$$R = 0.9999$$

$$DL = 0.1679$$

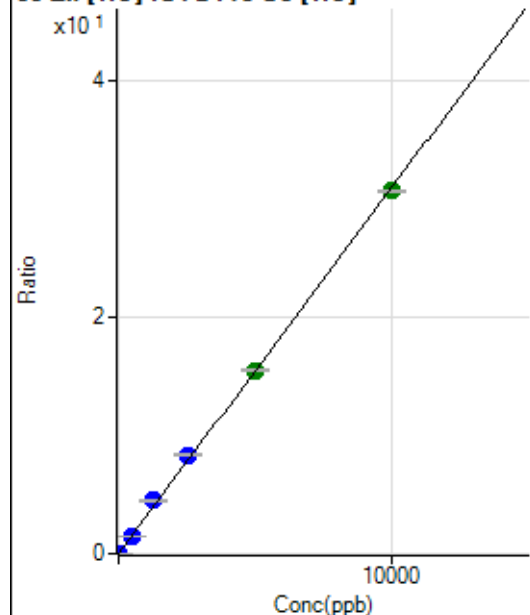
$$BEC = 0.686$$

Weight: <None>

Min Conc: 0

Calibration for 029ICSA.d

⁶⁶Zn [He] ISTD: ⁴⁵Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	303.34	0.0030	P	9.3
2	☐	5.000	5.559	2076.83	0.0201	P	3.6
3	☐	500.000	491.293	161202.46	1.5193	P	2.0
4	☐	1250.000	1446.583	457687.97	4.4677	P	0.3
5	☐	2500.000	2696.528	856563.52	8.3256	P	0.8
6	☐	5000.000	5016.315	1617002.04	15.4855	A	0.8
7	☐	10000.000	9918.573	3191777.80	30.6160	A	0.5
8	☐			13766.45	0.1305	P	3.7

$$y = 0.0031 * x + 0.0030$$

$$R = 0.9996$$

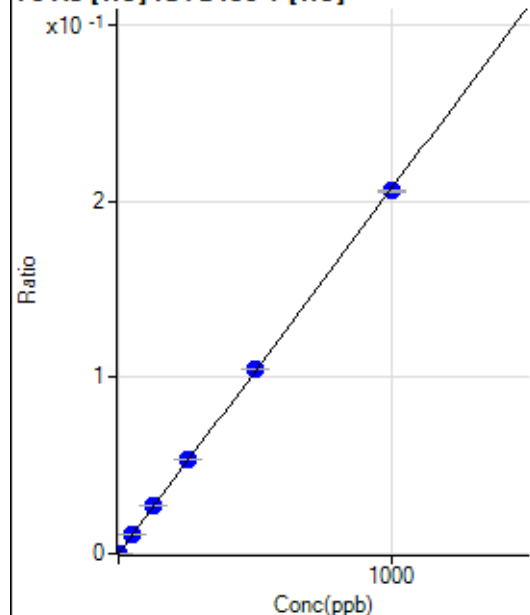
$$DL = 0.2658$$

$$BEC = 0.9574$$

Weight: <None>

Min Conc: 0

⁷⁵As [He] ISTD: ⁸⁹Y [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7.78	0.0000	P	23.6
2	☐	1.000	1.113	235.56	0.0002	P	19.2
3	☐	50.000	51.629	10784.00	0.0107	P	2.0
4	☐	125.000	130.228	26647.35	0.0270	P	1.6
5	☐	250.000	257.672	52520.39	0.0534	P	0.8
6	☐	500.000	506.926	103399.88	0.1050	P	0.4
7	☐	1000.000	993.884	208239.20	0.2059	P	0.4
8	☐			122.22	0.0001	P	16.5

$$y = 2.0716E-004 * x + 7.9018E-006$$

$$R = 0.9999$$

$$DL = 0.02698$$

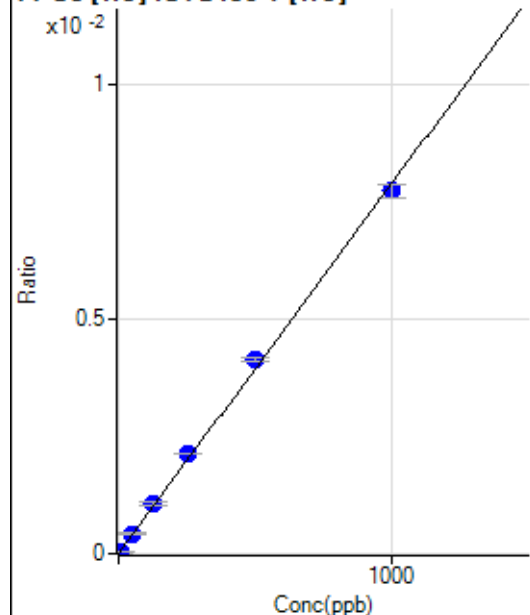
$$BEC = 0.03814$$

Weight: <None>

Min Conc: 0

Calibration for 029ICSA.d

77 Se [He] ISTD:89 Y [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2.22	0.0000	P	86.6
2	☐	5.000	3.722	31.11	0.0000	P	22.9
3	☐	50.000	53.374	425.57	0.0004	P	6.3
4	☐	125.000	134.627	1047.82	0.0011	P	7.4
5	☐	250.000	269.657	2090.17	0.0021	P	0.4
6	☐	500.000	525.297	4072.82	0.0041	P	1.2
7	☐	1000.000	981.072	7811.03	0.0077	P	3.9
8	☐			4.44	0.0000	P	114.

$$y = 7.8706E-006 * x + 2.2465E-006$$

$$R = 0.9993$$

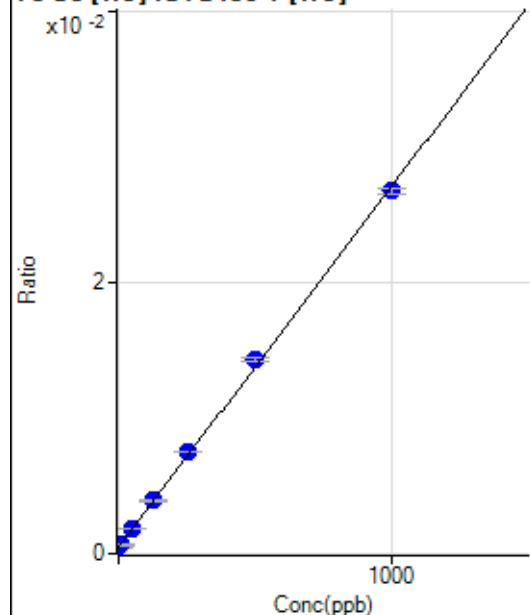
$$DL = 0.7416$$

$$BEC = 0.2854$$

Weight: <None>

Min Conc: 0

78 Se [He] ISTD:89 Y [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	494.46	0.0005	P	12.9
2	☐	5.000	5.626	644.46	0.0007	P	12.9
3	☐	50.000	50.216	1853.47	0.0018	P	2.8
4	☐	125.000	129.820	3908.34	0.0040	P	3.0
5	☐	250.000	263.479	7395.24	0.0075	P	0.7
6	☐	500.000	517.811	14067.91	0.0143	P	1.9
7	☐	1000.000	987.108	27083.74	0.0268	P	1.8
8	☐			544.46	0.0005	P	6.7

$$y = 2.6622E-005 * x + 5.0297E-004$$

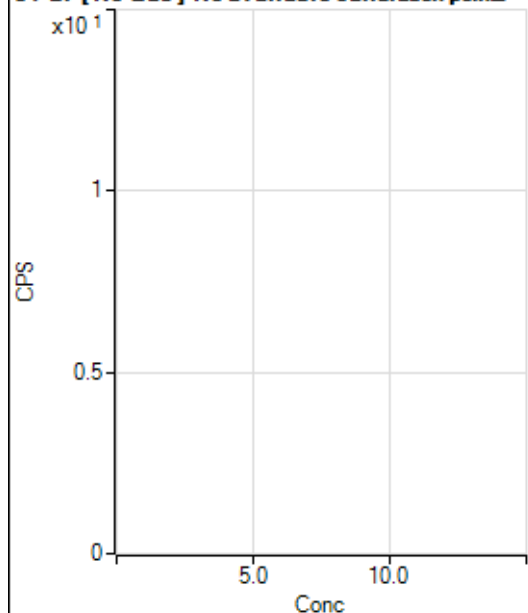
$$R = 0.9996$$

$$DL = 7.336$$

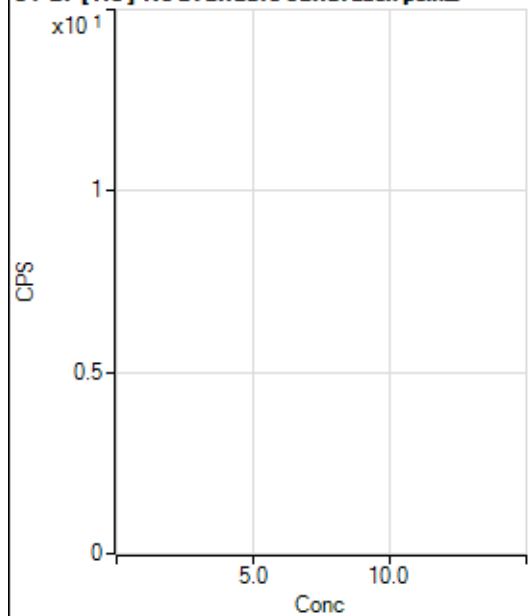
$$BEC = 18.89$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

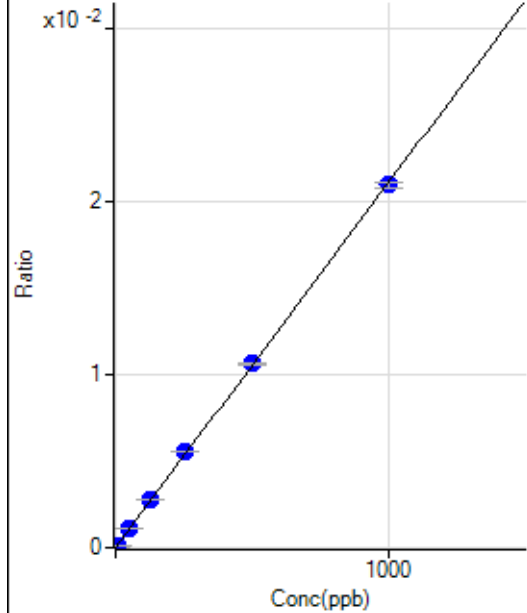
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			17843.12		P	1.3
2	☐			17941.02		P	0.8
3	☐			18082.32		P	0.6
4	☐			17504.93		P	1.2
5	☐			17244.69		P	1.9
6	☐			17364.75		P	2.3
7	☐			17784.16		P	0.6
8	☐			18942.24		P	0.7

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			122.22		P	15.0
2	☐			126.67		P	14.7
3	☐			126.67		P	15.8
4	☐			102.23		P	12.3
5	☐			110.00		P	6.1
6	☐			107.78		P	22.4
7	☐			151.11		P	22.6
8	☐			212.23		P	19.6

Calibration for 029ICSA.d

82 Se [No Gas] ISTD: 89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4.50	0.0000	P	565.
2	☐	5.000	6.135	486.59	0.0001	P	5.3
3	☐	50.000	52.158	4203.63	0.0011	P	1.8
4	☐	125.000	130.771	10585.24	0.0028	P	2.3
5	☐	250.000	263.044	20808.12	0.0055	P	0.0
6	☐	500.000	503.990	40588.73	0.0106	P	0.9
7	☐	1000.000	993.909	80242.71	0.0209	P	1.5
8	☐			235.05	0.0001	P	18.6

$$y = 2.1065E-005 * x + 1.2002E-006$$

$$R = 0.9999$$

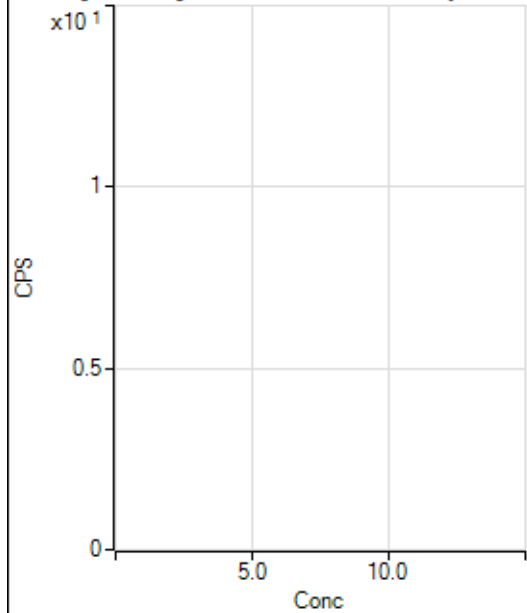
$$DL = 0.9661$$

$$BEC = 0.05698$$

Weight: <None>

Min Conc: 0

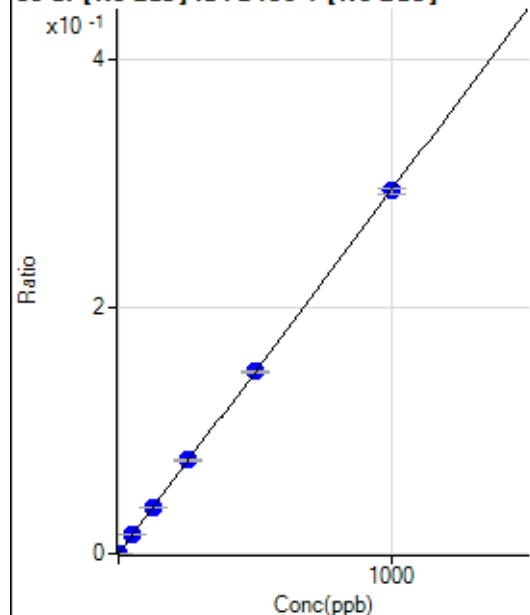
83 Kr [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			336.68		P	10.4
2	☐			292.23		P	9.2
3	☐			295.56		P	5.7
4	☐			296.67		P	4.9
5	☐			288.89		P	12.7
6	☐			277.78		P	12.8
7	☐			282.23		P	19.6
8	☐			286.67		P	14.1

Calibration for 029ICSA.d

86 Sr [No Gas] ISTD : 89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	465.57	0.0001	P	2.1
2	☐	1.000	1.031	1597.88	0.0004	P	7.2
3	☐	50.000	50.148	56871.70	0.0149	P	0.9
4	☐	125.000	127.993	145129.94	0.0378	P	1.1
5	☐	250.000	257.673	285065.40	0.0759	P	1.3
6	☐	500.000	499.947	562728.04	0.1472	P	0.8
7	☐	1000.000	997.727	1125439.50	0.2937	P	1.3
8	☐			4426.27	0.0012	P	1.4

$$y = 2.9420E-004 * x + 1.2503E-004$$

R = 1.0000

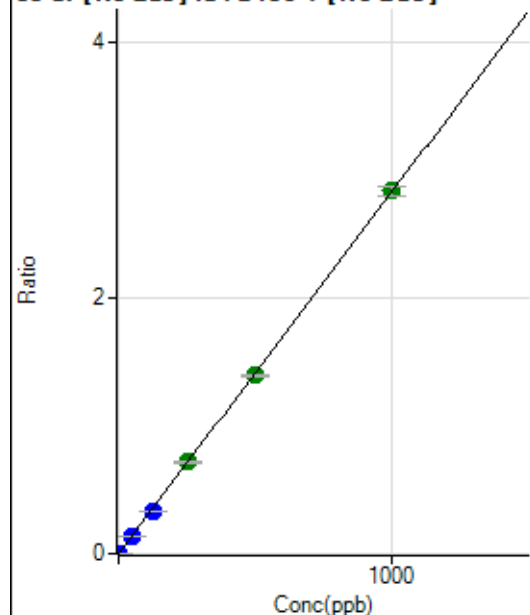
DL = 0.02693

BEC = 0.425

Weight: <None>

Min Conc: 0

88 Sr [No Gas] ISTD : 89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	85.55	0.0000	P	24.3
2	☐	1.000	1.041	11044.24	0.0030	P	1.9
3	☐	50.000	47.021	507192.61	0.1327	P	2.4
4	☐	125.000	116.526	1263340.36	0.3289	P	1.4
5	☐	250.000	254.236	2693600.90	0.7175	A	2.2
6	☐	500.000	492.845	5317099.02	1.3910	A	0.9
7	☐	1000.000	1003.727	10855432.34	2.8328	A	2.5
8	☐			35598.58	0.0093	P	0.8

$$y = 0.0028 * x + 2.2960E-005$$

R = 0.9999

DL = 0.005931

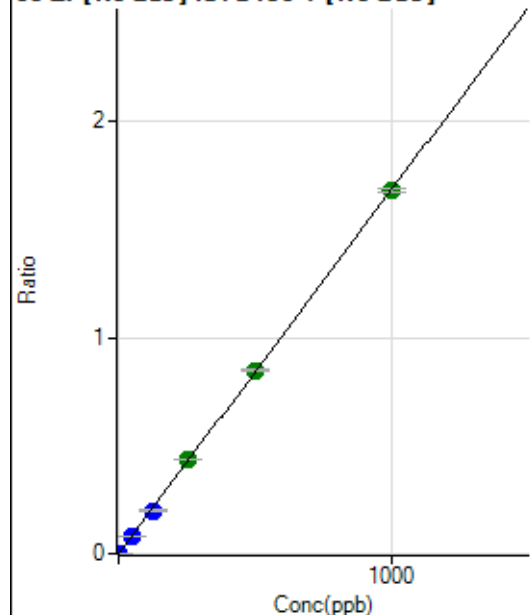
BEC = 0.008135

Weight: <None>

Min Conc: 0

Calibration for 029ICSA.d

90 Zr [No Gas] ISTD: 89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	161.11	0.0000	P	18.5
2	☐	1.000	1.016	6535.96	0.0018	P	7.7
3	☐	50.000	46.492	299425.36	0.0783	P	1.7
4	☐	125.000	118.070	764022.93	0.1989	P	1.6
5	☐	250.000	259.237	1639392.79	0.4367	A	0.5
6	☐	500.000	503.650	3242763.46	0.8483	A	1.2
7	☐	1000.000	996.908	6436001.64	1.6791	A	1.1
8	☐			5483.29	0.0014	P	3.6

$$y = 0.0017 * x + 4.3253E-005$$

$$R = 0.9999$$

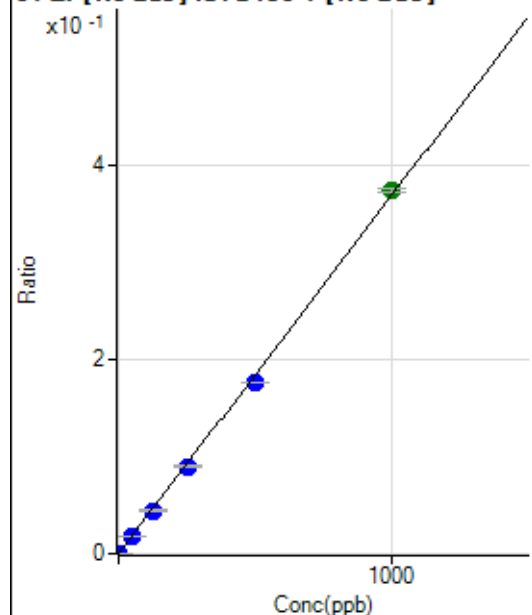
$$DL = 0.01423$$

$$BEC = 0.02568$$

Weight: <None>

Min Conc: 0

91 Zr [No Gas] ISTD: 89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0000	P	29.7
2	☐	1.000	1.037	1456.75	0.0004	P	4.3
3	☐	50.000	47.609	66941.81	0.0175	P	3.5
4	☐	125.000	120.421	170192.37	0.0443	P	1.6
5	☐	250.000	243.707	336588.02	0.0897	P	0.6
6	☐	500.000	477.551	671521.83	0.1757	P	0.4
7	☐	1000.000	1013.490	1428788.50	0.3728	A	1.2
8	☐			1222.29	0.0003	P	5.4

$$y = 3.6784E-004 * x + 8.9464E-006$$

$$R = 0.9996$$

$$DL = 0.02168$$

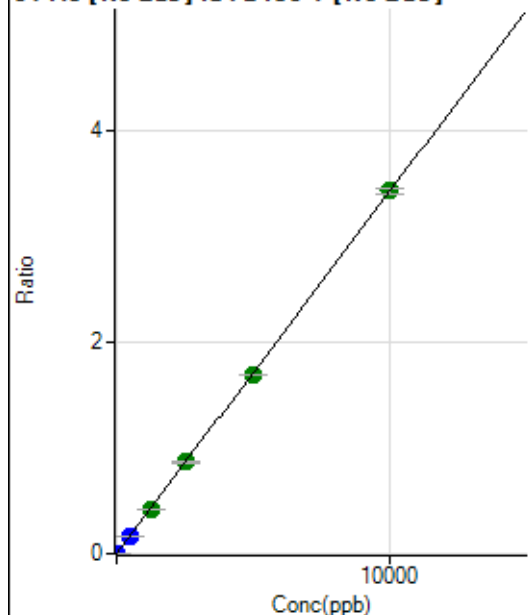
$$BEC = 0.02432$$

Weight: <None>

Min Conc: 0

Calibration for 029ICSA.d

94 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	127.78	0.0000	P	12.6
2	☐	5.000	6.015	7808.81	0.0021	P	4.1
3	☐	500.000	465.962	610048.37	0.1596	P	1.9
4	☐	1250.000	1235.068	1625249.56	0.4231	A	0.7
5	☐	2500.000	2531.291	3254798.81	0.8670	A	2.2
6	☐	5000.000	4951.746	6483397.47	1.6961	A	0.5
7	☐	10000.000	10019.872	13152877.72	3.4319	A	1.4
8	☐			3699.39	0.0010	P	4.3

$$y = 3.4251E-004 * x + 3.4325E-005$$

$$R = 1.0000$$

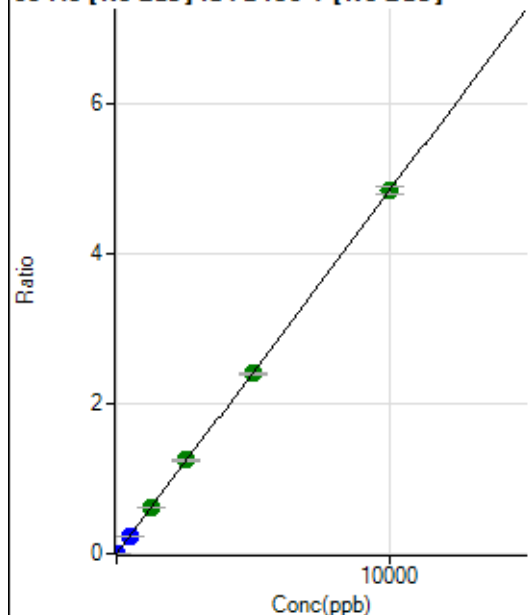
$$DL = 0.03802$$

$$BEC = 0.1002$$

Weight: <None>

Min Conc: 0

95 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	107.78	0.0000	P	7.6
2	☐	5.000	5.232	9546.53	0.0026	P	1.7
3	☐	500.000	469.005	867391.58	0.2270	P	1.6
4	☐	1250.000	1267.808	2356494.08	0.6135	A	1.7
5	☐	2500.000	2573.210	4674673.78	1.2451	A	0.9
6	☐	5000.000	4968.557	9190320.83	2.4041	A	1.4
7	☐	10000.000	9996.743	18536466.67	4.8370	A	2.1
8	☐			2292.42	0.0006	P	4.7

$$y = 4.8385E-004 * x + 2.8941E-005$$

$$R = 1.0000$$

$$DL = 0.0137$$

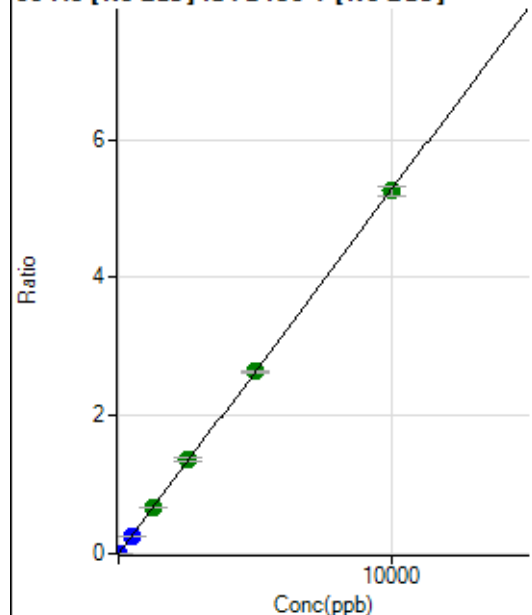
$$BEC = 0.05981$$

Weight: <None>

Min Conc: 0

Calibration for 029ICSA.d

96 Mo [No Gas] ISTD: 89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	215.56	0.0001	P	7.8
2	☐	5.000	5.413	10859.69	0.0029	P	2.5
3	☐	500.000	473.003	953331.29	0.2495	P	2.5
4	☐	1250.000	1269.879	2572378.56	0.6697	A	1.7
5	☐	2500.000	2588.990	5124767.32	1.3653	A	3.7
6	☐	5000.000	5010.164	10099665.61	2.6420	A	0.7
7	☐	10000.000	9971.535	20149477.20	5.2583	A	2.9
8	☐			9569.90	0.0025	P	2.0

$$y = 5.2732\text{E-}004 * x + 5.7901\text{E-}005$$

$$R = 0.9999$$

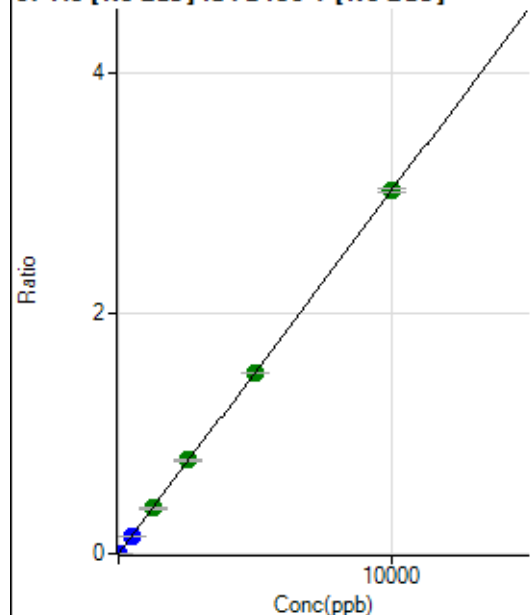
$$DL = 0.02555$$

$$BEC = 0.1098$$

Weight: <None>

Min Conc: 0

97 Mo [No Gas] ISTD: 89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	81.11	0.0000	P	14.6
2	☐	5.000	5.273	6007.95	0.0016	P	2.3
3	☐	500.000	475.253	547576.22	0.1433	P	1.8
4	☐	1250.000	1252.519	1450203.92	0.3776	A	3.1
5	☐	2500.000	2571.492	2909995.27	0.7752	A	2.1
6	☐	5000.000	4972.251	5729664.43	1.4989	A	0.2
7	☐	10000.000	9996.924	11549304.69	3.0135	A	1.2
8	☐			1480.09	0.0004	P	3.2

$$y = 3.0144\text{E-}004 * x + 2.1786\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.03168$$

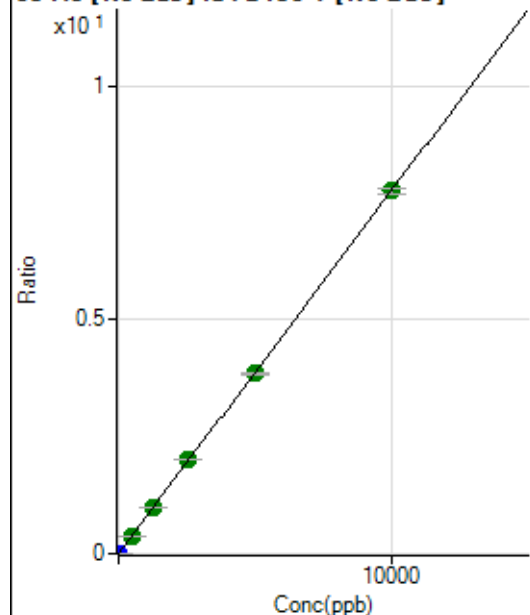
$$BEC = 0.07227$$

Weight: <None>

Min Conc: 0

Calibration for 029ICSA.d

98 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	193.33	0.0001	P	16.2
2	☐	5.000	5.325	15612.90	0.0042	P	1.3
3	☐	500.000	499.629	1483335.31	0.3880	A	0.0
4	☐	1250.000	1265.125	3774095.50	0.9824	A	0.8
5	☐	2500.000	2609.419	7607429.89	2.0263	A	0.6
6	☐	5000.000	4953.450	14703335.06	3.8465	A	1.1
7	☐	10000.000	9994.048	29742544.28	7.7605	A	1.5
8	☐			3490.45	0.0009	P	2.6

$$y = 7.7651E-004 * x + 5.1944E-005$$

$$R = 0.9999$$

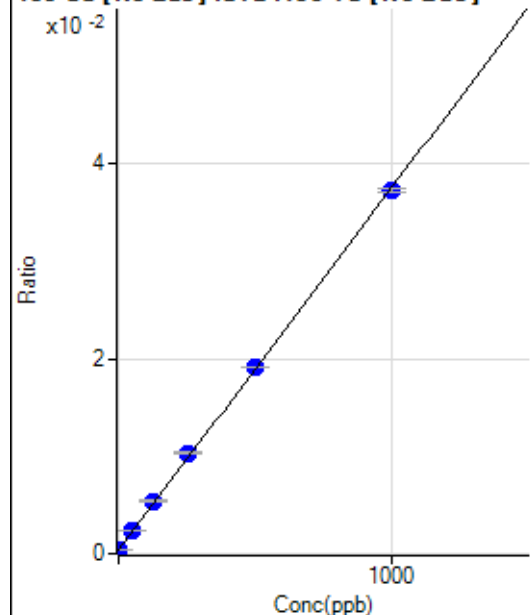
$$DL = 0.03258$$

$$BEC = 0.06689$$

Weight: <None>

Min Conc: 0

106 Cd [No Gas] ISTD:159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	998.94	0.0004	P	3.6
2	☐	1.000	1.355	1132.28	0.0005	P	3.3
3	☐	50.000	53.657	5930.16	0.0024	P	1.6
4	☐	125.000	134.460	13359.59	0.0054	P	1.2
5	☐	250.000	267.503	25334.39	0.0103	P	0.6
6	☐	500.000	504.495	48917.61	0.0191	P	0.9
7	☐	1000.000	992.011	94968.20	0.0372	P	1.0
8	☐			1006.71	0.0004	P	3.2

$$y = 3.7122E-005 * x + 4.1736E-004$$

$$R = 0.9998$$

$$DL = 1.228$$

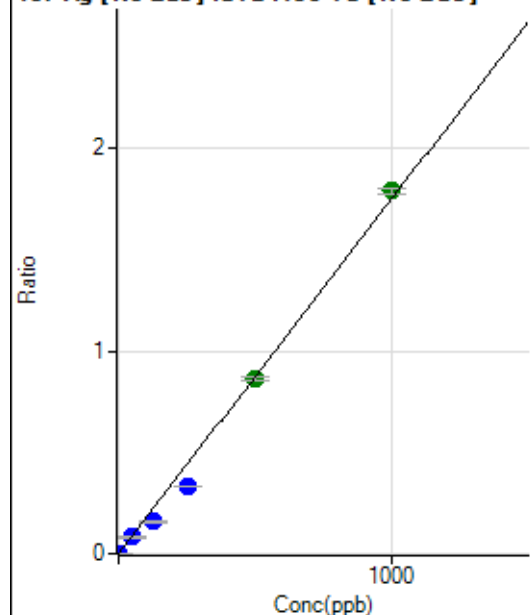
$$BEC = 11.24$$

Weight: <None>

Min Conc: 0

Calibration for 029ICSA.d

107 Ag [No Gas] ISTD : 159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	52.22	0.0000	P	16.2
2	☐	1.000	1.170	5000.91	0.0021	P	5.1
3	☐	50.000	46.437	199872.93	0.0812	P	1.6
4	☐	125.000	89.869	388187.26	0.1572	P	1.0
5	☐	250.000	188.214	805745.27	0.3291	P	0.7
6	☐	500.000	493.207	2203018.60	0.8624	A	3.0
7	☐	1000.000	1023.413	4562981.91	1.7894	A	1.5
8	☐			441.12	0.0002	P	15.1

$$y = 0.0017 * x + 2.1825E-005$$

$$R = 0.9977$$

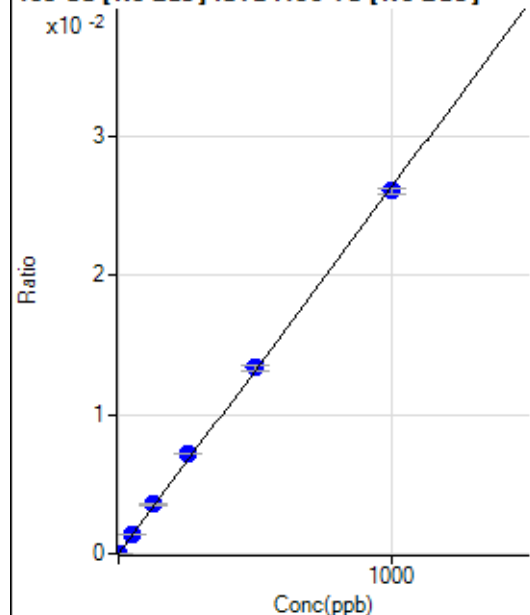
$$DL = 0.006076$$

$$BEC = 0.01248$$

Weight: <None>

Min Conc: 0

108 Cd [No Gas] ISTD : 159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	1.000	1.224	77.78	0.0000	P	19.1
3	☐	50.000	52.528	3402.66	0.0014	P	1.1
4	☐	125.000	133.840	8700.48	0.0035	P	1.7
5	☐	250.000	272.784	17578.57	0.0072	P	0.4
6	☐	500.000	506.470	34053.38	0.0133	P	3.1
7	☐	1000.000	989.838	66430.31	0.0261	P	1.8
8	☐			32.22	0.0000	P	21.7

$$y = 2.6320E-005 * x + 0.0000E+000$$

$$R = 0.9997$$

$$DL = 0$$

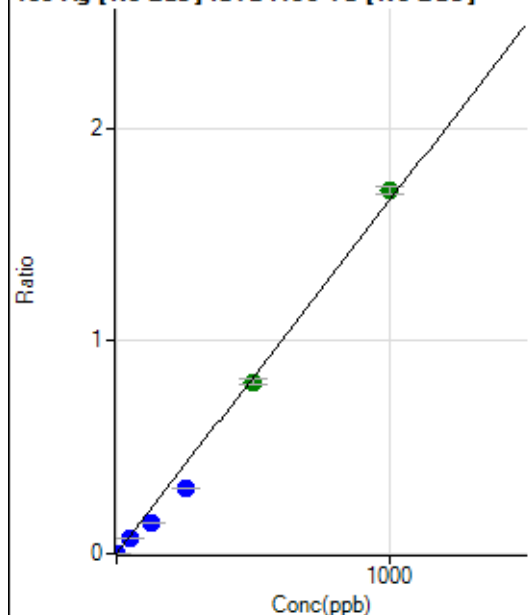
$$BEC = 0$$

Weight: <None>

Min Conc: 0

Calibration for 029ICSA.d

109 Ag [No Gas] ISTD : 159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	46.67	0.0000	P	11.9
2	☐	1.000	1.124	4561.88	0.0019	P	2.5
3	☐	50.000	44.847	183147.93	0.0744	P	1.3
4	☐	125.000	88.416	362321.32	0.1467	P	1.3
5	☐	250.000	184.607	749828.73	0.3063	P	0.6
6	☐	500.000	487.400	2065798.35	0.8086	A	2.5
7	☐	1000.000	1027.479	4346249.52	1.7045	A	2.2
8	☐			421.12	0.0002	P	12.5

$$y = 0.0017 * x + 1.9494E-005$$

$$R = 0.9973$$

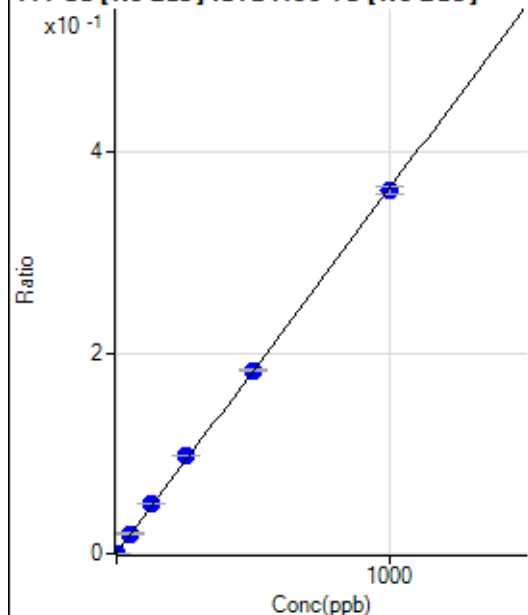
$$DL = 0.004196$$

$$BEC = 0.01175$$

Weight: <None>

Min Conc: 0

111 Cd [No Gas] ISTD : 159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	707.03	0.0003	P	3.9
2	☐	1.000	1.209	1777.09	0.0007	P	3.5
3	☐	50.000	54.385	49349.42	0.0201	P	2.3
4	☐	125.000	134.823	121718.17	0.0493	P	1.1
5	☐	250.000	267.329	238504.12	0.0974	P	0.2
6	☐	500.000	502.230	466927.26	0.1828	P	1.5
7	☐	1000.000	993.106	920690.28	0.3611	P	2.1
8	☐			847.70	0.0003	P	4.6

$$y = 3.6330E-004 * x + 2.9540E-004$$

$$R = 0.9998$$

$$DL = 0.09542$$

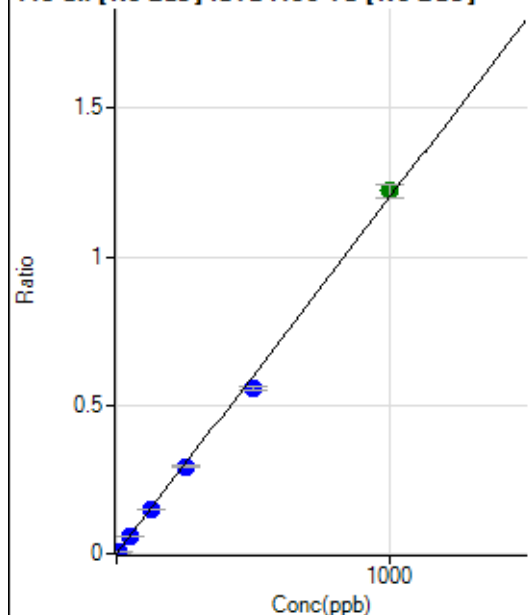
$$BEC = 0.8131$$

Weight: <None>

Min Conc: 0

Calibration for 029ICSA.d

118 Sn [No Gas] ISTD : 159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	570.02	0.0002	P	6.9
2	☐	5.000	5.229	15740.92	0.0065	P	3.4
3	☐	50.000	48.849	144729.73	0.0588	P	1.0
4	☐	125.000	122.312	362785.79	0.1469	P	0.8
5	☐	250.000	245.279	720582.16	0.2943	P	0.9
6	☐	500.000	465.471	1426395.40	0.5583	P	1.8
7	☐	1000.000	1018.837	3114742.07	1.2217	A	3.9
8	☐			1466.75	0.0006	P	7.3

$$y = 0.0012 * x + 2.3829E-004$$

$$R = 0.9991$$

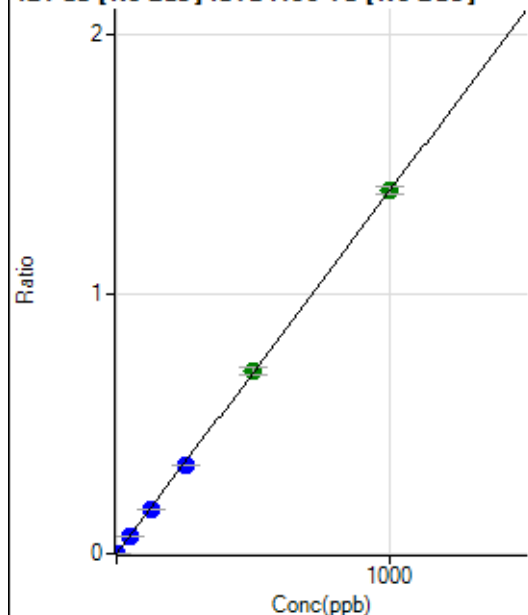
$$DL = 0.04125$$

$$BEC = 0.1988$$

Weight: <None>

Min Conc: 0

121 Sb [No Gas] ISTD : 159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	22.22	0.0000	P	47.9
2	☐	2.000	2.164	7324.15	0.0030	P	3.8
3	☐	50.000	47.987	164736.74	0.0669	P	1.2
4	☐	125.000	121.908	419952.52	0.1700	P	0.9
5	☐	250.000	243.125	830169.43	0.3391	P	0.7
6	☐	500.000	502.944	1791706.05	0.7014	A	3.8
7	☐	1000.000	1000.734	3558768.77	1.3957	A	2.0
8	☐			1777.91	0.0007	P	2.2

$$y = 0.0014 * x + 9.2765E-006$$

$$R = 1.0000$$

$$DL = 0.009563$$

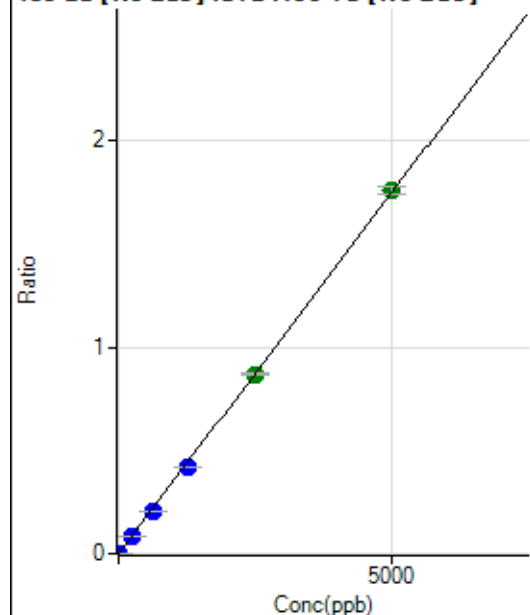
$$BEC = 0.006651$$

Weight: <None>

Min Conc: 0

Calibration for 029ICSA.d

135 Ba [No Gas] ISTD : 159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	32.22	0.0000	P	35.7
2	☐	10.000	10.319	8770.55	0.0036	P	1.0
3	☐	250.000	237.427	204483.05	0.0831	P	0.8
4	☐	625.000	591.423	511111.18	0.2069	P	1.2
5	☐	1250.000	1191.266	1020478.02	0.4168	P	0.3
6	☐	2500.000	2485.557	2221969.00	0.8696	A	1.2
7	☐	5000.000	5026.730	4484558.96	1.7587	A	2.0
8	☐			1997.94	0.0008	P	3.9

$$y = 3.4987E-004 * x + 1.3447E-005$$

$$R = 0.9999$$

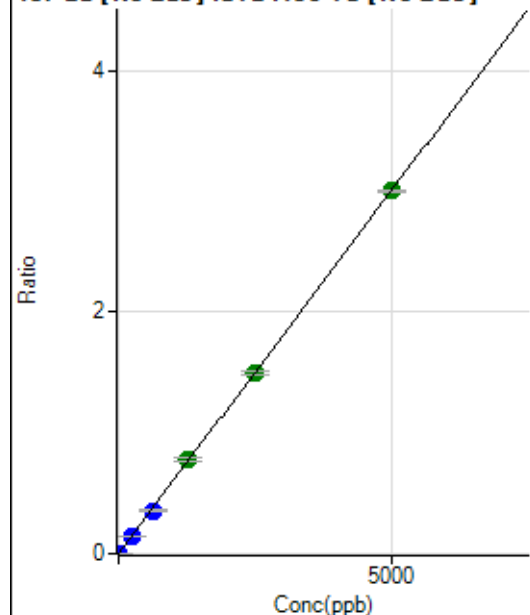
$$DL = 0.04122$$

$$BEC = 0.03843$$

Weight: <None>

Min Conc: 0

137 Ba [No Gas] ISTD : 159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	33.34	0.0000	P	75.0
2	☐	10.000	10.292	14993.58	0.0062	P	2.0
3	☐	250.000	235.646	348477.13	0.1416	P	0.3
4	☐	625.000	595.530	883726.19	0.3578	P	0.9
5	☐	1250.000	1305.311	1919960.93	0.7842	A	3.3
6	☐	2500.000	2489.117	3820454.39	1.4954	A	2.0
7	☐	5000.000	4996.014	7654070.37	3.0015	A	0.7
8	☐			3376.00	0.0014	P	1.8

$$y = 6.0077E-004 * x + 1.3881E-005$$

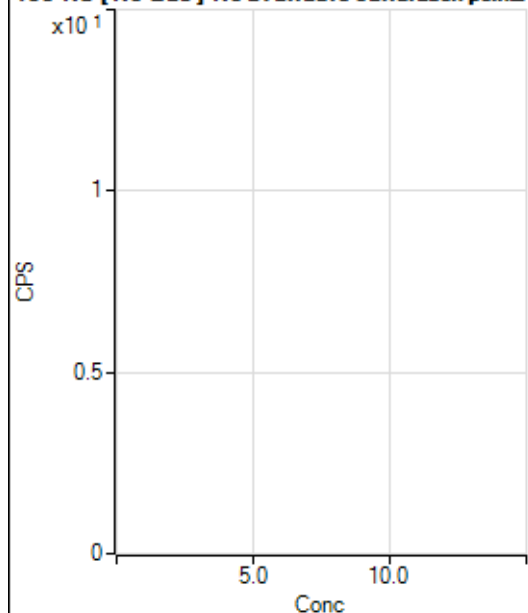
$$R = 0.9999$$

$$DL = 0.052$$

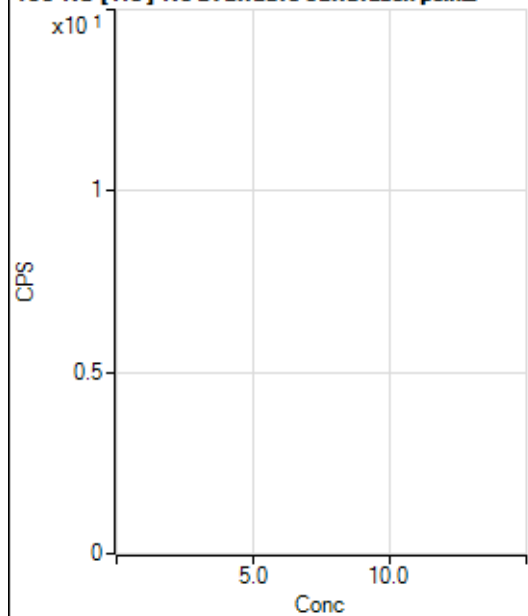
$$BEC = 0.02311$$

Weight: <None>

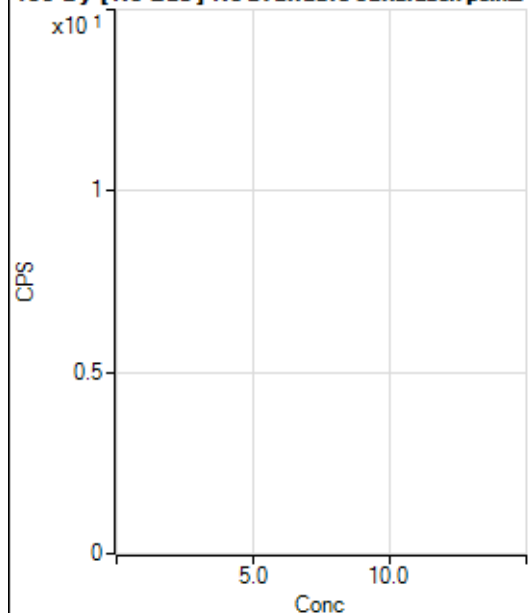
Min Conc: 0

150 Nd [No Gas] No available calibration points

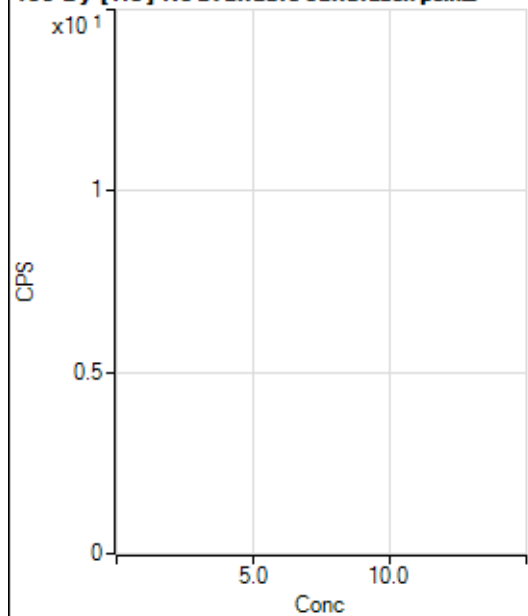
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐			8.89		P	86.6
3	☐			14.44		P	35.3
4	☐			22.22		P	62.4
5	☐			46.67		P	14.3
6	☐			103.34		P	14.1
7	☐			185.56		P	13.5
8	☐			75.56		P	6.7

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			5.56		P	91.6
3	☐			3.33		P	173.
4	☐			11.11		P	91.7
5	☐			14.44		P	35.3
6	☐			30.00		P	11.1
7	☐			46.67		P	39.8
8	☐			57.78		P	8.8

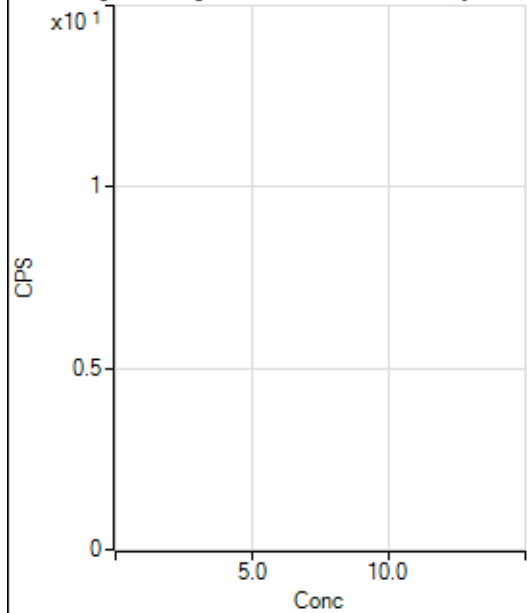
156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	91.7
2	☐			7.78		P	89.2
3	☐			7.78		P	24.7
4	☐			21.11		P	24.1
5	☐			30.00		P	38.5
6	☐			38.89		P	40.5
7	☐			86.67		P	21.4
8	☐			170.00		P	21.6

156 Dy [He] No available calibration points

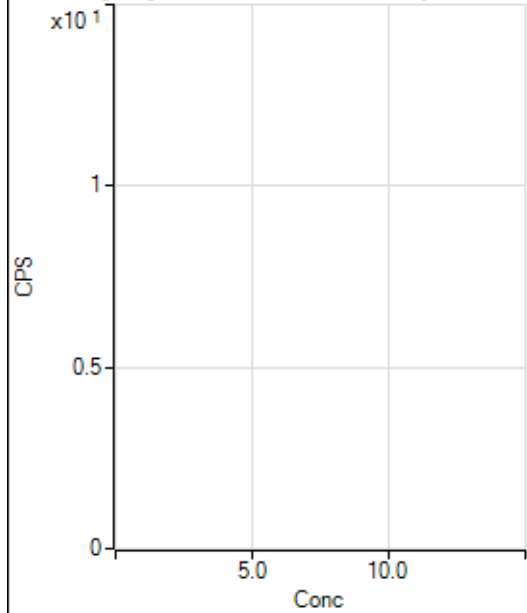
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	43.4
2	☐			5.56		P	34.7
3	☐			15.55		P	44.6
4	☐			44.44		P	41.3
5	☐			81.11		P	22.6
6	☐			114.45		P	28.3
7	☐			268.90		P	3.6
8	☐			136.67		P	21.1

160 Gd [No Gas] No available calibration poin...

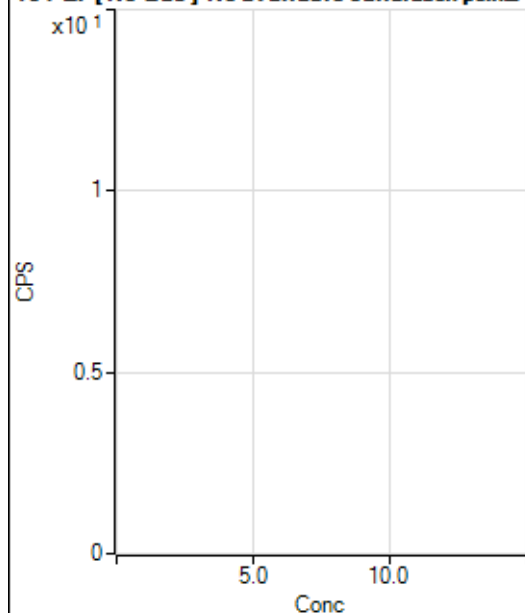


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			22.22		P	52.7
2	☐			16.66		P	34.6
3	☐			11.11		P	17.3
4	☐			20.00		P	16.7
5	☐			33.33		P	10.0
6	☐			44.44		P	26.3
7	☐			56.67		P	15.6
8	☐			185.56		P	12.0

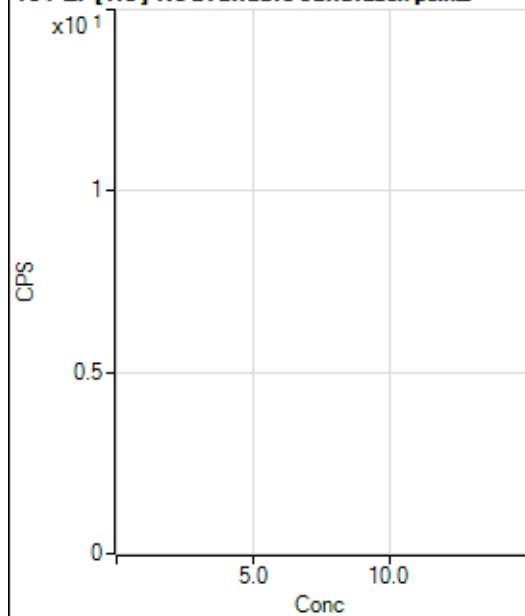
160 Gd [He] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			114.44		P	13.1
2	☐			117.78		P	18.2
3	☐			126.67		P	5.3
4	☐			136.67		P	11.2
5	☐			121.11		P	17.7
6	☐			136.67		P	4.9
7	☐			144.45		P	26.5
8	☐			246.67		P	11.5

164 Er [No Gas] No available calibration points

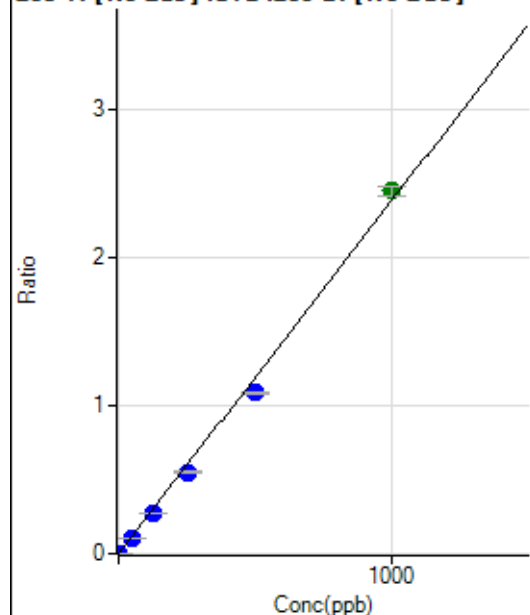
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			12.22		P	78.7
2	☐			17.78		P	39.0
3	☐			25.55		P	41.9
4	☐			28.89		P	37.1
5	☐			46.67		P	35.7
6	☐			47.78		P	21.3
7	☐			98.89		P	21.9
8	☐			341.12		P	7.5

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐			13.33		P	NaN
3	☐			16.66		P	34.6
4	☐			20.00		P	0.0
5	☐			22.22		P	62.4
6	☐			50.00		P	6.7
7	☐			61.11		P	22.0
8	☐			291.12		P	4.6

Calibration for 029ICSA.d

203 Tl [No Gas] ISTD : 209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	37.78	0.0000	P	31.3
2	☐	1.000	0.991	2897.01	0.0024	P	1.9
3	☐	50.000	44.790	135319.75	0.1066	P	0.2
4	☐	125.000	114.200	343363.77	0.2718	P	0.5
5	☐	250.000	231.545	697189.51	0.5511	P	0.7
6	☐	500.000	455.681	1379426.25	1.0846	P	0.8
7	☐	1000.000	1028.384	3102640.86	2.4477	A	2.3
8	☐			283.34	0.0002	P	11.9

$$y = 0.0024 * x + 3.1381E-005$$

$$R = 0.9984$$

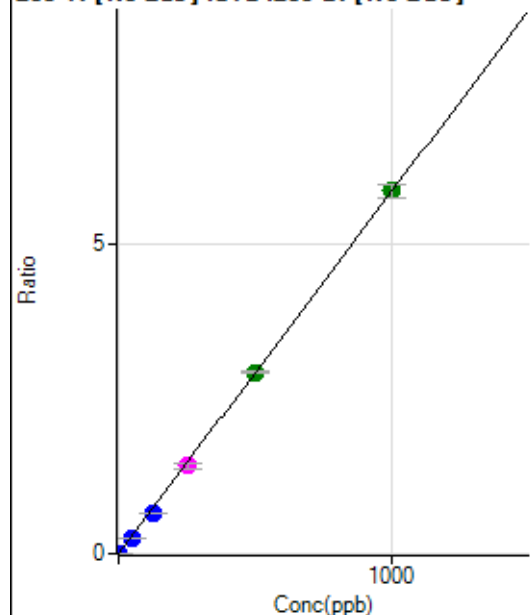
$$DL = 0.01237$$

$$BEC = 0.01318$$

Weight: <None>

Min Conc: 0

205 Tl [No Gas] ISTD : 209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	87.78	0.0001	P	11.9
2	☐	1.000	0.976	6985.19	0.0058	P	1.7
3	☐	50.000	43.353	320993.06	0.2530	P	0.9
4	☐	125.000	112.468	828770.09	0.6561	P	0.6
5	☐	250.000	242.549	1790611.81	1.4150	M	7.5
6	☐	500.000	501.919	3723961.96	2.9280	A	1.9
7	☐	1000.000	1002.802	7414828.78	5.8498	A	3.4
8	☐			726.69	0.0006	P	12.9

$$y = 0.0058 * x + 7.2901E-005$$

$$R = 0.9999$$

$$DL = 0.004476$$

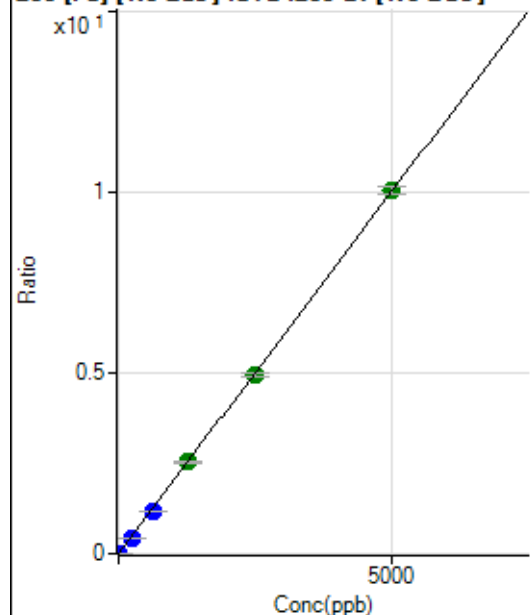
$$BEC = 0.0125$$

Weight: <None>

Min Conc: 0

Calibration for 029ICSA.d

206 [Pb] [No Gas] ISTD : 209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	294.45	0.0002	P	9.8
2	☐	1.000	0.982	2679.19	0.0022	P	2.8
3	☐	250.000	221.934	564430.75	0.4448	P	1.1
4	☐	625.000	576.348	1458630.17	1.1548	P	0.4
5	☐	1250.000	1265.621	3207478.08	2.5356	A	2.0
6	☐	2500.000	2477.367	6311966.37	4.9630	A	2.5
7	☐	5000.000	5014.896	12734546.89	10.0463	A	2.1
8	☐			8799.59	0.0074	P	2.9

$$y = 0.0020 * x + 2.4453E-004$$

$$R = 0.9999$$

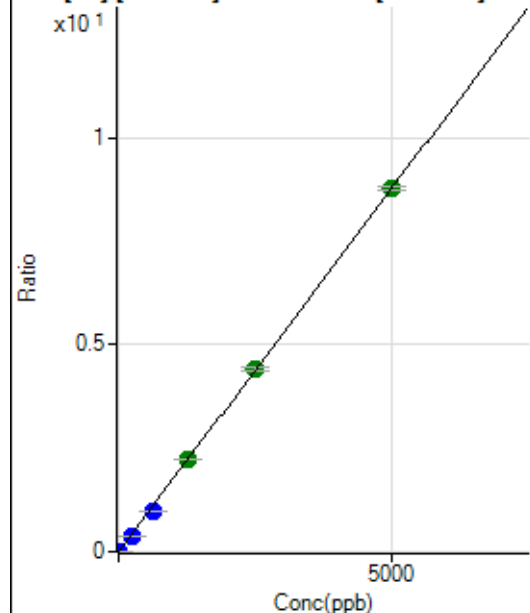
$$DL = 0.03587$$

$$BEC = 0.1221$$

Weight: <None>

Min Conc: 0

207 [Pb] [No Gas] ISTD : 209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	255.56	0.0002	P	6.5
2	☐	1.000	1.023	2428.03	0.0020	P	5.8
3	☐	250.000	217.935	484616.50	0.3819	P	0.5
4	☐	625.000	562.612	1244906.64	0.9856	P	0.3
5	☐	1250.000	1273.462	2821822.53	2.2306	A	0.7
6	☐	2500.000	2509.759	5590706.31	4.3959	A	1.6
7	☐	5000.000	4998.657	11098657.20	8.7551	A	1.0
8	☐			7453.23	0.0063	P	3.4

$$y = 0.0018 * x + 2.1217E-004$$

$$R = 0.9999$$

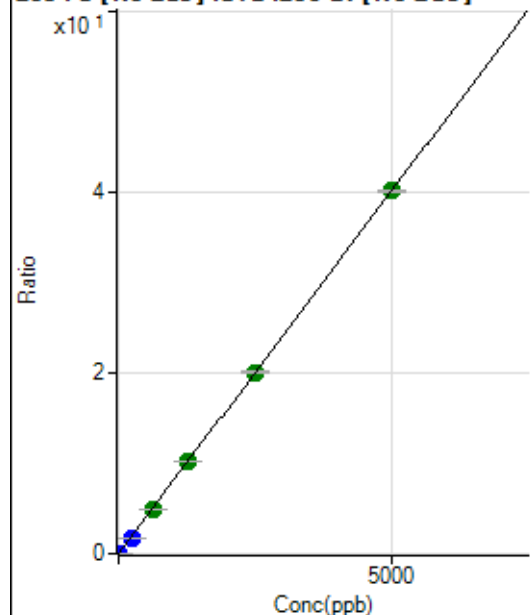
$$DL = 0.0236$$

$$BEC = 0.1211$$

Weight: <None>

Min Conc: 0

208 Pb [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1173.37	0.0010	P	2.6
2	☐	1.000	0.982	10739.53	0.0089	P	1.7
3	☐	250.000	218.313	2226431.65	1.7547	P	1.0
4	☐	625.000	599.199	6080863.29	4.8142	A	0.2
5	☐	1250.000	1269.491	12900911.13	10.1986	A	1.3
6	☐	2500.000	2495.534	25496265.67	20.0472	A	1.3
7	☐	5000.000	5002.170	50938213.13	40.1826	A	0.4
8	☐			34993.63	0.0296	P	0.9

$$y = 0.0080 * x + 9.7424E-004$$

$$R = 1.0000$$

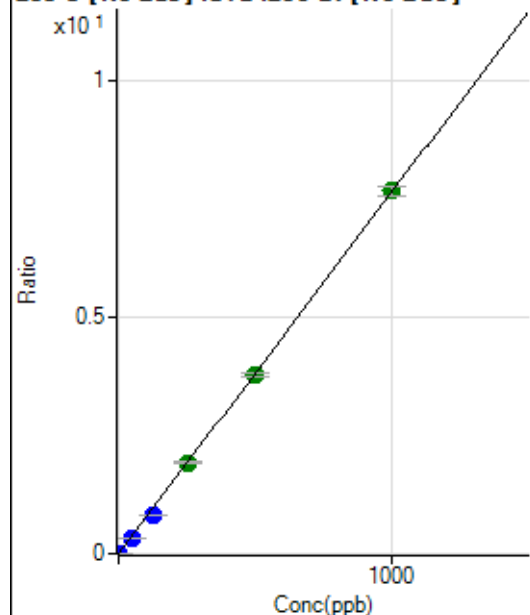
$$DL = 0.009357$$

$$BEC = 0.1213$$

Weight: <None>

Min Conc: 0

238 U [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18.89	0.0000	P	56.8
2	☐	1.000	0.962	8906.37	0.0074	P	1.5
3	☐	50.000	41.586	402197.16	0.3170	P	1.1
4	☐	125.000	106.288	1023255.89	0.8101	P	2.3
5	☐	250.000	250.726	2417182.67	1.9110	A	1.9
6	☐	500.000	496.219	4810052.05	3.7821	A	2.0
7	☐	1000.000	1004.469	9703991.80	7.6558	A	2.3
8	☐			348.90	0.0003	P	10.0

$$y = 0.0076 * x + 1.5684E-005$$

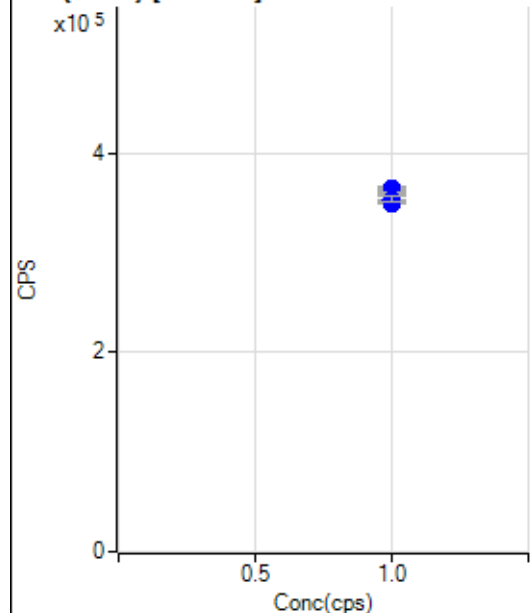
$$R = 0.9998$$

$$DL = 0.003506$$

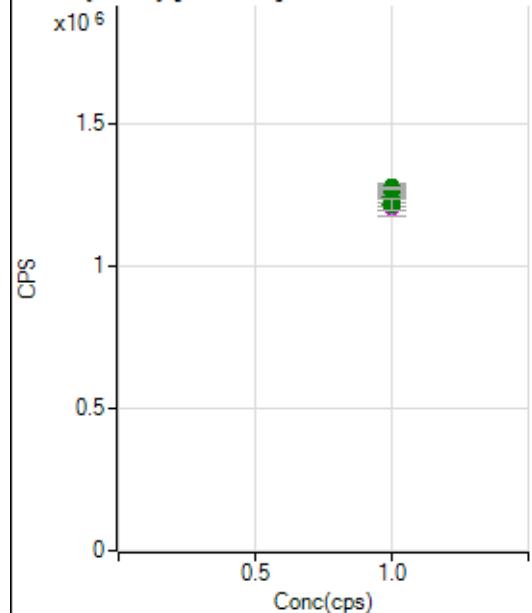
$$BEC = 0.002058$$

Weight: <None>

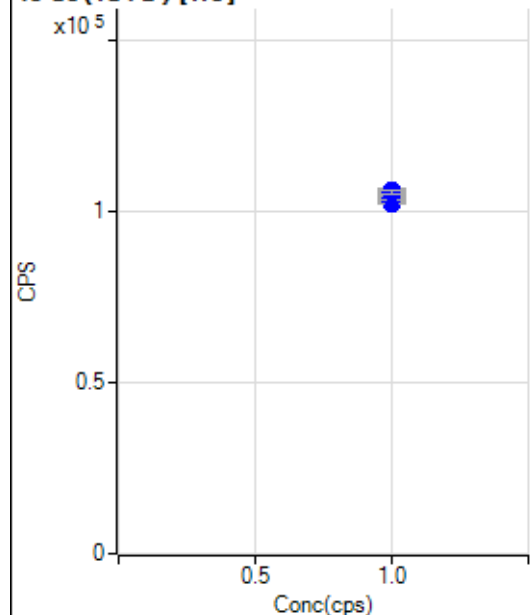
Min Conc: 0

6 Li (ISTD) [No Gas]

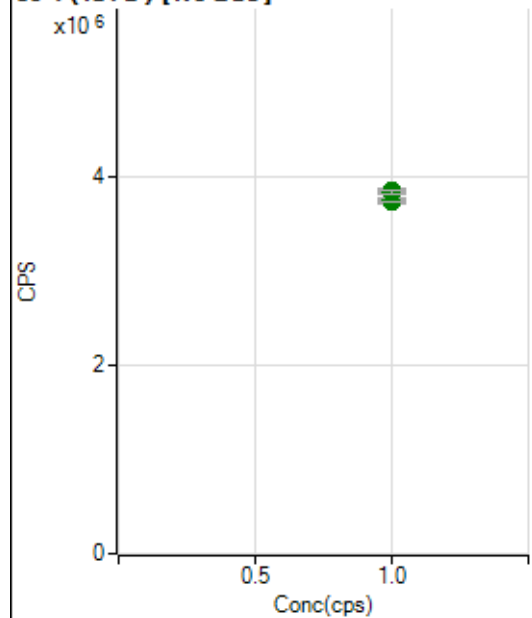
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		350970.15		P	0.5
2	☐	1.000		351992.17		P	0.9
3	☐	1.000		363812.31		P	1.8
4	☐	1.000		362851.50		P	1.0
5	☐	1.000		360448.38		P	0.7
6	☐	1.000		359472.64		P	0.4
7	☐	1.000		349486.21		P	0.7
8	☐	1.000		352965.92		P	1.6

45 Sc (ISTD) [No Gas]

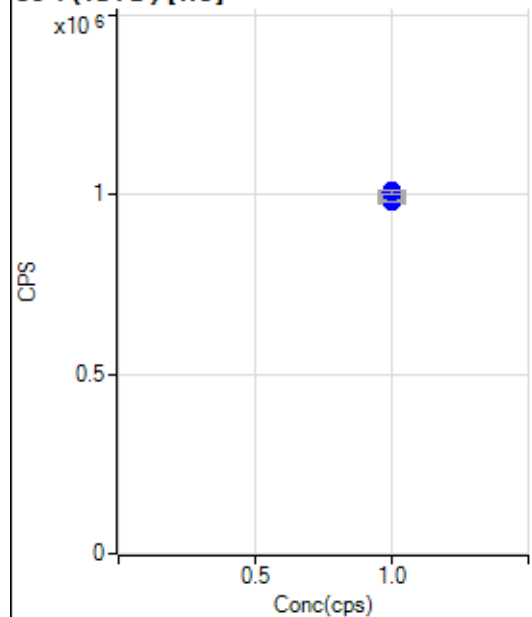
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1211490.55		M	5.8
2	☐	1.000		1256923.85		A	1.1
3	☐	1.000		1275211.69		A	1.2
4	☐	1.000		1271818.04		A	2.6
5	☐	1.000		1243345.69		A	1.1
6	☐	1.000		1218376.29		A	0.8
7	☐	1.000		1218108.05		A	3.4
8	☐	1.000		1271842.81		A	0.6

45 Sc (ISTD) [He]

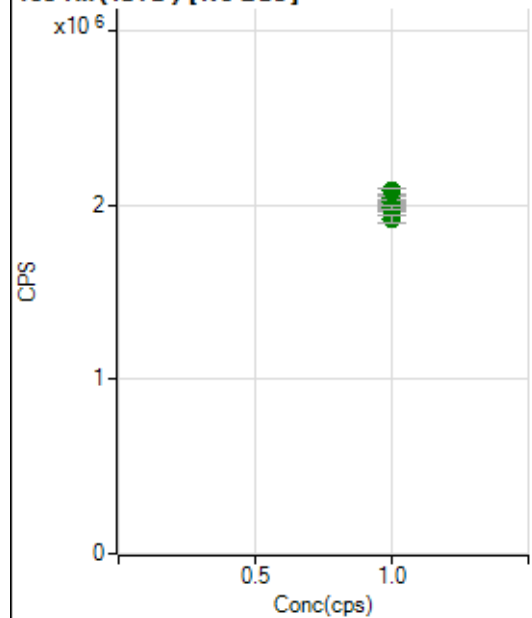
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		102621.55		P	0.8
2	☐	1.000		103288.29		P	1.2
3	☐	1.000		106115.62		P	1.0
4	☐	1.000		102444.17		P	0.6
5	☐	1.000		102886.62		P	0.9
6	☐	1.000		104418.17		P	0.4
7	☐	1.000		104256.05		P	1.4
8	☐	1.000		105516.82		P	1.1

89 Y (ISTD) [No Gas]

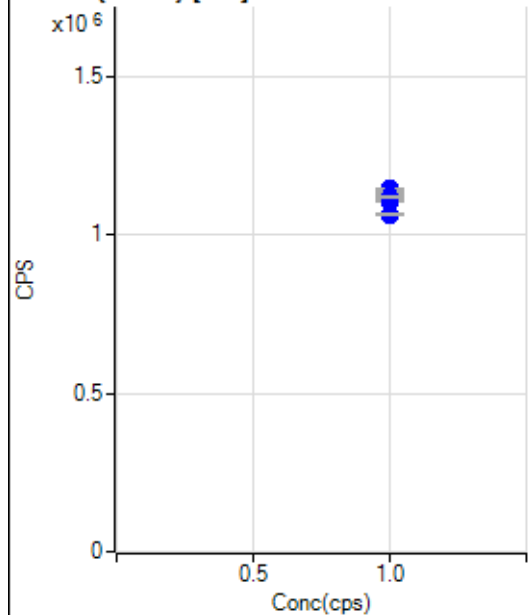
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3723784.29		A	0.5
2	☐	1.000		3729185.74		A	1.2
3	☐	1.000		3822829.80		A	2.6
4	☐	1.000		3841718.38		A	1.3
5	☐	1.000		3754475.50		A	1.0
6	☐	1.000		3822655.88		A	0.4
7	☐	1.000		3832882.69		A	1.3
8	☐	1.000		3827617.16		A	1.0

89 Y (ISTD) [He]

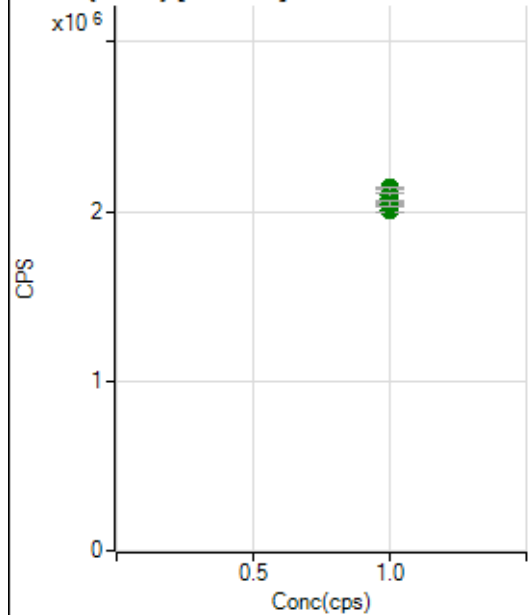
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		982995.99		P	1.1
2	☐	1.000		987387.76		P	0.6
3	☐	1.000		1007484.73		P	0.5
4	☐	1.000		987443.82		P	1.4
5	☐	1.000		983776.18		P	0.5
6	☐	1.000		984557.85		P	0.4
7	☐	1.000		1011362.44		P	0.8
8	☐	1.000		1006446.04		P	1.2

103 Rh (ISTD) [No Gas]

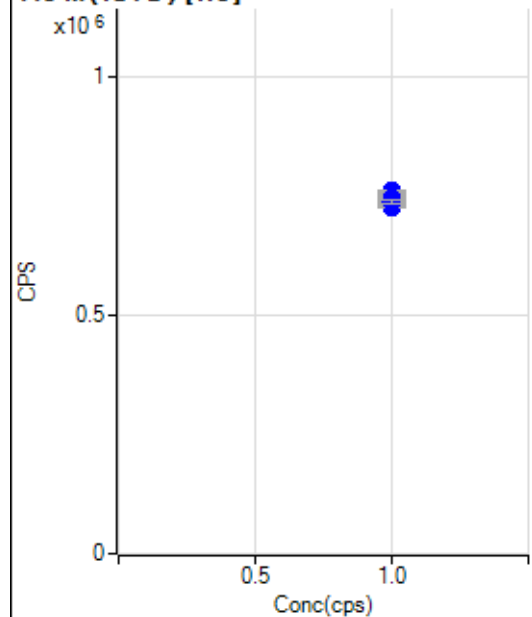
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1996829.05		A	2.0
2	☐	1.000		1993542.07		A	1.5
3	☐	1.000		2079957.92		A	1.8
4	☐	1.000		2036183.72		A	1.4
5	☐	1.000		1972834.02		A	0.8
6	☐	1.000		2016228.31		A	0.9
7	☐	1.000		1984323.72		A	0.7
8	☐	1.000		1917753.89		A	2.4

103 Rh (ISTD) [He]

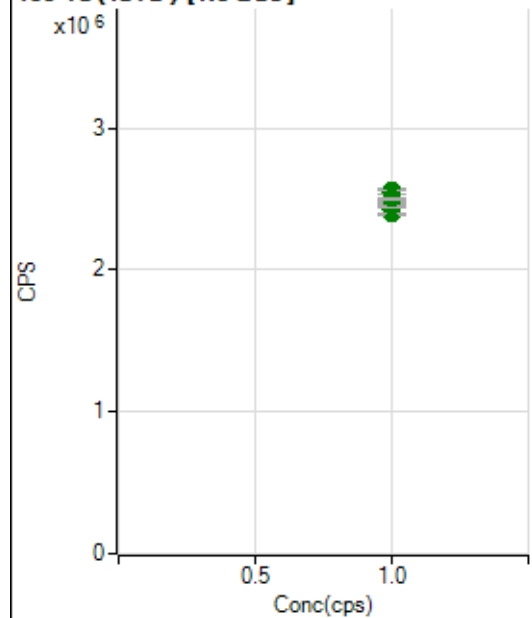
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1122308.48		P	0.9
2	☐	1.000		1119844.04		P	0.7
3	☐	1.000		1143578.12		P	0.5
4	☐	1.000		1123949.26		P	1.7
5	☐	1.000		1115594.54		P	1.0
6	☐	1.000		1105743.93		P	0.4
7	☐	1.000		1118077.36		P	0.7
8	☐	1.000		1062672.70		P	0.6

115 In (ISTD) [No Gas]

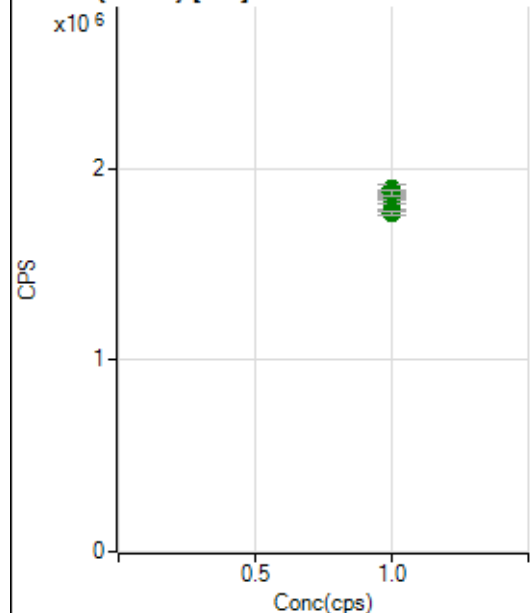
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2053780.95		A	1.0
2	☐	1.000		2042983.44		A	1.6
3	☐	1.000		2139529.83		A	0.8
4	☐	1.000		2101871.78		A	3.5
5	☐	1.000		2076760.44		A	2.7
6	☐	1.000		2044918.80		A	1.7
7	☐	1.000		2012340.88		A	1.5
8	☐	1.000		2046272.47		A	1.7

115 In (ISTD) [He]

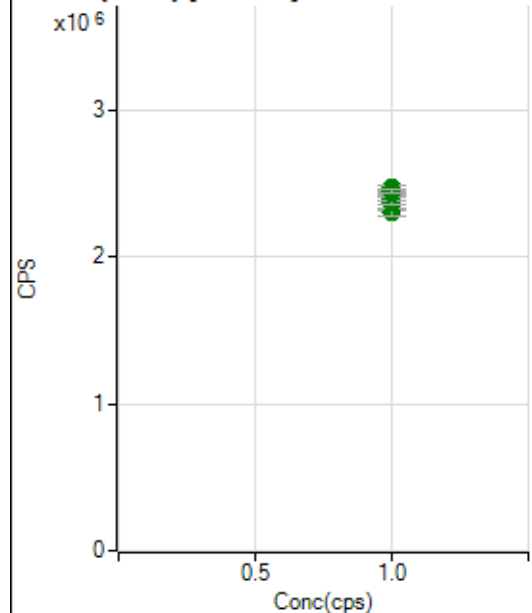
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		750086.98		P	0.7
2	☐	1.000		743242.76		P	0.2
3	☐	1.000		759881.13		P	0.5
4	☐	1.000		745803.57		P	0.3
5	☐	1.000		734014.87		P	0.6
6	☐	1.000		729596.11		P	0.2
7	☐	1.000		723987.96		P	0.0
8	☐	1.000		737592.07		P	0.8

159 Tb (ISTD) [No Gas]

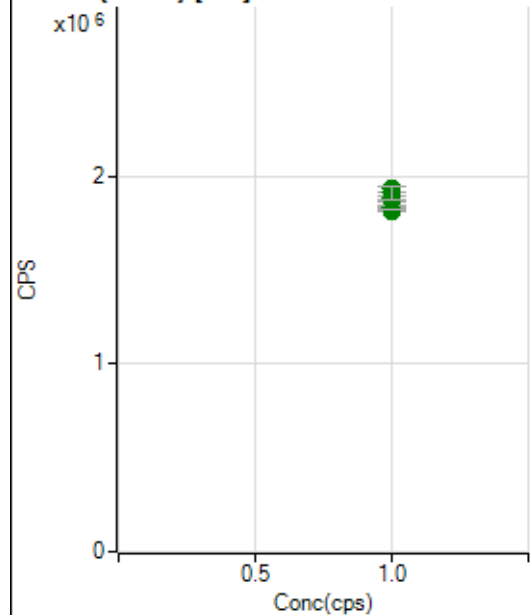
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2392997.19		A	0.8
2	☐	1.000		2420048.56		A	2.0
3	☐	1.000		2461314.15		A	1.1
4	☐	1.000		2470014.14		A	0.7
5	☐	1.000		2448307.97		A	0.5
6	☐	1.000		2555327.95		A	1.6
7	☐	1.000		2550198.24		A	1.2
8	☐	1.000		2500509.18		A	0.7

159 Tb (ISTD) [He]

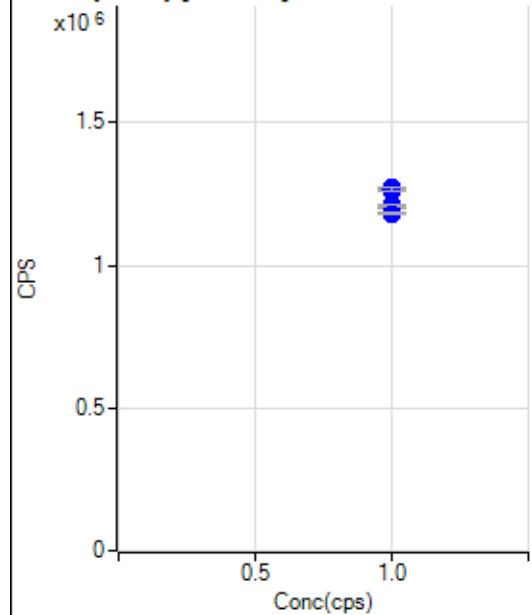
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1787457.51		A	0.3
2	☐	1.000		1765734.61		A	1.0
3	☐	1.000		1874362.21		A	0.8
4	☐	1.000		1835341.92		A	1.7
5	☐	1.000		1833228.44		A	1.2
6	☐	1.000		1855411.08		A	2.1
7	☐	1.000		1894680.06		A	2.2
8	☐	1.000		1874157.37		A	1.8

165 Ho (ISTD) [No Gas]

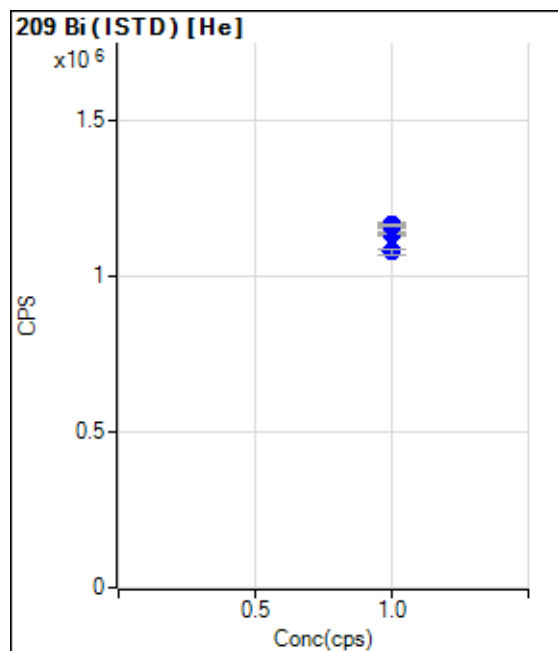
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2322692.87		A	0.4
2	☐	1.000		2306182.99		A	1.9
3	☐	1.000		2389563.59		A	3.0
4	☐	1.000		2370277.03		A	1.4
5	☐	1.000		2431809.70		A	0.6
6	☐	1.000		2431024.63		A	2.2
7	☐	1.000		2470088.96		A	1.7
8	☐	1.000		2449538.07		A	1.3

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1812705.06		A	0.4
2	☐	1.000		1830158.12		A	0.5
3	☐	1.000		1882345.30		A	1.2
4	☐	1.000		1833777.58		A	1.2
5	☐	1.000		1877845.27		A	1.5
6	☐	1.000		1873227.61		A	0.4
7	☐	1.000		1932107.80		A	1.3
8	☐	1.000		1911026.83		A	3.4

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1204455.77		P	0.5
2	☐	1.000		1211640.15		P	0.5
3	☐	1.000		1268952.94		P	1.0
4	☐	1.000		1263096.51		P	0.1
5	☐	1.000		1265003.17		P	0.8
6	☐	1.000		1271834.52		P	0.4
7	☐	1.000		1267690.15		P	0.8
8	☐	1.000		1181623.56		P	0.8



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1134255.20		P	0.2
2	☐	1.000		1138625.52		P	0.6
3	☐	1.000		1163590.65		P	1.1
4	☐	1.000		1164530.67		P	1.7
5	☐	1.000		1165557.56		P	0.3
6	☐	1.000		1158985.90		P	1.1
7	☐	1.000		1163442.48		P	0.2
8	☐	1.000		1079829.82		P	1.9

US EPA Tune Check Report

Reviewed By:jasw
On:6/12/2025 5:42
PM
Inst Id :P7
LB :LB136121

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\P7032125 MS.b
Acq. Date-Time 2025-06-11 17:35:39
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		2457	24572.19			1.195	5.000
24		45887	458871.10			0.477	5.000
25		5967	59665.28			0.288	5.000
26		6867	68674.49			0.521	5.000
59		28282	282821.54			0.688	5.000
113		3820	38199.71			1.297	5.000
115		43820	438200.43			1.661	5.000
206		7672	76723.20			1.663	5.000
207		6710	67100.22			1.989	5.000
208		15951	159505.09			1.664	5.000
220		0	4.40			54.142	

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	2442	2499	2473	2423	2450
24	45740	45924	46179	45979	45613
25	5960	5977	5951	5991	5953
26	6878	6906	6888	6852	6814
59	28159	28581	28143	28381	28148
113	3828	3901	3804	3795	3773
115	44548	44675	43253	43415	43209
206	7784	7813	7663	7591	7510
207	6761	6906	6676	6658	6548
208	16160	16296	15839	15668	15790

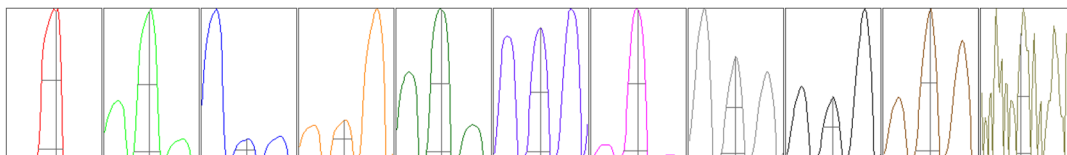
US EPA Tune Check Report

Reviewed By: jasw
On: 6/12/2025 5:42 PM
Inst Id : P7
LB : LB136121

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	4030.23	9.10	8.90 - 9.10	
24	77861.31	23.95	23.90 - 24.10	
25	10138.10	24.95	24.90 - 25.10	
26	11700.07	25.95	25.90 - 26.10	
59	48016.40	58.95	58.90 - 59.10	
113	7185.81	113.00	112.90 - 113.10	
115	83420.67	115.00	114.90 - 115.10	
206	15770.94	206.00	205.90 - 206.10	
207	13469.85	207.00	206.90 - 207.10	
208	32557.03	208.00	207.90 - 208.10	
220	0.75	219.80	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.62	0.770	0.900	
24	0.62	0.824	0.900	
25	0.62	0.776	0.900	
26	0.62	0.755	0.900	
59	0.61	0.774	0.900	
113	0.55	0.737	0.900	
115	0.53	0.748	0.900	
206	0.51	0.749	0.900	
207	0.52	0.761	0.900	
208	0.51	0.767	0.900	
220	0.37	0.442		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

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

US EPA Tune Check Report

Reviewed By:jasw
On:6/12/2025 5:42
PM
Inst Id :P7
LB :LB136121

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

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.8 V	Deflect	16.2 V
Extract 2	-115.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-45 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	160 V		

QP Parameters

Mass Gain	139	Axis Gain	0.9976	QP Bias	-3.0 V
Mass Offset	129	Axis Offset	0.11		

Hardware Settings

Torch

Torch H	-0.2 mm	Torch V	0.2 mm

EM

Discriminator	4.7 mV	Analog HV	2319 V	Pulse HV	1152 V

[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		9369	93686.85			0.876	
89		29351	293505.10			0.564	
205		9587	95873.72			0.837	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	9408	9493	9298	9341	9303
89	29218	29510	29131	29460	29433
205	9634	9660	9563	9621	9459

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.87 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.9 V	Deflect	3.6 V

US EPA Tune Check Report

Reviewed By:jasw
On:6/12/2025 5:42
PM
Inst Id :P7
LB :LB136121

Extract 2	-130.0 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	139	Axis Gain	0.9976	QP Bias	-13.0 V
Mass Offset	129	Axis Offset	0.11		
Hardware Settings					
Torch					
Torch H	-0.2 mm	Torch V	0.2 mm		
EM					
Discriminator	4.7 mV	Analog HV	2319 V	Pulse HV	1152 V

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S0 Instrumnet Name : P7
Client Sample ID : S0 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:00:35 DataFile Name : 012CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.03	0.35	-0.38	0.00	N/A	ppb
Antimony	121-1	0.00	0.00	0.00	0.00	N/A	ppb
Arsenic	75-2	0.01	-0.01	-0.01	0.00	N/A	ppb
Barium	135-1	-0.01	0.00	0.01	0.00	N/A	ppb
Barium	137-1	0.00	-0.02	0.02	0.00	N/A	ppb
Beryllium	9-1	-0.02	0.02	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	0.00	0.00	0.00	0.00	N/A	ppb
Cadmium	106-1	-0.25	-0.22	0.47	0.00	N/A	ppb
Cadmium	111-1	-0.02	-0.01	0.04	0.00	N/A	ppb
Calcium	43-1	1.18	-2.67	1.49	0.00	N/A	ppb
Calcium	44-1	5.25	-3.04	-2.22	0.00	N/A	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.04	0.02	-0.06	0.00	N/A	ppb
Cobalt	59-2	0.00	0.01	0.00	0.00	N/A	ppb
Copper	63-2	-0.06	0.05	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	0.00	0.00	0.01	0.00	N/A	ppb
Iron	57-2	1.59	-2.45	0.87	0.00	N/A	ppb
Iron	54-2	1.26	0.55	-1.81	0.00	N/A	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S0 Instrumnet Name : P7
Client Sample ID : S0 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:00:35 DataFile Name : 012CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.01	0.00	-0.01	0.00	N/A	ppb
Lead	207-1	-0.01	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	-0.03	-0.01	0.04	0.00	N/A	ppb
Manganese	55-2	0.02	-0.01	-0.01	0.00	N/A	ppb
Molybdenum	94-1	0.00	-0.01	0.01	0.00	N/A	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	96-1	0.01	-0.01	0.00	0.00	N/A	ppb
Molybdenum	97-1	0.00	-0.01	0.01	0.00	N/A	ppb
Molybdenum	98-1	0.01	-0.01	0.00	0.00	N/A	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.05	0.04	0.01	0.00	N/A	ppb
Phosphorus	31-2	-27.65	-18.04	-10.26	-18.65		ppb
Potassium	39-2	-3.41	4.18	-0.77	0.00	N/A	ppb
Rhodium	103-1				100		%
Rhodium	103-2				100		%
Scandium	45-1				100		%
Scandium	45-2				100		%
Selenium	82-1	0.07	0.28	-0.35	0.00	N/A	ppb
Selenium	77-2	0.14	-0.29	0.15	0.00	N/A	ppb
Selenium	78-2	1.37	1.45	-2.82	0.00	N/A	ppb
Silicon	28-1	19.91	-8.46	-11.45	0.00	N/A	ppb
Silver	107-1	0.00	0.00	0.00	0.00	N/A	ppb
Silver	109-1	0.00	0.00	0.00	0.00	N/A	ppb
Sodium	23-2	-0.29	0.82	-0.53	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	784.52	-162.66	-254.34	122.51	469.48	ppb
Terbium	159-1				100		%
Terbium	159-2				100		%
Thallium	203-1	0.00	0.00	0.00	0.00	N/A	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	N/A	ppb
Tin	118-1	0.00	0.01	-0.01	0.00	N/A	ppb
Titanium	47-1	0.01	-0.03	0.01	0.00	N/A	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S0 Instrumnet Name : P7
Client Sample ID : S0 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:00:35 DataFile Name : 012CALB.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	0.01	-0.01	0.00	0.00	N/A	ppb
Yttrium	89-1				100		%
Yttrium	89-2				100		%
Zinc	66-2	-0.04	-0.07	0.10	0.00	N/A	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	N/A	ppb
Zirconium	91-1	0.00	0.01	-0.01	0.00	N/A	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S2 Instrumnet Name : P7
Client Sample ID : S2 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:07:26 DataFile Name : 014CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	19.93	18.15	18.98	19.02	4.67	ppb
Antimony	121-1	2.21	2.07	2.22	2.16	3.85	ppb
Arsenic	75-2	1.19	1.28	0.86	1.11	19.82	ppb
Barium	135-1	10.40	10.36	10.20	10.32	1.01	ppb
Barium	137-1	10.38	10.06	10.44	10.29	2.01	ppb
Beryllium	9-1	1.19	1.04	1.25	1.16	8.94	ppb
Bismuth	209-1				101		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	1.26	0.97	1.43	1.22	19.08	ppb
Cadmium	106-1	1.31	1.79	0.96	1.36	30.64	ppb
Cadmium	111-1	1.23	1.13	1.27	1.21	5.79	ppb
Calcium	43-1	496.79	516.30	544.08	519.06	4.58	ppb
Calcium	44-1	514.58	539.73	531.64	528.65	2.43	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.26	2.23	2.08	2.19	4.38	ppb
Cobalt	59-2	1.20	1.09	1.12	1.14	4.86	ppb
Copper	63-2	2.22	2.20	2.11	2.18	2.72	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				101		%
Indium	115-1				99		%
Indium	115-2				99		%
Iron	56-2	53.08	54.05	53.72	53.62	0.92	ppb
Iron	57-2	52.45	54.05	58.87	55.12	6.06	ppb
Iron	54-2	56.97	54.91	59.10	56.99	3.68	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S2 Instrumnet Name : P7
Client Sample ID : S2 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:07:26 DataFile Name : 014CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.95	1.00	1.00	0.98	3.17	ppb
Lead	207-1	1.10	1.00	0.97	1.02	6.49	ppb
Lead	208-1	1.00	0.99	0.96	0.98	1.86	ppb
Lithium	6-1				100		%
Magnesium	24-2	478.46	493.07	483.82	485.12	1.52	ppb
Manganese	55-2	1.05	1.00	1.02	1.02	2.27	ppb
Molybdenum	94-1	5.92	6.30	5.83	6.02	4.16	ppb
Molybdenum	95-1	5.14	5.32	5.23	5.23	1.77	ppb
Molybdenum	96-1	5.28	5.40	5.55	5.41	2.51	ppb
Molybdenum	97-1	5.29	5.39	5.14	5.27	2.34	ppb
Molybdenum	98-1	5.25	5.38	5.35	5.33	1.30	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.99	1.33	1.15	1.16	14.86	ppb
Phosphorus	31-2	13.11	17.58	25.26	18.65	32.97	ppb
Potassium	39-2	526.38	542.34	535.22	534.64	1.50	ppb
Rhodium	103-1				100		%
Rhodium	103-2				100		%
Scandium	45-1				104		%
Scandium	45-2				101		%
Selenium	82-1	6.31	5.76	6.34	6.13	5.30	ppb
Selenium	77-2	2.70	4.01	4.46	3.72	24.62	ppb
Selenium	78-2	3.66	9.28	3.94	5.63	56.26	ppb
Silicon	28-1	-14.63	-9.44	-6.24	-10.10		ppb
Silver	107-1	1.16	1.12	1.24	1.17	5.12	ppb
Silver	109-1	1.10	1.16	1.12	1.12	2.57	ppb
Sodium	23-2	519.11	536.62	522.38	526.03	1.77	ppb
Strontium	86-1	1.15	1.00	0.95	1.03	10.18	ppb
Strontium	88-1	1.06	1.04	1.02	1.04	1.88	ppb
Sulfur	34-1	-284.47	-163.34	80.29	-122.51		ppb
Terbium	159-1				101		%
Terbium	159-2				99		%
Thallium	203-1	1.00	1.01	0.97	0.99	1.93	ppb
Thallium	205-1	0.97	1.00	0.97	0.98	1.75	ppb
Tin	118-1	5.31	5.02	5.36	5.23	3.50	ppb
Titanium	47-1	4.80	4.85	4.60	4.75	2.76	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S2 Instrumnet Name : P7
Client Sample ID : S2 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:07:26 DataFile Name : 014CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.95	0.96	0.98	0.96	1.48	ppb
Vanadium	51-2	5.25	5.36	5.49	5.37	2.19	ppb
Yttrium	89-1				100		%
Yttrium	89-2				100		%
Zinc	66-2	5.33	5.80	5.54	5.56	4.26	ppb
Zirconium	90-1	0.95	1.11	0.99	1.02	7.92	ppb
Zirconium	91-1	1.02	1.00	1.09	1.04	4.43	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S3 Instrumnet Name : P7
Client Sample ID : S3 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:14:41 DataFile Name : 016CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	897.59	908.37	876.47	894.14	1.81	ppb
Antimony	121-1	48.49	48.09	47.37	47.99	1.18	ppb
Arsenic	75-2	52.80	50.79	51.30	51.63	2.03	ppb
Barium	135-1	239.49	237.24	235.55	237.43	0.83	ppb
Barium	137-1	236.31	235.88	234.74	235.65	0.35	ppb
Beryllium	9-1	50.32	49.54	50.78	50.21	1.25	ppb
Bismuth	209-1				105		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	53.10	51.90	52.59	52.53	1.15	ppb
Cadmium	106-1	53.34	54.83	52.80	53.66	1.96	ppb
Cadmium	111-1	55.66	53.16	54.33	54.38	2.30	ppb
Calcium	43-1	4841.69	4847.19	4883.68	4857.52	0.47	ppb
Calcium	44-1	4888.71	4772.66	4837.03	4832.80	1.20	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	48.66	48.79	46.88	48.11	2.22	ppb
Cobalt	59-2	48.15	48.54	46.81	47.83	1.90	ppb
Copper	63-2	476.05	480.52	464.50	473.69	1.74	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				104		%
Indium	115-1				104		%
Indium	115-2				101		%
Iron	56-2	2542.77	2515.22	2460.44	2506.14	1.67	ppb
Iron	57-2	2471.71	2439.38	2383.87	2431.65	1.83	ppb
Iron	54-2	2543.50	2481.47	2453.18	2492.71	1.85	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S3 Instrumnet Name : P7
Client Sample ID : S3 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:14:41 DataFile Name : 016CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	223.16	219.04	223.60	221.93	1.13	ppb
Lead	207-1	218.49	216.63	218.69	217.94	0.52	ppb
Lead	208-1	219.97	215.93	219.04	218.31	0.97	ppb
Lithium	6-1				104		%
Magnesium	24-2	4477.38	4452.38	4378.97	4436.24	1.15	ppb
Manganese	55-2	466.68	472.51	460.91	466.70	1.24	ppb
Molybdenum	94-1	470.89	455.88	471.12	465.96	1.87	ppb
Molybdenum	95-1	474.71	460.22	472.09	469.01	1.65	ppb
Molybdenum	96-1	481.16	459.45	478.40	473.00	2.50	ppb
Molybdenum	97-1	481.23	465.17	479.36	475.25	1.85	ppb
Molybdenum	98-1	499.61	499.65	499.62	499.63	0.00	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	51.70	52.58	51.40	51.89	1.19	ppb
Phosphorus	31-2	990.37	1009.04	964.01	987.81	2.29	ppb
Potassium	39-2	2455.57	2454.24	2438.91	2449.57	0.38	ppb
Rhodium	103-1				104		%
Rhodium	103-2				102		%
Scandium	45-1				105		%
Scandium	45-2				103		%
Selenium	82-1	52.01	51.30	53.16	52.16	1.80	ppb
Selenium	77-2	57.10	50.45	52.57	53.37	6.36	ppb
Selenium	78-2	50.34	52.11	48.20	50.22	3.90	ppb
Silicon	28-1	38.62	21.12	33.95	31.23	29.00	ppb
Silver	107-1	47.21	45.70	46.40	46.44	1.63	ppb
Silver	109-1	45.49	44.63	44.42	44.85	1.27	ppb
Sodium	23-2	5293.11	5268.83	5085.24	5215.72	2.18	ppb
Strontium	86-1	50.60	49.68	50.17	50.15	0.91	ppb
Strontium	88-1	47.65	45.73	47.68	47.02	2.38	ppb
Sulfur	34-1	825.60	783.74	830.88	813.41	3.18	ppb
Terbium	159-1				103		%
Terbium	159-2				105		%
Thallium	203-1	44.69	44.86	44.82	44.79	0.20	ppb
Thallium	205-1	43.80	43.16	43.11	43.35	0.89	ppb
Tin	118-1	49.33	48.83	48.39	48.85	0.96	ppb
Titanium	47-1	458.67	445.10	455.89	453.22	1.58	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S3 Instrumnet Name : P7
Client Sample ID : S3 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:14:41 DataFile Name : 016CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	42.11	41.23	41.42	41.59	1.12	ppb
Vanadium	51-2	48.54	47.54	47.76	47.95	1.09	ppb
Yttrium	89-1				103		%
Yttrium	89-2				102		%
Zinc	66-2	488.56	502.31	483.01	491.29	2.02	ppb
Zirconium	90-1	46.94	45.60	46.94	46.49	1.65	ppb
Zirconium	91-1	48.62	45.68	48.53	47.61	3.51	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S4 Instrumnet Name : P7
Client Sample ID : S4 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:18:04 DataFile Name : 017CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2306.88	2272.88	2287.03	2288.93	0.75	ppb
Antimony	121-1	121.45	121.16	123.11	121.91	0.86	ppb
Arsenic	75-2	129.78	132.56	128.34	130.23	1.65	ppb
Barium	135-1	591.54	584.42	598.30	591.42	1.17	ppb
Barium	137-1	597.23	589.52	599.84	595.53	0.90	ppb
Beryllium	9-1	127.57	128.63	130.04	128.75	0.96	ppb
Bismuth	209-1				105		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	132.10	132.93	136.49	133.84	1.75	ppb
Cadmium	106-1	132.53	135.91	134.94	134.46	1.29	ppb
Cadmium	111-1	136.27	134.87	133.32	134.82	1.09	ppb
Calcium	43-1	12343.22	12717.81	12101.02	12387.35	2.51	ppb
Calcium	44-1	12812.10	12850.74	12336.73	12666.53	2.26	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	124.91	122.36	121.92	123.06	1.31	ppb
Cobalt	59-2	124.85	123.20	121.52	123.19	1.35	ppb
Copper	63-2	1314.47	1312.17	1284.63	1303.76	1.27	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				101		%
Indium	115-1				102		%
Indium	115-2				99		%
Iron	56-2	6445.37	6455.22	6259.02	6386.53	1.73	ppb
Iron	57-2	6269.12	6295.62	6151.52	6238.75	1.23	ppb
Iron	54-2	6421.65	6411.27	6299.46	6377.46	1.06	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S4 Instrumnet Name : P7
Client Sample ID : S4 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:18:04 DataFile Name : 017CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	578.59	574.21	576.24	576.35	0.38	ppb
Lead	207-1	560.51	563.73	563.60	562.61	0.32	ppb
Lead	208-1	598.33	600.54	598.73	599.20	0.20	ppb
Lithium	6-1				103		%
Magnesium	24-2	12887.36	12600.91	12875.44	12787.91	1.27	ppb
Manganese	55-2	1306.04	1313.76	1270.77	1296.86	1.77	ppb
Molybdenum	94-1	1225.25	1239.46	1240.50	1235.07	0.69	ppb
Molybdenum	95-1	1282.33	1242.45	1278.65	1267.81	1.74	ppb
Molybdenum	96-1	1264.05	1251.29	1294.30	1269.88	1.74	ppb
Molybdenum	97-1	1263.28	1209.47	1284.80	1252.52	3.10	ppb
Molybdenum	98-1	1273.61	1254.09	1267.67	1265.12	0.79	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	137.09	138.70	136.72	137.51	0.77	ppb
Phosphorus	31-2	2616.14	2562.05	2590.67	2589.62	1.04	ppb
Potassium	39-2	6547.13	6456.25	6457.76	6487.05	0.80	ppb
Rhodium	103-1				102		%
Rhodium	103-2				100		%
Scandium	45-1				105		%
Scandium	45-2				100		%
Selenium	82-1	130.78	127.80	133.73	130.77	2.26	ppb
Selenium	77-2	123.05	140.87	139.96	134.63	7.45	ppb
Selenium	78-2	125.98	128.70	134.77	129.82	3.47	ppb
Silicon	28-1	83.10	104.84	77.15	88.37	16.50	ppb
Silver	107-1	90.85	89.64	89.12	89.87	0.99	ppb
Silver	109-1	88.49	87.24	89.52	88.42	1.29	ppb
Sodium	23-2	13834.45	13307.20	13676.24	13605.96	1.99	ppb
Strontium	86-1	128.33	126.43	129.22	127.99	1.12	ppb
Strontium	88-1	116.34	115.04	118.19	116.53	1.36	ppb
Sulfur	34-1	2496.31	2781.40	2217.58	2498.43	11.28	ppb
Terbium	159-1				103		%
Terbium	159-2				103		%
Thallium	203-1	114.73	114.30	113.57	114.20	0.51	ppb
Thallium	205-1	112.43	113.14	111.83	112.47	0.58	ppb
Tin	118-1	121.70	121.76	123.48	122.31	0.83	ppb
Titanium	47-1	1144.59	1172.38	1125.07	1147.35	2.07	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S4 Instrumnet Name : P7
Client Sample ID : S4 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:18:04 DataFile Name : 017CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	104.86	104.83	109.17	106.29	2.35	ppb
Vanadium	51-2	122.65	123.25	121.39	122.43	0.78	ppb
Yttrium	89-1				103		%
Yttrium	89-2				100		%
Zinc	66-2	1446.74	1450.81	1442.20	1446.58	0.30	ppb
Zirconium	90-1	118.13	116.11	119.97	118.07	1.63	ppb
Zirconium	91-1	122.14	118.36	120.77	120.42	1.59	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S5 Instrumnet Name : P7
Client Sample ID : S5 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:21:13 DataFile Name : 018CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	4524.11	4506.18	4625.83	4552.04	1.42	ppb
Antimony	121-1	244.25	241.18	243.94	243.13	0.70	ppb
Arsenic	75-2	258.85	255.34	258.83	257.67	0.78	ppb
Barium	135-1	1188.73	1189.19	1195.88	1191.27	0.34	ppb
Barium	137-1	1323.01	1256.28	1336.64	1305.31	3.29	ppb
Beryllium	9-1	256.99	262.89	257.30	259.06	1.28	ppb
Bismuth	209-1				105		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	271.70	272.70	273.95	272.78	0.41	ppb
Cadmium	106-1	265.95	267.40	269.17	267.50	0.60	ppb
Cadmium	111-1	266.98	267.19	267.82	267.33	0.16	ppb
Calcium	43-1	24697.95	24570.33	24951.56	24739.95	0.78	ppb
Calcium	44-1	25408.23	25362.99	25742.06	25504.43	0.81	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	245.99	242.27	245.61	244.63	0.84	ppb
Cobalt	59-2	242.53	240.56	245.68	242.92	1.06	ppb
Copper	63-2	2635.30	2514.70	2646.29	2598.76	2.81	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				105		%
Holmium	165-2				104		%
Indium	115-1				101		%
Indium	115-2				98		%
Iron	56-2	12861.53	12710.79	12748.25	12773.52	0.61	ppb
Iron	57-2	12431.73	12196.38	12477.04	12368.38	1.22	ppb
Iron	54-2	12672.30	12472.01	12665.46	12603.26	0.90	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S5 Instrumnet Name : P7
Client Sample ID : S5 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:21:13 DataFile Name : 018CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1262.67	1242.41	1291.78	1265.62	1.96	ppb
Lead	207-1	1263.63	1274.81	1281.95	1273.46	0.73	ppb
Lead	208-1	1272.44	1251.24	1284.78	1269.49	1.34	ppb
Lithium	6-1				103		%
Magnesium	24-2	25207.34	24823.30	25445.02	25158.55	1.25	ppb
Manganese	55-2	2531.26	2516.75	2579.43	2542.48	1.29	ppb
Molybdenum	94-1	2532.81	2474.60	2586.47	2531.29	2.21	ppb
Molybdenum	95-1	2597.54	2571.56	2550.54	2573.21	0.91	ppb
Molybdenum	96-1	2657.67	2481.10	2628.20	2588.99	3.65	ppb
Molybdenum	97-1	2578.13	2514.17	2622.18	2571.49	2.11	ppb
Molybdenum	98-1	2622.63	2593.35	2612.27	2609.42	0.57	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	266.51	265.23	267.09	266.28	0.36	ppb
Phosphorus	31-2	5239.53	5182.53	5374.99	5265.68	1.88	ppb
Potassium	39-2	13221.24	12859.15	13057.53	13045.97	1.39	ppb
Rhodium	103-1				99		%
Rhodium	103-2				99		%
Scandium	45-1				103		%
Scandium	45-2				100		%
Selenium	82-1	262.94	263.12	263.07	263.04	0.04	ppb
Selenium	77-2	270.73	269.32	268.92	269.66	0.35	ppb
Selenium	78-2	261.14	264.33	264.96	263.48	0.78	ppb
Silicon	28-1	178.02	185.01	202.18	188.40	6.60	ppb
Silver	107-1	189.69	187.21	187.74	188.21	0.69	ppb
Silver	109-1	185.68	184.63	183.51	184.61	0.59	ppb
Sodium	23-2	27412.87	26855.95	27208.33	27159.05	1.04	ppb
Strontium	86-1	257.81	254.31	260.89	257.67	1.28	ppb
Strontium	88-1	257.91	247.72	257.08	254.24	2.23	ppb
Sulfur	34-1	5042.93	4973.90	5108.25	5041.70	1.33	ppb
Terbium	159-1				102		%
Terbium	159-2				103		%
Thallium	203-1	231.37	230.12	233.14	231.54	0.65	ppb
Thallium	205-1	221.56	252.05	254.04	242.55	7.51	ppb
Tin	118-1	242.80	246.09	246.94	245.28	0.89	ppb
Titanium	47-1	2462.52	2469.50	2528.52	2486.85	1.46	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S5 Instrumnet Name : P7
Client Sample ID : S5 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:21:13 DataFile Name : 018CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	255.18	245.83	251.17	250.73	1.87	ppb
Vanadium	51-2	242.15	241.02	245.02	242.73	0.85	ppb
Yttrium	89-1				101		%
Yttrium	89-2				100		%
Zinc	66-2	2708.21	2670.17	2711.21	2696.53	0.85	ppb
Zirconium	90-1	260.22	257.73	259.76	259.24	0.51	ppb
Zirconium	91-1	244.54	241.93	244.65	243.71	0.63	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S6 Instrumnet Name : P7
Client Sample ID : S6 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:24:17 DataFile Name : 019CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	8784.04	8767.93	8747.66	8766.54	0.21	ppb
Antimony	121-1	489.93	494.31	524.59	502.94	3.75	ppb
Arsenic	75-2	505.10	508.87	506.80	506.93	0.37	ppb
Barium	135-1	2451.78	2492.87	2512.02	2485.56	1.24	ppb
Barium	137-1	2450.28	2470.18	2546.89	2489.12	2.05	ppb
Beryllium	9-1	500.42	506.75	504.17	503.78	0.63	ppb
Bismuth	209-1				106		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	490.79	506.85	521.76	506.47	3.06	ppb
Cadmium	106-1	499.58	505.07	508.83	504.50	0.92	ppb
Cadmium	111-1	494.88	501.96	509.85	502.23	1.49	ppb
Calcium	43-1	48587.06	48709.70	49623.66	48973.48	1.16	ppb
Calcium	44-1	50169.20	50551.70	49139.82	49953.58	1.46	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	473.77	471.74	465.53	470.35	0.91	ppb
Cobalt	59-2	465.23	471.05	466.93	467.74	0.64	ppb
Copper	63-2	5041.24	4968.51	5002.34	5004.03	0.73	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				103		%
Indium	115-1				100		%
Indium	115-2				97		%
Iron	56-2	25249.01	25282.25	24611.32	25047.53	1.51	ppb
Iron	57-2	23894.43	23708.53	23661.91	23754.95	0.52	ppb
Iron	54-2	25390.75	25370.72	25482.27	25414.58	0.23	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S6 Instrumnet Name : P7
Client Sample ID : S6 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:24:17 DataFile Name : 019CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2409.43	2491.81	2530.86	2477.37	2.50	ppb
Lead	207-1	2462.88	2540.83	2525.56	2509.76	1.65	ppb
Lead	208-1	2458.66	2511.54	2516.40	2495.53	1.28	ppb
Lithium	6-1				102		%
Magnesium	24-2	47953.19	49108.47	48576.48	48546.05	1.19	ppb
Manganese	55-2	4992.04	5101.56	4928.25	5007.28	1.75	ppb
Molybdenum	94-1	4925.82	4951.50	4977.92	4951.75	0.53	ppb
Molybdenum	95-1	4958.16	5043.62	4903.89	4968.56	1.42	ppb
Molybdenum	96-1	5041.19	5014.91	4974.39	5010.16	0.67	ppb
Molybdenum	97-1	4975.90	4977.38	4963.47	4972.25	0.15	ppb
Molybdenum	98-1	4915.36	4927.30	5017.69	4953.45	1.13	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	497.66	507.58	497.68	500.97	1.14	ppb
Phosphorus	31-2	10049.31	10021.96	9724.18	9931.82	1.82	ppb
Potassium	39-2	24844.84	24795.83	25056.11	24898.93	0.56	ppb
Rhodium	103-1				101		%
Rhodium	103-2				99		%
Scandium	45-1				101		%
Scandium	45-2				102		%
Selenium	82-1	507.27	506.17	498.53	503.99	0.94	ppb
Selenium	77-2	519.24	531.40	525.25	525.30	1.16	ppb
Selenium	78-2	507.43	528.20	517.80	517.81	2.01	ppb
Silicon	28-1	435.80	467.02	473.72	458.85	4.41	ppb
Silver	107-1	477.44	494.99	507.19	493.21	3.03	ppb
Silver	109-1	486.49	475.86	499.85	487.40	2.47	ppb
Sodium	23-2	52048.50	52122.69	50689.76	51620.32	1.56	ppb
Strontium	86-1	495.94	500.44	503.47	499.95	0.76	ppb
Strontium	88-1	487.75	494.88	495.91	492.84	0.90	ppb
Sulfur	34-1	9871.10	10025.65	10124.24	10007.00	1.28	ppb
Terbium	159-1				107		%
Terbium	159-2				104		%
Thallium	203-1	451.95	458.84	456.25	455.68	0.76	ppb
Thallium	205-1	498.63	494.40	512.72	501.92	1.91	ppb
Tin	118-1	456.86	466.02	473.53	465.47	1.79	ppb
Titanium	47-1	4949.92	4975.45	4955.85	4960.40	0.27	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S6 Instrumnet Name : P7
Client Sample ID : S6 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:24:17 DataFile Name : 019CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	499.51	503.96	485.18	496.22	1.98	ppb
Vanadium	51-2	467.90	466.97	467.52	467.46	0.10	ppb
Yttrium	89-1				103		%
Yttrium	89-2				100		%
Zinc	66-2	4990.31	4993.25	5065.38	5016.32	0.85	ppb
Zirconium	90-1	508.38	497.07	505.50	503.65	1.17	ppb
Zirconium	91-1	475.28	478.07	479.30	477.55	0.43	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S7 Instrumnet Name : P7
Client Sample ID : S7 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:27:13 DataFile Name : 020CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	19324.03	19039.14	19111.53	19158.23	0.77	ppb
Antimony	121-1	983.66	996.49	1022.05	1000.73	1.95	ppb
Arsenic	75-2	997.10	990.09	994.47	993.88	0.36	ppb
Barium	135-1	4929.19	5127.04	5023.95	5026.73	1.97	ppb
Barium	137-1	4969.88	4983.08	5035.08	4996.01	0.69	ppb
Beryllium	9-1	985.97	993.85	1006.27	995.36	1.03	ppb
Bismuth	209-1				105		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	969.14	998.64	1001.73	989.84	1.82	ppb
Cadmium	106-1	981.09	995.91	999.03	992.01	0.97	ppb
Cadmium	111-1	968.60	1006.92	1003.80	993.11	2.14	ppb
Calcium	43-1	94480.78	102457.51	97973.29	98303.86	4.07	ppb
Calcium	44-1	96654.88	106570.88	99999.38	101075.05	4.99	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	991.86	1034.75	1022.91	1016.51	2.18	ppb
Cobalt	59-2	996.33	1028.92	1029.46	1018.23	1.86	ppb
Copper	63-2	9890.24	10111.38	9902.05	9967.89	1.25	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				107		%
Indium	115-1				98		%
Indium	115-2				97		%
Iron	56-2	49331.26	49976.21	51200.53	50169.33	1.89	ppb
Iron	57-2	50162.26	50969.67	51029.73	50720.55	0.96	ppb
Iron	54-2	51067.20	51608.06	50941.84	51205.70	0.69	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S7 Instrumnet Name : P7
Client Sample ID : S7 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:27:13 DataFile Name : 020CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	4987.77	4927.61	5129.31	5014.90	2.06	ppb
Lead	207-1	4961.43	5053.39	4981.15	4998.66	0.97	ppb
Lead	208-1	4976.87	5017.90	5011.74	5002.17	0.44	ppb
Lithium	6-1				100		%
Magnesium	24-2	96694.18	96431.74	97955.70	97027.21	0.84	ppb
Manganese	55-2	9984.24	9995.87	9964.53	9981.55	0.16	ppb
Molybdenum	94-1	10032.16	9877.85	10149.61	10019.87	1.36	ppb
Molybdenum	95-1	9954.31	9813.79	10222.13	9996.74	2.08	ppb
Molybdenum	96-1	9888.66	9737.27	10288.68	9971.54	2.86	ppb
Molybdenum	97-1	9929.02	9929.04	10132.70	9996.92	1.18	ppb
Molybdenum	98-1	9841.25	10002.24	10138.65	9994.05	1.49	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	976.78	1004.36	1000.22	993.79	1.50	ppb
Phosphorus	31-2	19721.88	20006.70	20142.65	19957.08	1.08	ppb
Potassium	39-2	49330.69	50258.91	49910.84	49833.48	0.94	ppb
Rhodium	103-1				99		%
Rhodium	103-2				100		%
Scandium	45-1				101		%
Scandium	45-2				102		%
Selenium	82-1	984.29	986.71	1010.73	993.91	1.47	ppb
Selenium	77-2	985.57	940.44	1017.21	981.07	3.93	ppb
Selenium	78-2	966.27	993.15	1001.90	987.11	1.88	ppb
Silicon	28-1	952.70	1122.21	1050.17	1041.69	8.17	ppb
Silver	107-1	1011.46	1018.52	1040.25	1023.41	1.47	ppb
Silver	109-1	1007.81	1022.22	1052.40	1027.48	2.21	ppb
Sodium	23-2	105638.48	103571.88	103434.30	104214.89	1.18	ppb
Strontium	86-1	990.16	990.81	1012.21	997.73	1.26	ppb
Strontium	88-1	992.74	985.74	1032.71	1003.73	2.52	ppb
Sulfur	34-1	19649.01	21096.62	19241.19	19995.60	4.88	ppb
Terbium	159-1				107		%
Terbium	159-2				106		%
Thallium	203-1	1000.96	1043.73	1040.46	1028.38	2.31	ppb
Thallium	205-1	964.94	1032.01	1011.46	1002.80	3.43	ppb
Tin	118-1	973.67	1045.81	1037.03	1018.84	3.86	ppb
Titanium	47-1	9836.07	10312.21	9966.50	10038.26	2.45	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S7 Instrumnet Name : P7
Client Sample ID : S7 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:27:13 DataFile Name : 020CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	981.12	1004.25	1028.03	1004.47	2.34	ppb
Vanadium	51-2	972.63	1052.51	1030.39	1018.51	4.05	ppb
Yttrium	89-1				103		%
Yttrium	89-2				103		%
Zinc	66-2	9883.71	9970.80	9901.21	9918.57	0.46	ppb
Zirconium	90-1	987.57	1009.48	993.67	996.91	1.13	ppb
Zirconium	91-1	1007.05	1006.09	1027.32	1013.49	1.18	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S8 Instrumnet Name : P7
Client Sample ID : S8 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:30:05 DataFile Name : 021CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	100658.29	99348.00	100955.01	100320.43	0.85	ppb
Antimony	121-1	0.51	0.51	0.49	0.50	2.27	ppb
Arsenic	75-2	0.53	0.65	0.46	0.55	17.67	ppb
Barium	135-1	2.29	2.30	2.14	2.25	3.96	ppb
Barium	137-1	2.24	2.18	2.25	2.22	1.82	ppb
Beryllium	9-1	0.10	0.14	0.14	0.13	16.35	ppb
Bismuth	209-1				98		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.46	0.61	0.40	0.49	21.74	ppb
Cadmium	106-1	-0.07	-0.35	-0.77	-0.40		ppb
Cadmium	111-1	0.16	0.13	0.07	0.12	35.63	ppb
Calcium	43-1	493806.75	505455.57	502115.00	500459.10	1.20	ppb
Calcium	44-1	499290.70	503481.37	496513.61	499761.89	0.70	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.53	1.48	1.32	1.44	7.52	ppb
Cobalt	59-2	1.68	1.65	1.70	1.68	1.56	ppb
Copper	63-2	1.69	1.69	1.64	1.67	1.73	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				105		%
Indium	115-1				100		%
Indium	115-2				98		%
Iron	56-2	247915.86	251270.36	250646.47	249944.23	0.71	ppb
Iron	57-2	248416.02	252004.12	249543.67	249987.94	0.73	ppb
Iron	54-2	252916.51	248763.07	247447.79	249709.12	1.14	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S8 Instrumnet Name : P7
Client Sample ID : S8 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:30:05 DataFile Name : 021CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	3.55	3.51	3.72	3.60	3.04	ppb
Lead	207-1	3.61	3.37	3.45	3.48	3.53	ppb
Lead	208-1	3.60	3.53	3.56	3.57	0.91	ppb
Lithium	6-1				101		%
Magnesium	24-2	501848.34	507689.89	492653.21	500730.48	1.51	ppb
Manganese	55-2	4.22	4.24	4.17	4.21	0.91	ppb
Molybdenum	94-1	2.76	2.59	2.82	2.72	4.42	ppb
Molybdenum	95-1	1.11	1.23	1.19	1.18	4.93	ppb
Molybdenum	96-1	4.52	4.66	4.71	4.63	2.09	ppb
Molybdenum	97-1	1.24	1.23	1.16	1.21	3.42	ppb
Molybdenum	98-1	1.10	1.14	1.08	1.11	2.77	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	3.22	3.10	2.97	3.10	3.95	ppb
Phosphorus	31-2	-7.73	-6.85	-17.86	-10.81		ppb
Potassium	39-2	251224.79	249617.45	249189.62	250010.62	0.43	ppb
Rhodium	103-1				96		%
Rhodium	103-2				95		%
Scandium	45-1				105		%
Scandium	45-2				103		%
Selenium	82-1	2.44	2.68	3.47	2.86	18.94	ppb
Selenium	77-2	-0.29	0.14	0.99	0.28	231.76	ppb
Selenium	78-2	2.96	0.36	0.93	1.42	96.11	ppb
Silicon	28-1	-29.24	-31.55	-25.70	-28.83		ppb
Silver	107-1	0.11	0.08	0.08	0.09	17.27	ppb
Silver	109-1	0.10	0.10	0.08	0.09	14.14	ppb
Sodium	23-2	510800.20	496037.77	489733.65	498857.21	2.17	ppb
Strontium	86-1	3.52	3.44	3.55	3.51	1.59	ppb
Strontium	88-1	3.26	3.31	3.30	3.29	0.82	ppb
Sulfur	34-1	-1876.07	-1723.99	-1536.78	-1712.28		ppb
Terbium	159-1				104		%
Terbium	159-2				105		%
Thallium	203-1	0.10	0.07	0.09	0.09	13.69	ppb
Thallium	205-1	0.11	0.09	0.08	0.09	14.59	ppb
Tin	118-1	0.33	0.26	0.29	0.29	12.33	ppb
Titanium	47-1	0.66	0.47	0.57	0.56	16.91	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S8 Instrumnet Name : P7
Client Sample ID : S8 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:30:05 DataFile Name : 021CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.04	0.03	0.04	0.04	10.52	ppb
Vanadium	51-2	0.23	0.25	0.24	0.24	2.87	ppb
Yttrium	89-1				103		%
Yttrium	89-2				102		%
Zinc	66-2	40.18	40.69	43.09	41.32	3.76	ppb
Zirconium	90-1	0.85	0.83	0.79	0.82	3.66	ppb
Zirconium	91-1	0.89	0.79	0.85	0.84	5.58	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICV01 Instrumnet Name : P7
Client Sample ID : ICV01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:48:19 DataFile Name : 024ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	456.84	469.46	458.08	461.46	1.51	ppb
Antimony	121-1	186.76	191.91	193.98	190.88	1.95	ppb
Arsenic	75-2	215.71	213.45	215.04	214.73	0.54	ppb
Barium	135-1	95.81	100.86	101.33	99.33	3.08	ppb
Barium	137-1	96.35	99.75	99.88	98.66	2.03	ppb
Beryllium	9-1	98.66	99.48	101.93	100.02	1.70	ppb
Bismuth	209-1				104		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	95.00	100.37	102.41	99.26	3.85	ppb
Cadmium	106-1	94.72	97.49	94.58	95.60	1.72	ppb
Cadmium	111-1	105.64	110.17	108.93	108.25	2.16	ppb
Calcium	43-1	1918.63	1934.81	1944.87	1932.77	0.68	ppb
Calcium	44-1	1942.97	1946.47	1979.43	1956.29	1.03	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	100.27	101.21	102.85	101.44	1.28	ppb
Cobalt	59-2	103.67	106.34	104.79	104.93	1.28	ppb
Copper	63-2	97.93	100.03	99.14	99.03	1.06	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				105		%
Indium	115-1				104		%
Indium	115-2				102		%
Iron	56-2	2086.17	2094.11	2079.48	2086.59	0.35	ppb
Iron	57-2	1966.31	2017.11	2026.11	2003.18	1.61	ppb
Iron	54-2	2072.52	2129.17	2098.23	2099.97	1.35	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICV01 Instrumnet Name : P7
Client Sample ID : ICV01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:48:19 DataFile Name : 024ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	189.06	188.30	191.08	189.48	0.76	ppb
Lead	207-1	184.35	184.01	186.57	184.98	0.75	ppb
Lead	208-1	185.18	184.43	187.50	185.70	0.86	ppb
Lithium	6-1				97		%
Magnesium	24-2	1060.94	1094.50	1106.31	1087.25	2.16	ppb
Manganese	55-2	98.15	101.39	100.52	100.02	1.68	ppb
Molybdenum	94-1	0.05	0.09	0.10	0.08	30.22	ppb
Molybdenum	95-1	0.05	0.05	0.03	0.04	18.08	ppb
Molybdenum	96-1	0.07	0.08	0.04	0.07	29.19	ppb
Molybdenum	97-1	0.03	0.09	0.06	0.06	45.21	ppb
Molybdenum	98-1	0.03	0.03	0.05	0.04	28.84	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	110.85	112.06	113.20	112.04	1.05	ppb
Phosphorus	31-2	-20.66	-22.13	-17.35	-20.04		ppb
Potassium	39-2	1906.97	1943.92	1977.87	1942.92	1.83	ppb
Rhodium	103-1				103		%
Rhodium	103-2				103		%
Scandium	45-1				103		%
Scandium	45-2				102		%
Selenium	82-1	192.91	195.90	192.78	193.86	0.91	ppb
Selenium	77-2	201.34	221.79	217.99	213.71	5.09	ppb
Selenium	78-2	209.75	227.29	208.61	215.22	4.87	ppb
Silicon	28-1	-24.42	-20.44	-16.75	-20.54		ppb
Silver	107-1	45.05	47.36	47.55	46.66	2.98	ppb
Silver	109-1	43.97	46.26	46.41	45.55	3.01	ppb
Sodium	23-2	1852.76	1917.04	1919.04	1896.28	1.99	ppb
Strontium	86-1	0.05	0.05	-0.03	0.02	210.30	ppb
Strontium	88-1	0.04	0.03	0.04	0.03	13.18	ppb
Sulfur	34-1	-1573.71	-1531.10	-1551.12	-1551.97		ppb
Terbium	159-1				104		%
Terbium	159-2				105		%
Thallium	203-1	201.45	195.65	203.94	200.35	2.12	ppb
Thallium	205-1	195.57	190.47	195.45	193.83	1.50	ppb
Tin	118-1	0.01	0.04	0.03	0.02	66.41	ppb
Titanium	47-1	-0.01	0.05	0.01	0.02	155.80	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICV01 Instrumnet Name : P7
Client Sample ID : ICV01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:48:19 DataFile Name : 024ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	86.66	ppb
Vanadium	51-2	96.07	98.64	98.01	97.58	1.37	ppb
Yttrium	89-1				103		%
Yttrium	89-2				103		%
Zinc	66-2	195.92	197.35	198.43	197.23	0.64	ppb
Zirconium	90-1	0.03	0.03	0.03	0.03	2.29	ppb
Zirconium	91-1	0.07	0.07	0.07	0.07	3.99	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : LLICV01 Instrumnet Name : P7
Client Sample ID : LLICV01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:00:22 DataFile Name : 026LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	16.13	16.22	17.67	16.67	5.20	ppb
Antimony	121-1	1.96	2.00	2.05	2.00	2.19	ppb
Arsenic	75-2	1.25	1.20	1.01	1.15	11.19	ppb
Barium	135-1	9.78	9.40	9.77	9.65	2.24	ppb
Barium	137-1	9.33	9.48	9.67	9.49	1.83	ppb
Beryllium	9-1	1.08	1.10	0.98	1.05	5.98	ppb
Bismuth	209-1				104		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.82	1.62	0.98	1.14	37.13	ppb
Cadmium	106-1	0.40	-2.09	-0.04	-0.58		ppb
Cadmium	111-1	1.13	0.97	1.08	1.06	7.78	ppb
Calcium	43-1	474.18	482.17	459.68	472.01	2.42	ppb
Calcium	44-1	472.20	475.03	473.54	473.59	0.30	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.88	1.76	1.87	1.84	3.62	ppb
Cobalt	59-2	1.03	1.00	0.95	0.99	3.95	ppb
Copper	63-2	1.98	1.95	2.01	1.98	1.51	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				104		%
Indium	115-1				104		%
Indium	115-2				101		%
Iron	56-2	49.85	49.03	48.95	49.27	1.01	ppb
Iron	57-2	54.85	48.94	53.88	52.56	6.03	ppb
Iron	54-2	46.81	49.77	54.72	50.43	7.92	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : LLICV01 Instrumnet Name : P7
Client Sample ID : LLICV01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:00:22 DataFile Name : 026LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.92	0.86	0.94	0.91	4.71	ppb
Lead	207-1	0.95	0.90	0.98	0.94	4.26	ppb
Lead	208-1	0.91	0.88	0.92	0.90	1.97	ppb
Lithium	6-1				96		%
Magnesium	24-2	425.80	427.27	436.52	429.86	1.35	ppb
Manganese	55-2	1.14	1.05	1.11	1.10	4.04	ppb
Molybdenum	94-1	5.58	5.70	5.61	5.63	1.14	ppb
Molybdenum	95-1	4.87	4.82	4.44	4.71	5.01	ppb
Molybdenum	96-1	4.87	4.92	4.86	4.88	0.67	ppb
Molybdenum	97-1	4.47	4.92	4.71	4.70	4.75	ppb
Molybdenum	98-1	4.82	4.78	4.75	4.78	0.71	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.97	1.01	1.17	1.05	10.50	ppb
Phosphorus	31-2	-1.90	18.03	3.04	6.39	162.50	ppb
Potassium	39-2	477.18	483.12	494.51	484.94	1.82	ppb
Rhodium	103-1				103		%
Rhodium	103-2				103		%
Scandium	45-1				105		%
Scandium	45-2				101		%
Selenium	82-1	5.41	6.50	6.04	5.98	9.20	ppb
Selenium	77-2	1.39	5.54	5.64	4.19	57.81	ppb
Selenium	78-2	6.20	7.32	5.14	6.22	17.47	ppb
Silicon	28-1	-21.62	-26.43	-20.31	-22.79		ppb
Silver	107-1	1.02	1.14	1.07	1.07	5.60	ppb
Silver	109-1	1.01	1.04	1.04	1.03	2.07	ppb
Sodium	23-2	474.97	463.08	475.97	471.34	1.52	ppb
Strontium	86-1	1.00	1.00	0.95	0.98	2.54	ppb
Strontium	88-1	0.92	0.91	0.94	0.92	1.97	ppb
Sulfur	34-1	-1666.37	-1448.76	-1439.50	-1518.21		ppb
Terbium	159-1				102		%
Terbium	159-2				105		%
Thallium	203-1	0.93	0.90	0.98	0.94	4.13	ppb
Thallium	205-1	0.87	0.90	0.88	0.88	1.92	ppb
Tin	118-1	4.72	4.94	4.91	4.86	2.37	ppb
Titanium	47-1	4.03	4.38	4.53	4.31	5.97	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : LLICV01 Instrumnet Name : P7
Client Sample ID : LLICV01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:00:22 DataFile Name : 026LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.86	0.85	0.84	0.85	1.21	ppb
Vanadium	51-2	4.81	4.87	5.16	4.94	3.81	ppb
Yttrium	89-1				104		%
Yttrium	89-2				103		%
Zinc	66-2	4.48	5.34	5.36	5.06	9.92	ppb
Zirconium	90-1	0.89	0.96	0.91	0.92	3.98	ppb
Zirconium	91-1	0.99	0.99	0.91	0.96	5.13	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICB01 Instrumnet Name : P7
Client Sample ID : ICB01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:07:12 DataFile Name : 028CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.12	0.02	0.11	0.08	64.28	ppb
Antimony	121-1	0.00	0.01	0.01	0.01	36.48	ppb
Arsenic	75-2	-0.02	-0.04	0.01	-0.02		ppb
Barium	135-1	0.00	-0.01	-0.02	-0.01		ppb
Barium	137-1	0.00	-0.01	0.00	0.00		ppb
Beryllium	9-1	0.00	-0.01	0.01	0.00	731.14	ppb
Bismuth	209-1				103		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.00	0.05	0.10	0.05	99.53	ppb
Cadmium	106-1	-0.23	-0.47	-1.11	-0.60		ppb
Cadmium	111-1	-0.01	-0.03	-0.08	-0.04		ppb
Calcium	43-1	-9.52	-3.76	-1.96	-5.08		ppb
Calcium	44-1	-8.69	-7.26	-9.77	-8.57		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.11	0.02	0.04	0.06	77.65	ppb
Cobalt	59-2	-0.01	-0.02	-0.02	-0.02		ppb
Copper	63-2	-0.12	-0.05	-0.03	-0.07		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				105		%
Indium	115-1				103		%
Indium	115-2				101		%
Iron	56-2	-0.03	-0.09	0.39	0.09	283.85	ppb
Iron	57-2	-2.74	-0.73	-0.82	-1.43		ppb
Iron	54-2	1.57	0.89	3.23	1.90	63.41	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICB01 Instrumnet Name : P7
Client Sample ID : ICB01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:07:12 DataFile Name : 028CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.03	0.02	0.02	0.02	35.87	ppb
Lead	207-1	0.02	0.00	0.03	0.01	114.19	ppb
Lead	208-1	0.01	0.00	0.02	0.01	132.59	ppb
Lithium	6-1				96		%
Magnesium	24-2	0.10	-0.19	-0.13	-0.07		ppb
Manganese	55-2	-0.07	-0.05	-0.03	-0.05		ppb
Molybdenum	94-1	0.00	-0.03	0.00	-0.01		ppb
Molybdenum	95-1	0.01	0.00	0.00	0.00	450.73	ppb
Molybdenum	96-1	-0.03	-0.01	-0.02	-0.02		ppb
Molybdenum	97-1	-0.01	-0.01	0.00	-0.01		ppb
Molybdenum	98-1	0.00	-0.02	0.00	-0.01		ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.01	-0.09	0.10	0.00	2059.01	ppb
Phosphorus	31-2	-25.48	-21.14	-23.64	-23.42		ppb
Potassium	39-2	-13.88	-12.85	-2.94	-9.89		ppb
Rhodium	103-1				102		%
Rhodium	103-2				103		%
Scandium	45-1				103		%
Scandium	45-2				101		%
Selenium	82-1	1.10	0.57	1.17	0.95	34.61	ppb
Selenium	77-2	-0.29	-0.29	-0.29	-0.29		ppb
Selenium	78-2	-0.71	1.40	2.70	1.13	152.22	ppb
Silicon	28-1	-25.69	-24.11	-25.76	-25.19		ppb
Silver	107-1	0.00	0.00	0.00	0.00		ppb
Silver	109-1	0.00	0.00	0.00	0.00	361.42	ppb
Sodium	23-2	5.03	4.01	5.11	4.71	12.99	ppb
Strontium	86-1	0.03	-0.10	0.04	-0.01		ppb
Strontium	88-1	0.00	0.00	0.00	0.00	158.97	ppb
Sulfur	34-1	-1158.79	-1194.91	-1494.30	-1282.67		ppb
Terbium	159-1				103		%
Terbium	159-2				104		%
Thallium	203-1	0.00	0.00	0.00	0.00	26.09	ppb
Thallium	205-1	0.01	0.00	0.00	0.00	16.77	ppb
Tin	118-1	0.00	0.04	0.03	0.02	102.24	ppb
Titanium	47-1	0.04	0.04	-0.06	0.01	624.58	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICB01 Instrumnet Name : P7
Client Sample ID : ICB01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:07:12 DataFile Name : 028CCBE.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	-0.01	0.00	0.00	0.00		ppb
Yttrium	89-1				104		%
Yttrium	89-2				102		%
Zinc	66-2	-0.08	0.03	0.31	0.08	239.97	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00		ppb
Zirconium	91-1	0.01	-0.01	-0.01	0.00		ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICSA01 Instrumnet Name : P7
Client Sample ID : ICSA01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:10:36 DataFile Name : 029ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	95474.13	94618.31	90127.62	93406.69	3.07	ppb
Antimony	121-1	1.17	1.08	1.06	1.10	5.11	ppb
Arsenic	75-2	0.30	0.47	0.23	0.34	37.03	ppb
Barium	135-1	1.20	1.34	1.38	1.31	7.28	ppb
Barium	137-1	1.38	1.38	1.28	1.35	4.45	ppb
Beryllium	9-1	0.31	0.22	0.26	0.26	17.85	ppb
Bismuth	209-1				103		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	7.43	6.72	5.94	6.70	11.12	ppb
Cadmium	106-1	-2.00	-0.53	-0.59	-1.04		ppb
Cadmium	111-1	0.18	0.23	0.26	0.23	19.25	ppb
Calcium	43-1	98480.13	97476.60	98624.99	98193.91	0.64	ppb
Calcium	44-1	103347.12	101982.26	100935.01	102088.13	1.18	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	20.50	20.46	19.79	20.25	1.98	ppb
Cobalt	59-2	1.36	1.30	1.24	1.30	4.50	ppb
Copper	63-2	8.50	8.66	8.78	8.65	1.61	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				106		%
Indium	115-1				104		%
Indium	115-2				99		%
Iron	56-2	105930.07	102925.32	102393.57	103749.65	1.84	ppb
Iron	57-2	103479.60	103828.14	101095.32	102801.02	1.45	ppb
Iron	54-2	102608.74	106197.89	104473.33	104426.65	1.72	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICSA01 Instrumnet Name : P7
Client Sample ID : ICSA01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:10:36 DataFile Name : 029ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	4.47	4.39	4.55	4.47	1.85	ppb
Lead	207-1	4.07	4.06	3.96	4.03	1.43	ppb
Lead	208-1	4.14	4.17	4.20	4.17	0.70	ppb
Lithium	6-1				97		%
Magnesium	24-2	94869.54	93693.59	92761.77	93774.97	1.13	ppb
Manganese	55-2	7.73	7.98	7.53	7.75	2.94	ppb
Molybdenum	94-1	1656.92	1691.15	1732.83	1693.63	2.24	ppb
Molybdenum	95-1	2093.61	2120.60	2171.48	2128.57	1.86	ppb
Molybdenum	96-1	2088.99	2094.54	2145.21	2109.58	1.47	ppb
Molybdenum	97-1	2047.77	2128.20	2103.39	2093.12	1.97	ppb
Molybdenum	98-1	2090.02	2106.55	2155.62	2117.40	1.61	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	5.66	6.26	5.72	5.88	5.65	ppb
Phosphorus	31-2	103419.29	104172.47	100241.55	102611.10	2.03	ppb
Potassium	39-2	106467.76	106715.42	104371.13	105851.43	1.22	ppb
Rhodium	103-1				101		%
Rhodium	103-2				100		%
Scandium	45-1				104		%
Scandium	45-2				101		%
Selenium	82-1	0.58	1.05	1.19	0.94	33.80	ppb
Selenium	77-2	0.55	-0.29	0.56	0.28	175.93	ppb
Selenium	78-2	-1.01	-0.95	-0.52	-0.83		ppb
Silicon	28-1	-26.46	-25.60	-35.53	-29.20		ppb
Silver	107-1	0.05	0.06	0.05	0.05	13.14	ppb
Silver	109-1	0.05	0.06	0.06	0.06	10.82	ppb
Sodium	23-2	108433.56	111260.98	104927.19	108207.24	2.93	ppb
Strontium	86-1	34.55	35.93	36.29	35.59	2.58	ppb
Strontium	88-1	31.73	32.81	33.27	32.60	2.42	ppb
Sulfur	34-1	119651.46	116967.44	118551.46	118390.12	1.14	ppb
Terbium	159-1				107		%
Terbium	159-2				105		%
Thallium	203-1	0.04	0.05	0.08	0.06	38.49	ppb
Thallium	205-1	0.04	0.04	0.06	0.05	26.13	ppb
Tin	118-1	2.39	2.73	2.60	2.57	6.55	ppb
Titanium	47-1	1876.75	1862.70	1894.00	1877.82	0.83	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICSA01 Instrumnet Name : P7
Client Sample ID : ICSA01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:10:36 DataFile Name : 029ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.01	0.01	0.02	0.01	15.81	ppb
Vanadium	51-2	0.20	0.22	0.17	0.19	12.82	ppb
Yttrium	89-1				103		%
Yttrium	89-2				102		%
Zinc	66-2	11.05	10.68	10.78	10.84	1.75	ppb
Zirconium	90-1	0.01	0.02	0.01	0.01	44.88	ppb
Zirconium	91-1	0.01	0.02	0.02	0.02	55.81	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICSAB01 Instrumnet Name : P7
Client Sample ID : ICSAB01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:13:50 DataFile Name : 030ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	90872.46	91171.77	88670.00	90238.08	1.51	ppb
Antimony	121-1	20.27	21.02	20.36	20.55	2.01	ppb
Arsenic	75-2	20.03	21.91	21.46	21.13	4.64	ppb
Barium	135-1	20.30	20.45	20.53	20.43	0.57	ppb
Barium	137-1	20.74	21.10	20.31	20.72	1.91	ppb
Beryllium	9-1	20.47	20.07	20.50	20.34	1.18	ppb
Bismuth	209-1				106		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	27.25	25.31	24.91	25.82	4.85	ppb
Cadmium	106-1	15.97	16.79	15.96	16.24	2.92	ppb
Cadmium	111-1	21.12	20.66	20.50	20.76	1.56	ppb
Calcium	43-1	98181.45	99011.10	97720.35	98304.30	0.67	ppb
Calcium	44-1	101014.18	101871.09	102320.98	101735.42	0.65	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	41.05	39.96	40.22	40.41	1.40	ppb
Cobalt	59-2	21.65	21.28	20.57	21.17	2.60	ppb
Copper	63-2	28.61	28.30	27.61	28.18	1.81	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				108		%
Holmium	165-2				106		%
Indium	115-1				105		%
Indium	115-2				99		%
Iron	56-2	103759.83	105254.01	99633.37	102882.40	2.83	ppb
Iron	57-2	103733.67	100798.66	100216.80	101583.04	1.86	ppb
Iron	54-2	103970.51	104971.72	99710.30	102884.18	2.72	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICSAB01 Instrumnet Name : P7
Client Sample ID : ICSAB01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:13:50 DataFile Name : 030ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	25.78	26.87	26.37	26.34	2.08	ppb
Lead	207-1	24.67	25.44	24.63	24.91	1.83	ppb
Lead	208-1	24.88	25.47	25.15	25.17	1.17	ppb
Lithium	6-1				96		%
Magnesium	24-2	91623.53	90576.55	89922.26	90707.44	0.95	ppb
Manganese	55-2	27.32	27.33	26.80	27.15	1.11	ppb
Molybdenum	94-1	1685.91	1668.66	1671.34	1675.30	0.55	ppb
Molybdenum	95-1	2105.76	2008.74	2037.11	2050.54	2.43	ppb
Molybdenum	96-1	2025.67	2031.40	2066.80	2041.29	1.09	ppb
Molybdenum	97-1	2125.21	1965.05	2040.34	2043.53	3.92	ppb
Molybdenum	98-1	2077.01	2024.98	2070.00	2057.33	1.37	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	26.54	26.71	26.81	26.69	0.51	ppb
Phosphorus	31-2	101485.86	101787.63	98845.29	100706.26	1.61	ppb
Potassium	39-2	103557.74	101758.44	101554.60	102290.26	1.08	ppb
Rhodium	103-1				101		%
Rhodium	103-2				100		%
Scandium	45-1				103		%
Scandium	45-2				101		%
Selenium	82-1	18.89	19.78	20.69	19.78	4.55	ppb
Selenium	77-2	22.92	15.71	19.49	19.37	18.61	ppb
Selenium	78-2	18.78	21.68	16.06	18.84	14.94	ppb
Silicon	28-1	-30.76	-33.61	-32.85	-32.41		ppb
Silver	107-1	20.20	20.59	20.14	20.31	1.21	ppb
Silver	109-1	19.98	20.10	20.18	20.09	0.48	ppb
Sodium	23-2	108293.66	107551.06	104281.64	106708.79	2.00	ppb
Strontium	86-1	35.36	35.32	33.77	34.82	2.61	ppb
Strontium	88-1	32.64	31.44	32.29	32.12	1.92	ppb
Sulfur	34-1	116499.03	119264.52	113952.07	116571.87	2.28	ppb
Terbium	159-1				110		%
Terbium	159-2				106		%
Thallium	203-1	19.53	20.25	19.60	19.79	2.00	ppb
Thallium	205-1	18.91	19.08	19.28	19.09	0.97	ppb
Tin	118-1	0.68	0.80	0.76	0.75	8.42	ppb
Titanium	47-1	1852.92	1873.26	1846.39	1857.52	0.75	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICSAB01 Instrumnet Name : P7
Client Sample ID : ICSAB01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:13:50 DataFile Name : 030ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.02	0.03	0.03	0.03	11.69	ppb
Vanadium	51-2	20.33	20.07	19.80	20.06	1.32	ppb
Yttrium	89-1				105		%
Yttrium	89-2				102		%
Zinc	66-2	31.30	30.34	30.07	30.57	2.10	ppb
Zirconium	90-1	0.01	0.01	0.01	0.01	6.00	ppb
Zirconium	91-1	0.03	0.01	0.00	0.02	104.58	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV01 Instrumnet Name : P7
Client Sample ID : CCV01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:29:03 DataFile Name : 033CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	49668.25	49614.87	49659.38	49647.50	0.06	ppb
Antimony	121-1	509.91	555.16	505.15	523.41	5.27	ppb
Arsenic	75-2	479.28	485.46	483.89	482.88	0.67	ppb
Barium	135-1	2569.70	2809.02	2549.09	2642.60	5.47	ppb
Barium	137-1	2485.86	2832.10	2556.41	2624.79	6.97	ppb
Beryllium	9-1	509.99	556.30	514.13	526.81	4.86	ppb
Bismuth	209-1				99		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	496.44	536.80	483.51	505.58	5.50	ppb
Cadmium	106-1	481.77	549.33	493.41	508.17	7.11	ppb
Cadmium	111-1	488.19	534.75	486.80	503.24	5.42	ppb
Calcium	43-1	252089.64	272134.51	255031.93	259752.03	4.17	ppb
Calcium	44-1	246806.87	277294.53	252528.65	258876.68	6.26	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	469.04	468.16	462.02	466.40	0.82	ppb
Cobalt	59-2	463.61	463.65	452.80	460.02	1.36	ppb
Copper	63-2	4824.97	4829.58	4654.34	4769.63	2.09	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				106		%
Indium	115-1				99		%
Indium	115-2				98		%
Iron	56-2	124992.57	129647.87	126329.23	126989.89	1.89	ppb
Iron	57-2	130253.07	126661.75	124683.37	127199.40	2.22	ppb
Iron	54-2	130999.36	127602.16	126688.46	128429.99	1.77	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV01 Instrumnet Name : P7
Client Sample ID : CCV01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:29:03 DataFile Name : 033CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2562.95	2817.91	2548.51	2643.12	5.73	ppb
Lead	207-1	2545.14	2867.68	2569.74	2660.85	6.75	ppb
Lead	208-1	2555.05	2820.31	2568.03	2647.80	5.65	ppb
Lithium	6-1				93		%
Magnesium	24-2	237029.86	231743.96	234997.78	234590.53	1.14	ppb
Manganese	55-2	5050.65	5057.64	4920.58	5009.62	1.54	ppb
Molybdenum	94-1	4850.55	5587.97	5035.51	5158.01	7.44	ppb
Molybdenum	95-1	5000.36	5625.63	5029.56	5218.52	6.76	ppb
Molybdenum	96-1	4928.31	5589.10	5070.34	5195.92	6.69	ppb
Molybdenum	97-1	4944.45	5582.62	5039.66	5188.91	6.63	ppb
Molybdenum	98-1	4908.40	5633.03	5149.97	5230.47	7.05	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	487.82	484.23	477.03	483.03	1.14	ppb
Phosphorus	31-2	10002.67	9819.41	9673.29	9831.79	1.68	ppb
Potassium	39-2	127619.95	125162.87	124565.12	125782.65	1.29	ppb
Rhodium	103-1				98		%
Rhodium	103-2				98		%
Scandium	45-1				102		%
Scandium	45-2				104		%
Selenium	82-1	465.23	519.53	475.47	486.74	5.93	ppb
Selenium	77-2	475.14	487.67	474.23	479.01	1.57	ppb
Selenium	78-2	482.91	480.74	471.89	478.51	1.22	ppb
Silicon	28-1	474.70	570.47	506.63	517.27	9.43	ppb
Silver	107-1	525.21	559.30	522.12	535.54	3.85	ppb
Silver	109-1	515.87	564.57	509.12	529.85	5.71	ppb
Sodium	23-2	229275.10	228701.89	230862.51	229613.17	0.49	ppb
Strontium	86-1	483.70	550.64	500.48	511.61	6.81	ppb
Strontium	88-1	479.22	551.12	502.59	510.98	7.18	ppb
Sulfur	34-1	8415.69	10138.95	8791.34	9115.33	9.94	ppb
Terbium	159-1				104		%
Terbium	159-2				106		%
Thallium	203-1	465.12	514.09	477.38	485.53	5.25	ppb
Thallium	205-1	499.39	563.71	512.59	525.23	6.47	ppb
Tin	118-1	462.83	558.07	460.47	493.79	11.28	ppb
Titanium	47-1	4973.68	5558.79	4983.22	5171.90	6.48	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV01 Instrumnet Name : P7
Client Sample ID : CCV01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:29:03 DataFile Name : 033CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	507.49	556.01	511.38	524.96	5.14	ppb
Vanadium	51-2	475.52	470.55	467.02	471.03	0.91	ppb
Yttrium	89-1				103		%
Yttrium	89-2				104		%
Zinc	66-2	4751.13	4683.99	4506.07	4647.06	2.73	ppb
Zirconium	90-1	495.28	561.47	506.72	521.16	6.79	ppb
Zirconium	91-1	471.91	526.20	480.06	492.72	5.94	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB01 Instrumnet Name : P7
Client Sample ID : CCB01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:35:40 DataFile Name : 035CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.22	-0.29	0.02	-0.16		ppb
Antimony	121-1	0.04	0.03	0.04	0.04	17.68	ppb
Arsenic	75-2	-0.01	-0.04	-0.02	-0.02		ppb
Barium	135-1	-0.02	-0.02	-0.02	-0.02		ppb
Barium	137-1	0.00	0.00	0.01	0.00	89.39	ppb
Beryllium	9-1	0.01	0.03	0.01	0.02	52.67	ppb
Bismuth	209-1				104		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.05	0.00	0.15	0.07	114.10	ppb
Cadmium	106-1	-1.57	-0.02	-2.52	-1.37		ppb
Cadmium	111-1	-0.08	0.02	-0.19	-0.08		ppb
Calcium	43-1	-1.68	-11.70	-10.27	-7.88		ppb
Calcium	44-1	-10.32	-8.81	-10.90	-10.01		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.01	-0.13	-0.07	-0.07		ppb
Cobalt	59-2	-0.02	-0.02	-0.01	-0.02		ppb
Copper	63-2	0.05	0.03	0.07	0.05	40.06	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				105		%
Indium	115-1				105		%
Indium	115-2				101		%
Iron	56-2	0.05	0.02	-0.67	-0.20		ppb
Iron	57-2	1.13	-2.93	-1.82	-1.21		ppb
Iron	54-2	-0.12	0.18	1.91	0.66	166.34	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB01 Instrumnet Name : P7
Client Sample ID : CCB01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:35:40 DataFile Name : 035CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.02	0.03	0.05	0.04	44.00	ppb
Lead	207-1	0.06	0.03	0.08	0.05	47.84	ppb
Lead	208-1	0.03	0.04	0.05	0.04	19.95	ppb
Lithium	6-1				97		%
Magnesium	24-2	0.81	0.51	0.38	0.56	39.04	ppb
Manganese	55-2	0.12	0.30	0.17	0.20	48.98	ppb
Molybdenum	94-1	0.05	0.01	0.05	0.04	58.97	ppb
Molybdenum	95-1	0.03	0.03	0.04	0.03	25.63	ppb
Molybdenum	96-1	0.01	0.01	0.00	0.01	103.77	ppb
Molybdenum	97-1	0.00	0.01	0.02	0.01	59.31	ppb
Molybdenum	98-1	0.03	0.03	0.03	0.03	12.12	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.02	-0.12	-0.15	-0.10		ppb
Phosphorus	31-2	-23.62	-26.01	-32.89	-27.51		ppb
Potassium	39-2	-1.14	-1.46	-9.51	-4.04		ppb
Rhodium	103-1				103		%
Rhodium	103-2				103		%
Scandium	45-1				104		%
Scandium	45-2				101		%
Selenium	82-1	0.30	1.30	0.27	0.62	94.60	ppb
Selenium	77-2	-0.29	-0.29	-0.29	-0.29		ppb
Selenium	78-2	0.58	-2.57	-2.60	-1.53		ppb
Silicon	28-1	-27.32	-23.28	-42.76	-31.12		ppb
Silver	107-1	0.01	0.01	0.01	0.01	9.55	ppb
Silver	109-1	0.01	0.01	0.01	0.01	7.56	ppb
Sodium	23-2	19.12	19.22	15.77	18.04	10.90	ppb
Strontium	86-1	-0.03	-0.10	-0.07	-0.07		ppb
Strontium	88-1	0.00	0.00	0.00	0.00	5679.83	ppb
Sulfur	34-1	-2161.68	-2139.03	-2435.51	-2245.41		ppb
Terbium	159-1				105		%
Terbium	159-2				104		%
Thallium	203-1	0.06	0.07	0.06	0.07	5.35	ppb
Thallium	205-1	0.05	0.07	0.06	0.06	11.12	ppb
Tin	118-1	-0.03	-0.01	-0.01	-0.02		ppb
Titanium	47-1	-0.03	-0.07	-0.05	-0.05		ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB01 Instrumnet Name : P7
Client Sample ID : CCB01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:35:40 DataFile Name : 035CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	102.58	ppb
Vanadium	51-2	0.00	-0.01	-0.01	-0.01		ppb
Yttrium	89-1				105		%
Yttrium	89-2				103		%
Zinc	66-2	-0.02	0.02	-0.12	-0.04		ppb
Zirconium	90-1	0.01	0.02	0.01	0.01	28.26	ppb
Zirconium	91-1	0.01	0.00	0.02	0.01	101.57	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CRI Instrumnet Name : P7
Client Sample ID : CRI Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:39:03 DataFile Name : 036LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	16.75	16.84	16.32	16.64	1.68	ppb
Antimony	121-1	1.95	1.95	1.95	1.95	0.18	ppb
Arsenic	75-2	0.90	1.17	1.19	1.09	15.12	ppb
Barium	135-1	9.64	9.73	9.39	9.59	1.84	ppb
Barium	137-1	9.12	9.51	9.57	9.40	2.62	ppb
Beryllium	9-1	0.96	1.05	1.08	1.03	6.35	ppb
Bismuth	209-1				104		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	1.61	0.91	1.52	1.34	28.38	ppb
Cadmium	106-1	-0.86	0.05	-1.17	-0.66		ppb
Cadmium	111-1	0.92	1.07	0.99	0.99	7.41	ppb
Calcium	43-1	479.13	454.47	489.13	474.24	3.76	ppb
Calcium	44-1	473.71	457.37	471.78	467.62	1.91	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.16	1.86	1.92	1.98	8.14	ppb
Cobalt	59-2	0.99	1.05	1.01	1.02	2.58	ppb
Copper	63-2	2.21	2.09	1.98	2.10	5.37	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				104		%
Indium	115-1				104		%
Indium	115-2				101		%
Iron	56-2	48.45	50.60	49.40	49.48	2.18	ppb
Iron	57-2	50.98	54.21	50.30	51.83	4.03	ppb
Iron	54-2	47.28	52.04	52.17	50.49	5.52	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CRI Instrumnet Name : P7
Client Sample ID : CRI Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:39:03 DataFile Name : 036LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.91	0.94	0.91	0.92	2.21	ppb
Lead	207-1	0.90	0.91	0.94	0.92	2.28	ppb
Lead	208-1	0.93	0.92	0.93	0.93	0.78	ppb
Lithium	6-1				97		%
Magnesium	24-2	430.45	433.96	441.51	435.30	1.30	ppb
Manganese	55-2	1.17	1.24	1.30	1.23	5.17	ppb
Molybdenum	94-1	5.49	5.26	5.60	5.45	3.17	ppb
Molybdenum	95-1	4.71	4.61	4.84	4.72	2.42	ppb
Molybdenum	96-1	4.91	4.60	4.81	4.77	3.27	ppb
Molybdenum	97-1	4.70	4.50	4.88	4.70	4.08	ppb
Molybdenum	98-1	4.64	4.58	4.77	4.66	2.02	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.07	0.88	1.05	1.00	10.20	ppb
Phosphorus	31-2	-14.14	-5.63	5.35	-4.81		ppb
Potassium	39-2	486.78	492.71	491.05	490.18	0.62	ppb
Rhodium	103-1				103		%
Rhodium	103-2				103		%
Scandium	45-1				103		%
Scandium	45-2				100		%
Selenium	82-1	6.41	6.26	5.50	6.05	8.07	ppb
Selenium	77-2	3.89	5.16	6.03	5.03	21.40	ppb
Selenium	78-2	4.83	5.01	6.76	5.53	19.32	ppb
Silicon	28-1	-31.08	-40.08	-29.50	-33.55		ppb
Silver	107-1	0.98	1.00	1.09	1.02	5.52	ppb
Silver	109-1	1.01	1.06	0.99	1.02	3.55	ppb
Sodium	23-2	483.69	496.11	486.95	488.92	1.32	ppb
Strontium	86-1	1.09	0.93	1.08	1.04	9.09	ppb
Strontium	88-1	0.91	0.93	0.93	0.92	1.53	ppb
Sulfur	34-1	-1926.54	-2174.51	-2174.32	-2091.79		ppb
Terbium	159-1				105		%
Terbium	159-2				104		%
Thallium	203-1	0.99	0.98	0.97	0.98	1.19	ppb
Thallium	205-1	0.96	0.97	0.97	0.97	0.45	ppb
Tin	118-1	4.67	4.69	4.71	4.69	0.42	ppb
Titanium	47-1	4.52	4.45	4.52	4.50	0.86	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CRI Instrumnet Name : P7
Client Sample ID : CRI Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:39:03 DataFile Name : 036LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.83	0.84	0.87	0.85	2.72	ppb
Vanadium	51-2	4.86	4.94	4.80	4.87	1.45	ppb
Yttrium	89-1				104		%
Yttrium	89-2				103		%
Zinc	66-2	5.18	5.24	5.25	5.22	0.76	ppb
Zirconium	90-1	0.91	0.90	0.91	0.91	0.68	ppb
Zirconium	91-1	0.83	1.02	0.89	0.91	10.19	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : P2218-03DLX10 Instrumnet Name : P7
Client Sample ID : X10 Dilution Factor : 10
Date & Time Acquired : 2025-06-11 19:42:28 DataFile Name : 037SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	7564.74	7730.01	7603.73	7632.83	1.13	ppb
Antimony	121-1	2.15	2.29	2.27	2.24	3.49	ppb
Arsenic	75-2	15.72	16.48	15.68	15.96	2.85	ppb
Barium	135-1	13.97	14.25	14.20	14.14	1.05	ppb
Barium	137-1	13.71	13.95	14.17	13.95	1.67	ppb
Beryllium	9-1	0.01	0.06	0.07	0.04	68.37	ppb
Bismuth	209-1				74		%
Bismuth	209-2				75		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	29.23	30.66	28.54	29.48	3.67	ppb
Cadmium	106-1	-1.95	-2.41	0.08	-1.43		ppb
Cadmium	111-1	0.80	0.82	0.82	0.81	1.59	ppb
Calcium	43-1	4507.40	4474.44	4536.44	4506.09	0.69	ppb
Calcium	44-1	4712.37	4768.83	4711.54	4730.91	0.69	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	6.35	6.45	6.32	6.37	1.04	ppb
Cobalt	59-2	0.52	0.42	0.44	0.46	11.51	ppb
Copper	63-2	113.52	114.98	113.41	113.97	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				75		%
Holmium	165-2				71		%
Indium	115-1				68		%
Indium	115-2				73		%
Iron	56-2	1933.21	1999.57	1961.64	1964.81	1.69	ppb
Iron	57-2	1903.51	1932.30	1901.23	1912.35	0.91	ppb
Iron	54-2	1933.28	1948.74	1903.95	1928.66	1.18	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : P2218-03DLX10 Instrumnet Name : P7
Client Sample ID : X10 Dilution Factor : 10
Date & Time Acquired : 2025-06-11 19:42:28 DataFile Name : 037SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	10.50	10.61	10.28	10.46	1.63	ppb
Lead	207-1	10.22	10.14	10.07	10.15	0.74	ppb
Lead	208-1	10.29	10.12	10.12	10.18	0.94	ppb
Lithium	6-1				74		%
Magnesium	24-2	425.71	428.13	419.37	424.40	1.07	ppb
Manganese	55-2	664.23	676.39	658.50	666.37	1.37	ppb
Molybdenum	94-1	6924.80	7167.99	7047.68	7046.82	1.73	ppb
Molybdenum	95-1	8859.28	8843.29	8690.04	8797.54	1.06	ppb
Molybdenum	96-1	8736.01	8913.94	8635.01	8761.65	1.61	ppb
Molybdenum	97-1	8828.64	8920.19	8600.25	8783.03	1.88	ppb
Molybdenum	98-1	8842.75	8931.23	8577.37	8783.78	2.10	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	3.82	3.62	3.48	3.64	4.68	ppb
Phosphorus	31-2	2615.92	2621.65	2546.64	2594.74	1.61	ppb
Potassium	39-2	451547.70	448759.26	459556.79	453287.92	1.24	ppb
Rhodium	103-1				68		%
Rhodium	103-2				74		%
Scandium	45-1				69		%
Scandium	45-2				75		%
Selenium	82-1	9.74	15.74	17.54	14.34	28.47	ppb
Selenium	77-2	14.91	11.17	17.84	14.64	22.83	ppb
Selenium	78-2	24.53	20.57	28.34	24.48	15.86	ppb
Silicon	28-1	1125.31	1230.60	1264.31	1206.74	6.01	ppb
Silver	107-1	0.06	0.05	0.05	0.06	11.95	ppb
Silver	109-1	0.04	0.08	0.07	0.06	24.97	ppb
Sodium	23-2	216369.13	221356.11	214503.69	217409.64	1.63	ppb
Strontium	86-1	21.73	22.38	22.09	22.06	1.48	ppb
Strontium	88-1	20.04	20.46	19.99	20.16	1.28	ppb
Sulfur	34-1	9413.37	8868.31	8560.78	8947.48	4.83	ppb
Terbium	159-1				76		%
Terbium	159-2				71		%
Thallium	203-1	0.18	0.16	0.17	0.17	6.59	ppb
Thallium	205-1	0.16	0.17	0.18	0.17	4.96	ppb
Tin	118-1	6.39	6.81	6.66	6.62	3.24	ppb
Titanium	47-1	3.25	3.14	2.99	3.13	4.05	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : P2218-03DLX10 Instrumnet Name : P7
Client Sample ID : X10 Dilution Factor : 10
Date & Time Acquired : 2025-06-11 19:42:28 DataFile Name : 037SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.03	0.03	0.03	0.03	7.17	ppb
Vanadium	51-2	2.88	2.70	2.94	2.84	4.41	ppb
Yttrium	89-1				75		%
Yttrium	89-2				76		%
Zinc	66-2	763.01	768.53	773.52	768.35	0.68	ppb
Zirconium	90-1	0.46	0.44	0.45	0.45	2.36	ppb
Zirconium	91-1	0.38	0.40	0.49	0.42	13.78	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : P2218-03DL2X50 Instrumnet Name : P7
Client Sample ID : X50 Dilution Factor : 50
Date & Time Acquired : 2025-06-11 19:48:49 DataFile Name : 038SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1431.76	1423.95	1435.66	1430.46	0.42	ppb
Antimony	121-1	0.44	0.43	0.40	0.42	5.26	ppb
Arsenic	75-2	3.36	3.92	3.35	3.54	9.18	ppb
Barium	135-1	2.64	2.68	2.58	2.63	1.84	ppb
Barium	137-1	2.65	2.71	2.67	2.68	1.10	ppb
Beryllium	9-1	0.00	-0.01	0.03	0.01	355.67	ppb
Bismuth	209-1				100		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	4.66	5.80	5.66	5.37	11.61	ppb
Cadmium	106-1	-1.52	-1.05	-1.88	-1.48		ppb
Cadmium	111-1	0.20	0.17	0.06	0.15	49.58	ppb
Calcium	43-1	854.58	780.05	733.63	789.42	7.73	ppb
Calcium	44-1	887.98	808.63	793.58	830.06	6.11	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.22	1.36	1.21	1.26	6.53	ppb
Cobalt	59-2	0.07	0.06	0.07	0.07	8.63	ppb
Copper	63-2	22.18	21.97	21.81	21.99	0.86	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				99		%
Indium	115-1				101		%
Indium	115-2				97		%
Iron	56-2	353.52	354.01	349.57	352.37	0.69	ppb
Iron	57-2	358.67	344.72	342.85	348.74	2.48	ppb
Iron	54-2	358.94	360.87	356.15	358.65	0.66	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : P2218-03DL2X50 Instrumnet Name : P7
Client Sample ID : X50 Dilution Factor : 50
Date & Time Acquired : 2025-06-11 19:48:49 DataFile Name : 038SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.92	1.95	1.98	1.95	1.55	ppb
Lead	207-1	1.92	1.95	1.92	1.93	0.85	ppb
Lead	208-1	1.91	1.91	1.96	1.93	1.54	ppb
Lithium	6-1				95		%
Magnesium	24-2	80.45	81.39	78.88	80.24	1.58	ppb
Manganese	55-2	127.77	126.78	125.68	126.74	0.82	ppb
Molybdenum	94-1	1291.00	1307.88	1292.98	1297.29	0.71	ppb
Molybdenum	95-1	1598.12	1625.57	1592.24	1605.31	1.11	ppb
Molybdenum	96-1	1578.93	1579.43	1585.22	1581.19	0.22	ppb
Molybdenum	97-1	1583.86	1607.94	1591.57	1594.46	0.77	ppb
Molybdenum	98-1	1598.37	1629.84	1585.91	1604.71	1.41	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.87	0.79	0.61	0.75	17.75	ppb
Phosphorus	31-2	458.97	445.03	378.01	427.34	10.13	ppb
Potassium	39-2	84644.57	85732.19	87401.92	85926.23	1.62	ppb
Rhodium	103-1				99		%
Rhodium	103-2				98		%
Scandium	45-1				98		%
Scandium	45-2				98		%
Selenium	82-1	5.10	6.51	6.00	5.87	12.18	ppb
Selenium	77-2	4.56	5.47	6.24	5.43	15.50	ppb
Selenium	78-2	2.99	7.96	9.92	6.96	51.35	ppb
Silicon	28-1	183.09	162.32	142.24	162.55	12.57	ppb
Silver	107-1	0.01	0.00	0.01	0.01	47.74	ppb
Silver	109-1	0.01	0.01	0.01	0.01	17.91	ppb
Sodium	23-2	40760.34	40513.69	41149.26	40807.76	0.79	ppb
Strontium	86-1	4.19	4.08	4.05	4.11	1.74	ppb
Strontium	88-1	3.70	3.81	3.70	3.74	1.67	ppb
Sulfur	34-1	-358.19	-1243.63	-1630.58	-1077.47		ppb
Terbium	159-1				101		%
Terbium	159-2				99		%
Thallium	203-1	0.04	0.05	0.04	0.04	15.63	ppb
Thallium	205-1	0.04	0.03	0.03	0.03	9.31	ppb
Tin	118-1	1.14	1.28	1.19	1.20	5.63	ppb
Titanium	47-1	0.54	0.41	0.47	0.47	13.99	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : P2218-03DL2X50 Instrumnet Name : P7
Client Sample ID : X50 Dilution Factor : 50
Date & Time Acquired : 2025-06-11 19:48:49 DataFile Name : 038SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.01	0.00	30.98	ppb
Vanadium	51-2	0.54	0.59	0.55	0.56	5.02	ppb
Yttrium	89-1				103		%
Yttrium	89-2				98		%
Zinc	66-2	149.40	148.26	147.87	148.51	0.54	ppb
Zirconium	90-1	0.08	0.09	0.09	0.09	7.95	ppb
Zirconium	91-1	0.11	0.07	0.10	0.09	20.58	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV02 Instrumnet Name : P7
Client Sample ID : CCV02 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:52:05 DataFile Name : 039CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	49374.96	51197.30	51698.03	50756.76	2.41	ppb
Antimony	121-1	491.89	519.77	513.90	508.52	2.89	ppb
Arsenic	75-2	487.63	493.18	499.13	493.32	1.17	ppb
Barium	135-1	2473.90	2616.07	2569.30	2553.09	2.84	ppb
Barium	137-1	2485.88	2575.05	2604.06	2555.00	2.41	ppb
Beryllium	9-1	500.06	495.58	510.00	501.88	1.47	ppb
Bismuth	209-1				104		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	474.89	502.28	505.66	494.28	3.41	ppb
Cadmium	106-1	475.63	506.03	495.26	492.31	3.13	ppb
Cadmium	111-1	469.74	492.92	492.38	485.01	2.73	ppb
Calcium	43-1	241972.95	247328.21	258160.02	249153.73	3.31	ppb
Calcium	44-1	246484.11	248030.03	250899.55	248471.23	0.90	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	467.18	472.15	476.65	472.00	1.00	ppb
Cobalt	59-2	457.63	464.48	474.03	465.38	1.77	ppb
Copper	63-2	4834.75	4926.50	4898.92	4886.72	0.96	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				111		%
Holmium	165-2				109		%
Indium	115-1				105		%
Indium	115-2				100		%
Iron	56-2	126592.09	132065.85	128024.85	128894.26	2.20	ppb
Iron	57-2	130569.90	127566.88	130435.94	129524.24	1.31	ppb
Iron	54-2	127093.11	133698.87	131403.40	130731.79	2.57	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV02 Instrumnet Name : P7
Client Sample ID : CCV02 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:52:05 DataFile Name : 039CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2551.89	2609.54	2601.07	2587.50	1.20	ppb
Lead	207-1	2561.55	2617.83	2593.04	2590.81	1.09	ppb
Lead	208-1	2537.43	2607.43	2588.78	2577.88	1.41	ppb
Lithium	6-1				103		%
Magnesium	24-2	241125.50	237410.38	243060.46	240532.11	1.19	ppb
Manganese	55-2	4887.15	5104.82	5013.28	5001.75	2.19	ppb
Molybdenum	94-1	5121.93	5031.99	4963.27	5039.07	1.58	ppb
Molybdenum	95-1	5244.78	4977.02	5036.15	5085.98	2.77	ppb
Molybdenum	96-1	5198.48	5135.31	4983.35	5105.71	2.17	ppb
Molybdenum	97-1	5141.60	5115.17	4996.07	5084.28	1.52	ppb
Molybdenum	98-1	5184.84	5152.92	4940.41	5092.72	2.61	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	484.34	489.47	495.70	489.84	1.16	ppb
Phosphorus	31-2	9938.60	10023.07	10126.88	10029.52	0.94	ppb
Potassium	39-2	127384.38	128178.24	128303.26	127955.29	0.39	ppb
Rhodium	103-1				102		%
Rhodium	103-2				100		%
Scandium	45-1				109		%
Scandium	45-2				106		%
Selenium	82-1	504.97	481.16	468.90	485.01	3.78	ppb
Selenium	77-2	499.38	499.47	476.58	491.81	2.68	ppb
Selenium	78-2	492.79	487.72	483.24	487.92	0.98	ppb
Silicon	28-1	499.85	512.12	540.02	517.33	3.98	ppb
Silver	107-1	506.26	506.86	532.02	515.05	2.86	ppb
Silver	109-1	499.01	520.91	532.96	517.63	3.32	ppb
Sodium	23-2	231135.65	229107.67	229758.28	230000.53	0.45	ppb
Strontium	86-1	506.49	497.86	485.77	496.71	2.10	ppb
Strontium	88-1	514.98	503.26	483.06	500.44	3.23	ppb
Sulfur	34-1	7604.29	7902.65	8157.87	7888.27	3.51	ppb
Terbium	159-1				110		%
Terbium	159-2				107		%
Thallium	203-1	469.87	473.46	471.88	471.73	0.38	ppb
Thallium	205-1	526.12	519.17	521.88	522.39	0.67	ppb
Tin	118-1	488.21	521.83	516.34	508.79	3.54	ppb
Titanium	47-1	4792.37	4802.86	5052.51	4882.58	3.02	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV02 Instrumnet Name : P7
Client Sample ID : CCV02 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:52:05 DataFile Name : 039CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	524.21	519.61	530.29	524.70	1.02	ppb
Vanadium	51-2	472.09	473.32	480.73	475.38	0.98	ppb
Yttrium	89-1				108		%
Yttrium	89-2				107		%
Zinc	66-2	4544.94	4668.72	4735.79	4649.82	2.08	ppb
Zirconium	90-1	504.89	515.74	504.78	508.47	1.24	ppb
Zirconium	91-1	487.75	479.00	468.10	478.28	2.06	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB02 Instrumnet Name : P7
Client Sample ID : CCB02 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:58:54 DataFile Name : 040CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.27	-0.16	0.23	-0.07		ppb
Antimony	121-1	0.05	0.03	0.05	0.04	30.79	ppb
Arsenic	75-2	0.02	0.02	-0.01	0.01	123.51	ppb
Barium	135-1	-0.02	0.01	0.01	0.00	589.47	ppb
Barium	137-1	0.01	0.00	0.00	0.00	19.72	ppb
Beryllium	9-1	0.01	0.04	-0.01	0.02	145.28	ppb
Bismuth	209-1				104		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.05	0.05	0.05	0.05	2.39	ppb
Cadmium	106-1	-2.01	-2.16	-1.86	-2.01		ppb
Cadmium	111-1	-0.13	-0.14	-0.13	-0.13		ppb
Calcium	43-1	-6.48	-4.93	-8.69	-6.70		ppb
Calcium	44-1	-8.04	-9.34	-6.76	-8.04		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.05	-0.09	-0.04	-0.06		ppb
Cobalt	59-2	-0.03	-0.02	-0.03	-0.03		ppb
Copper	63-2	-0.02	0.00	0.03	0.00	1125.10	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				105		%
Indium	115-1				105		%
Indium	115-2				102		%
Iron	56-2	-0.23	-0.31	-0.20	-0.25		ppb
Iron	57-2	0.97	-2.35	-2.31	-1.23		ppb
Iron	54-2	0.41	1.02	-0.75	0.23	394.75	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB02 Instrumnet Name : P7
Client Sample ID : CCB02 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:58:54 DataFile Name : 040CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.02	0.01	0.02	0.01	40.52	ppb
Lead	207-1	0.01	0.03	0.01	0.02	96.97	ppb
Lead	208-1	0.02	0.02	0.02	0.02	2.04	ppb
Lithium	6-1				99		%
Magnesium	24-2	1.10	1.57	1.26	1.31	18.26	ppb
Manganese	55-2	0.24	0.30	0.27	0.27	10.82	ppb
Molybdenum	94-1	0.08	0.04	0.03	0.05	46.71	ppb
Molybdenum	95-1	0.05	0.05	0.04	0.05	8.41	ppb
Molybdenum	96-1	0.03	0.03	0.02	0.02	15.49	ppb
Molybdenum	97-1	0.08	0.06	0.05	0.06	19.78	ppb
Molybdenum	98-1	0.05	0.04	0.05	0.05	9.72	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.00	-0.03	0.02	0.00		ppb
Phosphorus	31-2	-28.13	-28.61	-41.11	-32.62		ppb
Potassium	39-2	-0.12	-1.64	-9.44	-3.73		ppb
Rhodium	103-1				104		%
Rhodium	103-2				104		%
Scandium	45-1				104		%
Scandium	45-2				103		%
Selenium	82-1	2.03	0.64	1.76	1.48	49.96	ppb
Selenium	77-2	1.37	0.54	0.56	0.82	57.30	ppb
Selenium	78-2	1.99	3.91	-0.23	1.89	109.66	ppb
Silicon	28-1	-34.67	-32.81	-26.61	-31.37		ppb
Silver	107-1	0.01	0.01	0.01	0.01	34.46	ppb
Silver	109-1	0.00	0.01	0.01	0.01	56.62	ppb
Sodium	23-2	16.54	15.74	16.74	16.34	3.26	ppb
Strontium	86-1	-0.06	0.01	-0.06	-0.04		ppb
Strontium	88-1	0.00	0.00	0.00	0.00	81.26	ppb
Sulfur	34-1	-2462.68	-2602.35	-2192.42	-2419.15		ppb
Terbium	159-1				106		%
Terbium	159-2				105		%
Thallium	203-1	0.00	0.01	0.02	0.01	63.08	ppb
Thallium	205-1	0.01	0.01	0.02	0.01	26.26	ppb
Tin	118-1	-0.04	-0.01	-0.03	-0.03		ppb
Titanium	47-1	0.02	-0.03	-0.01	-0.01		ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB02 Instrumnet Name : P7
Client Sample ID : CCB02 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:58:54 DataFile Name : 040CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	77.74	ppb
Vanadium	51-2	-0.01	-0.01	0.00	-0.01		ppb
Yttrium	89-1				106		%
Yttrium	89-2				104		%
Zinc	66-2	0.04	0.05	-0.08	0.00	2751.49	ppb
Zirconium	90-1	0.01	0.02	0.01	0.01	37.73	ppb
Zirconium	91-1	0.01	0.03	0.01	0.02	80.57	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : PB168360BL Instrumnet Name : P7
Client Sample ID : PB168360BL Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:02:18 DataFile Name : 041CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.15	0.14	0.12	0.04	453.27	ppb
Antimony	121-1	0.02	0.02	0.02	0.02	20.74	ppb
Arsenic	75-2	0.01	0.02	-0.04	0.00		ppb
Barium	135-1	0.00	-0.02	-0.02	-0.01		ppb
Barium	137-1	0.02	0.00	0.00	0.01	137.39	ppb
Beryllium	9-1	-0.01	0.01	0.05	0.02	150.62	ppb
Bismuth	209-1				107		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.00	0.00	0.10	0.03	173.21	ppb
Cadmium	106-1	-1.91	-2.41	-2.13	-2.15		ppb
Cadmium	111-1	-0.12	-0.17	-0.16	-0.15		ppb
Calcium	43-1	-3.02	-9.20	-8.32	-6.85		ppb
Calcium	44-1	-6.84	-7.22	-6.55	-6.87		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.00	-0.02	-0.08	-0.03		ppb
Cobalt	59-2	-0.03	-0.03	-0.03	-0.03		ppb
Copper	63-2	0.02	-0.04	-0.02	-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				109		%
Holmium	165-2				106		%
Indium	115-1				106		%
Indium	115-2				103		%
Iron	56-2	-0.14	-0.26	-0.13	-0.18		ppb
Iron	57-2	-1.28	0.14	1.03	-0.04		ppb
Iron	54-2	0.45	-0.47	0.09	0.03	1729.73	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : PB168360BL Instrumnet Name : P7
Client Sample ID : PB168360BL Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:02:18 DataFile Name : 041CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.03	0.01	0.04	0.03	62.20	ppb
Lead	207-1	0.04	0.00	0.02	0.02	108.73	ppb
Lead	208-1	0.03	0.00	0.02	0.02	65.31	ppb
Lithium	6-1				99		%
Magnesium	24-2	1.04	1.09	1.04	1.06	2.92	ppb
Manganese	55-2	0.25	0.25	0.33	0.28	17.40	ppb
Molybdenum	94-1	0.02	0.02	0.03	0.03	24.57	ppb
Molybdenum	95-1	0.04	0.04	0.02	0.03	26.24	ppb
Molybdenum	96-1	0.02	0.02	0.04	0.03	35.35	ppb
Molybdenum	97-1	0.05	0.05	0.02	0.04	44.22	ppb
Molybdenum	98-1	0.03	0.03	0.03	0.03	3.75	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.05	-0.09	-0.05	-0.06		ppb
Phosphorus	31-2	-50.83	-28.67	-35.94	-38.48		ppb
Potassium	39-2	-6.09	-0.94	-2.09	-3.04		ppb
Rhodium	103-1				105		%
Rhodium	103-2				104		%
Scandium	45-1				104		%
Scandium	45-2				102		%
Selenium	82-1	1.86	0.93	1.68	1.49	33.22	ppb
Selenium	77-2	0.55	1.37	0.13	0.68	92.00	ppb
Selenium	78-2	-2.53	1.38	-0.71	-0.62		ppb
Silicon	28-1	-32.27	-31.31	-32.12	-31.90		ppb
Silver	107-1	0.00	0.01	0.00	0.00	110.62	ppb
Silver	109-1	0.00	0.00	0.00	0.00		ppb
Sodium	23-2	14.91	15.01	14.34	14.75	2.47	ppb
Strontium	86-1	-0.02	0.03	0.04	0.02	157.77	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	369.40	ppb
Sulfur	34-1	-2232.31	-2155.31	-2453.35	-2280.32		ppb
Terbium	159-1				108		%
Terbium	159-2				105		%
Thallium	203-1	0.02	0.01	0.01	0.01	27.52	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	6.12	ppb
Tin	118-1	-0.04	0.02	-0.06	-0.03		ppb
Titanium	47-1	-0.01	-0.02	-0.02	-0.02		ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : PB168360BL Instrumnet Name : P7
Client Sample ID : PB168360BL Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:02:18 DataFile Name : 041CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	58.21	ppb
Vanadium	51-2	0.00	0.00	-0.01	0.00		ppb
Yttrium	89-1				106		%
Yttrium	89-2				104		%
Zinc	66-2	0.20	0.09	0.10	0.13	46.27	ppb
Zirconium	90-1	0.00	0.00	0.01	0.00	85.15	ppb
Zirconium	91-1	0.01	0.00	0.00	0.00	609.66	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : PB168360BS Instrumnet Name : P7
Client Sample ID : PB168360BS Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:05:40 DataFile Name : 042LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	8496.76	8582.26	8724.67	8601.23	1.34	ppb
Antimony	121-1	523.11	510.07	506.50	513.23	1.70	ppb
Arsenic	75-2	503.62	497.53	503.95	501.70	0.72	ppb
Barium	135-1	2586.27	2497.97	2531.88	2538.71	1.75	ppb
Barium	137-1	2571.62	2474.42	2549.87	2531.97	2.01	ppb
Beryllium	9-1	506.83	505.69	500.58	504.36	0.66	ppb
Bismuth	209-1				107		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	511.19	503.98	510.63	508.60	0.79	ppb
Cadmium	106-1	517.81	499.89	501.87	506.53	1.94	ppb
Cadmium	111-1	513.00	502.51	511.64	509.05	1.12	ppb
Calcium	43-1	46452.59	49130.29	48715.85	48099.58	3.00	ppb
Calcium	44-1	46733.21	49947.89	51265.68	49315.59	4.73	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	465.86	473.26	474.38	471.17	0.98	ppb
Cobalt	59-2	463.00	472.34	476.34	470.56	1.45	ppb
Copper	63-2	4970.92	5080.40	5024.45	5025.26	1.09	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				109		%
Indium	115-1				106		%
Indium	115-2				101		%
Iron	56-2	24346.18	25210.45	24465.87	24674.17	1.90	ppb
Iron	57-2	23285.40	23985.83	24110.69	23793.97	1.87	ppb
Iron	54-2	25401.29	25756.52	26096.09	25751.30	1.35	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : PB168360BS Instrumnet Name : P7
Client Sample ID : PB168360BS Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:05:40 DataFile Name : 042LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2509.30	2618.70	2614.03	2580.68	2.40	ppb
Lead	207-1	2562.59	2569.72	2566.83	2566.38	0.14	ppb
Lead	208-1	2499.83	2534.61	2587.04	2540.50	1.73	ppb
Lithium	6-1				100		%
Magnesium	24-2	48096.93	47643.75	47775.14	47838.61	0.49	ppb
Manganese	55-2	4948.96	5158.63	5036.10	5047.90	2.09	ppb
Molybdenum	94-1	4888.24	5060.81	4866.51	4938.52	2.16	ppb
Molybdenum	95-1	5034.45	5130.84	5083.57	5082.95	0.95	ppb
Molybdenum	96-1	4871.76	5161.67	4951.49	4994.97	3.00	ppb
Molybdenum	97-1	4823.89	5118.34	4987.79	4976.67	2.96	ppb
Molybdenum	98-1	4858.40	5060.28	5078.22	4998.97	2.44	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	499.50	501.38	501.28	500.72	0.21	ppb
Phosphorus	31-2	9720.42	10049.78	9880.06	9883.42	1.67	ppb
Potassium	39-2	24679.73	24870.55	25567.88	25039.39	1.87	ppb
Rhodium	103-1				104		%
Rhodium	103-2				103		%
Scandium	45-1				107		%
Scandium	45-2				105		%
Selenium	82-1	482.90	500.99	503.22	495.70	2.25	ppb
Selenium	77-2	528.03	514.30	550.91	531.08	3.48	ppb
Selenium	78-2	498.34	523.95	509.91	510.73	2.51	ppb
Silicon	28-1	396.97	439.59	448.05	428.20	6.39	ppb
Silver	107-1	490.18	499.53	487.93	492.55	1.25	ppb
Silver	109-1	498.20	491.03	503.09	497.44	1.22	ppb
Sodium	23-2	51103.05	52109.27	52295.37	51835.89	1.24	ppb
Strontium	86-1	480.60	502.51	496.40	493.17	2.29	ppb
Strontium	88-1	483.01	495.88	493.62	490.84	1.40	ppb
Sulfur	34-1	7494.85	8271.87	7992.10	7919.61	4.97	ppb
Terbium	159-1				110		%
Terbium	159-2				109		%
Thallium	203-1	453.51	456.99	461.94	457.48	0.93	ppb
Thallium	205-1	496.75	499.83	509.12	501.90	1.28	ppb
Tin	118-1	513.07	468.61	466.94	482.87	5.42	ppb
Titanium	47-1	4750.88	4889.00	4936.08	4858.65	1.98	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : PB168360BS Instrumnet Name : P7
Client Sample ID : PB168360BS Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:05:40 DataFile Name : 042LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	498.48	493.68	492.57	494.91	0.63	ppb
Vanadium	51-2	459.99	473.41	473.46	468.95	1.66	ppb
Yttrium	89-1				108		%
Yttrium	89-2				105		%
Zinc	66-2	5163.98	5035.03	5077.11	5092.04	1.29	ppb
Zirconium	90-1	484.13	513.46	494.76	497.45	2.98	ppb
Zirconium	91-1	453.72	477.17	474.71	468.53	2.75	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:09:26 DataFile Name : 043SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	75.90	66.99	63.23	68.71	9.47	ppb
Antimony	121-1	0.41	0.38	0.38	0.39	4.11	ppb
Arsenic	75-2	0.74	1.06	1.02	0.94	18.25	ppb
Barium	135-1	448.69	465.93	459.29	457.97	1.90	ppb
Barium	137-1	457.16	467.23	459.29	461.23	1.15	ppb
Beryllium	9-1	0.07	0.03	0.08	0.06	48.02	ppb
Bismuth	209-1				118		%
Bismuth	209-2				116		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.09	0.04	0.04	0.06	42.55	ppb
Cadmium	106-1	-1.99	-2.29	-1.70	-2.00		ppb
Cadmium	111-1	-0.13	-0.14	-0.08	-0.12		ppb
Calcium	43-1	29650.37	30837.87	31731.44	30739.89	3.40	ppb
Calcium	44-1	30818.79	32037.58	33170.09	32008.82	3.67	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.19	0.27	0.19	0.21	21.17	ppb
Cobalt	59-2	7.91	8.20	8.22	8.11	2.15	ppb
Copper	63-2	0.09	0.09	0.20	0.13	51.07	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				120		%
Holmium	165-2				117		%
Indium	115-1				120		%
Indium	115-2				113		%
Iron	56-2	6821.85	7046.79	6873.88	6914.17	1.70	ppb
Iron	57-2	6668.74	6847.06	6864.23	6793.34	1.59	ppb
Iron	54-2	6651.98	6782.38	6811.79	6748.72	1.26	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:09:26 DataFile Name : 043SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.14	0.11	0.13	0.13	13.27	ppb
Lead	207-1	0.14	0.11	0.13	0.13	14.78	ppb
Lead	208-1	0.13	0.11	0.11	0.12	11.71	ppb
Lithium	6-1				107		%
Magnesium	24-2	9289.97	9237.45	9197.71	9241.71	0.50	ppb
Manganese	55-2	611.61	623.65	627.91	621.05	1.36	ppb
Molybdenum	94-1	16.91	16.40	16.63	16.65	1.52	ppb
Molybdenum	95-1	20.52	20.26	20.51	20.43	0.73	ppb
Molybdenum	96-1	20.24	19.95	20.59	20.26	1.57	ppb
Molybdenum	97-1	20.03	20.03	20.44	20.17	1.16	ppb
Molybdenum	98-1	20.45	20.46	21.01	20.64	1.57	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	12.17	11.87	12.19	12.08	1.46	ppb
Phosphorus	31-2	253.14	251.35	267.34	257.27	3.40	ppb
Potassium	39-2	8885.37	8961.97	9252.69	9033.35	2.15	ppb
Rhodium	103-1				117		%
Rhodium	103-2				114		%
Scandium	45-1				119		%
Scandium	45-2				114		%
Selenium	82-1	1.61	2.02	1.85	1.83	11.16	ppb
Selenium	77-2	-0.29	0.46	1.60	0.59	160.15	ppb
Selenium	78-2	-4.19	0.04	1.68	-0.82		ppb
Silicon	28-1	8065.17	7998.20	8257.53	8106.97	1.66	ppb
Silver	107-1	0.02	0.02	0.01	0.02	22.23	ppb
Silver	109-1	0.02	0.01	0.01	0.01	45.09	ppb
Sodium	23-2	7814.51	8253.09	8112.62	8060.07	2.78	ppb
Strontium	86-1	327.20	324.45	325.63	325.76	0.42	ppb
Strontium	88-1	329.64	321.07	321.71	324.14	1.47	ppb
Sulfur	34-1	7907.19	8151.38	8374.18	8144.25	2.87	ppb
Terbium	159-1				121		%
Terbium	159-2				116		%
Thallium	203-1	0.23	0.23	0.24	0.23	2.72	ppb
Thallium	205-1	0.22	0.23	0.22	0.22	2.31	ppb
Tin	118-1	0.22	0.26	0.25	0.24	8.37	ppb
Titanium	47-1	2.75	2.56	2.47	2.59	5.43	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:09:26 DataFile Name : 043SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.02	0.02	0.02	0.02	8.17	ppb
Vanadium	51-2	0.73	0.74	0.73	0.73	0.42	ppb
Yttrium	89-1				118		%
Yttrium	89-2				115		%
Zinc	66-2	5.11	4.97	5.10	5.06	1.56	ppb
Zirconium	90-1	0.04	0.04	0.04	0.04	3.72	ppb
Zirconium	91-1	0.04	0.04	0.05	0.05	14.90	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01DUP Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425DUP Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:12:44 DataFile Name : 044SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	63.07	61.66	60.18	61.64	2.34	ppb
Antimony	121-1	0.37	0.35	0.34	0.35	3.26	ppb
Arsenic	75-2	0.61	0.60	0.85	0.69	20.57	ppb
Barium	135-1	466.22	458.20	447.96	457.46	2.00	ppb
Barium	137-1	463.80	456.50	445.88	455.39	1.98	ppb
Beryllium	9-1	0.06	0.10	0.02	0.06	68.13	ppb
Bismuth	209-1				117		%
Bismuth	209-2				115		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.00	0.04	0.17	0.07	124.32	ppb
Cadmium	106-1	-0.86	-2.92	-2.24	-2.01		ppb
Cadmium	111-1	-0.05	-0.19	-0.14	-0.13		ppb
Calcium	43-1	31096.21	30549.16	30476.39	30707.25	1.10	ppb
Calcium	44-1	31995.81	31685.47	32065.10	31915.46	0.63	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.19	0.29	0.21	0.23	22.47	ppb
Cobalt	59-2	7.72	8.08	8.19	8.00	3.11	ppb
Copper	63-2	0.17	0.09	0.11	0.12	36.21	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				119		%
Holmium	165-2				118		%
Indium	115-1				119		%
Indium	115-2				114		%
Iron	56-2	6887.15	7003.28	7161.71	7017.38	1.96	ppb
Iron	57-2	6614.35	6734.51	6875.95	6741.60	1.94	ppb
Iron	54-2	6645.35	6751.12	6808.77	6735.08	1.23	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01DUP Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425DUP Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:12:44 DataFile Name : 044SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.16	0.19	0.17	0.17	10.03	ppb
Lead	207-1	0.14	0.14	0.12	0.13	10.41	ppb
Lead	208-1	0.15	0.17	0.15	0.16	6.61	ppb
Lithium	6-1				104		%
Magnesium	24-2	8970.46	8988.71	8984.11	8981.09	0.11	ppb
Manganese	55-2	615.18	610.71	628.34	618.08	1.48	ppb
Molybdenum	94-1	16.27	17.05	16.14	16.49	2.99	ppb
Molybdenum	95-1	20.18	20.62	19.90	20.24	1.79	ppb
Molybdenum	96-1	19.42	20.09	20.02	19.84	1.85	ppb
Molybdenum	97-1	19.60	20.88	19.88	20.12	3.35	ppb
Molybdenum	98-1	19.67	20.70	20.09	20.16	2.57	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	11.87	11.58	12.13	11.86	2.31	ppb
Phosphorus	31-2	288.25	248.28	260.98	265.84	7.68	ppb
Potassium	39-2	8930.32	8985.90	9063.45	8993.22	0.74	ppb
Rhodium	103-1				118		%
Rhodium	103-2				115		%
Scandium	45-1				118		%
Scandium	45-2				114		%
Selenium	82-1	1.73	1.10	2.51	1.78	39.63	ppb
Selenium	77-2	0.09	0.46	0.09	0.21	102.54	ppb
Selenium	78-2	1.58	0.73	-1.55	0.25	636.67	ppb
Silicon	28-1	8080.08	7837.91	7799.91	7905.97	1.92	ppb
Silver	107-1	0.01	0.01	0.01	0.01	6.76	ppb
Silver	109-1	0.01	0.00	0.00	0.01	80.10	ppb
Sodium	23-2	7843.81	7887.35	7915.89	7882.35	0.46	ppb
Strontium	86-1	321.63	330.96	318.52	323.70	2.00	ppb
Strontium	88-1	320.18	326.80	319.78	322.26	1.22	ppb
Sulfur	34-1	8539.10	8397.77	7995.16	8310.68	3.40	ppb
Terbium	159-1				121		%
Terbium	159-2				117		%
Thallium	203-1	0.23	0.21	0.22	0.22	4.96	ppb
Thallium	205-1	0.24	0.24	0.22	0.23	3.98	ppb
Tin	118-1	0.24	0.23	0.24	0.24	2.27	ppb
Titanium	47-1	2.60	2.28	2.23	2.37	8.58	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01DUP Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425DUP Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:12:44 DataFile Name : 044SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.02	0.02	0.01	0.02	4.26	ppb
Vanadium	51-2	0.68	0.67	0.68	0.68	1.14	ppb
Yttrium	89-1				119		%
Yttrium	89-2				116		%
Zinc	66-2	5.14	5.32	5.05	5.17	2.67	ppb
Zirconium	90-1	0.02	0.03	0.03	0.03	13.70	ppb
Zirconium	91-1	0.03	0.03	0.02	0.03	9.80	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01LX5 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425L Dilution Factor : 5
Date & Time Acquired : 2025-06-11 20:16:03 DataFile Name : 045SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10.77	11.88	12.80	11.82	8.62	ppb
Antimony	121-1	0.08	0.07	0.08	0.08	6.03	ppb
Arsenic	75-2	0.20	0.13	0.14	0.16	25.91	ppb
Barium	135-1	90.23	88.89	88.92	89.35	0.86	ppb
Barium	137-1	89.65	90.04	88.65	89.45	0.80	ppb
Beryllium	9-1	0.06	0.04	0.03	0.04	29.16	ppb
Bismuth	209-1				110		%
Bismuth	209-2				108		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.14	0.14	0.19	0.16	16.78	ppb
Cadmium	106-1	-2.27	-1.84	-2.12	-2.08		ppb
Cadmium	111-1	-0.16	-0.12	-0.16	-0.14		ppb
Calcium	43-1	5846.44	6126.82	5964.61	5979.29	2.35	ppb
Calcium	44-1	5928.82	6027.02	5850.36	5935.40	1.49	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.04	0.01	0.04	0.03	63.76	ppb
Cobalt	59-2	1.56	1.54	1.66	1.59	4.19	ppb
Copper	63-2	0.03	-0.06	0.05	0.00	1132.61	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				110		%
Holmium	165-2				109		%
Indium	115-1				110		%
Indium	115-2				105		%
Iron	56-2	1382.17	1351.11	1410.46	1381.24	2.15	ppb
Iron	57-2	1323.60	1287.27	1359.48	1323.45	2.73	ppb
Iron	54-2	1329.88	1303.31	1336.20	1323.13	1.32	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01LX5 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425L Dilution Factor : 5
Date & Time Acquired : 2025-06-11 20:16:03 DataFile Name : 045SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.03	0.03	0.03	0.03	6.37	ppb
Lead	207-1	0.05	0.03	0.05	0.04	34.19	ppb
Lead	208-1	0.03	0.03	0.03	0.03	3.42	ppb
Lithium	6-1				96		%
Magnesium	24-2	1604.73	1587.81	1622.32	1604.95	1.08	ppb
Manganese	55-2	122.33	121.37	124.51	122.74	1.31	ppb
Molybdenum	94-1	3.14	3.23	3.22	3.20	1.56	ppb
Molybdenum	95-1	4.02	4.04	3.96	4.01	1.11	ppb
Molybdenum	96-1	4.00	3.91	3.91	3.94	1.27	ppb
Molybdenum	97-1	3.97	4.06	3.89	3.98	2.15	ppb
Molybdenum	98-1	4.02	3.93	4.01	3.99	1.26	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.22	2.32	2.35	2.30	2.98	ppb
Phosphorus	31-2	5.40	35.80	10.75	17.32	93.69	ppb
Potassium	39-2	1649.70	1656.68	1695.29	1667.23	1.47	ppb
Rhodium	103-1				109		%
Rhodium	103-2				107		%
Scandium	45-1				109		%
Scandium	45-2				105		%
Selenium	82-1	1.60	1.38	1.82	1.60	13.75	ppb
Selenium	77-2	-0.29	-0.29	0.51	-0.02		ppb
Selenium	78-2	0.26	0.24	2.58	1.03	131.20	ppb
Silicon	28-1	1506.27	1532.39	1516.75	1518.47	0.87	ppb
Silver	107-1	0.00	0.00	0.00	0.00	126.51	ppb
Silver	109-1	0.00	0.00	0.00	0.00	91.25	ppb
Sodium	23-2	1397.54	1403.46	1418.94	1406.65	0.79	ppb
Strontium	86-1	64.40	63.87	60.73	63.00	3.15	ppb
Strontium	88-1	58.75	58.85	57.34	58.31	1.45	ppb
Sulfur	34-1	-1401.90	-1208.17	-1401.94	-1337.33		ppb
Terbium	159-1				112		%
Terbium	159-2				108		%
Thallium	203-1	0.05	0.06	0.06	0.06	8.83	ppb
Thallium	205-1	0.05	0.05	0.05	0.05	4.76	ppb
Tin	118-1	0.03	0.02	0.03	0.02	27.83	ppb
Titanium	47-1	0.53	0.54	0.46	0.51	8.52	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01LX5 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425L Dilution Factor : 5
Date & Time Acquired : 2025-06-11 20:16:03 DataFile Name : 045SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	8.38	ppb
Vanadium	51-2	0.13	0.12	0.12	0.12	6.52	ppb
Yttrium	89-1				110		%
Yttrium	89-2				108		%
Zinc	66-2	1.40	0.81	1.15	1.12	26.43	ppb
Zirconium	90-1	0.00	0.01	0.01	0.01	51.91	ppb
Zirconium	91-1	0.00	0.02	0.01	0.01	129.31	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-02 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MS Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:19:24 DataFile Name : 046SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	7567.45	7483.90	7590.95	7547.43	0.75	ppb
Antimony	121-1	495.13	488.35	491.09	491.52	0.69	ppb
Arsenic	75-2	1.11	0.86	0.94	0.97	13.00	ppb
Barium	135-1	2627.41	2693.01	2637.77	2652.73	1.33	ppb
Barium	137-1	2643.85	2582.95	2639.72	2622.18	1.30	ppb
Beryllium	9-1	499.33	493.24	488.64	493.74	1.09	ppb
Bismuth	209-1				117		%
Bismuth	209-2				113		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	464.51	460.61	464.84	463.32	0.51	ppb
Cadmium	106-1	481.73	469.79	470.16	473.89	1.43	ppb
Cadmium	111-1	485.85	471.28	475.64	477.59	1.57	ppb
Calcium	43-1	72695.76	74128.85	75674.10	74166.24	2.01	ppb
Calcium	44-1	76174.22	78263.61	78513.64	77650.49	1.65	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	447.73	434.99	443.46	442.06	1.47	ppb
Cobalt	59-2	463.15	493.13	457.28	471.19	4.08	ppb
Copper	63-2	4800.54	4639.14	4704.30	4714.66	1.72	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				122		%
Holmium	165-2				117		%
Indium	115-1				119		%
Indium	115-2				109		%
Iron	56-2	27779.45	27285.57	27575.38	27546.80	0.90	ppb
Iron	57-2	26558.85	26473.88	26640.45	26557.73	0.31	ppb
Iron	54-2	28402.67	28260.90	28682.34	28448.64	0.75	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-02 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MS Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:19:24 DataFile Name : 046SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2373.18	2437.03	2358.25	2389.49	1.75	ppb
Lead	207-1	2437.01	2459.34	2438.11	2444.82	0.51	ppb
Lead	208-1	2358.80	2423.71	2434.67	2405.73	1.70	ppb
Lithium	6-1				104		%
Magnesium	24-2	53227.00	52649.62	54448.24	53441.62	1.72	ppb
Manganese	55-2	5439.62	5396.85	5330.29	5388.92	1.02	ppb
Molybdenum	94-1	2227.45	2292.71	2175.10	2231.76	2.64	ppb
Molybdenum	95-1	1735.17	1764.01	1720.97	1740.05	1.26	ppb
Molybdenum	96-1	1821.15	1869.14	1801.87	1830.72	1.89	ppb
Molybdenum	97-1	1726.45	1730.88	1707.57	1721.63	0.72	ppb
Molybdenum	98-1	1750.93	1772.65	1705.28	1742.95	1.97	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	484.76	472.26	487.35	481.46	1.68	ppb
Phosphorus	31-2	218.60	233.87	230.96	227.81	3.56	ppb
Potassium	39-2	30145.10	29201.59	29923.48	29756.73	1.66	ppb
Rhodium	103-1				114		%
Rhodium	103-2				112		%
Scandium	45-1				120		%
Scandium	45-2				114		%
Selenium	82-1	474.49	492.42	482.69	483.20	1.86	ppb
Selenium	77-2	521.99	506.07	507.55	511.87	1.72	ppb
Selenium	78-2	508.76	510.43	514.94	511.38	0.62	ppb
Silicon	28-1	7253.75	7264.69	7591.17	7369.87	2.60	ppb
Silver	107-1	83.19	82.10	83.01	82.77	0.70	ppb
Silver	109-1	83.10	80.93	81.74	81.93	1.34	ppb
Sodium	23-2	56081.15	57333.57	55924.38	56446.37	1.37	ppb
Strontium	86-1	835.02	857.11	855.47	849.20	1.45	ppb
Strontium	88-1	826.78	888.92	839.31	851.67	3.86	ppb
Sulfur	34-1	8317.77	8800.99	9297.32	8805.36	5.56	ppb
Terbium	159-1				122		%
Terbium	159-2				117		%
Thallium	203-1	442.34	438.66	434.83	438.61	0.86	ppb
Thallium	205-1	467.20	478.72	484.66	476.86	1.86	ppb
Tin	118-1	399.14	394.82	398.67	397.54	0.60	ppb
Titanium	47-1	2.54	2.42	2.77	2.58	7.05	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-02 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MS Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:19:24 DataFile Name : 046SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	466.62	476.63	469.14	470.80	1.11	ppb
Vanadium	51-2	458.30	454.91	460.00	457.74	0.57	ppb
Yttrium	89-1				120		%
Yttrium	89-2				114		%
Zinc	66-2	4900.29	4874.33	4961.92	4912.18	0.92	ppb
Zirconium	90-1	481.02	470.19	467.16	472.79	1.54	ppb
Zirconium	91-1	434.47	444.41	440.47	439.79	1.14	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-03 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MSD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:22:25 DataFile Name : 047SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	7498.72	7562.88	7597.45	7553.02	0.66	ppb
Antimony	121-1	490.85	505.56	479.84	492.08	2.62	ppb
Arsenic	75-2	0.89	0.89	0.98	0.92	5.64	ppb
Barium	135-1	2617.18	2745.68	2649.64	2670.83	2.50	ppb
Barium	137-1	2658.93	2710.85	2579.35	2649.71	2.50	ppb
Beryllium	9-1	485.93	491.56	487.73	488.41	0.59	ppb
Bismuth	209-1				117		%
Bismuth	209-2				114		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	466.71	478.13	454.05	466.30	2.58	ppb
Cadmium	106-1	471.07	481.08	466.17	472.78	1.61	ppb
Cadmium	111-1	475.91	489.21	475.03	480.05	1.66	ppb
Calcium	43-1	73936.08	73699.25	76540.86	74725.40	2.11	ppb
Calcium	44-1	76204.05	76914.61	76621.19	76579.95	0.47	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	431.15	441.19	430.69	434.34	1.37	ppb
Cobalt	59-2	452.69	461.48	450.64	454.94	1.27	ppb
Copper	63-2	4789.19	4809.92	4645.58	4748.23	1.88	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				123		%
Holmium	165-2				116		%
Indium	115-1				117		%
Indium	115-2				111		%
Iron	56-2	28248.04	28148.42	27408.39	27934.95	1.64	ppb
Iron	57-2	26600.96	26677.88	26506.45	26595.10	0.32	ppb
Iron	54-2	28178.38	28543.93	28582.65	28434.99	0.78	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-03 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MSD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:22:25 DataFile Name : 047SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2378.19	2407.60	2346.67	2377.49	1.28	ppb
Lead	207-1	2380.44	2451.12	2360.13	2397.23	1.99	ppb
Lead	208-1	2372.50	2426.57	2384.84	2394.64	1.18	ppb
Lithium	6-1				104		%
Magnesium	24-2	53335.27	53591.07	53090.08	53338.81	0.47	ppb
Manganese	55-2	5524.37	5426.11	5401.65	5450.71	1.19	ppb
Molybdenum	94-1	2268.03	2298.30	2222.91	2263.08	1.68	ppb
Molybdenum	95-1	1700.58	1758.83	1738.71	1732.71	1.71	ppb
Molybdenum	96-1	1832.62	1817.72	1822.25	1824.20	0.42	ppb
Molybdenum	97-1	1740.21	1776.41	1732.69	1749.77	1.34	ppb
Molybdenum	98-1	1683.73	1768.56	1741.81	1731.37	2.51	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	478.99	488.83	479.38	482.40	1.16	ppb
Phosphorus	31-2	225.79	243.85	231.94	233.86	3.93	ppb
Potassium	39-2	29515.99	30064.50	29917.49	29832.66	0.95	ppb
Rhodium	103-1				117		%
Rhodium	103-2				112		%
Scandium	45-1				117		%
Scandium	45-2				113		%
Selenium	82-1	477.66	488.92	484.66	483.75	1.17	ppb
Selenium	77-2	483.34	476.76	517.16	492.42	4.40	ppb
Selenium	78-2	493.92	503.71	487.72	495.12	1.63	ppb
Silicon	28-1	7414.78	7246.19	7673.04	7444.67	2.89	ppb
Silver	107-1	81.47	84.29	81.40	82.39	2.00	ppb
Silver	109-1	80.76	83.16	79.63	81.18	2.22	ppb
Sodium	23-2	56521.12	57579.88	56888.90	56996.63	0.94	ppb
Strontium	86-1	852.99	853.85	847.31	851.38	0.42	ppb
Strontium	88-1	837.76	869.72	841.19	849.56	2.07	ppb
Sulfur	34-1	8503.83	8439.15	8937.64	8626.87	3.14	ppb
Terbium	159-1				121		%
Terbium	159-2				117		%
Thallium	203-1	429.77	444.04	426.86	433.56	2.12	ppb
Thallium	205-1	479.63	500.98	479.70	486.77	2.53	ppb
Tin	118-1	397.96	401.69	392.46	397.37	1.17	ppb
Titanium	47-1	2.54	2.51	4.19	3.08	31.27	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-03 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MSD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:22:25 DataFile Name : 047SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	456.54	461.27	466.13	461.31	1.04	ppb
Vanadium	51-2	451.99	456.70	451.15	453.28	0.66	ppb
Yttrium	89-1				119		%
Yttrium	89-2				115		%
Zinc	66-2	4968.23	4956.10	4820.70	4915.01	1.67	ppb
Zirconium	90-1	463.43	475.10	480.39	472.97	1.83	ppb
Zirconium	91-1	436.62	444.35	440.48	440.48	0.88	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01A Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425A Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:25:22 DataFile Name : 048SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	7496.03	7672.91	7486.18	7551.71	1.39	ppb
Antimony	121-1	478.48	503.15	487.07	489.57	2.56	ppb
Arsenic	75-2	0.98	0.77	0.82	0.86	12.76	ppb
Barium	135-1	2674.10	2735.08	2659.38	2689.52	1.49	ppb
Barium	137-1	2659.06	2666.62	2661.37	2662.35	0.15	ppb
Beryllium	9-1	482.00	496.61	490.84	489.82	1.50	ppb
Bismuth	209-1				118		%
Bismuth	209-2				114		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	459.59	472.58	467.25	466.47	1.40	ppb
Cadmium	106-1	462.71	480.54	469.02	470.76	1.92	ppb
Cadmium	111-1	467.59	488.58	476.38	477.52	2.21	ppb
Calcium	43-1	70222.88	75914.84	75785.38	73974.37	4.39	ppb
Calcium	44-1	74434.09	78818.57	77352.26	76868.31	2.90	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	439.35	448.21	433.96	440.51	1.63	ppb
Cobalt	59-2	450.34	461.88	455.72	455.98	1.27	ppb
Copper	63-2	4761.04	4805.08	4717.31	4761.15	0.92	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				120		%
Holmium	165-2				118		%
Indium	115-1				117		%
Indium	115-2				110		%
Iron	56-2	28033.07	28149.83	27592.18	27925.03	1.05	ppb
Iron	57-2	26881.24	27123.47	26805.01	26936.57	0.62	ppb
Iron	54-2	29031.31	28668.24	28765.34	28821.63	0.65	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01A Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425A Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:25:22 DataFile Name : 048SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2402.84	2440.76	2395.51	2413.04	1.01	ppb
Lead	207-1	2340.79	2405.07	2407.45	2384.44	1.59	ppb
Lead	208-1	2368.16	2416.89	2385.69	2390.25	1.03	ppb
Lithium	6-1				103		%
Magnesium	24-2	51613.85	52063.94	52203.17	51960.32	0.59	ppb
Manganese	55-2	5418.55	5501.39	5422.62	5447.52	0.86	ppb
Molybdenum	94-1	2351.48	2238.90	2228.00	2272.79	3.01	ppb
Molybdenum	95-1	1771.05	1738.91	1708.77	1739.58	1.79	ppb
Molybdenum	96-1	1871.52	1748.40	1772.37	1797.43	3.63	ppb
Molybdenum	97-1	1777.65	1720.25	1689.75	1729.22	2.58	ppb
Molybdenum	98-1	1748.17	1792.87	1709.67	1750.24	2.38	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	483.63	496.78	484.84	488.42	1.49	ppb
Phosphorus	31-2	221.10	234.59	239.18	231.62	4.06	ppb
Potassium	39-2	29580.18	30243.42	29770.85	29864.82	1.14	ppb
Rhodium	103-1				115		%
Rhodium	103-2				113		%
Scandium	45-1				118		%
Scandium	45-2				114		%
Selenium	82-1	491.54	489.53	480.54	487.20	1.20	ppb
Selenium	77-2	518.28	508.73	533.17	520.06	2.37	ppb
Selenium	78-2	485.31	486.91	498.83	490.35	1.51	ppb
Silicon	28-1	7099.44	7680.46	7544.83	7441.58	4.08	ppb
Silver	107-1	81.04	82.41	82.56	82.00	1.02	ppb
Silver	109-1	79.01	83.28	80.88	81.06	2.64	ppb
Sodium	23-2	55957.15	56724.14	55064.34	55915.21	1.49	ppb
Strontium	86-1	872.26	848.18	839.94	853.46	1.97	ppb
Strontium	88-1	872.04	855.97	844.81	857.61	1.60	ppb
Sulfur	34-1	7846.85	9094.46	9130.52	8690.61	8.41	ppb
Terbium	159-1				122		%
Terbium	159-2				118		%
Thallium	203-1	430.32	432.84	433.40	432.19	0.38	ppb
Thallium	205-1	484.50	478.48	471.87	478.28	1.32	ppb
Tin	118-1	389.62	401.06	395.41	395.37	1.45	ppb
Titanium	47-1	2.39	2.81	2.65	2.62	8.15	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01A Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425A Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:25:22 DataFile Name : 048SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	460.24	470.74	467.22	466.07	1.15	ppb
Vanadium	51-2	458.25	462.05	453.19	457.83	0.97	ppb
Yttrium	89-1				120		%
Yttrium	89-2				115		%
Zinc	66-2	4766.80	5092.15	4910.59	4923.18	3.31	ppb
Zirconium	90-1	482.78	475.26	468.97	475.67	1.45	ppb
Zirconium	91-1	447.95	434.45	436.46	439.62	1.66	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-05 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:28:23 DataFile Name : 049SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1125.19	1114.93	1122.12	1120.75	0.47	ppb
Antimony	121-1	4.16	4.18	4.17	4.17	0.36	ppb
Arsenic	75-2	1.19	0.92	1.16	1.09	13.79	ppb
Barium	135-1	283.24	277.79	281.53	280.85	0.99	ppb
Barium	137-1	281.61	275.31	280.34	279.09	1.19	ppb
Beryllium	9-1	0.09	0.07	0.05	0.07	23.20	ppb
Bismuth	209-1				118		%
Bismuth	209-2				114		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.35	0.40	0.09	0.28	59.47	ppb
Cadmium	106-1	-1.71	-1.96	-2.54	-2.07		ppb
Cadmium	111-1	-0.07	-0.13	-0.14	-0.12		ppb
Calcium	43-1	125646.05	122707.59	124714.26	124355.96	1.21	ppb
Calcium	44-1	123540.52	119928.76	121513.38	121660.89	1.49	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.07	0.02	0.04	0.04	60.58	ppb
Cobalt	59-2	2.33	2.44	2.31	2.36	3.02	ppb
Copper	63-2	0.80	0.75	0.64	0.73	11.43	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				123		%
Holmium	165-2				118		%
Indium	115-1				122		%
Indium	115-2				113		%
Iron	56-2	1614.07	1609.41	1581.58	1601.69	1.10	ppb
Iron	57-2	2210.67	2171.29	2207.15	2196.37	0.99	ppb
Iron	54-2	1553.30	1531.92	1570.08	1551.77	1.23	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-05 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:28:23 DataFile Name : 049SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.16	0.17	0.18	0.17	5.36	ppb
Lead	207-1	0.19	0.15	0.14	0.16	13.63	ppb
Lead	208-1	0.16	0.16	0.16	0.16	1.68	ppb
Lithium	6-1				102		%
Magnesium	24-2	4172.19	4146.26	4158.65	4159.03	0.31	ppb
Manganese	55-2	256.52	254.18	256.24	255.65	0.50	ppb
Molybdenum	94-1	55.55	54.42	54.22	54.73	1.32	ppb
Molybdenum	95-1	67.47	67.06	66.62	67.05	0.63	ppb
Molybdenum	96-1	66.77	65.81	65.52	66.03	0.99	ppb
Molybdenum	97-1	68.45	67.53	67.26	67.75	0.93	ppb
Molybdenum	98-1	67.73	66.50	66.99	67.07	0.93	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	11.53	11.16	10.71	11.13	3.70	ppb
Phosphorus	31-2	-13.42	-22.29	-19.32	-18.34		ppb
Potassium	39-2	25971.33	25792.01	25321.29	25694.88	1.31	ppb
Rhodium	103-1				119		%
Rhodium	103-2				114		%
Scandium	45-1				119		%
Scandium	45-2				113		%
Selenium	82-1	1.62	2.49	2.72	2.28	25.38	ppb
Selenium	77-2	0.08	0.47	0.47	0.34	65.47	ppb
Selenium	78-2	-2.02	-0.91	-2.13	-1.68		ppb
Silicon	28-1	1823.04	1806.07	1843.13	1824.08	1.02	ppb
Silver	107-1	0.04	0.03	0.03	0.03	24.23	ppb
Silver	109-1	0.03	0.02	0.03	0.03	13.41	ppb
Sodium	23-2	24980.80	25646.00	24844.19	25157.00	1.71	ppb
Strontium	86-1	854.20	849.15	845.99	849.78	0.49	ppb
Strontium	88-1	863.44	859.80	857.83	860.36	0.33	ppb
Sulfur	34-1	46844.63	46074.46	46271.31	46396.80	0.86	ppb
Terbium	159-1				120		%
Terbium	159-2				118		%
Thallium	203-1	0.19	0.17	0.16	0.18	7.76	ppb
Thallium	205-1	0.18	0.17	0.17	0.17	4.97	ppb
Tin	118-1	0.54	0.56	0.55	0.55	2.03	ppb
Titanium	47-1	0.18	0.31	0.30	0.26	26.43	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-05 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:28:23 DataFile Name : 049SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.03	0.03	0.03	0.03	8.08	ppb
Vanadium	51-2	3.08	2.95	2.99	3.00	2.17	ppb
Yttrium	89-1				119		%
Yttrium	89-2				115		%
Zinc	66-2	1.80	1.56	1.54	1.63	8.94	ppb
Zirconium	90-1	0.17	0.17	0.17	0.17	1.69	ppb
Zirconium	91-1	0.18	0.17	0.16	0.17	5.98	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-06 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425-FD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:31:40 DataFile Name : 050SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1153.90	1175.44	1142.54	1157.30	1.44	ppb
Antimony	121-1	4.05	4.04	4.25	4.11	2.90	ppb
Arsenic	75-2	1.22	0.86	1.10	1.06	17.30	ppb
Barium	135-1	261.11	259.88	268.61	263.20	1.79	ppb
Barium	137-1	262.59	261.50	272.06	265.38	2.19	ppb
Beryllium	9-1	0.01	0.05	0.03	0.03	76.88	ppb
Bismuth	209-1				117		%
Bismuth	209-2				113		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.25	0.26	0.58	0.36	51.48	ppb
Cadmium	106-1	-1.54	-1.72	-2.52	-1.93		ppb
Cadmium	111-1	-0.10	-0.10	-0.14	-0.11		ppb
Calcium	43-1	126102.05	123964.74	127547.62	125871.47	1.43	ppb
Calcium	44-1	126039.01	120076.17	124359.95	123491.71	2.49	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.03	0.03	0.04	0.01	349.00	ppb
Cobalt	59-2	2.22	2.18	2.12	2.17	2.35	ppb
Copper	63-2	0.69	0.57	0.53	0.60	14.21	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				122		%
Holmium	165-2				117		%
Indium	115-1				120		%
Indium	115-2				113		%
Iron	56-2	1472.77	1465.51	1446.10	1461.46	0.94	ppb
Iron	57-2	2079.06	2088.33	2062.35	2076.58	0.63	ppb
Iron	54-2	1399.93	1418.58	1398.75	1405.75	0.79	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-06 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425-FD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:31:40 DataFile Name : 050SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.90	0.88	0.80	0.86	6.11	ppb
Lead	207-1	0.76	0.74	0.79	0.77	3.04	ppb
Lead	208-1	0.79	0.80	0.78	0.79	1.54	ppb
Lithium	6-1				102		%
Magnesium	24-2	3782.92	3923.00	3796.54	3834.16	2.01	ppb
Manganese	55-2	235.02	234.57	229.45	233.02	1.33	ppb
Molybdenum	94-1	53.63	52.61	55.61	53.95	2.82	ppb
Molybdenum	95-1	65.77	66.49	68.96	67.07	2.50	ppb
Molybdenum	96-1	65.03	65.44	67.35	65.94	1.88	ppb
Molybdenum	97-1	67.06	67.33	69.74	68.05	2.17	ppb
Molybdenum	98-1	66.27	66.03	68.28	66.86	1.85	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	10.81	10.95	10.77	10.84	0.84	ppb
Phosphorus	31-2	-29.59	-32.82	-13.94	-25.45		ppb
Potassium	39-2	25904.51	26748.98	25873.44	26175.65	1.90	ppb
Rhodium	103-1				118		%
Rhodium	103-2				114		%
Scandium	45-1				117		%
Scandium	45-2				112		%
Selenium	82-1	1.85	2.31	2.17	2.11	11.20	ppb
Selenium	77-2	0.46	1.19	1.21	0.95	44.81	ppb
Selenium	78-2	-3.35	-0.41	-0.01	-1.26		ppb
Silicon	28-1	1796.85	1776.18	1807.15	1793.39	0.88	ppb
Silver	107-1	0.01	0.01	0.01	0.01	9.89	ppb
Silver	109-1	0.01	0.01	0.01	0.01	38.87	ppb
Sodium	23-2	24650.54	25122.01	24856.66	24876.41	0.95	ppb
Strontium	86-1	808.39	806.23	842.61	819.08	2.49	ppb
Strontium	88-1	819.07	796.65	840.09	818.60	2.65	ppb
Sulfur	34-1	44268.11	43830.08	45082.60	44393.60	1.43	ppb
Terbium	159-1				122		%
Terbium	159-2				118		%
Thallium	203-1	0.11	0.10	0.10	0.11	4.84	ppb
Thallium	205-1	0.09	0.09	0.09	0.09	3.80	ppb
Tin	118-1	0.38	0.46	0.46	0.43	9.75	ppb
Titanium	47-1	0.26	0.20	0.30	0.25	20.36	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-06 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425-FD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:31:40 DataFile Name : 050SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.02	0.02	0.03	0.03	18.54	ppb
Vanadium	51-2	3.21	3.31	3.21	3.24	1.74	ppb
Yttrium	89-1				122		%
Yttrium	89-2				116		%
Zinc	66-2	2.00	2.02	1.76	1.93	7.58	ppb
Zirconium	90-1	0.04	0.04	0.05	0.05	13.16	ppb
Zirconium	91-1	0.07	0.04	0.06	0.06	25.90	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV03 Instrumnet Name : P7
Client Sample ID : CCV03 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:35:01 DataFile Name : 051CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	48425.17	49685.32	49099.81	49070.10	1.29	ppb
Antimony	121-1	511.66	482.46	505.26	499.79	3.07	ppb
Arsenic	75-2	479.86	492.51	485.39	485.92	1.30	ppb
Barium	135-1	2561.07	2490.38	2508.49	2519.98	1.46	ppb
Barium	137-1	2534.40	2484.01	2521.22	2513.21	1.04	ppb
Beryllium	9-1	507.39	506.72	513.34	509.15	0.72	ppb
Bismuth	209-1				105		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	481.89	465.00	478.57	475.16	1.88	ppb
Cadmium	106-1	476.43	472.95	476.65	475.35	0.44	ppb
Cadmium	111-1	483.54	475.84	478.60	479.32	0.81	ppb
Calcium	43-1	255728.81	254700.66	248946.67	253125.38	1.44	ppb
Calcium	44-1	249742.86	256633.92	251622.87	252666.55	1.41	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	463.44	474.23	467.52	468.39	1.16	ppb
Cobalt	59-2	463.51	466.44	460.10	463.35	0.68	ppb
Copper	63-2	4849.87	4962.75	4806.80	4873.14	1.65	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				112		%
Holmium	165-2				109		%
Indium	115-1				105		%
Indium	115-2				100		%
Iron	56-2	125695.88	129327.41	127269.42	127430.90	1.43	ppb
Iron	57-2	126974.28	129977.68	128971.80	128641.25	1.19	ppb
Iron	54-2	128056.44	132857.83	130814.92	130576.40	1.85	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV03 Instrumnet Name : P7
Client Sample ID : CCV03 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:35:01 DataFile Name : 051CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2679.75	2538.20	2550.38	2589.44	3.03	ppb
Lead	207-1	2563.47	2630.30	2523.82	2572.53	2.09	ppb
Lead	208-1	2594.92	2572.55	2527.65	2565.04	1.34	ppb
Lithium	6-1				95		%
Magnesium	24-2	231308.14	231619.57	236568.14	233165.28	1.27	ppb
Manganese	55-2	4918.70	4980.87	5043.46	4981.01	1.25	ppb
Molybdenum	94-1	4950.26	4905.02	4964.72	4940.00	0.63	ppb
Molybdenum	95-1	4984.45	5059.26	4883.09	4975.60	1.78	ppb
Molybdenum	96-1	5021.96	4941.58	5076.47	5013.34	1.35	ppb
Molybdenum	97-1	4851.88	5044.15	5123.77	5006.60	2.79	ppb
Molybdenum	98-1	5019.42	5008.84	4992.85	5007.03	0.27	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	482.46	492.60	485.24	486.77	1.08	ppb
Phosphorus	31-2	9611.61	9544.33	9725.35	9627.10	0.95	ppb
Potassium	39-2	123683.08	128258.52	129828.24	127256.61	2.51	ppb
Rhodium	103-1				102		%
Rhodium	103-2				100		%
Scandium	45-1				107		%
Scandium	45-2				105		%
Selenium	82-1	468.76	470.39	475.27	471.47	0.72	ppb
Selenium	77-2	483.08	483.33	504.36	490.25	2.49	ppb
Selenium	78-2	447.03	481.99	474.21	467.74	3.92	ppb
Silicon	28-1	472.19	480.28	470.08	474.18	1.14	ppb
Silver	107-1	509.71	503.30	503.42	505.47	0.73	ppb
Silver	109-1	508.10	496.84	521.60	508.85	2.44	ppb
Sodium	23-2	221137.47	228342.51	230303.67	226594.55	2.13	ppb
Strontium	86-1	489.99	493.03	494.37	492.46	0.46	ppb
Strontium	88-1	488.25	494.80	490.36	491.14	0.68	ppb
Sulfur	34-1	8920.29	8548.51	8285.10	8584.64	3.72	ppb
Terbium	159-1				113		%
Terbium	159-2				108		%
Thallium	203-1	480.80	473.57	464.65	473.01	1.71	ppb
Thallium	205-1	528.34	523.42	511.95	521.24	1.61	ppb
Tin	118-1	511.32	495.16	508.89	505.12	1.73	ppb
Titanium	47-1	4912.87	4845.63	4892.50	4883.67	0.71	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV03 Instrumnet Name : P7
Client Sample ID : CCV03 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:35:01 DataFile Name : 051CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	514.74	512.34	513.69	513.59	0.23	ppb
Vanadium	51-2	464.39	475.89	475.20	471.83	1.37	ppb
Yttrium	89-1				110		%
Yttrium	89-2				106		%
Zinc	66-2	4668.43	4795.24	4715.78	4726.48	1.36	ppb
Zirconium	90-1	499.79	506.73	506.76	504.43	0.80	ppb
Zirconium	91-1	468.08	467.93	468.64	468.22	0.08	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB03 Instrumnet Name : P7
Client Sample ID : CCB03 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:41:07 DataFile Name : 052CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.66	-0.08	-0.04	-0.26		ppb
Antimony	121-1	0.04	0.04	0.04	0.04	8.81	ppb
Arsenic	75-2	-0.02	-0.02	-0.01	-0.02		ppb
Barium	135-1	-0.02	-0.01	-0.01	-0.01		ppb
Barium	137-1	0.03	0.01	0.02	0.02	53.03	ppb
Beryllium	9-1	0.04	0.03	0.03	0.03	18.76	ppb
Bismuth	209-1				107		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.05	0.10	0.10	0.08	36.18	ppb
Cadmium	106-1	-3.96	-1.98	-1.87	-2.60		ppb
Cadmium	111-1	-0.26	-0.12	-0.12	-0.17		ppb
Calcium	43-1	-0.44	-2.59	-8.53	-3.85		ppb
Calcium	44-1	-8.19	-10.18	-8.02	-8.80		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.12	-0.01	-0.07	-0.07		ppb
Cobalt	59-2	-0.01	-0.03	-0.02	-0.02		ppb
Copper	63-2	0.07	0.10	0.00	0.06	88.25	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				108		%
Holmium	165-2				106		%
Indium	115-1				106		%
Indium	115-2				102		%
Iron	56-2	0.14	0.28	0.33	0.25	39.34	ppb
Iron	57-2	-4.65	-1.95	-0.44	-2.34		ppb
Iron	54-2	-0.96	1.33	-0.11	0.09	1298.63	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB03 Instrumnet Name : P7
Client Sample ID : CCB03 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:41:07 DataFile Name : 052CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.02	0.03	0.03	0.03	26.19	ppb
Lead	207-1	0.02	0.04	0.02	0.03	30.63	ppb
Lead	208-1	0.01	0.02	0.02	0.02	20.29	ppb
Lithium	6-1				95		%
Magnesium	24-2	1.47	1.11	1.88	1.49	25.90	ppb
Manganese	55-2	0.30	0.26	0.36	0.31	16.37	ppb
Molybdenum	94-1	0.07	0.07	0.09	0.07	18.66	ppb
Molybdenum	95-1	0.06	0.06	0.04	0.06	24.30	ppb
Molybdenum	96-1	0.03	0.03	0.02	0.02	28.32	ppb
Molybdenum	97-1	0.08	0.07	0.05	0.07	23.31	ppb
Molybdenum	98-1	0.04	0.07	0.04	0.05	40.03	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.06	0.01	-0.06	-0.04		ppb
Phosphorus	31-2	-42.47	-48.69	-39.70	-43.62		ppb
Potassium	39-2	-13.72	-12.95	-8.91	-11.86		ppb
Rhodium	103-1				105		%
Rhodium	103-2				103		%
Scandium	45-1				103		%
Scandium	45-2				102		%
Selenium	82-1	1.60	1.30	1.01	1.30	22.83	ppb
Selenium	77-2	-0.29	0.55	0.13	0.13	317.74	ppb
Selenium	78-2	0.88	1.57	3.24	1.90	63.99	ppb
Silicon	28-1	-38.10	-28.04	-26.83	-30.99		ppb
Silver	107-1	0.01	0.01	0.01	0.01	47.88	ppb
Silver	109-1	0.01	0.01	0.00	0.01	111.79	ppb
Sodium	23-2	15.24	14.05	13.60	14.30	5.94	ppb
Strontium	86-1	-0.03	-0.07	-0.01	-0.03		ppb
Strontium	88-1	0.00	0.01	0.01	0.01	69.21	ppb
Sulfur	34-1	-2449.37	-2224.84	-2291.65	-2321.95		ppb
Terbium	159-1				108		%
Terbium	159-2				105		%
Thallium	203-1	0.06	0.03	0.04	0.04	37.72	ppb
Thallium	205-1	0.04	0.04	0.04	0.04	7.87	ppb
Tin	118-1	-0.02	0.00	0.02	0.00		ppb
Titanium	47-1	-0.05	0.01	-0.04	-0.02		ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB03 Instrumnet Name : P7
Client Sample ID : CCB03 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:41:07 DataFile Name : 052CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	108.24	ppb
Vanadium	51-2	0.00	-0.01	-0.01	0.00		ppb
Yttrium	89-1				106		%
Yttrium	89-2				104		%
Zinc	66-2	0.23	0.19	0.01	0.14	79.24	ppb
Zirconium	90-1	0.02	0.03	0.03	0.03	21.44	ppb
Zirconium	91-1	0.02	0.03	0.03	0.03	30.74	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-07 Instrumnet Name : P7
Client Sample ID : MW-19B-72-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:44:31 DataFile Name : 053SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	17.10	9.25	5.05	10.47	58.43	ppb
Antimony	121-1	0.04	0.04	0.06	0.05	17.36	ppb
Arsenic	75-2	0.64	0.41	0.37	0.47	30.28	ppb
Barium	135-1	415.61	421.80	548.21	461.87	16.20	ppb
Barium	137-1	416.52	417.39	549.74	461.22	16.62	ppb
Beryllium	9-1	0.05	0.00	0.04	0.03	84.11	ppb
Bismuth	209-1				110		%
Bismuth	209-2				88		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.04	0.13	0.11	0.10	48.52	ppb
Cadmium	106-1	-0.40	-2.78	-2.73	-1.97		ppb
Cadmium	111-1	-0.02	-0.20	-0.19	-0.13		ppb
Calcium	43-1	69003.93	67836.06	88967.84	75269.27	15.78	ppb
Calcium	44-1	72619.13	69731.19	94550.53	78966.95	17.19	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.86	0.08	0.00	0.32	151.34	ppb
Cobalt	59-2	6.11	2.82	2.45	3.79	53.10	ppb
Copper	63-2	1.28	0.25	0.11	0.55	116.25	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				112		%
Holmium	165-2				89		%
Indium	115-1				111		%
Indium	115-2				86		%
Iron	56-2	63440.57	28963.30	24567.71	38990.52	54.60	ppb
Iron	57-2	60666.64	27930.55	23954.29	37517.16	53.70	ppb
Iron	54-2	64501.56	29407.46	24881.36	39596.79	54.77	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-07 Instrumnet Name : P7
Client Sample ID : MW-19B-72-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:44:31 DataFile Name : 053SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.75	0.79	0.99	0.84	15.37	ppb
Lead	207-1	0.70	0.68	0.96	0.78	19.97	ppb
Lead	208-1	0.72	0.75	0.98	0.82	16.95	ppb
Lithium	6-1				97		%
Magnesium	24-2	62824.00	27607.73	24273.60	38235.11	55.86	ppb
Manganese	55-2	4061.32	1858.01	1527.66	2482.33	55.49	ppb
Molybdenum	94-1	0.47	0.55	0.71	0.58	21.57	ppb
Molybdenum	95-1	0.62	0.66	0.81	0.70	14.64	ppb
Molybdenum	96-1	0.96	1.05	1.24	1.08	13.25	ppb
Molybdenum	97-1	0.67	0.66	0.85	0.73	14.59	ppb
Molybdenum	98-1	0.56	0.54	0.81	0.64	23.14	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	4.87	1.83	1.79	2.83	62.41	ppb
Phosphorus	31-2	563.68	180.47	155.75	299.97	76.25	ppb
Potassium	39-2	29713.06	12784.70	11373.86	17957.21	56.83	ppb
Rhodium	103-1				108		%
Rhodium	103-2				87		%
Scandium	45-1				109		%
Scandium	45-2				86		%
Selenium	82-1	1.64	1.36	1.99	1.66	19.08	ppb
Selenium	77-2	-0.29	0.13	-0.29	-0.15		ppb
Selenium	78-2	29.11	0.70	-1.29	9.51	178.86	ppb
Silicon	28-1	8272.04	8081.25	11014.13	9122.47	17.99	ppb
Silver	107-1	0.00	0.01	0.01	0.01	23.78	ppb
Silver	109-1	0.00	0.01	0.01	0.00	38.24	ppb
Sodium	23-2	36893.59	16477.48	14315.83	22562.30	55.22	ppb
Strontium	86-1	880.25	893.33	1162.99	978.86	16.30	ppb
Strontium	88-1	885.28	890.90	1181.51	985.90	17.19	ppb
Sulfur	34-1	82954.25	81207.10	109693.20	91284.85	17.49	ppb
Terbium	159-1				113		%
Terbium	159-2				90		%
Thallium	203-1	0.03	0.02	0.03	0.03	18.44	ppb
Thallium	205-1	0.03	0.03	0.04	0.03	6.09	ppb
Tin	118-1	0.94	0.97	1.25	1.05	16.06	ppb
Titanium	47-1	0.71	0.76	0.94	0.80	15.38	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-07 Instrumnet Name : P7
Client Sample ID : MW-19B-72-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:44:31 DataFile Name : 053SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.04	0.04	0.06	0.04	25.18	ppb
Vanadium	51-2	0.36	0.14	0.14	0.21	58.98	ppb
Yttrium	89-1				110		%
Yttrium	89-2				88		%
Zinc	66-2	9.73	4.19	3.51	5.81	58.69	ppb
Zirconium	90-1	0.01	0.00	0.02	0.01	89.86	ppb
Zirconium	91-1	0.00	0.01	0.01	0.00	91.33	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:47:49 DataFile Name : 054SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	17.82	17.66	18.22	17.90	1.61	ppb
Antimony	121-1	0.28	0.27	0.28	0.28	2.19	ppb
Arsenic	75-2	0.95	0.92	0.78	0.88	10.25	ppb
Barium	135-1	460.77	461.23	459.47	460.49	0.20	ppb
Barium	137-1	458.51	465.07	463.52	462.36	0.74	ppb
Beryllium	9-1	0.06	0.09	0.03	0.06	52.64	ppb
Bismuth	209-1				119		%
Bismuth	209-2				116		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.13	0.17	0.21	0.17	25.87	ppb
Cadmium	106-1	-1.84	-0.91	-2.75	-1.83		ppb
Cadmium	111-1	-0.11	-0.06	-0.17	-0.11		ppb
Calcium	43-1	32684.57	33151.70	32999.17	32945.14	0.72	ppb
Calcium	44-1	33779.62	34543.72	33843.10	34055.48	1.25	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.08	-0.03	-0.03	-0.05		ppb
Cobalt	59-2	8.21	8.11	8.29	8.20	1.10	ppb
Copper	63-2	0.00	-0.06	-0.01	-0.02		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				123		%
Holmium	165-2				119		%
Indium	115-1				120		%
Indium	115-2				114		%
Iron	56-2	7086.73	7196.50	7262.16	7181.80	1.23	ppb
Iron	57-2	6947.01	6900.20	7078.11	6975.11	1.32	ppb
Iron	54-2	6896.79	6960.39	6997.59	6951.59	0.73	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:47:49 DataFile Name : 054SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.15	0.09	0.13	0.13	23.89	ppb
Lead	207-1	0.09	0.10	0.13	0.10	20.65	ppb
Lead	208-1	0.12	0.12	0.13	0.12	4.80	ppb
Lithium	6-1				101		%
Magnesium	24-2	9773.77	9633.78	9467.29	9624.94	1.59	ppb
Manganese	55-2	647.06	648.77	657.43	651.09	0.85	ppb
Molybdenum	94-1	16.76	16.59	16.12	16.49	2.02	ppb
Molybdenum	95-1	20.03	20.46	19.78	20.09	1.72	ppb
Molybdenum	96-1	20.13	20.04	19.93	20.03	0.52	ppb
Molybdenum	97-1	20.54	20.59	20.47	20.53	0.29	ppb
Molybdenum	98-1	20.28	20.12	20.01	20.14	0.67	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	11.22	11.44	11.49	11.38	1.28	ppb
Phosphorus	31-2	245.49	224.57	262.82	244.29	7.84	ppb
Potassium	39-2	8929.76	8794.67	8796.06	8840.16	0.88	ppb
Rhodium	103-1				115		%
Rhodium	103-2				115		%
Scandium	45-1				120		%
Scandium	45-2				115		%
Selenium	82-1	0.99	1.43	1.83	1.41	29.67	ppb
Selenium	77-2	0.09	0.08	-0.29	-0.04		ppb
Selenium	78-2	-1.87	0.41	-3.31	-1.59		ppb
Silicon	28-1	7776.01	7865.20	7935.09	7858.77	1.01	ppb
Silver	107-1	0.00	0.00	0.00	0.00	52.46	ppb
Silver	109-1	0.00	0.00	0.00	0.00		ppb
Sodium	23-2	7533.59	7539.23	7631.74	7568.19	0.73	ppb
Strontium	86-1	339.28	342.29	331.60	337.72	1.63	ppb
Strontium	88-1	340.40	336.73	328.05	335.06	1.89	ppb
Sulfur	34-1	12426.96	12394.85	11870.59	12230.80	2.55	ppb
Terbium	159-1				124		%
Terbium	159-2				118		%
Thallium	203-1	0.25	0.22	0.24	0.24	6.17	ppb
Thallium	205-1	0.24	0.23	0.22	0.23	4.09	ppb
Tin	118-1	0.15	0.18	0.19	0.17	10.93	ppb
Titanium	47-1	0.54	0.70	0.73	0.66	15.29	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:47:49 DataFile Name : 054SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.01	0.01	0.01	0.01	11.74	ppb
Vanadium	51-2	0.27	0.28	0.26	0.27	4.97	ppb
Yttrium	89-1				122		%
Yttrium	89-2				117		%
Zinc	66-2	3.79	4.34	4.26	4.13	7.24	ppb
Zirconium	90-1	0.01	0.00	0.01	0.01	51.97	ppb
Zirconium	91-1	0.00	0.01	0.00	0.00	256.44	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08DUP Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425DUP Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:51:06 DataFile Name : 055SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	17.32	17.07	17.73	17.37	1.94	ppb
Antimony	121-1	0.28	0.29	0.29	0.29	1.33	ppb
Arsenic	75-2	0.85	0.71	1.07	0.88	21.14	ppb
Barium	135-1	474.88	468.52	468.70	470.70	0.77	ppb
Barium	137-1	472.44	473.06	467.71	471.07	0.62	ppb
Beryllium	9-1	0.03	0.06	0.12	0.07	64.61	ppb
Bismuth	209-1				121		%
Bismuth	209-2				117		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.13	0.09	0.17	0.13	33.44	ppb
Cadmium	106-1	-2.42	-2.50	-2.84	-2.58		ppb
Cadmium	111-1	-0.15	-0.18	-0.19	-0.18		ppb
Calcium	43-1	33265.34	32539.27	34442.07	33415.56	2.87	ppb
Calcium	44-1	34166.84	34819.54	35941.13	34975.84	2.57	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.10	-0.08	-0.10	-0.09		ppb
Cobalt	59-2	8.36	8.21	8.14	8.24	1.34	ppb
Copper	63-2	-0.03	-0.06	-0.07	-0.05		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				123		%
Holmium	165-2				120		%
Indium	115-1				122		%
Indium	115-2				115		%
Iron	56-2	7314.95	7167.11	7184.93	7222.33	1.12	ppb
Iron	57-2	7094.78	6985.55	6935.59	7005.30	1.16	ppb
Iron	54-2	7018.06	6967.02	6927.63	6970.90	0.65	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08DUP Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425DUP Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:51:06 DataFile Name : 055SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.12	0.16	0.12	0.13	16.22	ppb
Lead	207-1	0.08	0.11	0.09	0.09	13.71	ppb
Lead	208-1	0.10	0.12	0.10	0.11	11.39	ppb
Lithium	6-1				105		%
Magnesium	24-2	9671.50	9768.60	9587.21	9675.77	0.94	ppb
Manganese	55-2	655.29	654.96	649.03	653.09	0.54	ppb
Molybdenum	94-1	16.48	16.42	16.24	16.38	0.77	ppb
Molybdenum	95-1	20.63	20.67	20.85	20.72	0.57	ppb
Molybdenum	96-1	19.88	20.07	20.34	20.10	1.15	ppb
Molybdenum	97-1	20.07	20.54	20.94	20.52	2.14	ppb
Molybdenum	98-1	20.94	20.75	20.79	20.83	0.49	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	12.59	11.52	11.21	11.77	6.14	ppb
Phosphorus	31-2	235.08	217.72	232.54	228.45	4.11	ppb
Potassium	39-2	8726.95	9025.60	8684.85	8812.47	2.11	ppb
Rhodium	103-1				117		%
Rhodium	103-2				115		%
Scandium	45-1				119		%
Scandium	45-2				114		%
Selenium	82-1	2.22	1.48	1.19	1.63	32.74	ppb
Selenium	77-2	0.45	-0.29	0.08	0.08	445.85	ppb
Selenium	78-2	1.21	-1.93	-1.26	-0.66		ppb
Silicon	28-1	7856.04	7723.59	7917.90	7832.51	1.27	ppb
Silver	107-1	0.00	0.00	0.00	0.00		ppb
Silver	109-1	0.00	0.00	0.00	0.00		ppb
Sodium	23-2	7775.44	7766.58	7853.77	7798.59	0.62	ppb
Strontium	86-1	338.74	334.63	339.27	337.55	0.75	ppb
Strontium	88-1	329.94	331.70	334.09	331.91	0.63	ppb
Sulfur	34-1	11414.71	11269.52	12526.30	11736.84	5.86	ppb
Terbium	159-1				122		%
Terbium	159-2				119		%
Thallium	203-1	0.19	0.21	0.22	0.21	8.03	ppb
Thallium	205-1	0.22	0.23	0.21	0.22	4.73	ppb
Tin	118-1	0.26	0.26	0.26	0.26	1.12	ppb
Titanium	47-1	0.67	0.49	0.60	0.59	15.56	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08DUP Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425DUP Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:51:06 DataFile Name : 055SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.01	0.01	0.01	0.01	7.23	ppb
Vanadium	51-2	0.27	0.21	0.30	0.26	17.83	ppb
Yttrium	89-1				121		%
Yttrium	89-2				117		%
Zinc	66-2	4.17	4.25	4.11	4.18	1.75	ppb
Zirconium	90-1	0.00	0.01	0.00	0.00	192.49	ppb
Zirconium	91-1	0.01	0.01	0.01	0.01	51.16	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08LX5 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425L Dilution Factor : 5
Date & Time Acquired : 2025-06-11 20:54:25 DataFile Name : 056SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	4.12	4.93	4.52	4.52	8.97	ppb
Antimony	121-1	0.07	0.06	0.06	0.06	8.08	ppb
Arsenic	75-2	0.14	0.16	0.22	0.17	22.87	ppb
Barium	135-1	90.80	92.33	91.77	91.63	0.84	ppb
Barium	137-1	91.40	90.92	91.84	91.39	0.50	ppb
Beryllium	9-1	0.04	0.01	0.04	0.03	57.21	ppb
Bismuth	209-1				110		%
Bismuth	209-2				109		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.14	0.05	0.14	0.11	49.70	ppb
Cadmium	106-1	-1.75	-0.33	-1.88	-1.32		ppb
Cadmium	111-1	-0.12	0.00	-0.13	-0.08		ppb
Calcium	43-1	6421.19	6726.58	6430.97	6526.24	2.66	ppb
Calcium	44-1	6759.26	6977.49	6806.93	6847.89	1.68	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.01	-0.04	0.00	-0.01		ppb
Cobalt	59-2	1.64	1.57	1.67	1.62	3.15	ppb
Copper	63-2	-0.01	0.00	-0.05	-0.02		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				111		%
Holmium	165-2				110		%
Indium	115-1				110		%
Indium	115-2				106		%
Iron	56-2	1462.68	1453.88	1439.73	1452.10	0.80	ppb
Iron	57-2	1401.91	1394.15	1378.32	1391.46	0.86	ppb
Iron	54-2	1383.51	1370.06	1386.06	1379.88	0.62	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08LX5 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425L Dilution Factor : 5
Date & Time Acquired : 2025-06-11 20:54:25 DataFile Name : 056SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.02	0.02	0.02	0.02	23.24	ppb
Lead	207-1	0.02	0.00	0.01	0.01	73.47	ppb
Lead	208-1	0.01	0.01	0.02	0.02	33.69	ppb
Lithium	6-1				93		%
Magnesium	24-2	1775.39	1750.96	1734.99	1753.78	1.16	ppb
Manganese	55-2	129.88	128.93	130.49	129.77	0.61	ppb
Molybdenum	94-1	3.20	3.28	3.31	3.27	1.72	ppb
Molybdenum	95-1	3.98	4.02	3.85	3.95	2.23	ppb
Molybdenum	96-1	3.93	4.02	3.86	3.94	1.99	ppb
Molybdenum	97-1	4.07	4.03	4.20	4.10	2.17	ppb
Molybdenum	98-1	3.90	4.05	4.09	4.01	2.48	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.27	2.44	2.32	2.34	3.84	ppb
Phosphorus	31-2	6.70	8.28	10.89	8.62	24.53	ppb
Potassium	39-2	1650.37	1608.76	1643.03	1634.06	1.36	ppb
Rhodium	103-1				108		%
Rhodium	103-2				108		%
Scandium	45-1				108		%
Scandium	45-2				105		%
Selenium	82-1	1.05	0.83	2.22	1.37	54.62	ppb
Selenium	77-2	0.11	-0.29	-0.29	-0.15		ppb
Selenium	78-2	4.85	-1.01	-0.53	1.10	294.44	ppb
Silicon	28-1	1492.52	1583.88	1511.81	1529.40	3.15	ppb
Silver	107-1	0.00	0.00	0.00	0.00	172.33	ppb
Silver	109-1	0.00	0.00	0.00	0.00	951.74	ppb
Sodium	23-2	1366.35	1382.91	1333.15	1360.80	1.86	ppb
Strontium	86-1	67.18	66.48	66.18	66.62	0.77	ppb
Strontium	88-1	60.42	60.50	61.08	60.67	0.59	ppb
Sulfur	34-1	-364.25	34.78	-192.00	-173.82		ppb
Terbium	159-1				112		%
Terbium	159-2				110		%
Thallium	203-1	0.06	0.05	0.05	0.05	5.45	ppb
Thallium	205-1	0.06	0.06	0.06	0.06	5.32	ppb
Tin	118-1	0.02	0.01	0.02	0.02	35.38	ppb
Titanium	47-1	0.11	0.09	0.10	0.10	11.68	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08LX5 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425L Dilution Factor : 5
Date & Time Acquired : 2025-06-11 20:54:25 DataFile Name : 056SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	46.14	ppb
Vanadium	51-2	0.05	0.07	0.07	0.06	21.04	ppb
Yttrium	89-1				110		%
Yttrium	89-2				109		%
Zinc	66-2	0.82	0.95	1.03	0.93	11.58	ppb
Zirconium	90-1	0.01	0.01	0.01	0.01	34.53	ppb
Zirconium	91-1	0.01	0.01	0.00	0.00	171.17	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-09 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MS Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:57:45 DataFile Name : 057SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	7759.79	7742.63	7662.94	7721.79	0.67	ppb
Antimony	121-1	500.23	527.45	499.55	509.08	3.13	ppb
Arsenic	75-2	1.01	1.03	0.67	0.90	21.94	ppb
Barium	135-1	2704.62	2825.05	2720.20	2749.96	2.38	ppb
Barium	137-1	2740.88	2747.59	2695.94	2728.14	1.03	ppb
Beryllium	9-1	499.24	499.29	494.19	497.57	0.59	ppb
Bismuth	209-1				120		%
Bismuth	209-2				115		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	478.17	487.59	473.83	479.86	1.47	ppb
Cadmium	106-1	480.26	489.83	486.37	485.49	1.00	ppb
Cadmium	111-1	489.26	506.34	492.66	496.08	1.82	ppb
Calcium	43-1	76720.05	75521.22	76280.47	76173.91	0.80	ppb
Calcium	44-1	79268.47	80750.41	78196.40	79405.09	1.62	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	453.27	453.21	454.40	453.63	0.15	ppb
Cobalt	59-2	468.69	471.97	471.07	470.58	0.36	ppb
Copper	63-2	4898.78	4853.26	4901.10	4884.38	0.55	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				124		%
Holmium	165-2				119		%
Indium	115-1				120		%
Indium	115-2				111		%
Iron	56-2	28500.18	28530.59	28406.42	28479.06	0.23	ppb
Iron	57-2	27366.83	27502.70	27153.40	27340.98	0.64	ppb
Iron	54-2	29794.48	29981.06	29685.63	29820.39	0.50	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-09 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MS Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:57:45 DataFile Name : 057SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2460.89	2418.11	2488.27	2455.76	1.44	ppb
Lead	207-1	2411.92	2493.23	2481.34	2462.16	1.78	ppb
Lead	208-1	2433.40	2428.85	2461.02	2441.09	0.71	ppb
Lithium	6-1				105		%
Magnesium	24-2	54067.88	55368.21	55506.36	54980.82	1.44	ppb
Manganese	55-2	5745.71	5626.91	5524.94	5632.52	1.96	ppb
Molybdenum	94-1	2377.66	2301.34	2288.06	2322.35	2.08	ppb
Molybdenum	95-1	1796.76	1776.62	1755.99	1776.46	1.15	ppb
Molybdenum	96-1	1852.45	1868.57	1890.53	1870.52	1.02	ppb
Molybdenum	97-1	1815.64	1762.62	1830.81	1803.02	1.99	ppb
Molybdenum	98-1	1764.10	1787.53	1775.68	1775.77	0.66	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	497.36	496.38	495.50	496.41	0.19	ppb
Phosphorus	31-2	243.90	217.13	226.18	229.07	5.94	ppb
Potassium	39-2	30255.19	30166.18	30391.74	30271.04	0.38	ppb
Rhodium	103-1				117		%
Rhodium	103-2				113		%
Scandium	45-1				121		%
Scandium	45-2				113		%
Selenium	82-1	488.89	499.10	491.62	493.20	1.07	ppb
Selenium	77-2	522.11	507.09	510.59	513.26	1.53	ppb
Selenium	78-2	511.31	504.09	495.80	503.73	1.54	ppb
Silicon	28-1	7525.03	7518.67	7393.05	7478.92	1.00	ppb
Silver	107-1	84.74	86.09	85.44	85.42	0.79	ppb
Silver	109-1	84.27	86.63	84.09	85.00	1.67	ppb
Sodium	23-2	58182.44	58490.54	57726.70	58133.23	0.66	ppb
Strontium	86-1	884.48	874.01	860.77	873.09	1.36	ppb
Strontium	88-1	883.83	894.65	873.90	884.13	1.17	ppb
Sulfur	34-1	9873.48	9699.82	9750.06	9774.45	0.91	ppb
Terbium	159-1				122		%
Terbium	159-2				119		%
Thallium	203-1	446.35	442.98	447.76	445.70	0.55	ppb
Thallium	205-1	500.14	494.73	490.85	495.24	0.94	ppb
Tin	118-1	405.34	469.79	411.32	428.81	8.30	ppb
Titanium	47-1	1.76	2.12	2.06	1.98	9.69	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-09 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MS Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:57:45 DataFile Name : 057SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	474.36	473.87	477.90	475.38	0.46	ppb
Vanadium	51-2	475.17	473.60	468.10	472.29	0.79	ppb
Yttrium	89-1				121		%
Yttrium	89-2				116		%
Zinc	66-2	5026.34	5069.47	5104.15	5066.65	0.77	ppb
Zirconium	90-1	496.13	479.15	474.82	483.37	2.33	ppb
Zirconium	91-1	451.43	448.88	444.56	448.29	0.77	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-10 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MSD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:00:47 DataFile Name : 058SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	7684.08	7508.39	7596.23	7596.23	1.16	ppb
Antimony	121-1	515.19	505.02	502.04	507.42	1.36	ppb
Arsenic	75-2	0.88	0.92	0.85	0.88	3.75	ppb
Barium	135-1	2841.01	2726.32	2814.66	2793.99	2.15	ppb
Barium	137-1	2750.82	2769.23	2722.82	2747.62	0.85	ppb
Beryllium	9-1	491.51	494.26	500.03	495.27	0.88	ppb
Bismuth	209-1				119		%
Bismuth	209-2				115		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	499.02	472.68	470.75	480.82	3.28	ppb
Cadmium	106-1	490.68	487.14	487.54	488.45	0.40	ppb
Cadmium	111-1	491.55	491.93	490.91	491.46	0.10	ppb
Calcium	43-1	74200.11	77177.23	76727.37	76034.90	2.11	ppb
Calcium	44-1	78262.09	80689.23	81748.03	80233.12	2.23	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	445.03	441.68	452.03	446.25	1.18	ppb
Cobalt	59-2	464.73	463.10	468.01	465.28	0.54	ppb
Copper	63-2	4845.95	4831.31	4722.96	4800.07	1.40	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				122		%
Holmium	165-2				118		%
Indium	115-1				119		%
Indium	115-2				111		%
Iron	56-2	27276.67	27142.55	27708.03	27375.75	1.08	ppb
Iron	57-2	26908.20	26674.34	27255.23	26945.92	1.08	ppb
Iron	54-2	28441.45	29066.42	29163.18	28890.35	1.36	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-10 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MSD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:00:47 DataFile Name : 058SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2457.67	2506.32	2444.12	2469.37	1.32	ppb
Lead	207-1	2395.44	2439.90	2482.57	2439.30	1.79	ppb
Lead	208-1	2415.41	2432.49	2422.85	2423.58	0.35	ppb
Lithium	6-1				104		%
Magnesium	24-2	55050.22	55173.32	53270.81	54498.12	1.95	ppb
Manganese	55-2	5352.95	5467.19	5619.37	5479.83	2.44	ppb
Molybdenum	94-1	2315.02	2330.05	2320.36	2321.81	0.33	ppb
Molybdenum	95-1	1796.84	1776.88	1762.53	1778.75	0.97	ppb
Molybdenum	96-1	1901.80	1883.01	1810.38	1865.06	2.59	ppb
Molybdenum	97-1	1781.60	1824.57	1773.47	1793.21	1.53	ppb
Molybdenum	98-1	1777.96	1756.61	1776.05	1770.21	0.67	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	485.98	491.13	492.64	489.92	0.71	ppb
Phosphorus	31-2	199.42	222.22	221.85	214.50	6.09	ppb
Potassium	39-2	29800.92	29460.86	29853.78	29705.18	0.72	ppb
Rhodium	103-1				114		%
Rhodium	103-2				113		%
Scandium	45-1				117		%
Scandium	45-2				115		%
Selenium	82-1	496.70	500.66	490.87	496.08	0.99	ppb
Selenium	77-2	496.03	496.18	528.80	507.01	3.72	ppb
Selenium	78-2	508.86	512.71	506.41	509.33	0.62	ppb
Silicon	28-1	7374.66	7553.99	7523.76	7484.13	1.28	ppb
Silver	107-1	85.91	85.47	85.63	85.67	0.26	ppb
Silver	109-1	85.51	83.66	83.85	84.34	1.21	ppb
Sodium	23-2	57926.12	56345.23	57346.92	57206.09	1.40	ppb
Strontium	86-1	867.99	880.05	858.76	868.93	1.23	ppb
Strontium	88-1	850.76	871.58	860.23	860.86	1.21	ppb
Sulfur	34-1	8926.89	9412.20	9485.81	9274.97	3.27	ppb
Terbium	159-1				121		%
Terbium	159-2				118		%
Thallium	203-1	442.33	446.76	437.50	442.19	1.05	ppb
Thallium	205-1	486.57	504.94	487.90	493.14	2.08	ppb
Tin	118-1	414.17	405.00	407.68	408.95	1.15	ppb
Titanium	47-1	1.71	1.79	1.74	1.75	2.19	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-10 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MSD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:00:47 DataFile Name : 058SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	479.64	477.81	483.68	480.38	0.63	ppb
Vanadium	51-2	463.06	460.49	468.84	464.13	0.92	ppb
Yttrium	89-1				120		%
Yttrium	89-2				115		%
Zinc	66-2	4980.59	4937.70	4901.97	4940.09	0.80	ppb
Zirconium	90-1	484.70	476.56	479.70	480.32	0.85	ppb
Zirconium	91-1	446.75	451.26	441.63	446.55	1.08	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08A Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425A Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:03:46 DataFile Name : 059SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	7619.65	7698.50	7539.70	7619.28	1.04	ppb
Antimony	121-1	489.56	505.81	514.52	503.30	2.52	ppb
Arsenic	75-2	0.88	1.00	0.84	0.91	9.34	ppb
Barium	135-1	2671.96	2785.89	2800.68	2752.84	2.56	ppb
Barium	137-1	2652.16	2735.82	2745.44	2711.14	1.89	ppb
Beryllium	9-1	496.00	502.58	500.31	499.63	0.67	ppb
Bismuth	209-1				120		%
Bismuth	209-2				114		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	460.24	475.30	485.83	473.79	2.72	ppb
Cadmium	106-1	466.05	478.34	488.96	477.78	2.40	ppb
Cadmium	111-1	480.07	488.62	503.61	490.77	2.43	ppb
Calcium	43-1	76539.65	78724.74	76172.85	77145.75	1.79	ppb
Calcium	44-1	78931.93	81286.90	77880.90	79366.57	2.20	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	450.96	450.91	452.08	451.32	0.15	ppb
Cobalt	59-2	469.47	471.56	465.95	468.99	0.60	ppb
Copper	63-2	4917.26	4947.25	4766.21	4876.91	1.99	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				123		%
Holmium	165-2				118		%
Indium	115-1				119		%
Indium	115-2				111		%
Iron	56-2	28298.06	28445.81	27623.44	28122.44	1.56	ppb
Iron	57-2	26896.09	27430.21	26891.10	27072.47	1.14	ppb
Iron	54-2	29292.50	29468.56	28739.11	29166.72	1.31	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08A Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425A Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:03:46 DataFile Name : 059SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2442.56	2428.62	2441.16	2437.45	0.31	ppb
Lead	207-1	2403.97	2499.98	2480.04	2461.33	2.06	ppb
Lead	208-1	2403.75	2439.91	2443.36	2429.01	0.90	ppb
Lithium	6-1				104		%
Magnesium	24-2	55462.17	55732.25	53896.87	55030.43	1.80	ppb
Manganese	55-2	5621.93	5649.47	5589.28	5620.23	0.54	ppb
Molybdenum	94-1	2256.04	2246.87	2320.95	2274.62	1.78	ppb
Molybdenum	95-1	1767.61	1771.84	1746.44	1761.96	0.77	ppb
Molybdenum	96-1	1849.38	1842.31	1816.22	1835.97	0.95	ppb
Molybdenum	97-1	1770.86	1726.53	1755.27	1750.89	1.28	ppb
Molybdenum	98-1	1795.37	1761.04	1773.24	1776.55	0.98	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	500.02	497.60	488.22	495.28	1.26	ppb
Phosphorus	31-2	212.31	213.95	245.48	223.91	8.35	ppb
Potassium	39-2	29806.49	30381.81	30061.49	30083.26	0.96	ppb
Rhodium	103-1				117		%
Rhodium	103-2				113		%
Scandium	45-1				117		%
Scandium	45-2				115		%
Selenium	82-1	501.69	488.89	492.88	494.49	1.32	ppb
Selenium	77-2	493.65	550.73	496.51	513.63	6.26	ppb
Selenium	78-2	509.62	521.71	502.06	511.13	1.94	ppb
Silicon	28-1	7330.60	7582.87	7403.21	7438.90	1.75	ppb
Silver	107-1	82.63	85.02	86.40	84.68	2.25	ppb
Silver	109-1	81.55	83.48	85.12	83.38	2.14	ppb
Sodium	23-2	58032.22	57301.42	57340.53	57558.05	0.71	ppb
Strontium	86-1	873.21	854.69	854.02	860.64	1.27	ppb
Strontium	88-1	875.45	866.66	858.57	866.89	0.97	ppb
Sulfur	34-1	9056.92	9485.75	8615.50	9052.72	4.81	ppb
Terbium	159-1				124		%
Terbium	159-2				119		%
Thallium	203-1	446.23	448.60	442.35	445.73	0.71	ppb
Thallium	205-1	482.99	492.44	488.88	488.10	0.98	ppb
Tin	118-1	396.65	455.96	415.49	422.70	7.17	ppb
Titanium	47-1	1.81	1.90	2.07	1.93	6.80	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08A Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425A Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:03:46 DataFile Name : 059SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	476.74	472.21	487.74	478.90	1.67	ppb
Vanadium	51-2	471.70	469.80	464.44	468.65	0.80	ppb
Yttrium	89-1				122		%
Yttrium	89-2				116		%
Zinc	66-2	5111.55	5074.45	4976.20	5054.06	1.38	ppb
Zirconium	90-1	476.18	479.21	474.85	476.75	0.47	ppb
Zirconium	91-1	448.41	444.71	443.68	445.60	0.56	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-11 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:06:48 DataFile Name : 060SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	177.32	174.20	172.52	174.68	1.39	ppb
Antimony	121-1	3.51	3.59	3.60	3.56	1.37	ppb
Arsenic	75-2	0.55	0.34	0.48	0.46	23.78	ppb
Barium	135-1	256.11	249.84	246.50	250.82	1.95	ppb
Barium	137-1	258.26	249.25	247.56	251.69	2.29	ppb
Beryllium	9-1	0.07	0.07	0.05	0.06	23.53	ppb
Bismuth	209-1				121		%
Bismuth	209-2				116		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.08	0.08	0.50	0.22	107.81	ppb
Cadmium	106-1	-1.31	-1.85	-2.32	-1.83		ppb
Cadmium	111-1	-0.02	-0.08	-0.14	-0.08		ppb
Calcium	43-1	114701.89	115920.60	116134.96	115585.82	0.67	ppb
Calcium	44-1	114978.20	111714.78	116677.94	114456.97	2.20	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.03	-0.05	-0.06	-0.04		ppb
Cobalt	59-2	0.19	0.18	0.21	0.20	7.01	ppb
Copper	63-2	0.50	0.45	0.54	0.50	9.51	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				125		%
Holmium	165-2				120		%
Indium	115-1				124		%
Indium	115-2				115		%
Iron	56-2	33.57	33.36	34.12	33.68	1.17	ppb
Iron	57-2	630.44	630.40	660.48	640.44	2.71	ppb
Iron	54-2	31.07	29.56	31.35	30.66	3.14	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-11 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:06:48 DataFile Name : 060SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.09	0.12	0.10	0.10	13.59	ppb
Lead	207-1	0.09	0.08	0.06	0.08	20.48	ppb
Lead	208-1	0.10	0.10	0.09	0.10	6.58	ppb
Lithium	6-1				101		%
Magnesium	24-2	322.98	322.67	323.53	323.06	0.14	ppb
Manganese	55-2	2.19	2.08	2.12	2.13	2.45	ppb
Molybdenum	94-1	54.23	54.04	53.39	53.89	0.82	ppb
Molybdenum	95-1	65.58	66.44	66.24	66.09	0.68	ppb
Molybdenum	96-1	64.41	64.82	64.89	64.71	0.40	ppb
Molybdenum	97-1	65.30	65.88	65.95	65.71	0.54	ppb
Molybdenum	98-1	65.59	65.82	65.86	65.76	0.22	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	7.78	7.63	7.69	7.70	0.96	ppb
Phosphorus	31-2	-38.93	-52.66	-44.70	-45.43		ppb
Potassium	39-2	25142.37	24611.72	24903.65	24885.91	1.07	ppb
Rhodium	103-1				121		%
Rhodium	103-2				116		%
Scandium	45-1				121		%
Scandium	45-2				116		%
Selenium	82-1	1.81	1.35	2.36	1.84	27.30	ppb
Selenium	77-2	0.09	0.45	1.18	0.57	97.28	ppb
Selenium	78-2	0.64	-1.15	-0.72	-0.41		ppb
Silicon	28-1	1406.92	1436.46	1552.58	1465.32	5.25	ppb
Silver	107-1	0.04	0.03	0.03	0.03	17.73	ppb
Silver	109-1	0.03	0.02	0.03	0.03	12.38	ppb
Sodium	23-2	23958.44	24248.41	23574.53	23927.13	1.41	ppb
Strontium	86-1	802.44	807.94	807.33	805.91	0.37	ppb
Strontium	88-1	806.01	812.72	810.89	809.87	0.43	ppb
Sulfur	34-1	40262.63	40605.84	43006.98	41291.82	3.62	ppb
Terbium	159-1				125		%
Terbium	159-2				120		%
Thallium	203-1	0.20	0.22	0.19	0.20	7.90	ppb
Thallium	205-1	0.23	0.20	0.19	0.20	10.49	ppb
Tin	118-1	0.63	0.64	0.61	0.63	2.56	ppb
Titanium	47-1	0.14	0.19	0.18	0.17	13.03	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-11 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:06:48 DataFile Name : 060SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.01	0.01	0.01	0.01	38.06	ppb
Vanadium	51-2	1.34	1.38	1.40	1.37	2.39	ppb
Yttrium	89-1				121		%
Yttrium	89-2				117		%
Zinc	66-2	1.71	1.41	1.55	1.56	9.80	ppb
Zirconium	90-1	0.19	0.17	0.17	0.18	6.09	ppb
Zirconium	91-1	0.18	0.18	0.22	0.19	14.04	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-12 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425-FD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:10:06 DataFile Name : 061SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	89.81	87.74	91.08	89.54	1.88	ppb
Antimony	121-1	3.69	3.51	3.63	3.61	2.56	ppb
Arsenic	75-2	0.70	0.36	0.55	0.54	31.75	ppb
Barium	135-1	272.05	270.79	275.18	272.67	0.83	ppb
Barium	137-1	274.24	269.74	277.99	273.99	1.51	ppb
Beryllium	9-1	0.00	0.01	0.01	0.01	92.10	ppb
Bismuth	209-1				120		%
Bismuth	209-2				115		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.30	0.25	0.22	0.26	15.36	ppb
Cadmium	106-1	-3.25	-2.43	-2.43	-2.70		ppb
Cadmium	111-1	-0.19	-0.16	-0.13	-0.16		ppb
Calcium	43-1	120962.70	121418.73	123439.94	121940.46	1.08	ppb
Calcium	44-1	119869.32	121942.09	123884.35	121898.59	1.65	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.17	0.17	0.18	0.17	2.60	ppb
Cobalt	59-2	0.18	0.17	0.20	0.18	9.58	ppb
Copper	63-2	0.31	0.35	0.27	0.31	12.29	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				125		%
Holmium	165-2				119		%
Indium	115-1				123		%
Indium	115-2				113		%
Iron	56-2	25.59	26.19	26.49	26.09	1.75	ppb
Iron	57-2	665.19	669.02	685.82	673.34	1.63	ppb
Iron	54-2	23.84	24.37	22.83	23.68	3.32	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-12 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425-FD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:10:06 DataFile Name : 061SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.10	0.09	0.07	0.09	19.84	ppb
Lead	207-1	0.10	0.05	0.10	0.08	33.86	ppb
Lead	208-1	0.10	0.09	0.08	0.09	7.81	ppb
Lithium	6-1				101		%
Magnesium	24-2	302.94	311.89	315.86	310.23	2.13	ppb
Manganese	55-2	1.61	1.58	1.71	1.63	4.15	ppb
Molybdenum	94-1	56.07	53.62	54.45	54.71	2.28	ppb
Molybdenum	95-1	69.43	67.20	66.39	67.67	2.32	ppb
Molybdenum	96-1	67.27	65.87	65.24	66.13	1.57	ppb
Molybdenum	97-1	69.61	67.10	67.38	68.03	2.02	ppb
Molybdenum	98-1	68.06	66.27	67.43	67.25	1.35	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	8.49	8.44	8.21	8.38	1.78	ppb
Phosphorus	31-2	-44.49	-48.71	-54.24	-49.15		ppb
Potassium	39-2	25470.05	26718.35	26779.88	26322.76	2.81	ppb
Rhodium	103-1				119		%
Rhodium	103-2				115		%
Scandium	45-1				119		%
Scandium	45-2				114		%
Selenium	82-1	1.41	2.36	2.22	1.99	25.74	ppb
Selenium	77-2	1.55	1.21	0.45	1.07	52.55	ppb
Selenium	78-2	-0.79	0.37	0.24	-0.06		ppb
Silicon	28-1	1611.82	1592.01	1616.42	1606.75	0.81	ppb
Silver	107-1	0.00	0.00	0.01	0.01	81.83	ppb
Silver	109-1	0.01	0.01	0.01	0.01	30.23	ppb
Sodium	23-2	25170.94	25796.92	26070.47	25679.45	1.80	ppb
Strontium	86-1	850.36	820.04	846.48	838.96	1.97	ppb
Strontium	88-1	875.82	824.24	865.99	855.35	3.20	ppb
Sulfur	34-1	46675.00	47405.91	48033.50	47371.47	1.44	ppb
Terbium	159-1				124		%
Terbium	159-2				120		%
Thallium	203-1	0.10	0.10	0.12	0.11	8.86	ppb
Thallium	205-1	0.11	0.11	0.10	0.10	6.96	ppb
Tin	118-1	8.67	8.38	8.63	8.56	1.82	ppb
Titanium	47-1	0.23	0.23	0.20	0.22	8.56	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-12 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425-FD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:10:06 DataFile Name : 061SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	39.32	ppb
Vanadium	51-2	1.07	1.12	0.90	1.03	10.98	ppb
Yttrium	89-1				122		%
Yttrium	89-2				117		%
Zinc	66-2	11.70	10.95	11.01	11.22	3.73	ppb
Zirconium	90-1	0.05	0.05	0.05	0.05	7.47	ppb
Zirconium	91-1	0.04	0.04	0.04	0.04	8.77	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-13 Instrumnet Name : P7
Client Sample ID : MW-19B-72-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:13:27 DataFile Name : 062SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	4.96	5.27	5.01	5.08	3.26	ppb
Antimony	121-1	0.05	0.05	0.05	0.05	2.27	ppb
Arsenic	75-2	0.29	0.26	0.43	0.33	28.43	ppb
Barium	135-1	412.62	417.42	406.00	412.01	1.39	ppb
Barium	137-1	412.13	417.20	406.42	411.92	1.31	ppb
Beryllium	9-1	0.00	0.04	-0.01	0.01	216.91	ppb
Bismuth	209-1				120		%
Bismuth	209-2				115		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.04	0.13	0.00	0.06	115.40	ppb
Cadmium	106-1	-2.07	-1.44	-3.03	-2.18		ppb
Cadmium	111-1	-0.15	-0.09	-0.21	-0.15		ppb
Calcium	43-1	65013.39	67305.42	65663.38	65994.06	1.79	ppb
Calcium	44-1	68048.48	69637.25	67902.94	68529.56	1.40	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.01	0.00	-0.03	-0.01		ppb
Cobalt	59-2	2.19	2.26	2.27	2.24	1.78	ppb
Copper	63-2	0.26	0.17	0.19	0.20	22.96	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				123		%
Holmium	165-2				120		%
Indium	115-1				120		%
Indium	115-2				113		%
Iron	56-2	22883.39	23115.57	23160.10	23053.02	0.64	ppb
Iron	57-2	22385.33	22442.61	22459.77	22429.24	0.17	ppb
Iron	54-2	23534.73	23951.93	23393.54	23626.73	1.23	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-13 Instrumnet Name : P7
Client Sample ID : MW-19B-72-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:13:27 DataFile Name : 062SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.39	0.36	0.38	0.38	4.01	ppb
Lead	207-1	0.33	0.34	0.34	0.34	2.57	ppb
Lead	208-1	0.35	0.35	0.35	0.35	0.80	ppb
Lithium	6-1				101		%
Magnesium	24-2	23097.42	23202.99	22867.04	23055.82	0.75	ppb
Manganese	55-2	1527.99	1522.03	1511.52	1520.51	0.55	ppb
Molybdenum	94-1	0.56	0.53	0.59	0.56	5.11	ppb
Molybdenum	95-1	0.60	0.67	0.57	0.61	7.69	ppb
Molybdenum	96-1	0.89	0.85	0.84	0.86	3.21	ppb
Molybdenum	97-1	0.55	0.56	0.57	0.56	2.15	ppb
Molybdenum	98-1	0.56	0.58	0.58	0.57	1.67	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.24	1.26	1.38	1.29	5.95	ppb
Phosphorus	31-2	80.15	75.98	63.57	73.24	11.78	ppb
Potassium	39-2	10561.93	10747.32	10612.04	10640.43	0.90	ppb
Rhodium	103-1				117		%
Rhodium	103-2				114		%
Scandium	45-1				117		%
Scandium	45-2				113		%
Selenium	82-1	1.20	1.31	1.21	1.24	4.93	ppb
Selenium	77-2	0.46	0.83	0.09	0.46	80.65	ppb
Selenium	78-2	-2.60	-2.01	-2.21	-2.27		ppb
Silicon	28-1	7924.13	8245.74	8011.18	8060.35	2.06	ppb
Silver	107-1	0.01	0.01	0.00	0.01	75.09	ppb
Silver	109-1	0.01	0.01	0.00	0.01	51.50	ppb
Sodium	23-2	14213.80	13862.65	14170.74	14082.40	1.36	ppb
Strontium	86-1	844.23	841.11	848.70	844.68	0.45	ppb
Strontium	88-1	867.02	841.13	860.51	856.22	1.57	ppb
Sulfur	34-1	77366.84	78551.82	77874.59	77931.08	0.76	ppb
Terbium	159-1				122		%
Terbium	159-2				119		%
Thallium	203-1	0.04	0.07	0.06	0.05	22.58	ppb
Thallium	205-1	0.05	0.04	0.05	0.05	10.00	ppb
Tin	118-1	0.55	0.61	0.61	0.59	6.35	ppb
Titanium	47-1	0.60	0.55	0.78	0.64	18.82	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-13 Instrumnet Name : P7
Client Sample ID : MW-19B-72-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:13:27 DataFile Name : 062SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.04	0.04	0.04	0.04	7.98	ppb
Vanadium	51-2	0.11	0.10	0.07	0.10	20.49	ppb
Yttrium	89-1				121		%
Yttrium	89-2				116		%
Zinc	66-2	3.25	3.25	3.14	3.21	1.96	ppb
Zirconium	90-1	0.03	0.02	0.03	0.02	10.40	ppb
Zirconium	91-1	0.05	0.03	0.04	0.04	24.93	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV04 Instrumnet Name : P7
Client Sample ID : CCV04 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:16:41 DataFile Name : 063CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	50488.20	49527.95	49928.81	49981.65	0.96	ppb
Antimony	121-1	485.91	500.47	499.82	495.40	1.66	ppb
Arsenic	75-2	479.41	490.38	480.61	483.47	1.25	ppb
Barium	135-1	2522.85	2494.26	2522.21	2513.11	0.65	ppb
Barium	137-1	2494.29	2477.90	2516.95	2496.38	0.79	ppb
Beryllium	9-1	505.79	504.05	524.90	511.58	2.26	ppb
Bismuth	209-1				106		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	470.02	473.62	488.66	477.43	2.07	ppb
Cadmium	106-1	472.78	473.04	483.70	476.51	1.31	ppb
Cadmium	111-1	472.85	466.16	482.75	473.92	1.76	ppb
Calcium	43-1	246277.91	246904.68	256146.14	249776.25	2.21	ppb
Calcium	44-1	246943.45	247347.01	254604.62	249631.69	1.73	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	461.35	472.11	480.29	471.25	2.02	ppb
Cobalt	59-2	460.69	465.91	468.07	464.89	0.82	ppb
Copper	63-2	4767.23	4921.53	5005.38	4898.05	2.47	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				114		%
Holmium	165-2				111		%
Indium	115-1				109		%
Indium	115-2				101		%
Iron	56-2	129059.65	131672.47	131501.82	130744.65	1.12	ppb
Iron	57-2	125266.95	130136.57	129974.80	128459.44	2.15	ppb
Iron	54-2	128979.88	129383.25	129174.01	129179.05	0.16	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV04 Instrumnet Name : P7
Client Sample ID : CCV04 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:16:41 DataFile Name : 063CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2610.92	2600.75	2612.36	2608.01	0.24	ppb
Lead	207-1	2577.28	2545.49	2549.56	2557.44	0.68	ppb
Lead	208-1	2597.89	2571.18	2563.09	2577.38	0.71	ppb
Lithium	6-1				93		%
Magnesium	24-2	233424.62	235433.31	237071.63	235309.86	0.78	ppb
Manganese	55-2	4967.27	5065.82	5043.57	5025.56	1.03	ppb
Molybdenum	94-1	4888.75	5012.12	4909.82	4936.90	1.34	ppb
Molybdenum	95-1	4925.13	5090.75	5007.59	5007.82	1.65	ppb
Molybdenum	96-1	4829.84	5080.14	4945.63	4951.87	2.53	ppb
Molybdenum	97-1	4787.69	5168.14	4980.25	4978.69	3.82	ppb
Molybdenum	98-1	4876.07	5090.12	4978.49	4981.56	2.15	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	481.13	490.58	497.42	489.71	1.67	ppb
Phosphorus	31-2	9632.78	9572.91	9714.17	9639.96	0.74	ppb
Potassium	39-2	126134.58	127421.18	128566.84	127374.20	0.96	ppb
Rhodium	103-1				104		%
Rhodium	103-2				103		%
Scandium	45-1				108		%
Scandium	45-2				106		%
Selenium	82-1	460.12	480.79	465.93	468.94	2.27	ppb
Selenium	77-2	468.83	477.01	511.43	485.76	4.65	ppb
Selenium	78-2	481.38	471.43	467.11	473.30	1.55	ppb
Silicon	28-1	438.49	444.63	479.98	454.36	4.93	ppb
Silver	107-1	515.75	495.79	516.27	509.27	2.29	ppb
Silver	109-1	510.29	504.03	516.89	510.40	1.26	ppb
Sodium	23-2	227923.95	230699.91	230561.88	229728.58	0.68	ppb
Strontium	86-1	487.49	504.03	489.00	493.50	1.85	ppb
Strontium	88-1	483.08	511.05	495.38	496.50	2.82	ppb
Sulfur	34-1	8389.15	8623.54	8498.67	8503.79	1.38	ppb
Terbium	159-1				115		%
Terbium	159-2				109		%
Thallium	203-1	478.91	473.13	467.30	473.11	1.23	ppb
Thallium	205-1	521.31	524.82	524.10	523.41	0.35	ppb
Tin	118-1	489.63	496.89	511.31	499.28	2.21	ppb
Titanium	47-1	4826.01	4916.24	5070.74	4937.66	2.51	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV04 Instrumnet Name : P7
Client Sample ID : CCV04 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:16:41 DataFile Name : 063CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	514.45	517.26	524.88	518.86	1.04	ppb
Vanadium	51-2	470.98	476.18	480.34	475.83	0.99	ppb
Yttrium	89-1				112		%
Yttrium	89-2				109		%
Zinc	66-2	4637.74	4867.84	4739.40	4748.33	2.43	ppb
Zirconium	90-1	503.40	518.27	497.49	506.39	2.12	ppb
Zirconium	91-1	460.63	476.18	456.61	464.47	2.23	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB04 Instrumnet Name : P7
Client Sample ID : CCB04 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:23:25 DataFile Name : 064CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.04	-0.14	-0.02	-0.04		ppb
Antimony	121-1	0.05	0.04	0.04	0.04	16.24	ppb
Arsenic	75-2	-0.04	-0.04	-0.02	-0.03		ppb
Barium	135-1	-0.01	0.01	0.00	0.00	12242.61	ppb
Barium	137-1	0.00	0.03	0.01	0.01	87.85	ppb
Beryllium	9-1	0.08	0.00	0.02	0.04	115.57	ppb
Bismuth	209-1				109		%
Bismuth	209-2				107		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.05	0.00	0.05	0.03	86.61	ppb
Cadmium	106-1	-2.71	-2.96	-2.93	-2.86		ppb
Cadmium	111-1	-0.14	-0.20	-0.19	-0.18		ppb
Calcium	43-1	-3.54	-8.70	-9.53	-7.26		ppb
Calcium	44-1	-13.71	-11.51	-12.54	-12.59		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.05	-0.05	-0.07	-0.06		ppb
Cobalt	59-2	-0.02	-0.02	-0.01	-0.02		ppb
Copper	63-2	0.03	-0.06	-0.04	-0.02		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				110		%
Holmium	165-2				110		%
Indium	115-1				112		%
Indium	115-2				105		%
Iron	56-2	-0.05	0.14	0.22	0.11	131.60	ppb
Iron	57-2	-4.12	-2.02	-4.41	-3.52		ppb
Iron	54-2	1.56	-0.66	0.10	0.33	338.85	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB04 Instrumnet Name : P7
Client Sample ID : CCB04 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:23:25 DataFile Name : 064CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.01	0.04	0.03	0.02	64.77	ppb
Lead	207-1	0.01	0.01	0.00	0.01	67.66	ppb
Lead	208-1	0.03	0.02	0.02	0.02	14.96	ppb
Lithium	6-1				93		%
Magnesium	24-2	1.66	1.39	1.11	1.39	19.92	ppb
Manganese	55-2	0.37	0.30	0.40	0.36	13.99	ppb
Molybdenum	94-1	0.08	0.07	0.06	0.07	14.65	ppb
Molybdenum	95-1	0.07	0.06	0.05	0.06	14.82	ppb
Molybdenum	96-1	0.02	0.05	0.03	0.03	49.32	ppb
Molybdenum	97-1	0.04	0.06	0.04	0.05	20.11	ppb
Molybdenum	98-1	0.04	0.04	0.04	0.04	9.08	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.04	-0.15	-0.19	-0.13		ppb
Phosphorus	31-2	-55.98	-55.14	-55.89	-55.67		ppb
Potassium	39-2	-21.36	-17.95	-21.79	-20.37		ppb
Rhodium	103-1				108		%
Rhodium	103-2				107		%
Scandium	45-1				107		%
Scandium	45-2				105		%
Selenium	82-1	1.55	2.19	2.11	1.95	18.08	ppb
Selenium	77-2	-0.29	-0.29	-0.29	-0.29		ppb
Selenium	78-2	-3.25	2.22	0.04	-0.33		ppb
Silicon	28-1	-43.11	-45.67	-44.80	-44.53		ppb
Silver	107-1	0.01	0.01	0.01	0.01	32.90	ppb
Silver	109-1	0.01	0.01	0.01	0.01	9.96	ppb
Sodium	23-2	11.74	10.48	12.99	11.74	10.67	ppb
Strontium	86-1	-0.06	0.00	-0.03	-0.03		ppb
Strontium	88-1	0.01	0.01	0.01	0.01	25.22	ppb
Sulfur	34-1	-2604.11	-2478.48	-2495.15	-2525.91		ppb
Terbium	159-1				110		%
Terbium	159-2				110		%
Thallium	203-1	0.04	0.03	0.05	0.04	21.66	ppb
Thallium	205-1	0.04	0.05	0.04	0.05	7.74	ppb
Tin	118-1	-0.02	0.00	-0.02	-0.02		ppb
Titanium	47-1	0.02	-0.02	-0.01	0.00	4950.55	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB04 Instrumnet Name : P7
Client Sample ID : CCB04 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:23:25 DataFile Name : 064CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	35.18	ppb
Vanadium	51-2	0.00	0.00	0.00	0.00	120.25	ppb
Yttrium	89-1				109		%
Yttrium	89-2				106		%
Zinc	66-2	-0.11	0.13	0.15	0.06	248.43	ppb
Zirconium	90-1	0.01	0.02	0.02	0.02	23.88	ppb
Zirconium	91-1	0.01	0.02	0.04	0.03	59.68	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2250-05 Instrumnet Name : P7
Client Sample ID : EB02-060525 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:27:14 DataFile Name : 065SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2.31	2.00	1.95	2.09	9.20	ppb
Antimony	121-1	0.01	0.02	0.00	0.01	62.85	ppb
Arsenic	75-2	-0.02	-0.02	-0.01	-0.02		ppb
Barium	135-1	0.63	0.63	0.70	0.65	5.79	ppb
Barium	137-1	0.65	0.62	0.77	0.68	11.59	ppb
Beryllium	9-1	0.03	0.02	0.02	0.03	21.78	ppb
Bismuth	209-1				124		%
Bismuth	209-2				118		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.08	0.00	0.04	0.04	99.01	ppb
Cadmium	106-1	-3.12	-3.16	-3.13	-3.14		ppb
Cadmium	111-1	-0.22	-0.23	-0.22	-0.22		ppb
Calcium	43-1	13.72	11.10	9.03	11.28	20.85	ppb
Calcium	44-1	1.13	1.58	5.59	2.77	88.65	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.10	-0.11	-0.16	-0.12		ppb
Cobalt	59-2	-0.02	-0.02	-0.02	-0.02		ppb
Copper	63-2	-0.11	-0.09	-0.15	-0.12		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				125		%
Holmium	165-2				121		%
Indium	115-1				122		%
Indium	115-2				116		%
Iron	56-2	2.96	2.82	2.60	2.79	6.52	ppb
Iron	57-2	-1.54	-5.08	-4.87	-3.83		ppb
Iron	54-2	-0.61	-0.06	1.18	0.17	541.13	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2250-05 Instrumnet Name : P7
Client Sample ID : EB02-060525 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:27:14 DataFile Name : 065SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.14	0.15	0.14	0.14	2.76	ppb
Lead	207-1	0.14	0.10	0.11	0.11	16.86	ppb
Lead	208-1	0.13	0.13	0.14	0.14	4.64	ppb
Lithium	6-1				103		%
Magnesium	24-2	1.75	1.91	2.19	1.95	11.62	ppb
Manganese	55-2	0.89	0.89	0.98	0.92	5.71	ppb
Molybdenum	94-1	0.00	0.00	-0.02	-0.01		ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	83.67	ppb
Molybdenum	96-1	-0.01	0.00	-0.01	-0.01		ppb
Molybdenum	97-1	0.00	-0.03	-0.02	-0.02		ppb
Molybdenum	98-1	-0.01	0.01	0.00	0.00	476.68	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.03	-0.08	-0.06	-0.06		ppb
Phosphorus	31-2	-63.08	-60.63	-57.09	-60.27		ppb
Potassium	39-2	-38.38	-31.95	-40.68	-37.00		ppb
Rhodium	103-1				123		%
Rhodium	103-2				118		%
Scandium	45-1				120		%
Scandium	45-2				115		%
Selenium	82-1	1.18	1.24	1.65	1.36	18.85	ppb
Selenium	77-2	-0.29	0.08	-0.29	-0.16		ppb
Selenium	78-2	1.69	-0.97	0.26	0.32	410.54	ppb
Silicon	28-1	-77.12	-80.03	-65.84	-74.33		ppb
Silver	107-1	0.00	0.00	0.00	0.00	132.27	ppb
Silver	109-1	0.00	0.00	0.01	0.00	203.21	ppb
Sodium	23-2	3.79	4.28	3.79	3.96	7.08	ppb
Strontium	86-1	-0.03	-0.01	0.08	0.01	418.26	ppb
Strontium	88-1	0.07	0.06	0.07	0.07	0.37	ppb
Sulfur	34-1	-3338.96	-3212.64	-2862.56	-3138.05		ppb
Terbium	159-1				126		%
Terbium	159-2				118		%
Thallium	203-1	0.03	0.04	0.04	0.04	19.82	ppb
Thallium	205-1	0.04	0.03	0.02	0.03	22.72	ppb
Tin	118-1	0.09	0.08	0.07	0.08	8.04	ppb
Titanium	47-1	0.28	0.32	0.36	0.32	12.95	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2250-05 Instrumnet Name : P7
Client Sample ID : EB02-060525 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:27:14 DataFile Name : 065SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	184.39	ppb
Vanadium	51-2	-0.01	-0.01	-0.01	-0.01		ppb
Yttrium	89-1				122		%
Yttrium	89-2				119		%
Zinc	66-2	0.32	0.34	0.50	0.39	25.77	ppb
Zirconium	90-1	-0.01	-0.01	0.00	-0.01		ppb
Zirconium	91-1	0.00	0.01	0.00	0.00	151.30	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2250-07 Instrumnet Name : P7
Client Sample ID : EB02-060525 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:30:36 DataFile Name : 066SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	5.72	5.95	4.96	5.54	9.39	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	27.13	ppb
Arsenic	75-2	0.02	-0.01	-0.02	-0.01		ppb
Barium	135-1	0.18	0.17	0.18	0.17	2.67	ppb
Barium	137-1	0.15	0.21	0.18	0.18	16.02	ppb
Beryllium	9-1	0.00	0.03	0.01	0.01	142.09	ppb
Bismuth	209-1				121		%
Bismuth	209-2				116		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.04	0.04	0.04	0.04	4.64	ppb
Cadmium	106-1	-2.55	-2.02	-2.23	-2.27		ppb
Cadmium	111-1	-0.19	-0.13	-0.15	-0.16		ppb
Calcium	43-1	30.68	33.41	39.10	34.40	12.50	ppb
Calcium	44-1	27.36	25.33	30.98	27.89	10.26	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.06	0.00	-0.01	0.02	244.74	ppb
Cobalt	59-2	-0.02	-0.01	-0.02	-0.02		ppb
Copper	63-2	0.03	0.02	-0.03	0.01	638.20	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				122		%
Holmium	165-2				120		%
Indium	115-1				121		%
Indium	115-2				114		%
Iron	56-2	10.75	11.41	11.44	11.20	3.47	ppb
Iron	57-2	6.59	7.13	3.92	5.88	29.26	ppb
Iron	54-2	9.68	8.18	7.35	8.40	14.05	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2250-07 Instrumnet Name : P7
Client Sample ID : EB02-060525 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:30:36 DataFile Name : 066SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.04	0.07	0.04	0.05	36.02	ppb
Lead	207-1	0.06	0.06	0.03	0.05	41.57	ppb
Lead	208-1	0.05	0.06	0.05	0.05	19.43	ppb
Lithium	6-1				101		%
Magnesium	24-2	13.41	13.74	12.21	13.12	6.17	ppb
Manganese	55-2	3.84	3.78	4.08	3.90	4.12	ppb
Molybdenum	94-1	0.01	0.01	0.00	0.01	72.61	ppb
Molybdenum	95-1	0.02	0.04	0.01	0.02	44.64	ppb
Molybdenum	96-1	0.00	-0.02	-0.01	-0.01		ppb
Molybdenum	97-1	0.00	0.04	0.04	0.02	98.96	ppb
Molybdenum	98-1	0.00	0.00	0.03	0.01	134.11	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.07	-0.23	-0.06	-0.12		ppb
Phosphorus	31-2	-52.82	-55.50	-56.11	-54.81		ppb
Potassium	39-2	-32.63	-30.84	-27.95	-30.47		ppb
Rhodium	103-1				119		%
Rhodium	103-2				116		%
Scandium	45-1				118		%
Scandium	45-2				113		%
Selenium	82-1	1.59	1.63	1.66	1.63	2.19	ppb
Selenium	77-2	-0.29	-0.29	-0.29	-0.29		ppb
Selenium	78-2	-2.29	0.88	-0.62	-0.67		ppb
Silicon	28-1	-76.05	-70.87	-60.44	-69.12		ppb
Silver	107-1	0.00	0.00	0.00	0.00		ppb
Silver	109-1	0.00	0.00	0.00	0.00		ppb
Sodium	23-2	14.79	13.16	16.15	14.70	10.19	ppb
Strontium	86-1	0.10	0.04	0.12	0.09	42.91	ppb
Strontium	88-1	0.17	0.16	0.17	0.17	4.13	ppb
Sulfur	34-1	-3259.95	-2950.55	-2705.98	-2972.16		ppb
Terbium	159-1				124		%
Terbium	159-2				117		%
Thallium	203-1	0.03	0.03	0.02	0.03	20.63	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	16.46	ppb
Tin	118-1	0.32	0.31	0.36	0.33	8.76	ppb
Titanium	47-1	0.02	0.00	0.05	0.02	100.15	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2250-07 Instrumnet Name : P7
Client Sample ID : EB02-060525 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:30:36 DataFile Name : 066SMPL.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	0.02	0.00	0.00	211.69	ppb
Yttrium	89-1				121		%
Yttrium	89-2				118		%
Zinc	66-2	0.75	0.68	0.74	0.72	5.49	ppb
Zirconium	90-1	-0.01	0.00	0.00	0.00		ppb
Zirconium	91-1	0.00	0.00	0.00	0.00		ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV05 Instrumnet Name : P7
Client Sample ID : CCV05 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:34:00 DataFile Name : 067CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	49904.38	49659.59	49700.97	49754.98	0.26	ppb
Antimony	121-1	512.91	508.00	511.55	510.82	0.50	ppb
Arsenic	75-2	484.28	486.99	483.77	485.01	0.36	ppb
Barium	135-1	2586.00	2504.83	2578.34	2556.39	1.75	ppb
Barium	137-1	2584.62	2515.67	2491.22	2530.50	1.91	ppb
Beryllium	9-1	511.73	513.16	513.56	512.82	0.19	ppb
Bismuth	209-1				104		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	483.82	484.89	484.01	484.24	0.12	ppb
Cadmium	106-1	485.23	478.79	492.25	485.42	1.39	ppb
Cadmium	111-1	488.05	485.68	493.97	489.23	0.87	ppb
Calcium	43-1	249900.39	253193.64	247981.70	250358.58	1.05	ppb
Calcium	44-1	244792.95	249597.94	247661.96	247350.95	0.98	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	465.82	472.89	466.04	468.25	0.86	ppb
Cobalt	59-2	462.92	468.90	463.59	465.14	0.70	ppb
Copper	63-2	4797.14	4981.67	4971.46	4916.76	2.11	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				113		%
Holmium	165-2				111		%
Indium	115-1				107		%
Indium	115-2				102		%
Iron	56-2	131487.36	126860.14	127568.25	128638.59	1.94	ppb
Iron	57-2	126507.76	131546.87	127053.05	128369.23	2.15	ppb
Iron	54-2	130995.69	130544.32	129340.40	130293.47	0.66	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV05 Instrumnet Name : P7
Client Sample ID : CCV05 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:34:00 DataFile Name : 067CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2612.15	2603.20	2604.13	2606.49	0.19	ppb
Lead	207-1	2588.72	2650.14	2567.99	2602.28	1.64	ppb
Lead	208-1	2578.61	2608.57	2555.27	2580.81	1.04	ppb
Lithium	6-1				93		%
Magnesium	24-2	232841.97	235434.59	235053.16	234443.24	0.60	ppb
Manganese	55-2	5043.57	4993.45	5061.13	5032.72	0.70	ppb
Molybdenum	94-1	5001.34	5076.90	5193.22	5090.49	1.90	ppb
Molybdenum	95-1	4988.85	5095.00	5285.14	5122.99	2.93	ppb
Molybdenum	96-1	5003.58	5095.32	5197.63	5098.85	1.90	ppb
Molybdenum	97-1	4894.67	5113.86	5197.87	5068.80	3.09	ppb
Molybdenum	98-1	5084.57	5029.49	5170.99	5095.02	1.40	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	489.13	497.53	486.93	491.19	1.14	ppb
Phosphorus	31-2	9518.49	9799.08	9598.15	9638.57	1.50	ppb
Potassium	39-2	131063.73	129756.12	128987.77	129935.87	0.81	ppb
Rhodium	103-1				102		%
Rhodium	103-2				102		%
Scandium	45-1				109		%
Scandium	45-2				106		%
Selenium	82-1	471.44	488.10	487.80	482.44	1.98	ppb
Selenium	77-2	495.50	488.01	489.77	491.09	0.80	ppb
Selenium	78-2	475.81	474.98	470.12	473.64	0.65	ppb
Silicon	28-1	427.25	446.54	459.80	444.53	3.68	ppb
Silver	107-1	527.16	513.32	533.03	524.50	1.93	ppb
Silver	109-1	527.68	512.00	520.89	520.19	1.51	ppb
Sodium	23-2	226375.76	227860.49	228709.42	227648.56	0.52	ppb
Strontium	86-1	491.96	501.56	509.38	500.97	1.74	ppb
Strontium	88-1	482.41	494.80	494.64	490.62	1.45	ppb
Sulfur	34-1	8025.60	7748.45	7761.37	7845.14	1.99	ppb
Terbium	159-1				111		%
Terbium	159-2				109		%
Thallium	203-1	469.91	470.22	465.53	468.55	0.56	ppb
Thallium	205-1	516.49	524.03	524.02	521.51	0.83	ppb
Tin	118-1	501.28	521.81	518.49	513.86	2.15	ppb
Titanium	47-1	4922.86	4878.80	4808.84	4870.17	1.18	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV05 Instrumnet Name : P7
Client Sample ID : CCV05 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:34:00 DataFile Name : 067CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	509.80	525.12	520.73	518.55	1.52	ppb
Vanadium	51-2	471.51	481.14	471.78	474.81	1.15	ppb
Yttrium	89-1				108		%
Yttrium	89-2				109		%
Zinc	66-2	4820.55	4871.89	4792.32	4828.25	0.84	ppb
Zirconium	90-1	497.16	520.25	518.94	512.12	2.53	ppb
Zirconium	91-1	462.69	473.51	486.57	474.25	2.52	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB05 Instrumnet Name : P7
Client Sample ID : CCB05 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:45:39 DataFile Name : 068CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.38	-0.31	-0.28	-0.07		ppb
Antimony	121-1	0.02	0.02	0.01	0.02	37.02	ppb
Arsenic	75-2	-0.02	-0.04	-0.01	-0.02		ppb
Barium	135-1	-0.02	0.01	-0.01	-0.01		ppb
Barium	137-1	0.01	0.00	0.00	0.00	5896.00	ppb
Beryllium	9-1	0.01	0.02	0.02	0.01	22.74	ppb
Bismuth	209-1				107		%
Bismuth	209-2				107		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.05	0.10	0.05	0.06	43.37	ppb
Cadmium	106-1	-2.41	-4.16	-3.73	-3.43		ppb
Cadmium	111-1	-0.15	-0.29	-0.26	-0.23		ppb
Calcium	43-1	-7.33	-6.16	-2.41	-5.30		ppb
Calcium	44-1	-13.65	-16.50	-12.45	-14.20		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.03	-0.03	-0.07	-0.04		ppb
Cobalt	59-2	-0.02	-0.02	-0.01	-0.02		ppb
Copper	63-2	-0.10	-0.13	-0.12	-0.12		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				110		%
Holmium	165-2				108		%
Indium	115-1				110		%
Indium	115-2				105		%
Iron	56-2	-0.12	0.63	0.22	0.24	156.83	ppb
Iron	57-2	-5.32	-5.73	-7.88	-6.31		ppb
Iron	54-2	1.05	1.64	0.59	1.09	48.29	ppb
Krypton	83-1						cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB05 Instrumnet Name : P7
Client Sample ID : CCB05 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:45:39 DataFile Name : 068CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.03	0.00	0.00	0.01	135.93	ppb
Lead	207-1	0.05	0.04	0.00	0.03	76.57	ppb
Lead	208-1	0.02	0.01	0.01	0.01	79.12	ppb
Lithium	6-1				91		%
Magnesium	24-2	0.65	0.96	0.72	0.78	20.75	ppb
Manganese	55-2	0.25	0.33	0.31	0.30	14.24	ppb
Molybdenum	94-1	0.03	0.05	0.04	0.04	21.17	ppb
Molybdenum	95-1	0.00	0.02	0.02	0.01	67.85	ppb
Molybdenum	96-1	0.03	0.00	0.00	0.01	167.68	ppb
Molybdenum	97-1	0.03	0.02	0.03	0.03	27.47	ppb
Molybdenum	98-1	0.01	0.03	0.02	0.02	62.80	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.07	-0.07	-0.14	-0.09		ppb
Phosphorus	31-2	-50.58	-44.69	-51.09	-48.79		ppb
Potassium	39-2	-21.55	-11.92	-22.59	-18.69		ppb
Rhodium	103-1				107		%
Rhodium	103-2				106		%
Scandium	45-1				106		%
Scandium	45-2				104		%
Selenium	82-1	1.27	1.75	0.95	1.32	30.61	ppb
Selenium	77-2	0.11	-0.29	-0.29	-0.15		ppb
Selenium	78-2	-1.66	-0.56	5.37	1.05	359.72	ppb
Silicon	28-1	-39.94	-38.72	-35.84	-38.17		ppb
Silver	107-1	0.00	0.00	0.01	0.00	329.73	ppb
Silver	109-1	0.00	0.00	0.00	0.00	49.23	ppb
Sodium	23-2	9.11	9.54	8.76	9.14	4.30	ppb
Strontium	86-1	-0.02	-0.05	-0.02	-0.03		ppb
Strontium	88-1	0.00	0.00	0.00	0.00	42.71	ppb
Sulfur	34-1	-2451.40	-2470.90	-2393.33	-2438.54		ppb
Terbium	159-1				110		%
Terbium	159-2				109		%
Thallium	203-1	0.03	0.04	0.02	0.03	32.13	ppb
Thallium	205-1	0.03	0.02	0.02	0.02	11.43	ppb
Tin	118-1	-0.02	-0.03	-0.02	-0.03		ppb
Titanium	47-1	-0.06	-0.01	-0.03	-0.03		ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB05 Instrumnet Name : P7
Client Sample ID : CCB05 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:45:39 DataFile Name : 068CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	109.74	ppb
Vanadium	51-2	0.00	0.00	-0.01	0.00		ppb
Yttrium	89-1				109		%
Yttrium	89-2				107		%
Zinc	66-2	0.06	0.14	0.23	0.15	56.42	ppb
Zirconium	90-1	0.01	0.02	0.03	0.02	32.96	ppb
Zirconium	91-1	0.01	0.01	0.03	0.01	84.29	ppb

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S0 Instrumnet Name : P7
Client Sample ID : S0 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:00:35 DataFile Name : 012CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	174	201	137	170	18.70	cps
Antimony	121-1	10	27	30	22	48.22	cps
Arsenic	75-2	10	7	7	8	24.71	cps
Barium	135-1	20	33	43	32	36.33	cps
Barium	137-1	37	7	57	33	75.49	cps
Beryllium	9-1	13	33	23	23	42.91	cps
Bismuth	209-1	1203455	1199170	1210743	1204456	0.49	cps
Bismuth	209-2	1136556	1132645	1133565	1134255	0.18	cps
Bromine	81-1	17687	17724	18118	17843	1.34	cps
Bromine	81-2	123	103	140	122	15.02	cps
Cadmium	108-1	0	0	0	0	0.00	cps
Cadmium	106-1	973	973	1050	999	4.43	cps
Cadmium	111-1	685	691	745	707	4.68	cps
Calcium	43-1	293	283	330	302	8.13	cps
Calcium	44-1	9893	9490	9753	9712	2.11	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	970	933	827	910	8.18	cps
Cobalt	59-2	80	103	77	87	16.77	cps
Copper	63-2	1060	1230	1180	1157	7.55	cps
Dysprosium	156-1	20	0	13	11	91.66	cps
Dysprosium	156-2	7	3	3	4	43.40	cps
Erbium	164-1	7	7	23	12	78.69	cps
Erbium	164-2	0	7	3	3	100.05	cps
Gadolinium	160-1	33	10	23	22	52.68	cps
Gadolinium	160-2	113	100	130	114	13.13	cps
Holmium	165-1	2312571	2330775	2324733	2322693	0.40	cps
Holmium	165-2	1803687	1815345	1819083	1812705	0.44	cps
Indium	115-1	2056869	2031802	2072672	2053781	1.00	cps
Indium	115-2	754261	743801	752200	750087	0.74	cps
Iron	56-2	15925	15705	15939	15856	0.83	cps
Iron	57-2	1603	1437	1577	1539	5.82	cps
Iron	54-2	2110	2027	1870	2002	6.09	cps
Krypton	83-1	300	340	370	337	10.43	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S0 Instrumnet Name : P7
Client Sample ID : S0 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:00:35 DataFile Name : 012CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	317	303	263	294	9.43	cps
Lead	207-1	237	260	270	256	6.69	cps
Lead	208-1	1203	1167	1150	1173	2.32	cps
Lithium	6-1	352720	349427	350764	350970	0.47	cps
Magnesium	24-2	140	140	150	143	4.03	cps
Manganese	55-2	453	413	420	429	5.00	cps
Molybdenum	94-1	133	110	140	128	12.33	cps
Molybdenum	95-1	100	107	117	108	7.78	cps
Molybdenum	96-1	233	203	210	216	7.31	cps
Molybdenum	97-1	80	70	93	81	14.43	cps
Molybdenum	98-1	220	160	200	193	15.80	cps
Neodymium	150-1	0	0	7	2	173.21	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	247	293	283	274	8.95	cps
Phosphorus	31-2	400	440	483	441	9.45	cps
Potassium	39-2	52403	53025	52861	52763	0.61	cps
Rhodium	103-1	2042041	1985693	1962753	1996829	2.04	cps
Rhodium	103-2	1134613	1116393	1115920	1122308	0.95	cps
Scandium	45-1	1130849	1243643	1259980	1211491	5.80	cps
Scandium	45-2	103105	101686	103074	102622	0.79	cps
Selenium	82-1	10	27	-23	4	562.82	cps
Selenium	77-2	3	0	3	2	86.60	cps
Selenium	78-2	537	527	420	494	13.08	cps
Silicon	28-1	1410892	1419685	1424249	1418275	0.48	cps
Silver	107-1	43	60	53	52	16.07	cps
Silver	109-1	50	40	50	47	12.37	cps
Sodium	23-2	10377	10478	10320	10392	0.77	cps
Strontium	86-1	467	457	473	466	1.80	cps
Strontium	88-1	73	110	73	86	24.75	cps
Sulfur	34-1	135848	136224	136721	136264	0.32	cps
Terbium	159-1	2386125	2378351	2414516	2392997	0.80	cps
Terbium	159-2	1786465	1781982	1793925	1787458	0.34	cps
Thallium	203-1	27	50	37	38	30.98	cps
Thallium	205-1	97	90	77	88	11.60	cps
Tin	118-1	573	603	533	570	6.16	cps
Titanium	47-1	70	57	77	68	15.02	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S0 Instrumnet Name : P7
Client Sample ID : S0 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:00:35 DataFile Name : 012CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	7	27	23	19	56.72	cps
Vanadium	51-2	20	3	17	13	66.16	cps
Yttrium	89-1	3706781	3741260	3723312	3723784	0.46	cps
Yttrium	89-2	994732	972495	981762	982996	1.14	cps
Zinc	66-2	293	280	337	303	9.77	cps
Zirconium	90-1	130	163	190	161	18.66	cps
Zirconium	91-1	33	43	23	33	30.00	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S2 Instrumnet Name : P7
Client Sample ID : S2 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:07:26 DataFile Name : 014CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2012	1803	1907	1907	5.46	cps
Antimony	121-1	7419	7159	7395	7324	1.96	cps
Arsenic	75-2	253	270	183	236	19.52	cps
Barium	135-1	8773	9000	8539	8771	2.62	cps
Barium	137-1	15015	14978	14988	14994	0.13	cps
Beryllium	9-1	704	611	735	683	9.44	cps
Bismuth	209-1	1204440	1215228	1215253	1211640	0.51	cps
Bismuth	209-2	1146129	1132097	1137650	1138626	0.62	cps
Bromine	81-1	17888	18094	17841	17941	0.75	cps
Bromine	81-2	130	143	107	127	14.65	cps
Cadmium	108-1	80	63	90	78	17.32	cps
Cadmium	106-1	1120	1197	1080	1132	5.24	cps
Cadmium	111-1	1785	1747	1800	1777	1.54	cps
Calcium	43-1	5498	5624	5861	5661	3.26	cps
Calcium	44-1	98481	101410	99212	99701	1.53	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	4344	4204	4041	4196	3.62	cps
Cobalt	59-2	2944	2620	2747	2770	5.88	cps
Copper	63-2	4991	4834	4757	4861	2.45	cps
Dysprosium	156-1	0	10	13	8	89.21	cps
Dysprosium	156-2	7	7	3	6	34.70	cps
Erbium	164-1	20	10	23	18	39.03	cps
Erbium	164-2	13	13	13	13	0.00	cps
Gadolinium	160-1	23	13	13	17	34.65	cps
Gadolinium	160-2	133	93	127	118	18.20	cps
Holmium	165-1	2254295	2331113	2333141	2306183	1.95	cps
Holmium	165-2	1835739	1834281	1820455	1830158	0.46	cps
Indium	115-1	2011794	2041561	2075595	2042983	1.56	cps
Indium	115-2	743963	743816	741949	743243	0.15	cps
Iron	56-2	94535	93661	94649	94282	0.57	cps
Iron	57-2	3494	3467	3697	3553	3.54	cps
Iron	54-2	6545	6228	6655	6476	3.42	cps
Krypton	83-1	263	317	297	292	9.22	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S2 Instrumnet Name : P7
Client Sample ID : S2 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:07:26 DataFile Name : 014CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	2577	2720	2740	2679	3.33	cps
Lead	207-1	2570	2394	2320	2428	5.29	cps
Lead	208-1	10815	10832	10572	10740	1.36	cps
Lithium	6-1	353774	348418	353784	351992	0.88	cps
Magnesium	24-2	74878	75300	75055	75078	0.28	cps
Manganese	55-2	1733	1637	1680	1683	2.88	cps
Molybdenum	94-1	7742	8062	7622	7809	2.91	cps
Molybdenum	95-1	9450	9580	9610	9547	0.89	cps
Molybdenum	96-1	10684	10687	11208	10860	2.78	cps
Molybdenum	97-1	6075	6051	5898	6008	1.60	cps
Molybdenum	98-1	15505	15558	15775	15613	0.92	cps
Neodymium	150-1	0	13	13	9	86.60	cps
Neodymium	150-2	7	0	10	6	91.64	cps
Nickel	60-2	850	1023	937	937	9.25	cps
Phosphorus	31-2	603	610	657	623	4.66	cps
Potassium	39-2	149449	148682	149742	149291	0.37	cps
Rhodium	103-1	1958285	2012907	2009434	1993542	1.53	cps
Rhodium	103-2	1118516	1128782	1112234	1119844	0.75	cps
Scandium	45-1	1271801	1254689	1244281	1256924	1.11	cps
Scandium	45-2	104430	101914	103521	103288	1.23	cps
Selenium	82-1	504	451	505	487	6.40	cps
Selenium	77-2	23	33	37	31	22.31	cps
Selenium	78-2	597	740	597	644	12.84	cps
Silicon	28-1	1422485	1427719	1430746	1426984	0.29	cps
Silver	107-1	4914	4888	5201	5001	3.48	cps
Silver	109-1	4427	4791	4467	4562	4.37	cps
Sodium	23-2	127346	128122	126966	127478	0.46	cps
Strontium	86-1	1740	1537	1517	1598	7.73	cps
Strontium	88-1	11331	10897	10904	11044	2.25	cps
Sulfur	34-1	137576	137424	139674	138225	0.91	cps
Terbium	159-1	2402799	2473588	2383759	2420049	1.96	cps
Terbium	159-2	1757982	1785161	1754060	1765735	0.96	cps
Thallium	203-1	2897	2950	2844	2897	1.84	cps
Thallium	205-1	6878	7145	6932	6985	2.02	cps
Tin	118-1	15869	15475	15879	15741	1.46	cps
Titanium	47-1	2490	2484	2340	2438	3.48	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S2 Instrumnet Name : P7
Client Sample ID : S2 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:07:26 DataFile Name : 014CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	8740	8903	9076	8906	1.89	cps
Vanadium	51-2	6948	6925	7195	7023	2.13	cps
Yttrium	89-1	3756926	3677845	3752786	3729186	1.19	cps
Yttrium	89-2	993909	986785	981470	987388	0.63	cps
Zinc	66-2	2027	2127	2077	2077	2.41	cps
Zirconium	90-1	6191	7012	6405	6536	6.51	cps
Zirconium	91-1	1447	1387	1537	1457	5.18	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S3 Instrumnet Name : P7
Client Sample ID : S3 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:14:41 DataFile Name : 016CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	83970	84640	83286	83965	0.81	cps
Antimony	121-1	164422	166505	163283	164737	0.99	cps
Arsenic	75-2	11068	10547	10737	10784	2.44	cps
Barium	135-1	203713	206062	203674	204483	0.67	cps
Barium	137-1	345139	351782	348511	348477	0.95	cps
Beryllium	9-1	29452	29710	29434	29532	0.52	cps
Bismuth	209-1	1259291	1282507	1265061	1268953	0.95	cps
Bismuth	209-2	1177206	1161356	1152210	1163591	1.09	cps
Bromine	81-1	17978	18205	18065	18082	0.63	cps
Bromine	81-2	147	107	127	127	15.79	cps
Cadmium	108-1	3397	3390	3420	3403	0.46	cps
Cadmium	106-1	5828	6088	5875	5930	2.34	cps
Cadmium	111-1	49871	48674	49503	49349	1.24	cps
Calcium	43-1	50373	51627	51313	51105	1.28	cps
Calcium	44-1	841505	841280	841006	841264	0.03	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	75504	75398	73914	74939	1.19	cps
Cobalt	59-2	116310	116780	114848	115979	0.87	cps
Copper	63-2	828286	832730	820906	827307	0.72	cps
Dysprosium	156-1	7	10	7	8	24.71	cps
Dysprosium	156-2	10	13	23	16	44.60	cps
Erbium	164-1	30	33	13	26	41.94	cps
Erbium	164-2	13	13	23	17	34.65	cps
Gadolinium	160-1	10	13	10	11	17.30	cps
Gadolinium	160-2	120	127	133	127	5.27	cps
Holmium	165-1	2368608	2469535	2330547	2389564	3.01	cps
Holmium	165-2	1903531	1884129	1859376	1882345	1.18	cps
Indium	115-1	2121273	2153620	2143697	2139530	0.77	cps
Indium	115-2	762929	760980	755735	759881	0.49	cps
Iron	56-2	3817844	3761676	3752751	3777424	0.93	cps
Iron	57-2	93552	91983	91701	92412	1.08	cps
Iron	54-2	205733	199969	201616	202439	1.47	cps
Krypton	83-1	313	293	280	296	5.68	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S3 Instrumnet Name : P7
Client Sample ID : S3 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:14:41 DataFile Name : 016CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	563264	563059	566969	564431	0.39	cps
Lead	207-1	482155	486868	484827	484617	0.49	cps
Lead	208-1	2226413	2225777	2227105	2226432	0.03	cps
Lithium	6-1	362029	370922	358485	363812	1.76	cps
Magnesium	24-2	707998	701254	703310	704187	0.49	cps
Manganese	55-2	584026	588967	585870	586287	0.43	cps
Molybdenum	94-1	609258	614625	606262	610048	0.69	cps
Molybdenum	95-1	867589	876448	858138	867392	1.06	cps
Molybdenum	96-1	958472	953692	947830	953331	0.56	cps
Molybdenum	97-1	547946	551915	542868	547576	0.83	cps
Molybdenum	98-1	1465399	1527102	1457505	1483335	2.57	cps
Neodymium	150-1	10	13	20	14	35.26	cps
Neodymium	150-2	10	0	0	3	173.21	cps
Nickel	60-2	30451	30845	30752	30683	0.67	cps
Phosphorus	31-2	5421	5491	5374	5429	1.08	cps
Potassium	39-2	506481	504230	511317	507343	0.71	cps
Rhodium	103-1	2105895	2098043	2035936	2079958	1.84	cps
Rhodium	103-2	1149044	1143236	1138455	1143578	0.46	cps
Scandium	45-1	1261046	1290988	1273600	1275212	1.18	cps
Scandium	45-2	105702	105283	107362	106116	1.04	cps
Selenium	82-1	4142	4258	4211	4204	1.38	cps
Selenium	77-2	457	400	420	426	6.75	cps
Selenium	78-2	1863	1893	1803	1853	2.47	cps
Silicon	28-1	1661532	1616545	1655834	1644637	1.49	cps
Silver	107-1	200713	198395	200511	199873	0.64	cps
Silver	109-1	183494	183801	182149	183148	0.48	cps
Sodium	23-2	1215866	1205537	1186879	1202761	1.22	cps
Strontium	86-1	56692	58014	55909	56872	1.87	cps
Strontium	88-1	508019	508002	505556	507193	0.28	cps
Sulfur	34-1	152067	155074	153656	153599	0.98	cps
Terbium	159-1	2430814	2482113	2471016	2461314	1.10	cps
Terbium	159-2	1891562	1871031	1860493	1874362	0.84	cps
Thallium	203-1	133986	136985	134988	135320	1.13	cps
Thallium	205-1	321811	322951	318217	320993	0.77	cps
Tin	118-1	144337	145904	143948	144730	0.72	cps
Titanium	47-1	229458	227958	230339	229252	0.53	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S3 Instrumnet Name : P7
Client Sample ID : S3 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:14:41 DataFile Name : 016CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	404210	403033	399349	402197	0.63	cps
Vanadium	51-2	64889	63305	64852	64349	1.40	cps
Yttrium	89-1	3776717	3935433	3756339	3822830	2.56	cps
Yttrium	89-2	1011094	1001657	1009703	1007485	0.51	cps
Zinc	66-2	159702	163536	160369	161202	1.27	cps
Zirconium	90-1	298717	302446	297113	299425	0.91	cps
Zirconium	91-1	67575	66165	67086	66942	1.07	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S4 Instrumnet Name : P7
Client Sample ID : S4 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:18:04 DataFile Name : 017CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	208397	204798	208607	207268	1.03	cps
Antimony	121-1	419773	419369	420715	419953	0.16	cps
Arsenic	75-2	26965	27035	25943	26647	2.29	cps
Barium	135-1	512909	507475	512949	511111	0.62	cps
Barium	137-1	889167	878972	883040	883726	0.58	cps
Beryllium	9-1	75299	74528	76657	75495	1.43	cps
Bismuth	209-1	1262404	1264105	1262781	1263097	0.07	cps
Bismuth	209-2	1187309	1157228	1149054	1164531	1.73	cps
Bromine	81-1	17737	17350	17427	17505	1.17	cps
Bromine	81-2	117	97	93	102	12.34	cps
Cadmium	108-1	8616	8683	8803	8700	1.09	cps
Cadmium	106-1	13226	13556	13296	13360	1.30	cps
Cadmium	111-1	123414	122336	119405	121718	1.70	cps
Calcium	43-1	129702	129144	129437	129428	0.22	cps
Calcium	44-1	2219243	2151203	2175490	2181979	1.58	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	185973	181733	183308	183672	1.17	cps
Cobalt	59-2	291461	286886	286455	288267	0.96	cps
Copper	63-2	2209290	2199728	2180078	2196365	0.68	cps
Dysprosium	156-1	27	17	20	21	24.12	cps
Dysprosium	156-2	27	63	43	44	41.30	cps
Erbium	164-1	33	37	17	29	37.08	cps
Erbium	164-2	20	20	20	20	0.00	cps
Gadolinium	160-1	20	23	17	20	16.65	cps
Gadolinium	160-2	133	123	153	137	11.18	cps
Holmium	165-1	2367281	2404664	2338886	2370277	1.39	cps
Holmium	165-2	1850152	1809067	1842113	1833778	1.19	cps
Indium	115-1	2185407	2074724	2045484	2101872	3.51	cps
Indium	115-2	748208	744391	744812	745804	0.28	cps
Iron	56-2	9332717	9322827	9151132	9268892	1.10	cps
Iron	57-2	227070	227435	224998	226501	0.58	cps
Iron	54-2	499179	497089	494462	496910	0.48	cps
Krypton	83-1	303	307	280	297	4.90	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S4 Instrumnet Name : P7
Client Sample ID : S4 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:18:04 DataFile Name : 017CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1463495	1454395	1458001	1458630	0.31	cps
Lead	207-1	1239568	1248380	1246772	1244907	0.38	cps
Lead	208-1	6068741	6099284	6074565	6080863	0.27	cps
Lithium	6-1	365260	358516	364779	362852	1.04	cps
Magnesium	24-2	1970103	1921343	1987345	1959597	1.75	cps
Manganese	55-2	1579556	1584783	1551799	1572046	1.13	cps
Molybdenum	94-1	1615935	1650381	1609433	1625250	1.35	cps
Molybdenum	95-1	2389056	2336985	2343442	2356494	1.20	cps
Molybdenum	96-1	2566656	2565146	2585333	2572379	0.44	cps
Molybdenum	97-1	1466289	1417317	1467005	1450204	1.96	cps
Molybdenum	98-1	3808021	3785654	3728612	3774096	1.08	cps
Neodymium	150-1	27	33	7	22	62.43	cps
Neodymium	150-2	20	13	0	11	91.66	cps
Nickel	60-2	77623	78330	78166	78040	0.47	cps
Phosphorus	31-2	12979	12689	12982	12883	1.31	cps
Potassium	39-2	1218122	1198839	1213857	1210273	0.84	cps
Rhodium	103-1	2069181	2024651	2014718	2036184	1.42	cps
Rhodium	103-2	1145112	1120058	1106678	1123949	1.74	cps
Scandium	45-1	1278502	1235595	1301357	1271818	2.63	cps
Scandium	45-2	102202	101938	103192	102444	0.65	cps
Selenium	82-1	10612	10470	10674	10585	0.99	cps
Selenium	77-2	973	1093	1077	1048	6.20	cps
Selenium	78-2	3867	3867	3991	3908	1.82	cps
Silicon	28-1	1897184	1933967	1902156	1911102	1.04	cps
Silver	107-1	393689	389016	381857	388187	1.54	cps
Silver	109-1	363824	359222	363917	362321	0.74	cps
Sodium	23-2	3055943	2932280	3050375	3012866	2.32	cps
Strontium	86-1	145844	145074	144472	145130	0.47	cps
Strontium	88-1	1264338	1262153	1263530	1263340	0.09	cps
Sulfur	34-1	178060	176024	177187	177091	0.58	cps
Terbium	159-1	2478076	2481700	2450267	2470014	0.70	cps
Terbium	159-2	1844535	1801132	1860358	1835342	1.67	cps
Thallium	203-1	344768	343936	341388	343364	0.51	cps
Thallium	205-1	828018	834413	823879	828770	0.64	cps
Tin	118-1	362154	362880	363324	362786	0.16	cps
Titanium	47-1	580424	574561	580722	578569	0.60	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S4 Instrumnet Name : P7
Client Sample ID : S4 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:18:04 DataFile Name : 017CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	1008953	1010065	1050750	1023256	2.33	cps
Vanadium	51-2	158522	158878	158406	158602	0.16	cps
Yttrium	89-1	3850272	3887244	3787639	3841718	1.31	cps
Yttrium	89-2	1002687	984176	975468	987444	1.41	cps
Zinc	66-2	456662	456763	459638	457688	0.37	cps
Zirconium	90-1	766203	760370	765496	764023	0.42	cps
Zirconium	91-1	173015	169268	168294	170192	1.46	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S5 Instrumnet Name : P7
Client Sample ID : S5 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:21:13 DataFile Name : 018CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	412717	412378	416218	413771	0.51	cps
Antimony	121-1	829039	824988	836481	830169	0.70	cps
Arsenic	75-2	53054	52028	52479	52520	0.98	cps
Barium	135-1	1012208	1020492	1028733	1020478	0.81	cps
Barium	137-1	1934385	1851141	1974356	1919961	3.27	cps
Beryllium	9-1	150184	151959	150466	150870	0.63	cps
Bismuth	209-1	1253530	1273159	1268320	1265003	0.81	cps
Bismuth	209-2	1164328	1170012	1162332	1165558	0.34	cps
Bromine	81-1	17584	16940	17210	17245	1.88	cps
Bromine	81-2	117	103	110	110	6.06	cps
Cadmium	108-1	17404	17604	17728	17579	0.93	cps
Cadmium	106-1	25042	25369	25593	25334	1.09	cps
Cadmium	111-1	236764	238803	239945	238504	0.68	cps
Calcium	43-1	252485	253278	251714	252492	0.31	cps
Calcium	44-1	4277119	4305135	4276092	4286115	0.38	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	369127	364702	363517	365782	0.81	cps
Cobalt	59-2	571907	569066	571412	570795	0.27	cps
Copper	63-2	4473455	4282262	4430644	4395454	2.28	cps
Dysprosium	156-1	23	23	43	30	38.49	cps
Dysprosium	156-2	93	90	60	81	22.63	cps
Erbium	164-1	63	30	47	47	35.71	cps
Erbium	164-2	27	7	33	22	62.43	cps
Gadolinium	160-1	30	33	37	33	10.01	cps
Gadolinium	160-2	130	97	137	121	17.69	cps
Holmium	165-1	2425309	2447994	2422126	2431810	0.58	cps
Holmium	165-2	1909566	1857320	1866650	1877845	1.48	cps
Indium	115-1	2019187	2129256	2081838	2076760	2.66	cps
Indium	115-2	736588	736564	728893	734015	0.60	cps
Iron	56-2	18798011	18636498	18377645	18604052	1.14	cps
Iron	57-2	453372	446222	448793	449463	0.81	cps
Iron	54-2	993194	980612	979077	984295	0.79	cps
Krypton	83-1	307	247	313	289	12.71	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S5 Instrumnet Name : P7
Client Sample ID : S5 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:21:13 DataFile Name : 018CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3171034	3169008	3282393	3207478	2.02	cps
Lead	207-1	2774551	2842929	2847988	2821823	1.45	cps
Lead	208-1	12813992	12797833	13090909	12900911	1.28	cps
Lithium	6-1	361683	357740	361922	360448	0.65	cps
Magnesium	24-2	3892800	3845589	3875740	3871376	0.62	cps
Manganese	55-2	3092305	3084287	3108029	3094874	0.39	cps
Molybdenum	94-1	3243203	3217917	3303276	3254799	1.35	cps
Molybdenum	95-1	4698587	4723893	4601542	4674674	1.38	cps
Molybdenum	96-1	5239318	4967272	5167712	5124767	2.75	cps
Molybdenum	97-1	2905367	2877319	2947300	2909995	1.21	cps
Molybdenum	98-1	7613379	7645392	7563518	7607430	0.54	cps
Neodymium	150-1	40	47	53	47	14.28	cps
Neodymium	150-2	20	13	10	14	35.26	cps
Nickel	60-2	152185	151938	150433	151519	0.63	cps
Phosphorus	31-2	25725	25531	26016	25757	0.95	cps
Potassium	39-2	2430945	2373285	2368642	2390958	1.45	cps
Rhodium	103-1	1985366	1977146	1955990	1972834	0.77	cps
Rhodium	103-2	1125145	1118909	1102729	1115595	1.04	cps
Scandium	45-1	1245352	1255740	1228945	1243346	1.09	cps
Scandium	45-2	103249	103575	101836	102887	0.90	cps
Selenium	82-1	20711	21047	20667	20808	1.00	cps
Selenium	77-2	2110	2087	2074	2090	0.89	cps
Selenium	78-2	7375	7415	7395	7395	0.27	cps
Silicon	28-1	2289984	2341912	2370830	2334242	1.75	cps
Silver	107-1	807236	802874	807126	805745	0.31	cps
Silver	109-1	749700	751262	748524	749829	0.18	cps
Sodium	23-2	6107088	6002106	5978663	6029286	1.13	cps
Strontium	86-1	284018	284521	286657	285065	0.49	cps
Strontium	88-1	2721173	2654308	2705321	2693601	1.30	cps
Sulfur	34-1	208912	209685	207057	208551	0.65	cps
Terbium	159-1	2433668	2452633	2458623	2448308	0.53	cps
Terbium	159-2	1833635	1854183	1811867	1833228	1.15	cps
Thallium	203-1	690357	697382	703830	697190	0.97	cps
Thallium	205-1	1620200	1871985	1879651	1790612	8.24	cps
Tin	118-1	709025	724224	728498	720582	1.42	cps
Titanium	47-1	1216287	1229910	1232432	1226210	0.71	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S5 Instrumnet Name : P7
Client Sample ID : S5 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:21:13 DataFile Name : 018CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	2438024	2385473	2428051	2417183	1.15	cps
Vanadium	51-2	316153	315672	315527	315784	0.10	cps
Yttrium	89-1	3738358	3796459	3728610	3754476	0.98	cps
Yttrium	89-2	989268	983440	978621	983776	0.54	cps
Zinc	66-2	863331	853897	852462	856564	0.69	cps
Zirconium	90-1	1638587	1648166	1631425	1639393	0.51	cps
Zirconium	91-1	336299	337888	335577	336588	0.35	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S6 Instrumnet Name : P7
Client Sample ID : S6 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:24:17 DataFile Name : 019CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	808152	807085	810644	808627	0.23	cps
Antimony	121-1	1768376	1769783	1836959	1791706	2.19	cps
Arsenic	75-2	102636	103727	103837	103400	0.64	cps
Barium	135-1	2220084	2239061	2206762	2221969	0.73	cps
Barium	137-1	3809792	3809719	3841852	3820454	0.49	cps
Beryllium	9-1	291700	294552	291511	292588	0.58	cps
Bismuth	209-1	1275449	1266448	1273606	1271835	0.37	cps
Bismuth	209-2	1171015	1160527	1145415	1158986	1.11	cps
Bromine	81-1	16960	17387	17747	17365	2.27	cps
Bromine	81-2	123	120	80	108	22.38	cps
Cadmium	108-1	33432	34247	34481	34053	1.62	cps
Cadmium	106-1	49076	49203	48474	48918	0.80	cps
Cadmium	111-1	466062	468905	465815	466927	0.37	cps
Calcium	43-1	489655	487045	491737	489479	0.48	cps
Calcium	44-1	8320874	8318578	8014134	8217862	2.15	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	716258	713553	708929	712913	0.52	cps
Cobalt	59-2	1106546	1120974	1118641	1115387	0.69	cps
Copper	63-2	8631066	8510944	8626605	8589538	0.79	cps
Dysprosium	156-1	57	33	27	39	40.51	cps
Dysprosium	156-2	150	107	87	114	28.29	cps
Erbium	164-1	37	50	57	48	21.31	cps
Erbium	164-2	50	47	53	50	6.66	cps
Gadolinium	160-1	33	43	57	44	26.35	cps
Gadolinium	160-2	130	143	137	137	4.88	cps
Holmium	165-1	2483108	2377131	2432835	2431025	2.18	cps
Holmium	165-2	1865438	1878121	1876124	1873228	0.36	cps
Indium	115-1	2034412	2015565	2084780	2044919	1.75	cps
Indium	115-2	728234	729294	731260	729596	0.21	cps
Iron	56-2	37209144	37277307	36532962	37006471	1.11	cps
Iron	57-2	877557	871190	875338	874695	0.37	cps
Iron	54-2	2005302	2004754	2027124	2012393	0.63	cps
Krypton	83-1	270	317	247	278	12.83	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S6 Instrumnet Name : P7
Client Sample ID : S6 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:24:17 DataFile Name : 019CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	6156469	6322035	6457396	6311966	2.39	cps
Lead	207-1	5502067	5636138	5633914	5590706	1.37	cps
Lead	208-1	25191432	25551585	25745780	25496266	1.10	cps
Lithium	6-1	360785	359763	357870	359473	0.41	cps
Magnesium	24-2	7469852	7653752	7621844	7581816	1.30	cps
Manganese	55-2	6151225	6289404	6116681	6185770	1.48	cps
Molybdenum	94-1	6453252	6505767	6491173	6483397	0.42	cps
Molybdenum	95-1	9176089	9361427	9033447	9190321	1.79	cps
Molybdenum	96-1	10167972	10144421	9986603	10099666	0.98	cps
Molybdenum	97-1	5737176	5755590	5696228	5729664	0.53	cps
Molybdenum	98-1	14599111	14677156	14833739	14703335	0.81	cps
Neodymium	150-1	113	87	110	103	14.06	cps
Neodymium	150-2	27	33	30	30	11.10	cps
Nickel	60-2	286418	292269	288506	289064	1.03	cps
Phosphorus	31-2	49276	49169	48045	48830	1.40	cps
Potassium	39-2	4560852	4554306	4632548	4582569	0.95	cps
Rhodium	103-1	2007767	2003953	2036965	2016228	0.90	cps
Rhodium	103-2	1108821	1100623	1107788	1105744	0.40	cps
Scandium	45-1	1228426	1218806	1207896	1218376	0.84	cps
Scandium	45-2	104148	104202	104904	104418	0.40	cps
Selenium	82-1	40875	40906	39985	40589	1.29	cps
Selenium	77-2	4011	4117	4091	4073	1.36	cps
Selenium	78-2	13743	14330	14130	14068	2.12	cps
Silicon	28-1	3442922	3558217	3556658	3519266	1.88	cps
Silver	107-1	2160533	2221869	2226654	2203019	1.67	cps
Silver	109-1	2088721	2026615	2082059	2065798	1.65	cps
Sodium	23-2	11686996	11709671	11464762	11620476	1.16	cps
Strontium	86-1	558547	565252	564385	562728	0.65	cps
Strontium	88-1	5265203	5357717	5328377	5317099	0.89	cps
Sulfur	34-1	272402	272376	271269	272016	0.24	cps
Terbium	159-1	2588034	2567135	2510815	2555328	1.56	cps
Terbium	159-2	1890001	1862947	1813285	1855411	2.10	cps
Thallium	203-1	1372035	1383134	1383109	1379426	0.46	cps
Thallium	205-1	3710020	3652582	3809284	3723962	2.13	cps
Tin	118-1	1418178	1434941	1426067	1426395	0.59	cps
Titanium	47-1	2411564	2405018	2374103	2396895	0.83	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S6 Instrumnet Name : P7
Client Sample ID : S6 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:24:17 DataFile Name : 019CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	4855871	4864547	4709738	4810052	1.81	cps
Vanadium	51-2	616213	615305	620187	617235	0.42	cps
Yttrium	89-1	3824873	3836007	3807087	3822656	0.38	cps
Yttrium	89-2	980817	983894	988963	984558	0.42	cps
Zinc	66-2	1604428	1606201	1640377	1617002	1.25	cps
Zirconium	90-1	3275157	3211645	3241488	3242763	0.98	cps
Zirconium	91-1	668719	674603	671243	671522	0.44	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S7 Instrumnet Name : P7
Client Sample ID : S7 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:27:13 DataFile Name : 020CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1804688	1730792	1757535	1764338	2.12	cps
Antimony	121-1	3547748	3525543	3603015	3558769	1.12	cps
Arsenic	75-2	210636	207361	206721	208239	1.01	cps
Barium	135-1	4459974	4550606	4443097	4484559	1.29	cps
Barium	137-1	7721493	7594509	7646209	7654070	0.83	cps
Beryllium	9-1	560402	561617	563932	561984	0.32	cps
Bismuth	209-1	1277815	1268219	1257037	1267690	0.82	cps
Bismuth	209-2	1166364	1160755	1163209	1163442	0.24	cps
Bromine	81-1	17891	17787	17674	17784	0.61	cps
Bromine	81-2	113	180	160	151	22.64	cps
Cadmium	108-1	65966	66679	66645	66430	0.61	cps
Cadmium	106-1	95264	94844	94797	94968	0.27	cps
Cadmium	111-1	910784	928744	922543	920690	0.99	cps
Calcium	43-1	963371	983782	996572	981242	1.71	cps
Calcium	44-1	16215138	16835520	16735588	16595415	2.01	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1521305	1544835	1544896	1537012	0.89	cps
Cobalt	59-2	2405703	2418308	2447665	2423892	0.89	cps
Copper	63-2	17189421	17106326	16946617	17080788	0.72	cps
Dysprosium	156-1	103	67	90	87	21.41	cps
Dysprosium	156-2	263	263	280	269	3.58	cps
Erbium	164-1	100	77	120	99	21.93	cps
Erbium	164-2	47	63	73	61	22.04	cps
Gadolinium	160-1	47	63	60	57	15.56	cps
Gadolinium	160-2	107	143	183	144	26.55	cps
Holmium	165-1	2514333	2466735	2429198	2470089	1.73	cps
Holmium	165-2	1945994	1902654	1947675	1932108	1.32	cps
Indium	115-1	2039100	1980734	2017188	2012341	1.47	cps
Indium	115-2	723781	724247	723936	723988	0.03	cps
Iron	56-2	73789189	72765426	75412797	73989137	1.80	cps
Iron	57-2	1868563	1848115	1871764	1862814	0.69	cps
Iron	54-2	4092434	4025755	4019929	4046039	1.00	cps
Krypton	83-1	230	340	277	282	19.56	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S7 Instrumnet Name : P7
Client Sample ID : S7 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:27:13 DataFile Name : 020CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	12767858	12519132	12916650	12734547	1.58	cps
Lead	207-1	11104079	11224949	10966944	11098657	1.16	cps
Lead	208-1	51086272	51120683	50607685	50938213	0.56	cps
Lithium	6-1	351807	349773	346879	349486	0.71	cps
Magnesium	24-2	15291406	14844293	15253877	15129859	1.64	cps
Manganese	55-2	12489351	12171329	12273973	12311551	1.32	cps
Molybdenum	94-1	13235107	13089448	13134078	13152878	0.57	cps
Molybdenum	95-1	18551693	18371092	18686615	18536467	0.85	cps
Molybdenum	96-1	20085021	19865429	20497981	20149477	1.59	cps
Molybdenum	97-1	11528363	11579618	11539934	11549305	0.23	cps
Molybdenum	98-1	29434463	30048930	29744240	29742544	1.03	cps
Neodymium	150-1	187	160	210	186	13.48	cps
Neodymium	150-2	67	43	30	47	39.77	cps
Nickel	60-2	570444	570941	575191	572192	0.46	cps
Phosphorus	31-2	97650	96418	98196	97421	0.93	cps
Potassium	39-2	9139979	9063289	9105346	9102871	0.42	cps
Rhodium	103-1	1984653	1971250	1997069	1984324	0.65	cps
Rhodium	103-2	1126259	1111081	1116893	1118077	0.68	cps
Scandium	45-1	1243261	1170788	1240275	1218108	3.37	cps
Scandium	45-2	105733	102921	104115	104256	1.35	cps
Selenium	82-1	79866	80419	80444	80243	0.41	cps
Selenium	77-2	7912	7485	8036	7811	3.70	cps
Selenium	78-2	26744	27238	27268	27084	1.09	cps
Silicon	28-1	5887425	6286265	6325287	6166326	3.93	cps
Silver	107-1	4573601	4517773	4597572	4562982	0.90	cps
Silver	109-1	4323710	4301959	4413079	4346250	1.35	cps
Sodium	23-2	24069928	22971577	23207315	23416273	2.47	cps
Strontium	86-1	1122513	1128245	1125560	1125440	0.25	cps
Strontium	88-1	10791659	10763142	11011496	10855432	1.25	cps
Sulfur	34-1	411645	406603	404999	407749	0.85	cps
Terbium	159-1	2586081	2536810	2527703	2550198	1.23	cps
Terbium	159-2	1943091	1876672	1864277	1894680	2.24	cps
Thallium	203-1	3044343	3150582	3112997	3102641	1.74	cps
Thallium	205-1	7192720	7634891	7416875	7414829	2.98	cps
Tin	118-1	3019492	3181385	3143349	3114742	2.72	cps
Titanium	47-1	4849862	4788231	4902369	4846821	1.18	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S7 Instrumnet Name : P7
Client Sample ID : S7 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:27:13 DataFile Name : 020CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	9555350	9707179	9849447	9703992	1.52	cps
Vanadium	51-2	1300407	1369772	1356550	1342243	2.74	cps
Yttrium	89-1	3851722	3868840	3778086	3832883	1.26	cps
Yttrium	89-2	1019711	1010970	1003406	1011362	0.81	cps
Zinc	66-2	3225733	3167600	3182000	3191778	0.95	cps
Zirconium	90-1	6406817	6578053	6323135	6436002	2.02	cps
Zirconium	91-1	1426835	1431809	1427722	1428789	0.19	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S8 Instrumnet Name : P7
Client Sample ID : S8 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:30:05 DataFile Name : 021CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	9493224	9230927	9323407	9349186	1.42	cps
Antimony	121-1	1797	1790	1747	1778	1.53	cps
Arsenic	75-2	120	143	103	122	16.44	cps
Barium	135-1	2027	2044	1923	1998	3.25	cps
Barium	137-1	3377	3304	3447	3376	2.12	cps
Beryllium	9-1	82	105	105	97	13.77	cps
Bismuth	209-1	1188495	1184872	1171503	1181624	0.76	cps
Bismuth	209-2	1100075	1080198	1059217	1079830	1.89	cps
Bromine	81-1	19059	18809	18959	18942	0.67	cps
Bromine	81-2	193	183	260	212	19.64	cps
Cadmium	108-1	30	40	27	32	21.53	cps
Cadmium	106-1	1030	1010	980	1007	2.50	cps
Cadmium	111-1	873	859	811	848	3.87	cps
Calcium	43-1	5118195	5275793	5263176	5219054	1.68	cps
Calcium	44-1	85125022	86443489	85609229	85725913	0.78	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3320	3187	2934	3147	6.24	cps
Cobalt	59-2	4194	4057	4157	4136	1.71	cps
Copper	63-2	4164	4107	3994	4088	2.12	cps
Dysprosium	156-1	170	133	207	170	21.57	cps
Dysprosium	156-2	153	153	103	137	21.13	cps
Erbium	164-1	363	347	313	341	7.46	cps
Erbium	164-2	303	293	277	291	4.63	cps
Gadolinium	160-1	167	180	210	186	11.96	cps
Gadolinium	160-2	220	277	243	247	11.54	cps
Holmium	165-1	2471556	2463911	2413147	2449538	1.30	cps
Holmium	165-2	1985679	1866790	1880611	1911027	3.40	cps
Indium	115-1	2082840	2041297	2014680	2046272	1.68	cps
Indium	115-2	743020	738096	731660	737592	0.77	cps
Iron	56-2	374448114	373895541	370707514	373017057	0.54	cps
Iron	57-2	9339203	9333806	9186692	9286567	0.93	cps
Iron	54-2	20461424	19827468	19603152	19964015	2.23	cps
Krypton	83-1	310	310	240	287	14.10	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S8 Instrumnet Name : P7
Client Sample ID : S8 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:30:05 DataFile Name : 021CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	8753	8630	9016	8800	2.25	cps
Lead	207-1	7776	7252	7332	7453	3.78	cps
Lead	208-1	35519	34798	34664	34994	1.31	cps
Lithium	6-1	346781	354078	358038	352966	1.62	cps
Magnesium	24-2	80151194	79883659	77048024	79027625	2.18	cps
Manganese	55-2	5781	5721	5594	5699	1.67	cps
Molybdenum	94-1	3761	3554	3784	3699	3.42	cps
Molybdenum	95-1	2180	2407	2290	2292	4.95	cps
Molybdenum	96-1	9373	9720	9617	9570	1.86	cps
Molybdenum	97-1	1520	1510	1410	1480	4.11	cps
Molybdenum	98-1	3487	3617	3367	3490	3.58	cps
Neodymium	150-1	80	70	77	76	6.74	cps
Neodymium	150-2	63	57	53	58	8.81	cps
Nickel	60-2	2184	2084	1997	2088	4.47	cps
Phosphorus	31-2	513	510	453	492	6.85	cps
Potassium	39-2	46784648	45797421	45442023	46008030	1.51	cps
Rhodium	103-1	1900011	1883713	1969538	1917754	2.38	cps
Rhodium	103-2	1065480	1066698	1055840	1062673	0.56	cps
Scandium	45-1	1264111	1273007	1278411	1271843	0.57	cps
Scandium	45-2	106783	105202	104565	105517	1.08	cps
Selenium	82-1	201	222	281	235	17.62	cps
Selenium	77-2	0	3	10	4	114.60	cps
Selenium	78-2	593	513	527	544	7.87	cps
Silicon	28-1	1344853	1343306	1376971	1355043	1.40	cps
Silver	107-1	513	390	420	441	14.58	cps
Silver	109-1	450	450	363	421	11.88	cps
Sodium	23-2	117501728	112416762	110315752	113411414	3.26	cps
Strontium	86-1	4457	4394	4427	4426	0.72	cps
Strontium	88-1	35352	36118	35326	35599	1.26	cps
Sulfur	34-1	114243	117212	120386	117280	2.62	cps
Terbium	159-1	2483108	2498362	2520057	2500509	0.74	cps
Terbium	159-2	1913714	1852449	1856309	1874157	1.83	cps
Thallium	203-1	313	247	290	283	11.94	cps
Thallium	205-1	833	707	640	727	13.52	cps
Tin	118-1	1570	1367	1463	1467	6.94	cps
Titanium	47-1	400	307	360	356	13.17	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : S8 Instrumnet Name : P7
Client Sample ID : S8 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:30:05 DataFile Name : 021CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	367	310	370	349	9.66	cps
Vanadium	51-2	327	340	330	332	2.09	cps
Yttrium	89-1	3836888	3860591	3785373	3827617	1.00	cps
Yttrium	89-2	1020120	1001437	997781	1006446	1.19	cps
Zinc	66-2	13560	13523	14217	13766	2.84	cps
Zirconium	90-1	5671	5564	5214	5483	4.36	cps
Zirconium	91-1	1283	1160	1223	1222	5.05	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICV01 Instrumnet Name : P7
Client Sample ID : ICV01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:48:19 DataFile Name : 024ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	42711	43273	41936	42640	1.57	cps
Antimony	121-1	664383	662438	668291	665037	0.45	cps
Arsenic	75-2	45533	45041	45128	45234	0.58	cps
Barium	135-1	85542	87369	87608	86840	1.30	cps
Barium	137-1	147679	148356	148251	148095	0.25	cps
Beryllium	9-1	54164	55332	56312	55269	1.95	cps
Bismuth	209-1	1247262	1261083	1238175	1248840	0.92	cps
Bismuth	209-2	1171078	1169028	1191696	1177267	1.06	cps
Bromine	81-1	18692	19079	18395	18722	1.83	cps
Bromine	81-2	97	107	113	106	7.95	cps
Cadmium	108-1	6378	6538	6658	6525	2.15	cps
Cadmium	106-1	10034	9990	9703	9909	1.81	cps
Cadmium	111-1	98645	99792	98483	98973	0.72	cps
Calcium	43-1	20103	20190	20117	20137	0.23	cps
Calcium	44-1	339742	338992	341560	340098	0.39	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	154187	153443	154834	154155	0.45	cps
Cobalt	59-2	249667	252514	247123	249768	1.08	cps
Copper	63-2	170883	172078	169391	170784	0.79	cps
Dysprosium	156-1	10	3	3	6	69.34	cps
Dysprosium	156-2	0	10	13	8	89.21	cps
Erbium	164-1	27	23	13	21	32.88	cps
Erbium	164-2	13	7	23	14	58.06	cps
Gadolinium	160-1	37	23	20	27	33.08	cps
Gadolinium	160-2	143	137	153	144	5.81	cps
Holmium	165-1	2400451	2384192	2361639	2382094	0.82	cps
Holmium	165-2	1907235	1892764	1905984	1901994	0.42	cps
Indium	115-1	2088536	2172249	2132478	2131088	1.96	cps
Indium	115-2	768804	768326	763707	766946	0.37	cps
Iron	56-2	3126971	3094938	3052187	3091365	1.21	cps
Iron	57-2	74551	75368	75174	75031	0.57	cps
Iron	54-2	167577	169696	166104	167792	1.08	cps
Krypton	83-1	317	223	270	270	17.28	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICV01 Instrumnet Name : P7
Client Sample ID : ICV01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:48:19 DataFile Name : 024ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	472684	475995	474262	474313	0.35	cps
Lead	207-1	402987	406702	404864	404851	0.46	cps
Lead	208-1	1856557	1869500	1866144	1864067	0.36	cps
Lithium	6-1	339672	344157	341842	341890	0.66	cps
Magnesium	24-2	167435	170312	170960	169569	1.11	cps
Manganese	55-2	122857	125122	123193	123724	0.99	cps
Molybdenum	94-1	203	247	263	238	13.03	cps
Molybdenum	95-1	200	193	173	189	7.35	cps
Molybdenum	96-1	367	383	313	354	10.32	cps
Molybdenum	97-1	123	183	153	153	19.56	cps
Molybdenum	98-1	307	277	343	309	10.81	cps
Neodymium	150-1	3	10	10	8	49.52	cps
Neodymium	150-2	3	3	0	2	86.60	cps
Nickel	60-2	64799	64585	64793	64726	0.19	cps
Phosphorus	31-2	443	430	450	441	2.31	cps
Potassium	39-2	404404	405443	408745	406197	0.56	cps
Rhodium	103-1	2007108	2107769	2046887	2053921	2.47	cps
Rhodium	103-2	1145139	1158398	1158879	1154139	0.68	cps
Scandium	45-1	1258030	1253060	1242143	1251078	0.65	cps
Scandium	45-2	105424	103951	103232	104202	1.07	cps
Selenium	82-1	15755	15691	15668	15705	0.29	cps
Selenium	77-2	1617	1780	1740	1712	4.97	cps
Selenium	78-2	6201	6675	6135	6337	4.65	cps
Silicon	28-1	1361049	1374298	1379467	1371604	0.69	cps
Silver	107-1	200997	205023	205438	203819	1.20	cps
Silver	109-1	186104	189991	190238	188778	1.23	cps
Sodium	23-2	431413	439776	437180	436123	0.98	cps
Strontium	86-1	543	537	443	508	11.01	cps
Strontium	88-1	480	387	470	446	11.50	cps
Sulfur	34-1	117947	118078	116772	117599	0.61	cps
Terbium	159-1	2550743	2474978	2470152	2498624	1.81	cps
Terbium	159-2	1854287	1902554	1868589	1875143	1.32	cps
Thallium	203-1	598081	587297	601063	595480	1.22	cps
Thallium	205-1	1423028	1401232	1411806	1412022	0.77	cps
Tin	118-1	630	707	667	668	5.74	cps
Titanium	47-1	67	97	77	80	19.09	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICV01 Instrumnet Name : P7
Client Sample ID : ICV01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 18:48:19 DataFile Name : 024ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	30	27	53	37	39.62	cps
Vanadium	51-2	128085	129672	127958	128572	0.74	cps
Yttrium	89-1	3875963	3801284	3857232	3844827	1.01	cps
Yttrium	89-2	1018793	1018460	1012892	1016715	0.33	cps
Zinc	66-2	64060	63625	63528	63738	0.44	cps
Zirconium	90-1	360	360	367	362	1.06	cps
Zirconium	91-1	137	130	140	136	3.76	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : LLICV01 Instrumnet Name : P7
Client Sample ID : LLICV01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:00:22 DataFile Name : 026LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1649	1659	1778	1696	4.24	cps
Antimony	121-1	6795	6788	7008	6864	1.82	cps
Arsenic	75-2	270	260	217	249	11.39	cps
Barium	135-1	8509	8002	8393	8301	3.20	cps
Barium	137-1	13907	13827	14241	13991	1.57	cps
Beryllium	9-1	611	624	553	596	6.35	cps
Bismuth	209-1	1254854	1256848	1242385	1251362	0.63	cps
Bismuth	209-2	1164624	1167943	1164812	1165793	0.16	cps
Bromine	81-1	18839	18428	18602	18623	1.11	cps
Bromine	81-2	110	130	150	130	15.38	cps
Cadmium	108-1	53	103	63	73	36.09	cps
Cadmium	106-1	1070	823	1017	970	13.38	cps
Cadmium	111-1	1752	1571	1681	1668	5.47	cps
Calcium	43-1	5308	5374	5081	5254	2.93	cps
Calcium	44-1	92004	92195	90907	91702	0.76	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3751	3570	3704	3675	2.54	cps
Cobalt	59-2	2517	2467	2320	2435	4.20	cps
Copper	63-2	4537	4494	4561	4531	0.75	cps
Dysprosium	156-1	0	3	0	1	173.21	cps
Dysprosium	156-2	0	0	0	0	0.00	cps
Erbium	164-1	20	30	20	23	24.74	cps
Erbium	164-2	17	23	10	17	39.99	cps
Gadolinium	160-1	13	7	27	16	65.47	cps
Gadolinium	160-2	117	140	113	123	11.78	cps
Holmium	165-1	2434135	2418885	2434059	2429026	0.36	cps
Holmium	165-2	1887886	1872574	1876433	1878964	0.42	cps
Indium	115-1	2128499	2161073	2135626	2141732	0.80	cps
Indium	115-2	760531	761996	758248	760259	0.25	cps
Iron	56-2	89143	87996	87204	88114	1.11	cps
Iron	57-2	3557	3344	3497	3466	3.18	cps
Iron	54-2	5701	5938	6278	5972	4.86	cps
Krypton	83-1	330	270	270	290	11.94	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : LLICV01 Instrumnet Name : P7
Client Sample ID : LLICV01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:00:22 DataFile Name : 026LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	2624	2474	2650	2583	3.69	cps
Lead	207-1	2360	2250	2397	2336	3.27	cps
Lead	208-1	10368	10155	10388	10304	1.26	cps
Lithium	6-1	338025	338344	334549	336973	0.62	cps
Magnesium	24-2	66192	66463	67377	66677	0.93	cps
Manganese	55-2	1830	1723	1777	1777	3.00	cps
Molybdenum	94-1	7565	7655	7545	7589	0.77	cps
Molybdenum	95-1	9280	9106	8399	8928	5.22	cps
Molybdenum	96-1	10210	10217	10107	10178	0.61	cps
Molybdenum	97-1	5331	5798	5561	5563	4.20	cps
Molybdenum	98-1	14751	14507	14421	14560	1.18	cps
Neodymium	150-1	0	7	7	4	86.60	cps
Neodymium	150-2	3	3	0	2	86.60	cps
Nickel	60-2	830	857	943	877	6.76	cps
Phosphorus	31-2	527	623	547	566	9.02	cps
Potassium	39-2	139530	140693	141656	140626	0.76	cps
Rhodium	103-1	2075365	2064910	2041271	2060515	0.85	cps
Rhodium	103-2	1156918	1159034	1150673	1155542	0.38	cps
Scandium	45-1	1282850	1278707	1264371	1275310	0.76	cps
Scandium	45-2	103709	103776	102978	103488	0.43	cps
Selenium	82-1	448	532	495	492	8.63	cps
Selenium	77-2	13	47	47	36	54.14	cps
Selenium	78-2	673	710	640	674	5.19	cps
Silicon	28-1	1401303	1373801	1387313	1387472	0.99	cps
Silver	107-1	4457	4868	4614	4646	4.45	cps
Silver	109-1	4177	4227	4281	4228	1.22	cps
Sodium	23-2	116608	114025	116007	115547	1.17	cps
Strontium	86-1	1627	1610	1563	1600	2.05	cps
Strontium	88-1	10210	9950	10357	10172	2.03	cps
Sulfur	34-1	118945	121673	120440	120352	1.14	cps
Terbium	159-1	2475966	2422252	2444669	2447629	1.10	cps
Terbium	159-2	1891201	1913412	1822244	1875619	2.53	cps
Thallium	203-1	2830	2734	2930	2831	3.47	cps
Thallium	205-1	6432	6685	6448	6522	2.17	cps
Tin	118-1	14611	14911	14965	14829	1.29	cps
Titanium	47-1	2120	2294	2340	2251	5.15	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : LLICV01 Instrumnet Name : P7
Client Sample ID : LLICV01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:00:22 DataFile Name : 026LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	8199	8159	7929	8096	1.80	cps
Vanadium	51-2	6315	6398	6728	6480	3.37	cps
Yttrium	89-1	3890831	3852831	3857477	3867046	0.54	cps
Yttrium	89-2	1008048	1017563	1000137	1008583	0.87	cps
Zinc	66-2	1740	2017	2007	1921	8.17	cps
Zirconium	90-1	5981	6391	6098	6157	3.43	cps
Zirconium	91-1	1457	1437	1320	1405	5.26	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICB01 Instrumnet Name : P7
Client Sample ID : ICB01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:07:12 DataFile Name : 028CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	184	177	180	180	1.87	cps
Antimony	121-1	40	53	60	51	19.92	cps
Arsenic	75-2	3	0	10	4	114.60	cps
Barium	135-1	33	23	20	26	27.15	cps
Barium	137-1	30	23	37	30	22.23	cps
Beryllium	9-1	20	20	30	23	24.64	cps
Bismuth	209-1	1255946	1242930	1234271	1244382	0.88	cps
Bismuth	209-2	1176438	1162075	1169675	1169396	0.61	cps
Bromine	81-1	19219	19450	18939	19203	1.33	cps
Bromine	81-2	127	100	107	111	12.49	cps
Cadmium	108-1	0	3	7	3	100.05	cps
Cadmium	106-1	1017	977	933	976	4.27	cps
Cadmium	111-1	725	691	659	692	4.80	cps
Calcium	43-1	213	270	300	261	16.86	cps
Calcium	44-1	8536	8709	8633	8626	1.01	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1087	970	970	1009	6.68	cps
Cobalt	59-2	60	43	43	49	19.69	cps
Copper	63-2	967	1093	1107	1056	7.32	cps
Dysprosium	156-1	10	0	0	3	173.21	cps
Dysprosium	156-2	0	3	3	2	86.60	cps
Erbium	164-1	27	20	17	21	24.12	cps
Erbium	164-2	10	10	13	11	17.30	cps
Gadolinium	160-1	7	17	10	11	45.82	cps
Gadolinium	160-2	107	107	133	116	13.32	cps
Holmium	165-1	2343777	2311732	2408868	2354792	2.10	cps
Holmium	165-2	1907234	1871681	1924757	1901224	1.42	cps
Indium	115-1	2161370	2147249	2061302	2123307	2.55	cps
Indium	115-2	758495	763239	754383	758706	0.58	cps
Iron	56-2	16002	16125	16399	16175	1.26	cps
Iron	57-2	1457	1550	1507	1505	3.10	cps
Iron	54-2	2150	2124	2250	2175	3.07	cps
Krypton	83-1	267	300	297	288	6.38	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICB01 Instrumnet Name : P7
Client Sample ID : ICB01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:07:12 DataFile Name : 028CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	380	347	340	356	6.03	cps
Lead	207-1	320	253	317	297	12.66	cps
Lead	208-1	1343	1170	1423	1312	9.87	cps
Lithium	6-1	336549	342977	336344	338623	1.11	cps
Magnesium	24-2	160	117	123	133	17.50	cps
Manganese	55-2	353	383	393	377	5.53	cps
Molybdenum	94-1	133	103	127	121	13.01	cps
Molybdenum	95-1	123	117	103	114	8.90	cps
Molybdenum	96-1	170	210	170	183	12.60	cps
Molybdenum	97-1	73	80	80	78	4.95	cps
Molybdenum	98-1	197	147	203	182	17.00	cps
Neodymium	150-1	0	7	3	3	100.05	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	283	227	330	280	18.48	cps
Phosphorus	31-2	413	440	417	423	3.43	cps
Potassium	39-2	50885	51734	52166	51595	1.26	cps
Rhodium	103-1	2008710	2081874	2033034	2041206	1.83	cps
Rhodium	103-2	1138623	1156830	1161619	1152357	1.05	cps
Scandium	45-1	1242881	1233502	1284097	1253493	2.15	cps
Scandium	45-2	103843	105192	102474	103836	1.31	cps
Selenium	82-1	93	53	98	81	30.31	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	487	537	577	533	8.45	cps
Silicon	28-1	1338725	1335918	1382820	1352488	1.95	cps
Silver	107-1	40	53	67	53	25.00	cps
Silver	109-1	43	50	57	50	13.34	cps
Sodium	23-2	11641	11561	11504	11569	0.59	cps
Strontium	86-1	510	380	523	471	16.81	cps
Strontium	88-1	93	93	87	91	4.22	cps
Sulfur	34-1	122294	120873	121532	121566	0.59	cps
Terbium	159-1	2486877	2442625	2480899	2470133	0.97	cps
Terbium	159-2	1850682	1880324	1862021	1864343	0.80	cps
Thallium	203-1	47	47	50	48	4.02	cps
Thallium	205-1	133	123	120	126	5.53	cps
Tin	118-1	583	700	677	653	9.45	cps
Titanium	47-1	90	90	43	74	36.20	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICB01 Instrumnet Name : P7
Client Sample ID : ICB01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:07:12 DataFile Name : 028CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	20	13	17	17	20.01	cps
Vanadium	51-2	7	10	10	9	21.63	cps
Yttrium	89-1	3816380	4016275	3800876	3877844	3.10	cps
Yttrium	89-2	1005408	993297	1002999	1000568	0.64	cps
Zinc	66-2	280	320	400	333	18.33	cps
Zirconium	90-1	140	183	140	154	16.20	cps
Zirconium	91-1	43	23	23	30	38.49	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICSA01 Instrumnet Name : P7
Client Sample ID : ICSA01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:10:36 DataFile Name : 029ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	8746163	8498424	8314131	8519573	2.54	cps
Antimony	121-1	4101	3901	3911	3971	2.84	cps
Arsenic	75-2	70	107	57	78	33.29	cps
Barium	135-1	1087	1247	1303	1212	9.27	cps
Barium	137-1	2117	2170	2047	2111	2.93	cps
Beryllium	9-1	197	144	164	169	15.97	cps
Bismuth	209-1	1232069	1239702	1246825	1239532	0.60	cps
Bismuth	209-2	1180908	1150552	1152268	1161243	1.47	cps
Bromine	81-1	19533	19910	20187	19877	1.65	cps
Bromine	81-2	353	327	320	333	5.29	cps
Cadmium	108-1	490	457	410	452	8.89	cps
Cadmium	106-1	860	1027	1037	974	10.18	cps
Cadmium	111-1	902	982	1025	970	6.44	cps
Calcium	43-1	1019934	1012297	1008019	1013417	0.60	cps
Calcium	44-1	17609893	17424860	16973248	17336000	1.89	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	31747	31072	30888	31236	1.45	cps
Cobalt	59-2	3314	3114	3057	3161	4.27	cps
Copper	63-2	15668	15618	16256	15847	2.24	cps
Dysprosium	156-1	10	7	13	10	33.30	cps
Dysprosium	156-2	3	7	13	8	65.47	cps
Erbium	164-1	17	17	33	22	43.28	cps
Erbium	164-2	10	50	20	27	78.06	cps
Gadolinium	160-1	10	20	20	17	34.64	cps
Gadolinium	160-2	140	100	173	138	26.65	cps
Holmium	165-1	2414119	2513562	2404778	2444153	2.47	cps
Holmium	165-2	1945861	1931830	1892837	1923509	1.43	cps
Indium	115-1	2143829	2097716	2147785	2129777	1.31	cps
Indium	115-2	751039	741255	741847	744714	0.74	cps
Iron	56-2	155417368	148059074	151279838	151585427	2.43	cps
Iron	57-2	3779693	3718326	3718464	3738828	0.95	cps
Iron	54-2	8064457	8183407	8268387	8172084	1.25	cps
Krypton	83-1	347	283	283	304	12.01	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICSA01 Instrumnet Name : P7
Client Sample ID : ICSA01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:10:36 DataFile Name : 029ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	11325	11201	11678	11402	2.17	cps
Lead	207-1	9036	9076	8920	9011	0.90	cps
Lead	208-1	42162	42740	43250	42717	1.27	cps
Lithium	6-1	343956	340120	342402	342159	0.56	cps
Magnesium	24-2	14717534	14251135	14491185	14486618	1.61	cps
Manganese	55-2	9923	10027	9737	9896	1.49	cps
Molybdenum	94-1	2196247	2225043	2244792	2222027	1.10	cps
Molybdenum	95-1	3920144	3941336	3973788	3945089	0.68	cps
Molybdenum	96-1	4262984	4242699	4278461	4261381	0.42	cps
Molybdenum	97-1	2388799	2464262	2398056	2417039	1.70	cps
Molybdenum	98-1	6280467	6283343	6330738	6298182	0.45	cps
Neodymium	150-1	17	20	27	21	24.12	cps
Neodymium	150-2	13	7	17	12	41.65	cps
Nickel	60-2	3517	3787	3577	3627	3.91	cps
Phosphorus	31-2	500053	493850	488094	493999	1.21	cps
Potassium	39-2	19289399	18956415	19042836	19096217	0.90	cps
Rhodium	103-1	1968755	2036264	2032952	2012657	1.89	cps
Rhodium	103-2	1130191	1113219	1108082	1117164	1.04	cps
Scandium	45-1	1262819	1266263	1246235	1258439	0.85	cps
Scandium	45-2	103722	101696	104447	103288	1.38	cps
Selenium	82-1	52	90	100	80	31.01	cps
Selenium	77-2	7	0	7	4	86.60	cps
Selenium	78-2	480	480	490	483	1.19	cps
Silicon	28-1	1356577	1364373	1296501	1339150	2.77	cps
Silver	107-1	270	340	297	302	11.69	cps
Silver	109-1	270	287	333	297	11.07	cps
Sodium	23-2	24236644	24382492	23617267	24078801	1.69	cps
Strontium	86-1	39821	41087	40850	40586	1.66	cps
Strontium	88-1	346643	355788	355157	352529	1.45	cps
Sulfur	34-1	1830434	1797417	1791064	1806305	1.17	cps
Terbium	159-1	2506298	2581518	2622471	2570096	2.29	cps
Terbium	159-2	1866292	1926282	1826102	1872892	2.69	cps
Thallium	203-1	160	180	283	208	31.86	cps
Thallium	205-1	393	370	540	434	21.21	cps
Tin	118-1	7789	9056	8799	8548	7.84	cps
Titanium	47-1	939982	935493	936166	937213	0.26	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICSA01 Instrumnet Name : P7
Client Sample ID : ICSA01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:10:36 DataFile Name : 029ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	147	147	187	160	14.43	cps
Vanadium	51-2	273	290	233	266	10.97	cps
Yttrium	89-1	3869720	3841110	3781999	3830943	1.17	cps
Yttrium	89-2	1008408	1004851	1001623	1004961	0.34	cps
Zinc	66-2	3844	3654	3784	3761	2.58	cps
Zirconium	90-1	247	307	223	259	16.60	cps
Zirconium	91-1	43	67	57	56	21.08	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICSAB01 Instrumnet Name : P7
Client Sample ID : ICSAB01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:13:50 DataFile Name : 030ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	8180871	8328299	8367614	8292261	1.19	cps
Antimony	121-1	73996	76764	74813	75191	1.89	cps
Arsenic	75-2	4174	4574	4484	4411	4.76	cps
Barium	135-1	18622	18762	18956	18780	0.89	cps
Barium	137-1	32648	33212	32176	32679	1.59	cps
Beryllium	9-1	11139	11065	11082	11095	0.35	cps
Bismuth	209-1	1288728	1273958	1277419	1280035	0.60	cps
Bismuth	209-2	1145206	1165452	1180867	1163842	1.54	cps
Bromine	81-1	20638	20691	20815	20715	0.44	cps
Bromine	81-2	490	417	377	428	13.44	cps
Cadmium	108-1	1877	1743	1727	1782	4.61	cps
Cadmium	106-1	2644	2724	2660	2676	1.58	cps
Cadmium	111-1	20854	20420	20390	20555	1.26	cps
Calcium	43-1	1011105	1015331	991573	1006003	1.26	cps
Calcium	44-1	17115500	17187552	17082081	17128378	0.31	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	61558	60836	63255	61883	2.01	cps
Cobalt	59-2	50488	50344	50281	50371	0.21	cps
Copper	63-2	49087	49281	49703	49357	0.64	cps
Dysprosium	156-1	10	17	23	17	39.99	cps
Dysprosium	156-2	13	20	10	14	35.26	cps
Erbium	164-1	13	20	43	26	61.64	cps
Erbium	164-2	37	27	23	29	24.03	cps
Gadolinium	160-1	40	20	33	31	32.73	cps
Gadolinium	160-2	113	127	137	126	9.32	cps
Holmium	165-1	2510083	2505355	2518649	2511362	0.27	cps
Holmium	165-2	1912737	1899472	1954701	1922303	1.50	cps
Indium	115-1	2163380	2180257	2132465	2158701	1.12	cps
Indium	115-2	739662	744488	752806	745652	0.89	cps
Iron	56-2	149604751	153986578	150584498	151391942	1.52	cps
Iron	57-2	3723540	3671343	3770861	3721914	1.34	cps
Iron	54-2	8030349	8226673	8072839	8109954	1.27	cps
Krypton	83-1	337	337	257	310	14.90	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICSAB01 Instrumnet Name : P7
Client Sample ID : ICSAB01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:13:50 DataFile Name : 030ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	66870	68894	67795	67853	1.49	cps
Lead	207-1	55968	57026	55366	56120	1.50	cps
Lead	208-1	258819	261873	259346	260013	0.63	cps
Lithium	6-1	336225	340636	333979	336947	1.01	cps
Magnesium	24-2	13968519	14011604	14370373	14116832	1.56	cps
Manganese	55-2	33370	33868	34322	33854	1.41	cps
Molybdenum	94-1	2214726	2280936	2242624	2246095	1.48	cps
Molybdenum	95-1	3907720	3878792	3861304	3882605	0.60	cps
Molybdenum	96-1	4096895	4275031	4269631	4213852	2.40	cps
Molybdenum	97-1	2457008	2363952	2409429	2410130	1.93	cps
Molybdenum	98-1	6185675	6275208	6296868	6252584	0.94	cps
Neodymium	150-1	27	27	23	26	7.55	cps
Neodymium	150-2	7	7	3	6	34.70	cps
Nickel	60-2	15208	15528	16099	15612	2.89	cps
Phosphorus	31-2	482241	490773	492362	488458	1.11	cps
Potassium	39-2	18439615	18386126	18956172	18593971	1.69	cps
Rhodium	103-1	2059776	1969970	2002621	2010789	2.26	cps
Rhodium	103-2	1116593	1123038	1122100	1120577	0.31	cps
Scandium	45-1	1255695	1250380	1237247	1247774	0.76	cps
Scandium	45-2	101931	103427	106847	104068	2.42	cps
Selenium	82-1	1530	1667	1712	1636	5.78	cps
Selenium	77-2	183	127	157	156	18.23	cps
Selenium	78-2	1007	1087	937	1010	7.43	cps
Silicon	28-1	1328732	1309774	1299538	1312681	1.13	cps
Silver	107-1	92499	94290	92804	93198	1.03	cps
Silver	109-1	86808	87335	88213	87452	0.81	cps
Sodium	23-2	23787400	23971137	24011344	23923294	0.50	cps
Strontium	86-1	40375	41966	39406	40583	3.19	cps
Strontium	88-1	353384	354183	357075	354881	0.55	cps
Sulfur	34-1	1775838	1806993	1714506	1765779	2.66	cps
Terbium	159-1	2616951	2617321	2633981	2622751	0.37	cps
Terbium	159-2	1912774	1881846	1904711	1899777	0.84	cps
Thallium	203-1	59931	61431	59643	60335	1.59	cps
Thallium	205-1	142252	141865	143771	142629	0.71	cps
Tin	118-1	2744	3127	3034	2968	6.74	cps
Titanium	47-1	922812	928991	906051	919284	1.29	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : ICSAB01 Instrumnet Name : P7
Client Sample ID : ICSAB01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:13:50 DataFile Name : 030ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	263	273	320	286	10.59	cps
Vanadium	51-2	26213	26260	26760	26411	1.15	cps
Yttrium	89-1	3835192	3990664	3917354	3914404	1.99	cps
Yttrium	89-2	1003885	1006039	1006770	1005565	0.15	cps
Zinc	66-2	10147	9990	10234	10124	1.22	cps
Zirconium	90-1	253	253	253	253	0.00	cps
Zirconium	91-1	80	53	37	57	38.57	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV01 Instrumnet Name : P7
Client Sample ID : CCV01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:29:03 DataFile Name : 033CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4628147	4673325	4689426	4663632	0.68	cps
Antimony	121-1	1806267	1812292	1819680	1812746	0.37	cps
Arsenic	75-2	101380	102931	102733	102348	0.82	cps
Barium	135-1	2283596	2300453	2303622	2295891	0.47	cps
Barium	137-1	3793247	3982582	3966939	3914256	2.68	cps
Beryllium	9-1	276548	280159	279979	278895	0.73	cps
Bismuth	209-1	1236377	1120052	1224912	1193780	5.37	cps
Bismuth	209-2	1110634	1126900	1113122	1116885	0.78	cps
Bromine	81-1	19350	19149	19309	19269	0.55	cps
Bromine	81-2	187	173	117	159	23.39	cps
Cadmium	108-1	33188	33071	32871	33043	0.49	cps
Cadmium	106-1	46484	48708	48387	47860	2.51	cps
Cadmium	111-1	451222	455426	457555	454735	0.71	cps
Calcium	43-1	2636532	2592739	2628211	2619161	0.89	cps
Calcium	44-1	42462603	43459043	42810064	42910570	1.18	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	718323	724755	717085	720055	0.57	cps
Cobalt	59-2	1117009	1129238	1105623	1117290	1.06	cps
Copper	63-2	8368172	8467018	8180620	8338603	1.74	cps
Dysprosium	156-1	100	97	113	103	8.54	cps
Dysprosium	156-2	200	213	217	210	4.20	cps
Erbium	164-1	190	243	193	209	14.30	cps
Erbium	164-2	167	160	173	167	4.00	cps
Gadolinium	160-1	93	90	113	99	12.76	cps
Gadolinium	160-2	207	223	247	226	8.91	cps
Holmium	165-1	2508348	2238070	2523198	2423205	6.62	cps
Holmium	165-2	1945901	1891753	1937782	1925145	1.52	cps
Indium	115-1	2078775	1889708	2103233	2023905	5.77	cps
Indium	115-2	732253	738663	731799	734238	0.52	cps
Iron	56-2	186528904	195574284	191053710	191052299	2.37	cps
Iron	57-2	4838843	4756515	4694167	4763175	1.52	cps
Iron	54-2	10471884	10311022	10263268	10348724	1.06	cps
Krypton	83-1	333	333	247	304	16.44	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV01 Instrumnet Name : P7
Client Sample ID : CCV01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:29:03 DataFile Name : 033CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	6348125	6322912	6253811	6308283	0.77	cps
Lead	207-1	5511638	5625812	5513296	5550248	1.18	cps
Lead	208-1	25377055	25376048	25269422	25340842	0.24	cps
Lithium	6-1	335628	311709	337059	328132	4.34	cps
Magnesium	24-2	37402209	36964806	37579244	37315420	0.85	cps
Manganese	55-2	6304293	6381507	6224385	6303395	1.25	cps
Molybdenum	94-1	6625862	6863197	6778214	6755758	1.78	cps
Molybdenum	95-1	9649170	9760704	9563991	9657955	1.02	cps
Molybdenum	96-1	10364572	10568557	10507783	10480304	1.00	cps
Molybdenum	97-1	5944229	6034446	5970357	5983011	0.78	cps
Molybdenum	98-1	15200661	15685036	15716212	15533970	1.86	cps
Neodymium	150-1	160	87	160	136	31.23	cps
Neodymium	150-2	47	40	47	44	8.66	cps
Nickel	60-2	284410	285377	281858	283881	0.64	cps
Phosphorus	31-2	49687	49316	48714	49239	1.00	cps
Potassium	39-2	23507617	23306174	23254185	23355992	0.57	cps
Rhodium	103-1	2018650	1822803	2041824	1961092	6.14	cps
Rhodium	103-2	1101685	1107474	1104451	1104537	0.26	cps
Scandium	45-1	1275492	1161927	1256799	1231406	4.94	cps
Scandium	45-2	105502	106646	106918	106355	0.71	cps
Selenium	82-1	39089	39247	39366	39234	0.35	cps
Selenium	77-2	3821	3931	3827	3859	1.60	cps
Selenium	78-2	13640	13613	13389	13547	1.01	cps
Silicon	28-1	3760344	3841616	3855268	3819076	1.34	cps
Silver	107-1	2332499	2289044	2358019	2326521	1.50	cps
Silver	109-1	2173692	2192282	2181582	2182519	0.43	cps
Sodium	23-2	52114064	52547713	53179094	52613624	1.02	cps
Strontium	86-1	568030	581347	579148	576175	1.24	cps
Strontium	88-1	5393985	5577486	5574450	5515307	1.91	cps
Sulfur	34-1	262078	261137	263517	262244	0.46	cps
Terbium	159-1	2539913	2340678	2582908	2487833	5.19	cps
Terbium	159-2	1889387	1901133	1869888	1886803	0.84	cps
Thallium	203-1	1368761	1370533	1391817	1377037	0.93	cps
Thallium	205-1	3601850	3683197	3662766	3649271	1.16	cps
Tin	118-1	1410001	1566681	1426557	1467747	5.86	cps
Titanium	47-1	2515982	2561589	2483863	2520478	1.55	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV01 Instrumnet Name : P7
Client Sample ID : CCV01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:29:03 DataFile Name : 033CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	4782311	4746538	4774211	4767687	0.39	cps
Vanadium	51-2	634391	634569	631413	633458	0.28	cps
Yttrium	89-1	3988121	3585837	3929972	3834643	5.67	cps
Yttrium	89-2	1021012	1023438	1024764	1023071	0.19	cps
Zinc	66-2	1547391	1542080	1487292	1525587	2.18	cps
Zirconium	90-1	3326986	3391158	3354178	3357441	0.96	cps
Zirconium	91-1	692316	694089	694001	693469	0.14	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB01 Instrumnet Name : P7
Client Sample ID : CCB01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:35:40 DataFile Name : 035CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	150	144	177	157	11.26	cps
Antimony	121-1	147	123	170	147	15.91	cps
Arsenic	75-2	7	0	3	3	100.05	cps
Barium	135-1	17	17	17	17	0.00	cps
Barium	137-1	37	40	50	42	16.43	cps
Beryllium	9-1	30	40	30	33	17.13	cps
Bismuth	209-1	1247140	1268127	1255519	1256929	0.84	cps
Bismuth	209-2	1173571	1153675	1164518	1163921	0.86	cps
Bromine	81-1	18281	18595	18145	18340	1.26	cps
Bromine	81-2	127	130	100	119	13.83	cps
Cadmium	108-1	3	0	10	4	114.60	cps
Cadmium	106-1	900	1037	823	920	11.75	cps
Cadmium	111-1	664	749	579	664	12.77	cps
Calcium	43-1	293	190	213	232	23.34	cps
Calcium	44-1	8266	8462	8466	8398	1.36	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	897	713	823	811	11.38	cps
Cobalt	59-2	37	47	53	46	18.41	cps
Copper	63-2	1240	1203	1317	1253	4.61	cps
Dysprosium	156-1	0	3	0	1	173.21	cps
Dysprosium	156-2	0	0	3	1	173.21	cps
Erbium	164-1	20	23	13	19	26.96	cps
Erbium	164-2	17	17	0	11	86.60	cps
Gadolinium	160-1	20	0	7	9	114.55	cps
Gadolinium	160-2	90	130	100	107	19.52	cps
Holmium	165-1	2460881	2408152	2414539	2427857	1.19	cps
Holmium	165-2	1874867	1896026	1919519	1896804	1.18	cps
Indium	115-1	2183335	2175841	2133550	2164242	1.24	cps
Indium	115-2	757717	750367	757545	755210	0.56	cps
Iron	56-2	15902	15788	15295	15662	2.06	cps
Iron	57-2	1577	1423	1513	1505	5.12	cps
Iron	54-2	1990	2003	2210	2068	5.97	cps
Krypton	83-1	317	257	373	316	18.49	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB01 Instrumnet Name : P7
Client Sample ID : CCB01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:35:40 DataFile Name : 035CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	363	390	443	399	10.21	cps
Lead	207-1	387	327	433	382	13.99	cps
Lead	208-1	1563	1637	1737	1646	5.29	cps
Lithium	6-1	339621	342244	341321	341062	0.39	cps
Magnesium	24-2	267	220	207	231	13.63	cps
Manganese	55-2	573	793	647	671	16.69	cps
Molybdenum	94-1	203	150	200	184	16.20	cps
Molybdenum	95-1	163	170	193	176	8.97	cps
Molybdenum	96-1	253	247	223	241	6.53	cps
Molybdenum	97-1	90	97	103	97	6.89	cps
Molybdenum	98-1	307	283	293	294	3.98	cps
Neodymium	150-1	7	3	0	3	100.05	cps
Neodymium	150-2	0	3	7	3	100.05	cps
Nickel	60-2	260	207	197	221	15.40	cps
Phosphorus	31-2	417	403	383	401	4.18	cps
Potassium	39-2	52473	52166	52473	52371	0.34	cps
Rhodium	103-1	2073231	2053470	2043544	2056749	0.73	cps
Rhodium	103-2	1153255	1150497	1153412	1152388	0.14	cps
Scandium	45-1	1243181	1235168	1288644	1255664	2.30	cps
Scandium	45-2	102447	101957	105447	103284	1.83	cps
Selenium	82-1	29	111	27	56	86.51	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	523	437	440	467	10.52	cps
Silicon	28-1	1331513	1341549	1305809	1326290	1.39	cps
Silver	107-1	113	103	107	108	4.72	cps
Silver	109-1	83	87	83	84	2.28	cps
Sodium	23-2	14594	14547	14260	14467	1.25	cps
Strontium	86-1	450	377	410	412	8.91	cps
Strontium	88-1	70	100	100	90	19.25	cps
Sulfur	34-1	108380	107995	108398	108258	0.21	cps
Terbium	159-1	2507255	2489361	2541749	2512788	1.06	cps
Terbium	159-2	1851339	1887802	1855850	1864997	1.07	cps
Thallium	203-1	230	253	233	239	5.28	cps
Thallium	205-1	483	590	527	533	10.06	cps
Tin	118-1	500	577	560	546	7.39	cps
Titanium	47-1	57	37	47	47	21.43	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB01 Instrumnet Name : P7
Client Sample ID : CCB01 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:35:40 DataFile Name : 035CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	47	23	27	32	39.17	cps
Vanadium	51-2	10	0	3	4	114.60	cps
Yttrium	89-1	3917843	3902193	3902845	3907627	0.23	cps
Yttrium	89-2	1009311	1005054	1014647	1009670	0.48	cps
Zinc	66-2	297	307	273	292	5.85	cps
Zirconium	90-1	250	277	230	252	9.28	cps
Zirconium	91-1	53	33	63	50	30.55	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CRI Instrumnet Name : P7
Client Sample ID : CRI Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:39:03 DataFile Name : 036LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1716	1686	1642	1681	2.19	cps
Antimony	121-1	6868	6842	6845	6852	0.21	cps
Arsenic	75-2	197	253	257	236	14.32	cps
Barium	135-1	8526	8586	8262	8458	2.03	cps
Barium	137-1	13827	14394	14441	14221	2.40	cps
Beryllium	9-1	547	600	619	588	6.34	cps
Bismuth	209-1	1266979	1245666	1258646	1257097	0.85	cps
Bismuth	209-2	1166301	1171267	1165545	1167704	0.27	cps
Bromine	81-1	18982	18956	18619	18852	1.08	cps
Bromine	81-2	107	140	97	114	19.82	cps
Cadmium	108-1	107	60	100	89	28.40	cps
Cadmium	106-1	970	1053	937	987	6.09	cps
Cadmium	111-1	1584	1715	1639	1646	4.00	cps
Calcium	43-1	5141	5058	5341	5180	2.81	cps
Calcium	44-1	88500	88688	89848	89012	0.82	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	4194	3650	3751	3865	7.48	cps
Cobalt	59-2	2454	2520	2450	2475	1.60	cps
Copper	63-2	4961	4654	4484	4700	5.14	cps
Dysprosium	156-1	17	3	7	9	78.08	cps
Dysprosium	156-2	0	3	0	1	173.21	cps
Erbium	164-1	10	23	23	19	40.75	cps
Erbium	164-2	3	10	13	9	57.30	cps
Gadolinium	160-1	13	10	13	12	15.73	cps
Gadolinium	160-2	123	63	97	94	31.83	cps
Holmium	165-1	2442695	2467953	2398888	2436512	1.43	cps
Holmium	165-2	1886384	1933550	1840659	1886864	2.46	cps
Indium	115-1	2144109	2145625	2114826	2134853	0.81	cps
Indium	115-2	760086	749896	753427	754470	0.69	cps
Iron	56-2	87549	88713	87161	87808	0.92	cps
Iron	57-2	3434	3474	3340	3416	2.00	cps
Iron	54-2	5768	6008	6031	5936	2.46	cps
Krypton	83-1	247	263	313	274	12.64	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CRI Instrumnet Name : P7
Client Sample ID : CRI Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:39:03 DataFile Name : 036LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	2620	2657	2590	2623	1.27	cps
Lead	207-1	2270	2244	2340	2285	2.19	cps
Lead	208-1	10685	10418	10672	10592	1.42	cps
Lithium	6-1	338485	338775	340413	339224	0.31	cps
Magnesium	24-2	67260	66309	67605	67058	1.00	cps
Manganese	55-2	1877	1917	1993	1929	3.07	cps
Molybdenum	94-1	7409	7205	7549	7387	2.34	cps
Molybdenum	95-1	8936	8866	9163	8988	1.73	cps
Molybdenum	96-1	10240	9747	10024	10004	2.47	cps
Molybdenum	97-1	5571	5408	5775	5584	3.29	cps
Molybdenum	98-1	14154	14164	14511	14276	1.42	cps
Neodymium	150-1	3	0	0	1	173.21	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	893	770	867	843	7.69	cps
Phosphorus	31-2	470	500	553	508	8.31	cps
Potassium	39-2	141996	139914	139916	140608	0.85	cps
Rhodium	103-1	2043532	2075117	2067470	2062040	0.80	cps
Rhodium	103-2	1160004	1145043	1150870	1151972	0.65	cps
Scandium	45-1	1230483	1272079	1253767	1252109	1.66	cps
Scandium	45-2	104246	101944	102162	102784	1.24	cps
Selenium	82-1	527	522	452	500	8.35	cps
Selenium	77-2	33	43	50	42	19.87	cps
Selenium	78-2	640	643	687	657	3.96	cps
Silicon	28-1	1300615	1301743	1332621	1311660	1.38	cps
Silver	107-1	4377	4464	4824	4555	5.20	cps
Silver	109-1	4251	4474	4177	4301	3.59	cps
Sodium	23-2	119168	119265	117504	118646	0.83	cps
Strontium	86-1	1730	1560	1717	1669	5.67	cps
Strontium	88-1	10000	10417	10244	10220	2.05	cps
Sulfur	34-1	110509	110717	109126	110117	0.79	cps
Terbium	159-1	2517534	2512963	2505227	2511908	0.25	cps
Terbium	159-2	1860598	1847996	1861164	1856586	0.40	cps
Thallium	203-1	3024	2957	2937	2973	1.53	cps
Thallium	205-1	7199	7129	7209	7179	0.61	cps
Tin	118-1	14691	14724	14738	14718	0.16	cps
Titanium	47-1	2274	2317	2317	2302	1.09	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CRI Instrumnet Name : P7
Client Sample ID : CRI Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:39:03 DataFile Name : 036LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	7989	7999	8369	8119	2.67	cps
Vanadium	51-2	6415	6385	6218	6339	1.67	cps
Yttrium	89-1	3870078	3922652	3865237	3885989	0.82	cps
Yttrium	89-2	1013537	1011076	1005415	1010009	0.41	cps
Zinc	66-2	1973	1950	1957	1960	0.61	cps
Zirconium	90-1	6095	6118	6105	6106	0.19	cps
Zirconium	91-1	1220	1500	1303	1341	10.72	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : P2218-03DLX10 Instrumnet Name : P7
Client Sample ID : X10 Dilution Factor : 10
Date & Time Acquired : 2025-06-11 19:42:28 DataFile Name : 037SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	512229	515161	522137	516509	0.99	cps
Antimony	121-1	5424	5861	5821	5702	4.23	cps
Arsenic	75-2	2457	2530	2434	2474	2.04	cps
Barium	135-1	8856	9146	9133	9045	1.81	cps
Barium	137-1	14905	15362	15632	15299	2.40	cps
Beryllium	9-1	21	41	48	37	38.05	cps
Bismuth	209-1	886196	899734	899865	895265	0.88	cps
Bismuth	209-2	855015	847162	839680	847286	0.91	cps
Bromine	81-1	482779	584261	635058	567366	13.67	cps
Bromine	81-2	131711	133120	135218	133350	1.32	cps
Cadmium	108-1	1390	1477	1377	1415	3.84	cps
Cadmium	106-1	623	600	770	664	13.87	cps
Cadmium	111-1	1057	1086	1085	1076	1.57	cps
Calcium	43-1	30380	30851	31426	30886	1.70	cps
Calcium	44-1	525485	543898	540024	536469	1.81	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	7739	7719	7809	7755	0.61	cps
Cobalt	59-2	977	793	840	870	10.95	cps
Copper	63-2	143885	143427	145780	144364	0.86	cps
Dysprosium	156-1	27	10	27	21	45.58	cps
Dysprosium	156-2	13	20	13	16	24.76	cps
Erbium	164-1	27	40	30	32	21.53	cps
Erbium	164-2	30	17	23	23	28.56	cps
Gadolinium	160-1	23	10	17	17	39.99	cps
Gadolinium	160-2	93	77	137	102	30.30	cps
Holmium	165-1	1696893	1745830	1766935	1736553	2.07	cps
Holmium	165-2	1293861	1287899	1289393	1290384	0.24	cps
Indium	115-1	1373513	1405479	1402591	1393861	1.27	cps
Indium	115-2	550272	549370	552836	550826	0.33	cps
Iron	56-2	2107658	2145227	2168673	2140519	1.44	cps
Iron	57-2	52508	52445	53187	52713	0.78	cps
Iron	54-2	113753	112843	113632	113409	0.44	cps
Krypton	83-1	287	273	240	267	9.01	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : P2218-03DLX10 Instrumnet Name : P7
Client Sample ID : X10 Dilution Factor : 10
Date & Time Acquired : 2025-06-11 19:42:28 DataFile Name : 037SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	18857	19344	18743	18981	1.68	cps
Lead	207-1	16056	16173	16066	16099	0.40	cps
Lead	208-1	74099	74028	74042	74057	0.05	cps
Lithium	6-1	251013	261806	267325	260048	3.19	cps
Magnesium	24-2	48911	48413	48864	48729	0.56	cps
Manganese	55-2	602639	603987	605882	604169	0.27	cps
Molybdenum	94-1	6482456	6828656	6865548	6725553	3.14	cps
Molybdenum	95-1	11715703	11901172	11958832	11858569	1.07	cps
Molybdenum	96-1	12590580	13073996	12950676	12871751	1.95	cps
Molybdenum	97-1	7273651	7478915	7373386	7375317	1.39	cps
Molybdenum	98-1	18766823	19289473	18943258	18999851	1.40	cps
Neodymium	150-1	20	13	23	19	26.96	cps
Neodymium	150-2	20	10	7	12	56.76	cps
Nickel	60-2	1820	1710	1700	1743	3.82	cps
Phosphorus	31-2	9733	9600	9620	9651	0.75	cps
Potassium	39-2	60328799	59010741	62264899	60534813	2.70	cps
Rhodium	103-1	1303105	1341400	1451357	1365287	5.64	cps
Rhodium	103-2	827702	829179	840932	832604	0.87	cps
Scandium	45-1	816572	835300	839310	830394	1.46	cps
Scandium	45-2	76650	75440	77732	76607	1.50	cps
Selenium	82-1	564	926	1054	848	29.96	cps
Selenium	77-2	90	67	107	88	22.89	cps
Selenium	78-2	870	777	940	862	9.50	cps
Silicon	28-1	4393854	4823478	4952438	4723256	6.19	cps
Silver	107-1	240	203	210	218	8.97	cps
Silver	109-1	170	263	240	224	21.64	cps
Sodium	23-2	35731334	35978094	35923407	35877612	0.36	cps
Strontium	86-1	17811	18659	18839	18436	2.98	cps
Strontium	88-1	154603	160661	160523	158596	2.18	cps
Sulfur	34-1	176894	175859	173817	175523	0.89	cps
Terbium	159-1	1806531	1829718	1832728	1822992	0.79	cps
Terbium	159-2	1281705	1270942	1277228	1276625	0.42	cps
Thallium	203-1	410	370	383	388	5.25	cps
Thallium	205-1	900	977	1000	959	5.46	cps
Tin	118-1	14267	15378	15071	14906	3.85	cps
Titanium	47-1	1097	1087	1043	1076	2.64	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : P2218-03DLX10 Instrumnet Name : P7
Client Sample ID : X10 Dilution Factor : 10
Date & Time Acquired : 2025-06-11 19:42:28 DataFile Name : 037SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	197	187	213	199	6.77	cps
Vanadium	51-2	2800	2587	2904	2764	5.84	cps
Yttrium	89-1	2733079	2781366	2844128	2786191	2.00	cps
Yttrium	89-2	752570	739240	747616	746476	0.90	cps
Zinc	66-2	180735	179170	185807	181904	1.91	cps
Zirconium	90-1	2240	2180	2284	2235	2.32	cps
Zirconium	91-1	410	433	540	461	15.03	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : P2218-03DL2X50 Instrumnet Name : P7
Client Sample ID : X50 Dilution Factor : 50
Date & Time Acquired : 2025-06-11 19:48:49 DataFile Name : 038SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	127234	125984	127884	127034	0.76	cps
Antimony	121-1	1507	1437	1397	1447	3.85	cps
Arsenic	75-2	677	783	683	714	8.36	cps
Barium	135-1	2270	2260	2277	2269	0.37	cps
Barium	137-1	3891	3907	4024	3941	1.84	cps
Beryllium	9-1	20	17	40	26	49.05	cps
Bismuth	209-1	1202099	1195689	1211201	1202996	0.65	cps
Bismuth	209-2	1112451	1115315	1118403	1115390	0.27	cps
Bromine	81-1	122222	137524	147242	135663	9.30	cps
Bromine	81-2	27309	27623	27746	27559	0.82	cps
Cadmium	108-1	297	363	370	343	11.81	cps
Cadmium	106-1	873	900	863	879	2.16	cps
Cadmium	111-1	894	852	792	846	6.04	cps
Calcium	43-1	8042	8026	7879	7982	1.13	cps
Calcium	44-1	141632	141409	144707	142582	1.29	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2664	2854	2660	2726	4.06	cps
Cobalt	59-2	247	220	237	234	5.75	cps
Copper	63-2	37771	37256	37236	37421	0.81	cps
Dysprosium	156-1	7	7	7	7	0.00	cps
Dysprosium	156-2	3	10	13	9	57.30	cps
Erbium	164-1	37	27	30	31	16.37	cps
Erbium	164-2	13	13	17	14	13.35	cps
Gadolinium	160-1	13	27	33	24	41.66	cps
Gadolinium	160-2	93	120	107	107	12.50	cps
Holmium	165-1	2331157	2414464	2410230	2385284	1.97	cps
Holmium	165-2	1770443	1800859	1803446	1791583	1.02	cps
Indium	115-1	2069620	2057527	2085800	2070982	0.68	cps
Indium	115-2	724718	723842	726145	724901	0.16	cps
Iron	56-2	517980	516378	513581	515980	0.43	cps
Iron	57-2	14194	13640	13666	13833	2.26	cps
Iron	54-2	29285	29302	29142	29243	0.30	cps
Krypton	83-1	330	257	307	298	12.58	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : P2218-03DL2X50 Instrumnet Name : P7
Client Sample ID : X50 Dilution Factor : 50
Date & Time Acquired : 2025-06-11 19:48:49 DataFile Name : 038SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4914	4974	5098	4995	1.87	cps
Lead	207-1	4291	4327	4324	4314	0.47	cps
Lead	208-1	19589	19532	20260	19794	2.04	cps
Lithium	6-1	329808	336446	334185	333479	1.01	cps
Magnesium	24-2	12232	12318	12025	12192	1.24	cps
Manganese	55-2	152310	150476	150182	150989	0.76	cps
Molybdenum	94-1	1693250	1712218	1708926	1704798	0.59	cps
Molybdenum	95-1	2960935	3006221	2972785	2979981	0.79	cps
Molybdenum	96-1	3188277	3183386	3225647	3199104	0.72	cps
Molybdenum	97-1	1828225	1852571	1851273	1844023	0.74	cps
Molybdenum	98-1	4752598	4837216	4751891	4780568	1.03	cps
Neodymium	150-1	13	10	7	10	33.30	cps
Neodymium	150-2	3	13	3	7	86.65	cps
Nickel	60-2	750	703	607	687	10.65	cps
Phosphorus	31-2	2667	2590	2294	2517	7.84	cps
Potassium	39-2	14867904	14991927	15387012	15082281	1.80	cps
Rhodium	103-1	1932035	2012548	1979226	1974603	2.05	cps
Rhodium	103-2	1094854	1106209	1108051	1103038	0.65	cps
Scandium	45-1	1108329	1207721	1257677	1191242	6.38	cps
Scandium	45-2	100487	100044	100726	100419	0.34	cps
Selenium	82-1	416	529	492	479	12.03	cps
Selenium	77-2	37	43	50	43	15.38	cps
Selenium	78-2	560	683	747	663	14.31	cps
Silicon	28-1	2059034	2149878	2144399	2117770	2.41	cps
Silver	107-1	77	70	100	82	19.16	cps
Silver	109-1	87	97	107	97	10.34	cps
Sodium	23-2	8832824	8740748	8938184	8837252	1.12	cps
Strontium	86-1	5194	5064	5081	5113	1.38	cps
Strontium	88-1	40111	41188	40386	40561	1.38	cps
Sulfur	34-1	118978	117689	117114	117927	0.81	cps
Terbium	159-1	2419416	2378126	2483348	2426963	2.18	cps
Terbium	159-2	1756871	1749336	1787554	1764587	1.15	cps
Thallium	203-1	150	177	143	157	11.26	cps
Thallium	205-1	340	327	300	322	6.32	cps
Tin	118-1	3887	4204	4144	4078	4.13	cps
Titanium	47-1	300	263	307	290	8.05	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : P2218-03DL2X50 Instrumnet Name : P7
Client Sample ID : X50 Dilution Factor : 50
Date & Time Acquired : 2025-06-11 19:48:49 DataFile Name : 038SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	47	53	70	57	21.21	cps
Vanadium	51-2	697	760	710	722	4.62	cps
Yttrium	89-1	3829030	3821939	3858537	3836502	0.51	cps
Yttrium	89-2	961265	955740	973374	963459	0.94	cps
Zinc	66-2	46633	46074	46268	46325	0.61	cps
Zirconium	90-1	683	713	777	724	6.58	cps
Zirconium	91-1	183	133	177	164	16.51	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV02 Instrumnet Name : P7
Client Sample ID : CCV02 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:52:05 DataFile Name : 039CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4805613	4926057	4919628	4883766	1.39	cps
Antimony	121-1	1862419	1898376	1842280	1867691	1.52	cps
Arsenic	75-2	106796	106690	107651	107046	0.49	cps
Barium	135-1	2349831	2397016	2310679	2352509	1.84	cps
Barium	137-1	4054458	4051400	4021367	4042408	0.45	cps
Beryllium	9-1	290992	292024	294654	292557	0.65	cps
Bismuth	209-1	1251640	1251524	1248986	1250717	0.12	cps
Bismuth	209-2	1150515	1140859	1129724	1140366	0.91	cps
Bromine	81-1	35643	34236	32065	33981	5.30	cps
Bromine	81-2	2490	2237	2197	2308	6.89	cps
Cadmium	108-1	33933	34621	34211	34255	1.01	cps
Cadmium	106-1	49066	50287	48330	49228	2.01	cps
Cadmium	111-1	464102	469743	460557	464801	1.00	cps
Calcium	43-1	2662332	2698682	2752349	2704455	1.67	cps
Calcium	44-1	44612201	44519694	44003308	44378401	0.74	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	747340	746646	745485	746491	0.13	cps
Cobalt	59-2	1151687	1155566	1166379	1157877	0.66	cps
Copper	63-2	8758365	8822625	8676925	8752638	0.83	cps
Dysprosium	156-1	130	97	123	117	15.12	cps
Dysprosium	156-2	147	190	167	168	12.93	cps
Erbium	164-1	190	240	153	194	22.37	cps
Erbium	164-2	187	163	153	168	10.19	cps
Gadolinium	160-1	70	87	113	90	24.28	cps
Gadolinium	160-2	217	187	153	186	17.07	cps
Holmium	165-1	2605099	2578155	2537933	2573729	1.31	cps
Holmium	165-2	2020570	1989487	1918656	1976237	2.64	cps
Indium	115-1	2184868	2209877	2099159	2164635	2.68	cps
Indium	115-2	756321	744606	746759	749229	0.83	cps
Iron	56-2	197324824	203504950	195112924	198647566	2.19	cps
Iron	57-2	5066522	4893493	4948588	4969535	1.78	cps
Iron	54-2	10611919	11035860	10727356	10791712	2.03	cps
Krypton	83-1	303	290	287	293	3.01	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV02 Instrumnet Name : P7
Client Sample ID : CCV02 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:52:05 DataFile Name : 039CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	6398760	6542686	6508239	6483228	1.16	cps
Lead	207-1	5615654	5738497	5672616	5675589	1.08	cps
Lead	208-1	25513136	26214479	25974217	25900611	1.38	cps
Lithium	6-1	360167	364713	357595	360825	1.00	cps
Magnesium	24-2	39742116	38682847	39168701	39197888	1.35	cps
Manganese	55-2	6371773	6579520	6390608	6447300	1.78	cps
Molybdenum	94-1	6945339	6935463	6995862	6958888	0.47	cps
Molybdenum	95-1	10046726	9690407	10027877	9921670	2.02	cps
Molybdenum	96-1	10852698	10896928	10814260	10854629	0.38	cps
Molybdenum	97-1	6135987	6204721	6197663	6179457	0.61	cps
Molybdenum	98-1	15939189	16101261	15787289	15942579	0.98	cps
Neodymium	150-1	127	87	110	108	18.64	cps
Neodymium	150-2	57	30	53	47	31.14	cps
Nickel	60-2	294952	294667	295135	294918	0.08	cps
Phosphorus	31-2	51570	51410	51366	51449	0.21	cps
Potassium	39-2	24508782	24379484	24135321	24341196	0.78	cps
Rhodium	103-1	2091036	2030847	1987006	2036297	2.56	cps
Rhodium	103-2	1139278	1118692	1122405	1126792	0.97	cps
Scandium	45-1	1341816	1330690	1300216	1324240	1.63	cps
Scandium	45-2	110198	108939	107743	108960	1.13	cps
Selenium	82-1	42116	40790	40652	41186	1.96	cps
Selenium	77-2	4157	4107	3907	4057	3.26	cps
Selenium	78-2	14400	14083	13917	14133	1.74	cps
Silicon	28-1	4082045	4109242	4150798	4114028	0.84	cps
Silver	107-1	2403150	2320934	2391160	2371748	1.87	cps
Silver	109-1	2247445	2263091	2272707	2261081	0.56	cps
Sodium	23-2	54875433	53772756	53333458	53993882	1.47	cps
Strontium	86-1	590418	589897	588635	589650	0.16	cps
Strontium	88-1	5754043	5715360	5610449	5693284	1.31	cps
Sulfur	34-1	263530	265785	263409	264241	0.51	cps
Terbium	159-1	2714797	2618809	2570440	2634682	2.79	cps
Terbium	159-2	1903550	1935935	1911987	1917157	0.88	cps
Thallium	203-1	1399803	1410367	1402824	1404331	0.39	cps
Thallium	205-1	3841450	3790382	3802410	3811414	0.70	cps
Tin	118-1	1589704	1639037	1591856	1606866	1.74	cps
Titanium	47-1	2550325	2534712	2605396	2563478	1.45	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV02 Instrumnet Name : P7
Client Sample ID : CCV02 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:52:05 DataFile Name : 039CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	5000812	4956466	5048139	5001806	0.92	cps
Vanadium	51-2	657852	652032	654965	654950	0.44	cps
Yttrium	89-1	3958924	4023953	4115195	4032691	1.95	cps
Yttrium	89-2	1057127	1044202	1041043	1047457	0.81	cps
Zinc	66-2	1546143	1570099	1575168	1563803	0.99	cps
Zirconium	90-1	3366666	3495555	3498850	3453690	2.18	cps
Zirconium	91-1	710309	709028	708615	709317	0.12	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB02 Instrumnet Name : P7
Client Sample ID : CCB02 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:58:54 DataFile Name : 040CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	150	160	197	169	14.54	cps
Antimony	121-1	203	123	190	172	24.89	cps
Arsenic	75-2	13	13	7	11	34.61	cps
Barium	135-1	20	47	43	37	39.63	cps
Barium	137-1	43	43	40	42	4.55	cps
Beryllium	9-1	30	47	20	32	41.49	cps
Bismuth	209-1	1270106	1253570	1246192	1256623	0.97	cps
Bismuth	209-2	1185097	1171980	1174061	1177046	0.60	cps
Bromine	81-1	21723	21192	20775	21230	2.24	cps
Bromine	81-2	677	660	650	662	2.03	cps
Cadmium	108-1	3	3	3	3	0.00	cps
Cadmium	106-1	867	880	867	871	0.88	cps
Cadmium	111-1	631	634	618	627	1.37	cps
Calcium	43-1	250	270	220	247	10.20	cps
Calcium	44-1	8846	8749	8789	8795	0.55	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	863	800	873	846	4.70	cps
Cobalt	59-2	23	33	27	28	18.33	cps
Copper	63-2	1150	1187	1240	1192	3.80	cps
Dysprosium	156-1	3	0	3	2	86.60	cps
Dysprosium	156-2	0	0	3	1	173.21	cps
Erbium	164-1	20	30	17	22	31.22	cps
Erbium	164-2	3	20	7	10	88.20	cps
Gadolinium	160-1	10	17	13	13	25.01	cps
Gadolinium	160-2	93	97	110	100	8.82	cps
Holmium	165-1	2484199	2452074	2466504	2467592	0.65	cps
Holmium	165-2	1894464	1969107	1868586	1910719	2.73	cps
Indium	115-1	2158388	2156664	2173758	2162937	0.44	cps
Indium	115-2	766204	765119	769763	767029	0.32	cps
Iron	56-2	15945	15792	16015	15917	0.72	cps
Iron	57-2	1617	1490	1497	1535	4.65	cps
Iron	54-2	2090	2134	2000	2075	3.28	cps
Krypton	83-1	300	367	293	320	12.67	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB02 Instrumnet Name : P7
Client Sample ID : CCB02 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:58:54 DataFile Name : 040CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	360	327	347	344	4.87	cps
Lead	207-1	283	337	280	300	10.60	cps
Lead	208-1	1447	1420	1413	1427	1.24	cps
Lithium	6-1	345976	345110	346475	345854	0.20	cps
Magnesium	24-2	320	393	347	353	10.50	cps
Manganese	55-2	737	807	780	774	4.56	cps
Molybdenum	94-1	243	190	180	204	16.66	cps
Molybdenum	95-1	210	210	193	204	4.70	cps
Molybdenum	96-1	287	283	267	279	3.84	cps
Molybdenum	97-1	180	160	147	162	10.34	cps
Molybdenum	98-1	363	333	340	346	4.56	cps
Neodymium	150-1	0	3	3	2	86.60	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	283	263	297	281	5.97	cps
Phosphorus	31-2	407	403	343	384	9.27	cps
Potassium	39-2	54189	53781	52540	53504	1.61	cps
Rhodium	103-1	2113739	2081855	2055253	2083616	1.41	cps
Rhodium	103-2	1160304	1168070	1169745	1166039	0.43	cps
Scandium	45-1	1271687	1290247	1232953	1264963	2.31	cps
Scandium	45-2	105431	105179	105558	105389	0.18	cps
Selenium	82-1	175	58	150	128	48.29	cps
Selenium	77-2	13	7	7	9	43.25	cps
Selenium	78-2	570	620	500	563	10.70	cps
Silicon	28-1	1327063	1355400	1323811	1335424	1.30	cps
Silver	107-1	80	110	93	94	15.91	cps
Silver	109-1	63	77	93	78	19.33	cps
Sodium	23-2	14434	14217	14497	14382	1.02	cps
Strontium	86-1	433	503	417	451	10.19	cps
Strontium	88-1	93	93	97	94	2.04	cps
Sulfur	34-1	106585	106125	107065	106592	0.44	cps
Terbium	159-1	2527628	2609402	2489379	2542137	2.41	cps
Terbium	159-2	1907668	1853942	1890255	1883955	1.45	cps
Thallium	203-1	53	70	93	72	27.83	cps
Thallium	205-1	163	177	207	182	12.18	cps
Tin	118-1	467	597	490	518	13.39	cps
Titanium	47-1	80	57	63	67	18.03	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB02 Instrumnet Name : P7
Client Sample ID : CCB02 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 19:58:54 DataFile Name : 040CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	47	23	33	34	34.00	cps
Vanadium	51-2	7	3	10	7	50.03	cps
Yttrium	89-1	3995115	3964190	3907508	3955604	1.12	cps
Yttrium	89-2	1025166	1021459	1006495	1017707	0.97	cps
Zinc	66-2	323	327	287	312	7.11	cps
Zirconium	90-1	233	273	220	242	11.46	cps
Zirconium	91-1	43	80	53	59	32.19	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : PB168360BL Instrumnet Name : P7
Client Sample ID : PB168360BL Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:02:18 DataFile Name : 041CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	160	187	183	177	8.21	cps
Antimony	121-1	110	83	87	93	15.57	cps
Arsenic	75-2	10	13	0	8	89.21	cps
Barium	135-1	37	17	17	23	49.48	cps
Barium	137-1	67	37	40	48	34.42	cps
Beryllium	9-1	20	30	50	33	45.56	cps
Bismuth	209-1	1288528	1290854	1278852	1286078	0.49	cps
Bismuth	209-2	1188174	1187942	1185706	1187274	0.11	cps
Bromine	81-1	20431	21119	20751	20767	1.66	cps
Bromine	81-2	517	473	487	492	4.51	cps
Cadmium	108-1	0	0	7	2	173.21	cps
Cadmium	106-1	897	850	870	872	2.68	cps
Cadmium	111-1	651	602	611	621	4.22	cps
Calcium	43-1	283	220	230	244	13.93	cps
Calcium	44-1	8966	8919	9070	8985	0.86	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	927	890	803	873	7.25	cps
Cobalt	59-2	27	23	20	23	14.29	cps
Copper	63-2	1213	1107	1147	1156	4.66	cps
Dysprosium	156-1	7	7	0	4	86.60	cps
Dysprosium	156-2	0	0	0	0	0.00	cps
Erbium	164-1	17	20	20	19	10.18	cps
Erbium	164-2	13	27	27	22	34.66	cps
Gadolinium	160-1	10	10	17	12	31.50	cps
Gadolinium	160-2	120	97	90	102	15.41	cps
Holmium	165-1	2553546	2538334	2516754	2536211	0.73	cps
Holmium	165-2	1924391	1959587	1895739	1926572	1.66	cps
Indium	115-1	2185909	2140263	2205504	2177226	1.54	cps
Indium	115-2	765987	772846	769925	769586	0.45	cps
Iron	56-2	15972	15748	15872	15864	0.71	cps
Iron	57-2	1523	1570	1597	1563	2.37	cps
Iron	54-2	2080	2000	2037	2039	1.96	cps
Krypton	83-1	250	343	253	282	18.76	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : PB168360BL Instrumnet Name : P7
Client Sample ID : PB168360BL Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:02:18 DataFile Name : 041CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	380	340	417	379	10.12	cps
Lead	207-1	363	267	323	318	15.29	cps
Lead	208-1	1520	1307	1433	1420	7.56	cps
Lithium	6-1	353134	344808	341703	346549	1.71	cps
Magnesium	24-2	310	317	307	311	1.64	cps
Manganese	55-2	750	740	843	778	7.33	cps
Molybdenum	94-1	163	167	177	169	4.11	cps
Molybdenum	95-1	190	183	157	177	9.98	cps
Molybdenum	96-1	273	277	307	286	6.43	cps
Molybdenum	97-1	143	140	107	130	15.60	cps
Molybdenum	98-1	290	280	280	283	2.04	cps
Neodymium	150-1	3	0	7	3	100.05	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	253	227	247	242	5.73	cps
Phosphorus	31-2	293	400	363	352	15.39	cps
Potassium	39-2	52754	53504	53096	53118	0.71	cps
Rhodium	103-1	2109460	2079575	2082327	2090454	0.79	cps
Rhodium	103-2	1161924	1159748	1173843	1165172	0.65	cps
Scandium	45-1	1259600	1262136	1267385	1263040	0.31	cps
Scandium	45-2	104759	104387	103998	104381	0.36	cps
Selenium	82-1	161	81	143	129	32.54	cps
Selenium	77-2	7	13	3	8	65.47	cps
Selenium	78-2	440	553	493	496	11.44	cps
Silicon	28-1	1325755	1332985	1334679	1331140	0.36	cps
Silver	107-1	73	83	53	70	21.82	cps
Silver	109-1	37	60	40	46	27.70	cps
Sodium	23-2	13973	13946	13743	13888	0.91	cps
Strontium	86-1	480	527	537	514	5.88	cps
Strontium	88-1	113	107	70	97	24.14	cps
Sulfur	34-1	108817	110123	106356	108432	1.76	cps
Terbium	159-1	2589142	2591076	2570708	2583642	0.44	cps
Terbium	159-2	1877655	1879091	1883103	1879950	0.15	cps
Thallium	203-1	87	67	80	78	13.09	cps
Thallium	205-1	210	220	223	218	3.19	cps
Tin	118-1	487	677	427	530	24.63	cps
Titanium	47-1	67	60	63	63	5.27	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : PB168360BL Instrumnet Name : P7
Client Sample ID : PB168360BL Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:02:18 DataFile Name : 041CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	37	27	27	30	19.24	cps
Vanadium	51-2	20	17	3	13	66.16	cps
Yttrium	89-1	3983312	3919425	3911339	3938025	1.00	cps
Yttrium	89-2	1010267	1025067	1018931	1018088	0.73	cps
Zinc	66-2	373	337	340	350	5.79	cps
Zirconium	90-1	193	173	210	192	9.55	cps
Zirconium	91-1	47	30	33	37	24.06	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : PB168360BS Instrumnet Name : P7
Client Sample ID : PB168360BS Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:05:40 DataFile Name : 042LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	817030	814252	825199	818827	0.69	cps
Antimony	121-1	1889399	1884473	1857227	1877033	0.92	cps
Arsenic	75-2	108332	107160	107513	107668	0.56	cps
Barium	135-1	2343439	2315230	2329061	2329243	0.61	cps
Barium	137-1	4001155	3938012	4027668	3988945	1.15	cps
Beryllium	9-1	288299	287839	286117	287418	0.40	cps
Bismuth	209-1	1298950	1292946	1290257	1294051	0.34	cps
Bismuth	209-2	1182600	1189513	1182134	1184749	0.35	cps
Bromine	81-1	20508	20214	20224	20315	0.82	cps
Bromine	81-2	470	370	453	431	12.43	cps
Cadmium	108-1	34845	35139	35336	35107	0.70	cps
Cadmium	106-1	50862	50263	50080	50402	0.81	cps
Cadmium	111-1	483427	484391	489480	485766	0.67	cps
Calcium	43-1	511162	514374	508595	511377	0.57	cps
Calcium	44-1	8463734	8606271	8808067	8626024	2.01	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	736122	737830	737296	737083	0.12	cps
Cobalt	59-2	1150965	1158544	1164729	1158079	0.60	cps
Copper	63-2	8895022	8969753	8843551	8902775	0.71	cps
Dysprosium	156-1	30	70	53	51	39.31	cps
Dysprosium	156-2	163	220	140	174	23.58	cps
Erbium	164-1	60	97	57	71	31.21	cps
Erbium	164-2	23	37	40	33	26.47	cps
Gadolinium	160-1	40	43	60	48	22.43	cps
Gadolinium	160-2	123	133	143	133	7.50	cps
Holmium	165-1	2517002	2500837	2591824	2536555	1.91	cps
Holmium	165-2	1966076	1986523	1951944	1968181	0.88	cps
Indium	115-1	2125713	2221518	2165824	2171018	2.22	cps
Indium	115-2	759705	761276	761548	760843	0.13	cps
Iron	56-2	37499585	38312676	37066631	37626297	1.68	cps
Iron	57-2	893852	908420	910316	904196	1.00	cps
Iron	54-2	2096732	2097690	2118745	2104389	0.59	cps
Krypton	83-1	317	240	267	274	14.18	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : PB168360BS Instrumnet Name : P7
Client Sample ID : PB168360BS Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:05:40 DataFile Name : 042LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	6529776	6782972	6756777	6689841	2.08	cps
Lead	207-1	5830277	5819468	5800831	5816859	0.26	cps
Lead	208-1	26085212	26325865	26814455	26408511	1.41	cps
Lithium	6-1	352070	352304	353773	352716	0.26	cps
Magnesium	24-2	7830599	7653440	7650811	7711616	1.34	cps
Manganese	55-2	6373537	6555005	6379526	6436023	1.60	cps
Molybdenum	94-1	6938173	6870233	6663310	6823905	2.10	cps
Molybdenum	95-1	10094421	9839589	9832836	9922282	1.50	cps
Molybdenum	96-1	10645840	10788050	10437835	10623908	1.66	cps
Molybdenum	97-1	6025830	6115144	6010452	6050475	0.93	cps
Molybdenum	98-1	15633516	15573877	15763591	15656995	0.62	cps
Neodymium	150-1	80	103	110	98	16.11	cps
Neodymium	150-2	17	17	33	22	43.28	cps
Nickel	60-2	300457	297566	296587	298203	0.67	cps
Phosphorus	31-2	49834	50817	49814	50155	1.14	cps
Potassium	39-2	4735517	4708104	4823598	4755740	1.27	cps
Rhodium	103-1	2078943	2068941	2081518	2076468	0.32	cps
Rhodium	103-2	1149159	1168528	1148237	1155308	0.99	cps
Scandium	45-1	1341269	1276183	1272572	1296675	2.98	cps
Scandium	45-2	108852	107401	107069	107774	0.88	cps
Selenium	82-1	42158	41832	42379	42123	0.65	cps
Selenium	77-2	4317	4211	4467	4332	2.98	cps
Selenium	78-2	14297	15024	14497	14606	2.57	cps
Silicon	28-1	3564417	3594854	3624917	3594729	0.84	cps
Silver	107-1	2219697	2313764	2243078	2258846	2.17	cps
Silver	109-1	2140439	2157918	2194334	2164230	1.27	cps
Sodium	23-2	11993114	12066056	12071661	12043610	0.36	cps
Strontium	86-1	586435	586447	584307	585730	0.21	cps
Strontium	88-1	5648897	5546905	5569065	5588289	0.96	cps
Sulfur	34-1	261781	260168	255450	259133	1.27	cps
Terbium	159-1	2589780	2649041	2629174	2622665	1.15	cps
Terbium	159-2	1969065	1928052	1972146	1956421	1.26	cps
Thallium	203-1	1402149	1406376	1418643	1409056	0.61	cps
Thallium	205-1	3764063	3769909	3832020	3788664	0.99	cps
Tin	118-1	1593660	1488939	1472509	1518369	4.33	cps
Titanium	47-1	2527217	2474484	2491244	2497648	1.08	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : PB168360BS Instrumnet Name : P7
Client Sample ID : PB168360BS Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:05:40 DataFile Name : 042LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	4935126	4865000	4844009	4881378	0.98	cps
Vanadium	51-2	633155	642945	641027	639042	0.81	cps
Yttrium	89-1	4143903	3963407	3997511	4034941	2.38	cps
Yttrium	89-2	1038288	1039639	1029772	1035899	0.52	cps
Zinc	66-2	1735233	1669362	1678105	1694234	2.11	cps
Zirconium	90-1	3379121	3427687	3331293	3379367	1.43	cps
Zirconium	91-1	691635	695691	698064	695130	0.47	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:09:26 DataFile Name : 043SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	8212	7091	6671	7325	10.88	cps
Antimony	121-1	1687	1547	1563	1599	4.78	cps
Arsenic	75-2	183	257	247	229	17.37	cps
Barium	135-1	457258	469423	461206	462629	1.34	cps
Barium	137-1	799959	808280	791926	800055	1.02	cps
Beryllium	9-1	71	41	74	62	29.60	cps
Bismuth	209-1	1402460	1429924	1425242	1419208	1.04	cps
Bismuth	209-2	1335884	1294988	1310167	1313680	1.57	cps
Bromine	81-1	36057	40402	41923	39461	7.71	cps
Bromine	81-2	4978	5118	5228	5108	2.45	cps
Cadmium	108-1	7	3	3	4	43.40	cps
Cadmium	106-1	1000	957	1017	991	3.12	cps
Cadmium	111-1	725	701	766	731	4.52	cps
Calcium	43-1	359171	366392	363739	363101	1.01	cps
Calcium	44-1	6146099	6266415	6259337	6223950	1.08	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1390	1483	1340	1405	5.18	cps
Cobalt	59-2	21682	21926	21863	21824	0.58	cps
Copper	63-2	1520	1493	1697	1570	7.04	cps
Dysprosium	156-1	53	70	53	59	16.34	cps
Dysprosium	156-2	73	50	67	63	18.98	cps
Erbium	164-1	53	50	60	54	9.35	cps
Erbium	164-2	37	60	37	44	30.31	cps
Gadolinium	160-1	37	63	53	51	26.35	cps
Gadolinium	160-2	160	170	157	162	4.28	cps
Holmium	165-1	2746635	2758149	2885795	2796860	2.76	cps
Holmium	165-2	2134046	2101143	2140012	2125067	0.99	cps
Indium	115-1	2454418	2474952	2484073	2471148	0.61	cps
Indium	115-2	849560	845455	843993	846336	0.34	cps
Iron	56-2	11552590	11636819	11295776	11495061	1.55	cps
Iron	57-2	282409	282719	282027	282385	0.12	cps
Iron	54-2	604725	601236	600857	602273	0.35	cps
Krypton	83-1	253	300	283	279	8.48	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:09:26 DataFile Name : 043SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	727	653	727	702	6.03	cps
Lead	207-1	650	570	617	612	6.56	cps
Lead	208-1	2870	2633	2667	2723	4.70	cps
Lithium	6-1	378643	368145	374605	373798	1.42	cps
Magnesium	24-2	1661148	1610775	1595940	1622621	2.11	cps
Manganese	55-2	865450	860580	862181	862737	0.29	cps
Molybdenum	94-1	25726	25058	24895	25226	1.75	cps
Molybdenum	95-1	43986	43585	43244	43605	0.85	cps
Molybdenum	96-1	47387	46899	47417	47234	0.62	cps
Molybdenum	97-1	26765	26868	26861	26831	0.22	cps
Molybdenum	98-1	70345	70673	71122	70714	0.55	cps
Neodymium	150-1	83	90	93	89	5.73	cps
Neodymium	150-2	40	63	57	53	22.53	cps
Nickel	60-2	8349	7952	8116	8139	2.45	cps
Phosphorus	31-2	2027	1967	2043	2012	2.00	cps
Potassium	39-2	1911675	1879795	1929275	1906915	1.32	cps
Rhodium	103-1	2356258	2332730	2345574	2344854	0.50	cps
Rhodium	103-2	1283378	1288885	1269998	1280754	0.76	cps
Scandium	45-1	1475971	1447722	1396803	1440165	2.79	cps
Scandium	45-2	119541	116575	116000	117372	1.62	cps
Selenium	82-1	155	194	175	175	11.02	cps
Selenium	77-2	0	7	17	8	107.84	cps
Selenium	78-2	443	570	617	543	16.51	cps
Silicon	28-1	46241976	44994419	44766279	45334225	1.75	cps
Silver	107-1	143	170	133	149	12.73	cps
Silver	109-1	150	123	90	121	24.82	cps
Sodium	23-2	2024296	2084198	2038826	2049107	1.52	cps
Strontium	86-1	425673	423709	416762	422048	1.11	cps
Strontium	88-1	4108634	4017025	3944725	4023461	2.04	cps
Sulfur	34-1	294878	293187	286356	291474	1.55	cps
Terbium	159-1	2912519	2879378	2869877	2887258	0.78	cps
Terbium	159-2	2132528	2001917	2062157	2065534	3.16	cps
Thallium	203-1	803	827	857	829	3.23	cps
Thallium	205-1	1917	2027	1943	1962	2.92	cps
Tin	118-1	1463	1577	1553	1531	3.91	cps
Titanium	47-1	1690	1550	1447	1562	7.82	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:09:26 DataFile Name : 043SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	190	197	220	202	7.79	cps
Vanadium	51-2	1120	1100	1087	1102	1.52	cps
Yttrium	89-1	4416293	4433035	4344613	4397981	1.07	cps
Yttrium	89-2	1132934	1131179	1125758	1129957	0.33	cps
Zinc	66-2	2240	2134	2170	2181	2.48	cps
Zirconium	90-1	473	490	487	483	1.82	cps
Zirconium	91-1	107	107	123	112	8.58	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01DUP Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425DUP Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:12:44 DataFile Name : 044SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6861	6587	6320	6589	4.11	cps
Antimony	121-1	1493	1427	1430	1450	2.59	cps
Arsenic	75-2	153	150	210	171	19.71	cps
Barium	135-1	468288	460291	458000	462193	1.17	cps
Barium	137-1	799910	787409	782763	790027	1.12	cps
Beryllium	9-1	58	84	38	60	39.18	cps
Bismuth	209-1	1421660	1412234	1408682	1414192	0.47	cps
Bismuth	209-2	1312252	1318456	1288762	1306490	1.20	cps
Bromine	81-1	39239	42882	44410	42177	6.30	cps
Bromine	81-2	5248	5468	5531	5415	2.75	cps
Cadmium	108-1	0	3	13	6	124.93	cps
Cadmium	106-1	1107	887	977	990	11.17	cps
Cadmium	111-1	798	648	711	719	10.45	cps
Calcium	43-1	359338	359224	357784	358782	0.24	cps
Calcium	44-1	6086826	6133780	6196998	6139201	0.90	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1390	1533	1380	1435	5.98	cps
Cobalt	59-2	21178	21753	21669	21533	1.44	cps
Copper	63-2	1690	1497	1500	1562	7.08	cps
Dysprosium	156-1	60	70	73	68	10.24	cps
Dysprosium	156-2	83	60	50	64	26.54	cps
Erbium	164-1	90	93	50	78	31.00	cps
Erbium	164-2	47	63	40	50	24.03	cps
Gadolinium	160-1	57	47	93	66	37.47	cps
Gadolinium	160-2	190	157	207	184	13.80	cps
Holmium	165-1	2762210	2773114	2769053	2768126	0.20	cps
Holmium	165-2	2159020	2170112	2084471	2137868	2.18	cps
Indium	115-1	2488087	2446319	2394476	2442961	1.92	cps
Indium	115-2	857836	848593	848587	851672	0.63	cps
Iron	56-2	11669511	11644087	11695794	11669797	0.22	cps
Iron	57-2	280277	280000	280772	280350	0.14	cps
Iron	54-2	604463	602564	596906	601311	0.65	cps
Krypton	83-1	270	323	247	280	14.04	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01DUP Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425DUP Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:12:44 DataFile Name : 044SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	793	883	817	831	5.62	cps
Lead	207-1	657	640	587	628	5.82	cps
Lead	208-1	3107	3277	3057	3147	3.67	cps
Lithium	6-1	362743	361672	373098	365838	1.72	cps
Magnesium	24-2	1604919	1578113	1549315	1577449	1.76	cps
Manganese	55-2	870987	848495	857479	858987	1.32	cps
Molybdenum	94-1	25412	25596	24641	25216	2.01	cps
Molybdenum	95-1	44390	43598	42789	43593	1.84	cps
Molybdenum	96-1	46674	46403	47022	46700	0.66	cps
Molybdenum	97-1	26868	27516	26644	27009	1.68	cps
Molybdenum	98-1	69471	70271	69334	69692	0.73	cps
Neodymium	150-1	73	110	77	87	23.40	cps
Neodymium	150-2	70	33	70	58	36.64	cps
Nickel	60-2	8156	7819	8029	8001	2.13	cps
Phosphorus	31-2	2224	1963	1997	2061	6.86	cps
Potassium	39-2	1922108	1897530	1879430	1899689	1.13	cps
Rhodium	103-1	2349398	2341047	2358066	2349504	0.36	cps
Rhodium	103-2	1282209	1284870	1291025	1286035	0.35	cps
Scandium	45-1	1408064	1432798	1430458	1423773	0.96	cps
Scandium	45-2	119608	117371	115289	117423	1.84	cps
Selenium	82-1	171	106	240	172	38.70	cps
Selenium	77-2	3	7	3	4	43.40	cps
Selenium	78-2	620	593	527	580	8.29	cps
Silicon	28-1	44192929	43671843	43397258	43754010	0.92	cps
Silver	107-1	100	97	103	100	3.33	cps
Silver	109-1	103	67	73	81	24.08	cps
Sodium	23-2	2032977	2005969	1977458	2005468	1.38	cps
Strontium	86-1	429394	424797	415673	423288	1.65	cps
Strontium	88-1	4095297	4018770	3998137	4037401	1.27	cps
Sulfur	34-1	291262	294113	287192	290856	1.20	cps
Terbium	159-1	2870628	2870966	2921983	2887859	1.02	cps
Terbium	159-2	2135233	2071157	2084003	2096798	1.62	cps
Thallium	203-1	837	757	793	796	5.03	cps
Thallium	205-1	2070	2070	1927	2022	4.09	cps
Tin	118-1	1520	1483	1533	1512	1.71	cps
Titanium	47-1	1533	1373	1347	1418	7.12	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01DUP Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425DUP Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:12:44 DataFile Name : 044SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	193	193	180	189	4.08	cps
Vanadium	51-2	1043	1007	1010	1020	1.99	cps
Yttrium	89-1	4531940	4357133	4429922	4439665	1.98	cps
Yttrium	89-2	1137392	1135988	1140578	1137986	0.21	cps
Zinc	66-2	2250	2274	2137	2220	3.29	cps
Zirconium	90-1	387	420	433	413	5.82	cps
Zirconium	91-1	83	83	77	81	4.74	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01LX5 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425L Dilution Factor : 5
Date & Time Acquired : 2025-06-11 20:16:03 DataFile Name : 045SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1210	1316	1381	1302	6.63	cps
Antimony	121-1	330	300	317	316	4.76	cps
Arsenic	75-2	53	37	40	43	20.34	cps
Barium	135-1	83436	83506	83593	83512	0.09	cps
Barium	137-1	142325	145220	143085	143543	1.05	cps
Beryllium	9-1	54	44	40	46	15.12	cps
Bismuth	209-1	1331130	1324569	1315859	1323853	0.58	cps
Bismuth	209-2	1222172	1212520	1225181	1219957	0.54	cps
Bromine	81-1	26945	26614	26581	26713	0.75	cps
Bromine	81-2	1500	1547	1460	1502	2.89	cps
Cadmium	108-1	10	10	13	11	17.30	cps
Cadmium	106-1	880	937	910	909	3.12	cps
Cadmium	111-1	626	679	641	648	4.21	cps
Calcium	43-1	64296	66277	65280	65284	1.52	cps
Calcium	44-1	1077621	1077636	1058498	1071252	1.03	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1030	973	1003	1002	2.83	cps
Cobalt	59-2	3947	3894	4131	3991	3.11	cps
Copper	63-2	1270	1117	1280	1222	7.49	cps
Dysprosium	156-1	0	10	13	8	89.21	cps
Dysprosium	156-2	13	13	13	13	0.00	cps
Erbium	164-1	10	27	47	28	66.09	cps
Erbium	164-2	23	13	40	26	52.73	cps
Gadolinium	160-1	27	23	23	24	7.89	cps
Gadolinium	160-2	133	140	150	141	5.94	cps
Holmium	165-1	2558140	2538208	2567729	2554692	0.59	cps
Holmium	165-2	1977327	1969513	1974504	1973781	0.20	cps
Indium	115-1	2286746	2214285	2285205	2262079	1.83	cps
Indium	115-2	791589	794980	783601	790057	0.74	cps
Iron	56-2	2133251	2085945	2140059	2119752	1.39	cps
Iron	57-2	52067	50688	52538	51764	1.86	cps
Iron	54-2	111187	109021	109831	110013	0.99	cps
Krypton	83-1	260	287	230	259	10.95	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01LX5 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425L Dilution Factor : 5
Date & Time Acquired : 2025-06-11 20:16:03 DataFile Name : 045SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	403	400	390	398	1.74	cps
Lead	207-1	390	340	400	377	8.53	cps
Lead	208-1	1583	1557	1557	1566	0.98	cps
Lithium	6-1	336061	334685	334997	335247	0.22	cps
Magnesium	24-2	260006	257299	258446	258583	0.53	cps
Manganese	55-2	157142	155923	157253	156773	0.47	cps
Molybdenum	94-1	4464	4641	4714	4606	2.79	cps
Molybdenum	95-1	7946	8076	8052	8024	0.86	cps
Molybdenum	96-1	8713	8619	8793	8708	1.00	cps
Molybdenum	97-1	4898	5074	4954	4975	1.81	cps
Molybdenum	98-1	12756	12622	13126	12835	2.03	cps
Neodymium	150-1	33	20	23	26	27.15	cps
Neodymium	150-2	13	10	10	11	17.30	cps
Nickel	60-2	1617	1677	1667	1653	1.94	cps
Phosphorus	31-2	587	740	603	643	13.08	cps
Potassium	39-2	366791	368152	369093	368012	0.31	cps
Rhodium	103-1	2219734	2142244	2177190	2179723	1.78	cps
Rhodium	103-2	1202688	1195773	1192458	1196973	0.44	cps
Scandium	45-1	1334397	1312888	1328119	1325135	0.83	cps
Scandium	45-2	108267	108281	106451	107666	0.98	cps
Selenium	82-1	140	123	164	142	14.34	cps
Selenium	77-2	0	0	7	2	173.21	cps
Selenium	78-2	540	547	607	564	6.51	cps
Silicon	28-1	9080998	9062867	9090317	9078061	0.15	cps
Silver	107-1	53	73	80	69	20.15	cps
Silver	109-1	70	57	57	61	12.59	cps
Sodium	23-2	336883	338307	336141	337110	0.33	cps
Strontium	86-1	76722	76970	74537	76077	1.76	cps
Strontium	88-1	667102	675949	670568	671206	0.66	cps
Sulfur	34-1	127671	128458	127070	127733	0.54	cps
Terbium	159-1	2641774	2683778	2685937	2670496	0.93	cps
Terbium	159-2	1903805	1941297	1969249	1938117	1.69	cps
Thallium	203-1	210	237	237	228	6.76	cps
Thallium	205-1	490	453	477	473	3.92	cps
Tin	118-1	723	693	727	714	2.57	cps
Titanium	47-1	357	353	317	342	6.49	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01LX5 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425L Dilution Factor : 5
Date & Time Acquired : 2025-06-11 20:16:03 DataFile Name : 045SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	63	60	67	63	5.27	cps
Vanadium	51-2	193	177	170	180	6.68	cps
Yttrium	89-1	4022682	4069061	4143137	4078293	1.49	cps
Yttrium	89-2	1059266	1073224	1061296	1064596	0.71	cps
Zinc	66-2	787	590	693	690	14.26	cps
Zirconium	90-1	203	230	270	234	14.31	cps
Zirconium	91-1	30	73	57	53	40.98	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-02 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MS Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:19:24 DataFile Name : 046SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	782687	783691	780612	782330	0.20	cps
Antimony	121-1	2018061	2018934	1988046	2008347	0.88	cps
Arsenic	75-2	270	210	227	236	13.15	cps
Barium	135-1	2686549	2793046	2678884	2719493	2.35	cps
Barium	137-1	4641976	4599967	4603339	4615094	0.51	cps
Beryllium	9-1	293523	291151	292940	292538	0.42	cps
Bismuth	209-1	1420522	1403818	1413396	1412579	0.59	cps
Bismuth	209-2	1290338	1282515	1282661	1285171	0.35	cps
Bromine	81-1	41786	45012	47115	44638	6.01	cps
Bromine	81-2	6031	6321	6295	6216	2.58	cps
Cadmium	108-1	35731	35938	35513	35727	0.59	cps
Cadmium	106-1	53482	52933	51872	52762	1.55	cps
Cadmium	111-1	516708	508412	502441	509187	1.41	cps
Calcium	43-1	880807	885370	875284	880487	0.57	cps
Calcium	44-1	15186450	15380438	14942415	15169768	1.45	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	760987	748565	749414	752988	0.92	cps
Cobalt	59-2	1238364	1334944	1215648	1262985	5.02	cps
Copper	63-2	9239424	9040076	9002266	9093922	1.40	cps
Dysprosium	156-1	60	87	107	84	27.73	cps
Dysprosium	156-2	193	167	207	189	10.78	cps
Erbium	164-1	60	60	80	67	17.32	cps
Erbium	164-2	43	73	60	59	25.53	cps
Gadolinium	160-1	67	93	77	79	17.07	cps
Gadolinium	160-2	160	233	183	192	19.49	cps
Holmium	165-1	2828206	2830207	2858459	2838957	0.60	cps
Holmium	165-2	2125896	2142297	2104403	2124199	0.89	cps
Indium	115-1	2483411	2407156	2432571	2441046	1.59	cps
Indium	115-2	824749	822852	815107	820903	0.62	cps
Iron	56-2	46019031	45764323	45418951	45734102	0.66	cps
Iron	57-2	1096316	1106429	1093369	1098704	0.62	cps
Iron	54-2	2521403	2540084	2531595	2531027	0.37	cps
Krypton	83-1	257	283	303	281	8.33	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-02 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MS Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:19:24 DataFile Name : 046SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	6753581	6853722	6677440	6761581	1.31	cps
Lead	207-1	6063517	6047105	6035813	6048812	0.23	cps
Lead	208-1	26917298	27332703	27643624	27297875	1.33	cps
Lithium	6-1	363837	365346	371053	366745	1.04	cps
Magnesium	24-2	9320756	9334511	9479892	9378386	0.94	cps
Manganese	55-2	7534853	7568748	7341051	7481551	1.64	cps
Molybdenum	94-1	3484994	3458664	3317722	3420460	2.63	cps
Molybdenum	95-1	3835047	3759210	3708254	3767504	1.69	cps
Molybdenum	96-1	4386796	4341187	4231457	4319813	1.85	cps
Molybdenum	97-1	2377254	2298025	2292264	2322514	2.04	cps
Molybdenum	98-1	6210589	6062536	5896930	6056685	2.59	cps
Neodymium	150-1	140	183	140	154	16.20	cps
Neodymium	150-2	17	57	63	46	55.40	cps
Nickel	60-2	313639	309367	313502	312169	0.78	cps
Phosphorus	31-2	1797	1903	1853	1851	2.88	cps
Potassium	39-2	6208040	6090562	6127476	6142026	0.98	cps
Rhodium	103-1	2308641	2272042	2270832	2283838	0.94	cps
Rhodium	103-2	1263166	1258266	1250802	1257411	0.50	cps
Scandium	45-1	1477208	1456168	1410195	1447857	2.37	cps
Scandium	45-2	117079	118537	116407	117341	0.93	cps
Selenium	82-1	45660	45689	45285	45544	0.50	cps
Selenium	77-2	4664	4484	4457	4535	2.48	cps
Selenium	78-2	15939	15855	15849	15881	0.32	cps
Silicon	28-1	41798872	41263100	41681855	41581276	0.68	cps
Silver	107-1	425133	425614	421349	424032	0.55	cps
Silver	109-1	402953	398060	393667	398227	1.17	cps
Sodium	23-2	14154968	14651096	14034430	14280165	2.29	cps
Strontium	86-1	1122694	1111121	1121327	1118381	0.57	cps
Strontium	88-1	10658349	11049105	10548371	10751942	2.45	cps
Sulfur	34-1	301908	305477	303660	303682	0.59	cps
Terbium	159-1	2922471	2964306	2902680	2929819	1.07	cps
Terbium	159-2	2099021	2100911	2086087	2095340	0.39	cps
Thallium	203-1	1495619	1465729	1462853	1474734	1.23	cps
Thallium	205-1	3871520	3920345	3996056	3929307	1.60	cps
Tin	118-1	1399221	1403874	1388111	1397069	0.58	cps
Titanium	47-1	1570	1477	1630	1559	4.96	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-02 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MS Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:19:24 DataFile Name : 046SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	5052025	5099763	5053875	5068554	0.53	cps
Vanadium	51-2	678512	681875	677113	679167	0.36	cps
Yttrium	89-1	4567723	4404197	4453136	4475019	1.88	cps
Yttrium	89-2	1134638	1125148	1115177	1124988	0.87	cps
Zinc	66-2	1771095	1783661	1783073	1779277	0.40	cps
Zirconium	90-1	3700798	3487985	3504008	3564264	3.33	cps
Zirconium	91-1	730035	720002	721543	723860	0.75	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-03 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MSD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:22:25 DataFile Name : 047SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	774513	775079	781845	777146	0.52	cps
Antimony	121-1	2004828	1998514	1970491	1991278	0.92	cps
Arsenic	75-2	220	217	240	226	5.59	cps
Barium	135-1	2681685	2722920	2729700	2711435	0.96	cps
Barium	137-1	4678200	4616236	4562859	4619098	1.25	cps
Beryllium	9-1	290258	287340	288169	288589	0.52	cps
Bismuth	209-1	1429932	1395591	1409795	1411773	1.22	cps
Bismuth	209-2	1280393	1293572	1297158	1290374	0.68	cps
Bromine	81-1	41672	45363	46664	44566	5.81	cps
Bromine	81-2	5915	6018	6125	6019	1.75	cps
Cadmium	108-1	35975	35670	35189	35611	1.11	cps
Cadmium	106-1	52434	51802	52184	52140	0.61	cps
Cadmium	111-1	507211	504602	509021	506945	0.44	cps
Calcium	43-1	870277	869956	874364	871532	0.28	cps
Calcium	44-1	14759070	14938916	14402297	14700094	1.86	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	731826	743041	728387	734418	1.04	cps
Cobalt	59-2	1208721	1222648	1198879	1210082	0.99	cps
Copper	63-2	9204890	9173022	8896346	9091419	1.87	cps
Dysprosium	156-1	83	100	93	92	9.10	cps
Dysprosium	156-2	123	187	213	174	26.50	cps
Erbium	164-1	77	70	80	76	6.74	cps
Erbium	164-2	70	70	43	61	25.20	cps
Gadolinium	160-1	87	87	127	100	23.09	cps
Gadolinium	160-2	157	190	140	162	15.69	cps
Holmium	165-1	2883069	2822658	2879428	2861718	1.18	cps
Holmium	165-2	2110128	2098798	2079754	2096227	0.73	cps
Indium	115-1	2425123	2387386	2413740	2408750	0.80	cps
Indium	115-2	834378	829211	827913	830501	0.41	cps
Iron	56-2	46730561	46204621	45176634	46037272	1.72	cps
Iron	57-2	1096540	1091176	1088664	1092126	0.37	cps
Iron	54-2	2498066	2510814	2524628	2511169	0.53	cps
Krypton	83-1	303	293	263	287	7.26	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-03 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MSD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:22:25 DataFile Name : 047SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	6812676	6731271	6627704	6723883	1.38	cps
Lead	207-1	5961998	5991570	5827885	5927151	1.47	cps
Lead	208-1	27253006	27204621	27008871	27155499	0.48	cps
Lithium	6-1	369712	361797	365692	365734	1.08	cps
Magnesium	24-2	9326859	9298894	9250109	9291954	0.42	cps
Manganese	55-2	7641707	7447579	7444700	7511328	1.50	cps
Molybdenum	94-1	3487492	3455497	3363658	3435549	1.87	cps
Molybdenum	95-1	3694027	3735642	3716662	3715444	0.56	cps
Molybdenum	96-1	4338561	4207659	4245259	4263827	1.58	cps
Molybdenum	97-1	2355024	2350576	2307478	2337692	1.12	cps
Molybdenum	98-1	5869600	6028320	5975337	5957752	1.36	cps
Neodymium	150-1	147	133	153	144	7.05	cps
Neodymium	150-2	53	60	60	58	6.67	cps
Nickel	60-2	309484	313386	308603	310491	0.82	cps
Phosphorus	31-2	1833	1917	1860	1870	2.28	cps
Potassium	39-2	6071369	6135115	6130688	6112391	0.58	cps
Rhodium	103-1	2354557	2350872	2293352	2332927	1.47	cps
Rhodium	103-2	1255899	1253893	1257379	1255724	0.14	cps
Scandium	45-1	1435075	1439153	1392766	1422331	1.81	cps
Scandium	45-2	116918	116011	116491	116473	0.39	cps
Selenium	82-1	45176	45213	45107	45165	0.12	cps
Selenium	77-2	4341	4214	4617	4391	4.70	cps
Selenium	78-2	15568	15615	15291	15492	1.13	cps
Silicon	28-1	41470759	40681374	41593065	41248400	1.20	cps
Silver	107-1	417255	417779	419157	418064	0.24	cps
Silver	109-1	392393	391078	389018	390830	0.44	cps
Sodium	23-2	14246286	14400352	14286591	14311076	0.56	cps
Strontium	86-1	1127133	1103194	1101795	1110707	1.28	cps
Strontium	88-1	10614331	10774347	10487948	10625542	1.35	cps
Sulfur	34-1	296283	296084	294305	295557	0.37	cps
Terbium	159-1	2928574	2834444	2944496	2902505	2.05	cps
Terbium	159-2	2053905	2107092	2136628	2099208	2.00	cps
Thallium	203-1	1462753	1474996	1432391	1456713	1.51	cps
Thallium	205-1	4000896	4078576	3945114	4008195	1.67	cps
Tin	118-1	1398003	1365724	1386185	1383304	1.18	cps
Titanium	47-1	1527	1513	2395	1812	27.88	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-03 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MSD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:22:25 DataFile Name : 047SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	4975669	4906508	5008666	4963614	1.05	cps
Vanadium	51-2	668251	669970	664569	667597	0.41	cps
Yttrium	89-1	4489228	4389460	4417695	4432128	1.16	cps
Yttrium	89-2	1140352	1122340	1133775	1132156	0.81	cps
Zinc	66-2	1793174	1774919	1733587	1767227	1.73	cps
Zirconium	90-1	3504169	3512590	3574528	3530429	1.09	cps
Zirconium	91-1	721037	717488	715815	718113	0.37	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01A Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425A Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:25:22 DataFile Name : 048SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	782332	779336	772063	777910	0.68	cps
Antimony	121-1	1980155	2013676	1984884	1992905	0.91	cps
Arsenic	75-2	240	190	200	210	12.60	cps
Barium	135-1	2776242	2746080	2718756	2747026	1.05	cps
Barium	137-1	4740310	4597295	4671898	4669835	1.53	cps
Beryllium	9-1	285377	288588	282668	285544	1.04	cps
Bismuth	209-1	1439021	1419725	1414065	1424270	0.92	cps
Bismuth	209-2	1304346	1306875	1274608	1295276	1.39	cps
Bromine	81-1	42070	46356	47523	45316	6.34	cps
Bromine	81-2	6171	6368	6185	6241	1.76	cps
Cadmium	108-1	35894	35694	35935	35841	0.36	cps
Cadmium	106-1	52207	52388	52093	52229	0.28	cps
Cadmium	111-1	504950	510203	506560	507238	0.53	cps
Calcium	43-1	858966	873840	872906	868571	0.96	cps
Calcium	44-1	14981236	14928177	14660002	14856472	1.16	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	753533	748122	735502	745719	1.24	cps
Cobalt	59-2	1215032	1212789	1215018	1214280	0.11	cps
Copper	63-2	9246499	9082033	9053232	9127255	1.14	cps
Dysprosium	156-1	107	83	80	90	16.15	cps
Dysprosium	156-2	157	190	190	179	10.76	cps
Erbium	164-1	87	80	70	79	10.64	cps
Erbium	164-2	40	57	47	48	17.56	cps
Gadolinium	160-1	90	77	53	73	25.31	cps
Gadolinium	160-2	167	157	167	163	3.53	cps
Holmium	165-1	2836460	2736646	2814442	2795849	1.88	cps
Holmium	165-2	2164598	2160057	2089157	2137938	1.98	cps
Indium	115-1	2479929	2384730	2351478	2405379	2.77	cps
Indium	115-2	832213	835092	816288	827864	1.22	cps
Iron	56-2	46860061	45794621	45577831	46077504	1.49	cps
Iron	57-2	1119663	1099473	1103288	1107475	0.97	cps
Iron	54-2	2600525	2499237	2546245	2548669	1.99	cps
Krypton	83-1	300	243	363	302	19.86	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01A Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425A Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:25:22 DataFile Name : 048SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	6927022	6941978	6786147	6885049	1.25	cps
Lead	207-1	5899958	5980698	5962733	5947796	0.71	cps
Lead	208-1	27376043	27564675	27100416	27347045	0.85	cps
Lithium	6-1	366455	359674	356438	360856	1.42	cps
Magnesium	24-2	9120226	8953308	9115255	9062930	1.05	cps
Manganese	55-2	7573732	7483516	7489769	7515672	0.67	cps
Molybdenum	94-1	3538521	3423616	3466728	3476288	1.67	cps
Molybdenum	95-1	3764865	3756326	3755998	3759063	0.13	cps
Molybdenum	96-1	4335935	4116244	4245866	4232682	2.61	cps
Molybdenum	97-1	2354269	2315093	2313961	2327774	0.99	cps
Molybdenum	98-1	5963997	6215405	6030998	6070133	2.14	cps
Neodymium	150-1	133	113	130	126	8.53	cps
Neodymium	150-2	37	70	50	52	32.12	cps
Nickel	60-2	315748	315631	312793	314724	0.53	cps
Phosphorus	31-2	1827	1850	1903	1860	2.11	cps
Potassium	39-2	6148072	6116206	6114127	6126135	0.31	cps
Rhodium	103-1	2298702	2273881	2293324	2288636	0.57	cps
Rhodium	103-2	1273215	1271990	1244625	1263277	1.28	cps
Scandium	45-1	1491287	1403405	1404299	1432997	3.52	cps
Scandium	45-2	118140	114975	116743	116620	1.36	cps
Selenium	82-1	45494	46041	45989	45842	0.66	cps
Selenium	77-2	4647	4557	4701	4635	1.56	cps
Selenium	78-2	15285	15318	15431	15345	0.50	cps
Silicon	28-1	41336815	41949711	41264272	41516933	0.91	cps
Silver	107-1	420546	413551	421849	418649	1.07	cps
Silver	109-1	389012	396531	392111	392551	0.96	cps
Sodium	23-2	14251756	14059924	13858679	14056786	1.40	cps
Strontium	86-1	1127956	1114573	1123116	1121882	0.60	cps
Strontium	88-1	10812461	10784849	10831013	10809441	0.21	cps
Sulfur	34-1	296931	299014	299771	298572	0.49	cps
Terbium	159-1	2967311	2869633	2921945	2919629	1.67	cps
Terbium	159-2	2107473	2128108	2079339	2104974	1.16	cps
Thallium	203-1	1473916	1462664	1458720	1465100	0.54	cps
Thallium	205-1	4067177	3962758	3892475	3974137	2.21	cps
Tin	118-1	1386811	1380534	1385903	1384416	0.25	cps
Titanium	47-1	1497	1643	1557	1566	4.71	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-01A Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425A Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:25:22 DataFile Name : 048SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	5047913	5093780	5035578	5059090	0.61	cps
Vanadium	51-2	684584	671777	669022	675128	1.23	cps
Yttrium	89-1	4393275	4464335	4542666	4466759	1.67	cps
Yttrium	89-2	1138685	1137572	1119608	1131955	0.95	cps
Zinc	66-2	1738479	1807360	1769725	1771855	1.95	cps
Zirconium	90-1	3572503	3573708	3588285	3578165	0.25	cps
Zirconium	91-1	723932	713468	729349	722250	1.12	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-05 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:28:23 DataFile Name : 049SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	115425	114656	113984	114688	0.63	cps
Antimony	121-1	16733	16853	16576	16721	0.83	cps
Arsenic	75-2	293	223	280	266	14.00	cps
Barium	135-1	285729	280236	280591	282185	1.09	cps
Barium	137-1	487775	476882	479746	481468	1.17	cps
Beryllium	9-1	75	65	55	65	15.20	cps
Bismuth	209-1	1450126	1428543	1394951	1424540	1.95	cps
Bismuth	209-2	1304236	1305797	1285254	1298429	0.88	cps
Bromine	81-1	37578	40536	41873	39995	5.50	cps
Bromine	81-2	4761	4848	5018	4875	2.68	cps
Cadmium	108-1	27	30	7	21	59.77	cps
Cadmium	106-1	1020	993	920	978	5.30	cps
Cadmium	111-1	775	711	693	726	5.98	cps
Calcium	43-1	1488921	1456598	1466085	1470535	1.13	cps
Calcium	44-1	24085492	23421710	23501368	23669523	1.53	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1143	1060	1087	1097	3.88	cps
Cobalt	59-2	6275	6575	6141	6330	3.51	cps
Copper	63-2	2837	2740	2500	2692	6.44	cps
Dysprosium	156-1	13	3	7	8	65.47	cps
Dysprosium	156-2	20	27	33	27	24.99	cps
Erbium	164-1	27	27	23	26	7.55	cps
Erbium	164-2	33	23	20	26	27.15	cps
Gadolinium	160-1	20	13	10	14	35.26	cps
Gadolinium	160-2	120	150	130	133	11.46	cps
Holmium	165-1	2831027	2878380	2838614	2849340	0.89	cps
Holmium	165-2	2138565	2100658	2159005	2132743	1.39	cps
Indium	115-1	2556853	2526335	2450623	2511270	2.18	cps
Indium	115-2	848268	842523	849495	846762	0.44	cps
Iron	56-2	2665095	2663991	2586232	2638440	1.71	cps
Iron	57-2	91973	90588	90930	91164	0.79	cps
Iron	54-2	138709	137168	138810	138229	0.67	cps
Krypton	83-1	317	277	233	276	15.12	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-05 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:28:23 DataFile Name : 049SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	827	840	847	838	1.22	cps
Lead	207-1	780	690	647	706	9.64	cps
Lead	208-1	3300	3237	3117	3218	2.89	cps
Lithium	6-1	360025	355790	356469	357428	0.64	cps
Magnesium	24-2	723752	721026	714339	719706	0.67	cps
Manganese	55-2	352389	350033	348544	350322	0.55	cps
Molybdenum	94-1	84224	83305	82950	83493	0.79	cps
Molybdenum	95-1	144368	144883	143857	144369	0.36	cps
Molybdenum	96-1	155832	155074	154311	155072	0.49	cps
Molybdenum	97-1	91270	90918	90492	90893	0.43	cps
Molybdenum	98-1	232620	230612	232148	231794	0.45	cps
Neodymium	150-1	13	20	3	12	68.66	cps
Neodymium	150-2	3	3	20	9	108.30	cps
Nickel	60-2	7692	7475	7095	7421	4.07	cps
Phosphorus	31-2	527	480	490	499	4.93	cps
Potassium	39-2	5305495	5282240	5123515	5237083	1.89	cps
Rhodium	103-1	2348985	2352995	2411427	2371136	1.47	cps
Rhodium	103-2	1294153	1268090	1280420	1280888	1.02	cps
Scandium	45-1	1445006	1447480	1433472	1441986	0.52	cps
Scandium	45-2	115957	116242	114821	115673	0.65	cps
Selenium	82-1	156	240	261	219	25.19	cps
Selenium	77-2	3	7	7	6	34.70	cps
Selenium	78-2	517	540	503	520	3.57	cps
Silicon	28-1	11545245	11473173	11560764	11526394	0.41	cps
Silver	107-1	273	227	190	230	18.16	cps
Silver	109-1	200	167	190	186	9.22	cps
Sodium	23-2	6251276	6433217	6156257	6280250	2.24	cps
Strontium	86-1	1110922	1115095	1110279	1112099	0.24	cps
Strontium	88-1	10766899	10825864	10794629	10795797	0.27	cps
Sulfur	34-1	917932	907036	901414	908794	0.92	cps
Terbium	159-1	2882870	2882983	2848227	2871360	0.70	cps
Terbium	159-2	2087327	2150342	2099036	2112235	1.59	cps
Thallium	203-1	707	637	590	644	9.11	cps
Thallium	205-1	1653	1523	1457	1545	6.48	cps
Tin	118-1	2547	2624	2564	2578	1.56	cps
Titanium	47-1	187	260	250	232	17.12	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-05 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:28:23 DataFile Name : 049SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	340	357	380	359	5.60	cps
Vanadium	51-2	4524	4347	4354	4408	2.27	cps
Yttrium	89-1	4418364	4461352	4458678	4446131	0.54	cps
Yttrium	89-2	1149933	1127777	1127953	1135221	1.12	cps
Zinc	66-2	987	903	883	924	5.93	cps
Zirconium	90-1	1490	1470	1463	1475	0.94	cps
Zirconium	91-1	330	320	300	317	4.82	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-06 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425-FD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:31:40 DataFile Name : 050SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	118531	118110	117827	118156	0.30	cps
Antimony	121-1	16840	16780	16870	16830	0.27	cps
Arsenic	75-2	297	213	267	259	16.30	cps
Barium	135-1	272280	270086	267024	269797	0.98	cps
Barium	137-1	470151	466626	464375	467050	0.62	cps
Beryllium	9-1	28	51	38	39	29.66	cps
Bismuth	209-1	1433668	1411897	1396378	1413981	1.32	cps
Bismuth	209-2	1284660	1279237	1288113	1284004	0.35	cps
Bromine	81-1	37167	39676	40753	39199	4.69	cps
Bromine	81-2	4737	4741	4754	4744	0.19	cps
Cadmium	108-1	20	20	43	28	48.49	cps
Cadmium	106-1	1073	1050	920	1014	8.14	cps
Cadmium	111-1	774	771	690	745	6.37	cps
Calcium	43-1	1482076	1455392	1468101	1468523	0.91	cps
Calcium	44-1	24370958	23193515	23549820	23704764	2.55	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	977	1053	1093	1041	5.69	cps
Cobalt	59-2	5985	5744	5738	5822	2.41	cps
Copper	63-2	2627	2347	2324	2432	6.94	cps
Dysprosium	156-1	13	0	10	8	89.21	cps
Dysprosium	156-2	30	20	27	26	19.92	cps
Erbium	164-1	23	47	27	32	39.17	cps
Erbium	164-2	10	23	17	17	39.99	cps
Gadolinium	160-1	23	20	30	24	20.83	cps
Gadolinium	160-2	110	117	140	122	12.89	cps
Holmium	165-1	2892982	2800622	2841626	2845076	1.63	cps
Holmium	165-2	2117418	2130038	2131900	2126452	0.37	cps
Indium	115-1	2445460	2449280	2512814	2469185	1.53	cps
Indium	115-2	846323	852624	841420	846789	0.66	cps
Iron	56-2	2436741	2372001	2402362	2403702	1.35	cps
Iron	57-2	86722	85203	86377	86101	0.92	cps
Iron	54-2	125412	124285	125800	125166	0.63	cps
Krypton	83-1	283	307	290	293	4.10	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-06 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425-FD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:31:40 DataFile Name : 050SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	2937	2840	2584	2787	6.55	cps
Lead	207-1	2220	2137	2227	2195	2.29	cps
Lead	208-1	10482	10505	10122	10369	2.07	cps
Lithium	6-1	359931	355077	356419	357142	0.70	cps
Magnesium	24-2	657157	666641	662117	661972	0.72	cps
Manganese	55-2	323345	315689	316933	318656	1.29	cps
Molybdenum	94-1	85702	82927	83372	84000	1.77	cps
Molybdenum	95-1	148321	147893	145927	147381	0.87	cps
Molybdenum	96-1	159954	158755	155428	158046	1.48	cps
Molybdenum	97-1	94241	93322	91957	93173	1.23	cps
Molybdenum	98-1	239884	235725	231911	235840	1.69	cps
Neodymium	150-1	17	17	30	21	36.45	cps
Neodymium	150-2	10	3	3	6	69.34	cps
Nickel	60-2	7242	7168	7245	7218	0.60	cps
Phosphorus	31-2	440	413	527	460	12.88	cps
Potassium	39-2	5299381	5351034	5313917	5321444	0.50	cps
Rhodium	103-1	2404469	2409442	2278123	2364011	3.15	cps
Rhodium	103-2	1265367	1289074	1271387	1275276	0.97	cps
Scandium	45-1	1433163	1431619	1403564	1422782	1.17	cps
Scandium	45-2	116118	113589	116575	115428	1.39	cps
Selenium	82-1	187	229	205	207	10.18	cps
Selenium	77-2	7	13	13	11	34.61	cps
Selenium	78-2	470	563	570	534	10.46	cps
Silicon	28-1	11310296	11187427	11130767	11209496	0.82	cps
Silver	107-1	110	103	107	107	3.13	cps
Silver	109-1	100	90	120	103	14.78	cps
Sodium	23-2	6177393	6158187	6253449	6196343	0.81	cps
Strontium	86-1	1108095	1089985	1083740	1093940	1.16	cps
Strontium	88-1	10764719	10326539	10359888	10483715	2.33	cps
Sulfur	34-1	869112	861163	863947	864741	0.47	cps
Terbium	159-1	2980004	2969939	2840922	2930289	2.65	cps
Terbium	159-2	2111819	2162852	2073019	2115897	2.13	cps
Thallium	203-1	423	383	390	399	5.37	cps
Thallium	205-1	883	857	807	849	4.58	cps
Tin	118-1	2077	2330	2227	2211	5.76	cps
Titanium	47-1	230	193	247	223	12.22	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-06 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425-FD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:31:40 DataFile Name : 050SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	283	273	363	307	16.09	cps
Vanadium	51-2	4731	4767	4747	4749	0.39	cps
Yttrium	89-1	4656748	4592925	4369507	4539727	3.32	cps
Yttrium	89-2	1135991	1145094	1133817	1138301	0.53	cps
Zinc	66-2	1060	1043	977	1027	4.30	cps
Zirconium	90-1	547	540	593	560	5.19	cps
Zirconium	91-1	170	117	130	139	19.98	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV03 Instrumnet Name : P7
Client Sample ID : CCV03 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:35:01 DataFile Name : 051CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4617682	4678491	4678221	4658131	0.75	cps
Antimony	121-1	1896521	1843666	1896271	1878819	1.62	cps
Arsenic	75-2	103756	106616	104918	105097	1.37	cps
Barium	135-1	2381468	2387475	2361809	2376917	0.56	cps
Barium	137-1	4046646	4089079	4076071	4070598	0.53	cps
Beryllium	9-1	269401	274773	276243	273472	1.32	cps
Bismuth	209-1	1249740	1265902	1263586	1259743	0.69	cps
Bismuth	209-2	1136627	1136893	1142499	1138673	0.29	cps
Bromine	81-1	22714	22140	22915	22590	1.78	cps
Bromine	81-2	790	697	683	723	8.03	cps
Cadmium	108-1	33709	33536	33896	33714	0.54	cps
Cadmium	106-1	48113	49250	48738	48700	1.17	cps
Cadmium	111-1	467660	474482	468688	470276	0.78	cps
Calcium	43-1	2711690	2731844	2646271	2696602	1.66	cps
Calcium	44-1	43563661	45280146	43999406	44281071	2.01	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	726331	733919	732123	730791	0.54	cps
Cobalt	59-2	1142864	1135681	1133536	1137360	0.43	cps
Copper	63-2	8607752	8697729	8524413	8609965	1.01	cps
Dysprosium	156-1	140	117	123	127	9.49	cps
Dysprosium	156-2	163	153	190	169	11.22	cps
Erbium	164-1	217	263	230	237	10.16	cps
Erbium	164-2	137	150	173	153	12.10	cps
Gadolinium	160-1	90	133	130	118	20.48	cps
Gadolinium	160-2	183	157	227	189	18.70	cps
Holmium	165-1	2611600	2622859	2585477	2606645	0.74	cps
Holmium	165-2	1993820	1955585	1984423	1977943	1.01	cps
Indium	115-1	2127247	2173700	2146152	2149033	1.09	cps
Indium	115-2	748302	747498	748799	748200	0.09	cps
Iron	56-2	191958297	195029637	194203857	193730597	0.82	cps
Iron	57-2	4827220	4879463	4899167	4868616	0.76	cps
Iron	54-2	10475702	10732254	10692655	10633537	1.30	cps
Krypton	83-1	293	277	287	286	2.94	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV03 Instrumnet Name : P7
Client Sample ID : CCV03 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:35:01 DataFile Name : 051CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	6709129	6436945	6455996	6534023	2.33	cps
Lead	207-1	5611331	5832062	5585746	5676380	2.39	cps
Lead	208-1	26051509	26160944	25657422	25956625	1.02	cps
Lithium	6-1	328631	335629	333072	332444	1.07	cps
Magnesium	24-2	37351604	36933364	38170070	37485012	1.68	cps
Manganese	55-2	6282966	6282671	6437101	6334246	1.41	cps
Molybdenum	94-1	6940296	6916136	6927040	6927824	0.17	cps
Molybdenum	95-1	9871975	10077359	9624667	9858000	2.30	cps
Molybdenum	96-1	10839879	10727310	10904789	10823993	0.83	cps
Molybdenum	97-1	5986687	6259471	6291721	6179293	2.71	cps
Molybdenum	98-1	15954160	16011465	15793288	15919638	0.71	cps
Neodymium	150-1	130	140	157	142	9.47	cps
Neodymium	150-2	30	43	37	37	18.18	cps
Nickel	60-2	287857	290218	289275	289117	0.41	cps
Phosphorus	31-2	48881	47935	49413	48743	1.54	cps
Potassium	39-2	23316123	23873749	24452015	23880629	2.38	cps
Rhodium	103-1	2056387	2040995	2009128	2035504	1.18	cps
Rhodium	103-2	1115847	1137383	1124928	1126053	0.96	cps
Scandium	45-1	1293186	1308055	1296364	1299202	0.60	cps
Scandium	45-2	107965	106613	107878	107485	0.70	cps
Selenium	82-1	40423	40795	40788	40669	0.52	cps
Selenium	77-2	3971	3977	4144	4031	2.44	cps
Selenium	78-2	12946	13933	13696	13525	3.81	cps
Silicon	28-1	3800380	3883638	3799460	3827826	1.26	cps
Silver	107-1	2368620	2411306	2368719	2382882	1.03	cps
Silver	109-1	2240220	2258447	2328590	2275752	2.05	cps
Sodium	23-2	51438438	52448681	53526769	52471296	1.99	cps
Strontium	86-1	590571	597628	592986	593728	0.60	cps
Strontium	88-1	5640359	5748759	5637541	5675553	1.12	cps
Sulfur	34-1	273012	270712	264474	269399	1.64	cps
Terbium	159-1	2657697	2740034	2691007	2696246	1.54	cps
Terbium	159-2	1935319	1933875	1924618	1931271	0.30	cps
Thallium	203-1	1430207	1426930	1397491	1418209	1.27	cps
Thallium	205-1	3851822	3865275	3773681	3830260	1.29	cps
Tin	118-1	1629896	1627287	1642480	1633221	0.50	cps
Titanium	47-1	2519694	2513786	2515415	2516298	0.12	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV03 Instrumnet Name : P7
Client Sample ID : CCV03 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:35:01 DataFile Name : 051CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	4902992	4943309	4947236	4931179	0.50	cps
Vanadium	51-2	634006	641572	648235	641271	1.11	cps
Yttrium	89-1	4093237	4116614	4073527	4094459	0.53	cps
Yttrium	89-2	1043676	1044907	1043337	1043973	0.08	cps
Zinc	66-2	1555965	1578201	1570472	1568213	0.72	cps
Zirconium	90-1	3445783	3513555	3476961	3478766	0.98	cps
Zirconium	91-1	704795	708599	702243	705213	0.45	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB03 Instrumnet Name : P7
Client Sample ID : CCB03 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:41:07 DataFile Name : 052CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	114	167	170	150	21.14	cps
Antimony	121-1	160	160	177	166	5.81	cps
Arsenic	75-2	3	3	7	4	43.40	cps
Barium	135-1	13	27	27	22	34.66	cps
Barium	137-1	77	47	70	64	24.44	cps
Beryllium	9-1	43	37	40	40	8.10	cps
Bismuth	209-1	1294263	1298465	1283888	1292205	0.58	cps
Bismuth	209-2	1201034	1186219	1190803	1192685	0.64	cps
Bromine	81-1	19947	19496	19369	19604	1.55	cps
Bromine	81-2	327	343	353	341	3.95	cps
Cadmium	108-1	3	7	7	6	34.70	cps
Cadmium	106-1	713	880	880	824	11.67	cps
Cadmium	111-1	530	645	638	604	10.62	cps
Calcium	43-1	310	283	223	272	16.31	cps
Calcium	44-1	8736	8269	8643	8549	2.89	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	747	917	813	826	10.38	cps
Cobalt	59-2	53	27	43	41	32.76	cps
Copper	63-2	1313	1350	1180	1281	6.98	cps
Dysprosium	156-1	3	10	3	6	69.34	cps
Dysprosium	156-2	0	0	0	0	0.00	cps
Erbium	164-1	7	33	10	17	87.16	cps
Erbium	164-2	13	0	7	7	99.98	cps
Gadolinium	160-1	10	13	0	8	89.21	cps
Gadolinium	160-2	117	87	130	111	19.97	cps
Holmium	165-1	2503143	2478628	2512595	2498122	0.70	cps
Holmium	165-2	1946108	1912400	1898941	1919150	1.27	cps
Indium	115-1	2155312	2192778	2211854	2186648	1.32	cps
Indium	115-2	762913	771171	760855	764980	0.71	cps
Iron	56-2	16519	16583	16626	16576	0.32	cps
Iron	57-2	1410	1497	1550	1486	4.76	cps
Iron	54-2	1983	2147	2030	2053	4.10	cps
Krypton	83-1	300	307	303	303	1.10	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB03 Instrumnet Name : P7
Client Sample ID : CCB03 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:41:07 DataFile Name : 052CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	367	400	397	388	4.73	cps
Lead	207-1	330	363	323	339	6.32	cps
Lead	208-1	1417	1487	1410	1438	2.95	cps
Lithium	6-1	330039	331576	335872	332496	0.91	cps
Magnesium	24-2	380	320	440	380	15.79	cps
Manganese	55-2	820	760	883	821	7.51	cps
Molybdenum	94-1	223	227	257	236	7.79	cps
Molybdenum	95-1	233	237	190	220	11.83	cps
Molybdenum	96-1	280	297	263	280	5.95	cps
Molybdenum	97-1	177	170	143	163	10.80	cps
Molybdenum	98-1	330	440	317	362	18.69	cps
Neodymium	150-1	3	0	0	1	173.21	cps
Neodymium	150-2	3	3	7	4	43.40	cps
Nickel	60-2	250	283	247	260	7.80	cps
Phosphorus	31-2	337	303	347	329	6.90	cps
Potassium	39-2	51758	51430	52095	51761	0.64	cps
Rhodium	103-1	2104132	2106673	2050800	2087202	1.51	cps
Rhodium	103-2	1165097	1159130	1159356	1161194	0.29	cps
Scandium	45-1	1259558	1240217	1242060	1247278	0.86	cps
Scandium	45-2	105565	104612	104468	104881	0.57	cps
Selenium	82-1	136	114	88	113	21.21	cps
Selenium	77-2	0	7	3	3	100.05	cps
Selenium	78-2	537	550	603	563	6.26	cps
Silicon	28-1	1298269	1324968	1332563	1318600	1.37	cps
Silver	107-1	90	80	113	94	18.11	cps
Silver	109-1	77	103	47	76	37.52	cps
Sodium	23-2	14157	13760	13640	13852	1.95	cps
Strontium	86-1	453	423	480	452	6.27	cps
Strontium	88-1	107	200	160	156	30.10	cps
Sulfur	34-1	105756	107246	106477	106493	0.70	cps
Terbium	159-1	2636967	2558986	2529224	2575059	2.16	cps
Terbium	159-2	1909709	1886052	1844285	1880016	1.76	cps
Thallium	203-1	230	127	177	178	29.07	cps
Thallium	205-1	377	420	377	391	6.40	cps
Tin	118-1	557	607	673	612	9.56	cps
Titanium	47-1	47	77	50	58	28.46	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB03 Instrumnet Name : P7
Client Sample ID : CCB03 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:41:07 DataFile Name : 052CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	17	47	63	42	56.00	cps
Vanadium	51-2	17	7	0	8	107.84	cps
Yttrium	89-1	3891564	4001000	3935645	3942736	1.40	cps
Yttrium	89-2	1019432	1009741	1023858	1017677	0.71	cps
Zinc	66-2	387	370	313	357	10.78	cps
Zirconium	90-1	300	350	377	342	11.37	cps
Zirconium	91-1	60	73	83	72	16.21	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-07 Instrumnet Name : P7
Client Sample ID : MW-19B-72-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:44:31 DataFile Name : 053SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	786	1000	717	834	17.70	cps
Antimony	121-1	210	210	203	208	1.85	cps
Arsenic	75-2	63	93	97	84	21.74	cps
Barium	135-1	431289	433827	424939	430018	1.06	cps
Barium	137-1	742174	737131	731694	736999	0.71	cps
Beryllium	9-1	52	25	36	38	35.69	cps
Bismuth	209-1	1442170	1437001	1087371	1322181	15.38	cps
Bismuth	209-2	523294	1172727	1315073	1003698	42.05	cps
Bromine	81-1	35386	38798	41756	38646	8.25	cps
Bromine	81-2	5274	5271	5251	5265	0.24	cps
Cadmium	108-1	3	10	7	7	50.03	cps
Cadmium	106-1	1193	923	700	939	26.31	cps
Cadmium	111-1	856	659	502	673	26.40	cps
Calcium	43-1	811291	809390	791082	803921	1.39	cps
Calcium	44-1	14048739	13690506	13832367	13857204	1.30	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1003	1023	1037	1021	1.64	cps
Cobalt	59-2	6578	6635	6638	6617	0.51	cps
Copper	63-2	1513	1570	1533	1539	1.87	cps
Dysprosium	156-1	53	40	33	42	24.12	cps
Dysprosium	156-2	40	47	60	49	20.83	cps
Erbium	164-1	53	50	27	43	33.52	cps
Erbium	164-2	50	27	13	30	61.87	cps
Gadolinium	160-1	27	73	33	44	56.79	cps
Gadolinium	160-2	83	117	137	112	24.01	cps
Holmium	165-1	2824374	2839510	2114906	2592930	15.97	cps
Holmium	165-2	775859	1918835	2143096	1612597	45.47	cps
Indium	115-1	2499310	2535586	1798933	2277943	18.23	cps
Indium	115-2	341568	743731	841187	642162	41.24	cps
Iron	56-2	42090112	41674623	40681685	41482140	1.74	cps
Iron	57-2	1002260	1001357	988516	997378	0.77	cps
Iron	54-2	2292599	2267482	2208060	2256047	1.92	cps
Krypton	83-1	290	310	250	283	10.78	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-07 Instrumnet Name : P7
Client Sample ID : MW-19B-72-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:44:31 DataFile Name : 053SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	2514	2627	2424	2521	4.04	cps
Lead	207-1	2084	2014	2060	2052	1.74	cps
Lead	208-1	9785	10098	9595	9826	2.59	cps
Lithium	6-1	367726	369226	280201	339051	15.03	cps
Magnesium	24-2	4406957	4199269	4248744	4284990	2.53	cps
Manganese	55-2	2253606	2235761	2115458	2201608	3.41	cps
Molybdenum	94-1	880	983	940	934	5.55	cps
Molybdenum	95-1	1480	1543	1423	1482	4.05	cps
Molybdenum	96-1	2530	2707	2394	2544	6.18	cps
Molybdenum	97-1	1013	983	940	979	3.77	cps
Molybdenum	98-1	2204	2100	2290	2198	4.33	cps
Neodymium	150-1	47	43	67	52	24.17	cps
Neodymium	150-2	43	40	40	41	4.68	cps
Nickel	60-2	1387	1300	1470	1386	6.14	cps
Phosphorus	31-2	1473	1380	1453	1436	3.42	cps
Potassium	39-2	2451555	2317003	2378698	2382418	2.83	cps
Rhodium	103-1	2419069	2344538	1698655	2154088	18.39	cps
Rhodium	103-2	511405	1131593	1272552	971850	41.67	cps
Scandium	45-1	1433386	1454637	1084157	1324060	15.71	cps
Scandium	45-2	46900	101694	117024	88539	41.64	cps
Selenium	82-1	161	132	146	146	9.81	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	580	527	533	547	5.32	cps
Silicon	28-1	46016493	45661028	45920958	45866159	0.40	cps
Silver	107-1	90	90	77	86	9.00	cps
Silver	109-1	70	83	63	72	14.10	cps
Sodium	23-2	3731877	3619703	3620485	3657355	1.76	cps
Strontium	86-1	1166172	1167493	1153950	1162538	0.64	cps
Strontium	88-1	11245557	11163980	11242034	11217191	0.41	cps
Sulfur	34-1	1489399	1483057	1450725	1474394	1.41	cps
Terbium	159-1	2965733	2939427	2215348	2706836	15.73	cps
Terbium	159-2	784960	1879044	2136652	1600219	44.85	cps
Thallium	203-1	153	120	100	124	21.65	cps
Thallium	205-1	380	373	307	353	11.48	cps
Tin	118-1	4051	4121	3841	4004	3.64	cps
Titanium	47-1	483	520	467	490	5.57	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-07 Instrumnet Name : P7
Client Sample ID : MW-19B-72-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:44:31 DataFile Name : 053SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	440	423	483	449	6.90	cps
Vanadium	51-2	220	193	227	213	8.27	cps
Yttrium	89-1	4500917	4440094	3371384	4104132	15.48	cps
Yttrium	89-2	453869	1009763	1137876	867169	41.93	cps
Zinc	66-2	1547	1617	1613	1592	2.48	cps
Zirconium	90-1	253	217	273	248	11.60	cps
Zirconium	91-1	40	50	37	42	16.43	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:47:49 DataFile Name : 054SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2055	2040	2064	2053	0.59	cps
Antimony	121-1	1193	1127	1177	1166	2.98	cps
Arsenic	75-2	233	230	193	219	10.14	cps
Barium	135-1	485071	474201	474060	477777	1.32	cps
Barium	137-1	828812	821022	821157	823664	0.54	cps
Beryllium	9-1	58	77	41	59	31.35	cps
Bismuth	209-1	1446566	1435920	1408713	1430399	1.36	cps
Bismuth	209-2	1317176	1313608	1299874	1310219	0.70	cps
Bromine	81-1	39372	42183	41939	41165	3.78	cps
Bromine	81-2	5138	5168	5108	5138	0.58	cps
Cadmium	108-1	10	13	17	13	25.01	cps
Cadmium	106-1	1050	1127	930	1036	9.57	cps
Cadmium	111-1	765	806	693	754	7.60	cps
Calcium	43-1	392118	392312	390190	391540	0.30	cps
Calcium	44-1	6671277	6729199	6587581	6662686	1.07	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	907	1000	983	963	5.17	cps
Cobalt	59-2	22243	21976	22093	22104	0.61	cps
Copper	63-2	1337	1210	1293	1280	5.03	cps
Dysprosium	156-1	10	20	3	11	75.52	cps
Dysprosium	156-2	60	30	37	42	37.31	cps
Erbium	164-1	33	10	23	22	52.68	cps
Erbium	164-2	13	7	17	12	41.65	cps
Gadolinium	160-1	17	13	7	12	41.65	cps
Gadolinium	160-2	123	110	123	119	6.48	cps
Holmium	165-1	2920089	2845115	2830188	2865131	1.68	cps
Holmium	165-2	2171329	2145345	2168766	2161814	0.66	cps
Indium	115-1	2475565	2458909	2437577	2457350	0.77	cps
Indium	115-2	852085	862178	853831	856032	0.63	cps
Iron	56-2	11854746	12049027	11958710	11954161	0.81	cps
Iron	57-2	290548	288864	291391	290268	0.44	cps
Iron	54-2	619285	625541	618523	621116	0.62	cps
Krypton	83-1	297	337	270	301	11.14	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:47:49 DataFile Name : 054SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	797	620	717	711	12.44	cps
Lead	207-1	523	553	613	563	8.13	cps
Lead	208-1	2860	2750	2830	2813	2.02	cps
Lithium	6-1	356269	352216	351485	353323	0.73	cps
Magnesium	24-2	1726432	1703253	1646275	1691987	2.44	cps
Manganese	55-2	904467	907684	904654	905601	0.20	cps
Molybdenum	94-1	26210	25790	25322	25774	1.72	cps
Molybdenum	95-1	44110	44775	43752	44212	1.17	cps
Molybdenum	96-1	48450	47925	48166	48180	0.55	cps
Molybdenum	97-1	28201	28091	28231	28174	0.26	cps
Molybdenum	98-1	71722	70710	71082	71171	0.72	cps
Neodymium	150-1	27	10	10	16	61.87	cps
Neodymium	150-2	13	10	3	9	57.30	cps
Nickel	60-2	7629	7782	7685	7699	1.01	cps
Phosphorus	31-2	1960	1847	2023	1943	4.61	cps
Potassium	39-2	1897597	1871507	1840991	1870032	1.52	cps
Rhodium	103-1	2316771	2308290	2291583	2305548	0.56	cps
Rhodium	103-2	1293064	1310167	1285312	1296181	0.98	cps
Scandium	45-1	1461913	1442044	1440869	1448276	0.82	cps
Scandium	45-2	118090	118197	116252	117513	0.93	cps
Selenium	82-1	100	141	181	141	28.79	cps
Selenium	77-2	3	3	0	2	86.60	cps
Selenium	78-2	517	597	473	529	11.83	cps
Silicon	28-1	44220884	44100828	44441418	44254377	0.39	cps
Silver	107-1	77	87	73	79	8.80	cps
Silver	109-1	57	53	57	56	3.47	cps
Sodium	23-2	1928264	1931451	1922831	1927515	0.23	cps
Strontium	86-1	453591	454765	445287	451214	1.15	cps
Strontium	88-1	4360259	4286348	4220624	4289077	1.63	cps
Sulfur	34-1	365965	360473	351731	359389	2.00	cps
Terbium	159-1	3008695	2938338	2948684	2965239	1.28	cps
Terbium	159-2	2137670	2125598	2054635	2105968	2.13	cps
Thallium	203-1	917	810	837	854	6.50	cps
Thallium	205-1	2157	2027	1950	2045	5.11	cps
Tin	118-1	1263	1347	1357	1322	3.88	cps
Titanium	47-1	397	483	497	459	11.83	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:47:49 DataFile Name : 054SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	177	147	147	157	11.06	cps
Vanadium	51-2	423	440	393	419	5.65	cps
Yttrium	89-1	4538542	4510291	4558544	4535792	0.53	cps
Yttrium	89-2	1140070	1161044	1141212	1147442	1.03	cps
Zinc	66-2	1730	1933	1873	1846	5.66	cps
Zirconium	90-1	237	217	263	239	9.80	cps
Zirconium	91-1	37	60	40	46	27.70	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08DUP Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425DUP Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:51:06 DataFile Name : 055SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1975	1946	2044	1988	2.51	cps
Antimony	121-1	1190	1207	1217	1205	1.12	cps
Arsenic	75-2	210	177	267	218	20.89	cps
Barium	135-1	486789	479635	478625	481683	0.92	cps
Barium	137-1	831562	831538	820091	827730	0.80	cps
Beryllium	9-1	44	61	97	68	40.31	cps
Bismuth	209-1	1481387	1436440	1439835	1452554	1.72	cps
Bismuth	209-2	1321317	1324401	1343698	1329805	0.91	cps
Bromine	81-1	40843	43367	44828	43013	4.69	cps
Bromine	81-2	5388	5608	5194	5397	3.83	cps
Cadmium	108-1	10	7	13	10	33.30	cps
Cadmium	106-1	960	950	910	940	2.81	cps
Cadmium	111-1	702	674	658	678	3.29	cps
Calcium	43-1	396426	392016	396911	395118	0.68	cps
Calcium	44-1	6702751	6905181	6817893	6808608	1.49	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	870	893	870	878	1.54	cps
Cobalt	59-2	22320	21913	22020	22084	0.96	cps
Copper	63-2	1250	1197	1193	1213	2.62	cps
Dysprosium	156-1	7	10	3	7	50.03	cps
Dysprosium	156-2	50	27	23	33	43.59	cps
Erbium	164-1	13	60	17	30	86.78	cps
Erbium	164-2	10	20	23	18	39.03	cps
Gadolinium	160-1	27	13	7	16	65.47	cps
Gadolinium	160-2	103	87	130	107	20.49	cps
Holmium	165-1	2840559	2853235	2878951	2857582	0.68	cps
Holmium	165-2	2181305	2160968	2176374	2172882	0.49	cps
Indium	115-1	2480387	2475798	2532352	2496179	1.26	cps
Indium	115-2	862636	853431	860770	858945	0.57	cps
Iron	56-2	12068103	11807916	12005034	11960351	1.13	cps
Iron	57-2	292621	287737	289741	290033	0.85	cps
Iron	54-2	621490	616118	621332	619647	0.49	cps
Krypton	83-1	240	280	313	278	13.22	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08DUP Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425DUP Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:51:06 DataFile Name : 055SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	713	803	703	740	7.44	cps
Lead	207-1	527	570	523	540	4.82	cps
Lead	208-1	2580	2780	2617	2659	4.00	cps
Lithium	6-1	367710	370507	363564	367260	0.95	cps
Magnesium	24-2	1684936	1699457	1691547	1691980	0.43	cps
Manganese	55-2	903399	901682	906185	903756	0.25	cps
Molybdenum	94-1	25846	25576	24891	25438	1.93	cps
Molybdenum	95-1	45551	45350	44999	45300	0.62	cps
Molybdenum	96-1	47975	48099	47969	48014	0.15	cps
Molybdenum	97-1	27630	28090	28181	27967	1.06	cps
Molybdenum	98-1	74248	73079	72037	73121	1.51	cps
Neodymium	150-1	20	40	37	32	33.25	cps
Neodymium	150-2	3	10	0	4	114.60	cps
Nickel	60-2	8406	7709	7615	7910	5.46	cps
Phosphorus	31-2	1877	1780	1887	1848	3.19	cps
Potassium	39-2	1830423	1888352	1845107	1854627	1.62	cps
Rhodium	103-1	2409227	2364540	2245392	2339719	3.62	cps
Rhodium	103-2	1295716	1290051	1287311	1291026	0.33	cps
Scandium	45-1	1452193	1468055	1404339	1441529	2.30	cps
Scandium	45-2	116470	116306	117955	116910	0.78	cps
Selenium	82-1	218	146	116	160	32.66	cps
Selenium	77-2	7	0	3	3	100.05	cps
Selenium	78-2	613	517	543	558	8.95	cps
Silicon	28-1	44361419	44118948	43224424	43901597	1.36	cps
Silver	107-1	47	63	50	53	16.53	cps
Silver	109-1	47	47	47	47	0.00	cps
Sodium	23-2	1962489	1957507	2007409	1975802	1.39	cps
Strontium	86-1	454129	445639	444546	448105	1.17	cps
Strontium	88-1	4238002	4232332	4194119	4221485	0.57	cps
Sulfur	34-1	347091	348499	353112	349567	0.90	cps
Terbium	159-1	2929625	2925738	2918471	2924612	0.19	cps
Terbium	159-2	2162949	2105480	2119186	2129205	1.41	cps
Thallium	203-1	710	777	797	761	5.96	cps
Thallium	205-1	1977	2040	1877	1965	4.19	cps
Tin	118-1	1610	1623	1600	1611	0.73	cps
Titanium	47-1	467	367	413	416	12.04	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08DUP Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425DUP Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:51:06 DataFile Name : 055SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	190	170	163	174	7.95	cps
Vanadium	51-2	417	323	463	401	17.77	cps
Yttrium	89-1	4551111	4520936	4448115	4506720	1.17	cps
Yttrium	89-2	1145995	1143988	1157287	1149090	0.62	cps
Zinc	66-2	1843	1870	1843	1852	0.83	cps
Zirconium	90-1	180	270	207	219	21.12	cps
Zirconium	91-1	63	50	50	54	14.14	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08LX5 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425L Dilution Factor : 5
Date & Time Acquired : 2025-06-11 20:54:25 DataFile Name : 056SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	571	646	608	608	6.23	cps
Antimony	121-1	270	237	240	249	7.38	cps
Arsenic	75-2	40	43	57	47	18.90	cps
Barium	135-1	85049	86652	85354	85685	0.99	cps
Barium	137-1	146978	146504	146649	146710	0.17	cps
Beryllium	9-1	44	27	44	38	25.35	cps
Bismuth	209-1	1324399	1331670	1326861	1327643	0.28	cps
Bismuth	209-2	1246214	1229938	1227601	1234584	0.82	cps
Bromine	81-1	25879	26511	26784	26391	1.76	cps
Bromine	81-2	1483	1577	1480	1513	3.63	cps
Cadmium	108-1	10	3	10	8	49.52	cps
Cadmium	106-1	943	1087	923	984	9.05	cps
Cadmium	111-1	673	788	659	707	10.01	cps
Calcium	43-1	70272	70711	69334	70106	1.00	cps
Calcium	44-1	1221643	1211274	1211930	1214949	0.48	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	973	890	950	938	4.58	cps
Cobalt	59-2	4127	3937	4181	4082	3.13	cps
Copper	63-2	1197	1220	1130	1182	3.95	cps
Dysprosium	156-1	0	3	10	4	114.60	cps
Dysprosium	156-2	0	0	13	4	173.21	cps
Erbium	164-1	20	30	17	22	31.22	cps
Erbium	164-2	10	17	3	10	66.70	cps
Gadolinium	160-1	0	10	13	8	89.21	cps
Gadolinium	160-2	67	73	180	107	59.62	cps
Holmium	165-1	2564984	2601165	2559933	2575361	0.87	cps
Holmium	165-2	2007473	1974883	2004107	1995488	0.90	cps
Indium	115-1	2305004	2247222	2241457	2264561	1.55	cps
Indium	115-2	798414	796526	793220	796053	0.33	cps
Iron	56-2	2244422	2226221	2205827	2225490	0.87	cps
Iron	57-2	54756	54345	53773	54291	0.91	cps
Iron	54-2	114964	113623	114983	114523	0.68	cps
Krypton	83-1	283	337	240	287	16.89	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08LX5 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425L Dilution Factor : 5
Date & Time Acquired : 2025-06-11 20:54:25 DataFile Name : 056SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	383	367	390	380	3.16	cps
Lead	207-1	330	290	310	310	6.45	cps
Lead	208-1	1447	1417	1523	1462	3.76	cps
Lithium	6-1	330972	322422	330017	327804	1.43	cps
Magnesium	24-2	286099	281556	279129	282261	1.25	cps
Manganese	55-2	165919	164345	166421	165562	0.65	cps
Molybdenum	94-1	4651	4751	4767	4723	1.34	cps
Molybdenum	95-1	8029	8099	7719	7949	2.55	cps
Molybdenum	96-1	8759	8919	8533	8737	2.22	cps
Molybdenum	97-1	5128	5071	5251	5150	1.79	cps
Molybdenum	98-1	12662	13113	13163	12979	2.12	cps
Neodymium	150-1	7	27	7	13	86.58	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	1637	1737	1663	1679	3.08	cps
Phosphorus	31-2	590	597	610	599	1.70	cps
Potassium	39-2	364949	356374	362971	361431	1.24	cps
Rhodium	103-1	2167509	2152768	2153491	2157923	0.39	cps
Rhodium	103-2	1212744	1210706	1206061	1209837	0.28	cps
Scandium	45-1	1328510	1276383	1308797	1304563	2.02	cps
Scandium	45-2	107686	107454	107508	107550	0.11	cps
Selenium	82-1	96	77	196	123	52.03	cps
Selenium	77-2	3	0	0	1	173.21	cps
Selenium	78-2	673	510	523	569	15.94	cps
Silicon	28-1	8972623	9056574	8933880	8987692	0.70	cps
Silver	107-1	57	73	60	63	13.92	cps
Silver	109-1	43	50	67	53	22.54	cps
Sodium	23-2	327841	330968	319611	326140	1.80	cps
Strontium	86-1	81722	80713	79902	80779	1.13	cps
Strontium	88-1	700705	700245	703004	701318	0.21	cps
Sulfur	34-1	142525	142628	142931	142695	0.15	cps
Terbium	159-1	2676079	2681393	2657114	2671529	0.48	cps
Terbium	159-2	1982387	1938894	1974913	1965398	1.18	cps
Thallium	203-1	223	207	210	213	4.14	cps
Thallium	205-1	547	580	530	552	4.61	cps
Tin	118-1	707	673	703	694	2.64	cps
Titanium	47-1	133	117	123	124	6.74	cps

LB Number : LB136121 Operator : Jaswal
 Lab Sample ID : Q2234-08LX5 Instrumnet Name : P7
 Client Sample ID : MW-17B-55-060425L Dilution Factor : 5
 Date & Time Acquired : 2025-06-11 20:54:25 DataFile Name : 056SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	67	47	40	51	27.15	cps
Vanadium	51-2	77	107	107	97	17.92	cps
Yttrium	89-1	4108593	4100393	4077489	4095492	0.39	cps
Yttrium	89-2	1065274	1071058	1070542	1068958	0.30	cps
Zinc	66-2	590	633	660	628	5.63	cps
Zirconium	90-1	230	270	230	243	9.49	cps
Zirconium	91-1	50	50	30	43	26.65	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-09 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MS Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:57:45 DataFile Name : 057SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	795137	795432	789126	793232	0.45	cps
Antimony	121-1	2079375	2124455	2037302	2080377	2.10	cps
Arsenic	75-2	247	250	170	222	20.37	cps
Barium	135-1	2820444	2854585	2783096	2819375	1.27	cps
Barium	137-1	4907941	4767229	4736257	4803809	1.90	cps
Beryllium	9-1	300285	295284	293142	296237	1.24	cps
Bismuth	209-1	1453350	1444455	1426805	1441537	0.94	cps
Bismuth	209-2	1306142	1293822	1298832	1299599	0.48	cps
Bromine	81-1	41542	45798	46898	44746	6.32	cps
Bromine	81-2	5998	6041	5998	6012	0.42	cps
Cadmium	108-1	37512	37064	36469	37015	1.41	cps
Cadmium	106-1	54381	53719	54017	54039	0.61	cps
Cadmium	111-1	530658	532105	524245	529003	0.79	cps
Calcium	43-1	916243	912948	911855	913682	0.25	cps
Calcium	44-1	15576696	16061498	15380695	15672963	2.24	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	763253	765125	768964	765781	0.38	cps
Cobalt	59-2	1241572	1253492	1254069	1249711	0.56	cps
Copper	63-2	9341093	9278245	9392058	9337132	0.61	cps
Dysprosium	156-1	90	67	50	69	29.17	cps
Dysprosium	156-2	157	190	200	182	12.45	cps
Erbium	164-1	43	60	53	52	16.07	cps
Erbium	164-2	40	43	47	43	7.70	cps
Gadolinium	160-1	37	47	43	42	12.06	cps
Gadolinium	160-2	160	147	153	153	4.35	cps
Holmium	165-1	2849499	2919441	2901465	2890135	1.26	cps
Holmium	165-2	2152212	2168503	2135756	2152157	0.76	cps
Indium	115-1	2434544	2531907	2452726	2473059	2.09	cps
Indium	115-2	832597	828715	832901	831404	0.28	cps
Iron	56-2	46774938	46945929	46853296	46858054	0.18	cps
Iron	57-2	1119146	1127602	1115961	1120903	0.54	cps
Iron	54-2	2620333	2643548	2623771	2629217	0.48	cps
Krypton	83-1	307	263	257	276	9.85	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-09 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MS Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:57:45 DataFile Name : 057SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	7165010	6997376	7112391	7091593	1.21	cps
Lead	207-1	6139766	6307901	6201093	6216254	1.37	cps
Lead	208-1	28410260	28183634	28207884	28267260	0.44	cps
Lithium	6-1	372287	366049	367139	368492	0.90	cps
Magnesium	24-2	9380252	9630687	9677768	9562902	1.67	cps
Manganese	55-2	7885052	7741998	7619869	7748973	1.71	cps
Molybdenum	94-1	3681437	3542177	3512925	3578846	2.52	cps
Molybdenum	95-1	3930011	3862975	3808561	3867182	1.57	cps
Molybdenum	96-1	4415944	4428007	4468807	4437586	0.62	cps
Molybdenum	97-1	2474142	2387683	2473846	2445224	2.04	cps
Molybdenum	98-1	6192446	6237558	6180696	6203567	0.48	cps
Neodymium	150-1	103	113	110	109	4.68	cps
Neodymium	150-2	33	33	17	28	34.63	cps
Nickel	60-2	318799	318997	319195	318997	0.06	cps
Phosphorus	31-2	1917	1777	1830	1841	3.84	cps
Potassium	39-2	6172745	6170680	6231214	6191546	0.56	cps
Rhodium	103-1	2360153	2309027	2355504	2341561	1.21	cps
Rhodium	103-2	1264995	1257012	1277353	1266453	0.81	cps
Scandium	45-1	1456068	1473852	1457442	1462454	0.68	cps
Scandium	45-2	115994	116294	116571	116286	0.25	cps
Selenium	82-1	46559	47249	46425	46744	0.95	cps
Selenium	77-2	4687	4527	4634	4616	1.77	cps
Selenium	78-2	16092	15785	15792	15890	1.10	cps
Silicon	28-1	42677624	43163859	41998732	42613405	1.37	cps
Silver	107-1	441695	434787	436913	437798	0.81	cps
Silver	109-1	416728	415109	407966	413268	1.13	cps
Sodium	23-2	14548789	14663599	14506811	14573066	0.56	cps
Strontium	86-1	1176837	1156025	1135682	1156181	1.78	cps
Strontium	88-1	11275652	11346191	11055245	11225696	1.35	cps
Sulfur	34-1	322920	324002	321214	322712	0.44	cps
Terbium	159-1	2980529	2888015	2924217	2930921	1.59	cps
Terbium	159-2	2120584	2119201	2130454	2123413	0.29	cps
Thallium	203-1	1544053	1522998	1520649	1529233	0.84	cps
Thallium	205-1	4240286	4168704	4085492	4164827	1.86	cps
Tin	118-1	1449169	1627326	1442738	1506411	6.95	cps
Titanium	47-1	1100	1323	1273	1232	9.51	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-09 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MS Dilution Factor : 1
Date & Time Acquired : 2025-06-11 20:57:45 DataFile Name : 057SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	5254593	5216970	5197110	5222891	0.56	cps
Vanadium	51-2	696968	696464	690006	694479	0.56	cps
Yttrium	89-1	4520382	4493630	4482382	4498798	0.43	cps
Yttrium	89-2	1140053	1133746	1152507	1142102	0.84	cps
Zinc	66-2	1799804	1819942	1836763	1818837	1.02	cps
Zirconium	90-1	3777472	3626614	3584845	3662977	2.77	cps
Zirconium	91-1	750654	742011	733028	741898	1.19	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-10 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MSD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:00:47 DataFile Name : 058SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	798468	790955	779441	789621	1.21	cps
Antimony	121-1	2059592	2050807	2040651	2050350	0.46	cps
Arsenic	75-2	217	223	210	217	3.08	cps
Barium	135-1	2849260	2777421	2870136	2832273	1.72	cps
Barium	137-1	4737178	4844209	4767542	4782976	1.15	cps
Beryllium	9-1	291937	293188	292724	292616	0.22	cps
Bismuth	209-1	1430501	1417650	1434242	1427464	0.61	cps
Bismuth	209-2	1298107	1319244	1307127	1308160	0.81	cps
Bromine	81-1	41465	43337	45426	43409	4.57	cps
Bromine	81-2	6018	6078	6195	6097	1.47	cps
Cadmium	108-1	37649	36225	36112	36662	2.34	cps
Cadmium	106-1	53408	53870	53963	53747	0.55	cps
Cadmium	111-1	512729	521229	520645	518201	0.92	cps
Calcium	43-1	888674	888246	883920	886947	0.30	cps
Calcium	44-1	15422719	15280155	15495405	15399426	0.71	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	759942	764607	762205	762251	0.31	cps
Cobalt	59-2	1248403	1261162	1241457	1250341	0.80	cps
Copper	63-2	9370470	9470745	9018139	9286452	2.56	cps
Dysprosium	156-1	70	53	63	62	13.48	cps
Dysprosium	156-2	133	157	200	163	20.71	cps
Erbium	164-1	50	40	57	49	17.16	cps
Erbium	164-2	40	33	33	36	10.83	cps
Gadolinium	160-1	43	40	70	51	32.17	cps
Gadolinium	160-2	140	153	210	168	22.15	cps
Holmium	165-1	2905296	2800583	2803043	2836307	2.11	cps
Holmium	165-2	2163021	2155740	2106932	2141898	1.42	cps
Indium	115-1	2486142	2398878	2440594	2441871	1.79	cps
Indium	115-2	835129	834806	828545	832827	0.45	cps
Iron	56-2	45397974	45796616	45537224	45577272	0.44	cps
Iron	57-2	1115913	1121456	1116105	1117825	0.28	cps
Iron	54-2	2536661	2628031	2568350	2577681	1.80	cps
Krypton	83-1	303	260	283	282	7.69	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-10 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MSD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:00:47 DataFile Name : 058SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	7043144	7118031	7022631	7061269	0.71	cps
Lead	207-1	6001938	6058417	6236521	6098959	2.01	cps
Lead	208-1	27756829	27701969	27915209	27791336	0.40	cps
Lithium	6-1	367623	367150	362336	365703	0.80	cps
Magnesium	24-2	9685146	9840404	9254546	9593366	3.16	cps
Manganese	55-2	7449513	7713211	7722172	7628298	2.03	cps
Molybdenum	94-1	3552004	3550943	3569014	3557321	0.29	cps
Molybdenum	95-1	3894608	3825377	3829704	3849896	1.01	cps
Molybdenum	96-1	4492522	4418127	4287175	4399275	2.36	cps
Molybdenum	97-1	2405786	2447177	2400731	2417898	1.05	cps
Molybdenum	98-1	6184623	6069125	6193252	6149000	1.13	cps
Neodymium	150-1	120	117	90	109	15.10	cps
Neodymium	150-2	27	23	47	32	39.17	cps
Nickel	60-2	315898	323637	316208	318581	1.38	cps
Phosphorus	31-2	1700	1850	1800	1783	4.28	cps
Potassium	39-2	6166577	6180816	6099928	6149107	0.70	cps
Rhodium	103-1	2290079	2295553	2264192	2283275	0.73	cps
Rhodium	103-2	1263780	1269379	1269369	1267509	0.25	cps
Scandium	45-1	1460199	1403216	1404566	1422660	2.29	cps
Scandium	45-2	117627	119246	116151	117675	1.32	cps
Selenium	82-1	46874	46929	46438	46747	0.57	cps
Selenium	77-2	4457	4401	4734	4531	3.94	cps
Selenium	78-2	16032	15939	15899	15956	0.43	cps
Silicon	28-1	41977713	41280485	41161439	41473212	1.06	cps
Silver	107-1	430659	435189	436406	434085	0.70	cps
Silver	109-1	406689	404153	405467	405436	0.31	cps
Sodium	23-2	14688691	14484796	14359546	14511011	1.14	cps
Strontium	86-1	1144457	1152517	1135093	1144023	0.76	cps
Strontium	88-1	10755559	10944429	10902224	10867404	0.91	cps
Sulfur	34-1	308378	303960	305409	305916	0.74	cps
Terbium	159-1	2866440	2911712	2914472	2897541	0.93	cps
Terbium	159-2	2137735	2120194	2092753	2116894	1.07	cps
Thallium	203-1	1506070	1507498	1493526	1502365	0.51	cps
Thallium	205-1	4060367	4175828	4082097	4106097	1.49	cps
Tin	118-1	1424024	1414514	1425240	1421259	0.41	cps
Titanium	47-1	1073	1073	1047	1064	1.45	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-10 Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425MSD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:00:47 DataFile Name : 058SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	5229510	5162735	5287364	5226536	1.19	cps
Vanadium	51-2	688770	694372	688614	690585	0.47	cps
Yttrium	89-1	4479463	4449240	4490549	4473084	0.48	cps
Yttrium	89-2	1141065	1126213	1136865	1134714	0.67	cps
Zinc	66-2	1808537	1817643	1757670	1794617	1.80	cps
Zirconium	90-1	3657052	3571362	3628301	3618905	1.21	cps
Zirconium	91-1	736152	738570	729524	734749	0.64	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08A Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425A Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:03:46 DataFile Name : 059SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	794481	792648	787916	791682	0.43	cps
Antimony	121-1	2063627	2089277	2073521	2075475	0.62	cps
Arsenic	75-2	217	243	207	222	8.53	cps
Barium	135-1	2825584	2886810	2831499	2847965	1.19	cps
Barium	137-1	4815871	4867885	4766105	4816620	1.06	cps
Beryllium	9-1	291828	294178	294218	293408	0.47	cps
Bismuth	209-1	1456322	1432271	1432498	1440364	0.96	cps
Bismuth	209-2	1305409	1295410	1293891	1298237	0.48	cps
Bromine	81-1	41836	44343	46169	44116	4.93	cps
Bromine	81-2	5858	6048	6148	6018	2.45	cps
Cadmium	108-1	36613	37051	36950	36871	0.62	cps
Cadmium	106-1	53552	53826	53655	53678	0.26	cps
Cadmium	111-1	528038	526613	529536	528062	0.28	cps
Calcium	43-1	898886	900475	901781	900381	0.16	cps
Calcium	44-1	15252639	15298552	15170835	15240675	0.42	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	772687	762926	776353	770655	0.90	cps
Cobalt	59-2	1265443	1255160	1258796	1259799	0.41	cps
Copper	63-2	9540859	9478830	9268627	9429439	1.51	cps
Dysprosium	156-1	63	40	90	64	38.82	cps
Dysprosium	156-2	160	183	150	164	10.40	cps
Erbium	164-1	40	50	60	50	20.00	cps
Erbium	164-2	27	37	37	33	17.32	cps
Gadolinium	160-1	57	43	20	40	46.40	cps
Gadolinium	160-2	113	117	187	139	29.81	cps
Holmium	165-1	2894678	2875139	2832400	2867406	1.11	cps
Holmium	165-2	2170208	2149382	2114069	2144553	1.32	cps
Indium	115-1	2425802	2419187	2462649	2435879	0.96	cps
Indium	115-2	831485	833755	832665	832635	0.14	cps
Iron	56-2	47258273	46910046	46235911	46801410	1.11	cps
Iron	57-2	1119225	1127123	1121536	1122628	0.36	cps
Iron	54-2	2621428	2604146	2577736	2601104	0.85	cps
Krypton	83-1	223	333	320	292	20.54	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08A Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425A Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:03:46 DataFile Name : 059SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	7126178	6968508	7005606	7033431	1.17	cps
Lead	207-1	6132043	6271613	6222585	6208747	1.14	cps
Lead	208-1	28121496	28073107	28117244	28103949	0.10	cps
Lithium	6-1	364161	362291	363983	363478	0.28	cps
Magnesium	24-2	9790981	9715454	9536069	9680835	1.35	cps
Manganese	55-2	7850569	7790239	7822556	7821121	0.39	cps
Molybdenum	94-1	3471315	3508011	3599230	3526185	1.87	cps
Molybdenum	95-1	3842111	3907917	3825901	3858643	1.13	cps
Molybdenum	96-1	4381085	4428466	4336313	4381955	1.05	cps
Molybdenum	97-1	2398056	2372387	2395610	2388684	0.59	cps
Molybdenum	98-1	6262866	6233383	6234238	6243496	0.27	cps
Neodymium	150-1	90	107	110	102	10.48	cps
Neodymium	150-2	27	30	30	29	6.65	cps
Nickel	60-2	326127	320490	319153	321924	1.15	cps
Phosphorus	31-2	1777	1763	1963	1835	6.10	cps
Potassium	39-2	6188806	6228110	6255279	6224065	0.54	cps
Rhodium	103-1	2388910	2318291	2299114	2335438	2.02	cps
Rhodium	103-2	1272570	1265212	1265324	1267702	0.33	cps
Scandium	45-1	1431850	1394584	1443376	1423270	1.79	cps
Scandium	45-2	118029	116551	118295	117625	0.80	cps
Selenium	82-1	47479	46947	47011	47146	0.62	cps
Selenium	77-2	4441	4908	4454	4601	5.78	cps
Selenium	78-2	16072	16286	15799	16052	1.52	cps
Silicon	28-1	40926893	41177149	41648207	41250749	0.89	cps
Silver	107-1	436754	440331	436591	437892	0.48	cps
Silver	109-1	408960	410199	408073	409078	0.26	cps
Sodium	23-2	14765882	14397507	14622867	14595419	1.27	cps
Strontium	86-1	1154599	1146730	1138094	1146474	0.72	cps
Strontium	88-1	11099061	11149067	10970414	11072847	0.83	cps
Sulfur	34-1	304474	303237	299799	302503	0.80	cps
Terbium	159-1	3022459	2961677	2889592	2957909	2.25	cps
Terbium	159-2	2116349	2099181	2164143	2126558	1.58	cps
Thallium	203-1	1546776	1529317	1508272	1528121	1.26	cps
Thallium	205-1	4103240	4114451	4085303	4100998	0.36	cps
Tin	118-1	1438057	1619752	1440129	1499313	6.96	cps
Titanium	47-1	1110	1130	1267	1169	7.29	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-08A Instrumnet Name : P7
Client Sample ID : MW-17B-55-060425A Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:03:46 DataFile Name : 059SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	5291701	5154840	5325254	5257265	1.72	cps
Vanadium	51-2	704017	692401	694746	697055	0.88	cps
Yttrium	89-1	4492147	4558170	4527424	4525913	0.73	cps
Yttrium	89-2	1142281	1131581	1139117	1137660	0.48	cps
Zinc	66-2	1862426	1825759	1817201	1835129	1.31	cps
Zirconium	90-1	3602925	3679166	3621053	3634382	1.10	cps
Zirconium	91-1	740982	745676	738929	741862	0.47	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-11 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:06:48 DataFile Name : 060SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	18875	18521	18138	18511	1.99	cps
Antimony	121-1	14668	15001	15168	14946	1.71	cps
Arsenic	75-2	140	90	123	118	21.62	cps
Barium	135-1	268175	261623	260347	263382	1.59	cps
Barium	137-1	464321	448143	448940	453802	2.01	cps
Beryllium	9-1	67	64	50	61	14.72	cps
Bismuth	209-1	1453310	1454182	1446996	1451496	0.27	cps
Bismuth	209-2	1313275	1306095	1313942	1311104	0.33	cps
Bromine	81-1	36405	39941	41181	39175	6.33	cps
Bromine	81-2	4481	4561	4701	4581	2.43	cps
Cadmium	108-1	7	7	40	18	108.23	cps
Cadmium	106-1	1103	1043	1000	1049	4.95	cps
Cadmium	111-1	864	799	742	802	7.63	cps
Calcium	43-1	1407998	1416335	1343075	1389136	2.89	cps
Calcium	44-1	23220725	22457048	22199993	22625922	2.35	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1010	970	947	976	3.28	cps
Cobalt	59-2	630	600	667	632	5.28	cps
Copper	63-2	2327	2217	2374	2306	3.49	cps
Dysprosium	156-1	0	13	10	8	89.21	cps
Dysprosium	156-2	23	20	13	19	26.96	cps
Erbium	164-1	13	13	23	17	34.65	cps
Erbium	164-2	20	10	30	20	50.00	cps
Gadolinium	160-1	13	33	3	17	91.67	cps
Gadolinium	160-2	90	117	163	123	30.10	cps
Holmium	165-1	2939095	2902723	2876416	2906078	1.08	cps
Holmium	165-2	2198101	2181339	2128944	2169461	1.66	cps
Indium	115-1	2567856	2579637	2465330	2537608	2.48	cps
Indium	115-2	867095	863556	861395	864016	0.33	cps
Iron	56-2	75053	74587	75023	74888	0.35	cps
Iron	57-2	28253	28213	29142	28536	1.84	cps
Iron	54-2	5134	4991	5094	5073	1.46	cps
Krypton	83-1	290	380	293	321	15.89	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-11 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:06:48 DataFile Name : 060SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	627	700	630	652	6.35	cps
Lead	207-1	547	520	463	510	8.34	cps
Lead	208-1	2600	2587	2453	2547	3.18	cps
Lithium	6-1	358623	353491	354150	355421	0.79	cps
Magnesium	24-2	57775	57641	57143	57520	0.58	cps
Manganese	55-2	3584	3434	3447	3488	2.38	cps
Molybdenum	94-1	84653	84170	82008	83610	1.68	cps
Molybdenum	95-1	144479	146065	143591	144712	0.87	cps
Molybdenum	96-1	154760	155413	153427	154534	0.66	cps
Molybdenum	97-1	89640	90250	89086	89659	0.65	cps
Molybdenum	98-1	231914	232241	229161	231105	0.73	cps
Neodymium	150-1	13	17	13	14	13.35	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	5441	5338	5311	5363	1.28	cps
Phosphorus	31-2	400	323	363	362	10.59	cps
Potassium	39-2	5284224	5166989	5168554	5206589	1.29	cps
Rhodium	103-1	2402595	2447720	2373663	2407993	1.55	cps
Rhodium	103-2	1287696	1318328	1307359	1304461	1.19	cps
Scandium	45-1	1496816	1489853	1410183	1465617	3.28	cps
Scandium	45-2	119255	119094	117750	118700	0.70	cps
Selenium	82-1	179	135	228	181	25.71	cps
Selenium	77-2	3	7	13	8	65.47	cps
Selenium	78-2	593	543	560	566	4.50	cps
Silicon	28-1	9630263	9750025	9840949	9740412	1.08	cps
Silver	107-1	260	243	203	236	12.36	cps
Silver	109-1	210	177	200	196	8.75	cps
Sodium	23-2	6166489	6232533	5991276	6130100	2.03	cps
Strontium	86-1	1074436	1079565	1063744	1072582	0.75	cps
Strontium	88-1	10347441	10411957	10244107	10334502	0.82	cps
Sulfur	34-1	840662	842471	835287	839473	0.45	cps
Terbium	159-1	2992321	2992490	3018215	3001009	0.50	cps
Terbium	159-2	2185293	2114091	2159130	2152838	1.67	cps
Thallium	203-1	740	797	683	740	7.66	cps
Thallium	205-1	2034	1763	1683	1827	10.04	cps
Tin	118-1	2964	3020	2930	2971	1.53	cps
Titanium	47-1	170	193	180	181	6.47	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-11 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:06:48 DataFile Name : 060SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	147	87	93	109	30.20	cps
Vanadium	51-2	2030	2094	2100	2075	1.86	cps
Yttrium	89-1	4548763	4539357	4476219	4521447	0.87	cps
Yttrium	89-2	1140952	1149990	1157376	1149439	0.72	cps
Zinc	66-2	983	870	910	921	6.24	cps
Zirconium	90-1	1643	1483	1497	1541	5.76	cps
Zirconium	91-1	337	333	407	359	11.54	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-12 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425-FD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:10:06 DataFile Name : 061SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	9593	9192	9429	9405	2.14	cps
Antimony	121-1	15455	14731	14798	14995	2.67	cps
Arsenic	75-2	177	93	140	137	30.56	cps
Barium	135-1	285473	284763	280687	283641	0.91	cps
Barium	137-1	494102	487044	486864	489336	0.84	cps
Beryllium	9-1	24	30	30	28	13.78	cps
Bismuth	209-1	1469117	1445757	1433873	1449582	1.24	cps
Bismuth	209-2	1323803	1305574	1299546	1309641	0.96	cps
Bromine	81-1	37808	40378	41802	39996	5.06	cps
Bromine	81-2	4684	5028	4924	4879	3.61	cps
Cadmium	108-1	23	20	17	20	16.65	cps
Cadmium	106-1	890	983	953	942	5.06	cps
Cadmium	111-1	677	708	722	702	3.32	cps
Calcium	43-1	1452338	1438844	1435580	1442254	0.62	cps
Calcium	44-1	23678253	23774095	23703298	23718549	0.21	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1340	1317	1313	1323	1.10	cps
Cobalt	59-2	580	540	623	581	7.17	cps
Copper	63-2	1940	1980	1813	1911	4.55	cps
Dysprosium	156-1	3	3	13	7	86.65	cps
Dysprosium	156-2	10	13	3	9	57.30	cps
Erbium	164-1	17	40	17	24	55.10	cps
Erbium	164-2	20	13	17	17	20.01	cps
Gadolinium	160-1	20	13	20	18	21.66	cps
Gadolinium	160-2	147	127	137	137	7.32	cps
Holmium	165-1	2936464	2871974	2894640	2901026	1.13	cps
Holmium	165-2	2181668	2153776	2159266	2164903	0.68	cps
Indium	115-1	2554177	2500567	2497347	2517364	1.27	cps
Indium	115-2	854875	843348	844965	847729	0.74	cps
Iron	56-2	61184	60963	60782	60977	0.33	cps
Iron	57-2	29512	29092	29449	29351	0.77	cps
Iron	54-2	4451	4411	4227	4363	2.73	cps
Krypton	83-1	310	250	260	273	11.76	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-12 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425-FD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:10:06 DataFile Name : 061SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	660	617	547	608	9.41	cps
Lead	207-1	570	433	543	516	14.05	cps
Lead	208-1	2573	2397	2370	2447	4.52	cps
Lithium	6-1	356766	353451	357797	356005	0.64	cps
Magnesium	24-2	53837	54339	54419	54199	0.58	cps
Manganese	55-2	2747	2650	2797	2731	2.73	cps
Molybdenum	94-1	86279	84693	84553	85175	1.13	cps
Molybdenum	95-1	150779	149789	145499	148689	1.89	cps
Molybdenum	96-1	159352	160147	155949	158482	1.41	cps
Molybdenum	97-1	94202	93195	92018	93138	1.17	cps
Molybdenum	98-1	237230	237099	237174	237168	0.03	cps
Neodymium	150-1	23	10	20	18	39.03	cps
Neodymium	150-2	3	10	0	4	114.60	cps
Nickel	60-2	5871	5721	5514	5702	3.14	cps
Phosphorus	31-2	367	337	303	336	9.44	cps
Potassium	39-2	5316387	5464908	5416711	5399335	1.40	cps
Rhodium	103-1	2399910	2394191	2340468	2378190	1.38	cps
Rhodium	103-2	1299961	1282887	1283926	1288925	0.74	cps
Scandium	45-1	1464060	1445012	1418132	1442401	1.60	cps
Scandium	45-2	118455	116138	114852	116482	1.57	cps
Selenium	82-1	138	234	217	196	26.00	cps
Selenium	77-2	17	13	7	12	41.65	cps
Selenium	78-2	557	580	587	574	2.74	cps
Silicon	28-1	10541186	10297037	10234910	10357711	1.56	cps
Silver	107-1	73	90	117	93	23.42	cps
Silver	109-1	103	110	83	99	14.03	cps
Sodium	23-2	6434499	6465207	6461300	6453669	0.26	cps
Strontium	86-1	1122505	1111042	1127521	1120356	0.75	cps
Strontium	88-1	11084970	10707314	11060042	10950776	1.93	cps
Sulfur	34-1	927258	927005	919715	924659	0.46	cps
Terbium	159-1	2998762	3005202	2914979	2972981	1.69	cps
Terbium	159-2	2135477	2178855	2094574	2136302	1.97	cps
Thallium	203-1	410	397	453	420	7.05	cps
Thallium	205-1	1023	1040	913	992	6.94	cps
Tin	118-1	31883	30913	30843	31213	1.86	cps
Titanium	47-1	213	213	190	206	6.56	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-12 Instrumnet Name : P7
Client Sample ID : MW-18B-56-060425-FD Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:10:06 DataFile Name : 061SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	50	67	43	53	22.54	cps
Vanadium	51-2	1623	1657	1327	1536	11.83	cps
Yttrium	89-1	4484582	4602837	4525256	4537558	1.32	cps
Yttrium	89-2	1155234	1130894	1151701	1145943	1.15	cps
Zinc	66-2	4627	4267	4241	4378	4.93	cps
Zirconium	90-1	550	623	590	588	6.25	cps
Zirconium	91-1	107	103	113	108	4.73	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-13 Instrumnet Name : P7
Client Sample ID : MW-19B-72-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:13:27 DataFile Name : 062SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	706	730	704	714	2.05	cps
Antimony	121-1	227	217	217	220	2.62	cps
Arsenic	75-2	77	70	110	86	25.05	cps
Barium	135-1	426931	422597	417737	422421	1.09	cps
Barium	137-1	732203	725243	718022	725156	0.98	cps
Beryllium	9-1	26	46	19	30	45.90	cps
Bismuth	209-1	1471774	1449655	1432676	1451368	1.35	cps
Bismuth	209-2	1323337	1291599	1308135	1307690	1.21	cps
Bromine	81-1	39921	44554	46262	43579	7.53	cps
Bromine	81-2	5661	6135	6278	6025	5.36	cps
Cadmium	108-1	3	10	0	4	114.60	cps
Cadmium	106-1	1007	1053	897	986	8.16	cps
Cadmium	111-1	716	757	648	707	7.81	cps
Calcium	43-1	771169	766798	763864	767277	0.48	cps
Calcium	44-1	13281930	13054685	12998114	13111576	1.15	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1053	1020	983	1019	3.44	cps
Cobalt	59-2	5955	6068	6081	6035	1.15	cps
Copper	63-2	1810	1620	1663	1698	5.87	cps
Dysprosium	156-1	27	23	13	21	32.88	cps
Dysprosium	156-2	43	40	37	40	8.32	cps
Erbium	164-1	33	30	30	31	6.18	cps
Erbium	164-2	30	23	13	22	37.76	cps
Gadolinium	160-1	23	17	30	23	28.56	cps
Gadolinium	160-2	173	147	127	149	15.73	cps
Holmium	165-1	2910119	2833334	2854513	2865989	1.38	cps
Holmium	165-2	2214948	2125607	2178473	2173009	2.07	cps
Indium	115-1	2532919	2383346	2483026	2466430	3.09	cps
Indium	115-2	847010	844096	846655	845920	0.19	cps
Iron	56-2	37841794	37825708	37905067	37857523	0.11	cps
Iron	57-2	922615	915296	916153	918021	0.44	cps
Iron	54-2	2085809	2100539	2051975	2079441	1.20	cps
Krypton	83-1	267	280	330	292	11.43	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-13 Instrumnet Name : P7
Client Sample ID : MW-19B-72-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:13:27 DataFile Name : 062SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1510	1400	1427	1446	3.97	cps
Lead	207-1	1157	1173	1167	1166	0.72	cps
Lead	208-1	5614	5544	5417	5525	1.80	cps
Lithium	6-1	359148	356308	352859	356105	0.88	cps
Magnesium	24-2	4037322	4013352	3955926	4002200	1.05	cps
Manganese	55-2	2112997	2082752	2068718	2088156	1.08	cps
Molybdenum	94-1	1023	977	1043	1014	3.37	cps
Molybdenum	95-1	1457	1587	1357	1467	7.86	cps
Molybdenum	96-1	2394	2284	2210	2296	4.02	cps
Molybdenum	97-1	853	860	863	859	0.59	cps
Molybdenum	98-1	2227	2270	2230	2242	1.08	cps
Neodymium	150-1	27	43	47	39	27.55	cps
Neodymium	150-2	17	10	17	14	26.66	cps
Nickel	60-2	1110	1113	1190	1138	3.98	cps
Phosphorus	31-2	1040	1007	940	996	5.11	cps
Potassium	39-2	2210147	2224373	2197501	2210674	0.61	cps
Rhodium	103-1	2352591	2371382	2294588	2339520	1.71	cps
Rhodium	103-2	1280300	1288908	1267063	1278757	0.86	cps
Scandium	45-1	1446091	1388949	1418221	1417754	2.02	cps
Scandium	45-2	116864	115641	115661	116055	0.60	cps
Selenium	82-1	120	130	119	123	5.16	cps
Selenium	77-2	7	10	3	7	50.03	cps
Selenium	78-2	493	513	503	503	1.99	cps
Silicon	28-1	44543198	44453369	44146356	44380974	0.47	cps
Silver	107-1	97	130	77	101	26.64	cps
Silver	109-1	107	87	73	89	18.88	cps
Sodium	23-2	3589825	3464807	3542158	3532263	1.79	cps
Strontium	86-1	1130052	1119907	1107126	1119029	1.03	cps
Strontium	88-1	11127562	10738097	10763024	10876228	2.00	cps
Sulfur	34-1	1412239	1374841	1393074	1393385	1.34	cps
Terbium	159-1	2957039	2893348	2940535	2930307	1.13	cps
Terbium	159-2	2173705	2143643	2075903	2131083	2.35	cps
Thallium	203-1	190	270	243	234	17.38	cps
Thallium	205-1	507	450	520	492	7.55	cps
Tin	118-1	2637	2810	2844	2764	4.02	cps
Titanium	47-1	423	380	517	440	15.87	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2234-13 Instrumnet Name : P7
Client Sample ID : MW-19B-72-060425 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:13:27 DataFile Name : 062SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	450	487	510	482	6.27	cps
Vanadium	51-2	180	167	123	157	18.91	cps
Yttrium	89-1	4547508	4523381	4431780	4500890	1.36	cps
Yttrium	89-2	1137600	1142334	1133221	1137718	0.40	cps
Zinc	66-2	1517	1503	1463	1495	1.86	cps
Zirconium	90-1	393	363	393	383	4.52	cps
Zirconium	91-1	123	90	103	106	15.90	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV04 Instrumnet Name : P7
Client Sample ID : CCV04 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:16:41 DataFile Name : 063CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4950836	4767018	4737793	4818549	2.40	cps
Antimony	121-1	1865980	1944497	1893453	1901310	2.10	cps
Arsenic	75-2	107167	107741	105992	106967	0.83	cps
Barium	135-1	2430453	2431193	2397000	2419549	0.81	cps
Barium	137-1	4126113	4147246	4107319	4126893	0.48	cps
Beryllium	9-1	263843	266238	275636	268572	2.32	cps
Bismuth	209-1	1260055	1276731	1287016	1274601	1.07	cps
Bismuth	209-2	1181040	1158101	1153821	1164321	1.26	cps
Bromine	81-1	24167	23549	23586	23767	1.46	cps
Bromine	81-2	890	797	670	786	14.06	cps
Cadmium	108-1	34063	34728	34935	34576	1.32	cps
Cadmium	106-1	49474	50083	49906	49821	0.63	cps
Cadmium	111-1	473816	472622	477183	474540	0.50	cps
Calcium	43-1	2654943	2647554	2707935	2670144	1.23	cps
Calcium	44-1	43792258	43630706	44277764	43900243	0.77	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	743553	746827	749031	746470	0.37	cps
Cobalt	59-2	1168093	1159528	1148451	1158691	0.85	cps
Copper	63-2	8700883	8816631	8840310	8785942	0.85	cps
Dysprosium	156-1	137	80	133	117	27.26	cps
Dysprosium	156-2	160	187	223	190	16.74	cps
Erbium	164-1	180	170	227	192	15.74	cps
Erbium	164-2	123	150	163	146	13.99	cps
Gadolinium	160-1	127	110	117	118	7.12	cps
Gadolinium	160-2	187	190	133	170	18.70	cps
Holmium	165-1	2624823	2664978	2627701	2639167	0.85	cps
Holmium	165-2	2046039	2024366	1968799	2013068	1.98	cps
Indium	115-1	2230825	2201193	2280374	2237464	1.79	cps
Indium	115-2	764326	763638	756030	761331	0.60	cps
Iron	56-2	202680457	202965937	199842804	201829733	0.86	cps
Iron	57-2	4897296	4993686	4917108	4936030	1.03	cps
Iron	54-2	10850246	10683238	10515469	10682984	1.57	cps
Krypton	83-1	290	280	280	283	2.04	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV04 Instrumnet Name : P7
Client Sample ID : CCV04 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:16:41 DataFile Name : 063CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	6590772	6651977	6735512	6659420	1.09	cps
Lead	207-1	5688126	5692302	5747333	5709254	0.58	cps
Lead	208-1	26296649	26370699	26499489	26388946	0.39	cps
Lithium	6-1	322870	326926	325018	324938	0.62	cps
Magnesium	24-2	38761584	38373399	38095219	38410067	0.87	cps
Manganese	55-2	6524824	6531418	6410976	6489073	1.04	cps
Molybdenum	94-1	6983391	7018765	7078543	7026900	0.68	cps
Molybdenum	95-1	9938568	10070655	10198677	10069300	1.29	cps
Molybdenum	96-1	10621929	10952581	10977462	10850657	1.83	cps
Molybdenum	97-1	6018953	6369415	6319112	6235827	3.04	cps
Molybdenum	98-1	15790986	16159880	16272207	16074358	1.57	cps
Neodymium	150-1	137	167	130	144	13.52	cps
Neodymium	150-2	33	57	53	48	26.42	cps
Nickel	60-2	295195	295431	295322	295316	0.04	cps
Phosphorus	31-2	50376	49142	49156	49558	1.43	cps
Potassium	39-2	24451001	24243837	24116169	24270336	0.70	cps
Rhodium	103-1	2059180	2063084	2079766	2067343	0.53	cps
Rhodium	103-2	1161394	1152711	1143145	1152416	0.79	cps
Scandium	45-1	1314705	1307718	1289291	1303905	1.01	cps
Scandium	45-2	111025	108975	107437	109146	1.65	cps
Selenium	82-1	40427	41411	41317	41052	1.32	cps
Selenium	77-2	3984	3984	4287	4085	4.29	cps
Selenium	78-2	14370	13843	13773	13996	2.33	cps
Silicon	28-1	3697923	3708309	3826457	3744230	1.91	cps
Silver	107-1	2483064	2415075	2451981	2450040	1.39	cps
Silver	109-1	2330938	2329486	2329209	2329877	0.04	cps
Sodium	23-2	54519164	54164294	53368101	54017186	1.09	cps
Strontium	86-1	598647	606764	606077	603829	0.75	cps
Strontium	88-1	5685970	5896832	5884804	5822535	2.03	cps
Sulfur	34-1	269745	271740	266110	269198	1.06	cps
Terbium	159-1	2753459	2785868	2716243	2751857	1.27	cps
Terbium	159-2	1988469	1923098	1909070	1940213	2.18	cps
Thallium	203-1	1436342	1437770	1431498	1435203	0.23	cps
Thallium	205-1	3831894	3908799	3934867	3891853	1.38	cps
Tin	118-1	1617010	1660299	1665771	1647693	1.62	cps
Titanium	47-1	2516336	2549758	2592829	2552974	1.50	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV04 Instrumnet Name : P7
Client Sample ID : CCV04 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:16:41 DataFile Name : 063CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	4940739	5033439	5148714	5040964	2.07	cps
Vanadium	51-2	661225	656186	652577	656663	0.66	cps
Yttrium	89-1	4170475	4088427	4209160	4156021	1.48	cps
Yttrium	89-2	1078999	1060503	1064512	1068005	0.91	cps
Zinc	66-2	1589544	1637592	1571897	1599678	2.13	cps
Zirconium	90-1	3536134	3568983	3527006	3544041	0.62	cps
Zirconium	91-1	706661	716154	707006	709941	0.76	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB04 Instrumnet Name : P7
Client Sample ID : CCB04 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:23:25 DataFile Name : 064CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	184	164	177	175	5.82	cps
Antimony	121-1	200	160	163	174	12.72	cps
Arsenic	75-2	0	0	3	1	173.21	cps
Barium	135-1	27	47	33	36	28.64	cps
Barium	137-1	40	80	57	59	34.12	cps
Beryllium	9-1	67	24	34	41	54.86	cps
Bismuth	209-1	1315585	1309576	1330772	1318644	0.83	cps
Bismuth	209-2	1228995	1205735	1222339	1219023	0.98	cps
Bromine	81-1	19813	20271	19453	19846	2.07	cps
Bromine	81-2	347	323	277	316	11.30	cps
Cadmium	108-1	3	0	3	2	86.60	cps
Cadmium	106-1	823	817	817	819	0.47	cps
Cadmium	111-1	631	588	599	606	3.62	cps
Calcium	43-1	290	230	223	248	14.82	cps
Calcium	44-1	8136	8362	8266	8255	1.38	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	873	867	840	860	2.05	cps
Cobalt	59-2	33	43	60	46	29.58	cps
Copper	63-2	1263	1103	1140	1169	7.17	cps
Dysprosium	156-1	3	0	0	1	173.21	cps
Dysprosium	156-2	3	3	3	3	0.00	cps
Erbium	164-1	13	20	23	19	26.96	cps
Erbium	164-2	30	23	13	22	37.76	cps
Gadolinium	160-1	10	17	3	10	66.70	cps
Gadolinium	160-2	113	127	90	110	16.87	cps
Holmium	165-1	2551316	2545070	2596628	2564338	1.10	cps
Holmium	165-2	2006471	1948198	2008389	1987686	1.72	cps
Indium	115-1	2275444	2281799	2340614	2299286	1.56	cps
Indium	115-2	790514	789950	784553	788339	0.42	cps
Iron	56-2	16623	16663	17010	16765	1.27	cps
Iron	57-2	1463	1520	1450	1478	2.52	cps
Iron	54-2	2237	2023	2114	2125	5.04	cps
Krypton	83-1	273	237	207	239	13.98	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB04 Instrumnet Name : P7
Client Sample ID : CCB04 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:23:25 DataFile Name : 064CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	340	420	403	388	10.88	cps
Lead	207-1	307	300	287	298	3.42	cps
Lead	208-1	1550	1473	1533	1519	2.65	cps
Lithium	6-1	328004	325757	325755	326506	0.40	cps
Magnesium	24-2	420	370	330	373	12.08	cps
Manganese	55-2	923	827	963	904	7.77	cps
Molybdenum	94-1	257	230	230	239	6.45	cps
Molybdenum	95-1	257	240	220	239	7.69	cps
Molybdenum	96-1	280	343	293	306	10.93	cps
Molybdenum	97-1	140	157	137	144	7.42	cps
Molybdenum	98-1	330	350	337	339	3.01	cps
Neodymium	150-1	0	0	3	1	173.21	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	267	197	177	213	22.15	cps
Phosphorus	31-2	277	277	277	277	0.00	cps
Potassium	39-2	51544	51400	51376	51440	0.18	cps
Rhodium	103-1	2154145	2137350	2179791	2157096	0.99	cps
Rhodium	103-2	1202766	1199407	1200011	1200728	0.15	cps
Scandium	45-1	1314190	1289064	1301919	1301724	0.97	cps
Scandium	45-2	108062	106437	107881	107460	0.83	cps
Selenium	82-1	138	192	186	172	17.24	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	433	590	527	517	15.25	cps
Silicon	28-1	1329934	1292202	1309311	1310482	1.44	cps
Silver	107-1	87	93	113	98	14.20	cps
Silver	109-1	73	80	77	77	4.35	cps
Sodium	23-2	13676	13182	13943	13601	2.84	cps
Strontium	86-1	443	507	470	473	6.72	cps
Strontium	88-1	220	187	170	192	13.24	cps
Sulfur	34-1	108069	107813	108646	108176	0.39	cps
Terbium	159-1	2598061	2655593	2646656	2633437	1.18	cps
Terbium	159-2	1987646	1971477	1958760	1972628	0.73	cps
Thallium	203-1	173	133	187	164	16.88	cps
Thallium	205-1	427	470	430	442	5.45	cps
Tin	118-1	560	623	557	580	6.48	cps
Titanium	47-1	87	63	70	73	16.39	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB04 Instrumnet Name : P7
Client Sample ID : CCB04 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:23:25 DataFile Name : 064CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	33	47	40	40	16.68	cps
Vanadium	51-2	20	17	13	17	20.01	cps
Yttrium	89-1	4080342	4046433	4065865	4064214	0.42	cps
Yttrium	89-2	1040327	1049612	1044788	1044909	0.44	cps
Zinc	66-2	283	357	370	337	13.86	cps
Zirconium	90-1	277	333	330	313	10.15	cps
Zirconium	91-1	57	70	103	77	31.35	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2250-05 Instrumnet Name : P7
Client Sample ID : EB02-060525 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:27:14 DataFile Name : 065SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	437	400	400	412	5.13	cps
Antimony	121-1	90	93	40	74	40.13	cps
Arsenic	75-2	3	3	7	4	43.40	cps
Barium	135-1	717	703	760	727	4.08	cps
Barium	137-1	1227	1163	1403	1265	9.84	cps
Beryllium	9-1	43	37	37	39	9.85	cps
Bismuth	209-1	1501550	1482335	1480621	1488169	0.78	cps
Bismuth	209-2	1345144	1330778	1337005	1337643	0.54	cps
Bromine	81-1	20855	19984	19917	20252	2.58	cps
Bromine	81-2	287	240	253	260	9.25	cps
Cadmium	108-1	7	0	3	3	100.05	cps
Cadmium	106-1	920	903	890	904	1.66	cps
Cadmium	111-1	663	639	634	645	2.37	cps
Calcium	43-1	540	500	457	499	8.35	cps
Calcium	44-1	12215	12112	12405	12244	1.22	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	873	843	777	831	5.95	cps
Cobalt	59-2	37	43	43	41	9.35	cps
Copper	63-2	1117	1137	1047	1100	4.30	cps
Dysprosium	156-1	0	7	0	2	173.21	cps
Dysprosium	156-2	0	0	3	1	173.21	cps
Erbium	164-1	7	13	23	14	58.06	cps
Erbium	164-2	13	23	10	16	44.60	cps
Gadolinium	160-1	10	7	17	11	45.82	cps
Gadolinium	160-2	90	110	157	119	28.78	cps
Holmium	165-1	2891152	2946663	2878608	2905474	1.25	cps
Holmium	165-2	2196496	2225684	2174535	2198905	1.17	cps
Indium	115-1	2507839	2486080	2512675	2502198	0.57	cps
Indium	115-2	873564	872345	873757	873222	0.09	cps
Iron	56-2	23195	22674	22620	22830	1.39	cps
Iron	57-2	1707	1540	1570	1606	5.53	cps
Iron	54-2	2250	2270	2414	2311	3.86	cps
Krypton	83-1	297	270	260	276	6.88	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2250-05 Instrumnet Name : P7
Client Sample ID : EB02-060525 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:27:14 DataFile Name : 065SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	787	800	790	792	0.88	cps
Lead	207-1	677	577	587	613	8.98	cps
Lead	208-1	3054	3027	3147	3076	2.05	cps
Lithium	6-1	368370	362243	354888	361834	1.87	cps
Magnesium	24-2	473	497	553	508	8.10	cps
Manganese	55-2	1743	1710	1867	1773	4.65	cps
Molybdenum	94-1	153	157	120	143	14.15	cps
Molybdenum	95-1	143	137	130	137	4.88	cps
Molybdenum	96-1	250	257	243	250	2.67	cps
Molybdenum	97-1	103	53	73	77	32.83	cps
Molybdenum	98-1	220	253	247	240	7.35	cps
Neodymium	150-1	7	0	3	3	100.05	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	293	260	277	277	6.03	cps
Phosphorus	31-2	263	273	297	278	6.16	cps
Potassium	39-2	52831	53477	52426	52911	1.00	cps
Rhodium	103-1	2529585	2477354	2381453	2462797	3.05	cps
Rhodium	103-2	1318857	1310964	1344828	1324883	1.34	cps
Scandium	45-1	1491003	1467482	1410768	1456418	2.83	cps
Scandium	45-2	118103	116625	118258	117662	0.77	cps
Selenium	82-1	121	123	161	135	16.89	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	640	550	600	597	7.56	cps
Silicon	28-1	1319278	1282517	1307802	1303199	1.44	cps
Silver	107-1	60	87	87	78	19.80	cps
Silver	109-1	47	73	87	69	29.56	cps
Sodium	23-2	12926	12885	12942	12918	0.23	cps
Strontium	86-1	547	543	663	584	11.69	cps
Strontium	88-1	963	923	930	939	2.28	cps
Sulfur	34-1	110355	110687	111933	110991	0.75	cps
Terbium	159-1	3050399	3010967	2955462	3005609	1.59	cps
Terbium	159-2	2157336	2098627	2091792	2115918	1.70	cps
Thallium	203-1	147	190	187	174	13.82	cps
Thallium	205-1	437	360	313	370	16.83	cps
Tin	118-1	1040	990	967	999	3.75	cps
Titanium	47-1	250	270	283	268	6.27	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2250-05 Instrumnet Name : P7
Client Sample ID : EB02-060525 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:27:14 DataFile Name : 065SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	23	23	27	24	7.89	cps
Vanadium	51-2	3	7	7	6	34.70	cps
Yttrium	89-1	4646787	4477670	4483229	4535896	2.12	cps
Yttrium	89-2	1168263	1152786	1176942	1165997	1.05	cps
Zinc	66-2	467	467	533	489	7.87	cps
Zirconium	90-1	137	153	177	156	12.92	cps
Zirconium	91-1	43	57	40	47	18.90	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2250-07 Instrumnet Name : P7
Client Sample ID : EB02-060525 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:30:36 DataFile Name : 066SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	777	804	694	758	7.57	cps
Antimony	121-1	73	63	50	62	18.81	cps
Arsenic	75-2	13	7	3	8	65.47	cps
Barium	135-1	237	210	217	221	6.28	cps
Barium	137-1	333	410	357	367	10.72	cps
Beryllium	9-1	23	43	27	31	34.33	cps
Bismuth	209-1	1480712	1446764	1437278	1454918	1.57	cps
Bismuth	209-2	1328454	1321498	1294668	1314873	1.36	cps
Bromine	81-1	19369	20401	20010	19927	2.61	cps
Bromine	81-2	253	313	250	272	13.09	cps
Cadmium	108-1	3	3	3	3	0.00	cps
Cadmium	106-1	1010	990	963	988	2.37	cps
Cadmium	111-1	711	714	692	706	1.70	cps
Calcium	43-1	740	747	787	758	3.33	cps
Calcium	44-1	17317	16336	16853	16835	2.92	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1133	1030	997	1053	6.77	cps
Cobalt	59-2	43	60	47	50	17.64	cps
Copper	63-2	1363	1343	1233	1313	5.33	cps
Dysprosium	156-1	13	10	10	11	17.30	cps
Dysprosium	156-2	0	0	7	2	173.21	cps
Erbium	164-1	13	20	33	22	45.83	cps
Erbium	164-2	13	10	10	11	17.30	cps
Gadolinium	160-1	30	7	20	19	61.96	cps
Gadolinium	160-2	103	133	113	117	13.10	cps
Holmium	165-1	2862367	2839567	2827348	2843094	0.63	cps
Holmium	165-2	2184143	2172748	2157528	2171473	0.61	cps
Indium	115-1	2549031	2484918	2431420	2488456	2.37	cps
Indium	115-2	860473	853102	858478	857351	0.44	cps
Iron	56-2	35479	36695	36320	36165	1.72	cps
Iron	57-2	2003	2033	1880	1972	4.12	cps
Iron	54-2	3107	2987	2880	2991	3.79	cps
Krypton	83-1	290	300	253	281	8.74	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2250-07 Instrumnet Name : P7
Client Sample ID : EB02-060525 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:30:36 DataFile Name : 066SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	480	563	470	504	10.16	cps
Lead	207-1	480	453	370	434	13.21	cps
Lead	208-1	1993	2143	1923	2020	5.56	cps
Lithium	6-1	356675	355202	352037	354638	0.67	cps
Magnesium	24-2	2484	2550	2257	2430	6.33	cps
Manganese	55-2	5738	5678	6025	5813	3.19	cps
Molybdenum	94-1	170	167	153	163	5.40	cps
Molybdenum	95-1	187	210	160	186	13.48	cps
Molybdenum	96-1	273	223	243	247	10.20	cps
Molybdenum	97-1	97	150	147	131	22.79	cps
Molybdenum	98-1	247	250	347	281	20.20	cps
Neodymium	150-1	0	3	0	1	173.21	cps
Neodymium	150-2	0	3	7	3	100.05	cps
Nickel	60-2	263	163	267	231	25.41	cps
Phosphorus	31-2	313	300	293	302	3.37	cps
Potassium	39-2	52932	53494	53457	53294	0.59	cps
Rhodium	103-1	2430719	2392497	2325993	2383070	2.22	cps
Rhodium	103-2	1298448	1296333	1297098	1297293	0.08	cps
Scandium	45-1	1476370	1425959	1379392	1427240	3.40	cps
Scandium	45-2	115735	116172	114839	115582	0.59	cps
Selenium	82-1	162	159	160	160	0.81	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	513	610	560	561	8.62	cps
Silicon	28-1	1312265	1295056	1306574	1304632	0.67	cps
Silver	107-1	73	53	60	62	16.37	cps
Silver	109-1	53	40	53	49	15.74	cps
Sodium	23-2	15408	15057	15625	15363	1.86	cps
Strontium	86-1	723	620	703	682	8.03	cps
Strontium	88-1	2384	2120	2177	2227	6.23	cps
Sulfur	34-1	110576	111735	111859	111390	0.64	cps
Terbium	159-1	3129938	2891301	2879152	2966797	4.77	cps
Terbium	159-2	2050085	2146317	2067909	2088103	2.45	cps
Thallium	203-1	137	150	113	133	13.92	cps
Thallium	205-1	330	400	337	356	10.87	cps
Tin	118-1	1933	1747	1927	1869	5.67	cps
Titanium	47-1	97	80	103	93	12.88	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : Q2250-07 Instrumnet Name : P7
Client Sample ID : EB02-060525 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:30:36 DataFile Name : 066SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	23	23	20	22	8.65	cps
Vanadium	51-2	13	40	13	22	69.30	cps
Yttrium	89-1	4660530	4485430	4423531	4523164	2.72	cps
Yttrium	89-2	1161194	1158767	1150939	1156967	0.46	cps
Zinc	66-2	610	587	603	600	2.00	cps
Zirconium	90-1	127	210	213	183	26.78	cps
Zirconium	91-1	37	37	40	38	5.09	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV05 Instrumnet Name : P7
Client Sample ID : CCV05 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:34:00 DataFile Name : 067CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4823806	4728767	4761161	4771245	1.01	cps
Antimony	121-1	1895619	1883928	1882767	1887438	0.38	cps
Arsenic	75-2	107490	107738	106727	107318	0.49	cps
Barium	135-1	2397664	2330376	2380657	2369566	1.48	cps
Barium	137-1	4114855	4018824	3949712	4027797	2.06	cps
Beryllium	9-1	270659	271951	272225	271611	0.31	cps
Bismuth	209-1	1246247	1249237	1244745	1246743	0.18	cps
Bismuth	209-2	1147528	1155981	1148078	1150529	0.41	cps
Bromine	81-1	19980	20197	20054	20077	0.55	cps
Bromine	81-2	333	320	307	320	4.17	cps
Cadmium	108-1	33746	33936	33619	33767	0.47	cps
Cadmium	106-1	48839	48370	49324	48844	0.98	cps
Cadmium	111-1	470647	469969	474368	471661	0.50	cps
Calcium	43-1	2683175	2725860	2687943	2698993	0.87	cps
Calcium	44-1	43236718	44204064	44160083	43866955	1.25	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	740039	740100	733777	737972	0.49	cps
Cobalt	59-2	1157010	1154522	1148310	1153281	0.39	cps
Copper	63-2	8630612	8829281	8864164	8774686	1.44	cps
Dysprosium	156-1	63	130	103	99	33.93	cps
Dysprosium	156-2	197	207	223	209	6.45	cps
Erbium	164-1	237	243	227	236	3.56	cps
Erbium	164-2	200	120	187	169	25.38	cps
Gadolinium	160-1	117	120	110	116	4.41	cps
Gadolinium	160-2	207	170	183	187	9.94	cps
Holmium	165-1	2623602	2618703	2633554	2625286	0.29	cps
Holmium	165-2	2051021	2043893	1957049	2017321	2.59	cps
Indium	115-1	2212208	2190773	2203366	2202116	0.49	cps
Indium	115-2	762596	767111	756368	762025	0.71	cps
Iron	56-2	203548090	193465310	195714710	197576037	2.68	cps
Iron	57-2	4875261	4994008	4852460	4907243	1.55	cps
Iron	54-2	10862645	10664252	10629445	10718781	1.17	cps
Krypton	83-1	270	350	333	318	13.28	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV05 Instrumnet Name : P7
Client Sample ID : CCV05 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:34:00 DataFile Name : 067CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	6521629	6514861	6493763	6510085	0.22	cps
Lead	207-1	5650767	5798691	5598759	5682739	1.83	cps
Lead	208-1	25815441	26177999	25550950	25848130	1.22	cps
Lithium	6-1	327363	328012	328087	327821	0.12	cps
Magnesium	24-2	38113465	37964789	38131158	38069804	0.24	cps
Manganese	55-2	6530566	6369528	6494660	6464918	1.31	cps
Molybdenum	94-1	7060603	6973515	7045308	7026475	0.66	cps
Molybdenum	95-1	9949320	9886317	10128774	9988137	1.26	cps
Molybdenum	96-1	10875231	10775233	10856029	10835498	0.49	cps
Molybdenum	97-1	6081434	6181990	6206050	6156491	1.07	cps
Molybdenum	98-1	16273489	15662029	15904085	15946534	1.93	cps
Neodymium	150-1	157	140	107	134	18.94	cps
Neodymium	150-2	37	33	77	49	49.33	cps
Nickel	60-2	295819	296419	291856	294698	0.84	cps
Phosphorus	31-2	49075	49754	49038	49289	0.82	cps
Potassium	39-2	25042009	24424062	24425735	24630602	1.45	cps
Rhodium	103-1	2033150	2035210	2064643	2044334	0.86	cps
Rhodium	103-2	1157645	1151305	1129924	1146291	1.27	cps
Scandium	45-1	1309427	1312958	1321902	1314762	0.49	cps
Scandium	45-2	109441	107814	108462	108573	0.75	cps
Selenium	82-1	40936	41237	40704	40959	0.65	cps
Selenium	77-2	4181	4104	4107	4131	1.05	cps
Selenium	78-2	14110	14040	13863	14004	0.91	cps
Silicon	28-1	3628090	3732547	3823498	3728045	2.62	cps
Silver	107-1	2442621	2386627	2459553	2429600	1.57	cps
Silver	109-1	2319807	2258579	2280469	2286285	1.36	cps
Sodium	23-2	53376744	52927838	53444378	53249653	0.53	cps
Strontium	86-1	597071	592248	594061	594460	0.41	cps
Strontium	88-1	5611657	5600183	5529376	5580405	0.80	cps
Sulfur	34-1	263338	259979	261941	261753	0.64	cps
Terbium	159-1	2649979	2659067	2638995	2649347	0.38	cps
Terbium	159-2	1963196	1934976	1959208	1952460	0.78	cps
Thallium	203-1	1393899	1398169	1379262	1390443	0.71	cps
Thallium	205-1	3754863	3818839	3805051	3792918	0.89	cps
Tin	118-1	1593247	1664188	1641112	1632849	2.22	cps
Titanium	47-1	2556531	2540478	2521111	2539373	0.70	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCV05 Instrumnet Name : P7
Client Sample ID : CCV05 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:34:00 DataFile Name : 067CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	4842385	4999866	4940266	4927506	1.61	cps
Vanadium	51-2	652526	655953	647058	651846	0.69	cps
Yttrium	89-1	4121667	4010243	3960783	4030898	2.04	cps
Yttrium	89-2	1071368	1067853	1064878	1068033	0.30	cps
Zinc	66-2	1628627	1621493	1604604	1618241	0.76	cps
Zirconium	90-1	3451440	3514085	3462015	3475847	0.96	cps
Zirconium	91-1	701521	698511	708925	702986	0.76	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB05 Instrumnet Name : P7
Client Sample ID : CCB05 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:45:39 DataFile Name : 068CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	214	147	150	170	22.05	cps
Antimony	121-1	100	83	60	81	24.77	cps
Arsenic	75-2	3	0	7	3	100.05	cps
Barium	135-1	13	43	23	27	57.29	cps
Barium	137-1	47	33	30	37	24.06	cps
Beryllium	9-1	27	30	30	29	6.73	cps
Bismuth	209-1	1277250	1289129	1287972	1284784	0.51	cps
Bismuth	209-2	1212036	1222705	1215287	1216676	0.45	cps
Bromine	81-1	19513	19593	19113	19406	1.33	cps
Bromine	81-2	190	187	253	210	17.89	cps
Cadmium	108-1	3	7	3	4	43.40	cps
Cadmium	106-1	853	693	743	763	10.72	cps
Cadmium	111-1	632	501	538	557	12.12	cps
Calcium	43-1	243	257	293	264	9.79	cps
Calcium	44-1	7956	7492	8116	7854	4.12	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	897	890	840	876	3.54	cps
Cobalt	59-2	43	50	60	51	16.42	cps
Copper	63-2	1023	963	983	990	3.09	cps
Dysprosium	156-1	3	10	3	6	69.34	cps
Dysprosium	156-2	0	0	3	1	173.21	cps
Erbium	164-1	13	13	10	12	15.73	cps
Erbium	164-2	10	10	20	13	43.30	cps
Gadolinium	160-1	3	10	20	11	75.52	cps
Gadolinium	160-2	97	120	130	116	14.80	cps
Holmium	165-1	2527430	2545806	2581340	2551525	1.07	cps
Holmium	165-2	1973116	1933115	1965054	1957095	1.08	cps
Indium	115-1	2257285	2240131	2277284	2258233	0.82	cps
Indium	115-2	787208	788066	788037	787770	0.06	cps
Iron	56-2	16299	17297	16766	16787	2.97	cps
Iron	57-2	1400	1373	1300	1358	3.81	cps
Iron	54-2	2167	2197	2124	2162	1.71	cps
Krypton	83-1	260	237	297	264	11.44	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB05 Instrumnet Name : P7
Client Sample ID : CCB05 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:45:39 DataFile Name : 068CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	390	323	320	344	11.46	cps
Lead	207-1	383	360	283	342	15.29	cps
Lead	208-1	1493	1330	1323	1382	6.97	cps
Lithium	6-1	317962	321032	323970	320988	0.94	cps
Magnesium	24-2	253	300	263	272	9.03	cps
Manganese	55-2	760	857	830	816	6.12	cps
Molybdenum	94-1	187	213	193	198	7.02	cps
Molybdenum	95-1	123	150	150	141	10.91	cps
Molybdenum	96-1	307	247	227	260	16.01	cps
Molybdenum	97-1	130	113	120	121	6.92	cps
Molybdenum	98-1	233	310	267	270	14.24	cps
Neodymium	150-1	7	7	3	6	34.70	cps
Neodymium	150-2	10	3	0	4	114.60	cps
Nickel	60-2	243	243	203	230	10.04	cps
Phosphorus	31-2	300	327	297	308	5.34	cps
Potassium	39-2	50858	52233	50523	51205	1.77	cps
Rhodium	103-1	2147631	2150613	2108014	2135420	1.11	cps
Rhodium	103-2	1199888	1187027	1171500	1186139	1.20	cps
Scandium	45-1	1283332	1288518	1275860	1282570	0.50	cps
Scandium	45-2	106699	105858	106401	106319	0.40	cps
Selenium	82-1	114	157	85	119	30.64	cps
Selenium	77-2	3	0	0	1	173.21	cps
Selenium	78-2	487	513	673	558	18.10	cps
Silicon	28-1	1313938	1325118	1325827	1321628	0.50	cps
Silver	107-1	63	40	93	66	40.78	cps
Silver	109-1	57	53	57	56	3.47	cps
Sodium	23-2	12899	12895	12782	12859	0.52	cps
Strontium	86-1	483	453	473	470	3.25	cps
Strontium	88-1	143	120	117	127	11.47	cps
Sulfur	34-1	107723	107877	107924	107841	0.10	cps
Terbium	159-1	2603224	2636122	2666451	2635266	1.20	cps
Terbium	159-2	1957577	1958583	1952138	1956099	0.18	cps
Thallium	203-1	140	150	97	129	21.99	cps
Thallium	205-1	280	247	280	269	7.16	cps
Tin	118-1	543	533	557	544	2.15	cps
Titanium	47-1	43	67	57	56	21.08	cps

LB Number : LB136121 Operator : Jaswal
Lab Sample ID : CCB05 Instrumnet Name : P7
Client Sample ID : CCB05 Dilution Factor : 1
Date & Time Acquired : 2025-06-11 21:45:39 DataFile Name : 068CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	27	23	50	33	43.59	cps
Vanadium	51-2	10	10	7	9	21.63	cps
Yttrium	89-1	4081303	4123738	4010390	4071810	1.41	cps
Yttrium	89-2	1060718	1051853	1042272	1051614	0.88	cps
Zinc	66-2	337	360	390	362	7.38	cps
Zirconium	90-1	267	307	347	307	13.04	cps
Zirconium	91-1	47	47	73	56	27.71	cps

SOP ID : M3010A-Digestion-17

SDG No : N/A

Matrix : WATER

Pipette ID : ICP A

Balance ID : N/A

Filter paper ID : N/A

pH Strip ID : M6069

Hood ID : #3

Block ID : 1. HOT BLOCK #1 2. N/A

Start Digest Date: 06/09/2025 Time : 12:20 Temp : 96 °C

End Digest Date: 06/09/2025 Time : 14:14 Temp : 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: S/29

Supervisor Signature: JEP

Temp : 1. 96°C 2. N/A

Standard Name	MLS USED	STD REF. # FROM LOG
Spike Sol 1	0.50	MP85846
Spike Sol 2	1.00	MP85847
Spike Sol 3	1.00	MP85848
Spike Sol 4	1.00	MP85849
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Conc. HNO3	3.00	M6158
1:1 HCL	5.00	MP85156
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

HOT BLOCK#1 CELL#50 96 C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
06/09/25 15:15	S/29. met. dig	JEP Met Lab
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
PB168360BL	PBW360	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	16
PB168360BS	LCS360	<2	50	50	Colorless	Colorless	Clear	Clear	MP85846,MP85847,MP85848,N	17
Q2218-03	3309	<2	50	50	Pink	ligh Brown	Clear	Clear	N/A	18
Q2234-01DUP	MW-17B-55-060425DUP	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	20
Q2234-01	MW-17B-55-060425	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	19
Q2234-02	Q2234-01MS	<2	50	50	Colorless	Colorless	Clear	Clear	MP85846,MP85847,MP85848,N	21
Q2234-03	Q2234-01MSD	<2	50	50	Colorless	Colorless	Clear	Clear	MP85846,MP85847,MP85848,N	22
Q2234-05	MW-18B-56-060425	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	23
Q2234-06	MW-18B-56-060425-FD	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	24
Q2234-07	MW-19B-72-060425	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	25
Q2234-08	MW-17B-55-060425	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	26
Q2234-09	Q2234-08MS	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	27
Q2234-10	Q2234-08MSD	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	28
Q2234-11	MW-18B-56-060425	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	29
Q2234-12	MW-18B-56-060425-FD	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	30
Q2234-13	MW-19B-72-060425	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	31
Q2250-05	EB02-060525	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	32
Q2250-07	EB02-060525	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	33

WORKLIST(Hardcopy Internal Chain)

Worklist Name : PB168360

Worklist ID : 190045

Department : Digestion

Date : 06-09-2025 11:39:50

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2218-03	3309	Water	Metals ICP-TAL	1:1 HNO3 to pH < 2	PSEG03	N31	06/04/2025	6020B
Q2234-01	MW-17B-55-060425	Water	Metals Group4	1:1 HNO3 to pH < 2	JACO05	N31	06/04/2025	6020B
Q2234-02	Q2234-01MS	Water	Metals Group4	1:1 HNO3 to pH < 2	JACO05	N31	06/04/2025	6020B
Q2234-03	Q2234-01MSD	Water	Metals Group4	1:1 HNO3 to pH < 2	JACO05	N31	06/04/2025	6020B
Q2234-05	MW-18B-56-060425	Water	Metals Group4	1:1 HNO3 to pH < 2	JACO05	N31	06/04/2025	6020B
Q2234-06	MW-18B-56-060425-FD	Water	Metals Group4	1:1 HNO3 to pH < 2	JACO05	N31	06/04/2025	6020B
Q2234-07	MW-19B-72-060425	Water	Metals Group4	1:1 HNO3 to pH < 2	JACO05	N31	06/04/2025	6020B
Q2234-08	MW-17B-55-060425	Water	Dissolved ICP-Group2	Cool 4 deg C	JACO05	N31	06/04/2025	6020B
Q2234-09	Q2234-08MS	Water	Dissolved ICP-Group2	Cool 4 deg C	JACO05	N31	06/04/2025	6020B
Q2234-10	Q2234-08MSD	Water	Dissolved ICP-Group2	Cool 4 deg C	JACO05	N31	06/04/2025	6020B
Q2234-11	MW-18B-56-060425	Water	Dissolved ICP-Group2	Cool 4 deg C	JACO05	N31	06/04/2025	6020B
Q2234-12	MW-18B-56-060425-FD	Water	Dissolved ICP-Group2	Cool 4 deg C	JACO05	N31	06/04/2025	6020B
Q2234-13	MW-19B-72-060425	Water	Dissolved ICP-Group2	Cool 4 deg C	JACO05	N31	06/04/2025	6020B
Q2250-05	EB02-060525	Water	Metals ICP-TAL	1:1 HNO3 to pH < 2	JACO05	N31	06/05/2025	6020B
Q2250-07	EB02-060525	Water	Dissolved ICP-Group2	Cool 4 deg C	JACO05	D22	06/05/2025	6020B

Date/Time 06/09/25 11:55

Raw Sample Received by: SLB.mcd19

Raw Sample Relinquished by: CLPcsn

Date/Time 06/09/25 12:55

Raw Sample Received by: CLPcsn

Raw Sample Relinquished by: SLB.mcd19

Instrument ID: P7

Daily Analysis Runlog For Sequence/QC Batch ID # LB136121

Review By	Janvi	Review On	6/12/2025 11:36:04 AM
Supervise By	jaswal	Supervise On	6/12/2025 5:42:09 PM
STD. NAME	STD REF.#		
ICAL Standard	MP85829,MP85838,MP85837,MP85835,MP85834,MP85833,MP85832,MP85831,MP85830		
ICV Standard	MP85839		
CCV Standard	MP85840		
ICSA Standard	MP85841,MP85842		
CRI Standard	MP85837		
LCS Standard			
Chk Standard	MP85844,MP85845		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	TUNE	TUNE	TUNE	06/11/25 17:38		Jaswal	OK
2	S0	S0	CAL1	06/11/25 18:00		Jaswal	OK
3	S2	S2	CAL3	06/11/25 18:07		Jaswal	OK
4	S3	S3	CAL4	06/11/25 18:14		Jaswal	OK
5	S4	S4	CAL5	06/11/25 18:18		Jaswal	OK
6	S5	S5	CAL6	06/11/25 18:21		Jaswal	OK
7	S6	S6	CAL7	06/11/25 18:24		Jaswal	OK
8	S7	S7	CAL8	06/11/25 18:27		Jaswal	OK
9	S8	S8	CAL9	06/11/25 18:30		Jaswal	OK
10	ICV01	ICV01	ICV	06/11/25 18:48		Jaswal	OK
11	LLICV01	LLICV01	LLICV	06/11/25 19:00		Jaswal	OK
12	ICB01	ICB01	ICB	06/11/25 19:07		Jaswal	OK
13	ICSA01	ICSA01	ICSA	06/11/25 19:10		Jaswal	OK
14	ICSAB01	ICSAB01	ICSAB	06/11/25 19:13		Jaswal	OK
15	CCV01	CCV01	CCV	06/11/25 19:29		Jaswal	OK
16	CCB01	CCB01	CCB	06/11/25 19:35		Jaswal	OK
17	CRI	CRI	CRDL	06/11/25 19:39		Jaswal	OK
18	Q2218-03DL	3309DL	SAM	06/11/25 19:42	K High , INT_STD 45Sc(1) Fail	Jaswal	Dilution

Instrument ID: P7

Daily Analysis Runlog For Sequence/QC Batch ID # LB136121

Review By	Janvi	Review On	6/12/2025 11:36:04 AM
Supervise By	jaswal	Supervise On	6/12/2025 5:42:09 PM
STD. NAME	STD REF.#		
ICAL Standard	MP85829,MP85838,MP85837,MP85835,MP85834,MP85833,MP85832,MP85831,MP85830		
ICV Standard	MP85839		
CCV Standard	MP85840		
ICSA Standard	MP85841,MP85842		
CRI Standard	MP85837		
LCS Standard			
Chk Standard	MP85844,MP85845		

19	Q2218-03DL2	3309DL2	SAM	06/11/25 19:48	50X For K, 50X for INT_STD 45Sc(1)	Jaswal	Confirms
20	CCV02	CCV02	CCV	06/11/25 19:52		Jaswal	OK
21	CCB02	CCB02	CCB	06/11/25 19:58		Jaswal	OK
22	PB168360BL	PB168360BL	MB	06/11/25 20:02		Jaswal	OK
23	PB168360BS	PB168360BS	LCS	06/11/25 20:05		Jaswal	OK
24	Q2234-01	MW-17B-55-060425	SAM	06/11/25 20:09		Jaswal	OK
25	Q2234-01DUP	MW-17B-55-060425D	DUP	06/11/25 20:12		Jaswal	OK
26	Q2234-01L	MW-17B-55-060425L	SD	06/11/25 20:16		Jaswal	OK
27	Q2234-02	MW-17B-55-060425M	MS	06/11/25 20:19		Jaswal	OK
28	Q2234-03	MW-17B-55-060425M	MSD	06/11/25 20:22		Jaswal	OK
29	Q2234-01A	MW-17B-55-060425A	PS	06/11/25 20:25		Jaswal	OK
30	Q2234-05	MW-18B-56-060425	SAM	06/11/25 20:28		Jaswal	OK
31	Q2234-06	MW-18B-56-060425-F	SAM	06/11/25 20:31		Jaswal	OK
32	CCV03	CCV03	CCV	06/11/25 20:35		Jaswal	OK
33	CCB03	CCB03	CCB	06/11/25 20:41		Jaswal	OK
34	Q2234-07	MW-19B-72-060425	SAM	06/11/25 20:44		Jaswal	OK
35	Q2234-08	MW-17B-55-060425	SAM	06/11/25 20:47		Jaswal	OK
36	Q2234-08DUP	MW-17B-55-060425D	DUP	06/11/25 20:51		Jaswal	OK
37	Q2234-08L	MW-17B-55-060425L	SD	06/11/25 20:54		Jaswal	OK

Instrument ID: P7

Daily Analysis Runlog For Sequence/QC Batch ID # LB136121

Review By	Janvi	Review On	6/12/2025 11:36:04 AM
Supervise By	jaswal	Supervise On	6/12/2025 5:42:09 PM
STD. NAME	STD REF.#		
ICAL Standard	MP85829,MP85838,MP85837,MP85835,MP85834,MP85833,MP85832,MP85831,MP85830		
ICV Standard	MP85839		
CCV Standard	MP85840		
ICSA Standard	MP85841,MP85842		
CRI Standard	MP85837		
LCS Standard			
Chk Standard	MP85844,MP85845		

38	Q2234-09	MW-17B-55-060425M	MS	06/11/25 20:57		Jaswal	OK
39	Q2234-10	MW-17B-55-060425M	MSD	06/11/25 21:00		Jaswal	OK
40	Q2234-08A	MW-17B-55-060425A	PS	06/11/25 21:03		Jaswal	OK
41	Q2234-11	MW-18B-56-060425	SAM	06/11/25 21:06		Jaswal	OK
42	Q2234-12	MW-18B-56-060425-F	SAM	06/11/25 21:10		Jaswal	OK
43	Q2234-13	MW-19B-72-060425	SAM	06/11/25 21:13		Jaswal	OK
44	CCV04	CCV04	CCV	06/11/25 21:16		Jaswal	OK
45	CCB04	CCB04	CCB	06/11/25 21:23		Jaswal	OK
46	Q2250-05	EB02-060525	SAM	06/11/25 21:27		Jaswal	OK
47	Q2250-07	EB02-060525	SAM	06/11/25 21:30		Jaswal	OK
48	CCV05	CCV05	CCV	06/11/25 21:34		Jaswal	OK
49	CCB05	CCB05	CCB	06/11/25 21:45		Jaswal	OK

Prep Standard - Chemical Standard Summary

Order ID : Q2234

Test : Dissolved ICP-Group2, Metals Group4

Prepbatch ID : PB168360,

Sequence ID/Qc Batch ID: LB136121, LB136121, LB136121,

Standard ID :

MP85156, MP85829, MP85830, MP85831, MP85832, MP85833, MP85834, MP85835, MP85836, MP85837, MP85838, MP85839, MP85840, MP85841, MP85842, MP85843, MP85844, MP85845, MP85846, MP85847, MP85848, MP85849,

Chemical ID :

M5305, M5471, M5520, M5658, M5739, M5751, M5798, M5799, M5800, M5801, M5811, M5815, M5817, M5873, M5874, M5942, M5961, M5962, M5977, M5981, M6021, M6023, M6025, M6026, M6028, M6030, M6032, M6055, M6079, M6086, M6127, M6128, M6137, M6142, M6144, M6145, M6150, M6151, M6153, M6158, M6159, M6160, M6162, W3112,

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
170	1:1HCL	MP85156	04/07/2025	08/18/2025	Kareem Khairalla	None	None	Sarabjit Jaswal
								04/07/2025

FROM 1250.00000ml of M6151 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1122	ICPMS CALIB BLANK(S0/ICB/CCB)	MP85829	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal
								06/14/2025

FROM 25.00000ml of M6151 + 4925.00000ml of W3112 + 50.00000ml of M6162 = Final Quantity: 5000.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2902	S8 ICPMS	MP85830	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP)	Sarabjit Jaswal
A) FROM 1.00000ml of M6159 + 2.50000ml of M5811 + 2.50000ml of M6142 + 5.00000ml of M6086 + 5.00000ml of M6127 + 5.00000ml of M6144 + 79.00000ml of MP85829 = Final Quantity: 100.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3947	S7(SFAM,6020,200.8)	MP85831	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP)	Sarabjit Jaswal
A) FROM 0.10000ml of M6153 + 0.40000ml of M6026 + 1.00000ml of M5799 + 1.00000ml of M5981 + 1.00000ml of M6079 + 1.00000ml of M6137 + 1.90000ml of M6159 + 10.00000ml of M5942 + 10.00000ml of M5977 + 10.00000ml of M6162 + 2.00000ml of M5815 + 2.00000ml of M5817 + 4.00000ml of M6032 + 4.90000ml of M5520 + 4.90000ml of M5811 + 5.00000ml of M6151 + 50.00000ml of M5305 + 834.10000ml of W3112 + 9.00000ml of M5751 + 9.00000ml of M6128 + 9.00000ml of M6145 + 9.90000ml of M6086 + 9.90000ml of M6127 + 9.90000ml of M6144 = Final Quantity: 1000.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3948	S6(SFAM,6020,200.8)	MP85832	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP)	Sarabjit Jaswal
A) FROM 0.50000ml of M6151 + 1.00000ml of M6162 + 48.50000ml of W3112 + 50.00000ml of MP85831 = Final Quantity: 100.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3949	S5(SFAM,6020,200.8)	MP85833	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP)	Sarabjit Jaswal
A) FROM 0.50000ml of M6151 + 1.00000ml of M6162 + 73.50000ml of W3112 + 25.00000ml of MP85831 = Final Quantity: 100.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3954	S4(SFAM,6020,200.8)	MP85834	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025
FROM 0.50000ml of M6151 + 1.00000ml of M6162 + 86.00000ml of W3112 + 12.50000ml of MP85831 = Final Quantity: 100.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3951	S3(SFAM, 6020,200.8)	MP85835	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP)	Sarabjit Jaswal
0.50000ml of M6151 + 1.00000ml of M6162 + 88.50000ml of W3112 + 10.00000ml of MP85832 = Final Quantity: 100.000 ml								

[illegible]

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3956	S2(SFAM,6020,200.8)	MP85837	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025
<u>FROM</u>	0.50000ml of M6151 + 1.00000ml of M6162 + 98.00000ml of W3112 + 0.50000ml of MP85836 = Final Quantity: 100.000 ml							



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3957	S1(SFAM,6020,200.8)	MP85838	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP)	Sarabjit Jaswal
A) FROM 0.50000ml of M6151 + 1.00000ml of M6162 + 88.50000ml of W3112 + 10.00000ml of MP85837 = Final Quantity: 100.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3958	ICV(SFAM)	MP85839	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP)	Sarabjit Jaswal
FROM 2.00000ml of M6150 + 98.00000ml of MP85829 = Final Quantity: 100.000 ml 								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3961	CCV	MP85840	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP)	Sarabjit Jaswal
A) <u>FROM</u> 0.20000ml of M6026 + 0.50000ml of M5471 + 0.50000ml of M5799 + 0.50000ml of M5981 + 0.50000ml of M6079 + 0.50000ml of M6137 + 1.00000ml of M5815 + 1.00000ml of M5817 + 10.00000ml of M6162 + 12.45000ml of M5520 + 12.45000ml of M5811 + 2.00000ml of M6032 + 24.95000ml of M6086 + 24.95000ml of M6127 + 24.95000ml of M6144 + 25.00000ml of M5305 + 4.50000ml of M5751 + 4.50000ml of M6128 + 4.50000ml of M6145 + 4.95000ml of M6159 + 5.00000ml of M6151 + 5.50000ml of M5942 + 5.50000ml of M5977 + 824.10000ml of W3112 = Final Quantity: 1000.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1142	ICSA ICPMS	MP85841	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025
<u>FROM</u>	10.00000ml of M5873 + 90.00000ml of MP85829 = Final Quantity: 100.000 ml							



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1143	ICSAB ICPMS	MP85842	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP)	Sarabjit Jaswal
FROM 10.00000ml of M5873 + 10.00000ml of M5874 + 80.00000ml of MP85829 = Final Quantity: 100.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3962	MG 10PPM FOR TUNE	MP85843	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP)	Sarabjit Jaswal
FROM 0.01000ml of M6127 + 9.99000ml of MP85829 = Final Quantity: 100.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3894	TUNE 200PPB	MP85844	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP)	Sarabjit Jaswal
FROM 2.00000ml of M6055 + 2.00000ml of MP85843 + 96.00000ml of MP85829 = Final Quantity: 100.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3903	ISS 3PPM	MP85845	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP)	Sarabjit Jaswal
FROM 5.00000ml of M6162 + 75.00000ml of M5739 + 170.00000ml of MP85829 = Final Quantity: 250.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3880	M&B SPIKE-1	MP85846	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP)	Sarabjit Jaswal
FROM 5.00000ml of M5471 + 5.00000ml of M5658 + 5.00000ml of M5798 + 5.00000ml of M5800 + 5.00000ml of M5961 + 5.00000ml of M5962 + 5.00000ml of M5981 + 5.00000ml of M6021 + 5.00000ml of M6023 + 5.00000ml of M6028 + 5.00000ml of M6030 + 5.00000ml of M6079 + 5.00000ml of M6160 + 35.00000ml of MP85829 = Final Quantity: 100.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3881	M&B SPIKE-2	MP85847	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025
<u>FROM</u>	10.00000ml of M5942 + 10.00000ml of M5977 + 12.50000ml of M5520 + 12.50000ml of M5811 + 12.50000ml of M6032 + 2.50000ml of M5799 + 2.50000ml of M6137 + 5.00000ml of M6159 + 32.50000ml of MP85829 = Final Quantity: 100.000 ml							

[illegible]

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3900	M&B SPIKE-4	MP85849	05/30/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP)	Sarabjit Jaswal
A) FROM 6.25000ml of M6086 + 6.25000ml of M6127 + 6.25000ml of M6144 + 6.25000ml of MP85829 = Final Quantity: 25.000 ml								

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	6020CAL-1 / Calibration Standard Method 6020	S2-MEB711244	10/20/2026	03/07/2025 / JANVI	04/01/2022 / jaswal	M5305

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57038 / Sr, 1000 PPM, 125 ml	082922	08/29/2025	04/14/2025 / jaswal	03/16/2023 / jaswal	M5471

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57119 / Potassium (K) 10,000PPM	120822	12/08/2025	08/01/2024 / Jaswal	03/17/2023 / bin	M5520

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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 #
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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57004 / Be, 1000 PPM, 125 ml	102523	10/25/2026	02/09/2024 / bin	02/09/2024 / bin	M5798

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57050 / Sn, 1000 PPM, 125 ml	071123	07/11/2026	02/09/2024 / bin	02/09/2024 / bin	M5799

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57027 / CO, 1000 PPM, 125 ml	091923	09/19/2026	05/31/2024 / bin	02/09/2024 / bin	M5800

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57033 / As, 1000 PPM, 125 ml	111323	11/13/2026	02/09/2024 / bin	02/09/2024 / bin	M5801

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58126 / Fe, 10000 PPM, 500 ml	051523	05/15/2026	02/06/2025 / kareem	01/03/2024 / jaswal	M5811

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57115 / P, 10000 PPM, 125 ml	041723	04/17/2026	05/21/2024 / Jaswal	02/09/2024 / jaswal	M5815

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57116 / S, 10000 PPM, 125 ml	071123	07/11/2026	03/01/2024 / jaswal	02/09/2024 / jaswal	M5817

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART A / ICSA (ICPMS) STOCK SOLN	CP-MS ICSA-0803	06/30/2025	04/17/2024 / jaswal	07/14/2022 / jaswal	M5873

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART B / ICSB (ICPMS) STOCK SOLUTION	CP-MS ICSB-0803	06/30/2025	04/17/2024 / jaswal	07/14/2022 / jaswal	M5874

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGTI1-1 / TITANIUM 125mL 1000ug/mL	T2-TI719972	06/17/2027	06/18/2024 / Jaswal	02/22/2024 / Jaswal	M5942

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGMO1-1 / MOLYBDENUM 125mL 1000ug/mL	T2-MO720876	07/17/2027	01/16/2025 / JANVI	02/22/2024 / Jaswal	M5977

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57092 / U, 1000 PPM, 125 ml	060724	06/07/2027	07/29/2024 / Jaswal	06/11/2024 / Jaswal	M5981

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57023 / V, 1000 PPM, 125 ml	062424	06/24/2027	09/28/2024 / jaswal	08/05/2024 / Jaswal	M6021

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57081 / TI, 1000 PPM, 125 ml	0624724	06/27/2027	08/05/2024 / kareem	08/05/2024 / Jaswal	M6023

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57082 / Pb, 1000 PPM, 125 ml	061224	11/09/2026	08/05/2024 / Jaswal	08/05/2024 / Jaswal	M6025

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57182 / Pb, 10000 PPM, 125 ml	110923	11/09/2026	12/05/2024 / janvi	08/05/2024 / Jaswal	M6026

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57048 / Cd, 1000 PPM, 125 ml	070124	07/01/2027	08/05/2024 / kareem	08/05/2024 / Jaswal	M6028

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57047 / Ag, 1000 PPM, 125 ml	122823	12/28/2026	08/05/2024 / kareem	08/05/2024 / Jaswal	M6030

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57056 / Ba, 1000 PPM, 125 ml	010924	01/09/2027	01/14/2025 / Jaswal	08/05/2024 / Jaswal	M6032

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	IV-STOCK-12 / ICP-MS TUNING SOLUTION, 125mL	U2-MEB734294	06/21/2028	08/21/2024 / Jaswal	08/19/2024 / Jaswal	M6055

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57040 / Zr, 1000 PPM, 125 ml	071423	07/14/2026	01/15/2025 / Jaswal	09/30/2024 / Jaswal	M6079

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Calcium, 500 ml, 10000 PPM	082324	08/23/2027	03/06/2025 / JANVI	10/14/2024 / jaswal	M6086

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	112124	11/21/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6127

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58025 / Mn, 1000 PPM, 500 ml	101124	10/11/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6128

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGSI1-1 / SILICON 125mL 1000ug/mL	V2-SI744713	07/10/2029	01/14/2025 / Jaswal	10/03/2024 / Jaswal	M6137

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58119 / K, 10000 PPM, 500 ml	103024	10/30/2027	05/06/2025 / JANVI	01/13/2025 / Jaswal	M6142

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58111 / Na, 10000 PPM, 500 ml	072424	07/24/2027	01/23/2025 / kareem	01/13/2025 / Jaswal	M6144

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58030 / Zinc, Zn, 500 ml, 1000 PPM	121724	12/17/2027	02/04/2025 / jaswal	01/13/2025 / Jaswal	M6145

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-1 / ICV (ICP/ICPMS) STOCK SOLN	ICV1-1014	07/07/2025	02/07/2025 / JANVI	04/20/2021 / JANVI	M6150

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	08/18/2025	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGSR10 / Strontium (SR), 125mL 10,000ppm	V2-SR754329	02/28/2026	02/28/2025 / JANVI	01/07/2025 / JANVI	M6153

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	03/25/2029	03/10/2025 / Eman	02/02/2025 / Sagar	M6158

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / Al, 10000 PPM, 500 ml	011325	03/18/2026	03/18/2025 / kareem	02/09/2025 / kareem	M6159

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57051 / Sb, 1000 PPM, 125 ml	071724	07/17/2027	03/24/2025 / kareem	10/18/2024 / kareem	M6160

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24H0162012	11/27/2025	05/27/2025 / Sagar	04/27/2025 / Sagar	M6162

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112



CERTIFIED WEIGHT REPORT:

Part Number: 57056
Lot Number: 010924
Description: Barium (Ba)
Solvent: Nitric Acid
Lot #

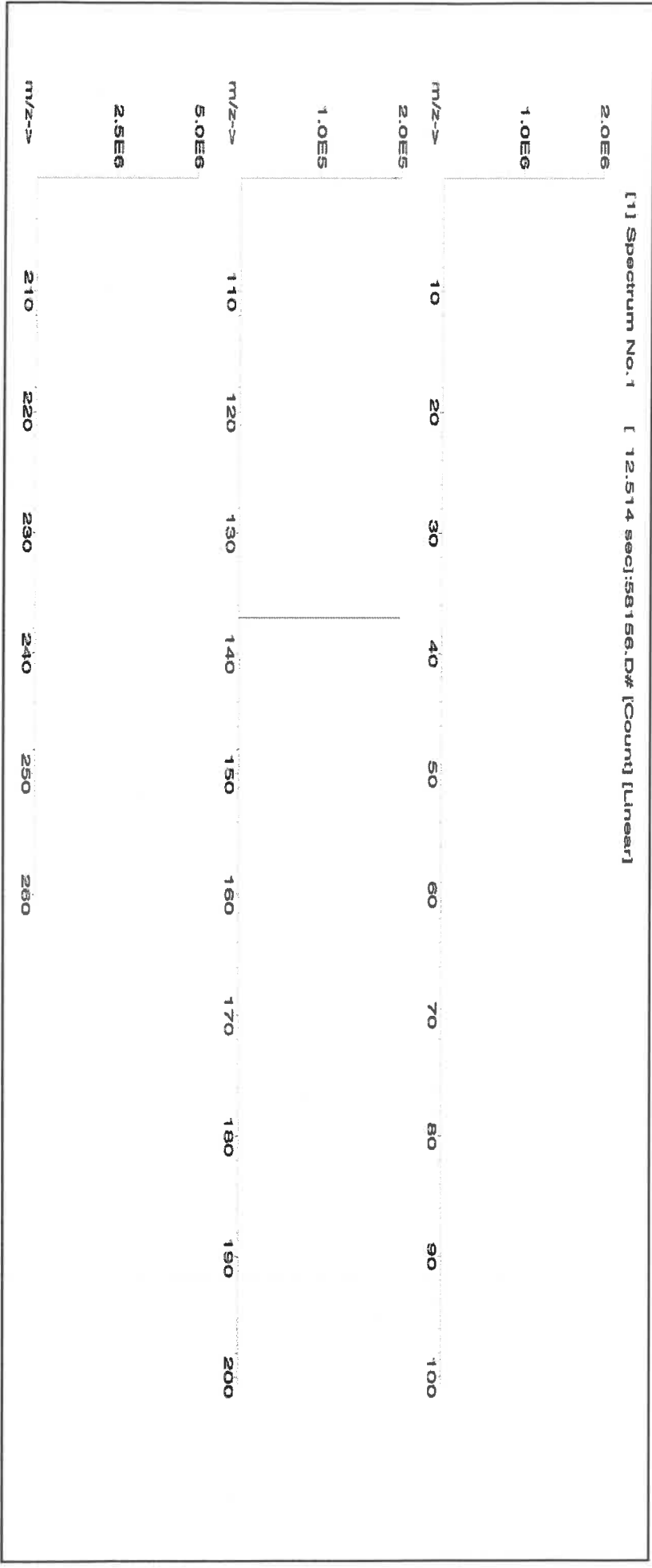
Expiration Date: 010927
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
2% **40.0** **Nitric Acid**
(mL)

NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 2000.02 **5E-05** **Balance Uncertainty**
0.058 **Flask Uncertainty**

<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito
	010924
<i>Pedro L. Renteria</i>	
Reviewed By:	Pedro L. Renteria
	010924

SDS Information									
Compound	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)
Barium nitrate (Ba)	IN023 BA0022019A1	1000	99.999	0.10	52.3	3.82417	3.82441	1000.1	2.0
								10022-31-8	0.5 mg/m3
									or-hat 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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number: **58120**
Lot Number: **082324**
Description: **Calcium (Ca)**

Solvent: **24002546 Nitric Acid**

Lot # **MC055 / MB086 / MB087**

Expiration Date: **082327**

Recommended Storage: **Ambient (20 °C)**

Nominal Concentration (µg/mL): **10000**

NIST Test Number: **6UTB**

Weight shown below was diluted to (mL): **4000.1 0.15 Flask Uncertainty**

2% **80.0 Nitric Acid (mL)**

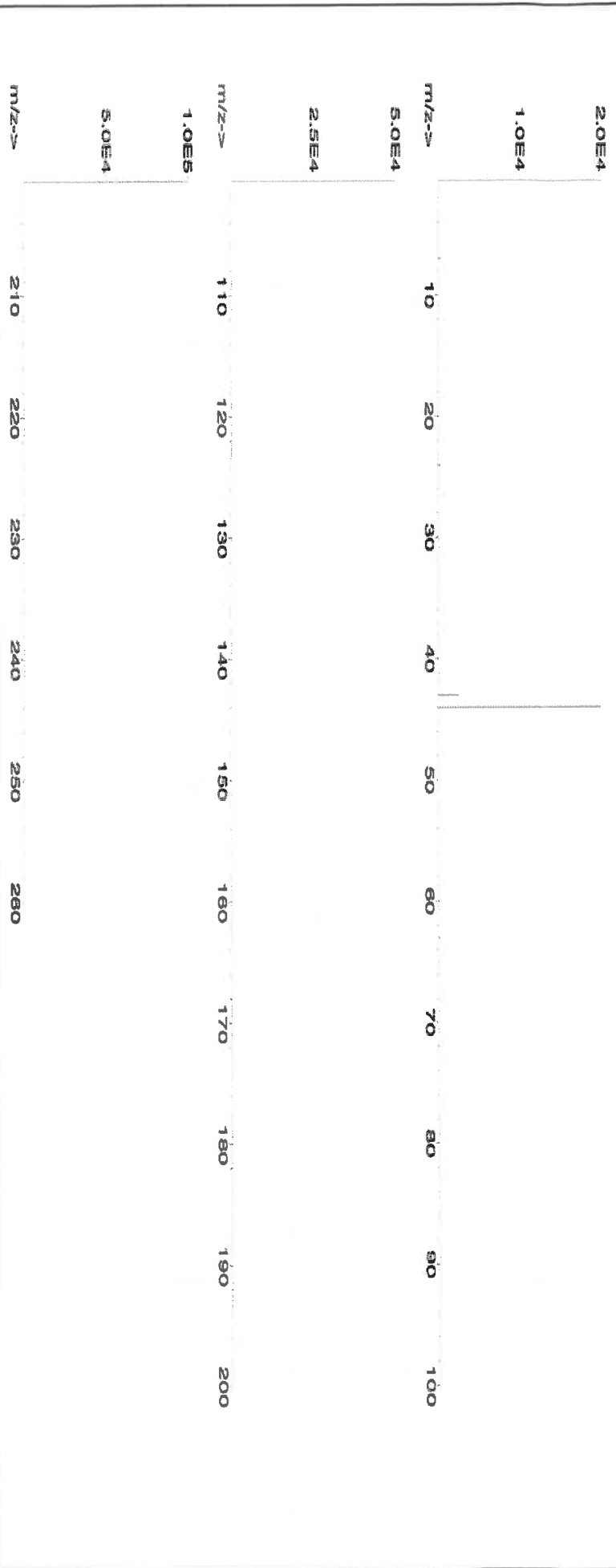
<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito
Reviewed By:	<i>Pedro L. Rentas</i>

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty		CAS#	OSHA PEL (TWA)	LD50	NIST SRM
										±	(µg/mL)				

SDS Information

1. Calcium carbonate (Ca) IN014 CAD03202383 10000 99.999 0.10 39.9 100.2537 100.2656 10001.2 20.0 471-34-1 5 mg/m3 or-rat >2000mg/kg 3109a

[1] Spectrum No. 1 [12.514 sec]:58120.D* [Count] [Linear]





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	Pt	<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	Ti	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	30	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Su	<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	Tl	<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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

57048
070124
Cadmium (Cd)

Solvent: 24002546 Nitric Acid

Lot #

R: 815/24

2% 40.0 Nitric Acid (mL)

Expiration Date: 070127

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL): 1000

NIST Test Number: 6UTB

SE-05 Balance Uncertainty

Weight shown below was diluted to (mL): 2000.07 0.100 Flask Uncertainty

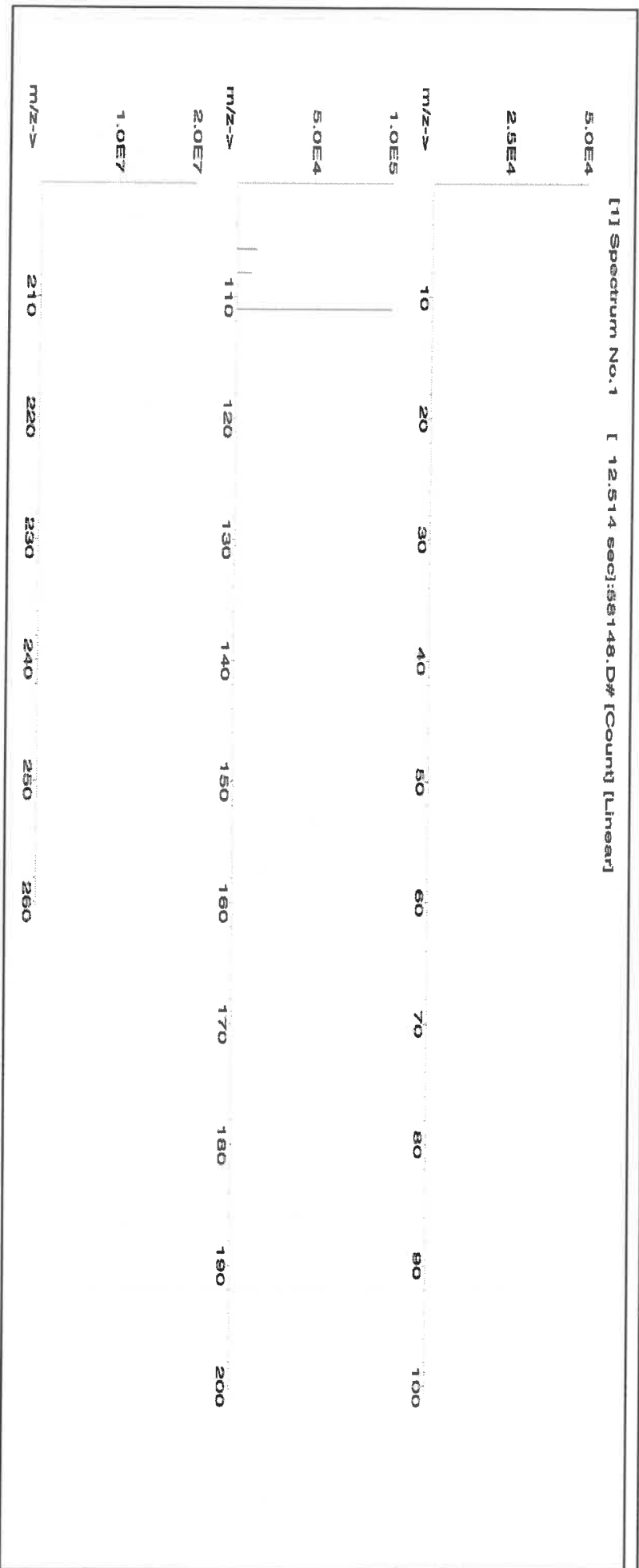
<i>Aleah O'Brady</i>	
Formulated By:	Aleah O'Brady
	070124
<i>Pedro L. Rentas</i>	
Reviewed By:	Pedro L. Rentas
	070124

Compound

Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

1. Cadmium nitrate tetrahydrate (Cd) IN024 CDM09221A1 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

[1] Spectrum No.1 [12.514 sec]:\$8148.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.2	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<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	Ba	<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	Cd	<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	Pr	<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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number: 58126
Lot Number: 051523
Description: Iron (Fe)

Solvent: 21110221 Nitric Acid

Lot #

Expiration Date: 051526

5.0% 250.0 (mL) Nitric Acid

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL): 10000

NIST Test Number: 6UTB

5E-05 Balance Uncertainty

Weight shown below was diluted to (mL): 5000.1 **0.12 Flask Uncertainty**

Giovanni Esposito

Formulated By: Giovanni Esposito **051523**

Pedro L. Renias

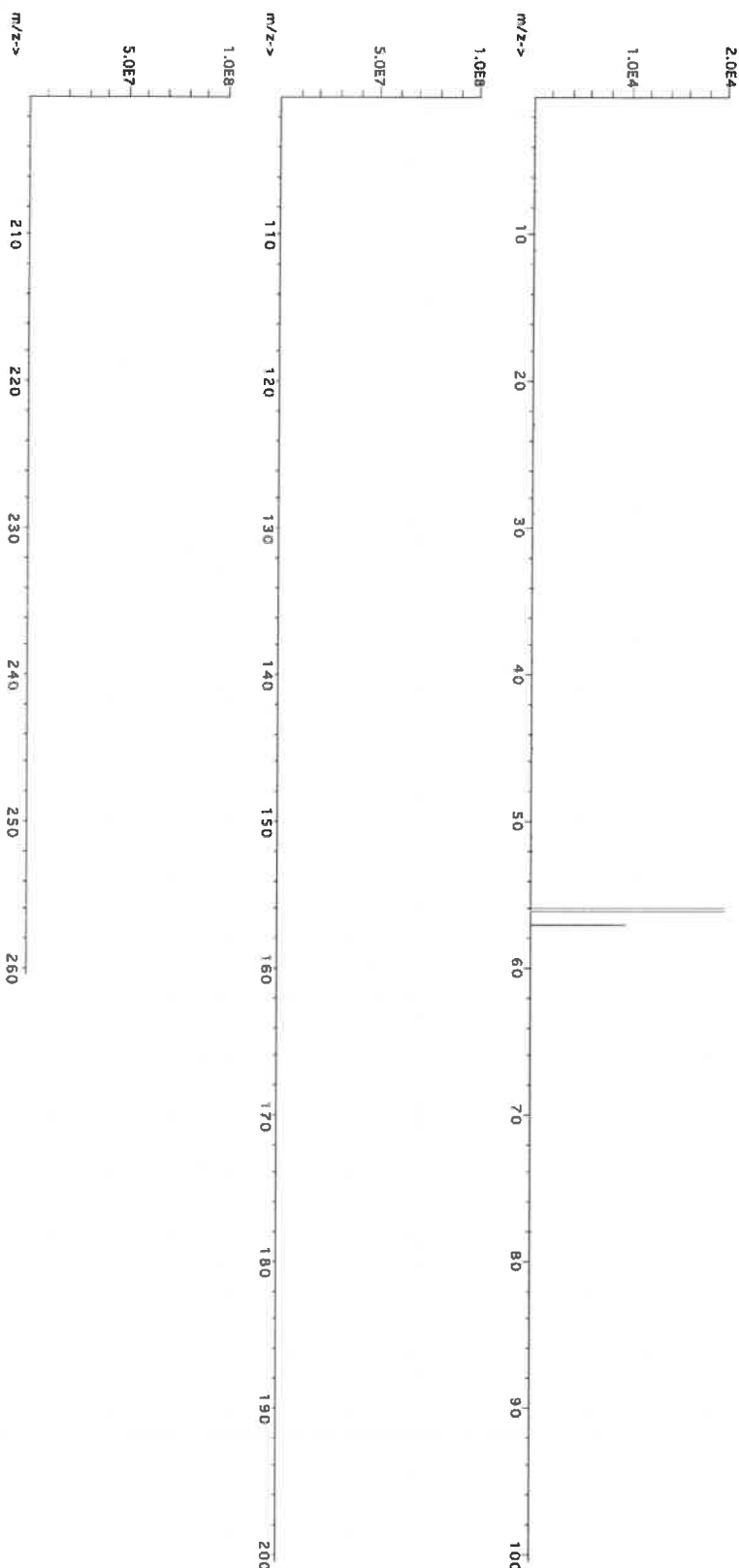
Reviewed By: Pedro L. Renias **051523**

SDS Information

Compound	Lot	Nominal	Purity	Uncertainty	Assay	Target	Actual	Actual	Uncertainty	(Solvent Safety Info. On Attached pg.)			
	RM#	Number	Conc. (µg/mL)	(%)	Purity (%)	(%)	Weight (g)	Weight (g)	Conc. (µg/mL)	+/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50

1. Iron (Fe) IN346 2302010-500 10000 99.995 0.10 100.0 50.0034 50.0111 10001.5 20.0 7439-89-6 5 mg/m3 or-rel 7500mg/kg 3126a

[1] Spectrum No.1 [30.763 sec]:58126.D# [Count] [Linear]





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	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ce	<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	Rb	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.10	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.05	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.10	Ge	<0.10	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.10
B	<0.02	Cu	<0.10	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Tl	<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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number: 57182
Lot Number: 110923
Description: Lead (Pb)

Solvent: Nitric Acid
Lot #

24002546

2% 40.0 (mL) Nitric Acid

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
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

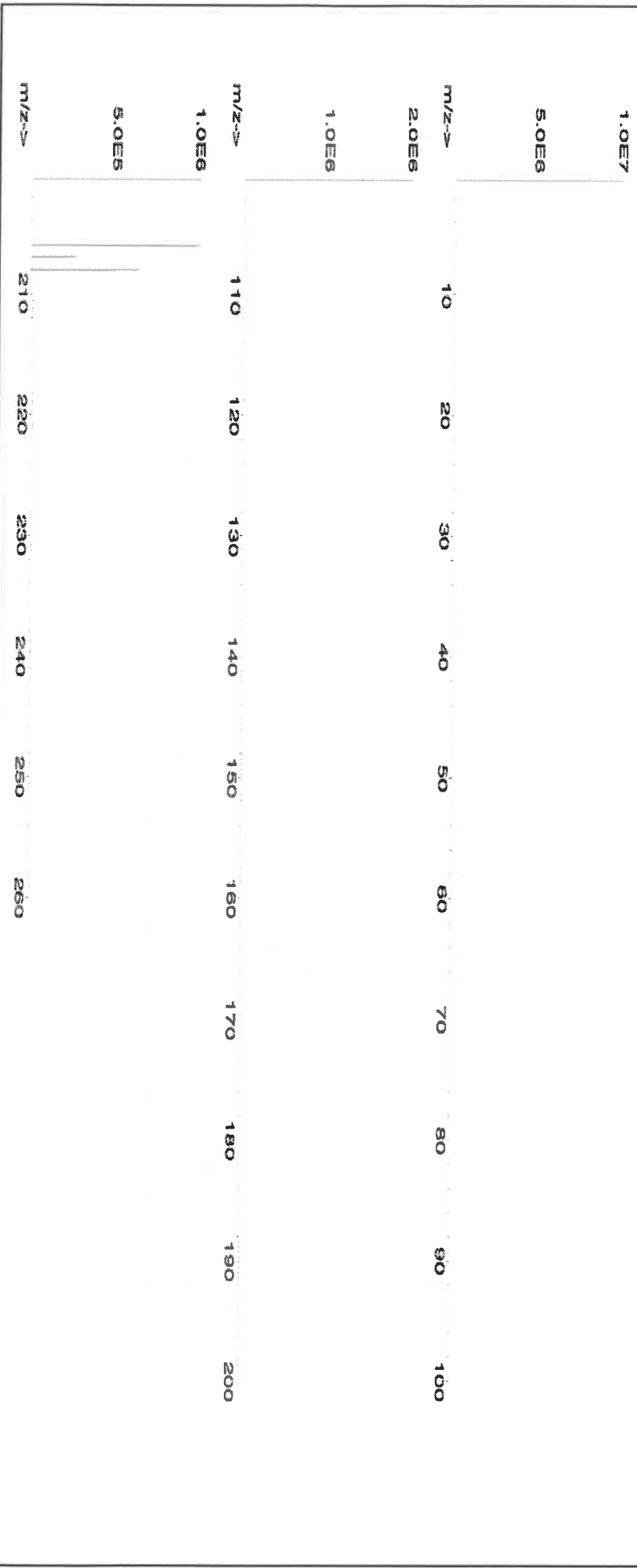
Formulated By:	Lawrence Barry
	110923
Reviewed By:	Pedro L. Rentas
	110923

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)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

1. Lead(II) nitrate (Pb) IN029 PED12016A1 10000 99.999 0.10 62.5 32.0006 32.0040 10001.1 20.0 10099-74-8 0.05 mg/m3 Inverse rat 83 mg/kg 3128

[1] Spectrum No.1 [17.284 sec]:58182.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS ($\mu\text{g/mL}$)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<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

Physical Characterization:

(T)= Target analyte

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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- * All Standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



CERTIFIED WEIGHT REPORT:

Part Number: **57182**
Lot Number: **110923**
Description: **Lead (Pb)**

Solvent: **24002546 Nitric Acid**
Lot #: **2%**

40.0 (mL) Nitric Acid

Expiration Date: **110926**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **10000**
NIST Test Number: **6UTB**

Weight shown below was diluted to (mL): **2000.02** 0.058 Flask Uncertainty

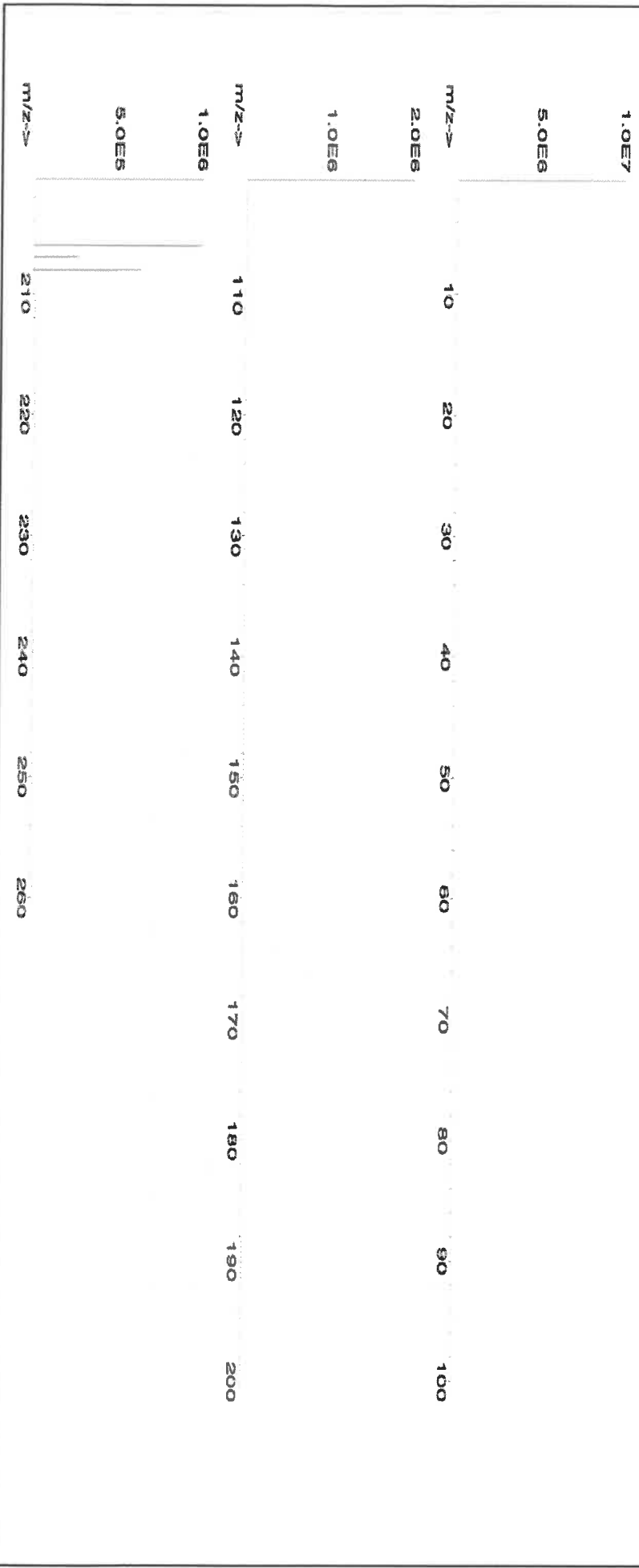
Formulated By:	Lawrence Barry
110923	
Reviewed By:	Pedro L. Rentas
110923	

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)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

1. Lead(II) nitrate (Pb) IN029 PED12016A1 10000 99.999 0.10 62.5 32.0006 32.0040 10001.1 20.0 10099-74-8 0.05 mg/m3 Inverse rat 83 mg/kg 3128

[1] Spectrum No.1 [17.284 sec]:58182.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS ($\mu\text{g/mL}$)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<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

Physical Characterization:

(T)= Target analyte

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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- * 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).



Refine your results. Redefine your industry.

Certificate of Analysis

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inorganicventures.com

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



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 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
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, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum(1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum(w_i)^2 (u_{\text{char } i})^2]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a)(u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = 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





Certified Reference Material CRM

CERTIFIED WEIGHT REPORT:

Part Number: **58119**
Lot Number: **120822**
Description: **Potassium (K)**

Solvent: 20510011 Nitric Acid

Lot #

M519 M520

BP R:03/17/23

Giovanni Esposito

Formulated By: Giovanni Esposito 120822

Expiration Date: 120825
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

2% 60.0 (mL) Nitric Acid

Reviewed By: *Pedro L. Rentas*

Pedro L. Rentas 120822

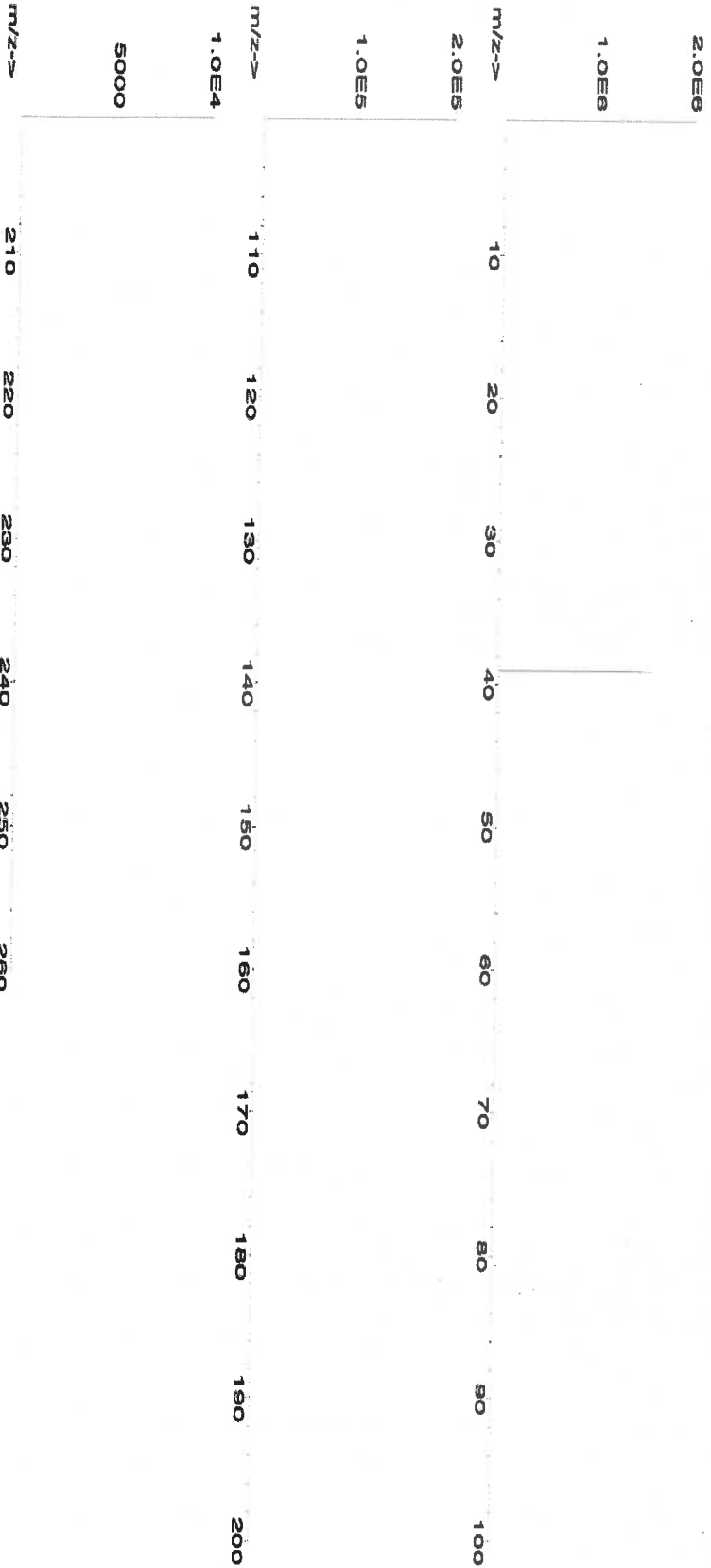
Weight shown below was diluted to (mL): 3000.4 0.06 Flask Uncertainty

Compound

Lot	Nominal	Purity	Uncertainty	Assay	Target	Actual	Expanded	SDS Information	NIST
Number	Conc. (µg/mL)	(%)	Purity (%)	(%)	Weight (g)	Weight (g)	Conc. (µg/mL)	(Solvent Safety Info. On Attached pg.)	
RM#									

1. Potassium nitrate (K) IN034 KD022021A1 10000 99.989 0.10 37.6 79.7990 79.8075 10001.1 20.0 7757-79-1 5 mg/m3 or/air 3015 mg/kg 3141a

[1] Spectrum No.1 [35.763 sec]:58119.D# [Count] [Linear]





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	Pt	<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	<0.02	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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CERTIFIED WEIGHT REPORT:

Part Number: 58024
Lot Number: 060523
Description: Chromium (Cr)

Lot #
21110221
Solvent: Nitric Acid

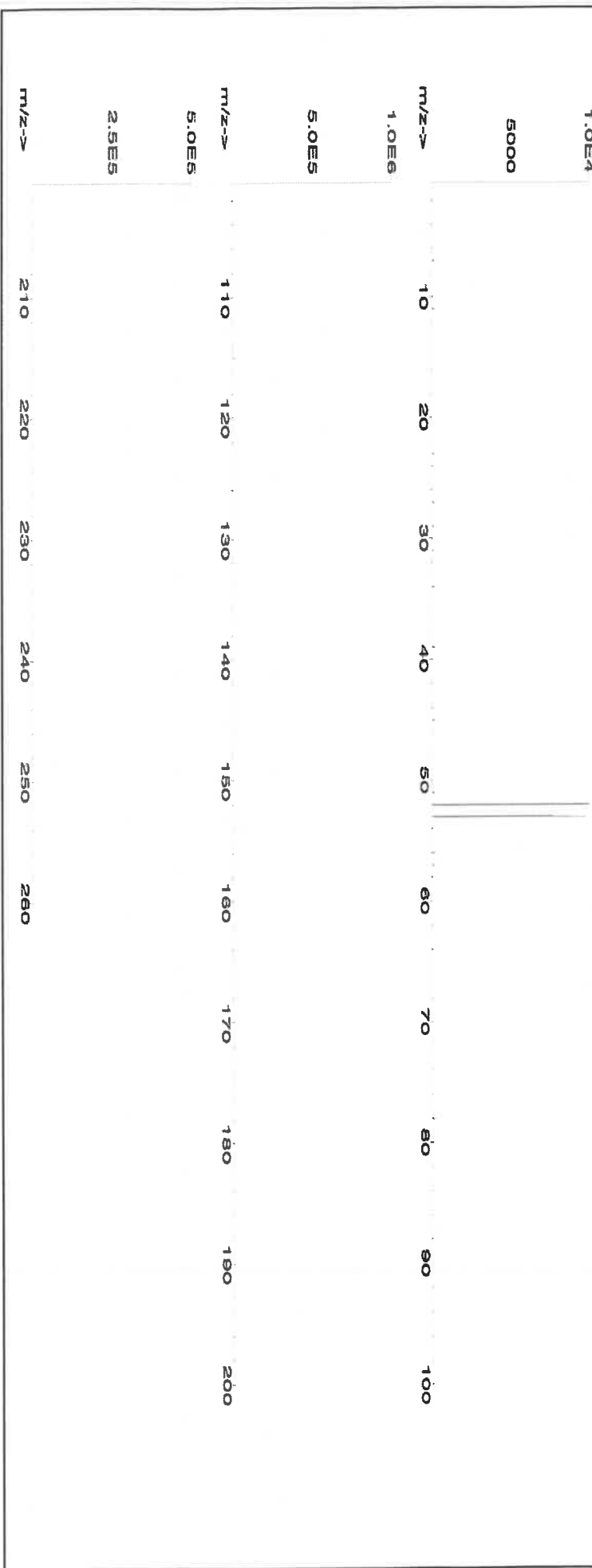
Formulated By:	Lawrence Barry
	060523
Reviewed By:	Pedro L. Ruelas
	060523

Expiration Date: 060526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 2000.02
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	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 or rat 3250 mg/kg 3112a

[1] Spectrum No.1 [31.393 sec]:57024.D# [Count] [Linear]





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:

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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number: 58029
Lot Number: 071723
Description: Copper (Cu)

Lot # 2110221
Solvent: Nitric Acid

Expiration Date: 071726
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000

2.0% **40.0 (mL)** **Nitric Acid**

Formulated By:	Benson Chan	071723
Reviewed By:	Pedro L. Ruelas	071723

NIST Test Number: 6L7B
Volume shown below was diluted to (mL): 2000.02
Balance Uncertainty: 5E-05
Flask Uncertainty: 0.058

SDS Information

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	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 or-rat 794 mg/kg 3114

[1] Spectrum No.1 [33.422 sec]:58029.D# [Count] [Linear]

1.0E6	m/z-->	10	20	30	40	50	60	70	80	90	100
5.0E5	m/z-->	110	120	130	140	150	160	170	180	190	200
2.5E7	m/z-->	210	220	230	240	250	260				



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	Bu	<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	Ru	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	La	<0.2	Hg	<0.2	P	<0.02	Sr	<0.02	S	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	Pb	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	Ta	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02			Nd	<0.02	K	<0.2	Sc	<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).



CERTIFIED WEIGHT REPORT:

Part Number: 57004
Lot Number: 102523
Description: Beryllium (Be)

Lot # 24002546
Solvent: Nitric Acid

Expiration Date:

102526

2.0%

40.0 (mL)

Nitric Acid

Recommended Storage:

Ambient (20 °C)

Nominal Concentration (µg/mL):

1000

NIST Test Number:

6UTB

Volume shown below was diluted to (mL): 2000.02

5E-05 Balance Uncertainty

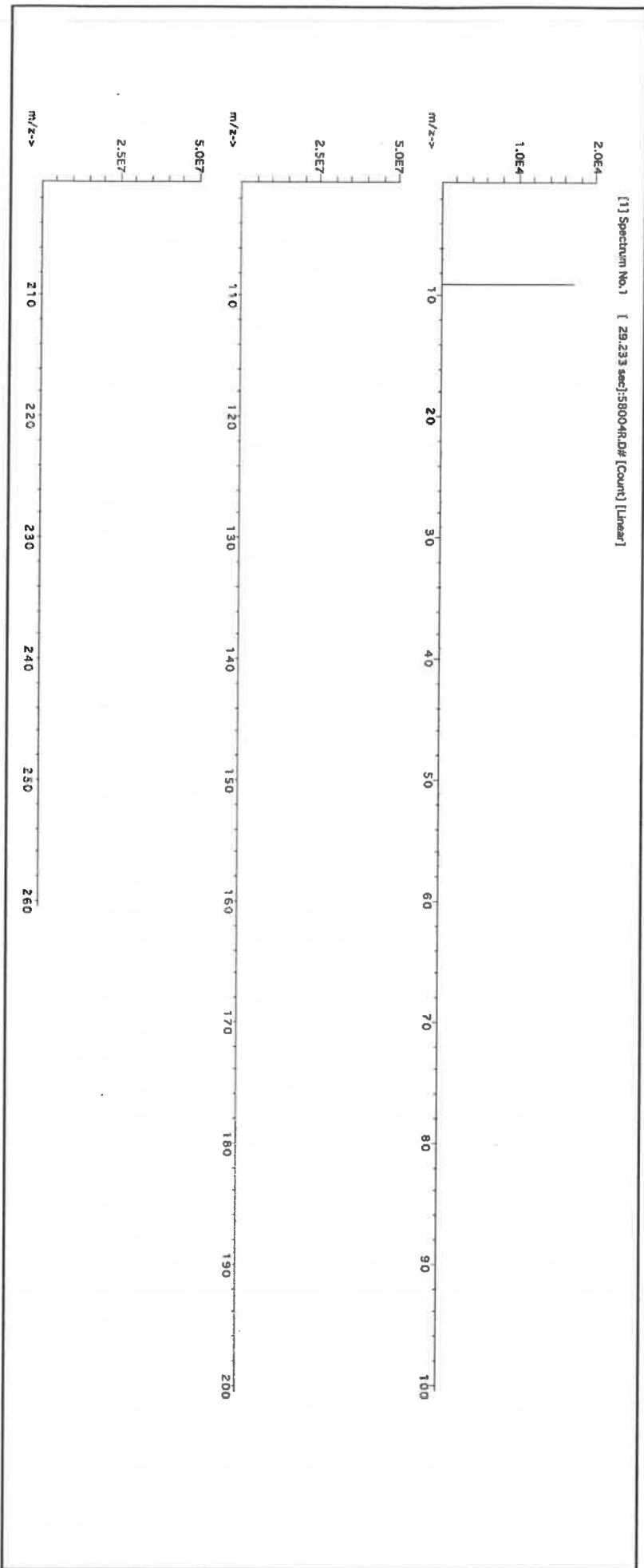
0.058 Flask Uncertainty

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

SDS Information

Compound	Part Number	Lot	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	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	0.2µg/m3	intrinsc-rat 3.16mg/kg	NA





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS ($\mu\text{g/mL}$)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<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	Tc	<0.02	U	<0.02
As	<0.02	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Ti	<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	<0.02	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	Ta	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.02	Sc	<0.02	Ta	<0.02	Tl	<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 certified (+/-) 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).



Certified Reference Material CRM



CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

Solvents: 21110221 Nitric Acid
22D0562008 Hydrochloric acid

Lot # R-02509124 M599

Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

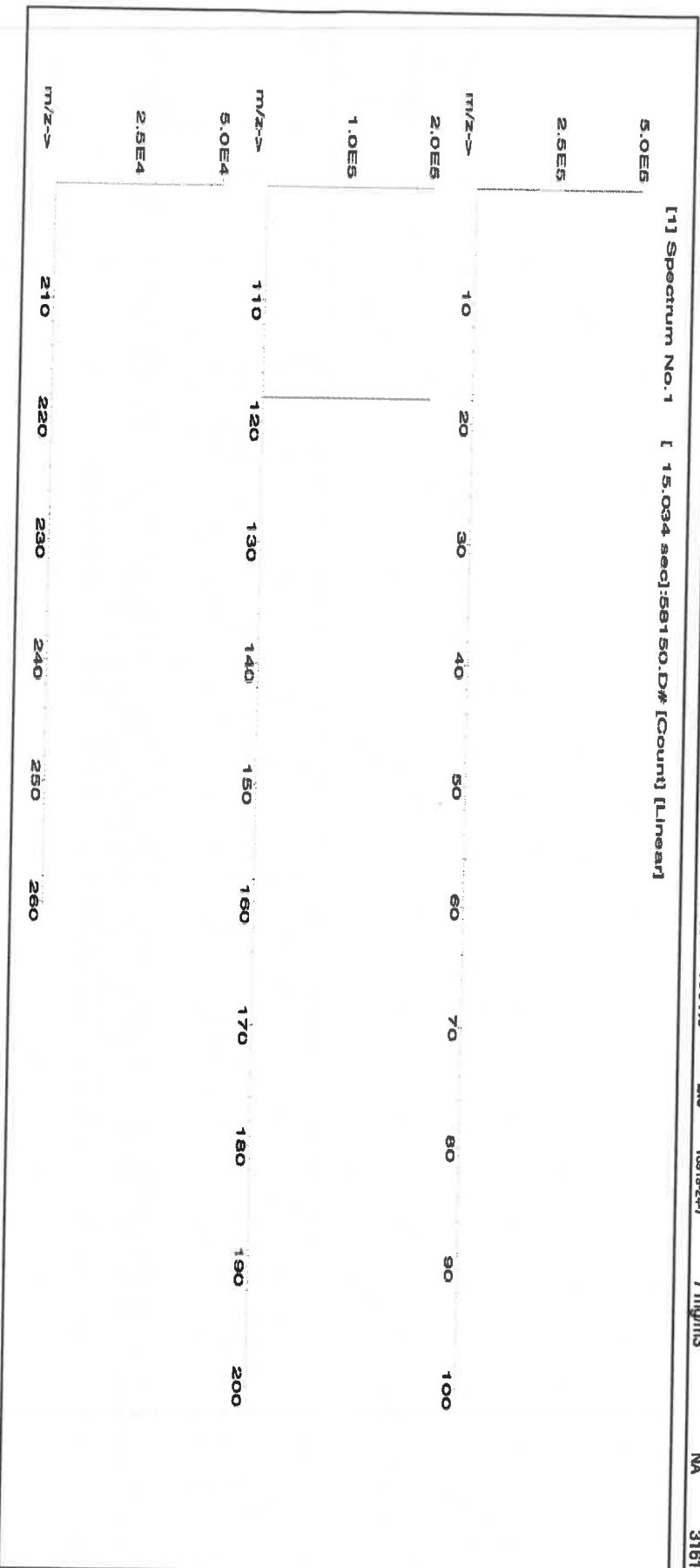
Weight shown below was diluted to (mL): 499.93
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Benson Chan
	071123
Reviewed By:	Pedro L. Rientas
	071123

SDS Information																			
Compound		Lot		Nominal		Purity		Uncertainty		Assay		Target		Actual		Expanded		NIST	
RM#	Number	Conc. (µg/mL)	(%)	Purity (%)	(%)	Weight (g)	Weight (g)	Conc. (µg/mL)	+/- (µg/mL)	(Solvent Safety Info. On Attached pg.)	CAS#	OSHA PEL (TWA)	LD50	SRM					

1. Ammonium hexafluoroantimonate(V) (Sn) INO10 SMD042023A1 1000 99.999 0.10 44.2 1.13107 1.13286 1001.6 2.0 16919-24-7 7 mg/m3 NA 3161a

[1] Spectrum No. 1 [15.034 sec]:56150.D# [Count] [Linear]





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	Ti	<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	Ta	<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	Tl	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
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- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



R: 02/09/24 115800 (BA)

CERTIFIED WEIGHT REPORT:

Part Number: 57027
Lot Number: 091923
Description: Cobalt (Co)

Expiration Date: 091926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Volume shown below was diluted to (mL): 2000.02

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Lot # 24002546
Solvent: Nitric Acid

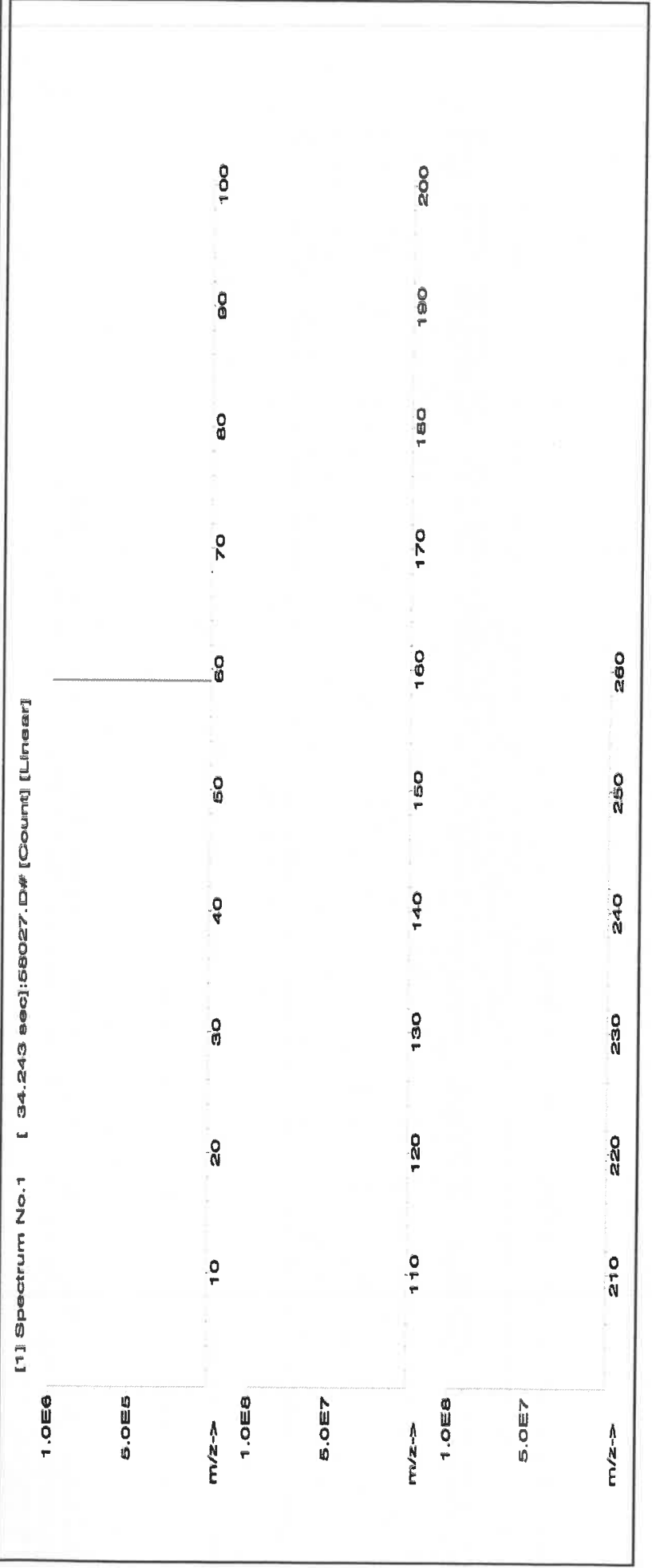
2.0% Nitric Acid
40.0 (mL)

Formulated By:	Lawrence Barry
Reviewed By:	Pedro L. Rentas

SDS Information

Expanded Uncertainty +/- (µg/mL)
(Solvent Safety Info. On Attached pg.)
NIST SRM
CAS# OSHA PEL (TWA) LD50

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





Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS ($\mu\text{g/mL}$)

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	<0.02	Os	<0.01	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	<0.2	Na	<0.02	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	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	<0.2	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

57033
111323
Arsenic (As)

Lot #
Solvent:

24002546
Nitric Acid

2.0%
(mL)

Nitric Acid

Expiration Date:

111326

Recommended Storage:
Ambient (20 °C)

Nominal Concentration (µg/mL):

1000

NIST Test Number:

6UTB

Volume shown below was diluted to (mL):

4000.0

5E-05

Balance Uncertainty
Flask Uncertainty

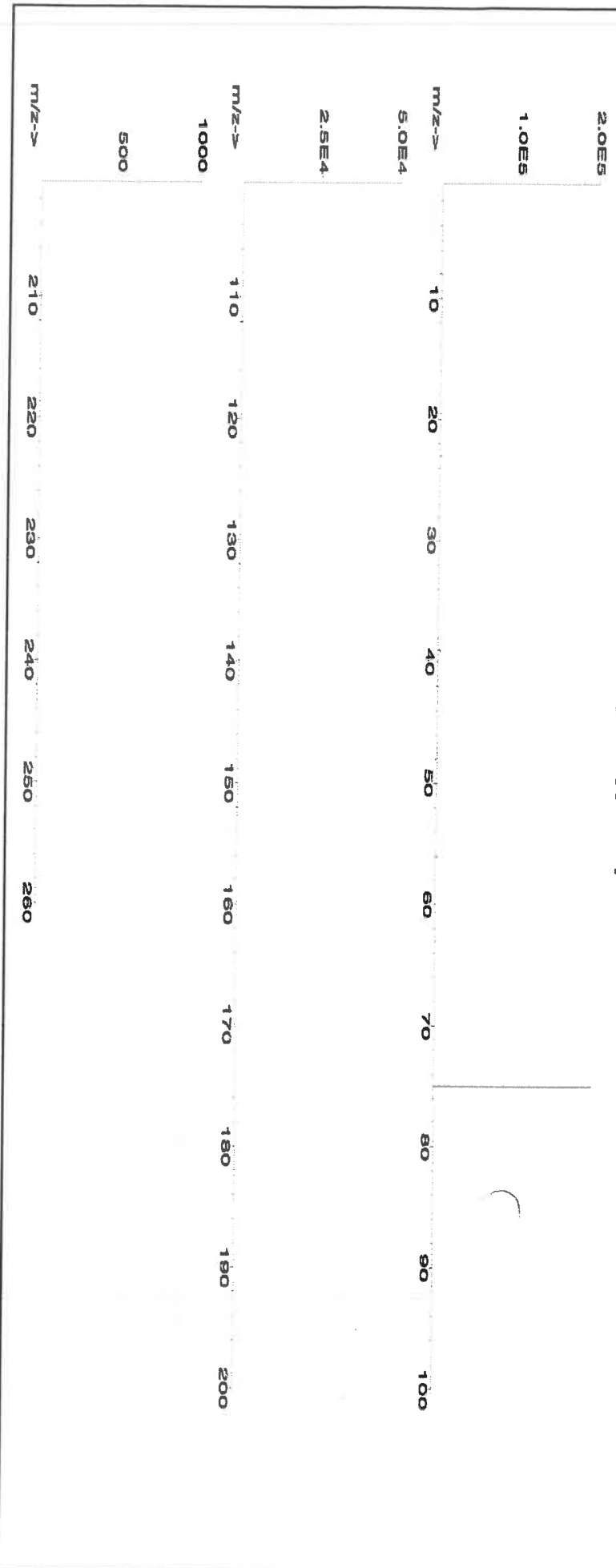
Formulated By:	Lawrence Barry	111323
Reviewed By:	Pedro L. Rendas	111323

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)	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 or-lat 500 mg/kg 3103a

[1] Spectrum No.1 [34.433 sec]:57033.D# [Count] [Linear]





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	Pt	<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	Tl _h	<0.02	Yb	<0.02
Bc	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge [*]	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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- * 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).



CERTIFIED WEIGHT REPORT:

Part Number: 57115
Lot Number: 041723
Description: Phosphorous (P)

Solvent: 21110221 Nitric Acid

Lot #

R102109124 M5815

Expiration Date: 041726
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

2% 40.0 (mL) Nitric Acid

Weight shown below was diluted to (mL): 2000.02 0.056 Balance Uncertainty Flask Uncertainty

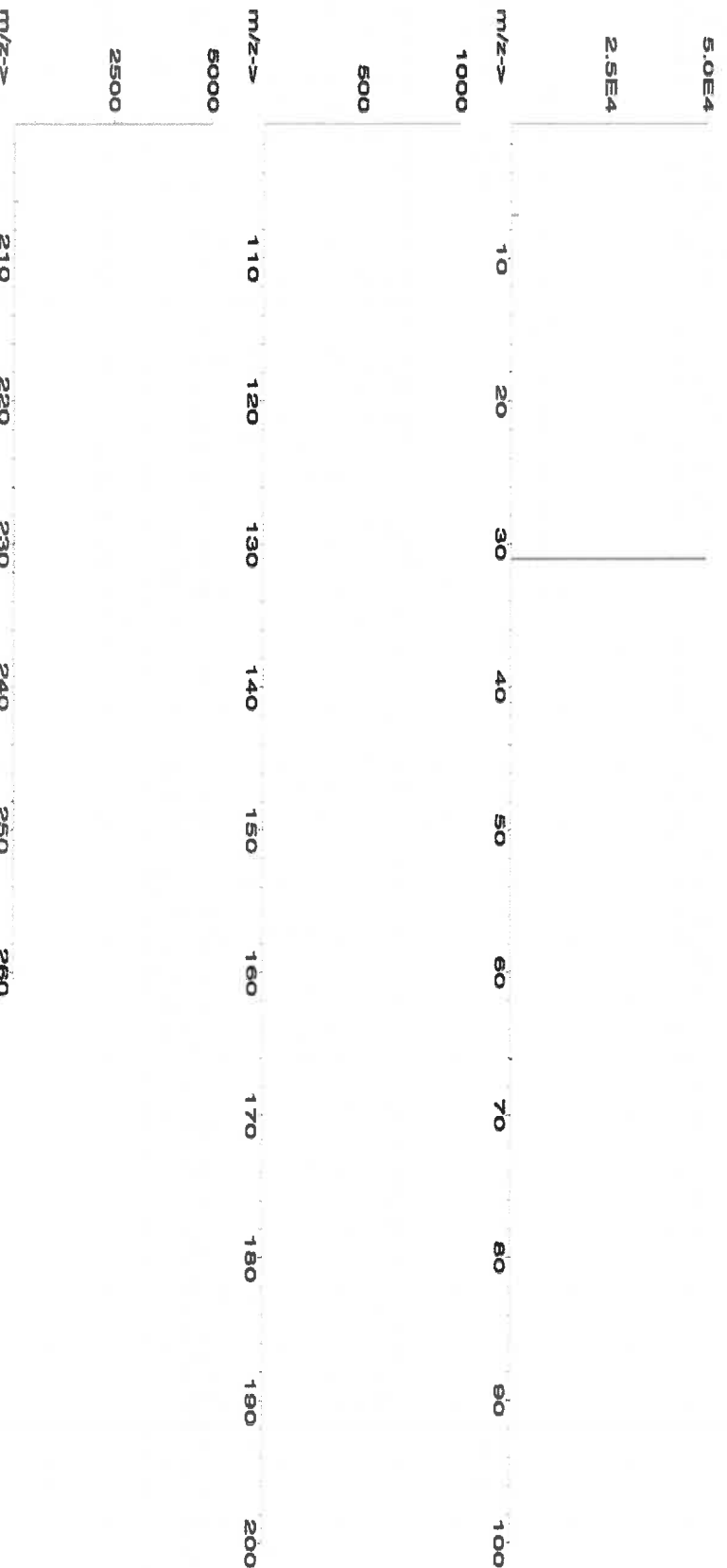
Formulated By: Lawrence Barry	041723
Reviewed By: Pedro L. Rentas	041723

Compound

RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

1. Ammonium dihydrogen phosphate (P) IN008 P082019A1 10000 99.999 0.10 27.5 72.7287 72.7289 10000.0 20.0 7722-76-1 5 mg/m3 or-hal >2000mg/kg 3186

[1] Spectrum No.1 [12.074 sec]:58115.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS ($\mu\text{g/mL}$)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<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:

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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number: **57116**
Lot Number: **071123**
Description: **Sulfur (S)**

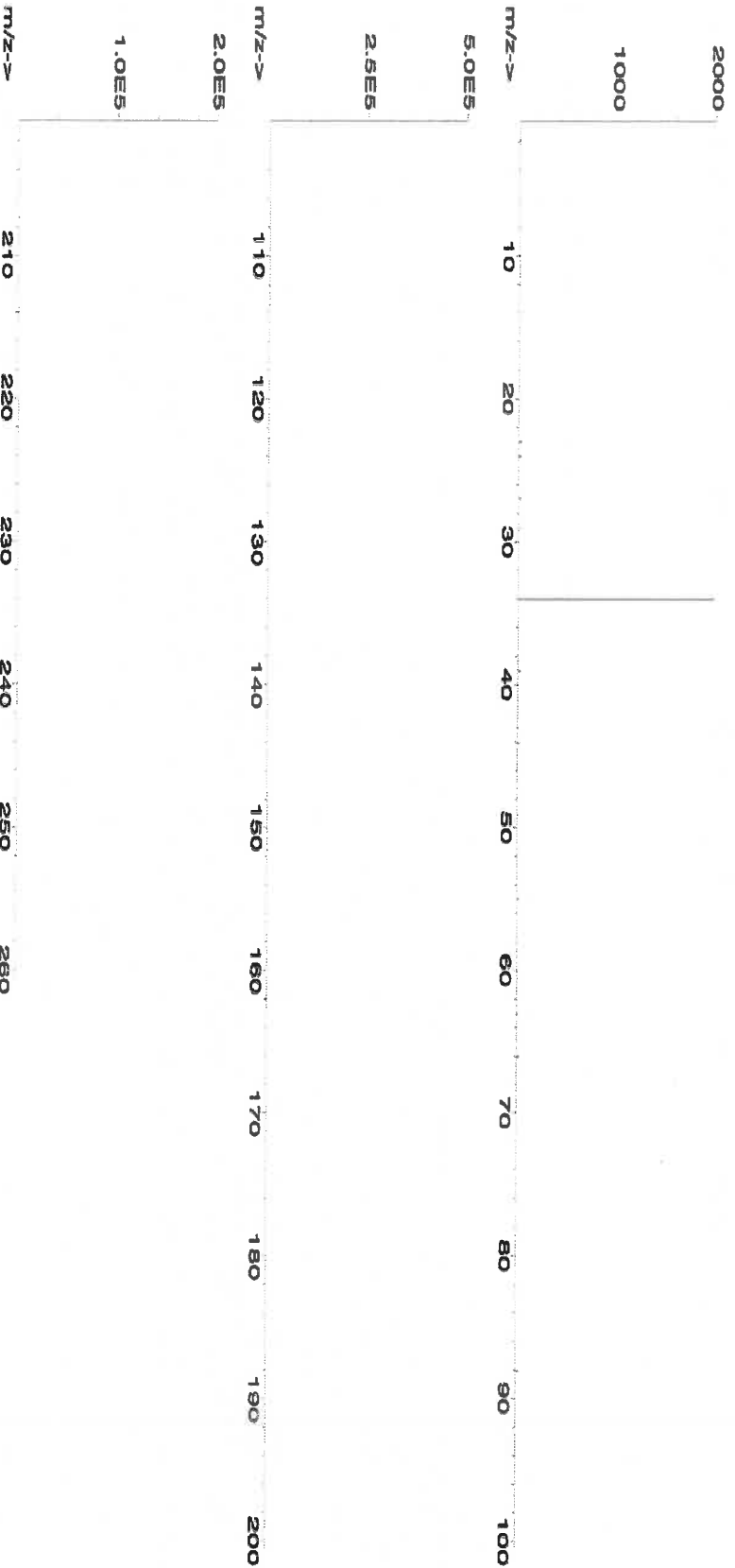
Lot #
Solvent: 071123 ASTM Type 1 Water

Formulated By:	Lawrence Barry
	071123
Reviewed By:	Pedro L. Rentas
	071123

Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1999.48 5E-05 Balance Uncertainty 0.058 Flask Uncertainty

SDS Information									
Compound	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)
Ammonium sulfate (S)	IN117 SLBR725V	10000	99.9	0.10	24.3	82.4675	82.4692	10000.1	20.0
						7763-20-2	NA	oralal 4250mg/kg	3181

[1] Spectrum No. 1 [24.004 sec]:58116.D# [Count] [Linear]





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	Pt	<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	Ti	<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

Physical Characterization:

(T)= Target analyte

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 certified (+/-) 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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F: 540-585-3012
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R: 02/22/24 M.5942

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).



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
Starting Material: Ti Metal
Starting Material Lot#: 2094
Starting Material Purity: 99.9975%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 5 µg/mL
Density: 1.012 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 1002 ± 4 µg/mL
ICP Assay NIST SRM 3162a Lot Number: 130925

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum (w_i) (X_i)$$

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:

$$w_i = (1/u_{char i}^2) / (\sum (1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (z) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum (w_i)^2 (u_{char i}^2)]^{1/2}$ 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

$$CRM/RM \text{ Expanded Uncertainty } (z) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000536	M	Eu	<	0.000268	O	Na	<	0.032670	M	Se		0.001204	O	Zn	<	0.003267
O	Al		0.000872	O	Fe		0.003225	O	Nb	<	0.043560	O	Si		0.004735	O	Zr	<	0.043560
M	As	<	0.008586	M	Ga	<	0.000268	M	Nd	<	0.000268	M	Sm	<	0.000268				
M	Au	<	0.004577	M	Gd	<	0.000268	O	Ni	<	0.010890	M	Sn		0.000096				
O	B	<	0.008929	M	Ge	<	0.002146	M	Os	<	0.000269	O	Sr		0.000096				
M	Ba	<	0.002683	M	Hf		0.002161	O	P	<	0.054450	M	Ta		0.010560				
M	Be	<	0.005366	M	Hg	<	0.003231	M	Pb	<	0.001073	M	Tb	<	0.000268				
M	Bi	<	0.001609	M	Ho	<	0.000268	M	Pd	<	0.000268	M	Te	<	0.001341				
O	Ca		0.000676	M	In	<	0.002683	M	Pr	<	0.000268	M	Th	<	0.053663				
M	Cd	<	0.000268	M	Ir	<	0.000269	M	Pt	<	0.000536	s	Ti	<					
M	Ce	<	0.000268	M	K		0.001172	M	Rb	<	0.000268	M	Tl	<	0.000268				
M	Co	<	0.004293	M	La	<	0.000268	M	Re	<	0.000268	M	Tm	<	0.000268				
M	Cr		0.000752	O	Li	<	0.027225	M	Rh	<	0.000268	M	U	<	0.000268				
M	Cs	<	0.000268	M	Lu	<	0.000268	M	Ru	<	0.000269	M	V	<	0.019855				
O	Cu	<	0.010890	O	Mg	<	0.005445	i	S	<		M	W		0.000473				
M	Dy	<	0.000268	O	Mn	<	0.003267	M	Sb	<	0.006976	M	Y	<	0.002146				
M	Er	<	0.000268	M	Mo		0.000774	O	Sc	<	0.004900	M	Yb	<	0.000536				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 47.87 +4 6 Ti(F)6-2

Chemical Compatibility - Soluble in concentrated HCl, HF, H3PO4 H2SO4 and HNO3. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths or high levels of transition elements unless they are fluorinated). Stable with most inorganic anions with a tendency to hydrolyze forming the hydrated oxide in all dilute acids except HF.

Stability - 2-100 ppb levels stable (Alone or mixed with all other metals) as the Ti(F)6-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the Ti(F)6-2 chemically stable for years in 2-5% HNO3 / trace HF in an LDPE container.

Ti Containing Samples (Preparation and Solution) - Metal (Soluble in H2O / HF caution -powder reacts violently); Oxide - low temperature history anatase or rutile (Dissolved by heating in 1:1:1 H2O / HF / H2SO4); Oxide - high temperature history (~800EC) brookite (fuse in Pt0 with K2S2O7); Ores (fuse in Pt0 with KF + K2S2O7 - no KF if silica not present); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve by heating with 1:1:1 H2O / HF / H2SO4 or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite crystalline form).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 48 amu	14 ppt	N/A	32S16O, 32S14N, 14N16O18O, 14N17N2, 36Ar12C, 48Ca, [96X=2 (where X = Zr, Mo, Ru)]
ICP-OES 323.452 nm	0.0054 / 0.00092 µg/mL	1	Ce, Ar, Ni
ICP-OES 334.941 nm	0.0038 / 0.000028 µg/mL	1	Nb, Ta, Cr, U
ICP-OES 336.121 nm	0.0053 / 0.000034 µg/mL	1	W, Mo, Co

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 17, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





CERTIFIED WEIGHT REPORT:

MS961 R-1 6/11/24

Lot #

Part Number: **57028**

Lot Number: **041124**

Description: **Nickel (NI)**

Solvent: 24002546 Nitric Acid

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

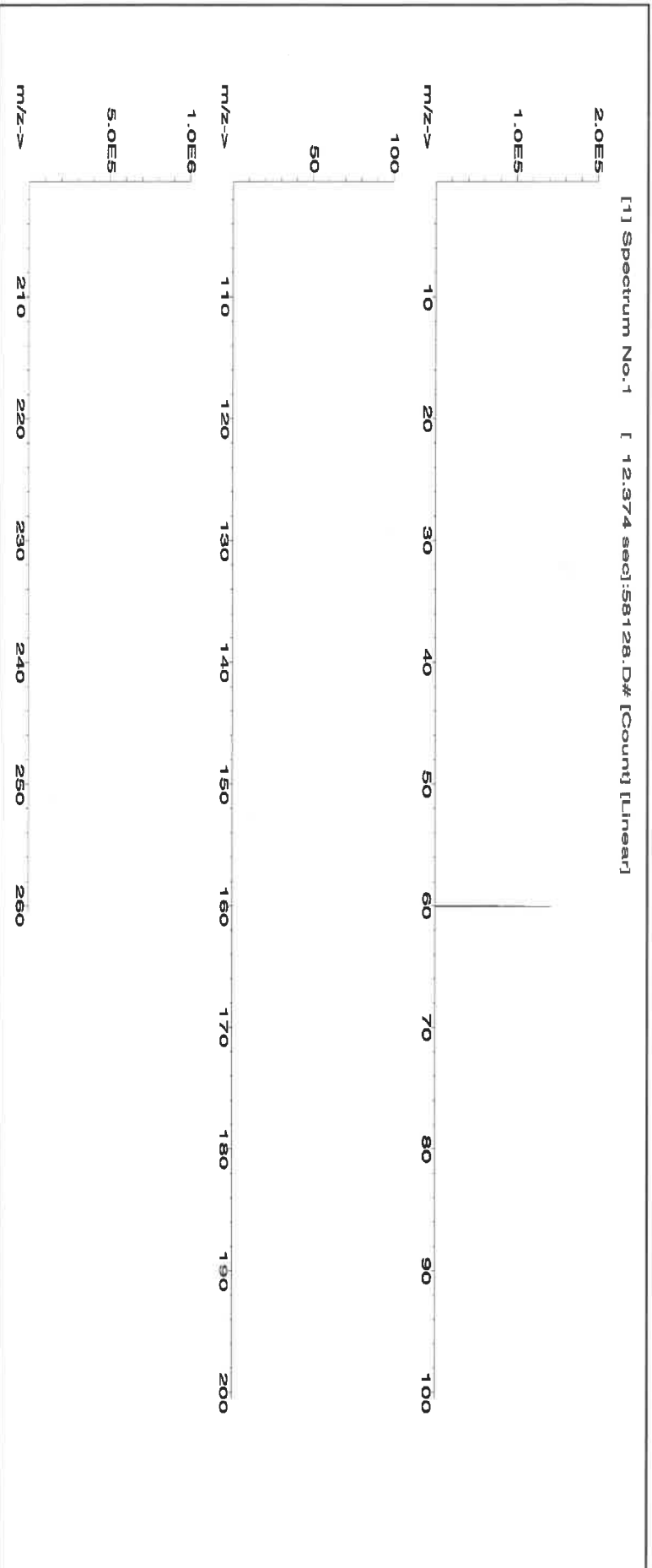
Weight shown below was diluted to (mL): 249.85 0.002 Flask Uncertainty

Formulated By:	Brian Geddes	041124
Reviewed By:	Pedro L. Rentas	041124

SDS Information

Compound	Lot	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	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	rat 1620 mg/kg	3136

[1] Spectrum No.1 [12.374 sec]:58128.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS ($\mu\text{g/mL}$)

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	Ba	<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
Bc	<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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CERTIFIED WEIGHT REPORT:

MS962 **R: 06/14/24**

Lot # **24002546** Solvent: **Nitric Acid**

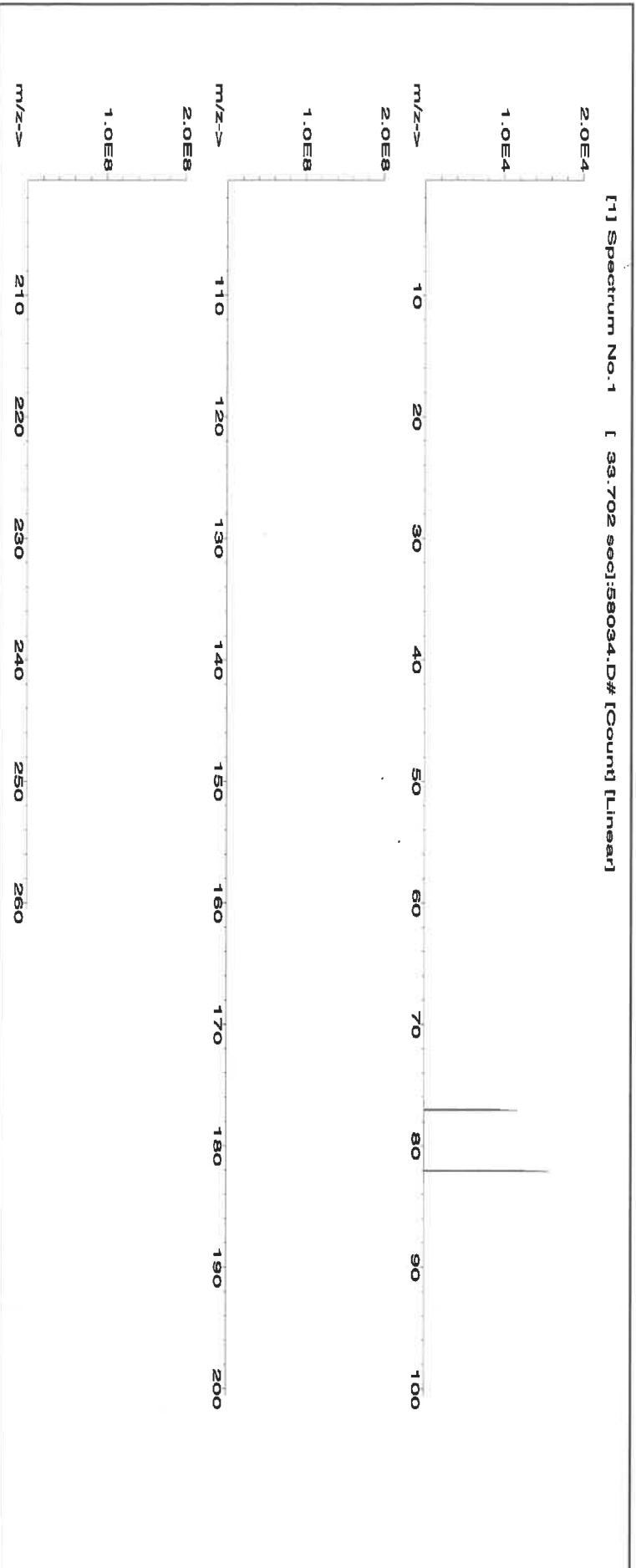
Part Number: **57034**
Lot Number: **060624**
Description: **Selenium (Se)**

2.0% 40.0 (mL) Nitric Acid

Expiration Date: **060627**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test Number: **6UTB**
Volume shown below was diluted to (mL): **2000.07**
SE-05 Balance Uncertainty **0.100** Flask Uncertainty

Formulated By:	Benson Chan	060624
Reviewed By:	Pedro L. Rantas	060624

SDS Information									
Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)
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	or-tral 6700 mg/kg	31.49





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	Pt	<0.02	Se	T	Tb	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	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	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Ru	<0.02	Na	<0.2	Th	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Sr	<0.02	S	<0.02	Tm	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	Ta	<0.02	Sn	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02		<0.02	Ti	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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Certificate of Analysis

M5976, M5977

R: 02/22/24

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).



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:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

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.

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k(u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2(u_{char i}^2)]^{1/2}$ 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

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k(u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000590	M	Eu	<	0.000300	M	Na		0.000879	M	Se	<	0.008000	M	Zn		0.000598
M	Al		0.000563	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.000175				
M	Ba		0.001689	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.006334	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Tl	<	0.032000				
M	Ce	<	0.008300	M	K		0.130213	M	Rb		0.004575	M	Tl		0.001266				
M	Co		0.000598	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.000527	O	Li		0.000059	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.000527	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.002252	M	Mg		0.000563	i	S	<		M	W		0.087982				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.001513	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9

[MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br16O,190Os2+,190Pt2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.569.6799; 540.585.3030, Fax: 540.585.3012; 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





MS981

R:6/11/24



CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

57092
060724
Uranium (U)

Expiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test Number:

060727
Ambient (20 °C)
1000
6UTB

Volume shown below was diluted to (mL): 2000.07

5E-05 Balance Uncertainty
0.100 Flask Uncertainty

Lot # Solvent:
24002546 Nitric Acid

2.0% Nitric Acid
40.0 (mL)

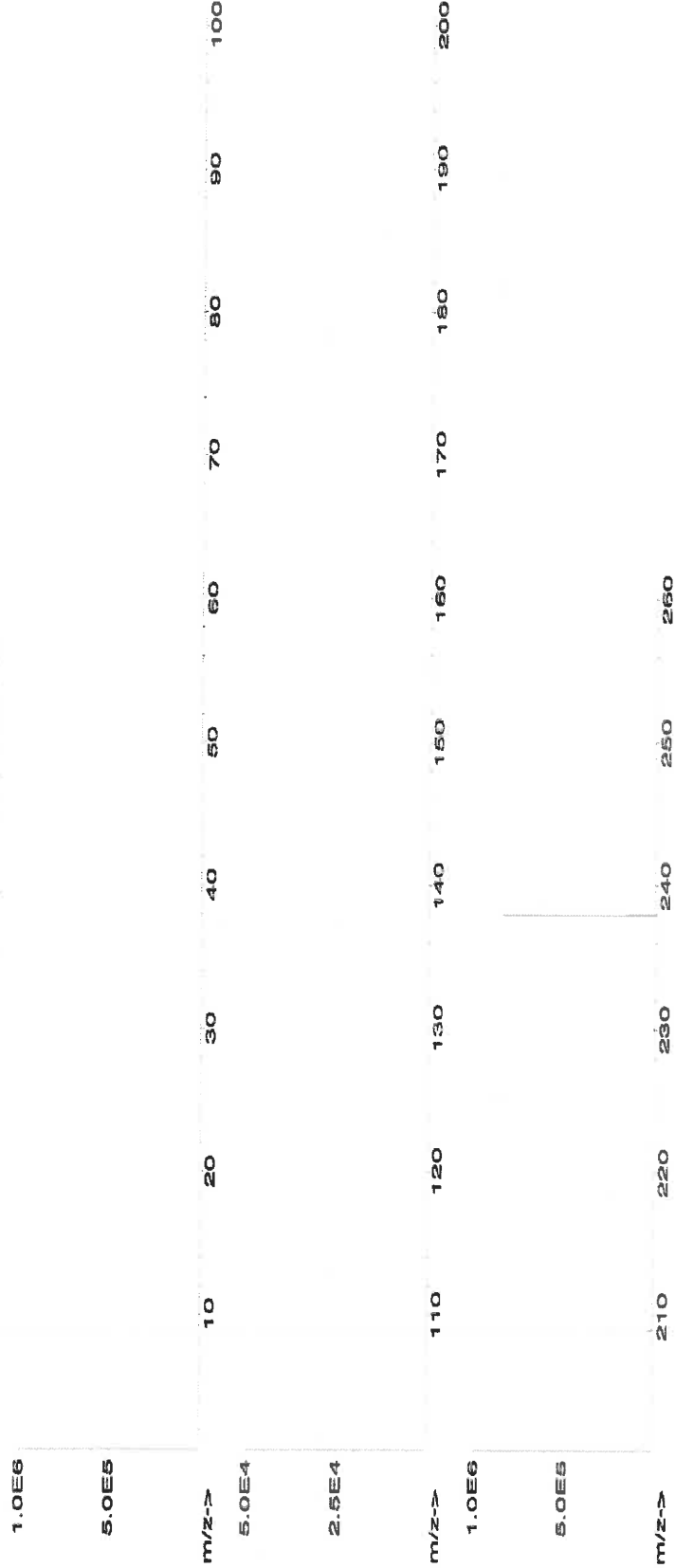
<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito
<i>Pedro L. Rentas</i>	
Reviewed By:	Pedro L. Rentas

SDS Information

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	(Solvent Safety Info. On Attached pg.)		
										CAS#	OSHA PEL (TWA)	LD50

1. Uranyl nitrate hexahydrate (U)	58192	041524	0.1000	200.0	0.084	1000	10001.5	1000.0	2.2	13620-83-7	0.05 mg/m3	orl-rat 1040 mg/kg	3164

[1] Spectrum No.1 [23.254 sec]:57092.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS ($\mu\text{g/mL}$)																			
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<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	<0.02	Os	<0.01	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	<0.02	Hg	<0.2	P	<0.2	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	<0.02	Sc	<0.2	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 certified (+/-) 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).

7236 673 3.67

18/19/24, M6055

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Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030

F: 540-585-3012

info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories".

Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



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:

$$X_{CRM/RM} = \sum (w_i) (X_i)$$

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:

$$w_i = (1/u_{char i}^2) / (\sum (1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{ts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum ((w_i)^2 (u_{char i})^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = 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

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{ts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = 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

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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





Certified Reference Material CRM



CERTIFIED WEIGHT REPORT:

Part Number: 57040
Lot Number: 071423
Description: Zirconium (Zr)

Lot # 21110221
Solvent: Nitric Acid

2.0% 40.0 (mL) Nitric Acid

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 5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Benson Chan	071423
Reviewed By:	Pedro L. Renteria	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.)	LDSO	NIST SRM

1. Zirconyl chloride octahydrate (Zr) 58140 070621 0.1000 200.0 0.084 1000 10000.3 1000.0 2.2 13520-82-8 NA NA NA

[1] Spectrum No. 1 [41.163 sec]: 57040.DW [Count] [Linear]

1.OE6	m/z->	10	20	30	40	50	60	70	80	90	100
5.OE6	m/z->	110	120	130	140	150	160	170	180	190	200
1.OE8	m/z->	210	220	230	240	250	260				
5.OE7	m/z->										



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	Tc	<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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number: 58112
Lot # 24012496
Description: Magnesium (Mg)
Solvent: Nitric Acid

Expiration Date: 11/21/27
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6LUB
Weight shown below was diluted to (mL): 2000.07
5E-05 Balance Uncertainty
0.100 Flask Uncertainty

<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito
Reviewed By:	Pedro L. Rentas
	112124

Compound

Lot	Nominal	Purity	Uncertainty	Assay	Target	Actual	Actual	Expanded	SDS Information	NIST
Number	Conc. (µg/mL)	(%)	Purity (%)	(%)	Weight (g)	Weight (g)	Conc. (µg/mL)	± (µg/mL)	(Solvent Safety Info. On Attached pg.)	SRM

1. Magnesium nitrate hexahydrate (Mg) IN030 MG000023A1 10000 99.999 0.10 8.51 234.9183 234.9459 10001.2 20.0 13446-18-9 NA off-rat 5440 mg/kg 3131a

[1] Spectrum No. 1 [19.823 sec]:58112.D# [Count] [Linear]





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	Pt	<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	Rc	<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	Rb	<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	Ru	<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	Sm	<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	Sc	<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			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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number: **58025**
Lot Number: **101124**
Description: **Manganese (Mn)**

R-71113128

Lot #: **24002546**
Solvent: **Nitric Acid**

Expiration Date: **101127**

Recommended Storage: **Ambient (20 °C)**

Nominal Concentration (µg/mL): **1000**

NIST Test Number: **6UTB**

Weight shown below was diluted to (mL): **4000.2**

5E-05 Balance Uncertainty
0.10 Flask Uncertainty

2%
80.0 (mL)
Nitric Acid

<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito
Reviewed By:	<i>Pedro L. Renteria</i>
	101124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty		CAS#	OSHA PEL (TWA)	LD50	NIST SRM
										±	(µg/mL)				

1. Manganese(II) nitrate hydrate (Mn) IN031 MNM02020A1 1000 99.999 0.10 20.8 19.2322 19.2344 **1000.1** **2.0** 15710-66-4 5 mg/m3 or-rel >300mg/kg 3132

[1] Spectrum No.1 [34.243 sec]:57025.D# [Count] [Linear]

5.0E6	m/z->	110	120	130	140	150	160	170	180	190	200
2.5E6	m/z->	10	20	30	40	50	60	70	80	90	100
1.0E6	m/z->	10	20	30	40	50	60	70	80	90	100
5.0E7	m/z->	10	20	30	40	50	60	70	80	90	100
5.0E7	m/z->	210	220	230	240	250	260				



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 preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
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- * Standards are certified (+/-) 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).

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

M6137
R-71013124

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).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGSI1
Lot Number: V2-SI744713
Matrix: tr. HNO₃
tr. HF
Value / Analyte(s): 1 000 µg/mL ea:
Silicon
Starting Material: Silica
Starting Material Lot#: 1771
Starting Material Purity: 99.9981%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 6 µg/mL
Density: 1.003 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	999 ± 5 µg/mL ICP Assay NIST SRM Traceable to 3150 Lot Number: S2-SI702546
Assay Method #2	1000 ± 7 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum (w_i) (X_i)$$

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:

$$w_i = (1/u_{char i}^2) / (\sum (1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (z) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum (w_i)^2 (u_{char i}^2)]^{1/2}$ 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

$$CRM/RM \text{ Expanded Uncertainty } (z) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000310	M	Eu	<	0.000310	O	Na	0.001656	M	Se	<	0.022000	M	Zn	<	0.002500	
M	Al		0.010787	M	Fe	<	0.027000	M	Nb	<	0.001300	s	Si	<		O	Zr	<	0.001900
M	As	<	0.001900	M	Ga	<	0.001300	M	Nd	<	0.000310	M	Sm	<	0.000310				
M	Au	<	0.000910	M	Gd	<	0.000310	M	Ni	<	0.005500	M	Sn		0.000096				
M	B		0.016180	M	Ge	<	0.001900	M	Os	<	0.000610	O	Sr		0.000092				
M	Ba		0.000096	M	Hf		0.000423	i	P	<		M	Ta		0.002542				
O	Be	<	0.000570	M	Hg	<	0.000610	M	Pb	<	0.000310	M	Tb	<	0.000310				
M	Bi	<	0.000310	M	Ho	<	0.000610	M	Pd	<	0.000610	M	Te	<	0.000910				
O	Ca		0.011557	M	In	<	0.000310	M	Pr	<	0.000310	M	Th	<	0.001900				
M	Cd	<	0.000310	M	Ir	<	0.000310	M	Pt	<	0.000310	M	Ti		0.001078				
M	Ce	<	0.000610	O	K		0.000577	M	Rb	<	0.009100	M	Tl	<	0.000310				
M	Co	<	0.001600	M	La	<	0.000310	M	Re	<	0.000310	M	Tm	<	0.000310				
M	Cr	<	0.010000	O	Li	<	0.000460	M	Rh	<	0.000310	M	U	<	0.000310				
M	Cs	<	0.000310	M	Lu	<	0.000310	M	Ru	<	0.000310	O	V	<	0.001300				
M	Cu	<	0.002500	O	Mg		0.001348	O	S	<	0.570000	M	W	<	0.001900				
M	Dy	<	0.000310	M	Mn	<	0.002500	M	Sb	<	0.000310	M	Y	<	0.000310				
M	Er	<	0.000310	M	Mo	<	0.000310	O	Sc	<	0.000590	M	Yb	<	0.000310				

M - Checked by ICP-MS

O - Checked by ICP-OES

i - Spectral Interference

n - Not Checked For

s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, <https://www.inorganicventures.com/terms-and-conditions-sale>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 28.09 +4 6 Si(OH)x(F)y2-

Chemical Compatibility -Soluble in HCl, HF, H3PO4 H2SO4 and HNO3 as the Si(OH)x(F)y2-. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths, or high levels of transition elements unless they are fluorinated. Stable with most inorganic anions with a tendency to hydrolyze forming silicic acid (silicic acid is soluble up to ∼100 ppm in water) in all dilute acids except HF.

Stability - 2-100 ppb levels - stability unknown - (alone or mixed with all other metals) as the Si(OH)x(F)y2-. 1-10,000 ppm single element solutions as the Si(OH)x(F)y2- chemically stable for years in 2-5 % HNO3 / trace HF in a LDPE container.

Si Containing Samples (Preparation and Solution) -Metal (Soluble in 1:1:1 H2O / HF / HNO3); Oxide - SiO2, amorphous (dissolve by heating in 1:1:1 H2O / HF / HNO3); Oxide - quartz (fuse in Pt0 with Na2CO3); Geological Samples(fuse in Pt0with Na2CO3 followed by HCl solution of the fuseate); Organic Matrices containing silicates and non volatile silicon compounds (dry ash at 4500C in Pt0 and dissolve by gently warming with 1:1:1 H2O / HF / H2SO4 or fuse / ash with Na2CO3 and dissolve fuseate with HCl / H2O); Silicone Oils - dimethyl silicones depolymerize to form volatile monomer units when heated (Measure directly in alcoholic KOH / xylene mixture where sample is treated first with the KOH at 60-1000C to "unzip" the Si- O-Si polymeric structure or digest with conc. H2SO4 / H2O2 followed by cooling and dissolution of the dehydrated silica with HF.) Note that the direct analysis of silicone oils in an organic solvent will result in false high results due to high vapor pressure of volatile monomer units like hexamethylcyclotrisiloxane. The KOH forms the K2+Si(CH3)2O= salt which is not volatile at room temperature.

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 28 amu	4000 - 8000 ppt	N/A	N2, 12C16O
ICP-OES 212.412 nm	0.02/0.01 µg/mL	1	Hf, Os, Mo, Ta
ICP-OES 251.611 nm	0.012/0.003 µg/mL	1	Ta, U, Zn, Th
ICP-OES 288.158 nm	0.03/0.004 µg/mL	1	Ta, Ce, Cr, Cd, Th

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; info@inorganicventures.com;

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 10, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- July 10, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor



Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





CERTIFIED WEIGHT REPORT:

Part Number: 57119
Lot Number: 103024
Description: Potassium (K)

R-21113125

Solvent: 24002546 Nitric Acid
Lot #

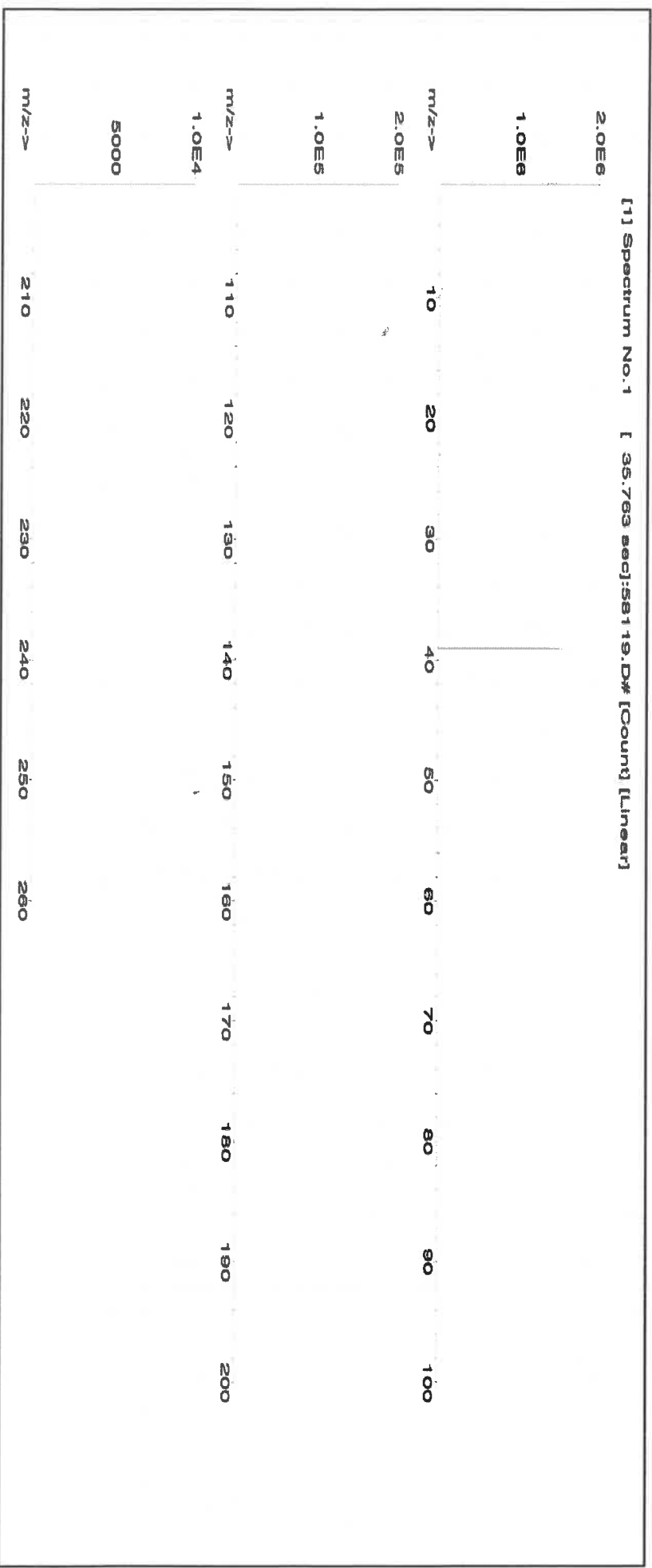
Expiration Date: 103027
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 4000.1
SE-05 Balance Uncertainty 0.15 **Flask Uncertainty**

<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito
Reviewed By:	Pedro L. Rentes
	103024

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

1. Potassium nitrate (K) IN034 KD062022A1 10000 99.999 0.10 37.7 106.1040 ##### 10001.1 20.0 7757-79-1 5 mg/m3 orl-rat 3750 mg/kg 3141a

[1] Spectrum No. 1 [35.763 sec]:58119.D# [Count] [Linear]





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	Pt	<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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number: **58111** Lot # **R-1113125**
Lot Number: **072424** Solvent: **24002546 Nitric Acid**
Description: **Sodium (Na)**

Expiration Date: **072427** 2% 80.0 Nitric Acid (mL)

Recommended Storage: **Ambient (20 °C)**

Nominal Concentration (µg/mL): **10000**

NIST Test Number: **6UTB**

Weight shown below was diluted to (mL): **4000.2** 5E-05 Balance Uncertainty
0.10 Flask Uncertainty

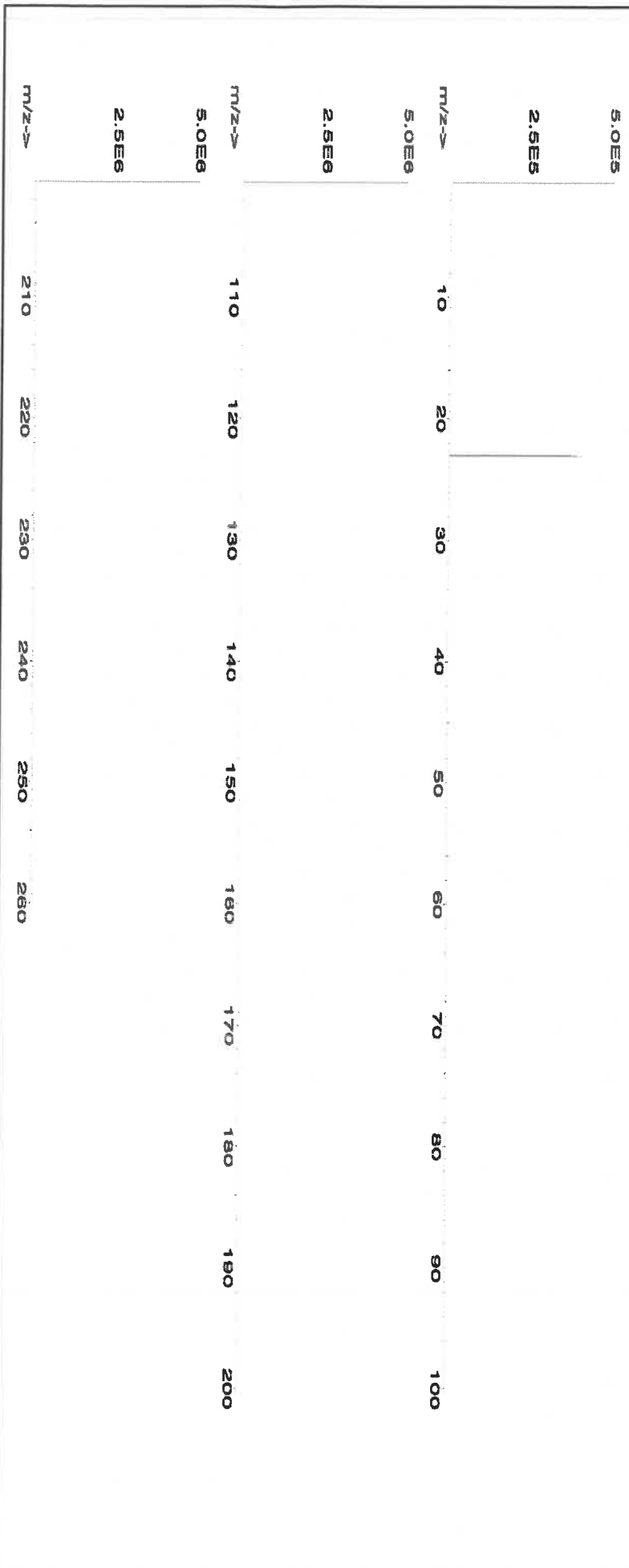
Formulated By:	Benson Chan	072424
Reviewed By:	Pedro L. Renteria	072424

Compound	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

SDS Information

1. Sodium nitrate (Na) IN036 NAV01201511 10000 99.999 0.10 26.9 148.7096 ##### 10000.0 20.0 7631-99-4 5 mg/m3 orl-rat 3430 mg/kg 3152a

[1] Spectrum No. 1 [8.935 sec]: 58111.D# [Count] [Linear]





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	Pt	<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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

58030
121724
Zinc (Zn)

R → 1/13/25 Solvent: 24012496 Nitric Acid

Lot #

Expiration Date:

121727

M6145

2%

40.0 (mL)

Nitric Acid

Recommended Storage:

Ambient (20 °C)

Nominal Concentration (µg/mL):

1000

NIST Test Number:

6UTB

5E-05 Balance Uncertainty

Weight shown below was diluted to (mL):

2000.1

0.10 Flask Uncertainty

<i>Aleah O'Brady</i>	
Formulated By:	Aleah O'Brady
Reviewed By:	<i>Pedro L. Rentes</i>
	Pedro L. Rentes
	121724

Compound

RM#

Lot Number

Nominal Conc. (µg/mL)

Purity (%)

Uncertainty Purity (%)

Assay (%)

Target Weight (g)

Actual Weight (g)

Actual Conc. (µg/mL)

Expanded Uncertainty +/- (µg/mL)

CAS#

OSHA PEL (TWA)

LD50

NIST SRM

SDS Information

(Solvent Safety Info. On Attached pg.)

1. Zinc nitrate hexahydrate (Zn)

IN016 ZNE032021A1

1000

99.999

0.10

24.3

8.2308

8.2311

1000.0

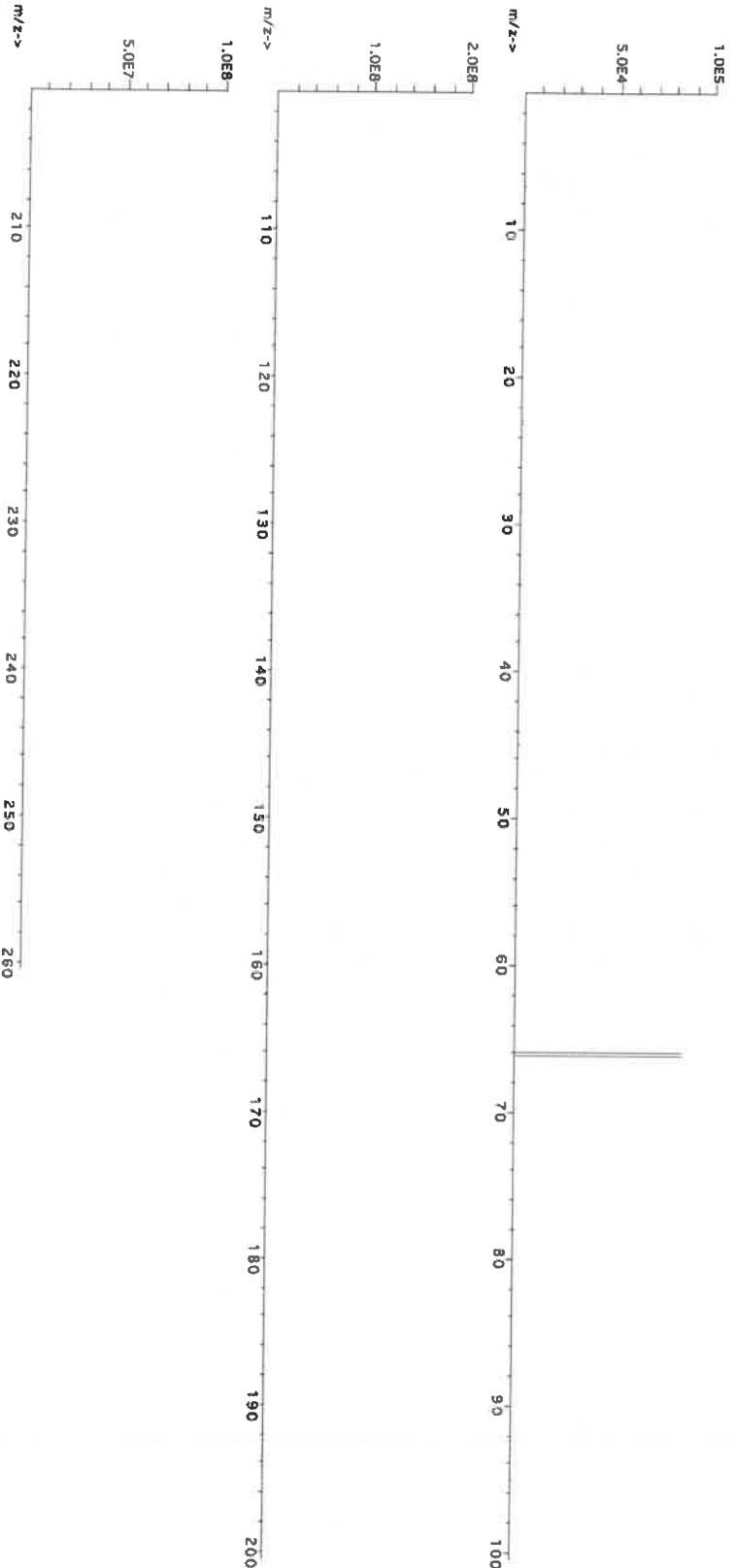
2.0

10196-18-6

1 mg/m3

or-rat 1190mg/kg 3168

[1] Spectrum No.1 [31.103 sec;58130.D# [Count] [Linear]





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	Pt	<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	Bu	<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	Md	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
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QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

R: 4/20/21

Instructions for QATS Reference Material: *Inorganic ICV Solutions*

QATS LABORATORY INORGANIC REFERENCE MATERIAL
INITIAL CALIBRATION VERIFICATION SOLUTIONS
(ICV1, ICV5, AND ICV6)

MG180

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Metals in Dilute Acidic or
Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) SAMPLE DESCRIPTION

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.

(B) BREAKAGE OR MISSING ITEMS

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) ANALYSIS OF SAMPLES

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.





QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: *Inorganic ICV Solutions*

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) K₂Cr₂O₇ 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 K₃Fe(CN)₆, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS

ICV1-1014		
Element	Concentration (µg/L) (after 10-fold dilution)	Concentration (µg/L) (after 50-fold dilution)
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	Concentration (µg/L) (after 100-fold dilution)	Analyte	Concentration (µg/L) (after 100-fold dilution)
Hg	4.0	CN ⁻	99

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

 **avantor™**



M6151

R → 11/15/25

Material No.: 9530-33
Batch No.: 22G2862015
Manufactured Date: 2022-06-15
Retest Date: 2027-06-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid–base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl ₂)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO ₄)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO ₃)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH ₄)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

 **avantorsm**



Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
Trace Impurities – Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities – Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	2.9 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities – Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities – Niobium (Nb)	≤ 1.0 ppb	0.8 ppb
Trace Impurities – Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	0.5 ppb
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	2.3 ppb
Trace Impurities – Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Tantalum (Ta)	≤ 1.0 ppb	1.6 ppb
Trace Impurities – Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	4.0 ppb
Trace Impurities – Titanium (Ti)	≤ 1.0 ppb	1.5 ppb
Trace Impurities – Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities – Zirconium (Zr)	≤ 1.0 ppb	0.3 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA–ANALYZED® Reagent
For Trace Metal Analysis



Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result

For Laboratory, Research, or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

A handwritten signature in cursive script that reads 'Jamie Ethier'.
Jamie Ethier
Vice President Global Quality

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

R → 1/7/23
M6153

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGSR10
Lot Number: V2-SR745329
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Strontium
Starting Material: Strontium Carbonate
Starting Material Lot#: 2647
Starting Material Purity: 99.9960%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10081 ± 39 µg/mL
Density: 1.030 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10059 ± 50 µg/mL**
ICP Assay NIST SRM Traceable to 3153a Lot Number: K2-SR650985

Assay Method #2 **10087 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

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:

$$w_i = (1/u_{char i}^2) / (\sum(1/(u_{char i}^2)))$$

$$CRM/RM \text{ Expanded Uncertainty } (z) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ 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

$$CRM/RM \text{ Expanded Uncertainty } (z) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000960	M	Eu	<	0.000480	O	Na		0.002964	M	Se	<	0.042000	M	Zn		0.004560
M	Al		0.003420	O	Fe		0.013225	M	Nb	<	0.000480	O	Si		0.012997	M	Zr		0.001847
M	As	<	0.007200	M	Ga	<	0.002900	M	Nd	<	0.000480	M	Sm	<	0.000480				
M	Au	<	0.003900	M	Gd	<	0.000480	O	Ni		0.001482	M	Sn	<	0.000480				
O	B	<	0.003200	M	Ge	<	0.004800	M	Os	<	0.001500	s	Sr	<					
M	Ba		0.638494	M	Hf	<	0.000480	O	P	<	0.017000	M	Ta	<	0.000480				
O	Be	<	0.000450	M	Hg	<	0.000960	M	Pb		0.010717	M	Tb	<	0.000480				
M	Bi	<	0.002000	M	Ho	<	0.000480	M	Pd	<	0.002000	M	Te	<	0.016000				
O	Ca		0.025083	M	In	<	0.008600	M	Pr		0.000547	M	Th	<	0.000480				
M	Cd	<	0.000960	M	Ir	<	0.000480	M	Pt	<	0.000480	M	Ti		0.004560				
M	Ce		0.000661	O	K		0.025083	M	Rb	<	0.003400	M	Tl	<	0.000480				
M	Co		0.001527	M	La	<	0.000480	M	Re	<	0.000480	M	Tm		0.004332				
O	Cr	<	0.004700	O	Li	<	0.005600	O	Rh	<	0.013000	M	U	<	0.000480				
M	Cs	<	0.000480	M	Lu	<	0.000480	M	Ru	<	0.000960	M	V	<	0.000960				
O	Cu	<	0.003800	O	Mg		0.001048	O	S	<	0.045000	M	W	<	0.002400				
M	Dy	<	0.000960	O	Mn		0.000319	M	Sb	<	0.009600	O	Y	<	0.001200				
M	Er	<	0.000480	M	Mo	<	0.002900	M	Sc	<	0.001500	M	Yb	<	0.000480				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures [Terms and Conditions of Sale](https://www.inorganicventures.com/terms-and-conditions-sale). <https://www.inorganicventures.com/terms-and-conditions-sale>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 87.62 +2 6 Sr(H₂O)₆+2

Chemical Compatibility - Soluble in HCl, and HNO₃. Avoid H₂SO₄, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1 - 3.5% HNO₃ / LDPE container.

Sr Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO₃); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 88 amu	1200 ppt	N/A	72Ge16O, 176Yb+2, 176Lu+2 , 176Hf+2
ICP-OES 407.771 nm	0.0004 / 0.00006 µg/mL	1	U, Ce
ICP-OES 421.552 nm	0.0008 / 0.00004 µg/mL	1	Rb
ICP-OES 460.733 nm	0.07 / 0.003 µg/mL	1	Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 26, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- August 26, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor



Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Nitric Acid 69%
CMOS



R- 0210212025

m - 6158

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO ₃)	69.0 - 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO ₄)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

 **avantorsTM**



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™**



Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Croak
Director Quality Operations, Bioscience Production

Nitric Acid 69%
CMOS

 **avantorsTM**



m-6162

Material No.: 9606-03
Batch No.: 24H0162012
Manufactured Date: 2024-06-28
Retest Date: 2029-06-27
Revision No.: 0

R. Date :- 04/27/2025

Certificate of Analysis

Test	Specification	Result
Assay (HNO ₃)	69.0 – 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	< 1 ppm
Chloride (Cl)	≤ 0.08 ppm	0.03 ppm
Phosphate (PO ₄)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities – Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	0.1 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 30.0 ppb	0.1 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 20 ppb	< 1 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 1 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Nickel (Ni)	≤ 20.0 ppb	< 1.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

 **avantorsTM**



Material No.: 9606-03
Batch No.: 24H0162012

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	< 1 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	1 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 1.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater	≤ 60 par/ml	13 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	5 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

 **avantor™**



Material No.: 9606-03
Batch No.: 24H0162012

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Croak
Director Quality Operations, Bioscience Production

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).

**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:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

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:

$$w_i = (1/u_{char\ i})^2 / (\sum(1/(u_{char\ i})^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k(u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2(u_{char\ i})^2]^{1/2}$ 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

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k(u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

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, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO₃. 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 HNO₃. Analyze this ICSAB solution by ICP-MS.

(D) "CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-MS ICS SOLUTION(S)

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-MS ICSA-0803, AND ICSA-0803 MIXED WITH ICSB-0803							
Element	CRQL	Part A (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)	Part A +Part B (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)
Al	20.0	[100000]			[100000]		
Sb	2.0	(1.5)	-2.5	5.5	(22.0)	18.0	26.0
As	1.0	(0.1)	-1.9	2.1	19.0	16.2	21.9
Ba	10.0	(1.2)	-18.8	21.2	(22.0)	2.0	42.0
Be	1.0	(0)	-2.0	2.0	19.0	16.2	21.9
Cd	1.0	(0.7)	-1.3	2.7	20.0	17.0	23.0
Ca	500	[100000]			[100000]		
C		[200000]			[200000]		
Cl		[1000000]			[1000000]		
Cr	2.0	(21.0)	17.0	25.0	40.0	34.0	46.0
Co	1.0	(1.0)	-1.0	3.0	20.0	17.0	23.0
Cu	2.0	(8.0)	4.0	12.0	(25.0)	21.0	29.0
Fe	200	[100000]			[100000]		
Pb	1.0	(4.0)	2.0	6.0	25.0	21.3	28.8
Mg	500	[100000]			[100000]		
Mn	1.0	(7.0)	5.0	9.0	27.0	23.0	31.1
Mo		[2000]			[2000]		
Ni	1.0	(6.0)	4.0	8.0	24.0	20.4	27.6
P		[100000]			[100000]		
K	500	[100000]			[100000]		
Se	5.0	(0.3)	-9.7	10.3	(19.0)	9.0	29.0
Ag	1.0	(0)	-2.0	2.0	18.0	15.3	20.7
Na	500	[100000]			[100000]		
S		[100000]			[100000]		
Tl	1.0	(0)	-2.0	2.0	21.0	17.9	24.2
Ti		[2000]			[2000]		
V	5.0	(0.5)	-9.5	10.5	(19.0)	9.0	29.0
Zn	5.0	(11.0)	1.0	21.0	(29.0)	19.0	39.0

[] Indicates analytes that do not require ICP-MS determination in the ICS.

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 2 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.



**QATS LABORATORY INORGANIC REFERENCE MATERIAL
 INTERFERENCE CHECK SAMPLE SET FOR ICP-MS (ICSA WITH ICSB)**

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
 Available Upon Request

(A) SAMPLE DESCRIPTION

Enclosed is a set of one (1) or more bottles of an Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. **For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-0803" and for the ICSAB mixture use "ICSA-0803+ICSB-0803".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) BREAKAGE OR MISSING ITEMS

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to the Contracting Officer, Ross Miller at miller.ross@epa.gov. If directed by Ross Miller, return the chain of custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
 APTIM Federal Services, LLC
 2700 Chandler Avenue - Building C
 Las Vegas, NV 89120

(C) ANALYSIS OF SAMPLES

This interference check sample set is to be used to verify elemental isobaric correction factors of inductively coupled plasma-mass spectrometers (ICP-MS). This reference material set consists of two (2) concentrated solutions. The ICSA solution contains several interferent elements and species; for a complete listing refer to the CLP SOW. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be, Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for the ICP-MS ICS Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-0803, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO₃. 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 HNO₃. Analyze this ICSAB solution by ICP-MS.

(D) "CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-MS ICS SOLUTION(S)

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-MS ICSA-0803, AND ICSA-0803 MIXED WITH ICSB-0803							
Element	CRQL	Part A (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)	Part A +Part B (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)
Al	20.0	[100000]			[100000]		
Sb	2.0	(1.5)	-2.5	5.5	(22.0)	18.0	26.0
As	1.0	(0.1)	-1.9	2.1	19.0	16.2	21.9
Ba	10.0	(1.2)	-18.8	21.2	(22.0)	2.0	42.0
Be	1.0	(0)	-2.0	2.0	19.0	16.2	21.9
Cd	1.0	(0.7)	-1.3	2.7	20.0	17.0	23.0
Ca	500	[100000]			[100000]		
C		[200000]			[200000]		
Cl		[1000000]			[1000000]		
Cr	2.0	(21.0)	17.0	25.0	40.0	34.0	46.0
Co	1.0	(1.0)	-1.0	3.0	20.0	17.0	23.0
Cu	2.0	(8.0)	4.0	12.0	(25.0)	21.0	29.0
Fe	200	[100000]			[100000]		
Pb	1.0	(4.0)	2.0	6.0	25.0	21.3	28.8
Mg	500	[100000]			[100000]		
Mn	1.0	(7.0)	5.0	9.0	27.0	23.0	31.1
Mo		[2000]			[2000]		
Ni	1.0	(6.0)	4.0	8.0	24.0	20.4	27.6
P		[100000]			[100000]		
K	500	[100000]			[100000]		
Se	5.0	(0.3)	-9.7	10.3	(19.0)	9.0	29.0
Ag	1.0	(0)	-2.0	2.0	18.0	15.3	20.7
Na	500	[100000]			[100000]		
S		[100000]			[100000]		
Tl	1.0	(0)	-2.0	2.0	21.0	17.9	24.2
Ti		[2000]			[2000]		
V	5.0	(0.5)	-9.5	10.5	(19.0)	9.0	29.0
Zn	5.0	(11.0)	1.0	21.0	(29.0)	19.0	39.0

[] 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 $\pm$ 2 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value $\pm$ 15 percent of the listed certified value.



Certified Reference Material CRM

M6030



CERTIFIED WEIGHT REPORT:

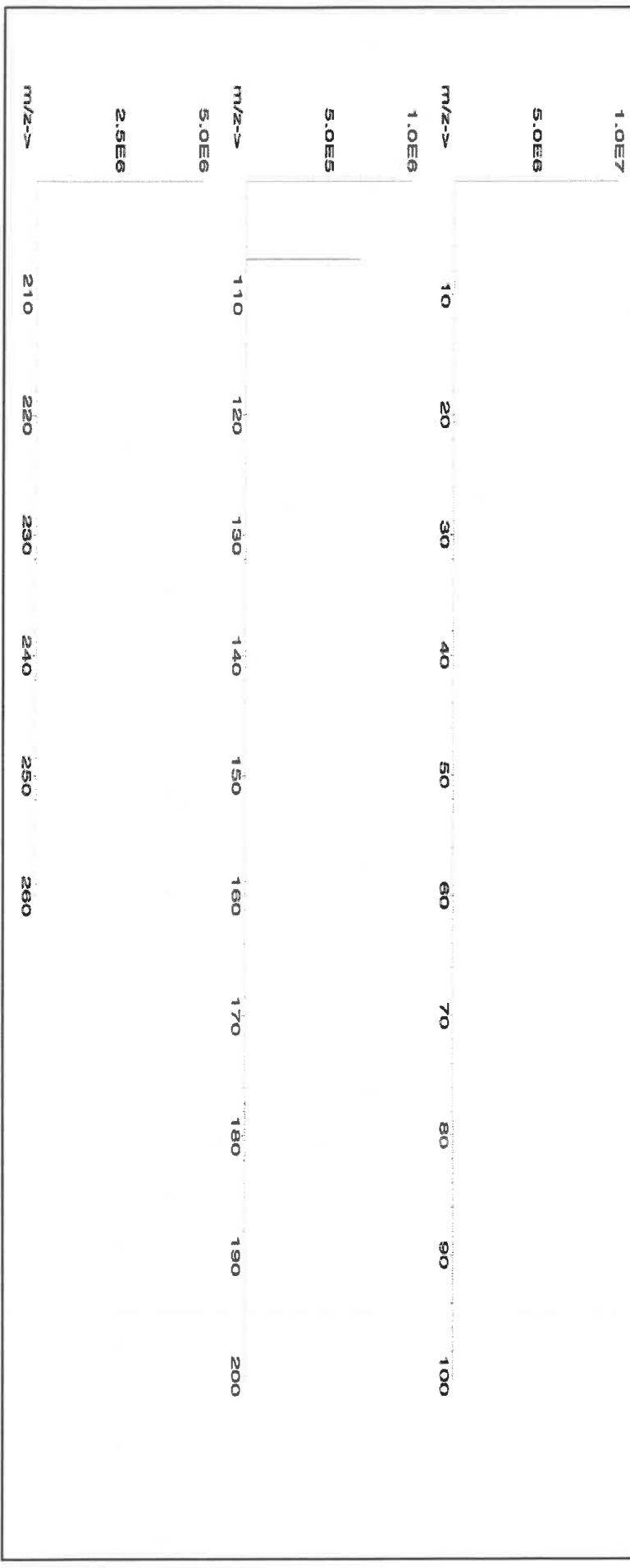
Part Number: **57047**
Lot Number: **122823**
Description: **Silver (Ag)**
Solvent: 24002546 Nitric Acid
Lot #

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
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Benson Chan
Reviewed By:	Pedro L. Rentas
122823	

SDS Information									
Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)
1. Silver nitrate (Ag)	IN035	J0612AGA1	1000.0	99.9996	0.10	63.7	6.27992	6.27998	1000.0
							2.0	7761-88-8	10 µg/mL
									NA
									3151

[1] Spectrum No. 1 [14.044 sec]:58147.D# [Count] [Linear]





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	Pt	<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:

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 meghom 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 certified (+/-) 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).



Certified Reference Material CRM



CERTIFIED WEIGHT REPORT:

Part Number: 57051
Lot Number: 071724
Description: Antimony (Sb)

MG160

Lot # 24002546
Solvent: Nitric Acid

Expiration Date: 071727
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Formulated By: Giovanni Esposito
Reviewed By: Pedro L. Rentas

071724

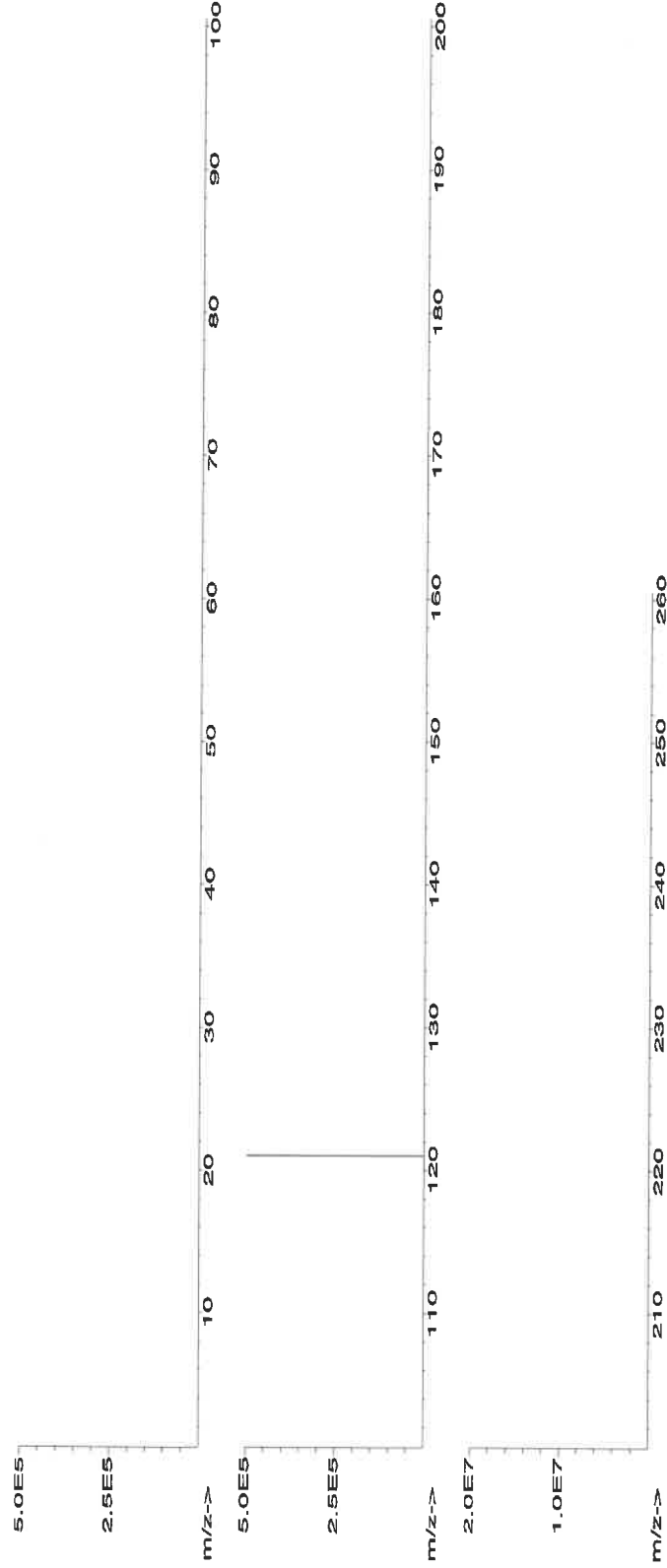
Volume shown below was diluted to (mL): 2000.26
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

SDS Information

Expanded Uncertainty (Solvent Safety Info. On Attached pg.)
Conc. (µg/mL) **Final Conc. (µg/mL)** **Initial Conc. (µg/mL)** **NIST SRM**
+/- (µg/mL) **CAS#** **OSHA PEL (TWA)** **LD50**

1. Antimony (Sb) 58151 060324 0.1000 200.0 0.084 1000 10001.4 1000.0 2.2 7440-36-0 0.5 mg/m3 or-rat 7000 mg/kg 3102a

[1] Spectrum No.1 [17.964 sec]:58051.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS ($\mu\text{g/mL}$)																			
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	<0.02	Os	<0.01	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	<0.02	Hg	<0.2	P	<0.2	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	Pr	<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 certified (+/-) 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: 8/5/24

M6019

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).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGSR1
Lot Number: U2-SR730227
Matrix: 0.1% (v/v) HNO₃
Value / Analyte(s): 1 000 µg/mL ea:
Strontium
Starting Material: SrCO₃
Starting Material Lot#: M2-2192
Starting Material Purity: 99.9993%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1001 ± 3 µg/mL
Density: 1.000 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	998 ± 4 µg/mL ICP Assay NIST SRM Traceable to 3153a Lot Number: K2-SR650985
Assay Method #2	1001 ± 3 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	1001 ± 2 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum (w_i) (X_i)$$

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:

$$w_i = (1/u_{char\ i})^2 / (\sum (1/u_{char\ i})^2)$$

$$CRM/RM \text{ Expanded Uncertainty } (k) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{ts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum (w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = 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

$$CRM/RM \text{ Expanded Uncertainty } (k) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{ts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001980	M	Eu	<	0.000495	O	Na	0.000200	M	Se	<	0.013862	O	Zn	0.000143	
O	Al	0.000370	O	Fe	0.000410	M	Nb	<	0.000495	i	Si	<			M	Zr	<	0.000495
M	As	<	0.000495	M	Ga	<	0.000495	M	Nd	<	0.000495	M	Sm	<	0.000495			
M	Au	<	0.000989	M	Gd	<	0.000495	O	Ni	<	0.007631	M	Sn	<	0.000990			
M	B	<	0.039606	M	Ge	<	0.000495	M	Os	<	0.000494	s	Sr	<				
M	Ba	0.006486	M	Hf	<	0.000495	i	P	<			M	Ta	<	0.000495			
M	Be	<	0.000990	M	Hg	<	0.000989	M	Pb	<	0.002970	M	Tb	<	0.000495			
M	Bi	<	0.000495	M	Ho	<	0.000495	M	Pd	<	0.003957	M	Te	<	0.027724			
O	Ca	0.004255	M	In	<	0.000495	M	Pr	<	0.000495	M	Th	<	0.000990				
M	Cd	0.001339	M	Ir	<	0.000494	M	Pt	<	0.002970	M	Ti	<	0.005940				
M	Ce	<	0.004950	O	K	<	0.008184	M	Rb	<	0.002970	M	Tl	<	0.000495			
M	Co	<	0.000495	M	La	<	0.000495	M	Re	<	0.000495	M	Tm	<	0.000495			
O	Cr	<	0.003207	O	Li	<	0.000884	O	Rh	<	0.012829	M	U	<	0.001485			
M	Cs	<	0.000990	M	Lu	<	0.002970	M	Ru	<	0.000989	M	V	<	0.001980			
M	Cu	0.000099	O	Mg	0.000064	i	S	<				M	W	<	0.003960			
M	Dy	<	0.000495	O	Mn	0.000066	M	Sb	<	0.014852	O	Y	<	0.000995				
M	Er	<	0.000495	M	Mo	<	0.001980	M	Sc	<	0.001980	M	Yb	<	0.000495			

M - Checked by ICP-MS

O - Checked by ICP-OES

i - Spectral Interference

n - Not Checked For

s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, <https://www.inorganicventures.com/terms-and-conditions-sale>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 87.62 +2 6 Sr(H₂O)₆+2

Chemical Compatibility - Soluble in HCl, and HNO₃. Avoid H₂SO₄, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1 - 3.5% HNO₃ / LDPE container.

Sr Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO₃); Ores (Carbonate fusion in PtO followed by HCl dissolution); Organic Matrices (Dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 88 amu	1200 ppt	N/A	72Ge16O, 176Yb+2, 176Lu+2 , 176Hf+2
ICP-OES 407.771 nm	0.0004 / 0.00006 µg/mL	1	U, Ce
ICP-OES 421.552 nm	0.0008 / 0.00004 µg/mL	1	Rb
ICP-OES 460.733 nm	0.07 / 0.003 µg/mL	1	Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; info@inorganicventures.com;

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 03, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- March 03, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





CERTIFIED WEIGHT REPORT:

Part Number: 57081
Lot Number: 062724
Description: Thallium (TI)

Lot #

Solvent: 24002546 Nitric Acid

2% 40.0 Nitric Acid (mL)

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

5E-05 Balance Uncertainty
0.10 Flask Uncertainty

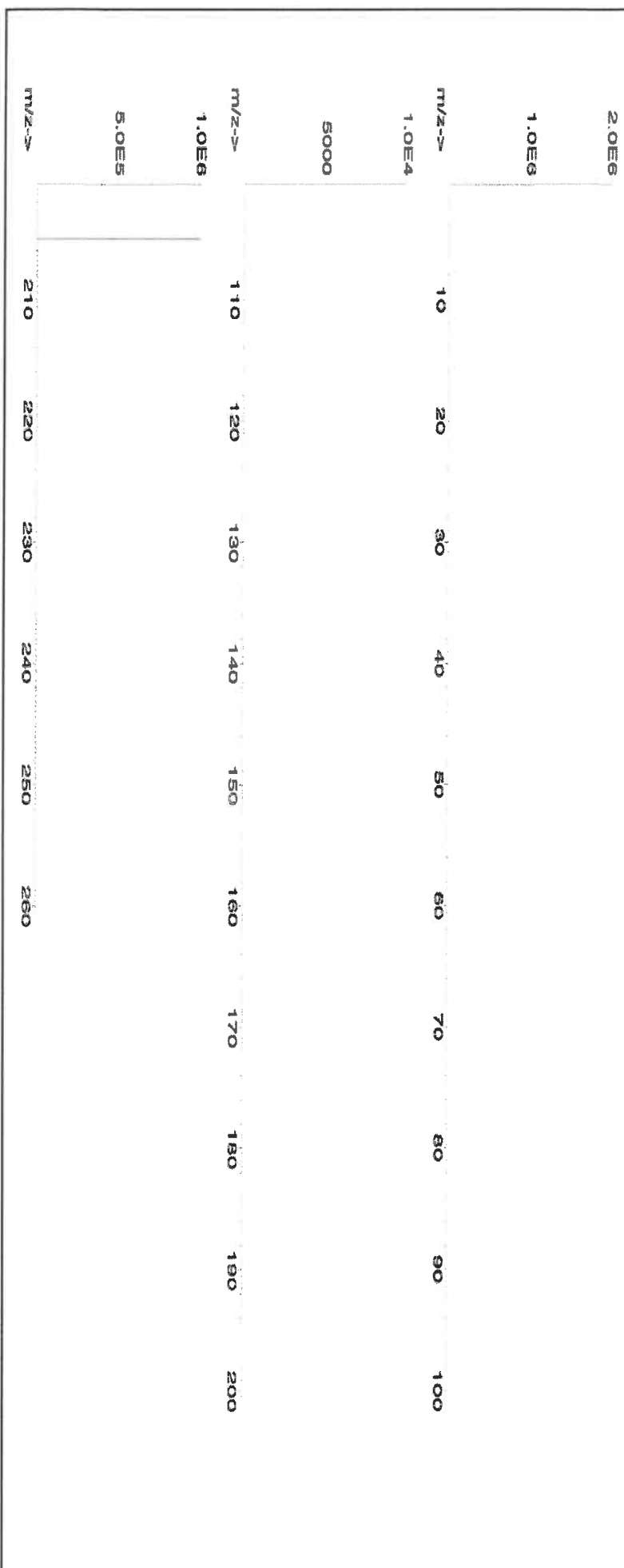
<i>Aleah O'Brady</i>	
Formulated By:	Aleah O'Brady
	062724
Reviewed By:	<i>Pedro L. Renteria</i>
	Pedro L. Renteria
	062724

SDS Information

Compound	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

1. Thallium nitrate (TI) 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

[1] Spectrum No.1 [14.044 sec]:57081.D# [Count] [Linear]





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	Pt	<0.02	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	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	Tm	<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	Sn	<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	Ti	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Se	<0.02	Ta	<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 certified (+/-) 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).



Certified Reference Material CRM

M6021



ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57023
Lot Number: 062424
Description: Vanadium (V)

Lot # 24002546
Solvent: Nitric Acid

Aleah O'Brady	
Formulated By:	Aleah O'Brady
Reviewed By:	Pedro L. Rantas

062424

062424

062424

Expiration Date: 062427
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

2.0%

40.0 (mL)

Nitric Acid

Aleah O'Brady

062424

Volume shown below was diluted to (mL): 2000.3

5E-05 Balance Uncertainty
0.06 Flask Uncertainty

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)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

SDS Information

(Solvent Safety Info. On Attached pg.)

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 or-at 58.1mg/kg 3165

[1] Spectrum No.1 [34.243 sec]:58023.D# [Count] [Linear]

m/z-->	10	20	30	40	50	60	70	80	90	100
2.0E6										
1.0E6										
2.0E7										
1.0E7										
m/z-->	110	120	130	140	150	160	170	180	190	200
5.0E6										
2.5E6										
m/z-->	210	220	230	240	250	260				



SHIPPING DOCUMENTS

CLIENT INFORMATION

CLIENT PROJECT INFORMATION

CLIENT BILLING INFORMATION

REPORT TO BE SENT TO:
COMPANY: Jacobs
ADDRESS: 412 Mt. Kemble Ave., Suite 100
CITY: Morrisstown STATE: NJ ZIP: 07960
ATTENTION: John Vinfante, John.Vinfante@Jacobs.com
PHONE: _____ FAX: _____

PROJECT NAME: StC Princeton
PROJECT NO.: D3868221 LOCATION: Princeton Junction
PROJECT MANAGER: Mary Murphy
e-mail: Mary.Murphy@Jacobs.com
PHONE: _____ FAX: _____

BILL TO: Mary Murphy PO#: _____
ADDRESS: _____
CITY: _____ STATE: _____ ZIP: _____
ATTENTION: _____ PHONE: _____

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) Standard TAT DAYS*
HARDCOPY (DATA PACKAGE): _____ DAYS*
EDD: _____ DAYS*

*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☐ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP
☒ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B
+ Raw Data ☐ Other _____
☐ EDD FORMAT _____

Site Specific Vocs (152605-1000)
114-Dioxane (182705-1000)
Total Metals (166705-1000)
Dissolved Iron (166705-1000)
Alkalinity (15m 7-20B)
TDS (5m 2540C)
Anions (9066)
Trace Vocs (5FAMOL-1-5M)

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS		
			COMP	GRAB	DATE	TIME		A/E	E	B/E	B/E	E	E	E	A/E			← Specify Preservatives	
								1	2	3	4	5	6	7	8			9	A-HCl
1.	MW-17B-55-060425	GW		X	6/4/25	1140	20	X	X	X	X	X	X	X			MS/MSD*		
2.	MW-17B-55-060425-SIM	GW		X	6/4/25	1145	3								X				
3.	MW-18B-56-060425	GW		X	6/4/25	1230	7		X	X	X	X	X	X					
4.	MW-18B-56-060425-FD	GW		X	6/4/25	1250	7		X	X	X	X	X	X					
5.	MW-19B-72-060425	GW		X	6/4/25	1550	7		X	X	X	X	X	X					
6.																			
7.																			
8.																			
9.																			
10.																			

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER: _____ DATE/TIME: _____ RECEIVED BY: 6-5-25
1. [Signature] 6/4/25 1830 1. [Signature] 0700
RELINQUISHED BY SAMPLER: _____ DATE/TIME: _____ RECEIVED BY: _____
2. _____ 2. _____
RELINQUISHED BY SAMPLER: _____ DATE/TIME: _____ RECEIVED BY: _____
3. _____ 3. _____

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 1.8°C

Comments: See work order for list of site specific Vocs

*MW-17B MS/MSD is for total metals, dissolved iron, alkalinity, TDS, and anions only
- Dissolved iron is field filtered
- PO# 148064311, 3 sample coolers

Page 1 of 2 CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete

☐ YES ☐ NO

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



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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2234	JACO05	Order Date : 6/5/2025 10:52:00 AM	Project Mgr :
Client Name : JACOBS Engineering Grou		Project Name : Former Schlumberger STC	Report Type : Level 3
Client Contact : John Ynfante		Receive DateTime : 6/5/2025 7:00:00 AM	EDD Type : CH2MHILL
Invoice Name : JACOBS Engineering Grou		Purchase Order :	Hard Copy Date :
Invoice Contact : John Ynfante			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2234-01	MW-17B-55-060425	Water	06/04/2025	11:40					
					VOCMS Group3		8260-Low	10 Bus. Days	
Q2234-04	MW-17B-55-060425-SIM	Water	06/04/2025	11:40					
				11:45	VOC-TRACE-SFAM		SFAM_Trace	10 Bus. Days	

Relinquished By :

Date / Time :

Received By :

Date / Time :

Storage Area : VOA Refridgerator Room