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

DATA PACKAGE

METALS

PROJECT NAME : ANSONIA LANDFILL 2025

LOCKWOOD, KESSLER & BARTLETT, INC.

1 Aerial Way

Syosset, NY - 11791-

Phone No: 516-938-0600

ORDER ID : Q3254

ATTENTION : John Gerlach

Laboratory Certification ID # 20012

Alliance TECHNICAL GROUP

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Cover Page

Order ID : Q3254

Project ID : Ansonia Landfill 2025

Client : Lockwood, Kessler & Bartlett, Inc.

Lab Sample Number	Client Sample Number
Q3254-01	MW-1
Q3254-02	MW-1
Q3254-03	MW-2
Q3254-04	MW-2
Q3254-05	MW-3
Q3254-06	MW-3
Q3254-07	MW-4
Q3254-08	MW-4
Q3254-09	TRIP-BLANK

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: 10/10/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Lockwood, Kessler & Bartlett, Inc.
Project Name: Ansonia Landfill 2025
Project # N/A
Order ID # Q3254
Test Name: Dissolved Metals Group5,Metals Group4

A. Number of Samples and Date of Receipt:
9 Water samples were received on 09/30/2025.

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

C. Analytical Techniques:
The analysis of Dissolved Metals Group5,Metals Group4 was based on method 6010D 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 compounds.
The Duplicate analysis met criteria for all compounds.
The Matrix Spike analysis met criteria for all compounds.
The Matrix Spike Duplicate analysis met criteria for all compounds.
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:
Samples Q3254-01, Q3254-03, Q3254-05, Q3254-07 were analyzed as Total Metal and Samples Q3254-02, Q3254-04, Q3254-06, Q3254-08 were analyzed as Dissolved Metal.

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

Signature_____

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DATA REPORTING QUALIFIERS- INORGANIC

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

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

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

ORDER ID: Q3254 MATRIX: Water

METHOD: 6010D

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

ADDITIONAL COMMENTS:

Samples Q3254-01, Q3254-03, Q3254-05, Q3254-07 were analyzed as Total Metal and Samples Q3254-02, Q3254-04, Q3254-06, Q3254-08 were analyzed as Dissolved Metal.

_____ _____

QA REVIEW Date

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q3254

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

QA Review Signature: SOHIL JODHANI **Date:** 10/10/2025

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LAB CHRONICLE

OrderID:	Q3254	**OrderDate:**	9/30/2025 12:37:00 PM
Client:	Lockwood, Kessler & Bartlett, Inc.	**Project:**	Ansonia Landfill 2025
Contact:	John Gerlach	**Location:**	D31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3254-01	**MW-1**	**Water**			**09/29/25**			**09/30/25**
			Metals Group4	6010D		10/01/25	10/02/25	
Q3254-02	**MW-1**	**Water**			**09/29/25**			**09/30/25**
			Dissolved Metals Group5	6010D		10/01/25	10/02/25	
Q3254-03	**MW-2**	**Water**			**09/29/25**			**09/30/25**
			Metals Group4	6010D		10/01/25	10/02/25	
Q3254-04	**MW-2**	**Water**			**09/29/25**			**09/30/25**
			Dissolved Metals Group5	6010D		10/01/25	10/02/25	
Q3254-05	**MW-3**	**Water**			**09/29/25**			**09/30/25**
			Metals Group4	6010D		10/01/25	10/02/25	
Q3254-06	**MW-3**	**Water**			**09/29/25**			**09/30/25**
			Dissolved Metals Group5	6010D		10/01/25	10/02/25	
Q3254-07	**MW-4**	**Water**			**09/29/25**			**09/30/25**
			Metals Group4	6010D		10/01/25	10/02/25	
Q3254-08	**MW-4**	**Water**			**09/29/25**			**09/30/25**
			Dissolved Metals Group5	6010D		10/01/25	10/02/25	

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Hit Summary Sheet
SW-846

SDG No.: Q3254 **Order ID:** Q3254

Client: Lockwood, Kessler & Bartlett, Inc. **Project ID:** Ansonia Landfill 2025

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : MW-1								
Q3254-01	MW-1	Water	Antimony	4.47	J	3.38	25.0	ug/L
Q3254-01	MW-1	Water	Barium	76.7		7.28	50.0	ug/L
Q3254-01	MW-1	Water	Cadmium	1.37	J	0.25	3.00	ug/L
Q3254-01	MW-1	Water	Nickel	3.83	J	1.53	20.0	ug/L
Q3254-01	MW-1	Water	Potassium	3730		459	1000	ug/L
Q3254-01	MW-1	Water	Selenium	4.83	J	4.82	10.0	ug/L
Q3254-01	MW-1	Water	Sodium	45500		434	1000	ug/L
Q3254-01	MW-1	Water	Thallium	5.29	J	2.19	20.0	ug/L
Q3254-01	MW-1	Water	Zinc	133		8.33	20.0	ug/L
Client ID : MW-1								
Q3254-02	MW-1	Water	Iron	18.9	J	11.7	50.0	ug/L
Q3254-02	MW-1	Water	Manganese	55.6		2.97	10.0	ug/L
Client ID : MW-2								
Q3254-03	MW-2	Water	Barium	161		7.28	50.0	ug/L
Q3254-03	MW-2	Water	Beryllium	0.40	J	0.28	3.00	ug/L
Q3254-03	MW-2	Water	Chromium	1.99	J	1.06	5.00	ug/L
Q3254-03	MW-2	Water	Cobalt	1.37	J	1.13	15.0	ug/L
Q3254-03	MW-2	Water	Copper	9.25	J	2.30	10.0	ug/L
Q3254-03	MW-2	Water	Lead	3.76	J	1.15	6.00	ug/L
Q3254-03	MW-2	Water	Nickel	19.3	J	1.53	20.0	ug/L
Q3254-03	MW-2	Water	Potassium	20900		459	1000	ug/L
Q3254-03	MW-2	Water	Sodium	225000		434	1000	ug/L
Q3254-03	MW-2	Water	Thallium	5.84	J	2.19	20.0	ug/L
Q3254-03	MW-2	Water	Zinc	63.7		8.33	20.0	ug/L
Client ID : MW-2								
Q3254-04	MW-2	Water	Iron	10000		11.7	50.0	ug/L
Q3254-04	MW-2	Water	Manganese	1160		2.97	10.0	ug/L
Client ID : MW-3								
Q3254-05	MW-3	Water	Barium	145		7.28	50.0	ug/L
Q3254-05	MW-3	Water	Chromium	1.41	J	1.06	5.00	ug/L
Q3254-05	MW-3	Water	Cobalt	1.24	J	1.13	15.0	ug/L
Q3254-05	MW-3	Water	Lead	1.49	J	1.15	6.00	ug/L
Q3254-05	MW-3	Water	Nickel	2.14	J	1.53	20.0	ug/L
Q3254-05	MW-3	Water	Potassium	14400		459	1000	ug/L
Q3254-05	MW-3	Water	Sodium	137000		434	1000	ug/L

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Hit Summary Sheet
SW-846

SDG No.: Q3254 **Order ID:** Q3254

Client: Lockwood, Kessler & Bartlett, Inc. **Project ID:** Ansonia Landfill 2025

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q3254-05	MW-3	Water	Thallium	7.19	J	2.19	20.0	ug/L
Q3254-05	MW-3	Water	Zinc	21.2		8.33	20.0	ug/L
Client ID : MW-3								
Q3254-06	MW-3	Water	Iron	2020		11.7	50.0	ug/L
Q3254-06	MW-3	Water	Manganese	499		2.97	10.0	ug/L
Client ID : MW-4								
Q3254-07	MW-4	Water	Barium	165		7.28	50.0	ug/L
Q3254-07	MW-4	Water	Beryllium	0.44	J	0.28	3.00	ug/L
Q3254-07	MW-4	Water	Chromium	1.87	J	1.06	5.00	ug/L
Q3254-07	MW-4	Water	Cobalt	1.37	J	1.13	15.0	ug/L
Q3254-07	MW-4	Water	Copper	10.5		2.30	10.0	ug/L
Q3254-07	MW-4	Water	Lead	3.57	J	1.15	6.00	ug/L
Q3254-07	MW-4	Water	Nickel	20.0		1.53	20.0	ug/L
Q3254-07	MW-4	Water	Potassium	22200		459	1000	ug/L
Q3254-07	MW-4	Water	Sodium	230000		434	1000	ug/L
Q3254-07	MW-4	Water	Thallium	8.73	J	2.19	20.0	ug/L
Q3254-07	MW-4	Water	Vanadium	4.16	J	3.13	20.0	ug/L
Q3254-07	MW-4	Water	Zinc	67.6		8.33	20.0	ug/L
Client ID : MW-4								
Q3254-08	MW-4	Water	Iron	9590		11.7	50.0	ug/L
Q3254-08	MW-4	Water	Manganese	1210		2.97	10.0	ug/L

SAMPLE DATA

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Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	09/29/25
Project:	Ansonia Landfill 2025	Date Received:	09/30/25
Client Sample ID:	MW-1	SDG No.:	Q3254
Lab Sample ID:	Q3254-01	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.
7440-36-0	Antimony	4.47	J	1	3.38	25.0	ug/L	10/01/25 10:45	10/02/25 14:34	6010D	SW3010
7440-38-2	Arsenic	10.0	U	1	2.56	10.0	ug/L	10/01/25 10:45	10/02/25 14:34	6010D	SW3010
7440-39-3	Barium	76.7		1	7.28	50.0	ug/L	10/01/25 10:45	10/02/25 14:34	6010D	SW3010
7440-41-7	Beryllium	3.00	U	1	0.28	3.00	ug/L	10/01/25 10:45	10/02/25 14:34	6010D	SW3010
7440-43-9	Cadmium	1.37	J	1	0.25	3.00	ug/L	10/01/25 10:45	10/02/25 14:34	6010D	SW3010
7440-47-3	Chromium	5.00	U	1	1.06	5.00	ug/L	10/01/25 10:45	10/02/25 14:34	6010D	SW3010
7440-48-4	Cobalt	15.0	U	1	1.13	15.0	ug/L	10/01/25 10:45	10/02/25 14:34	6010D	SW3010
7440-50-8	Copper	10.0	U	1	2.30	10.0	ug/L	10/01/25 10:45	10/02/25 14:34	6010D	SW3010
7439-92-1	Lead	6.00	U	1	1.15	6.00	ug/L	10/01/25 10:45	10/02/25 14:34	6010D	SW3010
7440-02-0	Nickel	3.83	J	1	1.53	20.0	ug/L	10/01/25 10:45	10/02/25 14:34	6010D	SW3010
7440-09-7	Potassium	3730		1	459	1000	ug/L	10/01/25 10:45	10/02/25 14:34	6010D	SW3010
7782-49-2	Selenium	4.83	J	1	4.82	10.0	ug/L	10/01/25 10:45	10/02/25 14:34	6010D	SW3010
7440-22-4	Silver	5.00	U	1	0.81	5.00	ug/L	10/01/25 10:45	10/02/25 14:34	6010D	SW3010
7440-23-5	Sodium	45500		1	434	1000	ug/L	10/01/25 10:45	10/02/25 14:34	6010D	SW3010
7440-28-0	Thallium	5.29	J	1	2.19	20.0	ug/L	10/01/25 10:45	10/02/25 14:34	6010D	SW3010
7440-62-2	Vanadium	20.0	U	1	3.13	20.0	ug/L	10/01/25 10:45	10/02/25 14:34	6010D	SW3010
7440-66-6	Zinc	133		1	8.33	20.0	ug/L	10/01/25 10:45	10/02/25 14:34	6010D	SW3010

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

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

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

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Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	09/29/25
Project:	Ansonia Landfill 2025	Date Received:	09/30/25
Client Sample ID:	MW-1	SDG No.:	Q3254
Lab Sample ID:	Q3254-02	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7439-89-6	Iron	18.9	J	1	11.7	50.0	ug/L	10/01/25 10:45	10/02/25 14:38	6010D	SW3010
7439-96-5	Manganese	55.6		1	2.97	10.0	ug/L	10/01/25 10:45	10/02/25 14:38	6010D	SW3010

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

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

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

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	09/29/25
Project:	Ansonia Landfill 2025	Date Received:	09/30/25
Client Sample ID:	MW-2	SDG No.:	Q3254
Lab Sample ID:	Q3254-03	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.
7440-36-0	Antimony	25.0	U	1	3.38	25.0	ug/L	10/01/25 10:45	10/02/25 14:43	6010D	SW3010
7440-38-2	Arsenic	10.0	U	1	2.56	10.0	ug/L	10/01/25 10:45	10/02/25 14:43	6010D	SW3010
7440-39-3	Barium	161		1	7.28	50.0	ug/L	10/01/25 10:45	10/02/25 14:43	6010D	SW3010
7440-41-7	Beryllium	0.40	J	1	0.28	3.00	ug/L	10/01/25 10:45	10/02/25 14:43	6010D	SW3010
7440-43-9	Cadmium	3.00	U	1	0.25	3.00	ug/L	10/01/25 10:45	10/02/25 14:43	6010D	SW3010
7440-47-3	Chromium	1.99	J	1	1.06	5.00	ug/L	10/01/25 10:45	10/02/25 14:43	6010D	SW3010
7440-48-4	Cobalt	1.37	J	1	1.13	15.0	ug/L	10/01/25 10:45	10/02/25 14:43	6010D	SW3010
7440-50-8	Copper	9.25	J	1	2.30	10.0	ug/L	10/01/25 10:45	10/02/25 14:43	6010D	SW3010
7439-92-1	Lead	3.76	J	1	1.15	6.00	ug/L	10/01/25 10:45	10/02/25 14:43	6010D	SW3010
7440-02-0	Nickel	19.3	J	1	1.53	20.0	ug/L	10/01/25 10:45	10/02/25 14:43	6010D	SW3010
7440-09-7	Potassium	20900		1	459	1000	ug/L	10/01/25 10:45	10/02/25 14:43	6010D	SW3010
7782-49-2	Selenium	10.0	U	1	4.82	10.0	ug/L	10/01/25 10:45	10/02/25 14:43	6010D	SW3010
7440-22-4	Silver	5.00	U	1	0.81	5.00	ug/L	10/01/25 10:45	10/02/25 14:43	6010D	SW3010
7440-23-5	Sodium	225000		1	434	1000	ug/L	10/01/25 10:45	10/02/25 14:43	6010D	SW3010
7440-28-0	Thallium	5.84	J	1	2.19	20.0	ug/L	10/01/25 10:45	10/02/25 14:43	6010D	SW3010
7440-62-2	Vanadium	20.0	U	1	3.13	20.0	ug/L	10/01/25 10:45	10/02/25 14:43	6010D	SW3010
7440-66-6	Zinc	63.7		1	8.33	20.0	ug/L	10/01/25 10:45	10/02/25 14:43	6010D	SW3010

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

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

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

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Fax : 908 789 8922

Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	09/29/25
Project:	Ansonia Landfill 2025	Date Received:	09/30/25
Client Sample ID:	MW-2	SDG No.:	Q3254
Lab Sample ID:	Q3254-04	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7439-89-6	Iron	10000		1	11.7	50.0	ug/L	10/01/25 10:45	10/02/25 14:57	6010D	SW3010
7439-96-5	Manganese	1160		1	2.97	10.0	ug/L	10/01/25 10:45	10/02/25 14:57	6010D	SW3010

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

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

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

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Fax : 908 789 8922

Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	09/29/25
Project:	Ansonia Landfill 2025	Date Received:	09/30/25
Client Sample ID:	MW-3	SDG No.:	Q3254
Lab Sample ID:	Q3254-05	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.
7440-36-0	Antimony	25.0	U	1	3.38	25.0	ug/L	10/01/25 10:45	10/02/25 15:01	6010D	SW3010
7440-38-2	Arsenic	10.0	U	1	2.56	10.0	ug/L	10/01/25 10:45	10/02/25 15:01	6010D	SW3010
7440-39-3	Barium	145		1	7.28	50.0	ug/L	10/01/25 10:45	10/02/25 15:01	6010D	SW3010
7440-41-7	Beryllium	3.00	U	1	0.28	3.00	ug/L	10/01/25 10:45	10/02/25 15:01	6010D	SW3010
7440-43-9	Cadmium	3.00	U	1	0.25	3.00	ug/L	10/01/25 10:45	10/02/25 15:01	6010D	SW3010
7440-47-3	Chromium	1.41	J	1	1.06	5.00	ug/L	10/01/25 10:45	10/02/25 15:01	6010D	SW3010
7440-48-4	Cobalt	1.24	J	1	1.13	15.0	ug/L	10/01/25 10:45	10/02/25 15:01	6010D	SW3010
7440-50-8	Copper	10.0	U	1	2.30	10.0	ug/L	10/01/25 10:45	10/02/25 15:01	6010D	SW3010
7439-92-1	Lead	1.49	J	1	1.15	6.00	ug/L	10/01/25 10:45	10/02/25 15:01	6010D	SW3010
7440-02-0	Nickel	2.14	J	1	1.53	20.0	ug/L	10/01/25 10:45	10/02/25 15:01	6010D	SW3010
7440-09-7	Potassium	14400		1	459	1000	ug/L	10/01/25 10:45	10/02/25 15:01	6010D	SW3010
7782-49-2	Selenium	10.0	U	1	4.82	10.0	ug/L	10/01/25 10:45	10/02/25 15:01	6010D	SW3010
7440-22-4	Silver	5.00	U	1	0.81	5.00	ug/L	10/01/25 10:45	10/02/25 15:01	6010D	SW3010
7440-23-5	Sodium	137000		1	434	1000	ug/L	10/01/25 10:45	10/02/25 15:01	6010D	SW3010
7440-28-0	Thallium	7.19	J	1	2.19	20.0	ug/L	10/01/25 10:45	10/02/25 15:01	6010D	SW3010
7440-62-2	Vanadium	20.0	U	1	3.13	20.0	ug/L	10/01/25 10:45	10/02/25 15:01	6010D	SW3010
7440-66-6	Zinc	21.2		1	8.33	20.0	ug/L	10/01/25 10:45	10/02/25 15:01	6010D	SW3010

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

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

Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	09/29/25
Project:	Ansonia Landfill 2025	Date Received:	09/30/25
Client Sample ID:	MW-3	SDG No.:	Q3254
Lab Sample ID:	Q3254-06	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.
7439-89-6	Iron	2020		1	11.7	50.0	ug/L	10/01/25 10:45	10/02/25 15:05	6010D	SW3010
7439-96-5	Manganese	499		1	2.97	10.0	ug/L	10/01/25 10:45	10/02/25 15:05	6010D	SW3010

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

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

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

Alliance TECHNICAL GROUP
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Fax : 908 789 8922

Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	09/29/25
Project:	Ansonia Landfill 2025	Date Received:	09/30/25
Client Sample ID:	MW-4	SDG No.:	Q3254
Lab Sample ID:	Q3254-07	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.
7440-36-0	Antimony	25.0	U	1	3.38	25.0	ug/L	10/01/25 10:45	10/02/25 15:09	6010D	SW3010
7440-38-2	Arsenic	10.0	U	1	2.56	10.0	ug/L	10/01/25 10:45	10/02/25 15:09	6010D	SW3010
7440-39-3	Barium	165		1	7.28	50.0	ug/L	10/01/25 10:45	10/02/25 15:09	6010D	SW3010
7440-41-7	Beryllium	0.44	J	1	0.28	3.00	ug/L	10/01/25 10:45	10/02/25 15:09	6010D	SW3010
7440-43-9	Cadmium	3.00	U	1	0.25	3.00	ug/L	10/01/25 10:45	10/02/25 15:09	6010D	SW3010
7440-47-3	Chromium	1.87	J	1	1.06	5.00	ug/L	10/01/25 10:45	10/02/25 15:09	6010D	SW3010
7440-48-4	Cobalt	1.37	J	1	1.13	15.0	ug/L	10/01/25 10:45	10/02/25 15:09	6010D	SW3010
7440-50-8	Copper	10.5		1	2.30	10.0	ug/L	10/01/25 10:45	10/02/25 15:09	6010D	SW3010
7439-92-1	Lead	3.57	J	1	1.15	6.00	ug/L	10/01/25 10:45	10/02/25 15:09	6010D	SW3010
7440-02-0	Nickel	20.0		1	1.53	20.0	ug/L	10/01/25 10:45	10/02/25 15:09	6010D	SW3010
7440-09-7	Potassium	22200		1	459	1000	ug/L	10/01/25 10:45	10/02/25 15:09	6010D	SW3010
7782-49-2	Selenium	10.0	U	1	4.82	10.0	ug/L	10/01/25 10:45	10/02/25 15:09	6010D	SW3010
7440-22-4	Silver	5.00	U	1	0.81	5.00	ug/L	10/01/25 10:45	10/02/25 15:09	6010D	SW3010
7440-23-5	Sodium	230000		1	434	1000	ug/L	10/01/25 10:45	10/02/25 15:09	6010D	SW3010
7440-28-0	Thallium	8.73	J	1	2.19	20.0	ug/L	10/01/25 10:45	10/02/25 15:09	6010D	SW3010
7440-62-2	Vanadium	4.16	J	1	3.13	20.0	ug/L	10/01/25 10:45	10/02/25 15:09	6010D	SW3010
7440-66-6	Zinc	67.6		1	8.33	20.0	ug/L	10/01/25 10:45	10/02/25 15:09	6010D	SW3010

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
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OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	09/29/25
Project:	Ansonia Landfill 2025	Date Received:	09/30/25
Client Sample ID:	MW-4	SDG No.:	Q3254
Lab Sample ID:	Q3254-08	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	9590		1	11.7	50.0	ug/L	10/01/25 10:45	10/02/25 15:34	6010D	SW3010
7439-96-5	Manganese	1210		1	2.97	10.0	ug/L	10/01/25 10:45	10/02/25 15:34	6010D	SW3010

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

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

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

METAL CALIBRATION DATA

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Antimony	4080	4000	102	90 - 110	P	10/02/2025	11:07	LB137406
	Arsenic	4010	4000	100	90 - 110	P	10/02/2025	11:07	LB137406
	Barium	7650	8000	96	90 - 110	P	10/02/2025	11:07	LB137406
	Beryllium	201	200	101	90 - 110	P	10/02/2025	11:07	LB137406
	Cadmium	1970	2000	99	90 - 110	P	10/02/2025	11:07	LB137406
	Chromium	824	800	103	90 - 110	P	10/02/2025	11:07	LB137406
	Cobalt	1970	2000	99	90 - 110	P	10/02/2025	11:07	LB137406
	Copper	1010	1000	101	90 - 110	P	10/02/2025	11:07	LB137406
	Iron	3990	4000	100	90 - 110	P	10/02/2025	11:07	LB137406
	Lead	3870	4000	97	90 - 110	P	10/02/2025	11:07	LB137406
	Manganese	1940	2000	97	90 - 110	P	10/02/2025	11:07	LB137406
	Nickel	1980	2000	99	90 - 110	P	10/02/2025	11:07	LB137406
	Potassium	19600	20000	98	90 - 110	P	10/02/2025	11:07	LB137406
	Selenium	4040	4000	101	90 - 110	P	10/02/2025	11:07	LB137406
	Silver	987	1000	99	90 - 110	P	10/02/2025	11:07	LB137406
	Sodium	19000	20000	95	90 - 110	P	10/02/2025	11:07	LB137406
	Thallium	3980	4000	100	90 - 110	P	10/02/2025	11:07	LB137406
	Vanadium	1960	2000	98	90 - 110	P	10/02/2025	11:07	LB137406
	Zinc	2010	2000	100	90 - 110	P	10/02/2025	11:07	LB137406

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Antimony	52.3	50.0	104	80 - 120	P	10/02/2025	11:11	LB137406
	Arsenic	21.7	20.0	108	80 - 120	P	10/02/2025	11:11	LB137406
	Barium	113	100	113	80 - 120	P	10/02/2025	11:11	LB137406
	Beryllium	6.80	6.0	113	80 - 120	P	10/02/2025	11:11	LB137406
	Cadmium	6.03	6.0	100	80 - 120	P	10/02/2025	11:11	LB137406
	Chromium	11.2	10.0	112	80 - 120	P	10/02/2025	11:11	LB137406
	Cobalt	30.1	30.0	100	80 - 120	P	10/02/2025	11:11	LB137406
	Copper	22.2	20.0	111	80 - 120	P	10/02/2025	11:11	LB137406
	Iron	104	100	104	80 - 120	P	10/02/2025	11:11	LB137406
	Lead	13.2	12.0	110	80 - 120	P	10/02/2025	11:11	LB137406
	Manganese	21.5	20.0	108	80 - 120	P	10/02/2025	11:11	LB137406
	Nickel	40.4	40.0	101	80 - 120	P	10/02/2025	11:11	LB137406
	Potassium	1770	2000	88	80 - 120	P	10/02/2025	11:11	LB137406
	Selenium	22.8	20.0	114	80 - 120	P	10/02/2025	11:11	LB137406
	Silver	11.0	10.0	110	80 - 120	P	10/02/2025	11:11	LB137406
	Sodium	1690	2000	84	80 - 120	P	10/02/2025	11:11	LB137406
	Thallium	46.1	40.0	115	80 - 120	P	10/02/2025	11:11	LB137406
	Vanadium	42.2	40.0	106	80 - 120	P	10/02/2025	11:11	LB137406
	Zinc	42.4	40.0	106	80 - 120	P	10/02/2025	11:11	LB137406

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Antimony	4950	5000	99	90 - 110	P	10/02/2025	11:58	LB137406
	Arsenic	5100	5000	102	90 - 110	P	10/02/2025	11:58	LB137406
	Barium	9630	10000	96	90 - 110	P	10/02/2025	11:58	LB137406
	Beryllium	267	250	107	90 - 110	P	10/02/2025	11:58	LB137406
	Cadmium	2530	2500	101	90 - 110	P	10/02/2025	11:58	LB137406
	Chromium	1040	1000	104	90 - 110	P	10/02/2025	11:58	LB137406
	Cobalt	2490	2500	100	90 - 110	P	10/02/2025	11:58	LB137406
	Copper	1260	1250	101	90 - 110	P	10/02/2025	11:58	LB137406
	Iron	4740	5000	95	90 - 110	P	10/02/2025	11:58	LB137406
	Lead	5080	5000	102	90 - 110	P	10/02/2025	11:58	LB137406
	Manganese	2440	2500	98	90 - 110	P	10/02/2025	11:58	LB137406
	Nickel	2500	2500	100	90 - 110	P	10/02/2025	11:58	LB137406
	Potassium	23300	25000	93	90 - 110	P	10/02/2025	11:58	LB137406
	Selenium	5120	5000	102	90 - 110	P	10/02/2025	11:58	LB137406
	Silver	1260	1250	101	90 - 110	P	10/02/2025	11:58	LB137406
	Sodium	22800	25000	91	90 - 110	P	10/02/2025	11:58	LB137406
	Thallium	5080	5000	102	90 - 110	P	10/02/2025	11:58	LB137406
	Vanadium	2470	2500	99	90 - 110	P	10/02/2025	11:58	LB137406
	Zinc	2520	2500	101	90 - 110	P	10/02/2025	11:58	LB137406
CCV02	Antimony	4830	5000	97	90 - 110	P	10/02/2025	13:48	LB137406
	Arsenic	5200	5000	104	90 - 110	P	10/02/2025	13:48	LB137406
	Barium	9090	10000	91	90 - 110	P	10/02/2025	13:48	LB137406
	Beryllium	246	250	98	90 - 110	P	10/02/2025	13:48	LB137406
	Cadmium	2570	2500	103	90 - 110	P	10/02/2025	13:48	LB137406
	Chromium	1070	1000	107	90 - 110	P	10/02/2025	13:48	LB137406
	Cobalt	2460	2500	99	90 - 110	P	10/02/2025	13:48	LB137406
	Copper	1260	1250	101	90 - 110	P	10/02/2025	13:48	LB137406
	Iron	5120	5000	102	90 - 110	P	10/02/2025	13:48	LB137406
	Lead	5240	5000	105	90 - 110	P	10/02/2025	13:48	LB137406
	Manganese	2330	2500	93	90 - 110	P	10/02/2025	13:48	LB137406
	Nickel	2490	2500	99	90 - 110	P	10/02/2025	13:48	LB137406
	Potassium	23300	25000	93	90 - 110	P	10/02/2025	13:48	LB137406
	Selenium	5320	5000	106	90 - 110	P	10/02/2025	13:48	LB137406
	Silver	1280	1250	102	90 - 110	P	10/02/2025	13:48	LB137406

Alliance TECHNICAL GROUP
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Fax : 908 789 8922

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV02	Sodium	24800	25000	99	90 - 110	P	10/02/2025	13:48	LB137406
	Thallium	5290	5000	106	90 - 110	P	10/02/2025	13:48	LB137406
	Vanadium	2390	2500	96	90 - 110	P	10/02/2025	13:48	LB137406
	Zinc	2500	2500	100	90 - 110	P	10/02/2025	13:48	LB137406
CCV03	Antimony	4800	5000	96	90 - 110	P	10/02/2025	14:47	LB137406
	Arsenic	5170	5000	104	90 - 110	P	10/02/2025	14:47	LB137406
	Barium	9030	10000	90	90 - 110	P	10/02/2025	14:47	LB137406
	Beryllium	243	250	97	90 - 110	P	10/02/2025	14:47	LB137406
	Cadmium	2560	2500	103	90 - 110	P	10/02/2025	14:47	LB137406
	Chromium	1050	1000	105	90 - 110	P	10/02/2025	14:47	LB137406
	Cobalt	2450	2500	98	90 - 110	P	10/02/2025	14:47	LB137406
	Copper	1250	1250	100	90 - 110	P	10/02/2025	14:47	LB137406
	Iron	5080	5000	102	90 - 110	P	10/02/2025	14:47	LB137406
	Lead	5220	5000	104	90 - 110	P	10/02/2025	14:47	LB137406
	Manganese	2320	2500	93	90 - 110	P	10/02/2025	14:47	LB137406
	Nickel	2470	2500	99	90 - 110	P	10/02/2025	14:47	LB137406
	Potassium	24700	25000	99	90 - 110	P	10/02/2025	14:47	LB137406
	Selenium	5300	5000	106	90 - 110	P	10/02/2025	14:47	LB137406
	Silver	1250	1250	100	90 - 110	P	10/02/2025	14:47	LB137406
	Sodium	24400	25000	98	90 - 110	P	10/02/2025	14:47	LB137406
	Thallium	5300	5000	106	90 - 110	P	10/02/2025	14:47	LB137406
	Vanadium	2360	2500	95	90 - 110	P	10/02/2025	14:47	LB137406
	Zinc	2470	2500	99	90 - 110	P	10/02/2025	14:47	LB137406
CCV04	Antimony	4920	5000	98	90 - 110	P	10/02/2025	15:54	LB137406
	Arsenic	5460	5000	109	90 - 110	P	10/02/2025	15:54	LB137406
	Barium	9070	10000	91	90 - 110	P	10/02/2025	15:54	LB137406
	Beryllium	234	250	93	90 - 110	P	10/02/2025	15:54	LB137406
	Cadmium	2660	2500	106	90 - 110	P	10/02/2025	15:54	LB137406
	Chromium	1070	1000	107	90 - 110	P	10/02/2025	15:54	LB137406
	Cobalt	2480	2500	99	90 - 110	P	10/02/2025	15:54	LB137406
	Copper	1290	1250	103	90 - 110	P	10/02/2025	15:54	LB137406
	Iron	5300	5000	106	90 - 110	P	10/02/2025	15:54	LB137406
	Lead	5270	5000	106	90 - 110	P	10/02/2025	15:54	LB137406
	Manganese	2340	2500	94	90 - 110	P	10/02/2025	15:54	LB137406

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV04	Nickel	2520	2500	101	90 - 110	P	10/02/2025	15:54	LB137406
	Potassium	24200	25000	97	90 - 110	P	10/02/2025	15:54	LB137406
	Selenium	4900	5000	98	90 - 110	P	10/02/2025	15:54	LB137406
	Silver	1290	1250	103	90 - 110	P	10/02/2025	15:54	LB137406
	Sodium	23300	25000	93	90 - 110	P	10/02/2025	15:54	LB137406
	Thallium	5170	5000	103	90 - 110	P	10/02/2025	15:54	LB137406
	Vanadium	2400	2500	96	90 - 110	P	10/02/2025	15:54	LB137406
	Zinc	2510	2500	100	90 - 110	P	10/02/2025	15:54	LB137406
CCV05	Antimony	4750	5000	95	90 - 110	P	10/02/2025	17:31	LB137406
	Arsenic	5060	5000	101	90 - 110	P	10/02/2025	17:31	LB137406
	Barium	9160	10000	92	90 - 110	P	10/02/2025	17:31	LB137406
	Beryllium	239	250	96	90 - 110	P	10/02/2025	17:31	LB137406
	Cadmium	2530	2500	101	90 - 110	P	10/02/2025	17:31	LB137406
	Chromium	1020	1000	102	90 - 110	P	10/02/2025	17:31	LB137406
	Cobalt	2430	2500	97	90 - 110	P	10/02/2025	17:31	LB137406
	Copper	1240	1250	99	90 - 110	P	10/02/2025	17:31	LB137406
	Iron	5480	5000	110	90 - 110	P	10/02/2025	17:31	LB137406
	Lead	5140	5000	103	90 - 110	P	10/02/2025	17:31	LB137406
	Manganese	2350	2500	94	90 - 110	P	10/02/2025	17:31	LB137406
	Nickel	2450	2500	98	90 - 110	P	10/02/2025	17:31	LB137406
	Potassium	22500	25000	90	90 - 110	P	10/02/2025	17:31	LB137406
	Selenium	5150	5000	103	90 - 110	P	10/02/2025	17:31	LB137406
	Silver	1230	1250	99	90 - 110	P	10/02/2025	17:31	LB137406
	Sodium	26000	25000	104	90 - 110	P	10/02/2025	17:31	LB137406
	Thallium	4690	5000	94	90 - 110	P	10/02/2025	17:31	LB137406
	Vanadium	2370	2500	95	90 - 110	P	10/02/2025	17:31	LB137406
	Zinc	2430	2500	97	90 - 110	P	10/02/2025	17:31	LB137406
CCV06	Antimony	4830	5000	96	90 - 110	P	10/02/2025	18:17	LB137406
	Arsenic	5210	5000	104	90 - 110	P	10/02/2025	18:17	LB137406
	Barium	9140	10000	91	90 - 110	P	10/02/2025	18:17	LB137406
	Beryllium	252	250	101	90 - 110	P	10/02/2025	18:17	LB137406
	Cadmium	2590	2500	104	90 - 110	P	10/02/2025	18:17	LB137406
	Chromium	1040	1000	104	90 - 110	P	10/02/2025	18:17	LB137406
	Cobalt	2460	2500	98	90 - 110	P	10/02/2025	18:17	LB137406

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV06	Copper	1270	1250	101	90 - 110	P	10/02/2025	18:17	LB137406
	Iron	5380	5000	108	90 - 110	P	10/02/2025	18:17	LB137406
	Lead	5290	5000	106	90 - 110	P	10/02/2025	18:17	LB137406
	Manganese	2360	2500	94	90 - 110	P	10/02/2025	18:17	LB137406
	Nickel	2490	2500	100	90 - 110	P	10/02/2025	18:17	LB137406
	Potassium	24700	25000	99	90 - 110	P	10/02/2025	18:17	LB137406
	Selenium	5010	5000	100	90 - 110	P	10/02/2025	18:17	LB137406
	Silver	1250	1250	100	90 - 110	P	10/02/2025	18:17	LB137406
	Sodium	26000	25000	104	90 - 110	P	10/02/2025	18:17	LB137406
	Thallium	4730	5000	94	90 - 110	P	10/02/2025	18:17	LB137406
	Vanadium	2370	2500	95	90 - 110	P	10/02/2025	18:17	LB137406
	Zinc	2450	2500	98	90 - 110	P	10/02/2025	18:17	LB137406

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Antimony	4030	4000	101	90 - 110	P	10/03/2025	12:18	LB137426
	Arsenic	3940	4000	99	90 - 110	P	10/03/2025	12:18	LB137426
	Barium	7900	8000	99	90 - 110	P	10/03/2025	12:18	LB137426
	Beryllium	199	200	100	90 - 110	P	10/03/2025	12:18	LB137426
	Cadmium	1950	2000	98	90 - 110	P	10/03/2025	12:18	LB137426
	Chromium	799	800	100	90 - 110	P	10/03/2025	12:18	LB137426
	Cobalt	1950	2000	98	90 - 110	P	10/03/2025	12:18	LB137426
	Copper	1010	1000	101	90 - 110	P	10/03/2025	12:18	LB137426
	Iron	3950	4000	99	90 - 110	P	10/03/2025	12:18	LB137426
	Lead	3840	4000	96	90 - 110	P	10/03/2025	12:18	LB137426
	Manganese	1980	2000	99	90 - 110	P	10/03/2025	12:18	LB137426
	Nickel	1960	2000	98	90 - 110	P	10/03/2025	12:18	LB137426
	Potassium	19400	20000	97	90 - 110	P	10/03/2025	12:18	LB137426
	Selenium	3960	4000	99	90 - 110	P	10/03/2025	12:18	LB137426
	Silver	960	1000	96	90 - 110	P	10/03/2025	12:18	LB137426
	Sodium	19300	20000	97	90 - 110	P	10/03/2025	12:18	LB137426
	Thallium	3750	4000	94	90 - 110	P	10/03/2025	12:18	LB137426
	Vanadium	1960	2000	98	90 - 110	P	10/03/2025	12:18	LB137426
	Zinc	1980	2000	99	90 - 110	P	10/03/2025	12:18	LB137426

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Antimony	53.8	50.0	108	80 - 120	P	10/03/2025	13:05	LB137426
	Arsenic	22.0	20.0	110	80 - 120	P	10/03/2025	13:05	LB137426
	Barium	99.1	100	99	80 - 120	P	10/03/2025	13:05	LB137426
	Beryllium	6.51	6.0	108	80 - 120	P	10/03/2025	13:05	LB137426
	Cadmium	6.05	6.0	101	80 - 120	P	10/03/2025	13:05	LB137426
	Chromium	10.4	10.0	104	80 - 120	P	10/03/2025	13:05	LB137426
	Cobalt	30.1	30.0	100	80 - 120	P	10/03/2025	13:05	LB137426
	Copper	21.3	20.0	107	80 - 120	P	10/03/2025	13:05	LB137426
	Iron	92.9	100	93	80 - 120	P	10/03/2025	13:05	LB137426
	Lead	12.8	12.0	107	80 - 120	P	10/03/2025	13:05	LB137426
	Manganese	21.2	20.0	106	80 - 120	P	10/03/2025	13:05	LB137426
	Nickel	41.3	40.0	103	80 - 120	P	10/03/2025	13:05	LB137426
	Potassium	1960	2000	98	80 - 120	P	10/03/2025	13:05	LB137426
	Selenium	19.3	20.0	96	80 - 120	P	10/03/2025	13:05	LB137426
	Silver	10.2	10.0	102	80 - 120	P	10/03/2025	13:05	LB137426
	Sodium	1990	2000	100	80 - 120	P	10/03/2025	13:05	LB137426
	Thallium	41.8	40.0	104	80 - 120	P	10/03/2025	13:05	LB137426
	Vanadium	39.2	40.0	98	80 - 120	P	10/03/2025	13:05	LB137426
	Zinc	42.4	40.0	106	80 - 120	P	10/03/2025	13:05	LB137426

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Antimony	5040	5000	101	90 - 110	P	10/03/2025	13:37	LB137426
	Arsenic	5030	5000	100	90 - 110	P	10/03/2025	13:37	LB137426
	Barium	10000	10000	100	90 - 110	P	10/03/2025	13:37	LB137426
	Beryllium	247	250	99	90 - 110	P	10/03/2025	13:37	LB137426
	Cadmium	2490	2500	100	90 - 110	P	10/03/2025	13:37	LB137426
	Chromium	989	1000	99	90 - 110	P	10/03/2025	13:37	LB137426
	Cobalt	2480	2500	99	90 - 110	P	10/03/2025	13:37	LB137426
	Copper	1260	1250	101	90 - 110	P	10/03/2025	13:37	LB137426
	Iron	4900	5000	98	90 - 110	P	10/03/2025	13:37	LB137426
	Lead	4940	5000	99	90 - 110	P	10/03/2025	13:37	LB137426
	Manganese	2500	2500	100	90 - 110	P	10/03/2025	13:37	LB137426
	Nickel	2490	2500	100	90 - 110	P	10/03/2025	13:37	LB137426
	Potassium	24200	25000	97	90 - 110	P	10/03/2025	13:37	LB137426
	Selenium	5050	5000	101	90 - 110	P	10/03/2025	13:37	LB137426
	Silver	1230	1250	98	90 - 110	P	10/03/2025	13:37	LB137426
	Sodium	24400	25000	97	90 - 110	P	10/03/2025	13:37	LB137426
	Thallium	4650	5000	93	90 - 110	P	10/03/2025	13:37	LB137426
	Vanadium	2480	2500	99	90 - 110	P	10/03/2025	13:37	LB137426
	Zinc	2480	2500	99	90 - 110	P	10/03/2025	13:37	LB137426
CCV02	Antimony	4990	5000	100	90 - 110	P	10/03/2025	15:00	LB137426
	Arsenic	4990	5000	100	90 - 110	P	10/03/2025	15:00	LB137426
	Barium	9880	10000	99	90 - 110	P	10/03/2025	15:00	LB137426
	Beryllium	244	250	98	90 - 110	P	10/03/2025	15:00	LB137426
	Cadmium	2460	2500	98	90 - 110	P	10/03/2025	15:00	LB137426
	Chromium	984	1000	98	90 - 110	P	10/03/2025	15:00	LB137426
	Cobalt	2450	2500	98	90 - 110	P	10/03/2025	15:00	LB137426
	Copper	1240	1250	99	90 - 110	P	10/03/2025	15:00	LB137426
	Iron	4860	5000	97	90 - 110	P	10/03/2025	15:00	LB137426
	Lead	4890	5000	98	90 - 110	P	10/03/2025	15:00	LB137426
	Manganese	2440	2500	98	90 - 110	P	10/03/2025	15:00	LB137426
	Nickel	2450	2500	98	90 - 110	P	10/03/2025	15:00	LB137426
	Potassium	24400	25000	98	90 - 110	P	10/03/2025	15:00	LB137426
	Selenium	5040	5000	101	90 - 110	P	10/03/2025	15:00	LB137426
	Silver	1230	1250	98	90 - 110	P	10/03/2025	15:00	LB137426

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV02	Sodium	24300	25000	97	90 - 110	P	10/03/2025	15:00	LB137426
	Thallium	4580	5000	92	90 - 110	P	10/03/2025	15:00	LB137426
	Vanadium	2470	2500	99	90 - 110	P	10/03/2025	15:00	LB137426
	Zinc	2450	2500	98	90 - 110	P	10/03/2025	15:00	LB137426
CCV03	Antimony	5140	5000	103	90 - 110	P	10/03/2025	15:51	LB137426
	Arsenic	5080	5000	102	90 - 110	P	10/03/2025	15:51	LB137426
	Barium	10000	10000	100	90 - 110	P	10/03/2025	15:51	LB137426
	Beryllium	239	250	96	90 - 110	P	10/03/2025	15:51	LB137426
	Cadmium	2440	2500	98	90 - 110	P	10/03/2025	15:51	LB137426
	Chromium	972	1000	97	90 - 110	P	10/03/2025	15:51	LB137426
	Cobalt	2450	2500	98	90 - 110	P	10/03/2025	15:51	LB137426
	Copper	1250	1250	100	90 - 110	P	10/03/2025	15:51	LB137426
	Iron	5230	5000	105	90 - 110	P	10/03/2025	15:51	LB137426
	Lead	4860	5000	97	90 - 110	P	10/03/2025	15:51	LB137426
	Manganese	2420	2500	97	90 - 110	P	10/03/2025	15:51	LB137426
	Nickel	2450	2500	98	90 - 110	P	10/03/2025	15:51	LB137426
	Potassium	25700	25000	103	90 - 110	P	10/03/2025	15:51	LB137426
	Selenium	5170	5000	103	90 - 110	P	10/03/2025	15:51	LB137426
	Silver	1240	1250	99	90 - 110	P	10/03/2025	15:51	LB137426
	Sodium	27300	25000	109	90 - 110	P	10/03/2025	15:51	LB137426
	Thallium	5250	5000	105	90 - 110	P	10/03/2025	15:51	LB137426
	Vanadium	2450	2500	98	90 - 110	P	10/03/2025	15:51	LB137426
	Zinc	2490	2500	100	90 - 110	P	10/03/2025	15:51	LB137426
CCV04	Antimony	5020	5000	100	90 - 110	P	10/03/2025	16:45	LB137426
	Arsenic	4930	5000	99	90 - 110	P	10/03/2025	16:45	LB137426
	Barium	9780	10000	98	90 - 110	P	10/03/2025	16:45	LB137426
	Beryllium	234	250	93	90 - 110	P	10/03/2025	16:45	LB137426
	Cadmium	2360	2500	94	90 - 110	P	10/03/2025	16:45	LB137426
	Chromium	938	1000	94	90 - 110	P	10/03/2025	16:45	LB137426
	Cobalt	2370	2500	95	90 - 110	P	10/03/2025	16:45	LB137426
	Copper	1210	1250	97	90 - 110	P	10/03/2025	16:45	LB137426
	Iron	5120	5000	102	90 - 110	P	10/03/2025	16:45	LB137426
	Lead	4700	5000	94	90 - 110	P	10/03/2025	16:45	LB137426
	Manganese	2370	2500	95	90 - 110	P	10/03/2025	16:45	LB137426

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV04	Nickel	2370	2500	95	90 - 110	P	10/03/2025	16:45	LB137426
	Potassium	24100	25000	96	90 - 110	P	10/03/2025	16:45	LB137426
	Selenium	5060	5000	101	90 - 110	P	10/03/2025	16:45	LB137426
	Silver	1210	1250	97	90 - 110	P	10/03/2025	16:45	LB137426
	Sodium	25400	25000	102	90 - 110	P	10/03/2025	16:45	LB137426
	Thallium	5250	5000	105	90 - 110	P	10/03/2025	16:45	LB137426
	Vanadium	2390	2500	96	90 - 110	P	10/03/2025	16:45	LB137426
	Zinc	2420	2500	97	90 - 110	P	10/03/2025	16:45	LB137426

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Metals

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CRDL STANDARD FOR AA & ICP

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRI01	Antimony	53.4	50.0	107	65 - 135	P	10/02/2025	11:36	LB137406
	Arsenic	23.1	20.0	116	65 - 135	P	10/02/2025	11:36	LB137406
	Barium	113	100	113	65 - 135	P	10/02/2025	11:36	LB137406
	Beryllium	6.95	6.0	116	65 - 135	P	10/02/2025	11:36	LB137406
	Cadmium	6.02	6.0	100	65 - 135	P	10/02/2025	11:36	LB137406
	Chromium	10.5	10.0	105	65 - 135	P	10/02/2025	11:36	LB137406
	Cobalt	30.2	30.0	101	65 - 135	P	10/02/2025	11:36	LB137406
	Copper	22.5	20.0	112	65 - 135	P	10/02/2025	11:36	LB137406
	Iron	88.5	100	88	65 - 135	P	10/02/2025	11:36	LB137406
	Lead	13.3	12.0	111	65 - 135	P	10/02/2025	11:36	LB137406
	Manganese	21.0	20.0	105	65 - 135	P	10/02/2025	11:36	LB137406
	Nickel	40.8	40.0	102	65 - 135	P	10/02/2025	11:36	LB137406
	Potassium	1530	2000	77	65 - 135	P	10/02/2025	11:36	LB137406
	Selenium	23.8	20.0	119	65 - 135	P	10/02/2025	11:36	LB137406
	Silver	10.3	10.0	103	65 - 135	P	10/02/2025	11:36	LB137406
	Sodium	1490	2000	74	65 - 135	P	10/02/2025	11:36	LB137406
	Thallium	46.6	40.0	117	65 - 135	P	10/02/2025	11:36	LB137406
	Vanadium	37.2	40.0	93	65 - 135	P	10/02/2025	11:36	LB137406
	Zinc	41.5	40.0	104	65 - 135	P	10/02/2025	11:36	LB137406
CRI01	Antimony	50.6	50.0	101	65 - 135	P	10/03/2025	13:16	LB137426
	Arsenic	21.4	20.0	107	65 - 135	P	10/03/2025	13:16	LB137426
	Barium	100	100	100	65 - 135	P	10/03/2025	13:16	LB137426
	Beryllium	6.49	6.0	108	65 - 135	P	10/03/2025	13:16	LB137426
	Cadmium	6.04	6.0	101	65 - 135	P	10/03/2025	13:16	LB137426
	Chromium	9.90	10.0	99	65 - 135	P	10/03/2025	13:16	LB137426
	Cobalt	29.7	30.0	99	65 - 135	P	10/03/2025	13:16	LB137426
	Copper	21.2	20.0	106	65 - 135	P	10/03/2025	13:16	LB137426
	Iron	91.2	100	91	65 - 135	P	10/03/2025	13:16	LB137426
	Lead	10.2	12.0	85	65 - 135	P	10/03/2025	13:16	LB137426
	Manganese	21.0	20.0	105	65 - 135	P	10/03/2025	13:16	LB137426
	Nickel	40.9	40.0	102	65 - 135	P	10/03/2025	13:16	LB137426
	Potassium	1890	2000	94	65 - 135	P	10/03/2025	13:16	LB137426
	Selenium	21.2	20.0	106	65 - 135	P	10/03/2025	13:16	LB137426
	Silver	10.5	10.0	105	65 - 135	P	10/03/2025	13:16	LB137426
	Sodium	1910	2000	95	65 - 135	P	10/03/2025	13:16	LB137426
	Thallium	39.4	40.0	98	65 - 135	P	10/03/2025	13:16	LB137426

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Metals

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CRDL STANDARD FOR AA & ICP

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRI01	Vanadium	39.8	40.0	100	65 - 135	P	10/03/2025	13:16	LB137426
	Zinc	42.0	40.0	105	65 - 135	P	10/03/2025	13:16	LB137426

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Antimony	6.76	+/-25	U	50.0	P	10/02/2025	11:27	LB137406
	Arsenic	5.12	+/-10	U	20.0	P	10/02/2025	11:27	LB137406
	Barium	15.3	+/-50	J	100	P	10/02/2025	11:27	LB137406
	Beryllium	0.56	+/-3	U	6.00	P	10/02/2025	11:27	LB137406
	Cadmium	0.50	+/-3	U	6.00	P	10/02/2025	11:27	LB137406
	Chromium	2.12	+/-5	U	10.0	P	10/02/2025	11:27	LB137406
	Cobalt	2.26	+/-15	U	30.0	P	10/02/2025	11:27	LB137406
	Copper	4.60	+/-10	U	20.0	P	10/02/2025	11:27	LB137406
	Iron	23.4	+/-50	U	100	P	10/02/2025	11:27	LB137406
	Lead	3.04	+/-6	J	12.0	P	10/02/2025	11:27	LB137406
	Manganese	5.94	+/-10	U	20.0	P	10/02/2025	11:27	LB137406
	Nickel	3.06	+/-20	U	40.0	P	10/02/2025	11:27	LB137406
	Potassium	918	+/-1000	U	2000	P	10/02/2025	11:27	LB137406
	Selenium	9.64	+/-10	U	20.0	P	10/02/2025	11:27	LB137406
	Silver	1.62	+/-5	U	10.0	P	10/02/2025	11:27	LB137406
	Sodium	868	+/-1000	U	2000	P	10/02/2025	11:27	LB137406
	Thallium	4.38	+/-20	U	40.0	P	10/02/2025	11:27	LB137406
	Vanadium	6.26	+/-20	U	40.0	P	10/02/2025	11:27	LB137406
	Zinc	16.7	+/-20	U	40.0	P	10/02/2025	11:27	LB137406

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Antimony	6.76	+/-25	U	50.0	P	10/02/2025	12:02	LB137406
	Arsenic	5.12	+/-10	U	20.0	P	10/02/2025	12:02	LB137406
	Barium	14.6	+/-50	U	100	P	10/02/2025	12:02	LB137406
	Beryllium	0.56	+/-3	U	6.00	P	10/02/2025	12:02	LB137406
	Cadmium	0.50	+/-3	U	6.00	P	10/02/2025	12:02	LB137406
	Chromium	2.12	+/-5	U	10.0	P	10/02/2025	12:02	LB137406
	Cobalt	2.26	+/-15	U	30.0	P	10/02/2025	12:02	LB137406
	Copper	4.60	+/-10	U	20.0	P	10/02/2025	12:02	LB137406
	Iron	23.4	+/-50	U	100	P	10/02/2025	12:02	LB137406
	Lead	2.30	+/-6	U	12.0	P	10/02/2025	12:02	LB137406
	Manganese	5.94	+/-10	U	20.0	P	10/02/2025	12:02	LB137406
	Nickel	3.06	+/-20	U	40.0	P	10/02/2025	12:02	LB137406
	Potassium	918	+/-1000	U	2000	P	10/02/2025	12:02	LB137406
	Selenium	9.64	+/-10	U	20.0	P	10/02/2025	12:02	LB137406
	Silver	1.62	+/-5	U	10.0	P	10/02/2025	12:02	LB137406
	Sodium	868	+/-1000	U	2000	P	10/02/2025	12:02	LB137406
	Thallium	4.38	+/-20	U	40.0	P	10/02/2025	12:02	LB137406
	Vanadium	6.26	+/-20	U	40.0	P	10/02/2025	12:02	LB137406
	Zinc	16.7	+/-20	U	40.0	P	10/02/2025	12:02	LB137406
CCB02	Antimony	7.17	+/-25	J	50.0	P	10/02/2025	13:52	LB137406
	Arsenic	5.12	+/-10	U	20.0	P	10/02/2025	13:52	LB137406
	Barium	36.1	+/-50	J	100	P	10/02/2025	13:52	LB137406
	Beryllium	0.56	+/-3	U	6.00	P	10/02/2025	13:52	LB137406
	Cadmium	0.50	+/-3	U	6.00	P	10/02/2025	13:52	LB137406
	Chromium	2.12	+/-5	U	10.0	P	10/02/2025	13:52	LB137406
	Cobalt	2.26	+/-15	U	30.0	P	10/02/2025	13:52	LB137406
	Copper	4.60	+/-10	U	20.0	P	10/02/2025	13:52	LB137406
	Iron	23.4	+/-50	U	100	P	10/02/2025	13:52	LB137406
	Lead	2.30	+/-6	U	12.0	P	10/02/2025	13:52	LB137406
	Manganese	5.94	+/-10	U	20.0	P	10/02/2025	13:52	LB137406
	Nickel	3.06	+/-20	U	40.0	P	10/02/2025	13:52	LB137406
	Potassium	918	+/-1000	U	2000	P	10/02/2025	13:52	LB137406
	Selenium	9.64	+/-10	U	20.0	P	10/02/2025	13:52	LB137406
	Silver	1.62	+/-5	U	10.0	P	10/02/2025	13:52	LB137406
	Sodium	868	+/-1000	U	2000	P	10/02/2025	13:52	LB137406
	Thallium	9.07	+/-20	J	40.0	P	10/02/2025	13:52	LB137406
	Vanadium	6.26	+/-20	U	40.0	P	10/02/2025	13:52	LB137406
	Zinc	16.7	+/-20	U	40.0	P	10/02/2025	13:52	LB137406
CCB03	Antimony	9.80	+/-25	J	50.0	P	10/02/2025	14:53	LB137406

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB03	Arsenic	5.12	+/-10	U	20.0	P	10/02/2025	14:53	LB137406
	Barium	35.3	+/-50	J	100	P	10/02/2025	14:53	LB137406
	Beryllium	0.56	+/-3	U	6.00	P	10/02/2025	14:53	LB137406
	Cadmium	0.50	+/-3	U	6.00	P	10/02/2025	14:53	LB137406
	Chromium	2.12	+/-5	U	10.0	P	10/02/2025	14:53	LB137406
	Cobalt	2.26	+/-15	U	30.0	P	10/02/2025	14:53	LB137406
	Copper	4.60	+/-10	U	20.0	P	10/02/2025	14:53	LB137406
	Iron	23.4	+/-50	U	100	P	10/02/2025	14:53	LB137406
	Lead	4.60	+/-6	J	12.0	P	10/02/2025	14:53	LB137406
	Manganese	5.94	+/-10	U	20.0	P	10/02/2025	14:53	LB137406
	Nickel	3.06	+/-20	U	40.0	P	10/02/2025	14:53	LB137406
	Potassium	918	+/-1000	U	2000	P	10/02/2025	14:53	LB137406
	Selenium	9.64	+/-10	U	20.0	P	10/02/2025	14:53	LB137406
	Silver	1.62	+/-5	U	10.0	P	10/02/2025	14:53	LB137406
	Sodium	868	+/-1000	U	2000	P	10/02/2025	14:53	LB137406
	Thallium	8.77	+/-20	J	40.0	P	10/02/2025	14:53	LB137406
	Vanadium	6.26	+/-20	U	40.0	P	10/02/2025	14:53	LB137406
	Zinc	16.7	+/-20	U	40.0	P	10/02/2025	14:53	LB137406
CCB04	Antimony	13.8	+/-25	J	50.0	P	10/02/2025	16:05	LB137406
	Arsenic	5.72	+/-10	J	20.0	P	10/02/2025	16:05	LB137406
	Barium	44.2	+/-50	J	100	P	10/02/2025	16:05	LB137406
	Beryllium	0.56	+/-3	U	6.00	P	10/02/2025	16:05	LB137406
	Cadmium	0.50	+/-3	U	6.00	P	10/02/2025	16:05	LB137406
	Chromium	2.12	+/-5	U	10.0	P	10/02/2025	16:05	LB137406
	Cobalt	2.26	+/-15	U	30.0	P	10/02/2025	16:05	LB137406
	Copper	4.60	+/-10	U	20.0	P	10/02/2025	16:05	LB137406
	Iron	23.4	+/-50	U	100	P	10/02/2025	16:05	LB137406
	Lead	2.67	+/-6	J	12.0	P	10/02/2025	16:05	LB137406
	Manganese	5.94	+/-10	U	20.0	P	10/02/2025	16:05	LB137406
	Nickel	3.06	+/-20	U	40.0	P	10/02/2025	16:05	LB137406
	Potassium	918	+/-1000	U	2000	P	10/02/2025	16:05	LB137406
	Selenium	9.64	+/-10	U	20.0	P	10/02/2025	16:05	LB137406
	Silver	1.62	+/-5	U	10.0	P	10/02/2025	16:05	LB137406
	Sodium	868	+/-1000	U	2000	P	10/02/2025	16:05	LB137406
	Thallium	17.5	+/-20	J	40.0	P	10/02/2025	16:05	LB137406
	Vanadium	6.26	+/-20	U	40.0	P	10/02/2025	16:05	LB137406
	Zinc	16.7	+/-20	U	40.0	P	10/02/2025	16:05	LB137406
CCB05	Antimony	6.76	+/-25	U	50.0	P	10/02/2025	17:35	LB137406
	Arsenic	5.12	+/-10	U	20.0	P	10/02/2025	17:35	LB137406

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB05	Barium	32.0	+/-50	J	100	P	10/02/2025	17:35	LB137406
	Beryllium	0.56	+/-3	U	6.00	P	10/02/2025	17:35	LB137406
	Cadmium	0.50	+/-3	U	6.00	P	10/02/2025	17:35	LB137406
	Chromium	2.12	+/-5	U	10.0	P	10/02/2025	17:35	LB137406
	Cobalt	2.26	+/-15	U	30.0	P	10/02/2025	17:35	LB137406
	Copper	4.60	+/-10	U	20.0	P	10/02/2025	17:35	LB137406
	Iron	23.4	+/-50	U	100	P	10/02/2025	17:35	LB137406
	Lead	2.81	+/-6	J	12.0	P	10/02/2025	17:35	LB137406
	Manganese	5.94	+/-10	U	20.0	P	10/02/2025	17:35	LB137406
	Nickel	3.06	+/-20	U	40.0	P	10/02/2025	17:35	LB137406
	Potassium	918	+/-1000	U	2000	P	10/02/2025	17:35	LB137406
	Selenium	9.64	+/-10	U	20.0	P	10/02/2025	17:35	LB137406
	Silver	1.62	+/-5	U	10.0	P	10/02/2025	17:35	LB137406
	Sodium	868	+/-1000	U	2000	P	10/02/2025	17:35	LB137406
	Thallium	6.83	+/-20	J	40.0	P	10/02/2025	17:35	LB137406
	Vanadium	6.26	+/-20	U	40.0	P	10/02/2025	17:35	LB137406
	Zinc	16.7	+/-20	U	40.0	P	10/02/2025	17:35	LB137406
CCB06	Antimony	9.78	+/-25	J	50.0	P	10/02/2025	18:21	LB137406
	Arsenic	5.12	+/-10	U	20.0	P	10/02/2025	18:21	LB137406
	Barium	37.5	+/-50	J	100	P	10/02/2025	18:21	LB137406
	Beryllium	0.56	+/-3	U	6.00	P	10/02/2025	18:21	LB137406
	Cadmium	0.50	+/-3	U	6.00	P	10/02/2025	18:21	LB137406
	Chromium	2.12	+/-5	U	10.0	P	10/02/2025	18:21	LB137406
	Cobalt	2.26	+/-15	U	30.0	P	10/02/2025	18:21	LB137406
	Copper	4.60	+/-10	U	20.0	P	10/02/2025	18:21	LB137406
	Iron	23.4	+/-50	U	100	P	10/02/2025	18:21	LB137406
	Lead	3.53	+/-6	J	12.0	P	10/02/2025	18:21	LB137406
	Manganese	5.94	+/-10	U	20.0	P	10/02/2025	18:21	LB137406
	Nickel	3.06	+/-20	U	40.0	P	10/02/2025	18:21	LB137406
	Potassium	918	+/-1000	U	2000	P	10/02/2025	18:21	LB137406
	Selenium	9.64	+/-10	U	20.0	P	10/02/2025	18:21	LB137406
	Silver	1.62	+/-5	U	10.0	P	10/02/2025	18:21	LB137406
	Sodium	868	+/-1000	U	2000	P	10/02/2025	18:21	LB137406
	Thallium	12.0	+/-20	J	40.0	P	10/02/2025	18:21	LB137406
	Vanadium	6.26	+/-20	U	40.0	P	10/02/2025	18:21	LB137406
	Zinc	16.7	+/-20	U	40.0	P	10/02/2025	18:21	LB137406

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Antimony	6.76	+/-25	U	50.0	P	10/03/2025	13:12	LB137426
	Arsenic	5.12	+/-10	U	20.0	P	10/03/2025	13:12	LB137426
	Barium	14.6	+/-50	U	100	P	10/03/2025	13:12	LB137426
	Beryllium	0.56	+/-3	U	6.00	P	10/03/2025	13:12	LB137426
	Cadmium	0.50	+/-3	U	6.00	P	10/03/2025	13:12	LB137426
	Chromium	2.12	+/-5	U	10.0	P	10/03/2025	13:12	LB137426
	Cobalt	2.26	+/-15	U	30.0	P	10/03/2025	13:12	LB137426
	Copper	4.60	+/-10	U	20.0	P	10/03/2025	13:12	LB137426
	Iron	23.4	+/-50	U	100	P	10/03/2025	13:12	LB137426
	Lead	2.30	+/-6	U	12.0	P	10/03/2025	13:12	LB137426
	Manganese	5.94	+/-10	U	20.0	P	10/03/2025	13:12	LB137426
	Nickel	3.06	+/-20	U	40.0	P	10/03/2025	13:12	LB137426
	Potassium	918	+/-1000	U	2000	P	10/03/2025	13:12	LB137426
	Selenium	9.64	+/-10	U	20.0	P	10/03/2025	13:12	LB137426
	Silver	1.62	+/-5	U	10.0	P	10/03/2025	13:12	LB137426
	Sodium	868	+/-1000	U	2000	P	10/03/2025	13:12	LB137426
	Thallium	4.38	+/-20	U	40.0	P	10/03/2025	13:12	LB137426
	Vanadium	6.26	+/-20	U	40.0	P	10/03/2025	13:12	LB137426
	Zinc	16.7	+/-20	U	40.0	P	10/03/2025	13:12	LB137426

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Antimony	6.76	+/-25	U	50.0	P	10/03/2025	13:41	LB137426
	Arsenic	5.12	+/-10	U	20.0	P	10/03/2025	13:41	LB137426
	Barium	14.6	+/-50	U	100	P	10/03/2025	13:41	LB137426
	Beryllium	0.56	+/-3	U	6.00	P	10/03/2025	13:41	LB137426
	Cadmium	0.50	+/-3	U	6.00	P	10/03/2025	13:41	LB137426
	Chromium	2.12	+/-5	U	10.0	P	10/03/2025	13:41	LB137426
	Cobalt	2.26	+/-15	U	30.0	P	10/03/2025	13:41	LB137426
	Copper	4.60	+/-10	U	20.0	P	10/03/2025	13:41	LB137426
	Iron	23.4	+/-50	U	100	P	10/03/2025	13:41	LB137426
	Lead	2.30	+/-6	U	12.0	P	10/03/2025	13:41	LB137426
	Manganese	5.94	+/-10	U	20.0	P	10/03/2025	13:41	LB137426
	Nickel	3.06	+/-20	U	40.0	P	10/03/2025	13:41	LB137426
	Potassium	918	+/-1000	U	2000	P	10/03/2025	13:41	LB137426
	Selenium	9.64	+/-10	U	20.0	P	10/03/2025	13:41	LB137426
	Silver	1.62	+/-5	U	10.0	P	10/03/2025	13:41	LB137426
	Sodium	868	+/-1000	U	2000	P	10/03/2025	13:41	LB137426
	Thallium	4.38	+/-20	U	40.0	P	10/03/2025	13:41	LB137426
	Vanadium	6.26	+/-20	U	40.0	P	10/03/2025	13:41	LB137426
	Zinc	16.7	+/-20	U	40.0	P	10/03/2025	13:41	LB137426
CCB02	Antimony	6.76	+/-25	U	50.0	P	10/03/2025	15:04	LB137426
	Arsenic	5.12	+/-10	U	20.0	P	10/03/2025	15:04	LB137426
	Barium	14.6	+/-50	U	100	P	10/03/2025	15:04	LB137426
	Beryllium	0.56	+/-3	U	6.00	P	10/03/2025	15:04	LB137426
	Cadmium	0.50	+/-3	U	6.00	P	10/03/2025	15:04	LB137426
	Chromium	2.12	+/-5	U	10.0	P	10/03/2025	15:04	LB137426
	Cobalt	2.26	+/-15	U	30.0	P	10/03/2025	15:04	LB137426
	Copper	4.60	+/-10	U	20.0	P	10/03/2025	15:04	LB137426
	Iron	23.4	+/-50	U	100	P	10/03/2025	15:04	LB137426
	Lead	2.30	+/-6	U	12.0	P	10/03/2025	15:04	LB137426
	Manganese	5.94	+/-10	U	20.0	P	10/03/2025	15:04	LB137426
	Nickel	3.06	+/-20	U	40.0	P	10/03/2025	15:04	LB137426
	Potassium	918	+/-1000	U	2000	P	10/03/2025	15:04	LB137426
	Selenium	9.64	+/-10	U	20.0	P	10/03/2025	15:04	LB137426
	Silver	1.62	+/-5	U	10.0	P	10/03/2025	15:04	LB137426
	Sodium	868	+/-1000	U	2000	P	10/03/2025	15:04	LB137426
	Thallium	10.1	+/-20	J	40.0	P	10/03/2025	15:04	LB137426
	Vanadium	6.26	+/-20	U	40.0	P	10/03/2025	15:04	LB137426
	Zinc	16.7	+/-20	U	40.0	P	10/03/2025	15:04	LB137426
CCB03	Antimony	6.76	+/-25	U	50.0	P	10/03/2025	16:00	LB137426

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB03	Arsenic	5.12	+/-10	U	20.0	P	10/03/2025	16:00	LB137426
	Barium	14.6	+/-50	U	100	P	10/03/2025	16:00	LB137426
	Beryllium	0.56	+/-3	U	6.00	P	10/03/2025	16:00	LB137426
	Cadmium	0.50	+/-3	U	6.00	P	10/03/2025	16:00	LB137426
	Chromium	2.12	+/-5	U	10.0	P	10/03/2025	16:00	LB137426
	Cobalt	2.26	+/-15	U	30.0	P	10/03/2025	16:00	LB137426
	Copper	4.60	+/-10	U	20.0	P	10/03/2025	16:00	LB137426
	Iron	23.4	+/-50	U	100	P	10/03/2025	16:00	LB137426
	Lead	2.30	+/-6	U	12.0	P	10/03/2025	16:00	LB137426
	Manganese	5.94	+/-10	U	20.0	P	10/03/2025	16:00	LB137426
	Nickel	3.06	+/-20	U	40.0	P	10/03/2025	16:00	LB137426
	Potassium	918	+/-1000	U	2000	P	10/03/2025	16:00	LB137426
	Selenium	9.64	+/-10	U	20.0	P	10/03/2025	16:00	LB137426
	Silver	1.62	+/-5	U	10.0	P	10/03/2025	16:00	LB137426
	Sodium	868	+/-1000	U	2000	P	10/03/2025	16:00	LB137426
	Thallium	4.38	+/-20	U	40.0	P	10/03/2025	16:00	LB137426
	Vanadium	6.26	+/-20	U	40.0	P	10/03/2025	16:00	LB137426
	Zinc	16.7	+/-20	U	40.0	P	10/03/2025	16:00	LB137426
CCB04	Antimony	6.76	+/-25	U	50.0	P	10/03/2025	16:49	LB137426
	Arsenic	5.12	+/-10	U	20.0	P	10/03/2025	16:49	LB137426
	Barium	14.6	+/-50	U	100	P	10/03/2025	16:49	LB137426
	Beryllium	0.56	+/-3	U	6.00	P	10/03/2025	16:49	LB137426
	Cadmium	0.50	+/-3	U	6.00	P	10/03/2025	16:49	LB137426
	Chromium	2.12	+/-5	U	10.0	P	10/03/2025	16:49	LB137426
	Cobalt	2.26	+/-15	U	30.0	P	10/03/2025	16:49	LB137426
	Copper	4.60	+/-10	U	20.0	P	10/03/2025	16:49	LB137426
	Iron	23.4	+/-50	U	100	P	10/03/2025	16:49	LB137426
	Lead	2.30	+/-6	U	12.0	P	10/03/2025	16:49	LB137426
	Manganese	5.94	+/-10	U	20.0	P	10/03/2025	16:49	LB137426
	Nickel	3.06	+/-20	U	40.0	P	10/03/2025	16:49	LB137426
	Potassium	918	+/-1000	U	2000	P	10/03/2025	16:49	LB137426
	Selenium	9.64	+/-10	U	20.0	P	10/03/2025	16:49	LB137426
	Silver	1.62	+/-5	U	10.0	P	10/03/2025	16:49	LB137426
	Sodium	868	+/-1000	U	2000	P	10/03/2025	16:49	LB137426
	Thallium	4.38	+/-20	U	40.0	P	10/03/2025	16:49	LB137426
	Vanadium	6.26	+/-20	U	40.0	P	10/03/2025	16:49	LB137426
	Zinc	16.7	+/-20	U	40.0	P	10/03/2025	16:49	LB137426

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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB169937BL		**WATER**		**Batch Number:**	**PB169937**		**Prep Date:**	**10/01/2025**	
	Antimony	3.38	<12.5	U	25.0	P	10/03/2025	14:07	LB137426
	Arsenic	2.56	<5	U	10.0	P	10/03/2025	14:07	LB137426
	Barium	7.28	<25	U	50.0	P	10/03/2025	14:07	LB137426
	Beryllium	0.28	<1.5	U	3.00	P	10/03/2025	14:07	LB137426
	Cadmium	0.25	<1.5	U	3.00	P	10/03/2025	14:07	LB137426
	Chromium	1.06	<2.5	U	5.00	P	10/03/2025	14:07	LB137426
	Cobalt	1.13	<7.5	U	15.0	P	10/03/2025	14:07	LB137426
	Copper	2.30	<5	U	10.0	P	10/03/2025	14:07	LB137426
	Iron	11.7	<25	U	50.0	P	10/03/2025	14:07	LB137426
	Lead	1.15	<3	U	6.00	P	10/03/2025	14:07	LB137426
	Manganese	2.97	<5	U	10.0	P	10/03/2025	14:07	LB137426
	Nickel	1.53	<10	U	20.0	P	10/03/2025	14:07	LB137426
	Potassium	459	<500	U	1000	P	10/03/2025	14:07	LB137426
	Selenium	4.82	<5	U	10.0	P	10/03/2025	14:07	LB137426
	Silver	0.81	<2.5	U	5.00	P	10/03/2025	14:07	LB137426
	Sodium	434	<500	U	1000	P	10/03/2025	14:07	LB137426
	Thallium	2.19	<10	U	20.0	P	10/03/2025	14:07	LB137426
	Vanadium	3.13	<10	U	20.0	P	10/03/2025	14:07	LB137426
	Zinc	8.33	<10	U	20.0	P	10/03/2025	14:07	LB137426

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

ICS Source: EPA **Instrument ID:** P4

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Antimony	1.99			-50	50	10/02/2025	11:42	LB137406
	Arsenic	5.85			-20	20	10/02/2025	11:42	LB137406
	Barium	18.7	6.0	312	-94	106	10/02/2025	11:42	LB137406
	Beryllium	1.98			-6	6	10/02/2025	11:42	LB137406
	Cadmium	-1.23	1.0	123	-5	7	10/02/2025	11:42	LB137406
	Chromium	50.8	52.0	98	42	62	10/02/2025	11:42	LB137406
	Cobalt	0.27			-30	30	10/02/2025	11:42	LB137406
	Copper	3.53	2.0	176	-18	22	10/02/2025	11:42	LB137406
	Iron	96000	101000	95	85600	116500	10/02/2025	11:42	LB137406
	Lead	-7.87			-12	12	10/02/2025	11:42	LB137406
	Manganese	0.23	7.0	3	-13	27	10/02/2025	11:42	LB137406
	Nickel	3.41	2.0	170	-38	42	10/02/2025	11:42	LB137406
	Potassium	-102			0	0	10/02/2025	11:42	LB137406
	Selenium	-8.13			-20	20	10/02/2025	11:42	LB137406
	Silver	-3.77			-10	10	10/02/2025	11:42	LB137406
	Sodium	-181			0	0	10/02/2025	11:42	LB137406
	Thallium	14.0			-40	40	10/02/2025	11:42	LB137406
	Vanadium	2.54			-40	40	10/02/2025	11:42	LB137406
	Zinc	-0.077			-40	40	10/02/2025	11:42	LB137406
ICSAB01	Antimony	622	618	101	525	711	10/02/2025	11:46	LB137406
	Arsenic	110	104	106	88.4	120	10/02/2025	11:46	LB137406
	Barium	515	537	96	437	637	10/02/2025	11:46	LB137406
	Beryllium	548	495	111	420	570	10/02/2025	11:46	LB137406
	Cadmium	1040	972	107	826	1120	10/02/2025	11:46	LB137406
	Chromium	594	542	110	460	624	10/02/2025	11:46	LB137406
	Cobalt	515	476	108	404	548	10/02/2025	11:46	LB137406
	Copper	510	511	100	434	588	10/02/2025	11:46	LB137406
	Iron	98300	99300	99	84400	114500	10/02/2025	11:46	LB137406
	Lead	42.6	49.0	87	37	61	10/02/2025	11:46	LB137406
	Manganese	497	507	98	430	584	10/02/2025	11:46	LB137406
	Nickel	1030	954	108	810	1100	10/02/2025	11:46	LB137406
	Potassium	-265			0	0	10/02/2025	11:46	LB137406
	Selenium	46.7	46.0	102	26	66	10/02/2025	11:46	LB137406
	Silver	212	201	106	170	232	10/02/2025	11:46	LB137406
	Sodium	-229			0	0	10/02/2025	11:46	LB137406
	Thallium	115	108	106	68	148	10/02/2025	11:46	LB137406
	Vanadium	499	491	102	417	565	10/02/2025	11:46	LB137406
	Zinc	1060	952	111	809	1095	10/02/2025	11:46	LB137406
ICSA01	Antimony	3.52			-50	50	10/03/2025	13:20	LB137426
	Arsenic	8.41			-20	20	10/03/2025	13:20	LB137426
	Barium	1.66	6.0	28	-94	106	10/03/2025	13:20	LB137426
	Beryllium	1.42			-6	6	10/03/2025	13:20	LB137426

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

ICS Source: EPA **Instrument ID:** P4

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	Cadmium	0.91	1.0	91	-5	7	10/03/2025	13:20	LB137426
	Chromium	46.6	52.0	90	42	62	10/03/2025	13:20	LB137426
	Cobalt	0.68			-30	30	10/03/2025	13:20	LB137426
	Copper	3.06	2.0	153	-18	22	10/03/2025	13:20	LB137426
	Iron	99600	101000	99	85600	116500	10/03/2025	13:20	LB137426
	Lead	0.97			-12	12	10/03/2025	13:20	LB137426
	Manganese	-1.76	7.0	25	-13	27	10/03/2025	13:20	LB137426
	Nickel	3.93	2.0	196	-38	42	10/03/2025	13:20	LB137426
	Potassium	187			0	0	10/03/2025	13:20	LB137426
	Selenium	9.27			-20	20	10/03/2025	13:20	LB137426
	Silver	1.41			-10	10	10/03/2025	13:20	LB137426
	Sodium	127			0	0	10/03/2025	13:20	LB137426
	Thallium	11.3			-40	40	10/03/2025	13:20	LB137426
	Vanadium	4.84			-40	40	10/03/2025	13:20	LB137426
	Zinc	1.66			-40	40	10/03/2025	13:20	LB137426
ICSAB01	Antimony	609	618	98	525	711	10/03/2025	13:25	LB137426
	Arsenic	110	104	106	88.4	120	10/03/2025	13:25	LB137426
	Barium	496	537	92	437	637	10/03/2025	13:25	LB137426
	Beryllium	516	495	104	420	570	10/03/2025	13:25	LB137426
	Cadmium	980	972	101	826	1120	10/03/2025	13:25	LB137426
	Chromium	553	542	102	460	624	10/03/2025	13:25	LB137426
	Cobalt	491	476	103	404	548	10/03/2025	13:25	LB137426
	Copper	484	511	95	434	588	10/03/2025	13:25	LB137426
	Iron	97500	99300	98	84400	114500	10/03/2025	13:25	LB137426
	Lead	49.1	49.0	100	37	61	10/03/2025	13:25	LB137426
	Manganese	492	507	97	430	584	10/03/2025	13:25	LB137426
	Nickel	981	954	103	810	1100	10/03/2025	13:25	LB137426
	Potassium	15.2			0	0	10/03/2025	13:25	LB137426
	Selenium	56.4	46.0	123	26	66	10/03/2025	13:25	LB137426
	Silver	208	201	104	170	232	10/03/2025	13:25	LB137426
	Sodium	92.2			0	0	10/03/2025	13:25	LB137426
	Thallium	105	108	97	68	148	10/03/2025	13:25	LB137426
	Vanadium	485	491	99	417	565	10/03/2025	13:25	LB137426
	Zinc	1030	952	108	809	1095	10/03/2025	13:25	LB137426

METAL QC DATA

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metals
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MATRIX SPIKE SUMMARY

client: Lockwood, Kessler & Bartlett, Inc. **level:** low **sdg no.:** Q3254

contract: LOCK01 **lab code:** ACE

matrix: Water **sample id:** Q3254-07 **client id:** MW-4MS

Percent Solids for Sample: NA **Spiked ID:** Q3254-07MS **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75 - 125	400		25.0	U	400	100		P
Arsenic	ug/L	75 - 125	448		10.0	U	400	112		P
Barium	ug/L	75 - 125	260		165		100	96		P
Beryllium	ug/L	75 - 125	104		0.44	J	100	104		P
Cadmium	ug/L	75 - 125	111		3.00	U	100	111		P
Chromium	ug/L	75 - 125	221		1.87	J	200	109		P
Cobalt	ug/L	75 - 125	106		1.37	J	100	105		P
Copper	ug/L	75 - 125	164		10.5		150	102		P
Iron	ug/L	75 - 125	11200		10800		1500	23		P
Lead	ug/L	75 - 125	545		3.57	J	500	108		P
Manganese	ug/L	75 - 125	1290		1180		100	117		P
Nickel	ug/L	75 - 125	285		20.0		250	106		P
Potassium	ug/L	75 - 125	25000		22200		5000	55		P
Selenium	ug/L	75 - 125	1160		10.0	U	1000	116		P
Silver	ug/L	75 - 125	36.4		5.00	U	37.5	97		P
Sodium	ug/L	75 - 125	211000		230000		1500	-1265		P
Thallium	ug/L	75 - 125	1110		8.73	J	1000	110		P
Vanadium	ug/L	75 - 125	149		4.16	J	150	97		P
Zinc	ug/L	75 - 125	172		67.6		100	104		P

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metals
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MATRIX SPIKE DUPLICATE SUMMARY

client: Lockwood, Kessler & Bartlett, Inc. **level:** low **sdg no.:** Q3254

contract: LOCK01 **lab code:** ACE

matrix: Water **sample id:** Q3254-07 **client id:** MW-4MSD

Percent Solids for Sample: NA **Spiked ID:** Q3254-07MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75 - 125	435		25.0	U	400	109		P
Arsenic	ug/L	75 - 125	480		10.0	U	400	120		P
Barium	ug/L	75 - 125	280		165		100	115		P
Beryllium	ug/L	75 - 125	112		0.44	J	100	112		P
Cadmium	ug/L	75 - 125	118		3.00	U	100	118		P
Chromium	ug/L	75 - 125	234		1.87	J	200	116		P
Cobalt	ug/L	75 - 125	113		1.37	J	100	111		P
Copper	ug/L	75 - 125	175		10.5		150	110		P
Iron	ug/L	75 - 125	11900		10800		1500	76		P
Lead	ug/L	75 - 125	585		3.57	J	500	116		P
Manganese	ug/L	75 - 125	1410		1180		100	231		P
Nickel	ug/L	75 - 125	304		20.0		250	113		P
Potassium	ug/L	75 - 125	27100		22200		5000	98		P
Selenium	ug/L	75 - 125	1240		10.0	U	1000	124		P
Silver	ug/L	75 - 125	39.8		5.00	U	37.5	106		P
Sodium	ug/L	75 - 125	224000		230000		1500	-401		P
Thallium	ug/L	75 - 125	1060		8.73	J	1000	105		P
Vanadium	ug/L	75 - 125	155		4.16	J	150	101		P
Zinc	ug/L	75 - 125	183		67.6		100	115		P

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Metals
- 5b -

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

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

Sample ID: **Spiked ID:**

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

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: Lockwood, Kessler & Bartlett, Inc. **Level:** LOW **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Matrix: Water **Sample ID:** Q3254-07 **Client ID:** MW-4DUP

Percent Solids for Sample: NA **Duplicate ID** Q3254-07DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L	20	25.0	U	25.0	U			P
Arsenic	ug/L	20	10.0	U	10.0	U			P
Barium	ug/L	20	165		168		2		P
Beryllium	ug/L	20	0.44	J	0.51	J	14		P
Cadmium	ug/L	20	3.00	U	3.00	U			P
Chromium	ug/L	20	1.87	J	1.85	J	1		P
Cobalt	ug/L	20	1.37	J	1.33	J	3		P
Copper	ug/L	20	10.5		11.1		5		P
Iron	ug/L	20	10800		9990		8		P
Lead	ug/L	20	3.57	J	4.48	J	23		P
Manganese	ug/L	20	1180		1190		1		P
Nickel	ug/L	20	20.0		19.8	J	1		P
Potassium	ug/L	20	22200		20700		7		P
Selenium	ug/L	20	10.0	U	10.0	U			P
Silver	ug/L	20	5.00	U	5.00	U			P
Sodium	ug/L	20	230000		213000		8		P
Thallium	ug/L	20	8.73	J	8.97	J	3		P
Vanadium	ug/L	20	4.16	J	20.0	U	200.0		P
Zinc	ug/L	20	67.6		66.7		1		P

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

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: Lockwood, Kessler & Bartlett, Inc. **Level:** LOW **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Matrix: Water **Sample ID:** Q3254-07MS **Client ID:** MW-4MSD

Percent Solids for Sample: NA **Duplicate ID** Q3254-07MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L	20	400		435		8		P
Arsenic	ug/L	20	448		480		7		P
Barium	ug/L	20	260		280		7		P
Beryllium	ug/L	20	104		112		7		P
Cadmium	ug/L	20	111		118		6		P
Chromium	ug/L	20	221		234		6		P
Cobalt	ug/L	20	106		113		6		P
Copper	ug/L	20	164		175		6		P
Iron	ug/L	20	11200		11900		6		P
Lead	ug/L	20	545		585		7		P
Manganese	ug/L	20	1290		1410		9		P
Nickel	ug/L	20	285		304		6		P
Potassium	ug/L	20	25000		27100		8		P
Selenium	ug/L	20	1160		1240		7		P
Silver	ug/L	20	36.4		39.8		9		P
Sodium	ug/L	20	211000		224000		6		P
Thallium	ug/L	20	1110		1060		5		P
Vanadium	ug/L	20	149		155		4		P
Zinc	ug/L	20	172		183		6		P

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

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB169937BS							
Antimony	ug/L	400	393		98	80 - 120	P
Arsenic	ug/L	400	379		95	80 - 120	P
Barium	ug/L	100	93.3		93	80 - 120	P
Beryllium	ug/L	100	96.4		96	80 - 120	P
Cadmium	ug/L	100	93.5		94	80 - 120	P
Chromium	ug/L	200	207		104	80 - 120	P
Cobalt	ug/L	100	94.5		94	80 - 120	P
Copper	ug/L	150	148		99	80 - 120	P
Iron	ug/L	1500	1490		99	80 - 120	P
Lead	ug/L	500	461		92	80 - 120	P
Manganese	ug/L	100	98.0		98	80 - 120	P
Nickel	ug/L	250	247		99	80 - 120	P
Potassium	ug/L	5000	4670		93	80 - 120	P
Selenium	ug/L	1000	961		96	80 - 120	P
Silver	ug/L	37.5	35.5		95	80 - 120	P
Sodium	ug/L	1500	1430		95	80 - 120	P
Thallium	ug/L	1000	926		93	80 - 120	P
Vanadium	ug/L	150	144		96	80 - 120	P
Zinc	ug/L	100	97.7		98	80 - 120	P

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Metals

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ICP SERIAL DILUTIONS

SAMPLE NO.

MW-4L

Lab Name: Alliance **Contract:** LOCK01

Lab Code: ACE **Lb No.:** lb137406 **Lab Sample ID :** Q3254-07L **SDG No.:** Q3254

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

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Antimony	25.0	U	21.8	J	100.0		P
Arsenic	10.0	U	16.5	J	100.0		P
Barium	165		251		52		P
Beryllium	0.44	J	15.0	U	100.0		P
Cadmium	3.00	U	15.0	U			P
Chromium	1.87	J	5.76	J	208		P
Cobalt	1.37	J	75.0	U	100.0		P
Copper	10.5		14.4	J	37		P
Iron	10800		10300		5		P
Lead	3.57	J	11.4	J	219		P
Manganese	1180		1290		10		P
Nickel	20.0		18.9	J	6		P
Potassium	22200		31400		41		P
Selenium	10.0	U	44.7	J	100.0		P
Silver	5.00	U	25.0	U			P
Sodium	230000		212000		8		P
Thallium	8.73	J	47.9	J	449		P
Vanadium	4.16	J	16.4	J	294		P
Zinc	67.6		68.0	J	1		P

METAL PREPARATION & INSTRUMENT DATA

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Al	Ca	Fe	Mg	Ag
Antimony	206.833	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	0.0000000	0.0000000	-0.0000440	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000930	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0007850	0.0000000	0.0000000
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	-0.0000920	0.0000000	0.0000380	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	-0.0001440	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	-0.0001490	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0001050	0.0000000	0.0000000

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ICP INTERELEMENT CORRECTION FACTORS

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: As	Ba	Be	Cd	Co
Antimony	206.833	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0002870
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0000000	0.0009530
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	-0.0039600
Lead	220.353	0.0000000	0.0003170	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	-0.0003570
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0000000	0.0054900
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Cr	Cu	K	Mn	Mo
Antimony	206.833	0.0122000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	-0.0029000	0.0000000	0.0000000	0.0000000	0.0004900
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	-0.0000710	-0.0003400
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000070	0.0002200	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	-0.0007860
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0006510	0.0020500
Iron	240.488	0.0000000	0.0000000	0.0000730	0.0000000	-0.0015250
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0001400	-0.0008600
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0007460	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000120
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0017400	-0.0100400
Vanadium	292.402	-0.0025100	0.0000000	0.0000000	0.0000000	-0.0072000
Zinc	213.800	0.0000000	0.0009010	0.0000000	0.0000000	0.0000000

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ICP INTERELEMENT CORRECTION FACTORS

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Na	Ni	Pb	Sb	Se
Antimony	206.833	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	-0.0047000	0.0036100	0.0000000	0.0000000
Iron	240.488	0.0000000	-0.0017000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0006580	0.0000000	0.0000000	0.0001290
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0003330	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0067600	0.0000000	0.0000000	0.0000000

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ICP INTERELEMENT CORRECTION FACTORS

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Sn	Ti	Tl	V	Zn
Antimony	206.833	-0.0035600	-0.0007970	0.0000000	-0.0018900	0.0000000
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000630	0.0001280	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0001110	0.0000000
Cobalt	228.616	0.0000000	0.0018800	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0003840	0.0000000	0.0000000	0.0000000
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	-0.0003610	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	-0.0007420	0.0000000	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	-0.0039700	0.0000000	-0.0115600	0.0000000
Vanadium	292.402	0.0000000	0.0005320	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

METAL PREPARATION & ANALYICAL SUMMARY

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SAMPLE PREPARATION SUMMARY

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q3254

Contract: LOCK01 **Lab Code:** ACE **Method:**

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB169937**						
PB169937BL	PB169937BL	MB	WATER	10/01/2025	50.0	25.0	
PB169937BS	PB169937BS	LCS	WATER	10/01/2025	50.0	25.0	
Q3254-01	MW-1	SAM	WATER	10/01/2025	50.0	25.0	
Q3254-02	MW-1	SAM	WATER	10/01/2025	50.0	25.0	
Q3254-03	MW-2	SAM	WATER	10/01/2025	50.0	25.0	
Q3254-04	MW-2	SAM	WATER	10/01/2025	50.0	25.0	
Q3254-05	MW-3	SAM	WATER	10/01/2025	50.0	25.0	
Q3254-06	MW-3	SAM	WATER	10/01/2025	50.0	25.0	
Q3254-07	MW-4	SAM	WATER	10/01/2025	50.0	25.0	
Q3254-07DUP	MW-4DUP	DUP	WATER	10/01/2025	50.0	25.0	
Q3254-07MS	MW-4MS	MS	WATER	10/01/2025	50.0	25.0	
Q3254-07MSD	MW-4MSD	MSD	WATER	10/01/2025	50.0	25.0	
Q3254-08	MW-4	SAM	WATER	10/01/2025	50.0	25.0	

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ANALYSIS RUN LOG

Client: Lockwood, Kessler & Bartlett, Inc. **Contract:** LOCK01

Lab code: ACE **Sdg no.:** Q3254

Instrument id number: **Method:** **Run number:** LB137406

Start date: 10/02/2025 **End date:** 10/02/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1037	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S1	S1	1	1042	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S2	S2	1	1046	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S3	S3	1	1050	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S4	S4	1	1054	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S5	S5	1	1058	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICV01	ICV01	1	1107	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
LLICV01	LLICV01	1	1111	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICB01	ICB01	1	1127	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CRI01	CRI01	1	1136	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA01	ICSA01	1	1142	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB01	ICSAB01	1	1146	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV01	CCV01	1	1158	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB01	CCB01	1	1202	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV02	CCV02	1	1348	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB02	CCB02	1	1352	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q3254-01	MW-1	1	1434	Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q3254-02	MW-1	1	1438	Fe,Mn
Q3254-03	MW-2	1	1443	Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV03	CCV03	1	1447	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB03	CCB03	1	1453	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q3254-04	MW-2	1	1457	Fe,Mn
Q3254-05	MW-3	1	1501	Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q3254-06	MW-3	1	1505	Fe,Mn
Q3254-07	MW-4	1	1509	Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q3254-07DUP	MW-4DUP	1	1513	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Fe,K,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q3254-07L	MW-4L	5	1518	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Fe,K,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q3254-07MS	MW-4MS	1	1522	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Fe,K,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q3254-07MSD	MW-4MSD	1	1526	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Fe,K,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q3254-08	MW-4	1	1534	Fe,Mn
CCV04	CCV04	1	1554	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB04	CCB04	1	1605	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV05	CCV05	1	1731	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB05	CCB05	1	1735	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV06	CCV06	1	1817	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB06	CCB06	1	1821	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn

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ANALYSIS RUN LOG

Client: Lockwood, Kessler & Bartlett, Inc. **Contract:** LOCK01

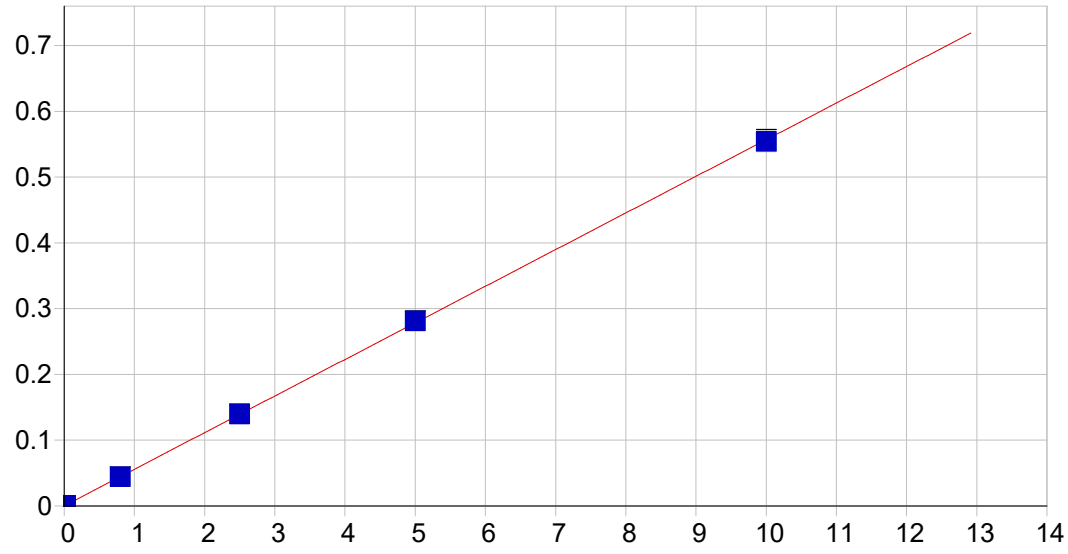
Lab code: ACE **Sdg no.:** Q3254

Instrument id number: **Method:** **Run number:** LB137426

Start date: 10/03/2025 **End date:** 10/03/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1153	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S1	S1	1	1158	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S2	S2	1	1202	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S3	S3	1	1206	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S4	S4	1	1210	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S5	S5	1	1214	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICV01	ICV01	1	1218	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
LLICV01	LLICV01	1	1305	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICB01	ICB01	1	1312	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CRI01	CRI01	1	1316	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA01	ICSA01	1	1320	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB01	ICSAB01	1	1325	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV01	CCV01	1	1337	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB01	CCB01	1	1341	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB169937BL	PB169937BL	1	1407	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Fe,K,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB169937BS	PB169937BS	1	1412	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Fe,K,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV02	CCV02	1	1500	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB02	CCB02	1	1504	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV03	CCV03	1	1551	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB03	CCB03	1	1600	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV04	CCV04	1	1645	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB04	CCB04	1	1649	Fe,Mn,Ag,As,Ba,Be,Cd,Co,Cr,Cu,K,Na,Ni,Pb,Sb,Se,Tl,V,Zn

METAL
RAW DATA

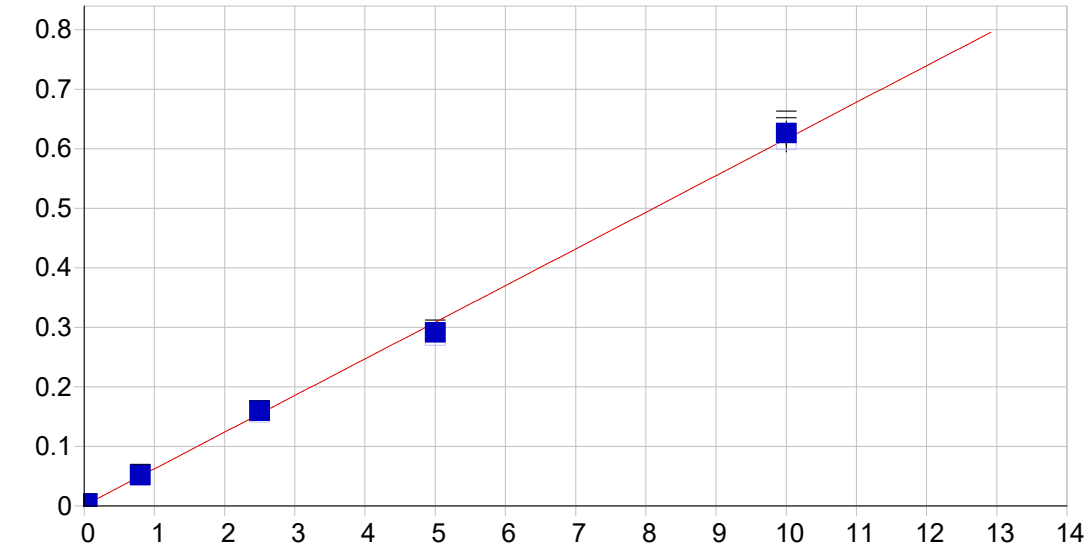


As 189.042 {479}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000158	Re-Slope:	1.000000
A1 (Gain):	0.055672	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999974	Status:	OK.
Std Error of Est:	0.000009		
Predicted MDL:	0.002121		
Predicted MQL:	0.007070		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00016	.000	1
S1	.02000	.02049	.000	2.44	.00129	.000	1
S3	2.5000	2.5067	.007	.266	.13956	.000	1
S4	5.0000	5.0528	.053	1.06	.28117	.001	1
S5	10.000	9.9484	-.052	-.516	.55343	.004	1
S2	.80000	.79164	-.008	-1.04	.04418	.000	1

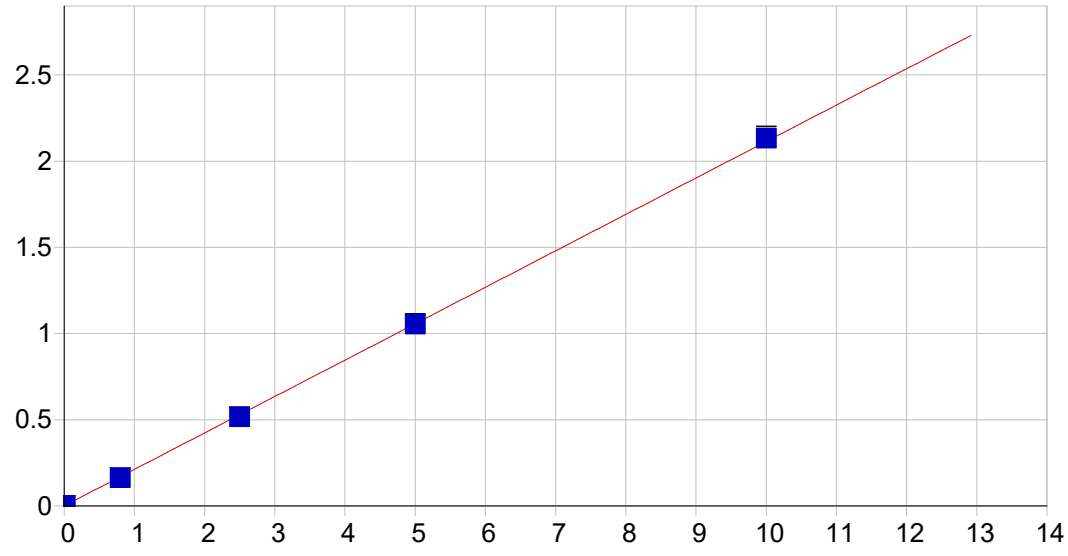


Tl 190.856 {477}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000739	Re-Slope:	1.000000
A1 (Gain):	0.061580	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999364	Status:	OK.
Std Error of Est:	0.000071		
Predicted MDL:	0.002804		
Predicted MQL:	0.009346		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00074	.000	1
S1	.04000	.04484	.005	12.1	.00334	.000	1
S3	2.5000	2.5813	.081	3.25	.15689	.001	1
S4	5.0000	4.7214	-.279	-5.57	.28587	.004	1
S5	10.000	10.164	.164	1.64	.61538	.020	1
S2	.80000	.82907	.029	3.63	.05089	.001	1

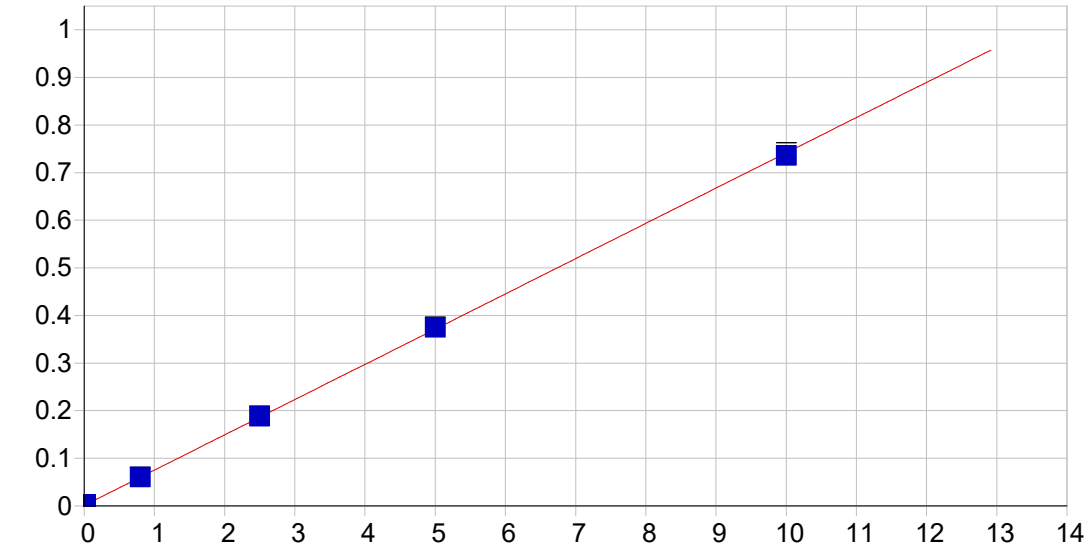


Pb 220.353 {453}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000490	Re-Slope:	1.000000
A1 (Gain):	0.211340	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999917	Status:	OK.
Std Error of Est:	0.000049		
Predicted MDL:	0.001418		
Predicted MQL:	0.004728		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00049	.000	1
S1	.01200	.01189	-.000	-.917	.00295	.000	1
S3	2.5000	2.4442	-.056	-2.23	.51646	.000	1
S4	5.0000	4.9883	-.012	-.234	1.0535	.003	1
S5	10.000	10.094	.094	.942	2.1315	.012	1
S2	.80000	.77341	-.027	-3.32	.16376	.000	1

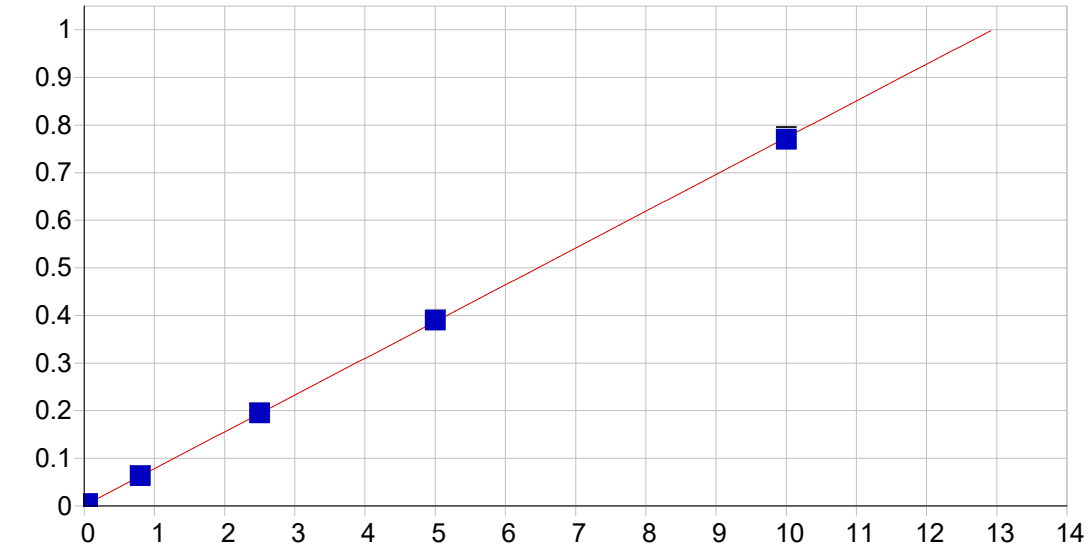


Se 196.090 {472}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001086	Re-Slope:	1.000000
A1 (Gain):	0.074054	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999964	Status:	OK.
Std Error of Est:	0.000015		
Predicted MDL:	0.002145		
Predicted MQL:	0.007149		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00109	.000	1
S1	.02000	.02099	.001	4.95	.00264	.000	1
S3	2.5000	2.5255	.026	1.02	.18806	.001	1
S4	5.0000	5.0469	.047	.939	.37473	.001	1
S5	10.000	9.9249	-.075	-.751	.73586	.006	1
S2	.80000	.80161	.002	.201	.06043	.000	1

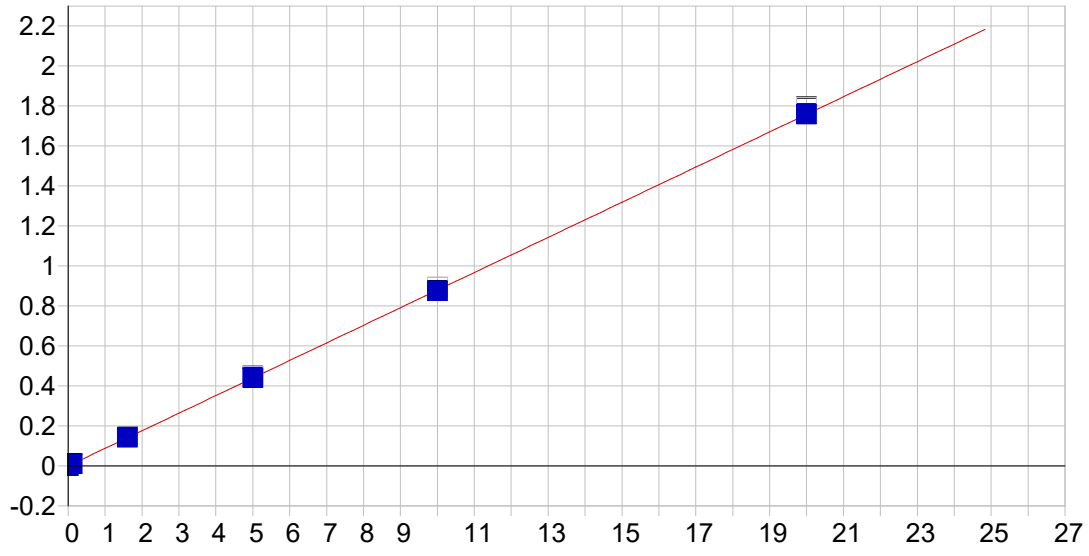


Sb 206.833 {463}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000960	Re-Slope:	1.000000
A1 (Gain):	0.077243	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999983	Status:	OK.
Std Error of Est:	0.000017		
Predicted MDL:	0.002525		
Predicted MQL:	0.008416		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00096	.000	1
S1	.05000	.04913	-.001	-1.74	.00476	.000	1
S3	2.5000	2.5119	.012	.474	.19551	.000	1
S4	5.0000	5.0360	.036	.721	.39101	.001	1
S5	10.000	9.9488	-.051	-.512	.77153	.004	1
S2	.80000	.80423	.004	.528	.06325	.000	1

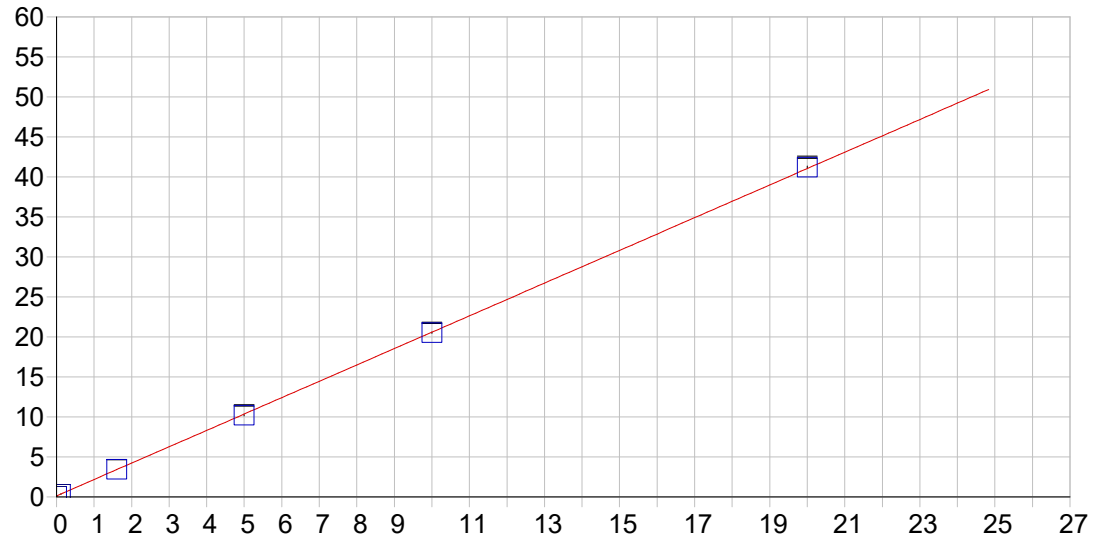


Al 396.152 { 85}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000023	Re-Slope:	1.000000
A1 (Gain):	0.087917	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999991	Status:	OK.
Std Error of Est:	0.000029		
Predicted MDL:	0.016336		
Predicted MQL:	0.054453		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00002	.001	1
S1	.10000	.10637	.006	6.37	.01006	.001	1
S3	5.0000	4.9999	-.000	-.002	.44813	.002	1
S4	10.000	9.9666	-.033	-.334	.89332	.001	1
S5	20.000	20.009	.009	.047	1.7933	.003	1
S2	1.6000	1.6173	.017	1.08	.14494	.001	1

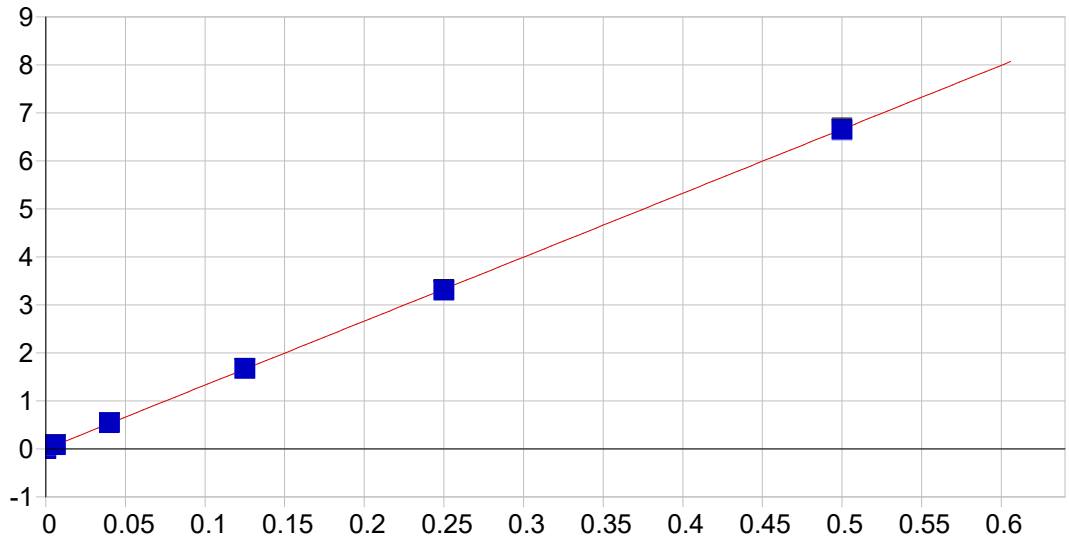


Ba 493.409 { 68}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.133960	Re-Slope:	1.000000
A1 (Gain):	2.045370	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999964	Status:	OK.
Std Error of Est:	0.001286		
Predicted MDL:	0.001713		
Predicted MQL:	0.005708		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.13394	.002	1
S1	.10000	.11048	.010	10.5	.35994	.002	1
S3	5.0000	4.9269	-.073	-1.46	10.211	.081	1
S4	10.000	9.9712	-.029	-.288	20.529	.081	1
S5	20.000	20.085	.085	.423	41.214	.129	1
S2	1.6000	1.6067	.007	.421	3.4203	.020	1

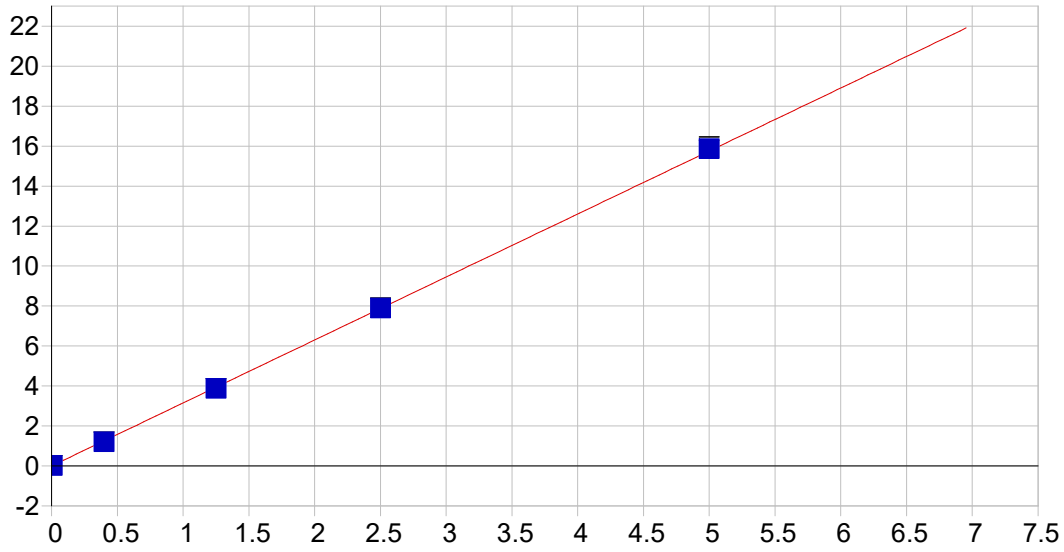


Be 234.861 {144}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.002079	Re-Slope:	1.000000
A1 (Gain):	13.322018	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999961	Status:	OK.
Std Error of Est:	0.000335		
Predicted MDL:	0.000085		
Predicted MQL:	0.000282		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00209	.001	1
S1	.00600	.00643	.000	7.15	.08297	.001	1
S3	.12500	.12558	.001	.463	1.6634	.009	1
S4	.25000	.24824	-.002	-.703	3.2901	.016	1
S5	.50000	.49976	-.000	-.048	6.6259	.031	1
S2	.04000	.04099	.001	2.48	.54163	.003	1

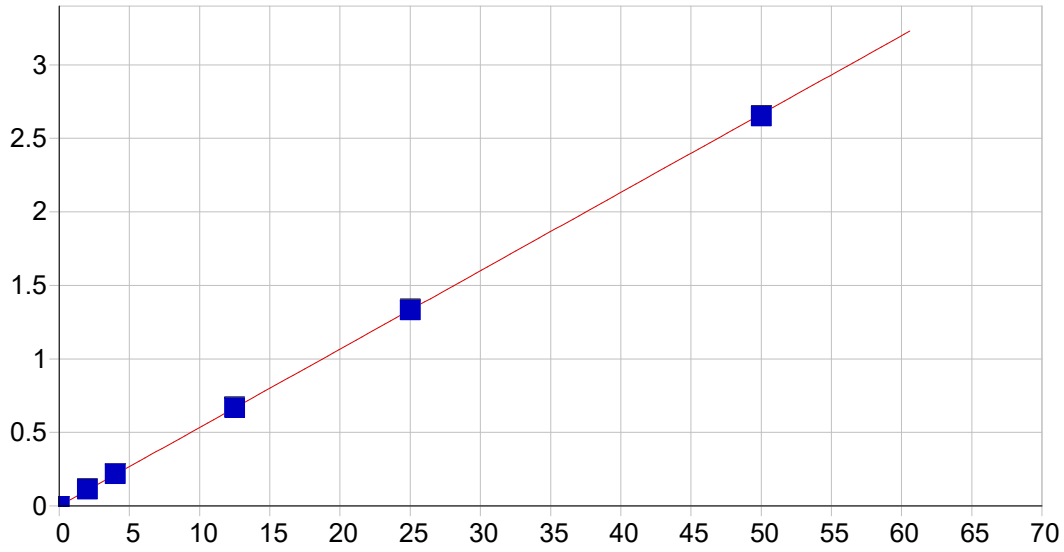


Cd 226.502 {449}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000813	Re-Slope:	1.000000
A1 (Gain):	3.151473	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999915	Status:	OK.
Std Error of Est:	0.000373		
Predicted MDL:	0.000081		
Predicted MQL:	0.000270		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00081	.000	1
S1	.00600	.00586	-.000	-2.28	.01773	.000	1
S3	1.2500	1.2278	-.022	-1.78	3.8711	.007	1
S4	2.5000	2.5042	.004	.169	7.8964	.019	1
S5	5.0000	5.0369	.037	.738	15.883	.088	1
S2	.40000	.38124	-.019	-4.69	1.2015	.003	1

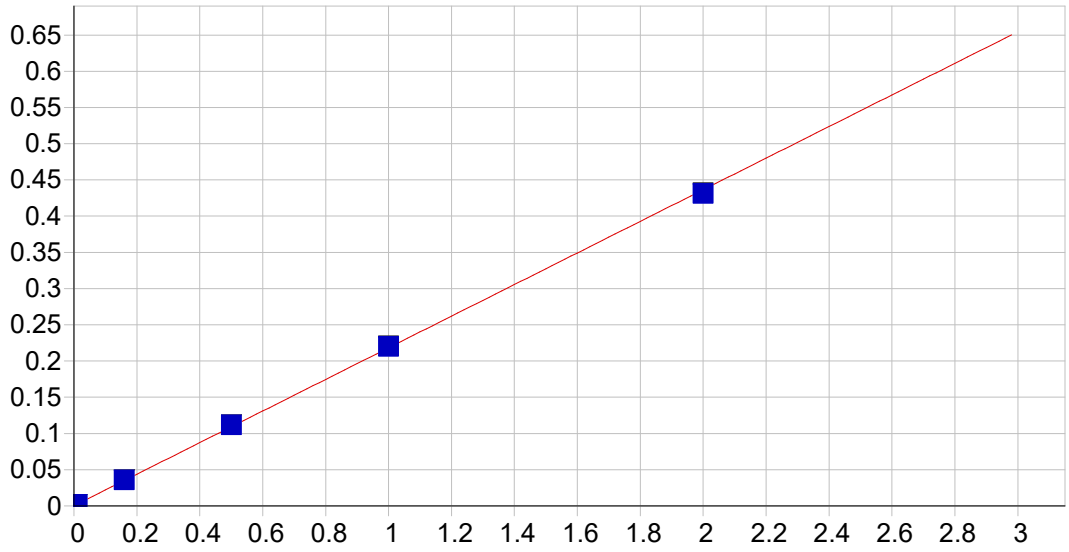


Ca 373.690 { 90}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000523	Re-Slope:	1.000000
A1 (Gain):	0.053296	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999943	Status:	OK.
Std Error of Est:	0.000301		
Predicted MDL:	0.021753		
Predicted MQL:	0.072510		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00016	-.000	.000	.00051	.001	1
S2	4.0000	4.0886	.089	2.22	.21843	.001	1
S3	12.500	12.534	.034	.269	.66852	.004	1
S4	25.000	25.004	.004	.014	1.3331	.006	1
S5	50.000	49.753	-.247	-.494	2.6522	.003	1
S1	2.0000	2.1212	.121	6.06	.11358	.001	1

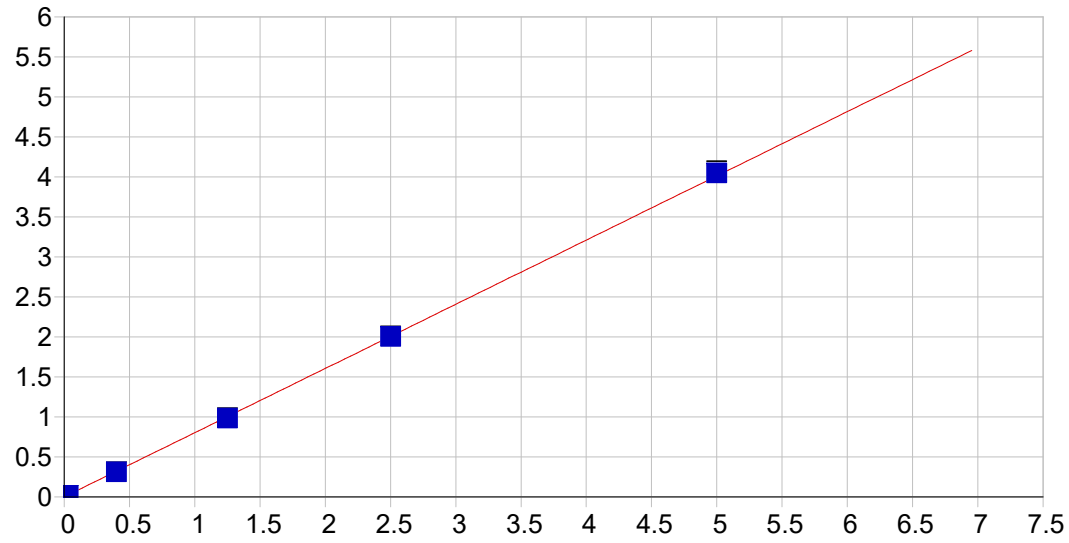


Cr 267.716 {126}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000118	Re-Slope:	1.000000
A1 (Gain):	0.218160	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999899	Status:	OK.
Std Error of Est:	0.000023		
Predicted MDL:	0.000441		
Predicted MQL:	0.001469		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00012	.000	1
S1	.01000	.01016	.000	1.61	.00234	.000	1
S3	.50000	.51140	.011	2.28	.11177	.001	1
S4	1.0000	1.0084	.008	.835	.22027	.000	1
S5	2.0000	1.9757	-.024	-1.21	.43149	.001	1
S2	.16000	.16435	.004	2.72	.03600	.000	1

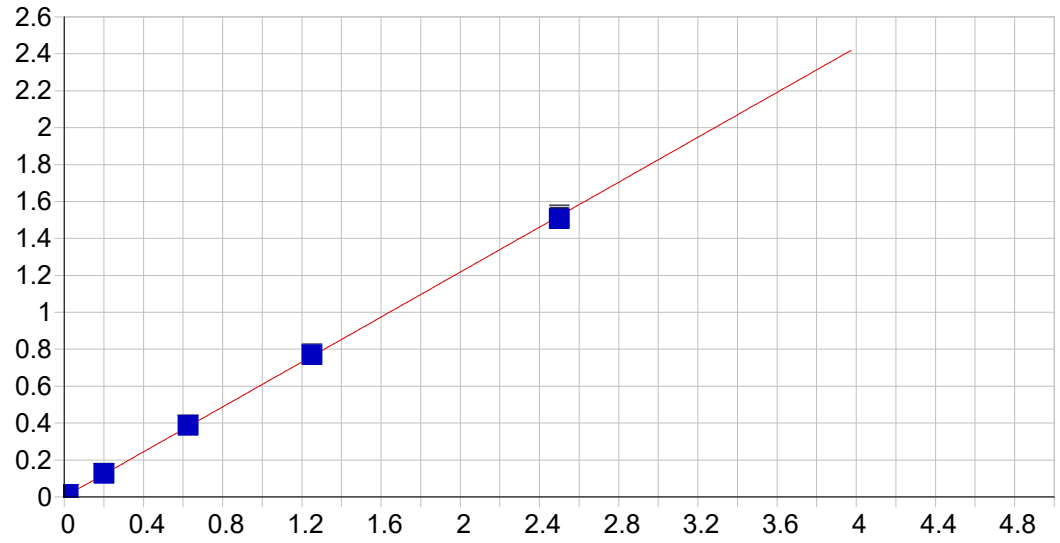


Co 228.616 {448}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000312	Re-Slope:	1.000000
A1 (Gain):	0.802517	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999932	Status:	OK.
Std Error of Est:	0.000190		
Predicted MDL:	0.000267		
Predicted MQL:	0.000889		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00031	.000	1
S1	.03000	.02949	-.001	-1.71	.02387	.000	1
S3	1.2500	1.2256	-.024	-1.95	.98558	.001	1
S4	2.5000	2.4960	-.004	-.161	2.0068	.004	1
S5	5.0000	5.0417	.042	.834	4.0532	.023	1
S2	.40000	.38725	-.013	-3.19	.31163	.000	1

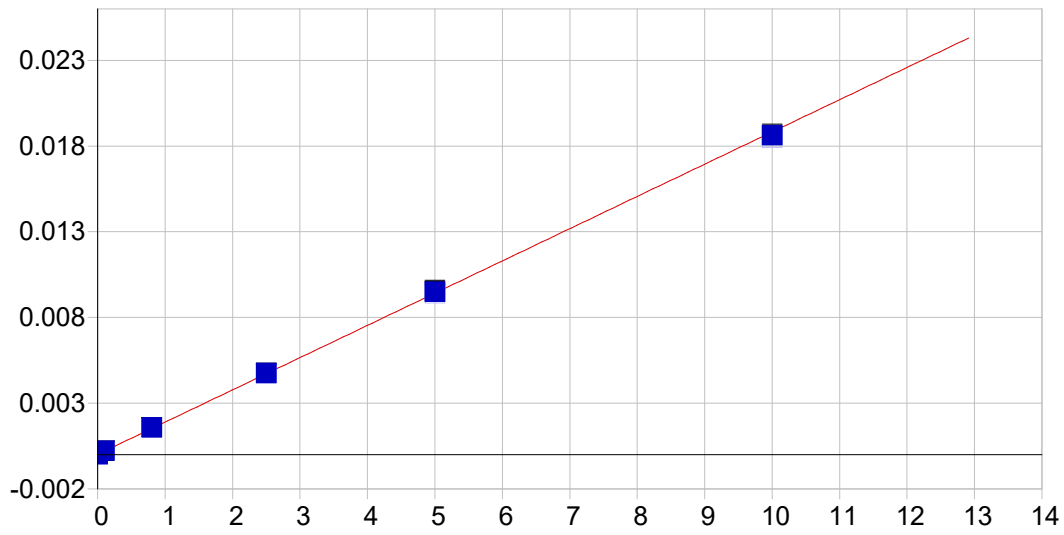


Cu 224.700 {450}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000906	Re-Slope:	1.000000
A1 (Gain):	0.608497	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999920	Status:	OK.
Std Error of Est:	0.000091		
Predicted MDL:	0.000486		
Predicted MQL:	0.001620		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00090	.000	1
S1	.02000	.02130	.001	6.51	.01400	.000	1
S3	.62500	.63366	.009	1.39	.38966	.000	1
S4	1.2500	1.2619	.012	.951	.77510	.001	1
S5	2.5000	2.4730	-.027	-1.08	1.5184	.008	1
S2	.20000	.20519	.005	2.59	.12678	.001	1

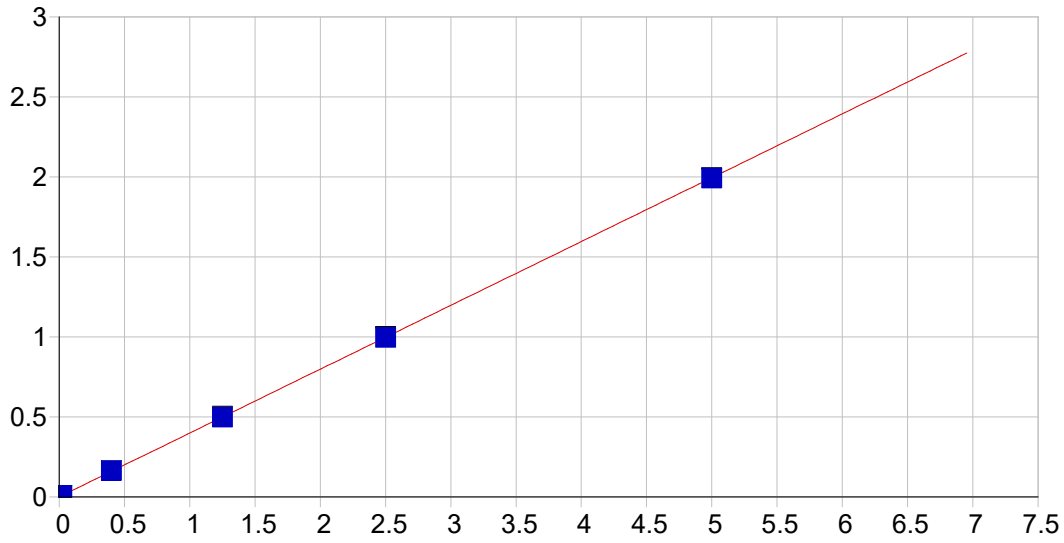


Fe 240.488 {140}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000014	Re-Slope:	1.000000
A1 (Gain):	0.001881	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999896	Status:	OK.
Std Error of Est:	0.000001		
Predicted MDL:	0.012809		
Predicted MQL:	0.042696		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00001	.000	1
S1	.10000	.10948	.009	9.48	.00022	.000	1
S3	2.5000	2.5205	.020	.819	.00471	.000	1
S4	5.0000	5.0387	.039	.773	.00941	.000	1
S5	10.000	9.8985	-.102	-1.02	.01847	.000	1
S2	.80000	.83299	.033	4.12	.00157	.000	1

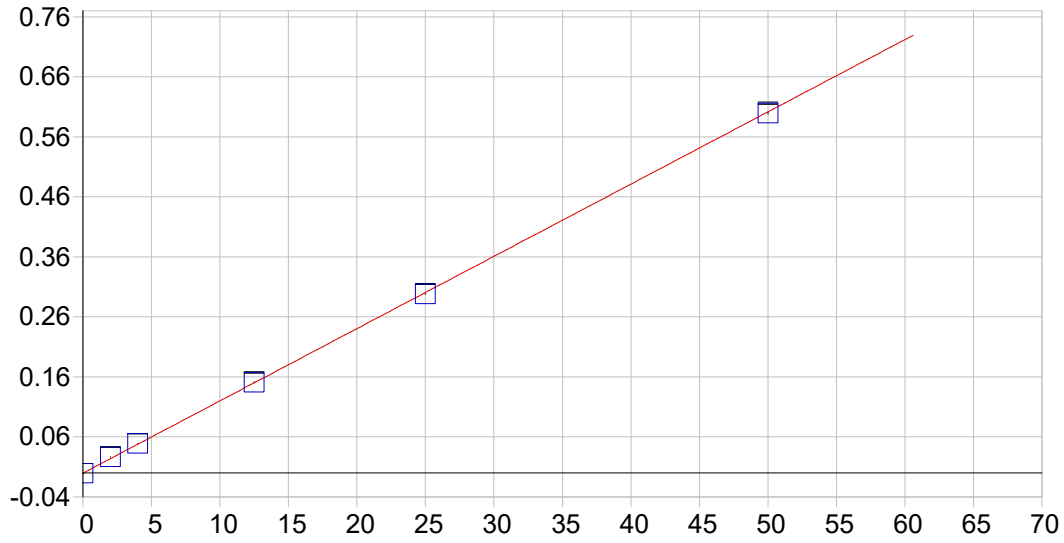


Mn 257.610 {131}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000355	Re-Slope:	1.000000
A1 (Gain):	0.398924	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999968	Status:	OK.
Std Error of Est:	0.000053		
Predicted MDL:	0.001078		
Predicted MQL:	0.003593		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00035	.000	1
S1	.02000	.02210	.002	10.5	.00918	.000	1
S3	1.2500	1.2484	-.002	-.128	.49847	.005	1
S4	2.5000	2.4976	-.002	-.094	.99692	.004	1
S5	5.0000	4.9903	-.010	-.194	1.9915	.004	1
S2	.40000	.41156	.012	2.89	.16457	.000	1

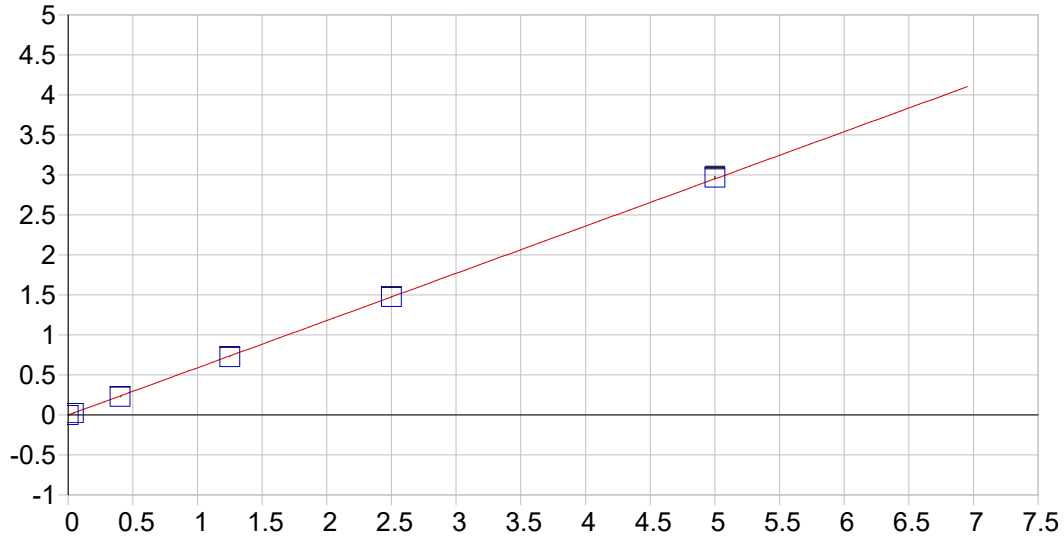


Mg 279.079 {121}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000381	Re-Slope:	1.000000
A1 (Gain):	0.012040	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999818	Status:	OK.
Std Error of Est:	0.000121		
Predicted MDL:	0.045655		
Predicted MQL:	0.152183		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00027	-.000	.000	-.00038	.000	1
S2	4.0000	4.0933	.093	2.33	.04890	.000	1
S3	12.500	12.556	.056	.447	.15080	.001	1
S4	25.000	24.796	-.204	-.815	.29817	.001	1
S5	50.000	49.813	-.187	-.373	.59939	.002	1
S1	2.0000	2.2413	.241	12.1	.02660	.000	1

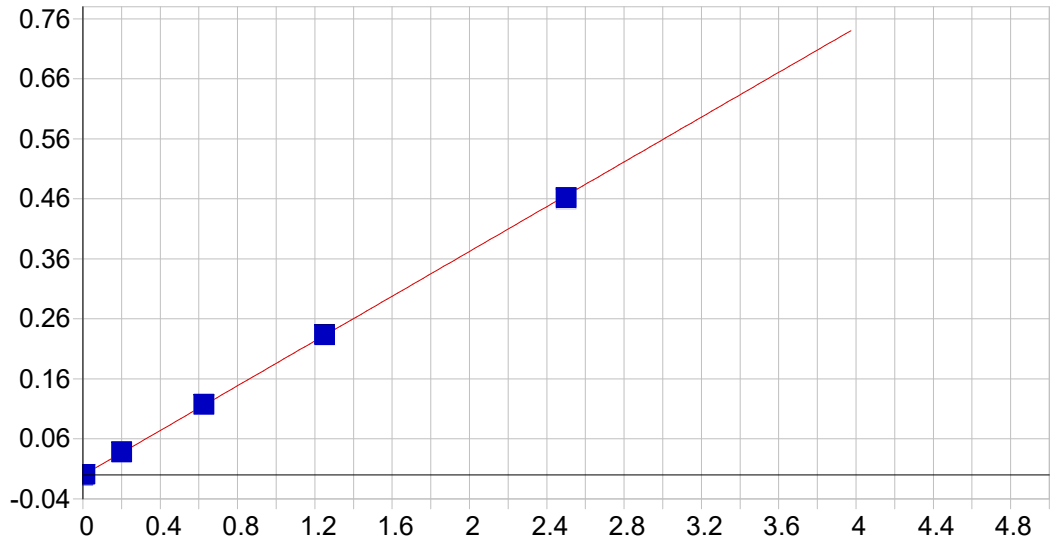


Ni 231.604 {446}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000542	Re-Slope:	1.000000
A1 (Gain):	0.590149	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999957	Status:	OK.
Std Error of Est:	0.000129		
Predicted MDL:	0.000406		
Predicted MQL:	0.001355		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00054	.000	1
S1	.04000	.03959	-.000	-1.02	.02282	.000	1
S3	1.2500	1.2304	-.020	-1.56	.72560	.001	1
S4	2.5000	2.4997	-.000	-.013	1.4746	.002	1
S5	5.0000	5.0311	.031	.622	2.9685	.016	1
S2	.40000	.38920	-.011	-2.70	.22914	.000	1

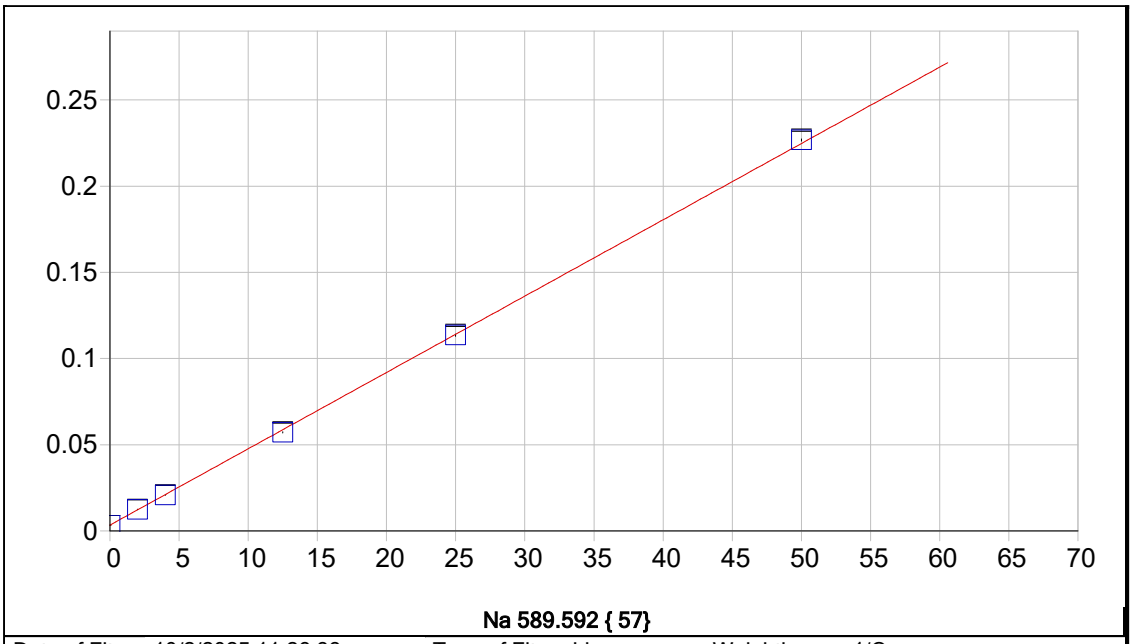


Ag 328.068 {103}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000613	Re-Slope:	1.000000
A1 (Gain):	0.186456	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999934	Status:	OK.
Std Error of Est:	0.000018		
Predicted MDL:	0.000799		
Predicted MQL:	0.002663		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00061	.000	1
S1	.01000	.01032	.000	3.18	.00129	.000	1
S3	.62500	.63224	.007	1.16	.11671	.000	1
S4	1.2500	1.2562	.006	.496	.23248	.000	1
S5	2.5000	2.4786	-.021	-.856	.45928	.000	1
S2	.20000	.20765	.008	3.83	.03792	.000	1

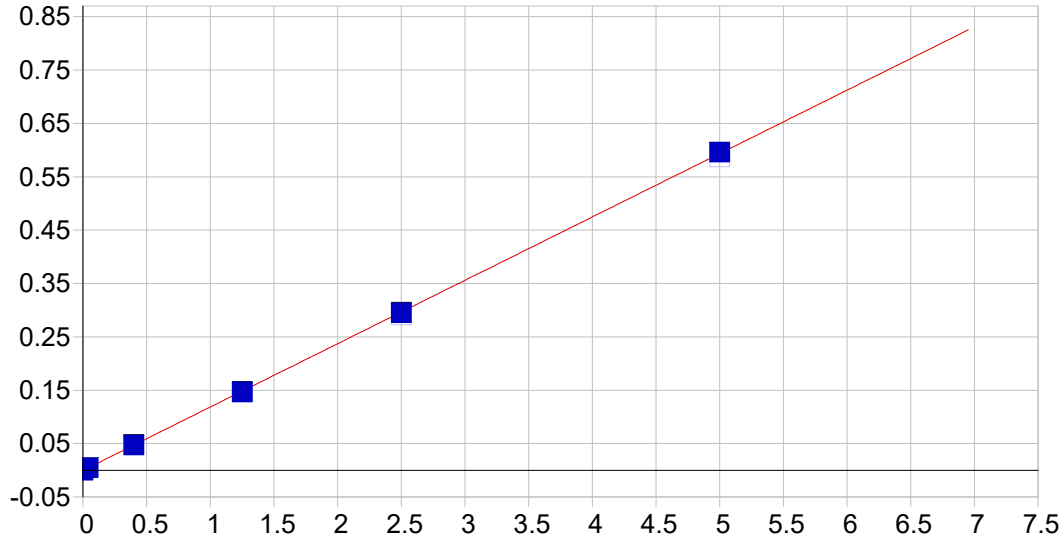


Na 589.592 { 57}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003369	Re-Slope:	1.000000
A1 (Gain):	0.004428	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999916	Status:	OK.
Std Error of Est:	0.000030		
Predicted MDL:	0.036795		
Predicted MQL:	0.122651		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	.00337	.000	1
S2	4.0000	3.9491	-.051	-1.27	.02086	.000	1
S3	12.500	12.161	-.339	-2.71	.05722	.000	1
S4	25.000	24.882	-.118	-.470	.11355	.001	1
S5	50.000	50.461	.461	.922	.22682	.001	1
S1	2.0000	2.0462	.046	2.31	.01243	.000	1

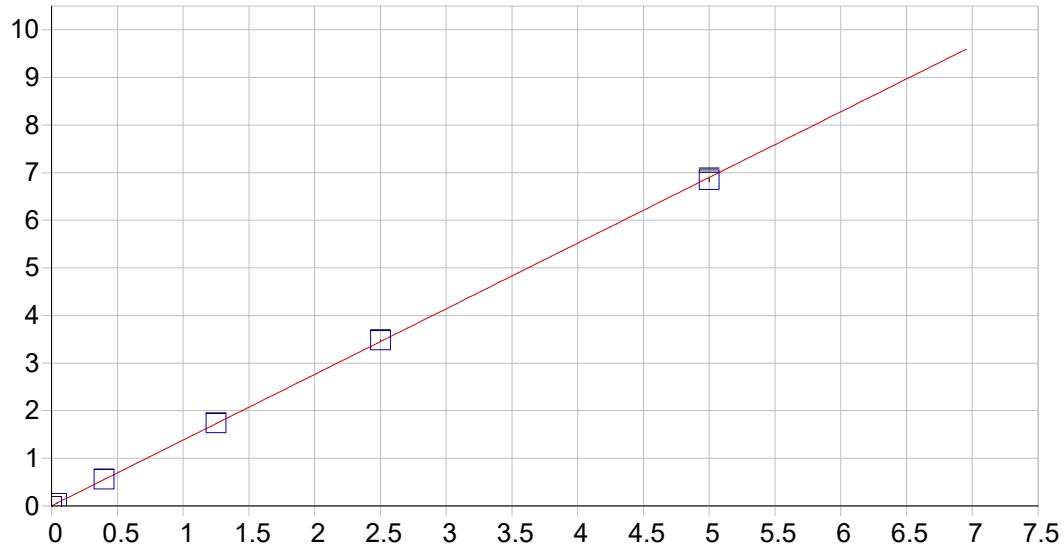


V 292.402 {115}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000381	Re-Slope:	1.000000
A1 (Gain):	0.118783	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999969	Status:	OK.
Std Error of Est:	0.000022		
Predicted MDL:	0.005429		
Predicted MQL:	0.018098		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00038	.000	1
S1	.04000	.04369	.004	9.22	.00463	.000	1
S3	1.2500	1.2400	-.010	-.797	.14475	.001	1
S4	2.5000	2.4877	-.012	-.494	.29078	.001	1
S5	5.0000	5.0182	.018	.364	.58704	.000	1
S2	.40000	.40051	.001	.126	.04650	.001	1

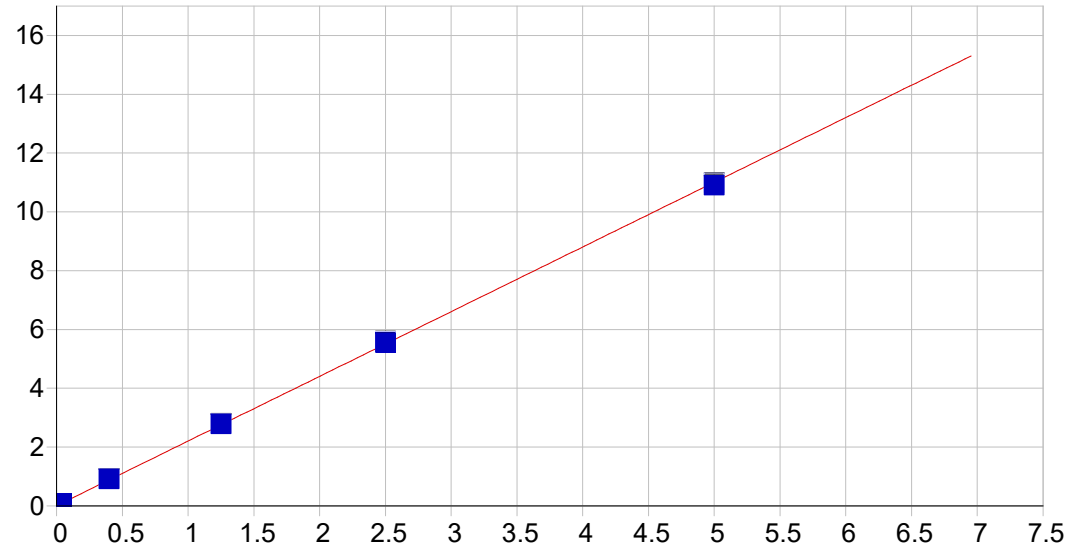


Zn 206.200 {464}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003061	Re-Slope:	1.000000
A1 (Gain):	1.379437	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999966	Status:	OK.
Std Error of Est:	0.000265		
Predicted MDL:	0.000129		
Predicted MQL:	0.000429		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00306	.000	1
S1	.04000	.04081	.001	2.02	.05935	.000	1
S3	1.2500	1.2580	.008	.643	1.7385	.002	1
S4	2.5000	2.5238	.024	.953	3.4845	.007	1
S5	5.0000	4.9630	-.037	-.740	6.8492	.043	1
S2	.40000	.40433	.004	1.08	.56081	.001	1

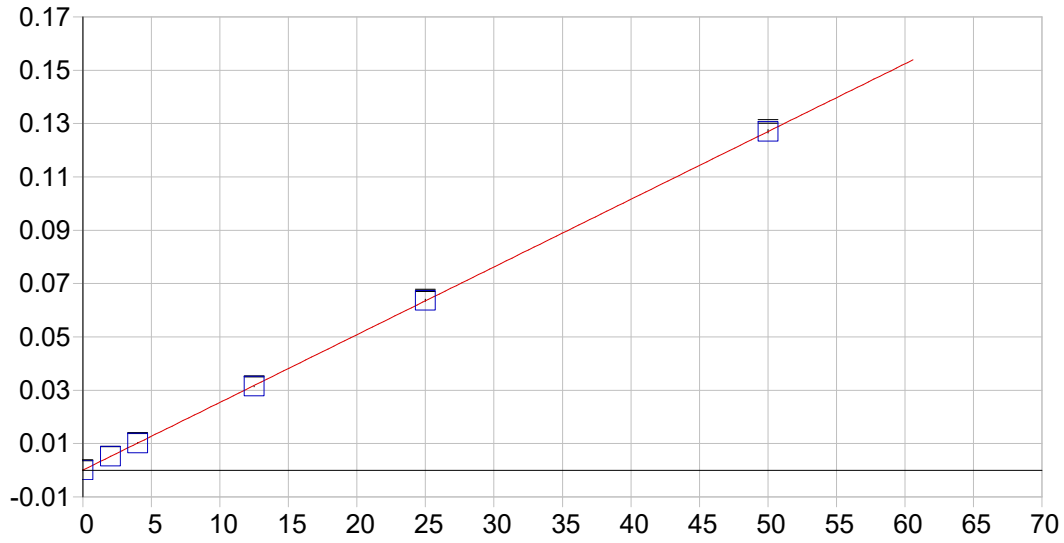


Zn 213.856 {158}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.005884	Re-Slope:	1.000000
A1 (Gain):	2.200338	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999928	Status:	OK.
Std Error of Est:	0.000623		
Predicted MDL:	0.000289		
Predicted MQL:	0.000962		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00588	.000	1
S1	.04000	.04121	.001	3.03	.09718	.000	1
S3	1.2500	1.2621	.012	.965	2.8020	.004	1
S4	2.5000	2.5208	.021	.830	5.5907	.015	1
S5	5.0000	4.9513	-.049	-.974	10.977	.017	1
S2	.40000	.41469	.015	3.67	.92446	.001	1

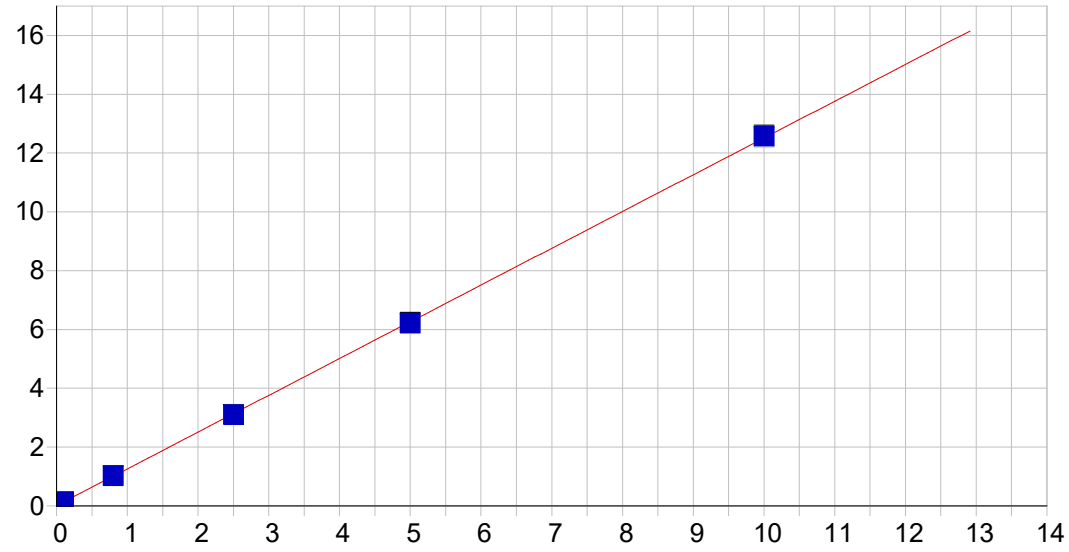


K 766.490 { 44}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000055	Re-Slope:	1.000000
A1 (Gain):	0.002539	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999990	Status:	OK.
Std Error of Est:	0.000006		
Predicted MDL:	0.076160		
Predicted MQL:	0.253866		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00005	.000	1
S2	4.0000	4.0027	.003	.069	.01022	.000	1
S3	12.500	12.372	-.128	-1.02	.03147	.000	1
S4	25.000	25.071	.071	.284	.06371	.000	1
S5	50.000	50.032	.032	.065	.12708	.001	1
S1	2.0000	2.0219	.022	1.10	.00519	.000	1

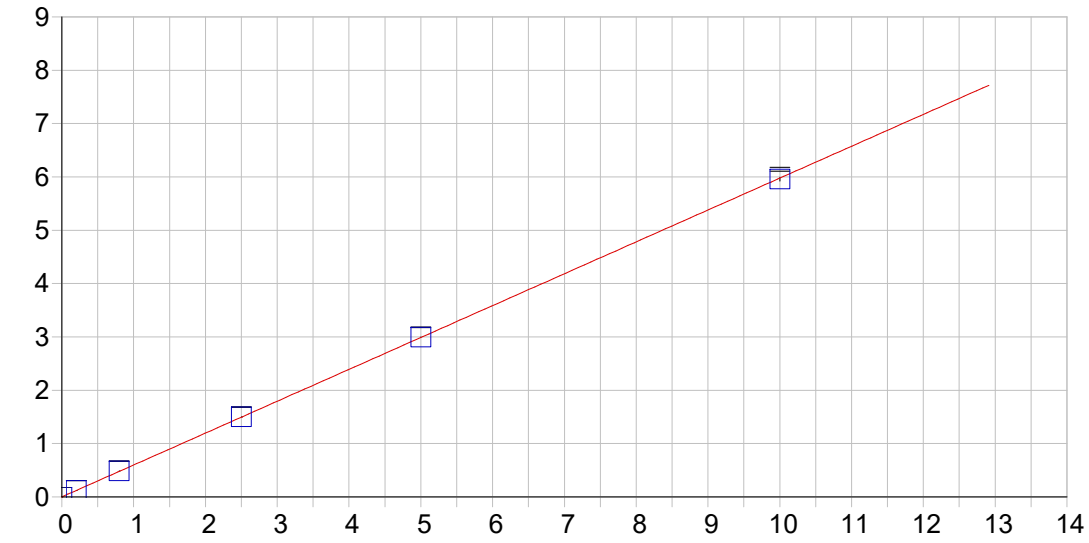


B 249.678 {135}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.010707	Re-Slope:	1.000000
A1 (Gain):	1.250224	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999975	Status:	OK.
Std Error of Est:	0.000465		
Predicted MDL:	0.000977		
Predicted MQL:	0.003258		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.01070	.000	1
S1	.10000	.10341	.003	3.41	.13925	.003	1
S3	2.5000	2.4742	-.026	-1.03	3.0928	.008	1
S4	5.0000	4.9658	-.034	-.684	6.1965	.024	1
S5	10.000	10.050	.050	.496	12.530	.043	1
S2	.80000	.80696	.007	.870	1.0160	.004	1

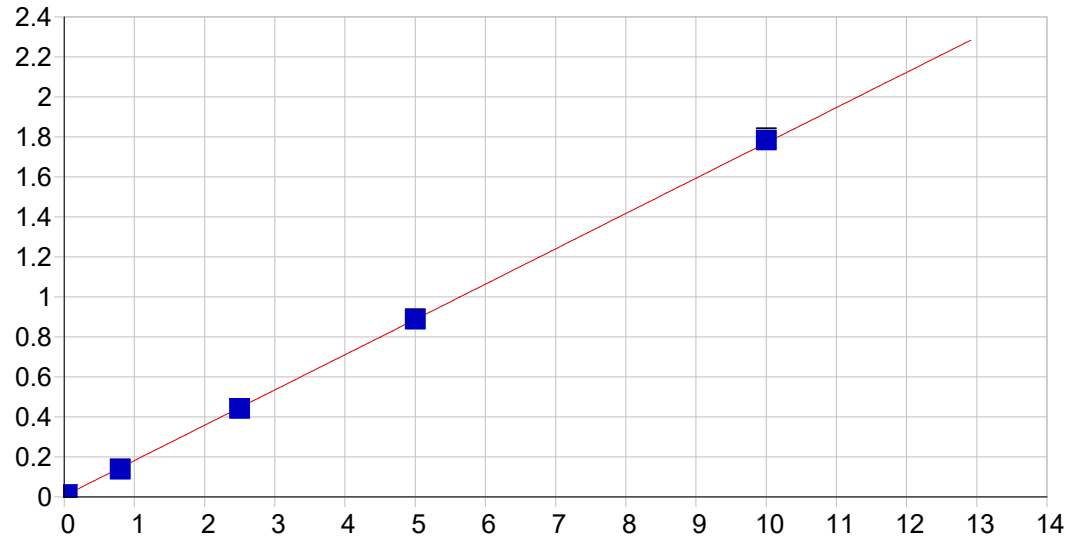


Mo 202.030 {467}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000535	Re-Slope:	1.000000
A1 (Gain):	0.597679	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999989	Status:	OK.
Std Error of Est:	0.000208		
Predicted MDL:	0.000312		
Predicted MQL:	0.001039		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00053	.000	1
S1	.20000	.20148	.001	.742	.12096	.000	1
S3	2.5000	2.5125	.013	.500	1.5022	.001	1
S4	5.0000	5.0067	.007	.134	2.9929	.005	1
S5	10.000	9.9664	-.034	-.336	5.9572	.035	1
S2	.80000	.81292	.013	1.61	.48640	.001	1

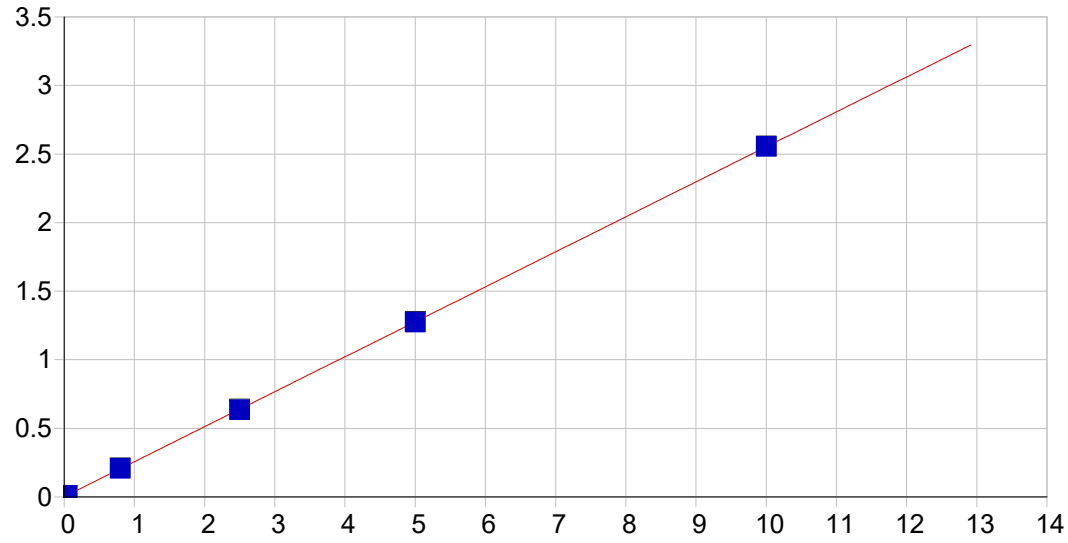


Sn 189.989 {478}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.005260	Re-Slope:	1.000000
A1 (Gain):	0.176457	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999899	Status:	OK.
Std Error of Est:	0.000083		
Predicted MDL:	0.000603		
Predicted MQL:	0.002009		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00526	.000	1
S1	.04000	.03819	-.002	-4.53	.01199	.000	1
S3	2.5000	2.4693	-.031	-1.23	.44053	.001	1
S4	5.0000	4.9999	-.000	-.002	.88663	.003	1
S5	10.000	10.078	.078	.785	1.7819	.011	1
S2	.80000	.75412	-.046	-5.74	.13818	.000	1

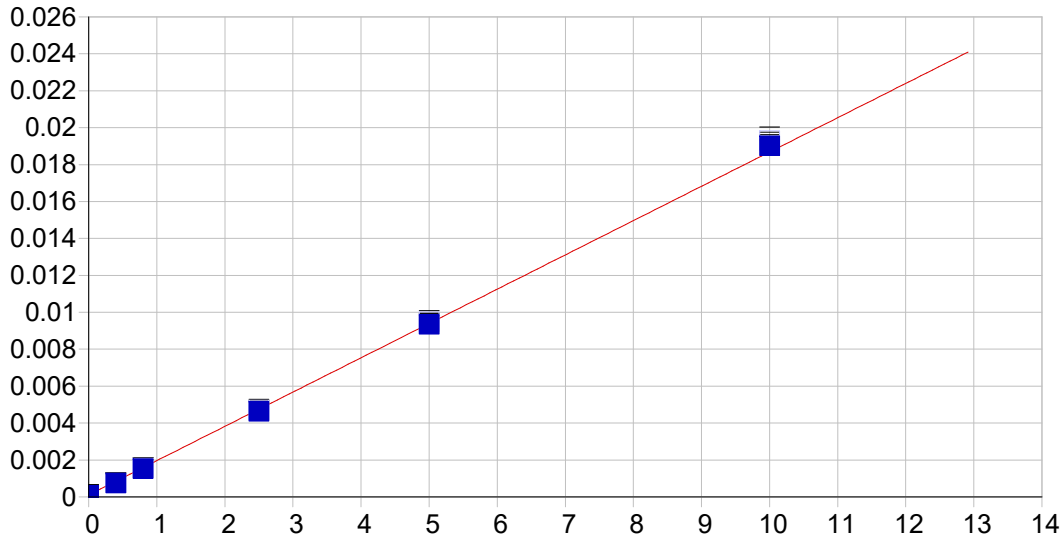


Ti 336.121 {100}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001830	Re-Slope:	1.000000
A1 (Gain):	0.255029	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999981	Status:	OK.
Std Error of Est:	0.000052		
Predicted MDL:	0.003295		
Predicted MQL:	0.010984		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00183	.001	1
S1	.04000	.04372	.004	9.29	.01297	.000	1
S3	2.5000	2.4835	-.017	-.661	.63496	.005	1
S4	5.0000	4.9861	-.014	-.278	1.2730	.006	1
S5	10.000	10.015	.015	.152	2.5551	.001	1
S2	.80000	.81150	.011	1.44	.20871	.001	1

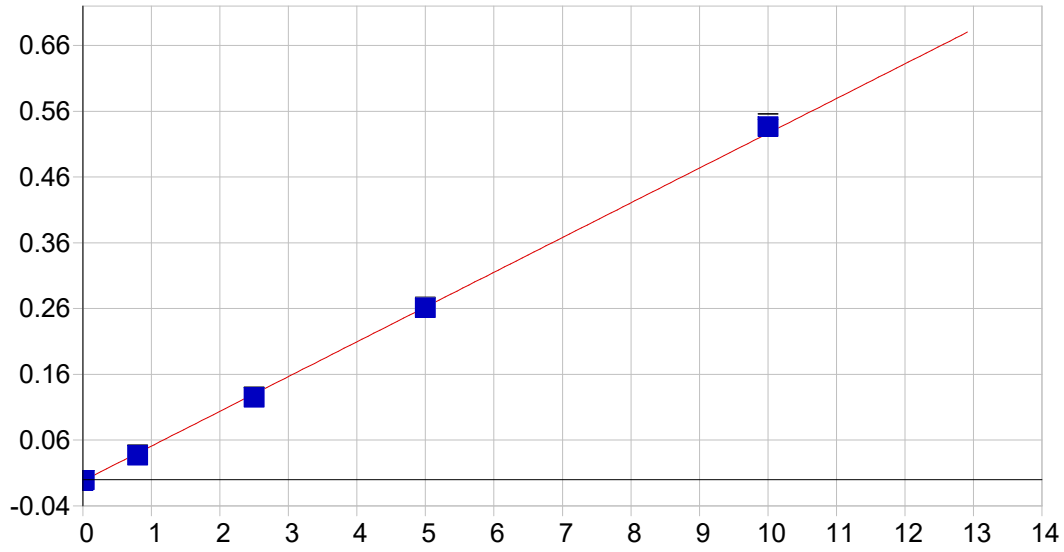


Si 288.158 {117}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000105	Re-Slope:	1.000000
A1 (Gain):	0.001858	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999629	Status:	OK.
Std Error of Est:	0.000005		
Predicted MDL:	0.023336		
Predicted MQL:	0.077785		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00008	.000	.000	.00010	.000	1
S1	.40000	.34299	-.057	-14.3	.00074	.000	1
S3	2.5000	2.4377	-.062	-2.49	.00470	.000	1
S4	5.0000	4.9729	-.027	-.541	.00948	.000	1
S5	10.000	10.178	.178	1.78	.01929	.000	1
S2	.80000	.76796	-.032	-4.00	.00155	.000	1

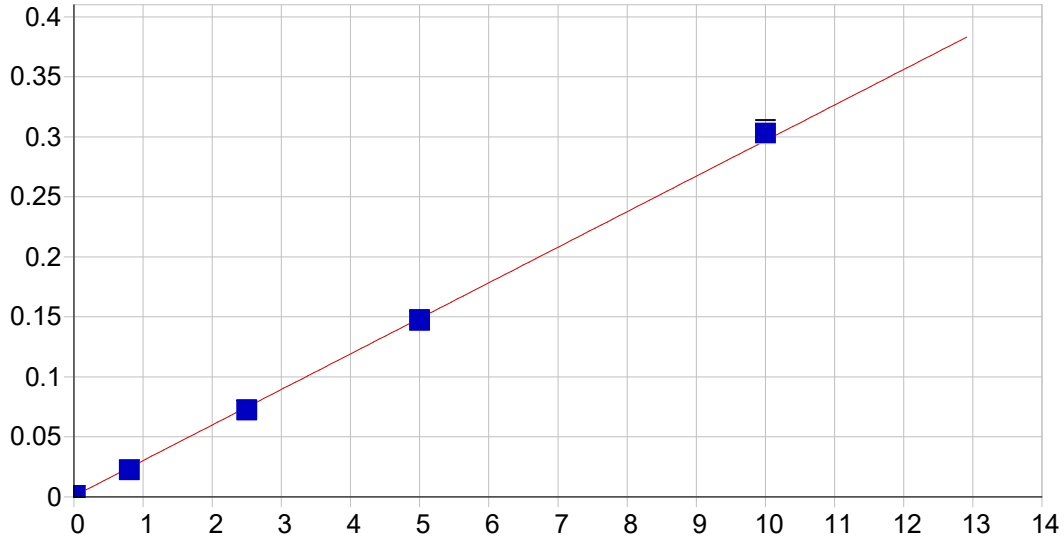


P 177.495 {490}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001830	Re-Slope:	1.000000
A1 (Gain):	0.052835	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999632	Status:	OK.
Std Error of Est:	0.000034		
Predicted MDL:	0.001571		
Predicted MQL:	0.005237		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00183	.000	1
S1	.02000	.01908	-.001	-4.60	-.00082	.000	1
S3	2.5000	2.3977	-.102	-4.09	.12483	.000	1
S4	5.0000	4.9771	-.023	-.459	.26109	.001	1
S5	10.000	10.192	.192	1.92	.53659	.004	1
S2	.80000	.73403	-.066	-8.25	.03695	.000	1

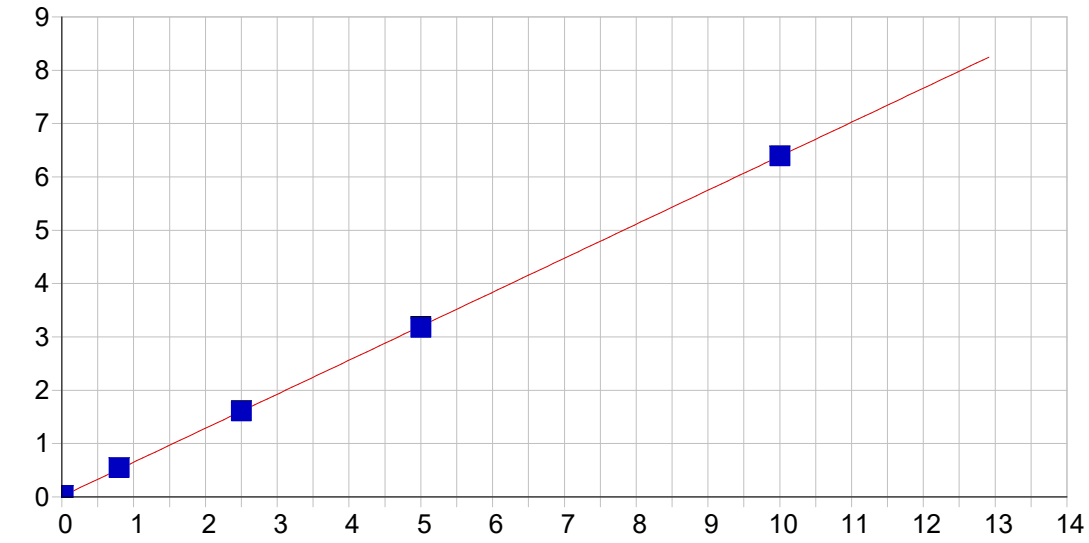


S 182.034 {485}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000693	Re-Slope:	1.000000
A1 (Gain):	0.029613	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999639	Status:	OK.
Std Error of Est:	0.000019		
Predicted MDL:	0.003063		
Predicted MQL:	0.010209		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00069	.000	1
S1	.02000	.01813	-.002	-9.35	.00120	.000	1
S3	2.5000	2.4149	-.085	-3.40	.07201	.000	1
S4	5.0000	4.9394	-.061	-1.21	.14658	.001	1
S5	10.000	10.210	.210	2.10	.30227	.003	1
S2	.80000	.73719	-.063	-7.85	.02246	.000	1

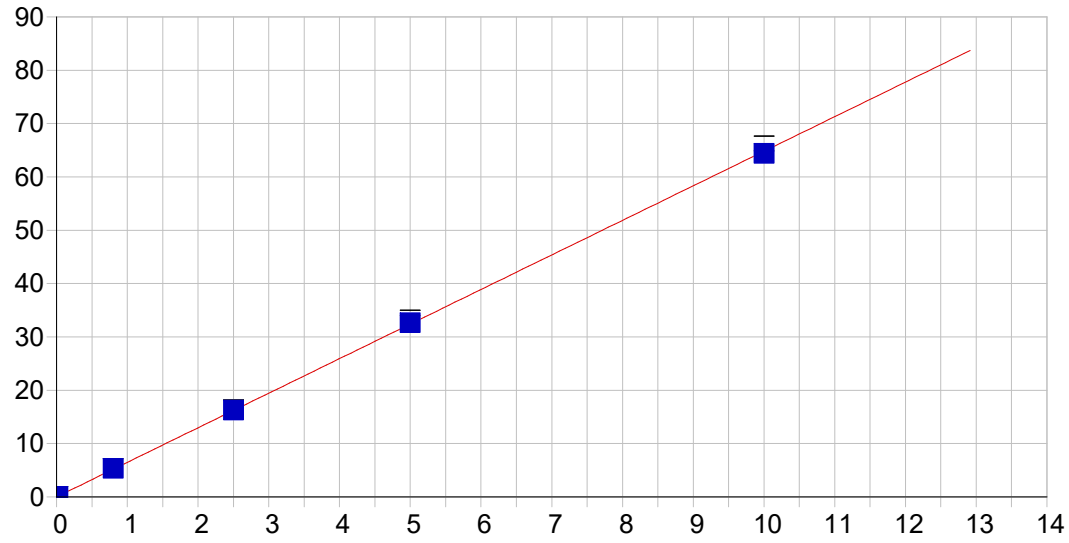


Li 670.784 { 50}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.012013	Re-Slope:	1.000000
A1 (Gain):	0.637592	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999929	Status:	OK.
Std Error of Est:	0.000178		
Predicted MDL:	0.004066		
Predicted MQL:	0.013553		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.01201	.002	1
S5	10.000	10.003	.003	.028	6.3948	.006	1
S4	5.0000	4.9591	-.041	-.818	3.1765	.016	1
S3	2.5000	2.4995	-.000	-.019	1.6070	.012	1
S1	.02000	.01798	-.002	-10.1	.02370	.002	1
S2	.80000	.84059	.041	5.07	.54838	.004	1

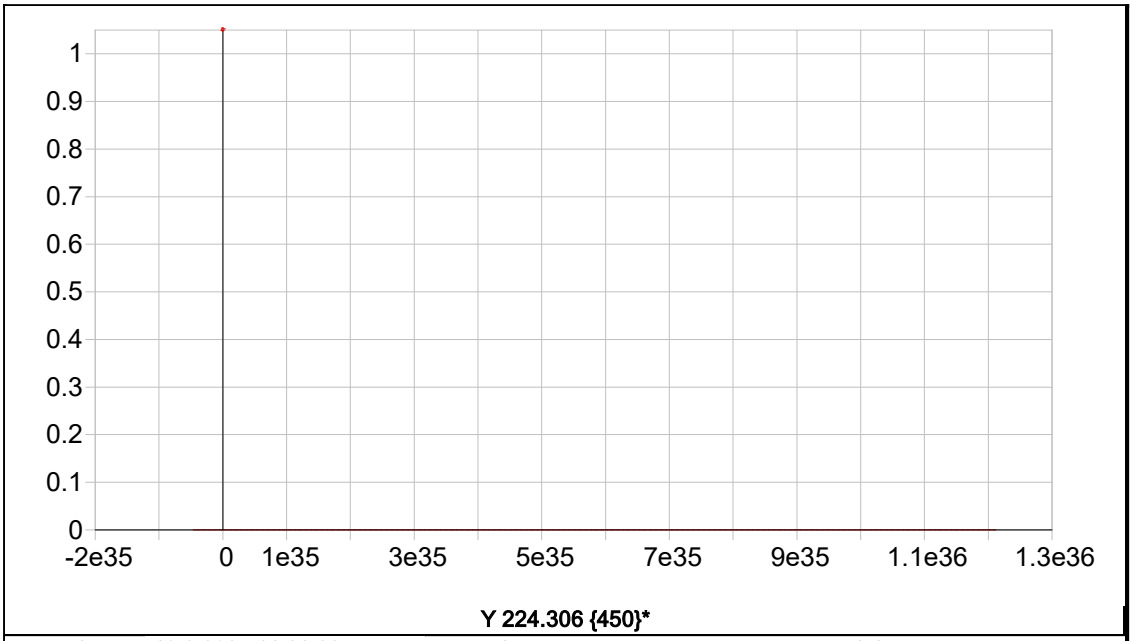


Sr 407.771 { 83}

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002421	Re-Slope:	1.000000
A1 (Gain):	6.480995	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999961	Status:	OK.
Std Error of Est:	0.001341		
Predicted MDL:	0.000218		
Predicted MQL:	0.000725		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00240	.001	1
S1	.02000	.02214	.002	10.7	.14653	.002	1
S3	2.5000	2.5085	.009	.342	16.276	.130	1
S4	5.0000	5.0365	.037	.731	32.675	.500	1
S5	10.000	9.9335	-.066	-.665	64.444	1.41	1
S2	.80000	.81924	.019	2.40	5.3169	.020	1

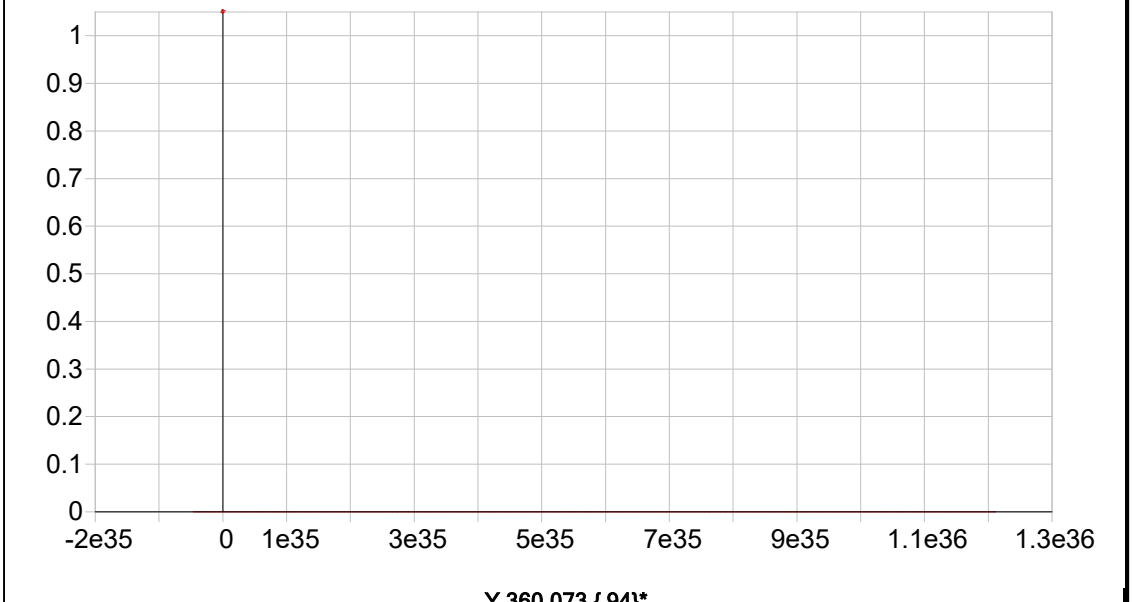


Y 224.306 {450}*

Date of Fit:	10/2/2025 11:26:33	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.000000	Status:	Warning Zero Gain
Std Error of Est:	0.000000		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



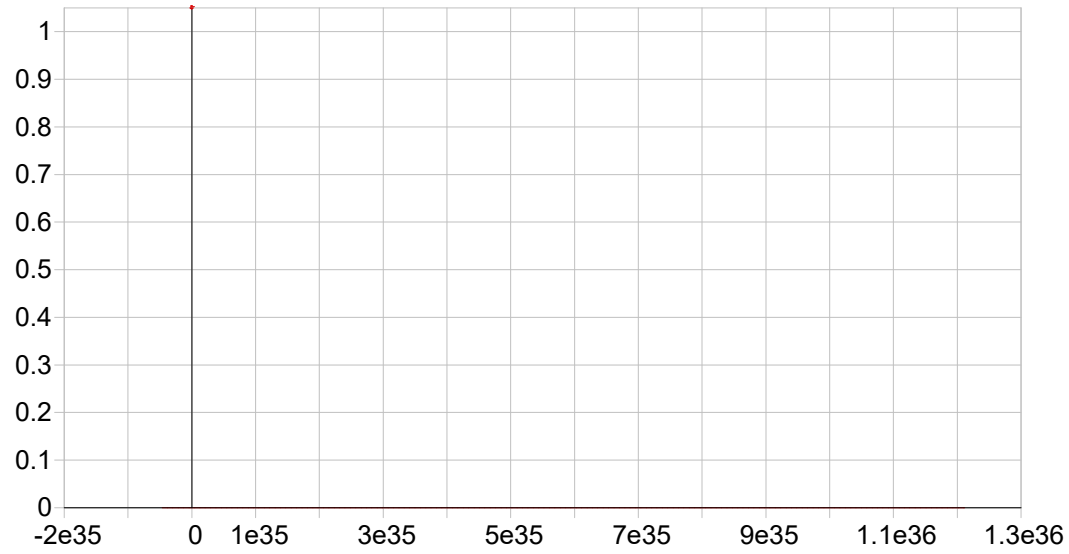
Y 360.073 { 94}*

Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000

A2 (Curvature):	0.000000					
n (Exponent):	1.000000					
Correlation:	0.000000		Status:	Warning	Zero Gain	
Std Error of Est:	0.000000					
Predicted MDL:	n/a					
Predicted MQL:	n/a					

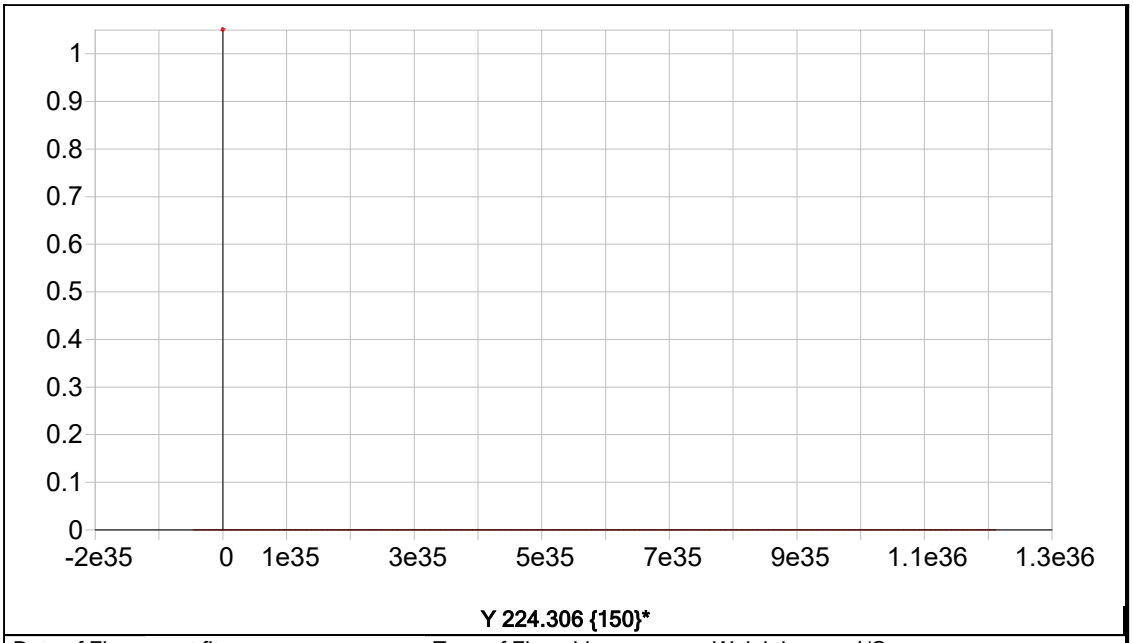
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



Y 371.030 { 91}*

Date of Fit:	<not fit>		Type of Fit:	Linear	Weighting:	1/Conc
A0 (Offset):		0.000000		Re-Slope:	1.000000	
A1 (Gain):		0.000000		Y-int:	0.000000	
A2 (Curvature):		0.000000				
n (Exponent):		1.000000				
Correlation:		0.000000		Status:	Warning	Zero Gain
Std Error of Est:		0.000000				
Predicted MDL:		n/a				
Predicted MQL:		n/a				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis

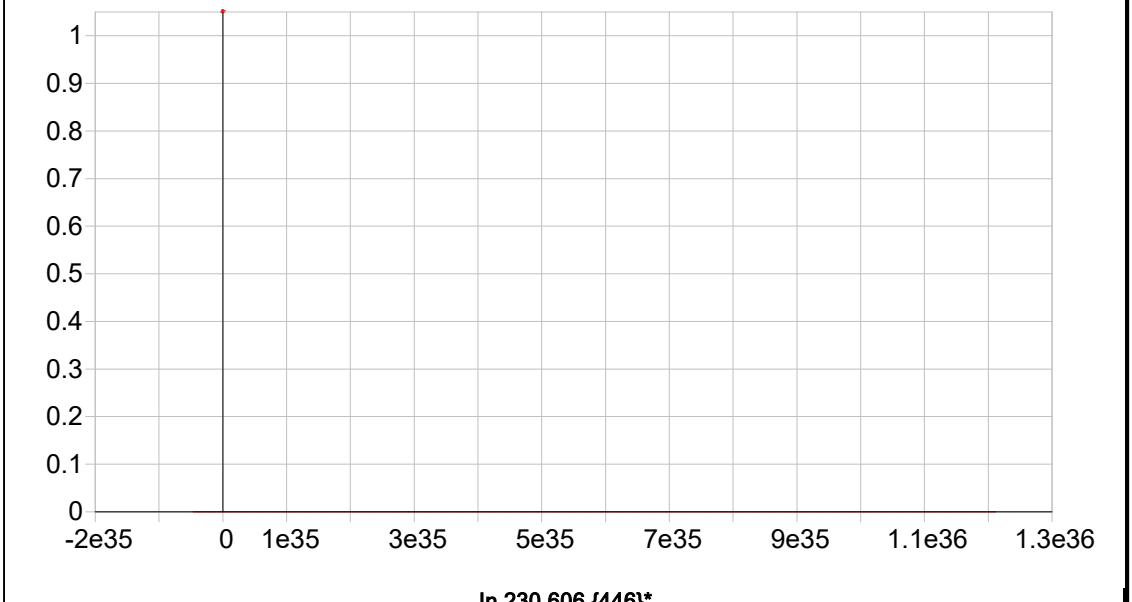


Y 224.306 {150}*

Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.000000	Status:	Warning Zero Gain
Std Error of Est:	0.000000		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



In 230.606 {446}*

Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000

A2 (Curvature):		0.000000					
n (Exponent):		1.000000					
Correlation:		0.000000		Status:	Warning	Zero Gain	
Std Error of Est:		0.000000					
Predicted MDL:		n/a					
Predicted MQL:		n/a					
Std. Name	**Stated Conc.**	**Found Conc.**	**Difference**	**% Diff.**	**(S)IR**	**Std Dev**	**Emphasis**

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: S0 Acquired: 10/2/2025 10:37:46 Type: Cal
Method: 6010-200.7 NEW(v241) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00016**	**.00074**	**.00049**	**.00109**	**.00096**	**.00002**	**.13394**	**-.00209**
Stddev	.00013	.00008	.00038	.00011	.00010	.00102	.00247	.00100
%RSD	82.603	11.377	77.302	9.9451	10.026	4581.6	1.8424	47.860
#1	.00020	.00083	.00086	.00099	.00103	-.00056	.13117	-.00248
#2	.00026	.00067	.00051	.00120	.00085	-.00057	.13474	-.00095
#3	.00001	.00072	.00010	.00107	.00099	.00120	.13591	-.00283

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00081**	**.00051**	**.00012**	**.00031**	**.00090**	**.00001**	**.00035**	**-.00038**
Stddev	.00014	.00051	.00011	.00027	.00021	.00002	.00032	.00031
%RSD	17.208	98.611	89.731	84.904	22.771	116.53	89.402	81.249
#1	-.00071	.00104	.00002	.00055	.00076	.00002	.00060	-.00003
#2	-.00097	.00048	.00010	.00036	.00114	-.00000	.00046	-.00051
#3	-.00075	.00003	.00023	.00003	.00081	.00003	-.00000	-.00062

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00054**	**-.00061**	**.00337**	**-.00038**	**.00588**	**.00005**	**.01070**	**.00053**
Stddev	.00007	.00007	.00007	.00025	.00046	.00017	.00028	.00009
%RSD	13.816	10.743	1.9295	66.392	7.9013	303.51	2.6196	16.418
#1	-.00046	-.00054	.00344	-.00063	.00620	.00004	.01084	.00060
#2	-.00060	-.00063	.00332	-.00038	.00608	-.00010	.01089	.00043
#3	-.00057	-.00067	.00335	-.00013	.00535	.00023	.01038	.00056

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00526**	**.00183**	**.00010**	**-.00183**	**.00069**	**.01201**	**.00240**
Stddev	.00005	.00084	.00002	.00007	.00006	.00183	.00056
%RSD	.95730	45.864	21.505	4.0168	8.8059	15.202	23.437
#1	.00532	.00096	.00008	-.00176	.00076	.01412	.00296
#2	.00524	.00264	.00010	-.00190	.00068	.01094	.00183
#3	.00523	.00189	.00013	-.00183	.00064	.01098	.00242

Sample Name: S0 Acquired: 10/2/2025 10:37:46 Type: Cal
Method: 6010-200.7 NEW(v241) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7943.0	102640.	5963.2	6399.2	9400.1
Stddev	18.2	472.	18.1	34.8	20.2
%RSD	.22887	.45945	.30416	.54361	.21509
#1	7923.7	102510.	5961.3	6378.2	9381.5
#2	7945.5	102250.	5982.2	6380.0	9397.3
#3	7959.8	103160.	5946.1	6439.3	9421.6

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: S1 Acquired: 10/2/2025 10:42:02 Type: Cal
Method: 6010-200.7 NEW(v241) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00129**	**.00334**	**.00295**	**.00264**	**.00476**	**.01006**	**.35994**	**.08297**
Stddev	.00004	.00007	.00020	.00008	.00008	.00134	.00235	.00121
%RSD	2.9529	2.0375	6.8186	2.9087	1.7341	13.352	.65379	1.4585
#1	.00134	.00341	.00317	.00270	.00486	.01109	.35911	.08436
#2	.00126	.00327	.00277	.00255	.00473	.01054	.36260	.08247
#3	.00129	.00334	.00292	.00267	.00470	.00854	.35812	.08210

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.01773**	**.11358**	**.00234**	**.02387**	**.01400**	**.00022**	**.00918**	**.02660**
Stddev	.00010	.00101	.00004	.00012	.00025	.00002	.00039	.00042
%RSD	.56351	.89010	1.6136	.48950	1.7828	9.4011	4.2970	1.5718
#1	.01763	.11402	.00229	.02400	.01375	.00020	.00961	.02699
#2	.01773	.11242	.00236	.02386	.01401	.00021	.00909	.02666
#3	.01783	.11429	.00235	.02377	.01425	.00024	.00883	.02616

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.02282**	**.00129**	**.01243**	**.00463**	**.09718**	**.00519**	**.13925**	**.12096**
Stddev	.00004	.00005	.00016	.00032	.00023	.00010	.00325	.00027
%RSD	.16909	3.8390	1.2845	6.9633	.23596	2.0146	2.3327	.22336
#1	.02278	.00124	.01241	.00426	.09702	.00530	.14243	.12081
#2	.02285	.00134	.01260	.00482	.09744	.00510	.13938	.12080
#3	.02284	.00129	.01228	.00481	.09707	.00516	.13594	.12127

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.01199**	**.01297**	**.00074**	**-.00082**	**.00120**	**.02370**	**.14653**
Stddev	.00010	.00042	.00004	.00003	.00013	.00157	.00173
%RSD	.79719	3.2010	5.2093	3.1593	10.501	6.6332	1.1783
#1	.01189	.01250	.00070	-.00079	.00129	.02220	.14807
#2	.01208	.01315	.00077	-.00082	.00126	.02358	.14685
#3	.01201	.01326	.00076	-.00085	.00106	.02533	.14466

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: S1 Acquired: 10/2/2025 10:42:02 Type: Cal
Method: 6010-200.7 NEW(v241) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7948.9	99410.	5909.1	6220.8	9446.4
Stddev	10.2	42.	30.2	22.8	17.3
%RSD	.12884	.04262	.51122	.36707	.18281
#1	7937.4	99446.	5886.3	6195.0	9427.1
#2	7957.0	99363.	5897.6	6238.4	9451.7
#3	7952.2	99421.	5943.3	6229.0	9460.3

Sample Name: S2 Acquired: 10/2/2025 10:46:15 Type: Cal
Method: 6010-200.7 NEW(v241) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348	Cd2265
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.04418**	**.05089**	**.16376**	**.06043**	**.06325**	**.14494**	**3.4203**	**.54163**	**1.2015**
Stddev	.00015	.00139	.00035	.00037	.00026	.00103	.0204	.00253	.0029
%RSD	.35044	2.7310	.21116	.61146	.40355	.71062	.59560	.46771	.23840
#1	.04409	.05011	.16336	.06013	.06304	.14604	3.4044	.53871	1.1983
#2	.04436	.05250	.16401	.06084	.06353	.14400	3.4433	.54307	1.2024
#3	.04410	.05008	.16390	.06032	.06317	.14479	3.4133	.54312	1.2038

Elem	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.21843**	**.03600**	**.31163**	**.12678**	**.00157**	**.16457**	**.04890**	**.22914**	**.03792**
Stddev	.00121	.00011	.00032	.00064	.00001	.00043	.00035	.00041	.00003
%RSD	.55545	.31578	.10301	.50594	.54597	.25840	.71463	.17691	.08620
#1	.21976	.03603	.31183	.12647	.00157	.16451	.04923	.22897	.03796
#2	.21737	.03588	.31126	.12751	.00157	.16502	.04853	.22886	.03790
#3	.21816	.03610	.31181	.12635	.00156	.16417	.04895	.22961	.03791

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.02086**	**.04650**	**.92446**	**.01022**	**1.0160**	**.48640**	**.13818**	**.20871**	**.00155**
Stddev	.00020	.00085	.00105	.00017	.0043	.00142	.00050	.00112	.00005
%RSD	.93793	1.8370	.11382	1.6906	.42249	.29139	.35886	.53556	2.9090
#1	.02065	.04587	.92332	.01039	1.0114	.48478	.13762	.20761	.00158
#2	.02088	.04747	.92540	.01021	1.0199	.48741	.13852	.20869	.00150
#3	.02104	.04615	.92466	.01005	1.0166	.48701	.13842	.20984	.00158

Elem	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.03695**	**.02246**	**.54838**	**5.3169**
Stddev	.00038	.00015	.00432	.0202
%RSD	1.0211	.67123	.78854	.37945
#1	.03651	.02233	.54645	5.3022
#2	.03721	.02262	.55333	5.3399
#3	.03711	.02243	.54535	5.3085

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: S2 Acquired: 10/2/2025 10:46:15 Type: Cal
Method: 6010-200.7 NEW(v241) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8031.0	99625.	6112.3	6209.0	9422.2
Stddev	17.7	82.	18.0	3.3	10.0
%RSD	.22040	.08242	.29397	.05293	.10594
#1	8047.9	99661.	6126.6	6212.0	9432.2
#2	8012.6	99682.	6092.1	6209.4	9412.3
#3	8032.6	99530.	6118.1	6205.5	9422.0

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: S3 Acquired: 10/2/2025 10:50:15 Type: Cal
Method: 6010-200.7 NEW(v241) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348	Cd2265
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.13956**	**.15689**	**.51646**	**.18806**	**.19551**	**.44813**	**10.211**	**1.6634**	**3.8711**
Stddev	.00014	.00077	.00039	.00069	.00029	.00189	.081	.0086	.0067
%RSD	.09937	.49266	.07606	.36804	.14892	.42150	.79232	.51982	.17237
#1	.13954	.15777	.51612	.18732	.19571	.45029	10.305	1.6729	3.8693
#2	.13944	.15655	.51636	.18869	.19564	.44730	10.166	1.6613	3.8655
#3	.13971	.15635	.51689	.18817	.19517	.44679	10.164	1.6560	3.8785

Elem	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.66852**	**.11177**	**.98558**	**.38966**	**.00471**	**.49847**	**.15080**	**.72560**	**.11671**
Stddev	.00427	.00055	.00082	.00031	.00001	.00500	.00121	.00128	.00040
%RSD	.63867	.49390	.08285	.07868	.17660	1.0025	.80159	.17704	.33954
#1	.67339	.11154	.98572	.38948	.00471	.50424	.15213	.72668	.11657
#2	.66677	.11240	.98470	.38948	.00472	.49542	.15049	.72418	.11715
#3	.66540	.11138	.98631	.39001	.00471	.49576	.14977	.72595	.11640

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.05722**	**.14475**	**2.8020**	**.03147**	**3.0928**	**1.5022**	**.44053**	**.63496**	**.00470**
Stddev	.00041	.00053	.0040	.00014	.0082	.0006	.00090	.00511	.00004
%RSD	.72504	.36794	.14464	.44969	.26639	.04037	.20527	.80445	.86174
#1	.05761	.14508	2.8040	.03132	3.1023	1.5021	.44117	.64079	.00466
#2	.05727	.14504	2.8046	.03160	3.0879	1.5017	.43950	.63279	.00474
#3	.05678	.14413	2.7973	.03148	3.0882	1.5029	.44092	.63130	.00471

Elem	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.12483**	**.07201**	**1.6070**	**16.276**
Stddev	.00036	.00022	.0115	.130
%RSD	.28862	.30849	.71842	.79661
#1	.12521	.07227	1.6200	16.425
#2	.12450	.07188	1.5981	16.206
#3	.12479	.07188	1.6028	16.196

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: S3 Acquired: 10/2/2025 10:50:15 Type: Cal
Method: 6010-200.7 NEW(v241) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7801.7	97902.	6038.1	6024.3	8863.6
Stddev	20.2	561.	38.1	43.2	30.6
%RSD	.25950	.57257	.63164	.71645	.34535
#1	7802.0	97949.	5999.6	6000.2	8852.8
#2	7821.8	97319.	6038.9	5998.6	8898.2
#3	7781.3	98437.	6075.9	6074.2	8839.9

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: S4 Acquired: 10/2/2025 10:54:12 Type: Cal
Method: 6010-200.7 NEW(v241) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348	Cd2265
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.28117**	**.28587**	**1.0535**	**.37473**	**.39101**	**.89332**	**20.529**	**3.2901**	**7.8964**
Stddev	.00068	.00416	.0028	.00081	.00073	.00056	.081	.0159	.0189
%RSD	.24031	1.4556	.26604	.21660	.18646	.06229	.39289	.48297	.23886
#1	.28116	.28156	1.0537	.37480	.39145	.89268	20.475	3.2992	7.8956
#2	.28050	.28986	1.0507	.37388	.39017	.89355	20.622	3.2993	7.8779
#3	.28185	.28619	1.0563	.37550	.39141	.89372	20.490	3.2717	7.9156

Elem	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.3331**	**.22027**	**2.0068**	**.77510**	**.00941**	**.99692**	**.29817**	**1.4746**	**.23248**
Stddev	.0060	.00042	.0042	.00136	.00010	.00441	.00076	.0025	.00045
%RSD	.44863	.18898	.20834	.17531	1.0317	.44211	.25522	.16785	.19499
#1	1.3306	.21981	2.0080	.77601	.00930	.99266	.29738	1.4747	.23278
#2	1.3399	.22062	2.0021	.77353	.00945	1.0015	.29889	1.4721	.23271
#3	1.3288	.22039	2.0102	.77574	.00948	.99664	.29825	1.4771	.23196

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.11355**	**.29078**	**5.5907**	**.06371**	**6.1965**	**2.9929**	**.88663**	**1.2730**	**.00948**
Stddev	.00071	.00085	.0153	.00042	.0236	.0048	.00252	.0061	.00007
%RSD	.62852	.29239	.27332	.65734	.38071	.16021	.28439	.48080	.71282
#1	.11273	.29012	5.5834	.06324	6.2049	2.9959	.88645	1.2693	.00941
#2	.11395	.29174	5.6082	.06405	6.2148	2.9874	.88420	1.2800	.00954
#3	.11398	.29048	5.5803	.06383	6.1699	2.9955	.88923	1.2696	.00950

Elem	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.26109**	**.14658**	**3.1765**	**32.675**
Stddev	.00083	.00069	.0155	.500
%RSD	.31655	.47122	.48852	1.5311
#1	.26054	.14616	3.1707	33.185
#2	.26070	.14620	3.1940	32.656
#3	.26204	.14737	3.1647	32.185

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: S4 Acquired: 10/2/2025 10:54:12 Type: Cal
Method: 6010-200.7 NEW(v241) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7630.4	96991.	5965.5	5983.0	8472.4
Stddev	11.3	197.	37.2	24.4	16.1
%RSD	.14809	.20342	.62342	.40786	.18949
#1	7634.9	96830.	5937.1	5980.5	8481.3
#2	7638.7	96931.	5951.8	5960.0	8482.0
#3	7617.5	97211.	6007.6	6008.6	8453.9

Sample Name: S5 Acquired: 10/2/2025 10:58:15 Type: Cal
Method: 6010-200.7 NEW(v241) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348	Cd2265
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.55343	.61538	2.1315	.73586	.77153	1.7933	41.214	6.6259	15.883
Stddev	.00368	.02047	.0118	.00616	.00410	.0031	.129	.0312	.088
%RSD	.66583	3.3266	.55493	.83726	.53201	.17269	.31280	.47143	.55561
#1	.55007	.59998	2.1186	.73098	.76716	1.7966	41.355	6.6547	15.789
#2	.55285	.60755	2.1339	.73382	.77214	1.7929	41.101	6.5927	15.898
#3	.55737	.63861	2.1419	.74278	.77530	1.7904	41.187	6.6302	15.963

Elem	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.6522	.43149	4.0532	1.5184	.01847	1.9915	.59939	2.9685	.45928
Stddev	.0034	.00074	.0225	.0079	.00007	.0037	.00188	.0156	.00032
%RSD	.13026	.17134	.55535	.52013	.37646	.18523	.31382	.52701	.06905
#1	2.6557	.43146	4.0283	1.5102	.01840	1.9940	.60142	2.9511	.45959
#2	2.6521	.43077	4.0591	1.5190	.01848	1.9873	.59771	2.9734	.45896
#3	2.6488	.43225	4.0721	1.5259	.01854	1.9933	.59905	2.9812	.45927

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.22682	.58704	10.977	.12708	12.530	5.9572	1.7819	2.5551	.01929
Stddev	.00062	.00016	.017	.00066	.043	.0350	.0109	.0011	.00021
%RSD	.27285	.02798	.15120	.51852	.34656	.58738	.61247	.04334	1.0770
#1	.22617	.58721	10.978	.12633	12.576	5.9230	1.7703	2.5545	.01907
#2	.22690	.58689	10.993	.12737	12.489	5.9557	1.7834	2.5544	.01948
#3	.22740	.58700	10.960	.12755	12.525	5.9930	1.7920	2.5564	.01932

Elem	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.53659	.30227	6.3948	64.444
Stddev	.00414	.00296	.0055	1.405
%RSD	.77126	.97796	.08661	2.1805
#1	.53255	.29957	6.3970	64.769
#2	.53641	.30182	6.3885	62.905
#3	.54082	.30543	6.3989	65.658

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: S5 Acquired: 10/2/2025 10:58:15 Type: Cal
Method: 6010-200.7 NEW(v241) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7692.7	96547.	5800.5	5974.2	8339.7
Stddev	19.7	458.	22.6	15.9	21.5
%RSD	.25615	.47462	.38985	.26685	.25738
#1	7715.0	96610.	5778.9	5981.3	8363.9
#2	7685.3	96060.	5798.7	5956.0	8323.1
#3	7677.8	96970.	5824.0	5985.4	8332.0

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: ICV01 Acquired: 10/2/2025 11:07:22 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.010504**	**3.982122**	**3.869810**	**4.038411**	**4.083734**	**7.884692**
Stddev	.018374	.035132	.010004	.012755	.011600	.015762
%RSD	.4581396	.8822328	.2585244	.3158366	.2840603	.1999087
#1	4.017100	4.004897	3.866797	4.037684	4.080911	7.889089
#2	3.989743	3.941662	3.861658	4.026035	4.073805	7.897789
#3	4.024670	3.999806	3.880974	4.051513	4.096485	7.867198

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.651655**	**.2011699**	**1.971090**	**19.49550**	**.8238759**	**1.972429**
Stddev	.012765	.0015770	.004833	.03263	.0033007	.004691
%RSD	.1668205	.7839130	.2452169	.1673715	.4006339	.2378377
#1	7.644612	.2022405	1.969306	19.50418	.8200872	1.971578
#2	7.666389	.2019103	1.967403	19.52291	.8254103	1.968221
#3	7.643964	.1993590	1.976562	19.45941	.8261300	1.977487

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.009452**	**3.991914**	**1.935462**	**19.78302**	**1.975161**	**.9870300**
Stddev	.002829	.046216	.000619	.12028	.004813	.0022614
%RSD	.2802420	1.157741	.0319926	.6079962	.2436896	.2291120
#1	1.008864	3.944094	1.934931	19.82536	1.974412	.9848968
#2	1.006964	3.995308	1.935313	19.87640	1.970766	.9867924
#3	1.012529	4.036339	1.936142	19.64730	1.980305	.9894009

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.03587**	**1.957589**	**2.006899**	**19.55253**	**3.912031**	**4.026561**
Stddev	.19524	.006543	.001315	.22772	.037345	.011415
%RSD	1.025641	.3342397	.0655188	1.164653	.9546255	.2834983
#1	18.85135	1.953684	2.007960	19.29091	3.946246	4.030383
#2	19.01596	1.965142	2.007308	19.66050	3.917655	4.013725
#3	19.24030	1.953939	2.005428	19.70618	3.872193	4.035575

Sample Name: ICV01 Acquired: 10/2/2025 11:07:22 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.009164	3.933565	F 3.631085	F .0023974	F .0292042	F -.004843
Stddev	.012476	.015463	.061009	.0013699	.0005927	.004626
%RSD	.3111880	.3930970	1.680183	57.14206	2.029651	95.51546
#1	4.012767	3.916759	3.564098	.0037681	.0296908	-.005393
#2	3.995283	3.947190	3.645695	.0023958	.0285441	.000033
#3	4.019443	3.936745	3.683463	.0010283	.0293778	-.009170

Elem	Sr4077
Units	ppm
Avg	F -.003439
Stddev	.000059
%RSD	1.716340
#1	-.003500
#2	-.003382
#3	-.003434

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8038.933	98654.35	6141.017	6126.934	9054.511
Stddev	21.112	827.58	44.186	55.434	20.096
%RSD	.2626252	.8388635	.7195198	.9047530	.2219476
#1	8016.995	99566.44	6142.246	6190.723	9034.492
#2	8059.110	97951.41	6096.230	6099.631	9074.684
#3	8040.694	98445.21	6184.576	6090.447	9054.356

Sample Name: LLICV01 Acquired: 10/2/2025 11:11:20 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0216894**	**.0460871**	**.0131975**	**.0227769**	**.0522646**	**.1198364**	**.1130984**
Stddev	.0007024	.0013825	.0008436	.0011793	.0019457	.0093288	.0019183
%RSD	3.238547	2.999795	6.391832	5.177652	3.722838	7.784587	1.696103
#1	.0220068	.0456107	.0123575	.0230066	.0512044	.1093853	.1128401
#2	.0208843	.0476448	.0140445	.0214996	.0510793	.1273217	.1151327
#3	.0221771	.0450057	.0131905	.0238244	.0545102	.1228023	.1113224

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0068043**	**.0060276**	**2.110052**	**.0112162**	**.0301083**	**.0221810**	**.1041650**
Stddev	.0001354	.0000718	.030480	.0000702	.0001964	.0004600	.0074037
%RSD	1.990047	1.190969	1.444517	.6257406	.6521657	2.073861	7.107715
#1	.0069582	.0060086	2.103477	.0112667	.0298829	.0220513	.0956160
#2	.0067036	.0059672	2.083396	.0112458	.0302423	.0226919	.1083934
#3	.0067509	.0061069	2.143283	.0111360	.0301998	.0217998	.1084855

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0215475**	**2.217155**	**.0403550**	**.0110047**	**1.686488**	**.0422250**	**.0423871**
Stddev	.0009729	.034717	.0003346	.0008463	.034990	.0032076	.0001094
%RSD	4.514885	1.565825	.8290912	7.690024	2.074728	7.596447	.2580313
#1	.0213795	2.203891	.0405495	.0109442	1.646195	.0458923	.0425078
#2	.0225935	2.256548	.0399686	.0101903	1.709206	.0408409	.0422947
#3	.0206697	2.191025	.0405468	.0118796	1.704064	.0399419	.0423587

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.769748**	**.1191891**	**.2038497**	**.0414877**	**.0413868**	**.3596071**	**.0182253**
Stddev	.060756	.0004650	.0003867	.0005632	.0038541	.0086437	.0005381
%RSD	3.433005	.3901451	.1897197	1.357426	9.312475	2.403649	2.952623
#1	1.837412	.1186747	.2039936	.0416516	.0371572	.3590582	.0176791
#2	1.751961	.1193130	.2034117	.0408608	.0423027	.3685122	.0187550
#3	1.719871	.1195797	.2041439	.0419508	.0447004	.3512510	.0182418

Sample Name: LLICV01 Acquired: 10/2/2025 11:11:20 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0178532	.0198670	.0214294
Stddev	.0002115	.0022761	.0000672
%RSD	1.184833	11.45651	.3133730
#1	.0176377	.0196055	.0214052
#2	.0178613	.0222626	.0215053
#3	.0180605	.0177330	.0213777

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8222.637	99523.48	6029.267	6204.944	9751.177
Stddev	15.538	861.25	36.892	40.529	20.726
%RSD	.1889661	.8653702	.6118741	.6531736	.2125501
#1	8240.370	100517.7	6001.811	6251.560	9774.251
#2	8216.133	99007.6	6071.202	6178.057	9734.137
#3	8211.408	99045.1	6014.789	6185.215	9745.143

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: ICB01 Acquired: 10/2/2025 11:27:08 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000856**	**.0038102**	**.0030384**	**-.003997**	**.0023852**	**.0177943**	**.0152777**
Stddev	.001553	.0021148	.0014143	.002583	.0002540	.0191147	.0020396
%RSD	181.3369	55.50342	46.54936	64.62429	10.64968	107.4206	13.35027
#1	.000108	.0046071	.0046709	-.001116	.0025090	.0052483	.0164339
#2	-.002647	.0054107	.0021847	-.004767	.0025535	.0083408	.0164764
#3	-.000030	.0014127	.0022594	-.006106	.0020930	.0397937	.0129226

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000039**	**-.000138**	**.0041291**	**.0008650**	**-.000127**	**.0002298**	**.0029612**
Stddev	.000086	.000030	.0345681	.0004816	.000277	.0003779	.0030436
%RSD	218.6366	22.01930	837.1866	55.67490	217.5135	164.4696	102.7830
#1	-.000139	-.000104	.0440037	.0003480	.000190	.0002002	.0011940
#2	.000003	-.000148	-.017378	.0013008	-.000320	-.000132	.0064756
#3	.000018	-.000162	-.014238	.0009463	-.000252	.000622	.0012140

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000564**	**.0354201**	**-.000073**	**-.000633**	**-.695784**	**.0021646**	**-.000880**
Stddev	.000633	.0220426	.000160	.000171	.013408	.0046237	.000079
%RSD	112.3215	62.23179	219.6403	26.98357	1.927012	213.6011	8.984620
#1	-.000654	.0458068	-.000170	-.000437	-.699329	.0021255	-.000789
#2	-.001147	.0101031	.000112	-.000714	-.707063	.0068078	-.000933
#3	.000110	.0503504	-.000160	-.000748	-.680960	-.002439	-.000918

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.710999**	**.0042463**	**.0000013**	F **-.028711**	**.0014029**	**-.004529**	**-.002199**
Stddev	.084364	.0012661	.0000296	.000232	.0020308	.016359	.000341
%RSD	11.86551	29.81639	2339.214	.8078604	144.7609	361.2109	15.50997
#1	-.805078	.0048985	-.000018	-.028893	.0034302	.000697	-.002522
#2	-.685849	.0027871	.000035	-.028450	.0014100	.008578	-.001842
#3	-.642071	.0050534	-.000013	-.028790	-.000631	-.022863	-.002232

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: ICB01 Acquired: 10/2/2025 11:27:08 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.006413	F -.015674	-.000253
Stddev	.001909	.001521	.000067
%RSD	29.76715	9.701374	26.24419
#1	-.005377	-.013994	-.000251
#2	-.008616	-.016072	-.000188
#3	-.005245	-.016956	-.000321

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8223.254	102621.4	5749.286	6280.691	9810.663
Stddev	2.157	443.1	30.484	39.215	12.852
%RSD	.0262306	.4317728	.5302138	.6243759	.1309987
#1	8222.714	102315.6	5714.087	6276.434	9820.346
#2	8225.630	102419.1	5767.121	6243.777	9815.561
#3	8221.418	103129.6	5766.649	6321.860	9796.083

Sample Name: CRI01 Acquired: 10/2/2025 11:36:51 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0231254**	**.0466232**	**.0132879**	**.0237572**	**.0534116**	**.1162570**	**.1128815**
Stddev	.0011278	.0013609	.0007389	.0031150	.0006259	.0219336	.0004956
%RSD	4.877074	2.918989	5.560602	13.11201	1.171897	18.86649	.4390246
#1	.0233459	.0456896	.0141067	.0220249	.0541111	.0925282	.1126805
#2	.0241266	.0459953	.0126708	.0218933	.0532191	.1204537	.1125180
#3	.0219035	.0481847	.0130861	.0273533	.0529045	.1357890	.1134460

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0069523**	**.0060222**	**2.082300**	**.0104810**	**.0302459**	**.0224710**	**.0884834**
Stddev	.0000614	.0000931	.002978	.0004430	.0002564	.0001860	.0075588
%RSD	.8833968	1.545268	.1429908	4.227067	.8476596	.8277639	8.542561
#1	.0069427	.0060981	2.080882	.0109904	.0304022	.0223789	.0971158
#2	.0068963	.0059184	2.085721	.0102669	.0299500	.0226851	.0852841
#3	.0070180	.0060502	2.080295	.0101857	.0303856	.0223491	.0830505

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0209677**	**2.248130**	**.0407534**	**.0102978**	**1.486411**	**.0372377**	**.0414577**
Stddev	.0010895	.059226	.0005337	.0002742	.019272	.0091694	.0001941
%RSD	5.195855	2.634478	1.309668	2.662768	1.296537	24.62408	.4681356
#1	.0219757	2.239560	.0413153	.0101788	1.465348	.0306371	.0412475
#2	.0198119	2.193655	.0406916	.0101032	1.503162	.0333684	.0414956
#3	.0211156	2.311174	.0402532	.0106114	1.490724	.0477076	.0416301

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.532351**	**.1125330**	**.1998926**	**.0416226**	**.0389818**	**.3239771**	**.0178130**
Stddev	.082598	.0013984	.0006383	.0004845	.0018028	.0144118	.0013397
%RSD	5.390276	1.242663	.3193216	1.164136	4.624677	4.448400	7.521132
#1	1.627441	.1130452	.2003297	.0417476	.0389553	.3398107	.0190430
#2	1.491197	.1136032	.2001880	.0420324	.0407976	.3204956	.0163854
#3	1.478416	.1109507	.1991601	.0410878	.0371923	.3116250	.0180106

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: CRI01 Acquired: 10/2/2025 11:36:51 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0174007	.0184881	.0209090
Stddev	.0019164	.0011463	.0003855
%RSD	11.01307	6.200203	1.843793
#1	.0192184	.0197976	.0213037
#2	.0153990	.0180001	.0205333
#3	.0175848	.0176665	.0208901

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8102.738	100873.3	5793.211	6240.747	9471.940
Stddev	19.366	345.3	7.498	45.736	26.940
%RSD	.2390045	.3422835	.1294309	.7328673	.2844181
#1	8105.839	101016.3	5784.837	6254.233	9482.508
#2	8082.010	101124.1	5795.494	6278.225	9441.318
#3	8120.367	100479.5	5799.303	6189.784	9491.993

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: ICSA01 Acquired: 10/2/2025 11:42:04 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0058495	.0139547	-.007865	-.008133	.0019942	245.4776	.0186577
Stddev	.0013925	.0020037	.002467	.004932	.0018859	.9904	.0002211
%RSD	23.80591	14.35842	31.36852	60.63888	94.56803	.4034621	1.184973
#1	.0072620	.0160101	-.006002	-.002450	.0013388	246.6055	.0188992
#2	.0044779	.0120071	-.010663	-.010658	.0041203	245.0772	.0184653
#3	.0058084	.0138470	-.006931	-.011291	.0005234	244.7500	.0186086

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019816	-.001226	236.3809	.0507701	.0002724	.0035309	95.96711
Stddev	.0001241	.000180	.8581	.0001130	.0000823	.0007208	1.21403
%RSD	6.263320	14.70838	.3630337	.2225185	30.22927	20.41497	1.265049
#1	.0020515	-.001021	237.2045	.0506710	.0003007	.0039813	94.82632
#2	.0018383	-.001297	236.4461	.0508931	.0003368	.0039118	95.83196
#3	.0020551	-.001360	235.4920	.0507463	.0001796	.0026995	97.24307

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002294	250.6928	.0034141	-.003772	-.180733	.0025376	-.000077
Stddev	.0012815	.9714	.0003224	.000928	.043229	.0026046	.000410
%RSD	558.5745	.3875006	9.442676	24.60167	23.91848	102.6406	535.2997
#1	-.000214	251.7056	.0031591	-.004839	-.230643	.0055450	.000351
#2	.001674	250.6040	.0033068	-.003318	-.156455	.0010492	-.000467
#3	-.000772	249.7688	.0037765	-.003158	-.155102	.0010185	-.000114

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.102202	-.006490	.0006508	-.002046	-.001122	-.006159	-.000945
Stddev	.046239	.006815	.0002356	.000257	.002057	.022197	.001338
%RSD	45.24259	105.0151	36.20479	12.56553	183.2446	360.3981	141.6195
#1	-.105498	-.013153	.0004105	-.002208	.001212	.018596	-.001118
#2	-.146705	-.006784	.0006604	-.002182	-.002668	-.024289	.000472
#3	-.054404	.000468	.0008814	-.001750	-.001911	-.012784	-.002187

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: ICSA01 Acquired: 10/2/2025 11:42:04 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.006561	F -.031118	.0066149
Stddev	.001953	.000688	.0015363
%RSD	29.77179	2.211241	23.22540
#1	-.004716	-.030571	.0080885
#2	-.008607	-.030892	.0067335
#3	-.006361	-.031890	.0050227

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7482.126	89404.01	5517.234	5741.288	8082.288
Stddev	16.715	385.54	73.231	24.628	19.877
%RSD	.2234015	.4312325	1.327305	.4289608	.2459369
#1	7477.108	89430.93	5439.618	5730.154	8077.406
#2	7468.494	89775.39	5526.981	5769.517	8065.306
#3	7500.775	89005.72	5585.102	5724.194	8104.151

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: ICSAB01 Acquired: 10/2/2025 11:46:10 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1104414**	**.1148952**	**.0426298**	**.0467042**	**.6221278**	**249.1307**
Stddev	.0026458	.0008453	.0026046	.0031048	.0024972	.4365
%RSD	2.395684	.7356926	6.109862	6.647749	.4013899	.1752045
#1	.1117369	.1155636	.0396400	.0438395	.6246661	249.6092
#2	.1073975	.1151770	.0444078	.0462697	.6196739	249.0285
#3	.1121898	.1139450	.0438414	.0500033	.6220435	248.7544

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5147428**	**.5476138**	**1.044159**	**240.0373**	**.5940481**	**.5145864**
Stddev	.0009081	.0039660	.001305	.1388	.0019871	.0004879
%RSD	.1764237	.7242412	.1250050	.0578211	.3345047	.0948057
#1	.5153158	.5440615	1.043214	240.1974	.5955866	.5141456
#2	.5136958	.5518931	1.043615	239.9644	.5918046	.5145032
#3	.5152169	.5468868	1.045648	239.9502	.5947532	.5151106

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5101702**	**98.31524**	**.4973366**	**254.9160**	**1.032925**	**.2122198**
Stddev	.0012496	.99117	.0021397	.3421	.001253	.0007450
%RSD	.2449480	1.008152	.4302388	.1342081	.1212637	.3510363
#1	.5088558	99.22451	.4976061	255.2137	1.033026	.2124925
#2	.5113431	97.25867	.4993288	254.9922	1.031625	.2113769
#3	.5103116	98.46253	.4950749	254.5423	1.034124	.2127899

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.229019**	**.4994687**	**1.057566**	**-.265058**	**1.030921**	**1.030446**
Stddev	.033101	.0045809	.003301	.026968	.004893	.001086
%RSD	14.45328	.9171461	.3121778	10.17441	.4746501	.1054253
#1	-.224672	.4947838	1.057685	-.237682	1.026327	1.029463
#2	-.198306	.4996843	1.054206	-.265894	1.036066	1.031613
#3	-.264078	.5039379	1.060806	-.291598	1.030370	1.030264

Sample Name: ICSAB01 Acquired: 10/2/2025 11:46:10 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.059368	.9993518	.9717933	F .0027809	F -.000634	F -.038114
Stddev	.003504	.0021671	.0258255	.0006680	.003690	.001110
%RSD	.3307639	.2168478	2.657511	24.02075	581.7500	2.911197
#1	1.055697	1.001328	.9454007	.0029674	-.003951	-.036832
#2	1.062677	.999694	.9970117	.0033359	.003341	-.038753
#3	1.059731	.997034	.9729675	.0020395	-.001293	-.038756

Elem	Sr4077
Units	ppm
Avg	F .0058375
Stddev	.0009553
%RSD	16.36404
#1	.0050644
#2	.0069054
#3	.0055427

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7434.976	89366.44	5590.968	5699.901	8040.414
Stddev	17.007	651.58	22.481	47.139	19.894
%RSD	.2287423	.7291082	.4021014	.8270145	.2474248
#1	7416.141	88696.96	5585.315	5671.447	8017.445
#2	7439.583	89998.50	5571.852	5754.314	8052.203
#3	7449.205	89403.85	5615.736	5673.943	8051.594

Sample Name: ICSADLX20 Acquired: 10/2/2025 11:50:11 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008752**	**.0056413**	**.0007634**	**.0048261**	**.0014293**	**13.44265**	**.0182722**
Stddev	.0017018	.0008081	.0004317	.0010523	.0001276	.06375	.0010520
%RSD	194.4348	14.32489	56.55001	21.80515	8.927102	.4742723	5.757461
#1	.0028375	.0065449	.0012492	.0060388	.0015009	13.47812	.0180320
#2	-.000016	.0053908	.0006171	.0042850	.0015051	13.48078	.0173611
#3	-.000196	.0049880	.0004238	.0041543	.0012820	13.36904	.0194236

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003059**	**-.000216**	**13.13294**	**.0030125**	**-.000048**	**-.000259**	**5.016671**
Stddev	.0000889	.000062	.04329	.0004226	.000248	.000213	.033570
%RSD	29.05078	28.79492	.3296196	14.02756	518.3236	82.31038	.6691607
#1	.0002053	-.000286	13.17721	.0032431	-.000256	-.000374	5.054821
#2	.0003736	-.000193	13.13091	.0025248	.000226	-.000013	5.003541
#3	.0003389	-.000168	13.09071	.0032697	-.000114	-.000389	4.991650

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001856**	**14.23205**	**-.000082**	**-.000511**	**-.505316**	**.0011192**	**-.001285**
Stddev	.0009905	.07775	.000304	.000672	.022251	.0051126	.000275
%RSD	533.8022	.5462923	369.9898	131.4283	4.403328	456.7911	21.37929
#1	.0011768	14.29085	.000224	-.000673	-.487648	-.004609	-.001424
#2	.0001842	14.14390	-.000384	.000227	-.530305	.002747	-.000969
#3	-.000804	14.26141	-.000086	-.001087	-.497996	.005219	-.001463

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.572629**	**-.001185**	**-.000071**	**.0010387**	**.0013041**	**-.036483**	**-.004301**
Stddev	.081295	.000998	.000122	.0001195	.0019948	.026714	.000928
%RSD	14.19672	84.27481	170.9303	11.50677	152.9654	73.22222	21.58457
#1	-.659638	-.000352	.000066	.0009683	.0019664	-.066642	-.003743
#2	-.559636	-.002292	-.000112	.0011767	.0028835	-.015792	-.005373
#3	-.498614	-.000910	-.000167	.0009710	-.000938	-.027017	-.003788

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: ICSADLX20 Acquired: 10/2/2025 11:50:11 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.005043	-.010388	.0004004
Stddev	.002916	.003466	.0001453
%RSD	57.81416	33.36879	36.27583
#1	-.007896	-.014367	.0005574
#2	-.002069	-.008772	.0003733
#3	-.005165	-.008024	.0002707

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8124.972	98353.65	5758.067	6059.383	9540.375
Stddev	12.050	562.32	33.614	2.473	14.258
%RSD	.1483041	.5717286	.5837656	.0408189	.1494472
#1	8129.353	98932.95	5784.758	6061.440	9543.732
#2	8111.345	98317.96	5769.126	6060.072	9524.738
#3	8134.218	97810.02	5720.317	6056.639	9552.655

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: ICSABDLX20 Acquired: 10/2/2025 11:54:20 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0067733**	**.0102947**	**.0020860**	**.0080883**	**.0323017**	**12.39232**	**.0408283**
Stddev	.0009024	.0022476	.0015431	.0001980	.0017594	.05373	.0006753
%RSD	13.32246	21.83231	73.97457	2.447542	5.446704	.4336062	1.654007
#1	.0057314	.0083174	.0014988	.0079774	.0315291	12.39724	.0415742
#2	.0073059	.0127391	.0009227	.0083169	.0343152	12.33630	.0402584
#3	.0072826	.0098277	.0038365	.0079707	.0310609	12.44343	.0406524

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0281534**	**.0500036**	**12.16817**	**.0300040**	**.0247234**	**.0264335**	**4.656006**
Stddev	.0002565	.0000994	.01685	.0001541	.0001808	.0008432	.023849
%RSD	.9111723	.1987500	.1385044	.5136823	.7311961	3.189846	.5122223
#1	.0284452	.0501151	12.18440	.0301169	.0249055	.0254602	4.637917
#2	.0280514	.0499717	12.16935	.0300667	.0245440	.0268984	4.647068
#3	.0279635	.0499242	12.15076	.0298284	.0247207	.0269418	4.683033

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0250708**	**13.10380**	**.0499377**	**.0097210**	**-.499124**	**.0248636**	**.0514555**
Stddev	.0008394	.04112	.0002263	.0007112	.022043	.0032327	.0001892
%RSD	3.348227	.3138006	.4531701	7.315588	4.416382	13.00196	.3677893
#1	.0246424	13.05743	.0498531	.0089191	-.480087	.0242135	.0515842
#2	.0245320	13.11815	.0497659	.0099690	-.494010	.0283720	.0512382
#3	.0260380	13.13583	.0501942	.0102749	-.523274	.0220053	.0515441

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.561215**	**.0518584**	**.0506941**	**.0513259**	**.0525032**	**.0364536**	**-.001901**
Stddev	.046091	.0016133	.0000607	.0005483	.0026201	.0208528	.001044
%RSD	8.212792	3.110896	.1197167	1.068258	4.990349	57.20384	54.93044
#1	-.609230	.0530289	.0506308	.0508774	.0520621	.0133508	-.002850
#2	-.517324	.0525281	.0507518	.0519371	.0501316	.0538818	-.002069
#3	-.557093	.0500181	.0506996	.0511632	.0553158	.0421282	-.000783

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: ICSABDLX20 Acquired: 10/2/2025 11:54:20 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.000005	-.010824	.0004536
Stddev	.001420	.003228	.0001894
%RSD	27460.17	29.82493	41.75145
#1	.001612	-.013389	.0002868
#2	-.000580	-.011883	.0006595
#3	-.001047	-.007199	.0004146

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8000.901	98096.25	5767.093	6126.877	9319.137
Stddev	6.492	252.71	15.713	32.284	5.189
%RSD	.0811412	.2576189	.2724563	.5269288	.0556796
#1	8007.976	98321.28	5750.423	6122.404	9314.084
#2	7999.509	98144.63	5781.632	6161.165	9324.451
#3	7995.218	97822.85	5769.224	6097.063	9318.875

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: CCV01 Acquired: 10/2/2025 11:58:26 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.095074**	**5.078578**	**5.083553**	**5.122565**	**4.954245**	**9.907362**	**9.628780**
Stddev	.016086	.118786	.010034	.018219	.004201	.042041	.112785
%RSD	.3157131	2.338954	.1973795	.3556670	.0847860	.4243429	1.171337
#1	5.084263	4.945182	5.076035	5.109354	4.957247	9.934280	9.693314
#2	5.087399	5.117634	5.079676	5.114992	4.949444	9.928888	9.694478
#3	5.113560	5.172919	5.094947	5.143350	4.956043	9.858917	9.498548

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2674385**	**2.531834**	**24.84214**	**1.041526**	**2.492503**	**1.262017**	**4.738865**
Stddev	.0005232	.005023	.14585	.003401	.002001	.001789	.078292
%RSD	.1956354	.1983803	.5871177	.3265632	.0802740	.1417781	1.652120
#1	.2678329	2.527402	24.95503	1.044497	2.490757	1.260165	4.783690
#2	.2676376	2.530812	24.89393	1.042264	2.492065	1.262150	4.784442
#3	.2668450	2.537290	24.67746	1.037816	2.494686	1.263737	4.648462

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.442497**	**25.07656**	**2.501977**	**1.264166**	**22.84700**	**2.471087**	**2.522920**
Stddev	.027390	.15062	.002441	.002909	.41364	.005185	.001820
%RSD	1.121392	.6006228	.0975457	.2301268	1.810496	.2098431	.0721401
#1	2.457775	25.19488	2.499940	1.266794	23.15299	2.465140	2.524811
#2	2.458840	25.12778	2.501309	1.264664	23.01162	2.474666	2.521181
#3	2.410876	24.90701	2.504682	1.261040	22.37639	2.473455	2.522767

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.28794**	**5.306156**	**4.961630**	**5.101696**	**4.880227**	**4.733376**	**5.172741**
Stddev	.17067	.002986	.009781	.014091	.046493	.014820	.019410
%RSD	.7328511	.0562686	.1971415	.2761972	.9526773	.3130955	.3752363
#1	23.41910	5.302760	4.953238	5.090373	4.906731	4.747136	5.151128
#2	23.34974	5.308370	4.959279	5.097240	4.907406	4.735307	5.178413
#3	23.09499	5.307338	4.972373	5.117476	4.826543	4.717685	5.188684

Sample Name: CCV01 Acquired: 10/2/2025 11:58:26 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**5.042924**	**4.737169**	**4.890031**
Stddev	.026802	.047647	.037674
%RSD	.5314814	1.005804	.7704185
#1	5.014051	4.768358	4.868980
#2	5.047710	4.760825	4.867587
#3	5.067011	4.682323	4.933525

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7826.667**	**95018.86**	**5590.567**	**5999.996**	**8657.938**
Stddev	13.863	678.40	29.140	36.178	14.488
%RSD	.1771199	.7139587	.5212284	.6029739	.1673361
#1	7841.300	94611.52	5582.972	5985.360	8673.474
#2	7824.971	94643.07	5565.977	5973.430	8655.542
#3	7813.731	95801.99	5622.752	6041.200	8644.798

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: CCB01 Acquired: 10/2/2025 12:02:30 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003567**	**.0037152**	**.0006793**	**.0053975**	**.0018821**	**.0047627**	**.0138459**
Stddev	.0013540	.0038231	.0005961	.0007429	.0016645	.0225533	.0007331
%RSD	379.6408	102.9054	87.75279	13.76389	88.43656	473.5394	5.294778
#1	.0014096	.0054361	.0001158	.0061607	.0031129	-.013465	.0136794
#2	-.001171	-.000666	.0013033	.0053549	-.000012	.029984	.0132104
#3	.000831	.006375	.0006187	.0046768	.002545	-.002231	.0146480

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000982**	**-.000098**	**.0147129**	**.0002381**	**.0000509**	**-.000244**	**-.003273**
Stddev	.0000788	.000067	.0190564	.0003163	.0001425	.000449	.011152
%RSD	80.29920	68.13059	129.5216	132.8626	280.2364	184.3046	340.7627
#1	.0001828	-.000162	.0217627	.0004838	.0000918	-.000638	-.014456
#2	.0000847	-.000028	-.006864	.0003494	-.000108	-.000339	.007847
#3	.0000270	-.000105	.029240	-.000119	.000168	.000246	-.003208

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000084**	**.0314050**	**-.000540**	**-.000201**	**-.516892**	**.0001021**	**-.001171**
Stddev	.000784	.0137356	.000278	.000966	.031230	.0035251	.000071
%RSD	935.6466	43.73699	51.46562	481.5187	6.041840	3451.911	6.065354
#1	.000739	.0471544	-.000719	-.000980	-.538653	.0009338	-.001200
#2	-.000168	.0251531	-.000220	.000880	-.530913	-.003765	-.001090
#3	-.000823	.0219075	-.000680	-.000501	-.481108	.003137	-.001223

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.541037**	**.0062511**	**.0001089**	**.0020089**	**-.000567**	**-.006989**	**-.003787**
Stddev	.051765	.0001541	.0001419	.0008427	.001793	.013407	.000183
%RSD	9.567725	2.464488	130.3278	41.94570	316.1216	191.8212	4.826261
#1	-.563762	.0061986	.0002481	.0011109	.001270	-.019685	-.003602
#2	-.577552	.0061301	.0001143	.0027824	-.002313	.007030	-.003790
#3	-.481797	.0064245	-.000036	.0021334	-.000658	-.008313	-.003968

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: CCB01 Acquired: 10/2/2025 12:02:30 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.001723	F -.010724	.0001926
Stddev	.001395	.007489	.0002640
%RSD	80.96196	69.82941	137.0751
#1	-.001571	-.003417	.0000993
#2	-.003188	-.010374	.0004907
#3	-.000410	-.018381	-.000012

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8058.074	100459.9	5724.615	6253.410	9503.351
Stddev	18.758	249.6	22.907	8.945	12.342
%RSD	.2327792	.2484999	.4001477	.1430493	.1298675
#1	8068.263	100654.2	5750.236	6255.845	9502.980
#2	8036.427	100547.1	5706.112	6243.499	9491.199
#3	8069.532	100178.3	5717.496	6260.886	9515.874

Sample Name: LR-1 Acquired: 10/2/2025 12:06:41 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0021056**	**.0220187**	**.0153045**	**.0048801**	**.0168759**	**.3681437**	**.0327877**
Stddev	.0032475	.0034082	.0029130	.0040724	.0050503	.0049898	.0018035
%RSD	154.2321	15.47850	19.03350	83.44937	29.92624	1.355397	5.500470
#1	-.001399	.0231698	.0131258	.0021580	.0223350	.3696441	.0307678
#2	.005013	.0181840	.0186132	.0095618	.0159224	.3625758	.0333591
#3	.002703	.0247023	.0141745	.0029204	.0123703	.3722111	.0342363

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010206**	**.0006657**	**2415.990**	**.0369462**	**.0072473**	**.0066875**	**.6285023**
Stddev	.0000320	.0000589	31.163	.0009112	.0002544	.0004246	.0071180
%RSD	3.137859	8.846110	1.289881	2.466372	3.510715	6.349645	1.132541
#1	.0010121	.0006654	2402.358	.0359898	.0075399	.0068734	.6331108
#2	.0010560	.0007248	2393.966	.0378042	.0071249	.0069876	.6320920
#3	.0009937	.0006070	2451.647	.0370448	.0070773	.0062017	.6203042

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0253247**	**2204.108**	**.0281599**	**-.002628**	**2352.364**	**.0113625**	**.0683965**
Stddev	.0013684	1.596	.0005794	.000173	35.949	.0024807	.0004457
%RSD	5.403242	.0724135	2.057570	6.589559	1.528212	21.83266	.6516928
#1	.0258821	2205.830	.0284852	-.002595	2385.477	.0088440	.0681544
#2	.0263265	2203.815	.0285036	-.002815	2357.487	.0138037	.0681242
#3	.0237656	2202.679	.0274910	-.002474	2314.128	.0114397	.0689109

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.026041**	**.0129748**	**.0062253**	**-.019599**	**-.086922**	**-.037398**	**.0141179**
Stddev	.963309	.0002917	.0002892	.000333	.002042	.020631	.0024664
%RSD	10.67255	2.248171	4.645557	1.698728	2.349634	55.16616	17.47038
#1	7.992847	.0127351	.0064102	-.019414	-.085765	-.024941	.0151361
#2	9.185782	.0128897	.0063737	-.019399	-.085721	-.026042	.0159122
#3	9.899494	.0132996	.0058920	-.019983	-.089280	-.061213	.0113054

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: LR-1 Acquired: 10/2/2025 12:06:41 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2369573	-.354711	.0589026
Stddev	.0039124	.007213	.0004455
%RSD	1.651117	2.033621	.7563355
#1	.2411541	-.361657	.0594165
#2	.2363069	-.347257	.0586264
#3	.2334107	-.355220	.0586648

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5882.183	72253.23	5364.204	4441.631	5942.134
Stddev	13.330	117.20	18.021	12.955	11.109
%RSD	.2266175	.1622129	.3359518	.2916706	.1869455
#1	5894.257	72124.66	5350.129	4450.499	5954.788
#2	5867.878	72280.91	5384.515	4447.630	5933.991
#3	5884.415	72354.12	5357.967	4426.764	5937.622

Sample Name: LR-2 Acquired: 10/2/2025 12:11:03 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0698610**	**-.118087**	**-.013388**	**-.762937**	**-.122239**	**1851.132**	**.0468446**
Stddev	.0035368	.010065	.004287	.022231	.013696	9.497	.0008986
%RSD	5.062653	8.523215	32.02059	2.913819	11.20459	.5130130	1.918245
#1	.0685707	-.128963	-.008724	-.787583	-.127822	1848.870	.0459884
#2	.0671504	-.116198	-.014284	-.756831	-.106633	1861.555	.0477803
#3	.0738617	-.109101	-.017156	-.744398	-.132262	1842.971	.0467650

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0539142**	**-.067666**	**14.44829**	**-.263306**	**.0199309**	**.0243265**	**2644.045**
Stddev	.0006913	.001085	.19521	.001989	.0001858	.0080955	21.430
%RSD	1.282127	1.602855	1.351077	.7552548	.9321023	33.27838	.8104920
#1	.0540461	-.068478	14.67035	-.264817	.0201069	.0187128	2664.127
#2	.0545300	-.068085	14.30376	-.264047	.0197367	.0206602	2646.525
#3	.0531665	-.066434	14.37076	-.261053	.0199491	.0336065	2621.483

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.451424**	**.9990549**	**.0499827**	**^ *****	**6.774691**	**.0389496**	**-.000938**
Stddev	.001788	.0346635	.0021409	-----	.029661	.0029361	.000950
%RSD	.3959843	3.469631	4.283244	-----	.4378156	7.538113	101.2496
#1	-.453147	1.029378	.0475942	^ -----	6.808885	.0373245	-.001219
#2	-.449578	1.006520	.0517289	^ -----	6.755900	.0371854	-.001716
#3	-.451546	.961267	.0506249	^ -----	6.759289	.0423390	.000120

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1676.706**	**^ *****	**-.015189**	**-.000183**	**.0078600**	**.4780723**	**.0592185**
Stddev	3.240	-----	.000101	.002619	.0020967	.0162567	.0006551
%RSD	.1932445	-----	.6618322	1428.245	26.67507	3.400464	1.106233
#1	1679.690	^ -----	-.015198	.000057	.0057238	.4947281	.0593437
#2	1677.167	^ -----	-.015084	.002307	.0099147	.4772421	.0585098
#3	1673.259	^ -----	-.015284	-.002914	.0079415	.4622466	.0598019

Sample Name: LR-2 Acquired: 10/2/2025 12:11:03 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**-.438398**	**.2656549**	**-2.53507**
Stddev	.013415	.0074222	.02060
%RSD	3.059956	2.793922	.8125537
#1	-.451170	.2742215	-2.55434
#2	-.439602	.2615943	-2.53751
#3	-.424422	.2611490	-2.51336

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7062.462**	**78384.27**	**5395.054**	**5218.921**	**7052.733**
Stddev	13.252	402.93	26.157	18.183	8.442
%RSD	.1876426	.5140402	.4848319	.3484125	.1197002
#1	7058.742	78570.03	5372.812	5207.138	7047.170
#2	7051.467	78660.80	5388.479	5239.863	7048.581
#3	7077.176	77921.97	5423.871	5209.762	7062.447

Sample Name: LR-3 Acquired: 10/2/2025 12:42:50 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1072259**	**.0613871**	**226.0789**	**.0386873**	**.2842126**	**.0525788**	**.0261278**
Stddev	.0040727	.0010413	2.2393	.0022029	.0086390	.0049266	.0018687
%RSD	3.798230	1.696344	.9905113	5.694146	3.039640	9.370006	7.152283
#1	.1025400	.0620195	226.7998	.0412156	.2937503	.0470886	.0259122
#2	.1092249	.0601852	223.5679	.0376650	.2769124	.0566141	.0243761
#3	.1099129	.0619565	227.8690	.0371813	.2819752	.0540339	.0280949

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.006630**	**-.002638**	**.1937233**	**26.31701**	**.0086658**	**54.83723**	**.0754585**
Stddev	.000155	.000100	.0030676	.51800	.0001540	.82575	.0131629
%RSD	2.334638	3.779496	1.583510	1.968315	1.777035	1.505823	17.44390
#1	-.006609	-.002620	.1972318	25.76311	.0088233	55.78144	.0745275
#2	-.006487	-.002549	.1915465	26.78947	.0085155	54.25014	.0627858
#3	-.006795	-.002746	.1923918	26.39845	.0086587	54.48011	.0890621

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**53.44304**	**-.177083**	**24.58918**	**.0051566**	**-.339611**	**-.053135**	**27.51311**
Stddev	.12278	.062365	.02675	.0005308	.007287	.006206	.13637
%RSD	.2297446	35.21762	.1087902	10.29423	2.145583	11.68045	.4956551
#1	53.56590	-.211246	24.61557	.0049151	-.347776	-.050672	27.36654
#2	53.32033	-.214902	24.58989	.0057652	-.337290	-.060195	27.63623
#3	53.44290	-.105102	24.56209	.0047894	-.333768	-.048538	27.53657

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.370737**	**.0117306**	**-.015637**	**-.013277**	**-.049896**	**-.079294**	**.1716296**
Stddev	.063618	.0011820	.000396	.000072	.002112	.008368	.0038735
%RSD	17.15977	10.07597	2.530689	.5438574	4.231948	10.55274	2.256865
#1	-.444165	.0130181	-.015790	-.013293	-.050212	-.069727	.1677084
#2	-.332168	.0106946	-.015932	-.013198	-.051832	-.085250	.1717268
#3	-.335878	.0114792	-.015187	-.013339	-.047645	-.082905	.1754535

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: LR-3 Acquired: 10/2/2025 12:42:50 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.1649451	-.012136	.0005394
Stddev	.0017962	.005276	.0004601
%RSD	1.088956	43.47572	85.28935
#1	.1641005	-.015823	.0010149
#2	.1637268	-.006092	.0000964
#3	.1670079	-.014493	.0005071

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7319.678	91233.71	4826.530	5737.916	8966.070
Stddev	17.780	707.40	17.342	74.958	31.633
%RSD	.2429034	.7753664	.3593083	1.306361	.3528114
#1	7334.559	92044.69	4807.205	5822.171	8997.361
#2	7299.989	90912.70	4840.738	5712.950	8934.105
#3	7324.487	90743.74	4831.646	5678.626	8966.745

Sample Name: Q3255-01 Acquired: 10/2/2025 12:55:49 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4563095**	**-.007876**	**.4291094**	**-.052467**	**.0060025**	**215.8755**
Stddev	.0039087	.001631	.0023671	.003751	.0025231	.1224
%RSD	.8565985	20.70290	.5516410	7.149159	42.03316	.0567211
#1	.4594777	-.009681	.4277261	-.052238	.0056042	216.0100
#2	.4519415	-.006510	.4318427	-.048836	.0037024	215.8461
#3	.4575093	-.007438	.4277595	-.056327	.0087011	215.7705

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.823725**	**.0238082**	**.0038660**	**1496.601**	**.2807599**	**.2105034**
Stddev	.006303	.0002138	.0002703	10.579	.0013495	.0006924
%RSD	.3456254	.8980705	6.991966	.7068540	.4806584	.3289216
#1	1.816565	.0240503	.0041013	1506.824	.2819867	.2097046
#2	1.826173	.0236450	.0039260	1497.279	.2809787	.2109319
#3	1.828438	.0237294	.0035707	1485.699	.2793144	.2108737

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4171409**	**250.2435**	**5.175199**	**67.80232**	**.3730310**	**-.024545**
Stddev	.0022584	2.6168	.015960	.07714	.0010123	.001244
%RSD	.5413986	1.045720	.3084010	.1137752	.2713652	5.067067
#1	.4196257	247.2320	5.157041	67.85466	.3722686	-.025974
#2	.4165835	251.9637	5.181550	67.83857	.3726449	-.023709
#3	.4152133	251.5348	5.187007	67.71373	.3741795	-.023951

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**34.97867**	**.5402258**	**.5610373**	**48.04816**	**.0282950**	**.0284751**
Stddev	.41255	.0129408	.0029471	.52033	.0101311	.0003652
%RSD	1.179433	2.395441	.5252959	1.082932	35.80529	1.282419
#1	34.50602	.5486142	.5614270	47.45406	.0166442	.0288907
#2	35.26646	.5467409	.5637701	48.42280	.0350333	.0283292
#3	35.16354	.5253222	.5579147	48.26763	.0332076	.0282055

Sample Name: Q3255-01 Acquired: 10/2/2025 12:55:49 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0365269	9.079083	5.415063	F 13.53876	F 34.69194	.2361327
Stddev	.0003738	.024587	.033751	.07296	.33093	.0020728
%RSD	1.023214	.2708084	.6232889	.5388781	.9539012	.8778135
#1	.0361743	9.053193	5.377471	13.53036	34.83695	.2337686
#2	.0369187	9.081938	5.442762	13.61556	34.92560	.2376382
#3	.0364877	9.102117	5.424956	13.47037	34.31326	.2369914

Elem	Sr4077
Units	ppm
Avg	F 13.18590
Stddev	.16403
%RSD	1.244014
#1	13.13239
#2	13.05529
#3	13.37000

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8434.049	97064.87	5669.909	6484.844	7012.425
Stddev	14.735	341.13	24.810	13.674	6.738
%RSD	.1747086	.3514419	.4375804	.2108646	.0960862
#1	8423.925	97455.45	5643.897	6498.755	7011.374
#2	8450.954	96913.83	5693.312	6471.420	7019.627
#3	8427.269	96825.34	5672.519	6484.358	7006.274

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3256-01 Acquired: 10/2/2025 13:00:03 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1407770**	**-.009106**	**3.265757**	**-.051863**	**-.000342**	**144.5312**	**1.383621**
Stddev	.0026180	.001314	.009161	.002808	.004130	.2309	.002016
%RSD	1.859644	14.43452	.2805158	5.415015	1206.002	.1597490	.1457259
#1	.1426973	-.007848	3.274991	-.054945	-.001946	144.7665	1.385078
#2	.1377949	-.010470	3.256671	-.049450	.004349	144.3049	1.384466
#3	.1418386	-.009001	3.265610	-.051193	-.003430	144.5221	1.381320

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0126727**	**.0058204**	**235.6341**	**.2686174**	**.1019875**	**.6539182**	**207.8131**
Stddev	.0000915	.0002678	.1595	.0020364	.0006018	.0006638	1.1866
%RSD	.7223104	4.601470	.0677023	.7581087	.5900344	.1015103	.5709757
#1	.0126239	.0061159	235.7899	.2666537	.1025000	.6546815	207.2817
#2	.0127783	.0057516	235.6413	.2684790	.1013249	.6534764	206.9850
#3	.0126158	.0055937	235.4711	.2707194	.1021375	.6535967	209.1724

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.256331**	**28.98286**	**.2078156**	**-.016746**	**28.36126**	**.3636956**	**2.258005**
Stddev	.010985	.05163	.0001226	.000764	.10130	.0043467	.007421
%RSD	.3373527	.1781255	.0590073	4.562586	.3571674	1.195150	.3286360
#1	3.264747	28.95653	.2077416	-.015972	28.26871	.3617244	2.250959
#2	3.260343	29.04234	.2077480	-.016766	28.34560	.3606838	2.257305
#3	3.243904	28.94969	.2079571	-.017500	28.46947	.3686787	2.265751

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.34433**	**.1098749**	**.0085682**	**.1676804**	**2.796682**	**8.015609**	**8.843692**
Stddev	.04632	.0071216	.0002089	.0010325	.007248	.067818	.096283
%RSD	.4083156	6.481548	2.438098	.6157347	.2591684	.8460749	1.088721
#1	11.30504	.1027823	.0084985	.1685612	2.801864	7.996402	8.925977
#2	11.33255	.1098170	.0088030	.1679359	2.788399	7.959466	8.737801
#3	11.39541	.1170252	.0084029	.1665442	2.799783	8.090959	8.867297

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3256-01 Acquired: 10/2/2025 13:00:03 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.413980**	**.1470900**	**1.063514**
Stddev	.058653	.0031148	.003742
%RSD	1.328797	2.117633	.3518549
#1	4.461609	.1446154	1.066542
#2	4.348467	.1505877	1.064670
#3	4.431863	.1460669	1.059331

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**8457.771**	**97208.37**	**5449.453**	**6424.996**	**8047.356**
Stddev	12.722	552.39	16.288	35.006	15.635
%RSD	.1504187	.5682516	.2988866	.5448361	.1942858
#1	8445.046	97236.00	5431.560	6419.568	8030.727
#2	8470.490	97746.43	5453.384	6462.398	8061.758
#3	8457.775	96642.69	5463.416	6393.021	8049.582

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3256-01DUP Acquired: 10/2/2025 13:04:01 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1192655**	**-.005734**	**3.198178**	**-.048402**	**.0021221**	**142.4381**	**1.363419**
Stddev	.0019134	.003083	.000790	.000946	.0025918	.3150	.004385
%RSD	1.604285	53.76841	.0246992	1.953561	122.1331	.2211687	.3216179
#1	.1212958	-.007979	3.197602	-.049002	.0051139	142.2000	1.358448
#2	.1174958	-.007005	3.199078	-.047312	.0005613	142.3191	1.365071
#3	.1190050	-.002219	3.197853	-.048892	.0006911	142.7953	1.366739

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0126882**	**.0059583**	**194.1322**	**.2545085**	**.0946943**	**.5688334**	**191.6748**
Stddev	.0001900	.0001833	.6616	.0002508	.0001250	.0015083	1.8576
%RSD	1.497591	3.076186	.3408074	.0985230	.1319772	.2651537	.9691524
#1	.0127437	.0060362	193.4204	.2547973	.0947820	.5698630	190.4197
#2	.0128442	.0060897	194.2478	.2543822	.0947497	.5695352	190.7959
#3	.0124766	.0057489	194.7284	.2543461	.0945512	.5671021	193.8088

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.697173**	**29.80693**	**.2085606**	**-.017192**	**24.41412**	**.3360252**	**2.581233**
Stddev	.010687	.22224	.0007680	.000873	.23404	.0071894	.002068
%RSD	.3962382	.7455984	.3682497	5.078747	.9586351	2.139542	.0801313
#1	2.684911	29.56965	.2080022	-.017971	24.23015	.3280426	2.583310
#2	2.704508	30.01022	.2082431	-.017356	24.33468	.3419904	2.579173
#3	2.702100	29.84090	.2094365	-.016248	24.67755	.3380425	2.581215

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.53570**	**-.133042**	**.0072152**	**.1579105**	**2.501050**	**4.868109**	**8.302865**
Stddev	.15444	.010652	.0002837	.0004997	.010338	.059171	.032963
%RSD	1.465877	8.006407	3.932206	.3164623	.4133517	1.215488	.3970024
#1	10.48382	-.134773	.0069249	.1579022	2.489794	4.859373	8.337676
#2	10.41388	-.142723	.0072288	.1584143	2.503236	4.813792	8.298789
#3	10.70940	-.121631	.0074919	.1574150	2.510120	4.931163	8.272130

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3256-01DUP Acquired: 10/2/2025 13:04:01 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.126688**	**.2098796**	**.9672823**
Stddev	.022502	.0064431	.0044106
%RSD	.5452765	3.069917	.4559766
#1	4.151419	.2120118	.9626738
#2	4.121223	.2026406	.9714639
#3	4.107422	.2149863	.9677092

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**8694.533**	**102181.7**	**5559.379**	**6710.624**	**8288.433**
Stddev	49.915	482.1	22.268	36.891	48.255
%RSD	.5740980	.4718141	.4005446	.5497344	.5821911
#1	8680.379	102410.4	5575.794	6727.983	8286.066
#2	8653.222	102507.0	5534.032	6735.633	8241.405
#3	8749.996	101627.9	5568.312	6668.257	8337.827

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: CCV02 Acquired: 10/2/2025 13:48:28 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.199173**	**5.287565**	**5.241449**	**5.318534**	**4.833843**	**9.451186**
Stddev	.018226	.295676	.027401	.010684	.027098	.146330
%RSD	.3505474	5.591907	.5227660	.2008886	.5605934	1.548274
#1	5.192659	5.300702	5.243640	5.317145	4.828069	9.291702
#2	5.185100	5.576454	5.213019	5.308612	4.810097	9.482594
#3	5.219761	4.985540	5.267688	5.329845	4.863362	9.579262

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.089482**	**.2455635**	**2.573881**	**23.97947**	**1.074333**	**2.464254**
Stddev	.089931	.0031442	.010542	.27951	.005537	.013587
%RSD	.9894017	1.280415	.4095755	1.165614	.5153887	.5513767
#1	8.988442	.2420150	2.573479	23.66817	1.080446	2.462879
#2	9.119244	.2466730	2.563546	24.06133	1.069654	2.451407
#3	9.160759	.2480027	2.584619	24.20891	1.072899	2.478477

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.262110**	**5.122069**	**2.334532**	**24.71480**	**2.485705**	**1.277427**
Stddev	.007186	.023181	.029323	.19589	.013798	.003231
%RSD	.5693532	.4525735	1.256072	.7925878	.5551068	.2529394
#1	1.260364	5.145889	2.302005	24.53168	2.483735	1.280315
#2	1.255959	5.099585	2.342648	24.69138	2.472999	1.273937
#3	1.270008	5.120731	2.358942	24.92135	2.500383	1.278028

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.83218**	**2.388302**	**2.497157**	**23.29383**	**4.677955**	**4.819320**
Stddev	.05395	.027748	.001742	.17506	.068255	.015560
%RSD	.2172506	1.161840	.0697427	.7515200	1.459077	.3228771
#1	24.85979	2.357656	2.498348	23.36382	4.599774	4.820972
#2	24.86674	2.411723	2.495158	23.09460	4.708412	4.802999
#3	24.77002	2.395528	2.497964	23.42306	4.725679	4.833989

Sample Name: CCV02 Acquired: 10/2/2025 13:48:28 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.267696**	**4.663919**	F **4.224088**	**5.485553**	**5.304656**	F **4.011778**
Stddev	.020266	.041516	.031632	.004964	.016558	.028525
%RSD	.3847228	.8901576	.7488527	.0904879	.3121402	.7110398
#1	5.273270	4.617077	4.220819	5.487167	5.302330	3.979011
#2	5.245227	4.678514	4.194217	5.489508	5.322254	4.025259
#3	5.284593	4.696168	4.257228	5.479983	5.289384	4.031064

Elem	Sr4077
Units	ppm
Avg	**4.604497**
Stddev	.042625
%RSD	.9257238
#1	4.557611
#2	4.614972
#3	4.640908

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7727.668**	**87325.89**	**4599.523**	**5772.921**	**8498.840**
Stddev	27.432	387.33	49.506	47.904	36.138
%RSD	.3549907	.4435471	1.076323	.8298139	.4252104
#1	7696.388	86890.76	4656.270	5719.330	8458.531
#2	7747.634	87453.88	4565.176	5787.849	8528.340
#3	7738.982	87633.03	4577.124	5811.584	8509.650

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: CCB02 Acquired: 10/2/2025 13:52:23 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0024544**	**.0090732**	**.0017327**	**.0061564**	**.0071677**	**-.007924**	**.0361078**
Stddev	.0003483	.0039249	.0015279	.0030442	.0041786	.006671	.0018843
%RSD	14.19195	43.25798	88.17809	49.44803	58.29696	84.18105	5.218413
#1	.0028553	.0074553	.0026036	.0080476	.0119927	-.000238	.0382049
#2	.0022824	.0135484	-.000031	.0077771	.0047700	-.012205	.0355615
#3	.0022256	.0062159	.002626	.0026447	.0047405	-.011330	.0345571

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000998**	**-.000125**	**.0063778**	**.0011463**	**.0001666**	**.0009059**	**.0081138**
Stddev	.0001857	.000055	.0274685	.0007873	.0001665	.0003047	.0145634
%RSD	186.0691	44.02121	430.6875	68.68456	99.93372	33.63003	179.4892
#1	-.000105	-.000160	.0179548	.0012430	.0001332	.0011306	.0240363
#2	.000256	-.000061	-.024984	.0018808	.0000193	.0005592	-.004532
#3	.000148	-.000152	.026163	.0003151	.0003473	.0010281	.004837

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009606**	**.0158437**	**-.000092**	**-.000311**	**-.504966**	**.0010766**	**-.000975**
Stddev	.0008145	.0916748	.000050	.000746	.036685	.0042098	.000088
%RSD	84.78506	578.6196	53.94864	240.0072	7.264885	391.0265	9.044023
#1	.0001856	.0974209	-.000040	.000549	-.468279	-.003651	-.000944
#2	.0008868	.0334773	-.000097	-.000788	-.541649	.002462	-.001074
#3	.0018095	-.083367	-.000140	-.000694	-.504971	.004419	-.000906

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.667256**	**.0085404**	**.0004260**	F **-.022154**	**.0025311**	**.0092140**	**-.006646**
Stddev	.030611	.0013116	.0004107	.000071	.0022042	.0146740	.002343
%RSD	4.587534	15.35707	96.40482	.3185123	87.08486	159.2578	35.24557
#1	-.701616	.0070288	.0004231	-.022091	.0044551	-.007697	-.009332
#2	-.642895	.0092164	.0008382	-.022230	.0030119	.018580	-.005584
#3	-.657258	.0093761	.0000168	-.022142	.0001262	.016759	-.005023

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: CCB02 Acquired: 10/2/2025 13:52:23 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0042843	F -.018080	-.000024
Stddev	.0005288	.006490	.000217
%RSD	12.34175	35.89807	899.7711
#1	.0037010	-.010776	-.000257
#2	.0047322	-.020276	.000011
#3	.0044196	-.023187	.000173

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8024.499	93858.72	4601.172	6099.973	9703.250
Stddev	10.960	386.79	32.955	22.629	5.488
%RSD	.1365759	.4120947	.7162199	.3709649	.0565563
#1	8019.775	94215.98	4563.432	6117.574	9697.144
#2	8016.694	93912.21	4615.822	6107.897	9704.835
#3	8037.028	93447.97	4624.261	6074.448	9707.771

Sample Name: Q3256-01LX5 Acquired: 10/2/2025 14:07:09 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0279249**	**.0059122**	**.6288315**	**-.001714**	**.0027905**	**31.95365**	**.3287960**
Stddev	.0018701	.0010996	.0092586	.004667	.0006524	.32914	.0035462
%RSD	6.696853	18.59859	1.472357	272.2391	23.37801	1.030066	1.078547
#1	.0280301	.0057555	.6382498	-.000406	.0021212	32.26963	.3297986
#2	.0297402	.0048995	.6285034	-.006895	.0028259	31.97857	.3317330
#3	.0260045	.0070818	.6197413	.002159	.0034245	31.61276	.3248564

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0037924**	**.0007046**	**52.82223**	**.0601896**	**.0185811**	**.1426892**	**42.81186**
Stddev	.0000672	.0000817	.42227	.0001796	.0003953	.0029446	.37075
%RSD	1.770980	11.60027	.7994179	.2983481	2.127413	2.063675	.8660016
#1	.0038275	.0007270	53.08440	.0603585	.0189461	.1457105	42.79585
#2	.0038347	.0006139	53.04717	.0602093	.0186358	.1425295	43.19035
#3	.0037149	.0007727	52.33510	.0600010	.0181612	.1398277	42.44937

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7265089**	**6.702003**	**.0380828**	**-.005035**	**5.246258**	**.0853622**	**.4865067**
Stddev	.0099940	.024422	.0008715	.000736	.097880	.0056644	.0023561
%RSD	1.375618	.3643943	2.288431	14.62684	1.865703	6.635756	.4842877
#1	.7313511	6.693639	.0389666	-.004737	5.148753	.0849939	.4887915
#2	.7331594	6.682862	.0380578	-.004494	5.344508	.0798909	.4866433
#3	.7150161	6.729507	.0372241	-.005874	5.245514	.0912018	.4840853

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.964378**	**.0076459**	**.0017773**	**.0343765**	**.6249012**	**1.846650**	**1.613004**
Stddev	.087319	.0008850	.0003409	.0003007	.0115875	.029337	.038033
%RSD	4.445126	11.57505	19.18249	.8747052	1.854288	1.588662	2.357917
#1	1.874024	.0066288	.0021624	.0346143	.6337683	1.841050	1.653419
#2	1.970802	.0082405	.0015141	.0344765	.6291452	1.878384	1.607679
#3	2.048307	.0080683	.0016554	.0340385	.6117901	1.820517	1.577913

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3256-01LX5 Acquired: 10/2/2025 14:07:09 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.8029938	.0293048	.2330920
Stddev	.0152863	.0036036	.0028383
%RSD	1.903663	12.29677	1.217670
#1	.8201604	.0252266	.2349410
#2	.7979674	.0306288	.2345109
#3	.7908536	.0320590	.2298240

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8124.550	93831.70	4838.881	6147.724	8999.032
Stddev	7.884	278.30	29.612	21.182	9.919
%RSD	.0970331	.2965927	.6119607	.3445439	.1102273
#1	8122.963	94123.38	4812.373	6171.672	8990.868
#2	8133.106	93569.06	4833.430	6140.056	9010.072
#3	8117.580	93802.66	4870.839	6131.444	8996.157

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3256-01MS Acquired: 10/2/2025 14:11:12 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9224127**	**2.090728**	**4.338632**	**1.926516**	**.3754469**	**162.7844**
Stddev	.0012405	.096160	.007219	.003806	.0007573	1.1418
%RSD	.1344891	4.599346	.1664001	.1975365	.2017074	.7013909
#1	.9237592	2.087609	4.337585	1.927837	.3762703	163.2364
#2	.9221628	2.188410	4.331993	1.929485	.3752898	161.4859
#3	.9213162	1.996166	4.346317	1.922226	.3747804	163.6310

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.437101**	**.1998589**	**.2264959**	**187.8831**	**.6860542**	**.3030938**
Stddev	.014083	.0025275	.0004005	1.2700	.0009623	.0005973
%RSD	.9799904	1.264641	.1768091	.6759628	.1402658	.1970565
#1	1.435021	.2026160	.2268601	188.0632	.6855083	.3025704
#2	1.424173	.1976515	.2260670	186.5326	.6871653	.3029665
#3	1.452108	.1993092	.2265606	189.0534	.6854890	.3037444

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.027310**	**196.4909**	**2.787506**	**31.70668**	**.7366616**	**.0520447**
Stddev	.001381	2.8943	.020953	.20715	.0007274	.0011403
%RSD	.1344255	1.472977	.7516712	.6533280	.0987471	2.191008
#1	1.028902	193.4329	2.783595	31.84856	.7359738	.0509386
#2	1.026597	196.8525	2.768784	31.46897	.7365879	.0519792
#3	1.026431	199.1874	2.810139	31.80251	.7374231	.0532164

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**27.51601**	**.6475714**	**2.463914**	**19.75895**	**.1289869**	**.3730994**
Stddev	.42021	.0014433	.004014	.20744	.0082477	.0004664
%RSD	1.527159	.2228817	.1629089	1.049837	6.394205	.1250021
#1	27.05764	.6488183	2.463994	19.55920	.1203842	.3736376
#2	27.60736	.6459903	2.467887	19.74433	.1368266	.3728149
#3	27.88304	.6479057	2.459860	19.97331	.1297499	.3728456

Sample Name: Q3256-01MS Acquired: 10/2/2025 14:11:12 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.086170	2.977951	5.849602	F 15.40729	4.636492	.3305231
Stddev	.001369	.024238	.066329	.02512	.009849	.0072782
%RSD	.1260396	.8139142	1.133901	.1630677	.2124262	2.202032
#1	1.087541	2.980524	5.773067	15.40354	4.638581	.3302948
#2	1.084803	2.952529	5.890377	15.43408	4.645129	.3233617
#3	1.086166	3.000800	5.885363	15.38426	4.625766	.3379127

Elem	Sr4077
Units	ppm
Avg	1.096079
Stddev	.008791
%RSD	.8020542
#1	1.098781
#2	1.086254
#3	1.103203

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8667.392	98335.17	5263.436	6564.633	8227.126
Stddev	14.401	681.62	34.873	57.240	5.480
%RSD	.1661468	.6931588	.6625485	.8719503	.0666037
#1	8660.078	99114.15	5234.824	6629.966	8222.367
#2	8658.115	98043.09	5302.280	6540.634	8225.895
#3	8683.981	97848.26	5253.203	6523.299	8233.117

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3256-01MSD Acquired: 10/2/2025 14:15:07 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9096222**	**2.011214**	**4.706567**	**1.835509**	**.3573817**	**153.9127**
Stddev	.0014146	.035204	.003790	.004018	.0041173	.3318
%RSD	.1555099	1.750393	.0805317	.2189162	1.152077	.2155553
#1	.9086449	2.049265	4.705523	1.835302	.3589127	154.0827
#2	.9112442	2.004574	4.703409	1.839626	.3527182	153.5303
#3	.9089774	1.979802	4.710770	1.831598	.3605142	154.1249

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.432322**	**.1910266**	**.2138619**	**209.3024**	**.9116769**	**.2914531**
Stddev	.002316	.0003607	.0003151	.5135	.0031280	.0004462
%RSD	.1616627	.1888174	.1473325	.2453281	.3431007	.1531045
#1	1.432109	.1906135	.2141149	209.7710	.9081908	.2917318
#2	1.430121	.1912793	.2135090	208.7535	.9142383	.2916890
#3	1.434737	.1911870	.2139617	209.3826	.9126015	.2909384

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.011883**	**265.2372**	**2.894495**	**30.93808**	**.7062658**	**.0434593**
Stddev	.000758	.4061	.003632	.09905	.0004507	.0002360
%RSD	.0749130	.1530898	.1254761	.3201427	.0638128	.5430477
#1	1.011024	265.4837	2.892333	30.92053	.7067660	.0434970
#2	1.012167	265.4595	2.892464	31.04473	.7058913	.0432066
#3	1.012458	264.7686	2.898688	30.84898	.7061400	.0436741

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**27.94728**	**.6636607**	**2.495710**	**19.78521**	**.0768268**	**.3654037**
Stddev	.04191	.0037112	.004329	.07831	.0141902	.0004711
%RSD	.1499673	.5591995	.1734415	.3958249	18.47039	.1289345
#1	27.96058	.6649994	2.493676	19.70442	.0923715	.3656198
#2	27.98093	.6594659	2.500681	19.86079	.0735417	.3648633
#3	27.90033	.6665168	2.492773	19.79041	.0645673	.3657281

Sample Name: Q3256-01MSD Acquired: 10/2/2025 14:15:07 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.344544**	**3.035401**	**5.832422**	F **15.64271**	**6.484099**	**.3177071**
Stddev	.001720	.008655	.025936	.02362	.013310	.0014132
%RSD	.1279425	.2851467	.4446910	.1509928	.2052771	.4448230
#1	1.342996	3.039830	5.836837	15.66445	6.475779	.3170463
#2	1.344240	3.025427	5.855867	15.61758	6.477068	.3167453
#3	1.346396	3.040945	5.804562	15.64609	6.499451	.3193297

Elem	Sr4077
Units	ppm
Avg	**1.143443**
Stddev	.003310
%RSD	.2894509
#1	1.146575
#2	1.139981
#3	1.143773

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**8617.932**	**97784.78**	**5307.266**	**6513.884**	**8244.460**
Stddev	24.965	336.84	22.578	27.339	22.780
%RSD	.2896863	.3444734	.4254192	.4197099	.2763010
#1	8615.809	98173.73	5329.039	6539.006	8237.013
#2	8594.096	97590.09	5308.798	6517.879	8226.337
#3	8643.890	97590.51	5283.961	6484.767	8270.032

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3256-01A Acquired: 10/2/2025 14:19:03 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8682318**	**2.056882**	**4.264107**	**1.831834**	**.6920127**	**146.6253**
Stddev	.0014378	.119657	.005598	.006152	.0053643	1.1428
%RSD	.1655989	5.817417	.1312799	.3358609	.7751789	.7793835
#1	.8689502	1.939367	4.269825	1.824838	.6916647	147.5685
#2	.8691688	2.052707	4.263857	1.836401	.6975426	146.9528
#3	.8665764	2.178573	4.258638	1.834263	.6868309	145.3545

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.539274**	**.1921250**	**.2116666**	**235.9997**	**.6461004**	**.2976613**
Stddev	.008516	.0011351	.0001231	1.8980	.0036315	.0006263
%RSD	.5532741	.5908182	.0581783	.8042356	.5620578	.2104173
#1	1.549102	.1929989	.2117851	237.5320	.6464060	.2978857
#2	1.534644	.1925341	.2116754	236.5906	.6495694	.2981445
#3	1.534075	.1908421	.2115392	233.8766	.6423258	.2969536

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9089110**	**197.8186**	**3.408371**	**30.98496**	**.7020382**	**.0466951**
Stddev	.0013357	1.0126	.026790	.37114	.0006485	.0007179
%RSD	.1469619	.5118987	.7860135	1.197814	.0923785	1.537349
#1	.9081012	197.8267	3.432792	31.23787	.7026866	.0473263
#2	.9104528	198.8272	3.412606	31.15813	.7020386	.0459142
#3	.9081791	196.8020	3.379716	30.55888	.7013895	.0468447

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**28.61118**	**.6267542**	**2.422304**	**18.76872**	**.3681028**	**.3621449**
Stddev	.06036	.0117689	.004124	.01641	.0045539	.0011395
%RSD	.2109547	1.877750	.1702589	.0874333	1.237116	.3146644
#1	28.59784	.6363074	2.419432	18.75321	.3654024	.3608932
#2	28.67710	.6303477	2.427030	18.78591	.3733605	.3631221
#3	28.55862	.6136075	2.420450	18.76704	.3655454	.3624194

Sample Name: Q3256-01A Acquired: 10/2/2025 14:19:03 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9209872	3.016589	9.762465	F 15.42740	4.413244	.2997605
Stddev	.0017102	.017762	.129696	.11339	.045633	.0022681
%RSD	.1856966	.5888066	1.328518	.7349822	1.033992	.7566448
#1	.9191136	3.026370	9.677607	15.30352	4.368146	.3007518
#2	.9213835	3.027311	9.911760	15.45261	4.412193	.2971655
#3	.9224645	2.996087	9.698027	15.52606	4.459393	.3013643

Elem	Sr4077
Units	ppm
Avg	1.227071
Stddev	.008341
%RSD	.6797700
#1	1.236531
#2	1.223913
#3	1.220771

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8710.578	98408.59	5197.873	6592.253	8245.515
Stddev	14.416	487.42	40.182	22.932	8.391
%RSD	.1655009	.4953005	.7730453	.3478630	.1017606
#1	8727.046	98467.51	5162.457	6599.191	8252.698
#2	8704.448	97894.39	5189.623	6566.653	8247.555
#3	8700.240	98863.87	5241.540	6610.914	8236.292

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3256-05 Acquired: 10/2/2025 14:22:58 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1204460**	**-.015847**	**6.247165**	**-.024559**	**-.006153**	**137.3600**
Stddev	.0041627	.001918	.005217	.006287	.003744	.5432
%RSD	3.456029	12.10504	.0835106	25.59937	60.84464	.3954834
#1	.1252136	-.013664	6.249474	-.027313	-.002950	137.9866
#2	.1185915	-.016616	6.241192	-.028998	-.005239	137.0724
#3	.1175329	-.017262	6.250829	-.017365	-.010268	137.0211

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.450227**	**.0191680**	**.0135269**	**160.4616**	**.2882612**	**.1034041**
Stddev	.010934	.0001687	.0002222	.6863	.0009059	.0001105
%RSD	.7539529	.8798610	1.642757	.4276873	.3142573	.1068719
#1	1.461621	.0192782	.0132775	161.2281	.2892596	.1033317
#2	1.449242	.0192521	.0135994	160.2523	.2880321	.1035313
#3	1.439819	.0189739	.0137039	159.9042	.2874918	.1033493

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8573567**	**259.1390**	**4.592927**	**28.81025**	**.2612020**	**-.022865**
Stddev	.0004477	.4775	.029612	.15013	.0003254	.000426
%RSD	.0522164	.1842791	.6447342	.5211105	.1245781	1.861116
#1	.8568549	259.5878	4.625790	28.98016	.2610780	-.022596
#2	.8577153	259.1921	4.584676	28.75506	.2609568	-.022644
#3	.8574997	258.6371	4.568316	28.69552	.2615711	-.023356

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**20.49776**	**.3640499**	**3.987129**	**10.05279**	**-.236326**	**.0095148**
Stddev	.01790	.0048469	.005529	.02596	.005701	.0003248
%RSD	.0873226	1.331373	.1386629	.2582089	2.412390	3.413784
#1	20.48110	.3691549	3.984181	10.03562	-.241913	.0093717
#2	20.49550	.3634839	3.993507	10.04011	-.236548	.0098867
#3	20.51668	.3595109	3.983699	10.08265	-.230518	.0092862

Sample Name: Q3256-05 Acquired: 10/2/2025 14:22:58 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2497147	2.404384	4.208694	F 10.69638	4.237117	.1373394
Stddev	.0017912	.018933	.025139	.09463	.053524	.0021944
%RSD	.7172913	.7874316	.5973133	.8847321	1.263224	1.597765
#1	.2476465	2.419951	4.199389	10.58713	4.176344	.1379910
#2	.2507639	2.409893	4.189534	10.74889	4.257769	.1391342
#3	.2507338	2.383307	4.237159	10.75310	4.277240	.1348931

Elem	Sr4077
Units	ppm
Avg	.7494648
Stddev	.0053092
%RSD	.7084031
#1	.7552859
#2	.7482197
#3	.7448887

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8832.520	103185.6	5455.334	6830.887	8243.344
Stddev	39.854	541.1	47.932	42.375	38.421
%RSD	.4512135	.5244025	.8786186	.6203470	.4660878
#1	8838.772	102677.1	5400.617	6789.943	8244.184
#2	8868.878	103754.2	5489.901	6874.561	8281.338
#3	8789.910	103125.4	5475.485	6828.158	8204.509

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3257-01 Acquired: 10/2/2025 14:26:56 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1738888**	**-.011892**	**1.035186**	**-.044708**	**-.020751**	**299.8072**
Stddev	.0021883	.004135	.002677	.005356	.006201	.7437
%RSD	1.258445	34.77122	.2585660	11.97979	29.88422	.2480750
#1	.1717683	-.008678	1.035688	-.048834	-.021843	300.5740
#2	.1737592	-.016557	1.037576	-.038655	-.026334	299.0889
#3	.1761391	-.010440	1.032294	-.046635	-.014076	299.7589

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.498991**	**.0450179**	**.0071210**	**58.79098**	**.5541340**	**.3949254**
Stddev	.013832	.0000716	.0002756	.14831	.0019456	.0008293
%RSD	.3953128	.1590537	3.869606	.2522596	.3511044	.2100013
#1	3.511484	.0450127	.0070518	58.95244	.5558321	.3939982
#2	3.501362	.0449490	.0068867	58.75966	.5520111	.3951813
#3	3.484127	.0450919	.0074246	58.66083	.5545589	.3955965

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7033196**	**570.3613**	**33.69099**	**123.6887**	**.6857494**	**^ *****
Stddev	.0035818	2.0057	.17843	.4689	.0006073	-----
%RSD	.5092727	.3516477	.5296132	.3790994	.0885561	-----
#1	.6999486	572.6694	33.87541	124.2286	.6851427	^ -----
#2	.7029298	569.0422	33.67835	123.3827	.6857483	^ -----
#3	.7070804	569.3723	33.51921	123.4550	.6863572	^ -----

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.520341**	**.8026435**	**1.938065**	**26.10422**	**^ *****	**.0084557**
Stddev	.053475	.0094917	.008145	.11980	-----	.0006000
%RSD	3.517313	1.182551	.4202692	.4589288	-----	7.095430
#1	1.479077	.8086437	1.944195	26.17796	^ -----	.0077641
#2	1.501191	.8075864	1.928822	25.96599	^ -----	.0087661
#3	1.580754	.7917005	1.941177	26.16871	^ -----	.0088368

Sample Name: Q3257-01 Acquired: 10/2/2025 14:26:56 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0467654	4.509635	3.563139	F 11.68633	4.911301	.9615127
Stddev	.0005827	.019989	.027714	.05145	.017401	.0097938
%RSD	1.246002	.4432500	.7778052	.4402294	.3543145	1.018582
#1	.0474369	4.532692	3.535573	11.74396	4.929829	.9727380
#2	.0464668	4.499030	3.562846	11.66998	4.908771	.9570886
#3	.0463925	4.497183	3.590999	11.64505	4.895303	.9547115

Elem	Sr4077
Units	ppm
Avg	-.268208
Stddev	.001714
%RSD	.6389996
#1	-.269762
#2	-.266370
#3	-.268491

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8787.701	99218.74	5374.557	6626.744	8197.632
Stddev	31.850	336.19	34.744	13.472	28.730
%RSD	.3624393	.3388372	.6464623	.2032912	.3504646
#1	8769.191	98890.57	5348.794	6616.959	8173.841
#2	8824.478	99203.24	5360.805	6621.164	8229.550
#3	8769.433	99562.41	5414.073	6642.109	8189.505

Sample Name: Q3257-02 Acquired: 10/2/2025 14:30:54 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1225650**	**-.032261**	**.5789008**	**-.088870**	**-.031549**	**146.8254**
Stddev	.0017146	.001517	.0009124	.006459	.001934	.2552
%RSD	1.398907	4.703436	.1576142	7.268426	6.130813	.1738351
#1	.1217742	-.030775	.5783946	-.095865	-.031255	147.1129
#2	.1245323	-.033808	.5799541	-.083131	-.033613	146.6255
#3	.1213886	-.032198	.5783537	-.087612	-.029778	146.7378

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.291497**	**.0403686**	**.0226728**	**70.21989**	**.8393111**	**.4511983**
Stddev	.004620	.0002476	.0006267	.10603	.0026401	.0001527
%RSD	.1076658	.6132132	2.764216	.1510023	.3145579	.0338408
#1	4.287216	.0405601	.0233179	70.28985	.8386301	.4510832
#2	4.290880	.0400891	.0220662	70.09789	.8370782	.4513716
#3	4.296395	.0404565	.0226343	70.27194	.8422250	.4511402

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5198254**	**615.1961**	**31.90897**	**122.1876**	**1.201041**	^ *****
Stddev	.0028849	4.4377	.04847	.4189	.001252	-----
%RSD	.5549799	.7213512	.1519120	.3428606	.1042113	-----
#1	.5229260	610.1238	31.93066	122.6491	1.202030	^ -----
#2	.5193301	617.1024	31.85344	121.8312	1.199634	^ -----
#3	.5172203	618.3623	31.94281	122.0825	1.201460	^ -----

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.062959**	**.6582967**	**1.176812**	**17.85941**	^ *****	**.0145650**
Stddev	.060946	.0050450	.004227	.20037	-----	.0003651
%RSD	1.989783	.7663778	.3591671	1.121941	-----	2.506758
#1	2.998667	.6641214	1.181458	17.62814	^ -----	.0145619
#2	3.119891	.6552973	1.173194	17.98079	^ -----	.0142015
#3	3.070319	.6554716	1.175785	17.96930	^ -----	.0149317

Sample Name: Q3257-02 Acquired: 10/2/2025 14:30:54 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0251027	9.789666	2.364146	F 22.37637	1.367956	.7996288
Stddev	.0004365	.001722	.018239	.09110	.010107	.0031239
%RSD	1.738931	.0175907	.7714697	.4071477	.7388492	.3906675
#1	.0246606	9.787854	2.373538	22.38354	1.362516	.7980838
#2	.0255334	9.791281	2.375775	22.28190	1.361735	.8032241
#3	.0251143	9.789863	2.343126	22.46369	1.379618	.7975784

Elem	Sr4077
Units	ppm
Avg	-.196999
Stddev	.004419
%RSD	2.243201
#1	-.191936
#2	-.198983
#3	-.200079

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	10333.04	118741.5	6351.881	7807.849	8113.238
Stddev	50.43	494.5	37.709	28.299	33.090
%RSD	.4880281	.4164528	.5936656	.3624473	.4078504
#1	10290.62	119248.1	6316.304	7834.862	8086.181
#2	10319.70	118716.4	6391.411	7810.266	8103.402
#3	10388.79	118260.1	6347.928	7778.418	8150.130

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3254-01 Acquired: 10/2/2025 14:34:53 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014552**	**.0105875**	**.0018118**	**.0096543**	**.0089324**	**.0399389**
Stddev	.0028800	.0032707	.0018526	.0020592	.0025622	.0112358
%RSD	197.9205	30.89224	102.2496	21.32888	28.68439	28.13243
#1	.0005985	.0137599	.0006485	.0088077	.0107650	.0524750
#2	-.000899	.0107760	.0039482	.0081535	.0060046	.0365654
#3	.004666	.0072266	.0008388	.0120019	.0100276	.0307764

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1534870**	**.0001488**	**.0027323**	**82.85703**	**.0016005**	**.0007538**
Stddev	.0055355	.0001073	.0001335	.31347	.0005673	.0001890
%RSD	3.606500	72.06419	4.886860	.3783312	35.44807	25.07636
#1	.1582424	.0000568	.0028224	83.21639	.0020606	.0005935
#2	.1548081	.0002666	.0027955	82.63977	.0009666	.0009622
#3	.1474105	.0001230	.0025789	82.71493	.0017742	.0007057

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0024900**	**.0376153**	**.1115924**	**14.56261**	**.0076687**	**-.000915**
Stddev	.0004701	.0087000	.0014115	.08576	.0001990	.000603
%RSD	18.88058	23.12900	1.264910	.5888742	2.594659	65.89143
#1	.0021978	.0322132	.1128251	14.65632	.0075891	-.000475
#2	.0022399	.0476514	.1100526	14.48805	.0075219	-.001602
#3	.0030323	.0329811	.1118995	14.54346	.0078952	-.000668

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**90.90344**	**-.000546**	**.2667899**	**7.462838**	**.1054130**	**.0013441**
Stddev	.29756	.005521	.0005621	.059706	.0021590	.0003523
%RSD	.3273313	1011.295	.2106985	.8000409	2.048146	26.21009
#1	90.75019	.002947	.2674129	7.394202	.1051236	.0016357
#2	91.24638	.002326	.2663206	7.502773	.1034133	.0014439
#3	90.71375	-.006911	.2666363	7.491540	.1077021	.0009527

Sample Name: Q3254-01 Acquired: 10/2/2025 14:34:53 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.027126	.0038111	F 12.01771	.0162089	F 19.29934	-.037575
Stddev	.000397	.0007015	.09301	.0019069	.09173	.001177
%RSD	1.464928	18.40747	.7739576	11.76419	.4752878	3.131678
#1	-.027030	.0030558	11.91647	.0140157	19.40513	-.036751
#2	-.027563	.0039352	12.09938	.0174741	19.24190	-.038923
#3	-.026786	.0044423	12.03729	.0171370	19.25099	-.037051

Elem	Sr4077
Units	ppm
Avg	.3695998
Stddev	.0026484
%RSD	.7165658
#1	.3726219
#2	.3676835
#3	.3684938

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7803.786	90704.15	4564.297	5940.244	8504.738
Stddev	14.588	326.57	43.859	20.667	12.487
%RSD	.1869286	.3600332	.9609157	.3479101	.1468286
#1	7787.510	90725.68	4513.779	5946.994	8490.359
#2	7808.171	90367.36	4592.654	5917.046	8512.861
#3	7815.679	91019.43	4586.457	5956.691	8510.994

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3254-02 Acquired: 10/2/2025 14:38:59 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001579**	**.0103806**	**.0026586**	**.0098103**	**.0064853**	**.0336544**
Stddev	.001139	.0015274	.0006609	.0002498	.0047685	.0068771
%RSD	72.14698	14.71364	24.85719	2.546230	73.52765	20.43453
#1	-.001727	.0114517	.0022199	.0100424	.0101247	.0398755
#2	-.002637	.0086316	.0034187	.0095459	.0010872	.0262697
#3	-.000373	.0110585	.0023372	.0098426	.0082440	.0348180

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1496698**	**.0000408**	**.0027413**	**83.01590**	**.0020978**	**.0006604**
Stddev	.0014181	.0001212	.0000447	.29034	.0010441	.0002569
%RSD	.9474595	296.7146	1.630034	.3497398	49.77052	38.90809
#1	.1505871	-.000062	.0027867	83.31925	.0020150	.0004074
#2	.1503858	.000174	.0026974	82.74061	.0010976	.0009211
#3	.1480365	.000010	.0027398	82.98782	.0031808	.0006527

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0023845**	**.0378059**	**.1112074**	**14.43534**	**.0085664**	**-.000447**
Stddev	.0001844	.0141133	.0007884	.01706	.0000488	.000251
%RSD	7.733016	37.33092	.7089153	.1181650	.5691587	56.15232
#1	.0024413	.0369649	.1120104	14.43188	.0085304	-.000161
#2	.0021784	.0241319	.1111772	14.42028	.0085470	-.000551
#3	.0025338	.0523209	.1104345	14.45386	.0086219	-.000631

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**95.79107**	**.0055194**	**.2746744**	**7.825834**	**.1005241**	**.0011708**
Stddev	.30146	.0041839	.0015372	.039426	.0019993	.0001553
%RSD	.3147055	75.80289	.5596385	.5037979	1.988841	13.26285
#1	95.44616	.0067179	.2730534	7.787943	.1028264	.0013501
#2	96.00421	.0008671	.2748587	7.866634	.0992258	.0010800
#3	95.92283	.0089732	.2761112	7.822926	.0995200	.0010823

Sample Name: Q3254-02 Acquired: 10/2/2025 14:38:59 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.027330	.0020606	F 12.57418	.0137951	F 19.71504	-.035908
Stddev	.000436	.0034240	.07135	.0006608	.04795	.003030
%RSD	1.597132	166.1624	.5674220	4.789794	.2432328	8.438609
#1	-.026828	.0054143	12.62201	.0130547	19.76028	-.039252
#2	-.027547	.0021970	12.49217	.0140057	19.72008	-.033346
#3	-.027616	-.001430	12.60836	.0143249	19.66477	-.035125

Elem	Sr4077
Units	ppm
Avg	.3729068
Stddev	.0009723
%RSD	.2607466
#1	.3728562
#2	.3739034
#3	.3719607

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7755.252	87807.54	4627.951	5880.768	8419.227
Stddev	12.793	103.77	12.123	16.181	12.711
%RSD	.1649546	.1181822	.2619557	.2751502	.1509743
#1	7741.075	87744.56	4614.048	5862.258	8404.599
#2	7758.745	87927.31	4636.318	5892.224	8427.583
#3	7765.935	87750.74	4633.487	5887.823	8425.498

Sample Name: Q3254-03 Acquired: 10/2/2025 14:43:04 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031772**	**.0116837**	**.0075104**	**.0006985**	**.0062373**	**.1432598**
Stddev	.0006718	.0007877	.0017770	.0042278	.0026581	.0356944
%RSD	21.14562	6.741979	23.66060	605.2478	42.61620	24.91584
#1	.0033570	.0116356	.0065281	-.001958	.0032199	.1801909
#2	.0037408	.0124944	.0095617	.005574	.0082328	.1089462
#3	.0024338	.0109211	.0064414	-.001520	.0072592	.1406424

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3214759**	**.0008050**	**-.000128**	**168.5787**	**.0039786**	**.0027324**
Stddev	.0013842	.0000855	.000159	.3469	.0003746	.0002578
%RSD	.4305687	10.61458	124.1201	.2058066	9.416182	9.433458
#1	.3202484	.0009034	-.000310	168.4114	.0037832	.0029973
#2	.3212031	.0007490	-.000050	168.9776	.0044106	.0027176
#3	.3229762	.0007626	-.000023	168.3472	.0037421	.0024824

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0184966**	**20.74244**	**2.360792**	**40.64298**	**.0385029**	**-.003077**
Stddev	.0003688	.11394	.002731	.11681	.0005190	.000468
%RSD	1.994047	.5492947	.1156867	.2874141	1.347856	15.20828
#1	.0181311	20.79058	2.363842	40.50818	.0380793	-.002989
#2	.0184899	20.82440	2.358572	40.70630	.0390818	-.002659
#3	.0188687	20.61233	2.359963	40.71446	.0383476	-.003583

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**449.0801**	**.0043416**	**.1274628**	**41.83585**	**1.850036**	**.0049359**
Stddev	7.2106	.0038491	.0004536	.21676	.011705	.0002061
%RSD	1.605629	88.65603	.3558964	.5181320	.6327051	4.175760
#1	443.0409	.0034804	.1276856	41.82763	1.851251	.0051515
#2	457.0634	.0085483	.1277621	42.05661	1.837771	.0049156
#3	447.1362	.0009960	.1269409	41.62331	1.861086	.0047407

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3254-03 Acquired: 10/2/2025 14:43:04 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.026063	.0086163	F 16.06858	.0458109	F 25.39992	-.051314
Stddev	.000247	.0016599	.19241	.0014149	.08492	.001853
%RSD	.9494976	19.26407	1.197448	3.088578	.3343226	3.610920
#1	-.025988	.0096213	16.10431	.0473899	25.30708	-.051725
#2	-.026340	.0095272	16.24062	.0453848	25.47366	-.052927
#3	-.025862	.0067005	15.86080	.0446580	25.41903	-.049290

Elem	Sr4077
Units	ppm
Avg	.7701750
Stddev	.0006551
%RSD	.0850548
#1	.7695940
#2	.7700460
#3	.7708849

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7459.171	86091.49	4670.076	5711.103	7779.298
Stddev	11.041	673.39	54.317	66.298	14.721
%RSD	.1480149	.7821767	1.163086	1.160858	.1892315
#1	7471.876	86825.24	4728.279	5787.075	7796.275
#2	7453.726	85501.77	4661.215	5664.959	7770.068
#3	7451.910	85947.47	4620.735	5681.274	7771.552

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: CCV03 Acquired: 10/2/2025 14:47:16 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.173196**	**5.303083**	**5.218108**	**5.300187**	**4.797121**	**9.360836**
Stddev	.019551	.170162	.003793	.027758	.004309	.059923
%RSD	.3779209	3.208735	.0726831	.5237132	.0898148	.6401421
#1	5.173834	5.256962	5.216794	5.301591	4.801758	9.419628
#2	5.192420	5.491551	5.222383	5.327216	4.793242	9.363036
#3	5.153334	5.160736	5.215147	5.271754	4.796361	9.299844

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.029445**	**.2430143**	**2.563843**	**23.79494**	**1.052727**	**2.446865**
Stddev	.039239	.0014239	.003309	.05661	.002217	.001411
%RSD	.4345654	.5859467	.1290806	.2379274	.2105582	.0576844
#1	9.072942	.2446565	2.561655	23.86014	1.054996	2.445879
#2	8.996712	.2421230	2.567650	23.75832	1.050567	2.448482
#3	9.018681	.2422634	2.562224	23.76634	1.052618	2.446236

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.253496**	**5.081777**	**2.323863**	**24.36410**	**2.472857**	**1.254678**
Stddev	.001690	.018291	.005828	.11358	.002209	.002222
%RSD	.1347957	.3599320	.2507815	.4661937	.0893120	.1771288
#1	1.254191	5.064148	2.329385	24.48265	2.470922	1.253142
#2	1.254727	5.080518	2.317771	24.25623	2.475264	1.253665
#3	1.251570	5.100665	2.324432	24.35341	2.472387	1.257226

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.36797**	**2.364172**	**2.466445**	**24.68637**	F **5.984048**	**4.774389**
Stddev	.06127	.010328	.004785	.06989	.032100	.016133
%RSD	.2514223	.4368432	.1939935	.2830990	.5364189	.3379158
#1	24.43431	2.374286	2.468748	24.75232	6.020779	4.778283
#2	24.31352	2.364586	2.460945	24.61312	5.969984	4.788219
#3	24.35609	2.353643	2.469643	24.69368	5.961381	4.756665

Sample Name: CCV03 Acquired: 10/2/2025 14:47:16 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.242499**	**4.622056**	F **4.074619**	**5.453567**	**5.342846**	F **3.941543**
Stddev	.019628	.017959	.018374	.046236	.048484	.009954
%RSD	.3743966	.3885451	.4509480	.8478196	.9074511	.2525348
#1	5.239475	4.640509	4.056505	5.464728	5.344412	3.953031
#2	5.263463	4.604636	4.093243	5.493202	5.390527	3.935490
#3	5.224558	4.621022	4.074109	5.402772	5.293598	3.936108

Elem	Sr4077
Units	ppm
Avg	**4.571356**
Stddev	.027631
%RSD	.6044410
#1	4.602722
#2	4.550614
#3	4.560732

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7800.269**	**89566.15**	**4648.550**	**5865.106**	**8548.749**
Stddev	22.300	303.62	43.945	42.909	20.422
%RSD	.2858857	.3389928	.9453522	.7316023	.2388873
#1	7774.548	89234.88	4598.164	5824.362	8525.179
#2	7812.068	89831.19	4678.946	5909.894	8559.912
#3	7814.190	89632.38	4668.541	5861.061	8561.155

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: CCB03 Acquired: 10/2/2025 14:53:05 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005835**	**.0087691**	**.0046036**	**.0076220**	**.0098040**	**-.008234**	**.0352738**
Stddev	.0003289	.0054573	.0007031	.0035768	.0007823	.013025	.0005077
%RSD	56.37281	62.23307	15.27213	46.92698	7.979688	158.1755	1.439334
#1	.0008952	.0029209	.0052383	.0113459	.0100342	-.008962	.0353239
#2	.0006155	.0137257	.0047246	.0042132	.0104455	-.020880	.0347429
#3	.0002397	.0096606	.0038479	.0073070	.0089324	.005139	.0357546

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001550**	**-.000227**	**-.026933**	**.0015431**	**-.000006**	**.0006653**	**-.001707**
Stddev	.0001010	.000083	.025343	.0002477	.000114	.0004852	.013065
%RSD	65.18620	36.53671	94.09777	16.05230	1975.084	72.94040	765.4237
#1	.0002681	-.000214	-.029775	.0018107	.000051	.0006063	-.004086
#2	.0001229	-.000152	-.050736	.0014966	.000068	.0011772	-.013419
#3	.0000739	-.000316	-.000288	.0013219	-.000137	.0002122	.012384

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007947**	**.0611404**	**-.000221**	**-.000769**	**-.637463**	**-.000991**	**.0006754**
Stddev	.0020458	.0431016	.000640	.000688	.041225	.009375	.0003060
%RSD	257.4178	70.49606	289.4682	89.45736	6.467110	945.6342	45.31058
#1	-.000732	.0455220	-.000388	-.001555	-.629843	-.001949	.0006539
#2	.003119	.0280254	.000486	-.000273	-.681967	.008826	.0009916
#3	-.000003	.1098740	-.000761	-.000480	-.600579	-.009851	.0003807

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.753920**	**.0053906**	**.0001213**	F **-.025571**	**.0024427**	**-.008070**	**-.007049**
Stddev	.028221	.0023119	.0002344	.000404	.0053345	.017982	.000388
%RSD	3.743259	42.88878	193.2309	1.580546	218.3878	222.8112	5.505613
#1	-.778569	.0043683	.0000828	-.025520	.0065426	-.028820	-.006964
#2	-.723136	.0080374	-.000091	-.025999	-.003588	.002967	-.006711
#3	-.760056	.0037659	.000373	-.025195	.004374	.001641	-.007473

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: CCB03 Acquired: 10/2/2025 14:53:05 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0035816	F -.024088	-.000189
Stddev	.0005774	.005546	.000200
%RSD	16.12110	23.02575	105.5463
#1	.0033208	-.029483	.000001
#2	.0042434	-.024379	-.000398
#3	.0031806	-.018402	-.000171

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8121.687	94599.38	4516.254	6159.162	9756.485
Stddev	22.118	142.50	27.427	19.037	16.842
%RSD	.2723306	.1506343	.6072928	.3090811	.1726226
#1	8134.464	94454.21	4485.006	6141.598	9773.433
#2	8096.148	94739.04	4527.421	6179.391	9739.752
#3	8134.450	94604.90	4536.336	6156.496	9756.269

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3254-04 Acquired: 10/2/2025 14:57:25 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0053354**	**.0138530**	**.0048880**	**.0061922**	**.0052273**	**.0583782**
Stddev	.0017488	.0012039	.0014014	.0014619	.0010458	.0253842
%RSD	32.77779	8.690218	28.67066	23.60790	20.00709	43.48236
#1	.0042476	.0137789	.0060900	.0056936	.0048475	.0448839
#2	.0044059	.0126879	.0033487	.0050449	.0044244	.0876594
#3	.0073527	.0150922	.0052255	.0078381	.0064100	.0425912

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3186170**	**.0009000**	**-.000213**	**166.9521**	**.0020914**	**.0026491**
Stddev	.0033346	.0000761	.000117	.4901	.0002481	.0004784
%RSD	1.046599	8.455971	55.07155	.2935863	11.86079	18.05810
#1	.3204998	.0008186	-.000079	167.1342	.0018413	.0030030
#2	.3147668	.0009694	-.000260	166.3970	.0023374	.0021048
#3	.3205843	.0009120	-.000299	167.3252	.0020955	.0028394

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0092909**	**20.03397**	**2.329216**	**40.35385**	**.0360487**	**-.003725**
Stddev	.0002843	.19279	.010793	.21570	.0002970	.000582
%RSD	3.059775	.9623130	.4633785	.5345147	.8240324	15.61517
#1	.0089650	19.83494	2.330203	40.34099	.0357207	-.004213
#2	.0094195	20.04715	2.317963	40.14486	.0362996	-.003881
#3	.0094881	20.21984	2.339481	40.57568	.0361259	-.003082

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**452.7445**	**.0011441**	**.1178333**	**41.15249**	**1.867860**	**.0045610**
Stddev	8.0526	.0081841	.0004838	.48313	.014579	.0000182
%RSD	1.778624	715.3268	.4105415	1.173996	.7805184	.3999340
#1	452.8724	-.007961	.1174035	40.80839	1.882697	.0045787
#2	460.7324	.003505	.1177393	40.94426	1.867331	.0045621
#3	444.6287	.007888	.1183572	41.70482	1.853553	.0045423

Sample Name: Q3254-04 Acquired: 10/2/2025 14:57:25 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.026678	-.003803	F 15.60970	.0393976	F 24.88908	-.044017
Stddev	.000129	.001282	.12690	.0001849	.07178	.002928
%RSD	.4851142	33.71447	.8129248	.4694258	.2883857	6.652493
#1	-.026680	-.005092	15.51403	.0396023	24.97149	-.041079
#2	-.026547	-.002528	15.56142	.0393481	24.84020	-.046935
#3	-.026806	-.003787	15.75365	.0392425	24.85557	-.044036

Elem	Sr4077
Units	ppm
Avg	.7629318
Stddev	.0032416
%RSD	.4248828
#1	.7637760
#2	.7593516
#3	.7656677

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7471.083	85445.83	4590.950	5734.703	7768.939
Stddev	45.847	247.42	22.116	41.698	44.214
%RSD	.6136577	.2895685	.4817207	.7271095	.5691134
#1	7524.013	85731.01	4567.973	5753.341	7819.973
#2	7443.731	85318.26	4592.789	5763.831	7744.650
#3	7445.506	85288.23	4612.089	5686.937	7742.193

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3254-05 Acquired: 10/2/2025 15:01:36 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000206**	**.0143745**	**.0029864**	**.0080253**	**.0053615**	**.1586605**
Stddev	.001631	.0024977	.0011358	.0035405	.0010556	.0276980
%RSD	791.8303	17.37616	38.03170	44.11701	19.68857	17.45742
#1	-.001713	.0158246	.0032998	.0039924	.0062002	.1266803
#2	-.000432	.0158084	.0017268	.0106225	.0041762	.1742855
#3	.001526	.0114903	.0039325	.0094609	.0057082	.1750156

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2893769**	**.0001205**	**.0001549**	**218.7395**	**.0028242**	**.0024718**
Stddev	.0044794	.0000875	.0000231	.5096	.0002194	.0001389
%RSD	1.547934	72.63943	14.91499	.2329933	7.767042	5.620034
#1	.2887013	.0001792	.0001786	218.2212	.0029291	.0025921
#2	.2941556	.0000199	.0001324	218.7573	.0025721	.0023198
#3	.2852737	.0001624	.0001538	219.2400	.0029715	.0025035

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0036926**	**3.890782**	**.9618324**	**33.58568**	**.0042854**	**-.002223**
Stddev	.0002682	.036702	.0012141	.15471	.0002177	.000183
%RSD	7.263330	.9433174	.1262292	.4606573	5.079849	8.252094
#1	.0038901	3.852745	.9612769	33.41210	.0040403	-.002082
#2	.0033873	3.893617	.9609955	33.63588	.0044563	-.002157
#3	.0038005	3.925985	.9632249	33.70907	.0043595	-.002431

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**274.0728**	**.0000111**	**.0424036**	**28.84299**	**1.187548**	**.0062900**
Stddev	2.1391	.0039874	.0005261	.23963	.007721	.0002532
%RSD	.7805000	36047.87	1.240795	.8307948	.6501399	4.025875
#1	272.7786	-.000805	.0430102	28.64529	1.187588	.0062523
#2	272.8979	.004343	.0421289	28.77420	1.195248	.0065600
#3	276.5419	-.003505	.0420716	29.10949	1.179807	.0060578

Sample Name: Q3254-05 Acquired: 10/2/2025 15:01:36 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.015775	.0069582	F 14.20949	.0134436	F 20.93312	-.055315
Stddev	.001803	.0012694	.08171	.0023275	.05127	.006805
%RSD	11.43120	18.24286	.5750555	17.31312	.2449121	12.30247
#1	-.017727	.0056868	14.13712	.0135924	20.87680	-.062881
#2	-.015425	.0069622	14.19325	.0110453	20.94548	-.053371
#3	-.014172	.0082256	14.29810	.0156931	20.97707	-.049694

Elem	Sr4077
Units	ppm
Avg	.9145021
Stddev	.0022789
%RSD	.2491971
#1	.9121879
#2	.9145746
#3	.9167439

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7537.684	86836.02	4501.264	5803.511	7911.392
Stddev	3.345	504.66	12.034	64.321	6.012
%RSD	.0443715	.5811644	.2673485	1.108311	.0759958
#1	7539.579	86752.99	4489.821	5754.823	7916.500
#2	7533.822	87377.05	4513.813	5876.428	7904.766
#3	7539.650	86378.03	4500.158	5779.284	7912.911

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3254-06 Acquired: 10/2/2025 15:05:40 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002428**	**.0104437**	**.0022483**	**.0084050**	**.0065511**	**.0533129**
Stddev	.0016052	.0016014	.0020269	.0036453	.0012801	.0155431
%RSD	660.9989	15.33382	90.15162	43.37081	19.53969	29.15453
#1	.0000116	.0121041	.0040240	.0125823	.0052050	.0587680
#2	.0019511	.0089086	.0000401	.0067644	.0066955	.0357776
#3	-.001234	.0103185	.0026808	.0058682	.0077529	.0653932

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3023090**	**.0002684**	**.0001463**	**228.3880**	**.0027040**	**.0026236**
Stddev	.0045369	.0000954	.0000581	.6548	.0001220	.0004738
%RSD	1.500742	35.52096	39.71528	.2866844	4.513124	18.05706
#1	.3036290	.0002555	.0002095	228.2221	.0027358	.0022213
#2	.2972586	.0001802	.0000952	227.8322	.0028069	.0025038
#3	.3060396	.0003696	.0001343	229.1097	.0025691	.0031458

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0035170**	**4.040341**	**.9981160**	**35.06999**	**.0053974**	**-.002176**
Stddev	.0005521	.061245	.0044098	.18839	.0001767	.000351
%RSD	15.69663	1.515846	.4418134	.5371905	3.273988	16.11695
#1	.0028838	3.981303	.9982299	34.93244	.0052001	-.002495
#2	.0038974	4.103578	1.002468	34.99282	.0054512	-.001801
#3	.0037698	4.036143	.993650	35.28472	.0055410	-.002231

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**287.0561**	**.0033808**	**.0437719**	**30.52862**	**1.224008**	**.0059396**
Stddev	3.3304	.0078289	.0000758	.35344	.014656	.0001829
%RSD	1.160185	231.5733	.1731284	1.157745	1.197355	3.079142
#1	284.4828	.0124191	.0438395	30.21460	1.235474	.0061482
#2	290.8177	-.000985	.0436900	30.91139	1.207496	.0058643
#3	285.8679	-.001292	.0437862	30.45986	1.229054	.0058065

Sample Name: Q3254-06 Acquired: 10/2/2025 15:05:40 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.026936	-.004923	F 14.91526	.0068627	F 22.14035	-.057792
Stddev	.000761	.001346	.15835	.0018054	.07421	.004905
%RSD	2.823734	27.34495	1.061635	26.30700	.3351577	8.486826
#1	-.026841	-.005468	14.77990	.0052341	22.12143	-.058783
#2	-.026228	-.003390	15.08939	.0088040	22.22219	-.052468
#3	-.027740	-.005911	14.87650	.0065500	22.07744	-.062126

Elem	Sr4077
Units	ppm
Avg	.9564782
Stddev	.0009989
%RSD	.1044349
#1	.9566499
#2	.9573802
#3	.9554046

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7507.722	86579.09	4556.187	5718.904	7855.592
Stddev	18.099	272.90	40.721	19.651	19.204
%RSD	.2410690	.3152085	.8937626	.3436131	.2444608
#1	7486.824	86565.22	4518.930	5714.686	7833.485
#2	7518.356	86313.38	4599.658	5701.705	7865.147
#3	7517.984	86858.66	4549.974	5740.322	7868.145

Sample Name: Q3254-07 Acquired: 10/2/2025 15:09:43 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0043002**	**.0174549**	**.0071372**	**.0071925**	**.0064769**	**.1618486**
Stddev	.0015884	.0026728	.0013148	.0055389	.0010213	.0071917
%RSD	36.93756	15.31252	18.42199	77.00915	15.76852	4.443453
#1	.0052261	.0170888	.0057789	.0015679	.0063987	.1571581
#2	.0052084	.0202919	.0072290	.0073682	.0075350	.1701284
#3	.0024661	.0149841	.0084037	.0126415	.0054969	.1582592

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3291723**	**.0008806**	**-.000361**	**169.7999**	**.0037351**	**.0027305**
Stddev	.0037665	.0001785	.000066	.4594	.0008768	.0002551
%RSD	1.144236	20.27379	18.43769	.2705517	23.47340	9.343311
#1	.3257172	.0010502	-.000347	170.1313	.0046850	.0024885
#2	.3286122	.0006943	-.000302	169.2755	.0029570	.0027061
#3	.3331875	.0008973	-.000433	169.9929	.0035631	.0029970

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0210336**	**21.62273**	**2.355202**	**41.07326**	**.0400649**	**-.003453**
Stddev	.0001973	.18327	.008105	.22061	.0007804	.001280
%RSD	.9379539	.8475947	.3441227	.5371063	1.947805	37.07736
#1	.0211084	21.59264	2.358289	41.09900	.0404969	-.002676
#2	.0211826	21.81918	2.346007	40.84092	.0405338	-.004930
#3	.0208099	21.45636	2.361310	41.27988	.0391640	-.002752

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**459.2363**	**.0083240**	**.1352801**	**44.36611**	**1.922952**	**.0047735**
Stddev	5.3568	.0106594	.0007916	.47629	.023349	.0002710
%RSD	1.166453	128.0559	.5851262	1.073536	1.214202	5.676944
#1	464.6057	-.003220	.1344681	44.05770	1.928085	.0046977
#2	453.8922	.010399	.1360495	44.91466	1.897464	.0050743
#3	459.2110	.017793	.1353226	44.12597	1.943306	.0045485

Sample Name: Q3254-07 Acquired: 10/2/2025 15:09:43 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.026078	.0074582	F 16.82971	.0491607	F 26.14009	-.044976
Stddev	.000321	.0011701	.11955	.0003805	.10699	.007855
%RSD	1.229500	15.68851	.7103488	.7739495	.4092846	17.46560
#1	-.026405	.0087498	16.80831	.0487424	26.16391	-.035969
#2	-.026064	.0071555	16.95851	.0492534	26.23315	-.050410
#3	-.025765	.0064692	16.72230	.0494863	26.02320	-.048549

Elem	Sr4077
Units	ppm
Avg	.7666465
Stddev	.0009378
%RSD	.1223268
#1	.7666075
#2	.7657288
#3	.7676032

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7459.258	81343.50	4565.167	5585.436	7746.810
Stddev	15.822	349.96	57.245	24.152	20.695
%RSD	.2121093	.4302213	1.253955	.4324109	.2671361
#1	7477.239	81733.62	4567.267	5612.306	7769.487
#2	7453.067	81239.70	4621.333	5578.467	7728.946
#3	7447.468	81057.19	4506.900	5565.534	7741.996

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3254-07DUP Acquired: 10/2/2025 15:13:54 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031438**	**.0179353**	**.0089642**	**.0084020**	**.0045353**	**.1513367**
Stddev	.0003580	.0035103	.0005723	.0044069	.0039218	.0132829
%RSD	11.38641	19.57186	6.384727	52.45017	86.47411	8.777042
#1	.0031800	.0218890	.0093780	.0067953	.0004106	.1379218
#2	.0034823	.0167317	.0092034	.0133867	.0082165	.1644835
#3	.0027691	.0151851	.0083110	.0050239	.0049786	.1516050

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3351278**	**.0010168**	**-.000235**	**170.4329**	**.0036983**	**.0026527**
Stddev	.0037151	.0000267	.000085	.3939	.0005249	.0001327
%RSD	1.108563	2.623812	36.13574	.2310963	14.19272	5.002925
#1	.3379409	.0010006	-.000272	170.8082	.0042854	.0025566
#2	.3309165	.0010023	-.000137	170.0228	.0035351	.0025974
#3	.3365260	.0010476	-.000294	170.4678	.0032744	.0028042

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0222276**	**19.97983**	**2.379353**	**41.51657**	**.0396807**	**-.003228**
Stddev	.0004398	.21465	.015613	.12037	.0003700	.000620
%RSD	1.978631	1.074324	.6561974	.2899324	.9323701	19.21345
#1	.0227174	20.22572	2.394044	41.53550	.0392585	-.003920
#2	.0218666	19.82990	2.362957	41.38786	.0399485	-.003040
#3	.0220988	19.88387	2.381057	41.62635	.0398350	-.002723

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**426.1743**	**-.003794**	**.1333371**	**41.44328**	**1.998790**	**.0048150**
Stddev	5.7041	.004174	.0009027	.35394	.010849	.0000773
%RSD	1.338452	110.0119	.6770048	.8540311	.5427580	1.604597
#1	432.4899	-.006115	.1340844	41.81577	1.986270	.0047684
#2	421.3972	.001025	.1335929	41.11140	2.004680	.0047723
#3	424.6358	-.006293	.1323342	41.40267	2.005418	.0049041

Sample Name: Q3254-07DUP Acquired: 10/2/2025 15:13:54 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.025677	.0085600	F 15.62765	.0493688	F 26.40360	-.042545
Stddev	.000643	.0020418	.09387	.0013286	.12466	.003258
%RSD	2.505249	23.85301	.6006881	2.691125	.4721352	7.656766
#1	-.024961	.0069705	15.73555	.0509028	26.30280	-.040356
#2	-.026207	.0108628	15.56473	.0486148	26.36501	-.046288
#3	-.025862	.0078467	15.58267	.0485887	26.54299	-.040990

Elem	Sr4077
Units	ppm
Avg	.7695441
Stddev	.0048087
%RSD	.6248761
#1	.7739591
#2	.7644204
#3	.7702530

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7343.330	83038.54	4272.412	5635.322	7614.537
Stddev	37.241	248.18	15.542	37.900	39.158
%RSD	.5071342	.2988749	.3637659	.6725373	.5142583
#1	7377.529	82794.36	4287.220	5591.590	7649.738
#2	7348.807	83290.54	4273.788	5658.618	7621.513
#3	7303.654	83030.72	4256.228	5655.756	7572.359

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3254-07LX5 Acquired: 10/2/2025 15:18:04 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0066016**	**.0191785**	**.0045497**	**.0178886**	**.0087271**	**.0171573**	**.1002194**
Stddev	.0028507	.0048407	.0009148	.0018099	.0061956	.0063661	.0013145
%RSD	43.18126	25.24029	20.10765	10.11764	70.99322	37.10448	1.311649
#1	.0048894	.0170271	.0034952	.0164793	.0081670	.0099156	.1008217
#2	.0098924	.0247220	.0051309	.0199298	.0151837	.0196843	.0987116
#3	.0050231	.0157865	.0050231	.0172568	.0028305	.0218720	.1011248

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004718**	**-.000427**	**37.34865**	**.0023027**	**.0004478**	**.0057769**	**4.117816**
Stddev	.0000998	.000200	.19984	.0001589	.0004193	.0006240	.015375
%RSD	21.15911	46.81362	.5350743	6.900613	93.63443	10.80101	.3733758
#1	.0003665	-.000226	37.57739	.0021208	.0000664	.0055084	4.132448
#2	.0004836	-.000428	37.20788	.0024146	.0008968	.0053322	4.101793
#3	.0005651	-.000626	37.26069	.0023726	.0003803	.0064902	4.119206

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5168325**	**8.952966**	**.0075705**	**-.002160**	**84.76202**	**.0065601**	**.0272011**
Stddev	.0034161	.037912	.0006524	.000225	.27884	.0059265	.0001598
%RSD	.6609699	.4234591	8.617342	10.40567	.3289706	90.34274	.5873298
#1	.5196020	8.986597	.0072187	-.002359	84.88686	.0027046	.0273078
#2	.5178803	8.960421	.0083233	-.001916	84.95664	.0133843	.0270174
#3	.5130152	8.911880	.0071696	-.002206	84.44258	.0035913	.0272780

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**12.55404**	**.4859772**	**.0009904**	**-.007118**	**.0078330**	**3.145184**	**.0024719**
Stddev	.07552	.0029428	.0002601	.000535	.0048394	.001986	.0010003
%RSD	.6015258	.6055501	26.25603	7.515868	61.78203	.0631285	40.46657
#1	12.63873	.4884501	.0012727	-.006571	.0022501	3.144497	.0024927
#2	12.49369	.4867592	.0007606	-.007640	.0104174	3.147421	.0034616
#3	12.52972	.4827224	.0009380	-.007144	.0108316	3.143632	.0014614

Sample Name: Q3254-07LX5 Acquired: 10/2/2025 15:18:04 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**5.274716**	**.0372032**	**.1687977**
Stddev	.073335	.0042434	.0012828
%RSD	1.390304	11.40611	.7599785
#1	5.359312	.0351953	.1702789
#2	5.235674	.0343364	.1680445
#3	5.229161	.0420780	.1680697

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7685.764**	**86907.85**	**4242.539**	**5924.419**	**8268.726**
Stddev	26.486	176.81	8.945	20.285	26.441
%RSD	.3446150	.2034503	.2108307	.3423952	.3197699
#1	7675.285	86823.90	4233.156	5906.181	8255.013
#2	7666.121	87111.01	4250.968	5946.267	8251.959
#3	7715.886	86788.66	4243.494	5920.810	8299.206

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3254-07MS Acquired: 10/2/2025 15:22:09 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8955480**	**2.226722**	**1.089925**	**2.318826**	**.8007386**	**2.042902**
Stddev	.0010384	.132016	.003310	.011535	.0022408	.039247
%RSD	.1159533	5.928712	.3037058	.4974669	.2798445	1.921122
#1	.8952919	2.079693	1.092175	2.305526	.7981514	2.044370
#2	.8946616	2.265380	1.086124	2.326103	.8020045	2.081394
#3	.8966905	2.335093	1.091475	2.324849	.8020601	2.002942

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5207050**	**.2089657**	**.2216480**	**172.1965**	**.4412933**	**.2118858**
Stddev	.0037558	.0008094	.0002600	.3585	.0015869	.0001744
%RSD	.7212979	.3873600	.1172852	.2081981	.3595951	.0822881
#1	.5165123	.2080740	.2214414	171.8158	.4428409	.2116846
#2	.5237617	.2096541	.2215626	172.5278	.4396699	.2119923
#3	.5218410	.2091690	.2219399	172.2459	.4413692	.2119807

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3281968**	**22.32708**	**2.588934**	**43.43033**	**.5690639**	**.0728915**
Stddev	.0004676	.05287	.009054	.08821	.0004817	.0004841
%RSD	.1424645	.2367896	.3497290	.2031151	.0846470	.6641916
#1	.3279110	22.36555	2.578568	43.40193	.5694032	.0734474
#2	.3279430	22.34889	2.595298	43.35981	.5692759	.0726644
#3	.3287364	22.26679	2.592935	43.52925	.5685125	.0725627

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**421.2878**	**.2988056**	**.3431186**	**49.91161**	**2.404211**	**.4134033**
Stddev	6.0579	.0085235	.0010756	.14066	.013011	.0004304
%RSD	1.437939	2.852509	.3134744	.2818097	.5411851	.1041071
#1	428.1936	.3075637	.3422493	49.86678	2.389790	.4134618
#2	416.8708	.2905380	.3427851	49.79884	2.415071	.4138015
#3	418.7989	.2983152	.3443215	50.06922	2.407771	.4129467

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3254-07MS Acquired: 10/2/2025 15:22:09 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7869076	.1973708	F 16.20680	7.790988	F 27.16732	.1185852
Stddev	.0012222	.0020255	.06399	.014888	.24273	.0091902
%RSD	.1553218	1.026224	.3948492	.1910893	.8934542	7.749837
#1	.7854987	.1996507	16.27691	7.779225	26.88939	.1079751
#2	.7876844	.1957791	16.15154	7.786011	27.27494	.1240570
#3	.7875396	.1966826	16.19196	7.807726	27.33763	.1237235

Elem	Sr4077
Units	ppm
Avg	.9592156
Stddev	.0039090
%RSD	.4075167
#1	.9548273
#2	.9623246
#3	.9604950

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7288.863	81742.70	4144.622	5630.171	7530.177
Stddev	11.971	496.25	4.760	42.266	9.380
%RSD	.1642425	.6070839	.1148445	.7506991	.1245682
#1	7299.316	81179.91	4139.613	5583.096	7535.567
#2	7291.470	82117.44	4145.168	5664.860	7535.618
#3	7275.803	81930.76	4149.086	5642.558	7519.346

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3254-07MSD Acquired: 10/2/2025 15:26:13 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9595976**	**2.112156**	**1.170510**	**2.473727**	**.8691009**	**2.165198**
Stddev	.0041749	.133814	.004048	.005071	.0025340	.023277
%RSD	.4350647	6.335400	.3458655	.2049757	.2915666	1.075050
#1	.9643399	2.253967	1.169702	2.477306	.8675523	2.182868
#2	.9564765	2.094385	1.166927	2.475950	.8720252	2.138823
#3	.9579762	1.988116	1.174902	2.467925	.8677251	2.173903

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5600893**	**.2242926**	**.2363775**	**186.7916**	**.4670512**	**.2255546**
Stddev	.0016132	.0018669	.0004542	.2505	.0012062	.0005648
%RSD	.2880165	.8323599	.1921593	.1341297	.2582560	.2504063
#1	.5616258	.2222384	.2358619	186.6586	.4658356	.2250471
#2	.5602331	.2247536	.2367187	186.6356	.4670701	.2254536
#3	.5584091	.2258859	.2365518	187.0806	.4682478	.2261631

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3496195**	**23.89852**	**2.817725**	**47.11193**	**.6070670**	**.0796870**
Stddev	.0016580	.06639	.005033	.11351	.0021489	.0011055
%RSD	.4742325	.2778010	.1786244	.2409387	.3539846	1.387332
#1	.3482580	23.95700	2.817878	46.99948	.6046177	.0805281
#2	.3491347	23.82636	2.812616	47.22647	.6079471	.0784348
#3	.3514659	23.91221	2.822679	47.10985	.6086361	.0800980

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**447.2108**	**.3100995**	**.3658441**	**54.17259**	**2.640584**	**.4385731**
Stddev	2.9397	.0039964	.0006622	.38273	.022105	.0008155
%RSD	.6573401	1.288737	.1809990	.7065075	.8371344	.1859340
#1	446.0610	.3059219	.3651575	54.33925	2.615119	.4393465
#2	450.5517	.3138858	.3658962	53.73478	2.654826	.4377213
#3	445.0199	.3104909	.3664787	54.44374	2.651808	.4386515

Sample Name: Q3254-07MSD Acquired: 10/2/2025 15:26:13 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8518853	.2161722	F 17.37415	8.149114	F 29.29422	.1168781
Stddev	.0012104	.0045835	.06364	.034693	.30418	.0040014
%RSD	.1420877	2.120286	.3662846	.4257319	1.038375	3.423592
#1	.8515228	.2188179	17.44606	8.185145	29.62069	.1182657
#2	.8532356	.2108797	17.32509	8.146264	29.24320	.1123676
#3	.8508976	.2188191	17.35130	8.115934	29.01877	.1200010

Elem	Sr4077
Units	ppm
Avg	1.038997
Stddev	.007257
%RSD	.6984444
#1	1.041576
#2	1.030803
#3	1.044612

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7215.400	81147.25	4055.238	5574.389	7417.463
Stddev	31.539	297.41	14.338	16.316	32.658
%RSD	.4371070	.3665050	.3535738	.2927015	.4402888
#1	7244.070	80995.25	4065.513	5559.770	7449.126
#2	7220.513	80956.55	4038.857	5571.406	7419.370
#3	7181.617	81489.94	4061.343	5591.991	7383.893

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3254-07A Acquired: 10/2/2025 15:30:17 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9519969**	**1.985330**	**1.168792**	**2.473925**	**.3359618**	**.8389720**
Stddev	.1242437	.231414	.148024	.309862	.0895610	.1561123
%RSD	13.05085	11.65621	12.66468	12.52511	26.65809	18.60756
#1	.8230272	1.797865	1.012604	2.151496	.2450941	.6960753
#2	.9620610	1.914153	1.186762	2.500810	.3386351	.8152551
#3	1.070902	2.243972	1.307011	2.769468	.4241563	1.005586

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4059476**	**.1416215**	**.2365820**	**169.4162**	**.2988978**	**.2242969**
Stddev	.0136973	.0187094	.0301062	.2778	.0400123	.0280671
%RSD	3.374156	13.21087	12.72548	.1639640	13.38663	12.51336
#1	.3925020	.1232412	.2049797	169.5384	.2586958	.1948045
#2	.4054573	.1409797	.2398390	169.6119	.2992797	.2274066
#3	.4198834	.1606435	.2649272	169.0983	.3387177	.2506796

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3492890**	**20.66097**	**2.422237**	**41.78802**	**.6022147**	**.0490730**
Stddev	.0423890	.14482	.006743	.35589	.0699053	.0074400
%RSD	12.13580	.7009585	.2783899	.8516472	11.60804	15.16112
#1	.3046789	20.49407	2.418930	41.41580	.5288791	.0420091
#2	.3541504	20.73526	2.429995	41.82330	.6096736	.0483705
#3	.3890377	20.75357	2.417785	42.12495	.6680915	.0568393

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**407.9559**	**.1188488**	**.2734192**	**44.89152**	**2.299392**	**.1643154**
Stddev	3.1135	.0225346	.0186194	.55518	.030883	.0455038
%RSD	.7631954	18.96070	6.809838	1.236706	1.343093	27.69293
#1	410.4588	.0955339	.2550166	44.27234	2.271130	.1191412
#2	408.9394	.1205003	.2729929	45.05729	2.294688	.1636632
#3	404.4694	.1405121	.2922480	45.34493	2.332357	.2101417

Sample Name: Q3254-07A Acquired: 10/2/2025 15:30:17 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2974828	.0214110	F 15.54916	8.129754	F 26.76853	.0056282
Stddev	.0952157	.0063087	.03331	.988490	.19831	.0099981
%RSD	32.00712	29.46482	.2142352	12.15892	.7408469	177.6432
#1	.2038504	.0161438	15.52037	7.122488	26.97157	-.001700
#2	.2943914	.0196865	15.54147	8.168440	26.57531	.001567
#3	.3942065	.0284026	15.58565	9.098333	26.75871	.017018

Elem	Sr4077
Units	ppm
Avg	.8282968
Stddev	.0089183
%RSD	1.076702
#1	.8183980
#2	.8307873
#3	.8357050

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7173.162	78070.42	3995.566	5405.001	7401.605
Stddev	24.052	516.11	26.229	41.317	21.086
%RSD	.3353071	.6610778	.6564460	.7644126	.2848879
#1	7173.684	77679.04	3971.001	5368.350	7399.238
#2	7196.949	77876.89	3992.506	5396.878	7423.775
#3	7148.853	78655.31	4023.190	5449.776	7381.802

Sample Name: Q3254-08 Acquired: 10/2/2025 15:34:12 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0048264**	**.0218596**	**.0053290**	**.0232138**	**.0092987**	**.0370957**
Stddev	.0073864	.0034838	.0018412	.0024958	.0050059	.0108071
%RSD	153.0412	15.93709	34.55095	10.75137	53.83374	29.13298
#1	-.003251	.0247657	.0044732	.0222428	.0095918	.0300735
#2	.011237	.0179977	.0040714	.0260491	.0041528	.0316731
#3	.006493	.0228156	.0074424	.0213494	.0141516	.0495404

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3467848**	**.0009941**	**-.000345**	**173.2590**	**.0033802**	**.0026482**
Stddev	.0026672	.0000733	.000056	.4706	.0005652	.0003600
%RSD	.7691272	7.377254	16.30157	.2716283	16.72027	13.59314
#1	.3469783	.0010283	-.000364	173.6488	.0035939	.0022530
#2	.3440261	.0009100	-.000389	172.7362	.0027393	.0027344
#3	.3493501	.0010442	-.000282	173.3920	.0038073	.0029572

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0122240**	**19.18071**	**2.425669**	**42.02620**	**.0373490**	**-.004387**
Stddev	.0005110	.13214	.016743	.12807	.0004680	.000459
%RSD	4.180111	.6889215	.6902312	.3047288	1.252954	10.47346
#1	.0127190	19.31640	2.435901	42.10527	.0370088	-.004521
#2	.0122544	19.05243	2.406347	42.09488	.0371555	-.003876
#3	.0116984	19.17330	2.434758	41.87844	.0378827	-.004765

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**406.6898**	**.0056603**	**.1248877**	**41.27989**	**2.164784**	**.0047764**
Stddev	3.5677	.0071911	.0007731	.21032	.008654	.0002504
%RSD	.8772484	127.0445	.6190537	.5094923	.3997475	5.243509
#1	407.7844	.0092069	.1249248	41.18485	2.172274	.0050418
#2	402.7031	.0103892	.1240966	41.13386	2.155311	.0047433
#3	409.5820	-.002615	.1256415	41.52095	2.166768	.0045442

Sample Name: Q3254-08 Acquired: 10/2/2025 15:34:12 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.026499	-.000403	F 15.16459	.0429159	F 28.09551	-.051136
Stddev	.001006	.003186	.07100	.0019581	.28223	.010670
%RSD	3.795408	791.2236	.4682140	4.562720	1.004527	20.86664
#1	-.027463	-.002608	15.13112	.0421247	28.38918	-.052242
#2	-.025456	.003250	15.24614	.0414772	27.82632	-.039956
#3	-.026579	-.001851	15.11651	.0451459	28.07103	-.061211

Elem	Sr4077
Units	ppm
Avg	.7869242
Stddev	.0073344
%RSD	.9320312
#1	.7909223
#2	.7784595
#3	.7913909

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7119.868	78951.41	3875.381	5483.984	7327.871
Stddev	7.218	301.48	19.632	7.657	7.890
%RSD	.1013800	.3818523	.5065742	.1396218	.1076776
#1	7112.105	79045.51	3866.466	5484.163	7319.307
#2	7126.377	79194.62	3897.888	5491.550	7334.847
#3	7121.123	78614.11	3861.788	5476.240	7329.457

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: CCV04 Acquired: 10/2/2025 15:54:16 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.460598**	**5.165748**	**5.274570**	**4.901248**	**4.921082**	**9.319877**
Stddev	.035940	.195298	.019965	.018974	.015561	.055951
%RSD	.6581757	3.780626	.3785108	.3871304	.3162021	.6003366
#1	5.429896	4.946080	5.257495	4.879607	4.908084	9.300898
#2	5.451767	5.231417	5.269694	4.915031	4.916837	9.382849
#3	5.500131	5.319747	5.296521	4.909105	4.938325	9.275885

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.074816**	**.2336235**	**2.663105**	**23.86584**	**1.066826**	**2.479181**
Stddev	.068337	.0028429	.012634	.15688	.014706	.008727
%RSD	.7530420	1.216894	.4743972	.6573442	1.378452	.3520220
#1	9.085575	.2328556	2.651956	23.87819	1.073274	2.472471
#2	9.137135	.2367716	2.660533	24.01618	1.077206	2.476025
#3	9.001738	.2312434	2.676827	23.70315	1.049998	2.489047

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.288290**	**5.296431**	**2.343470**	**24.14536**	**2.519794**	**1.285059**
Stddev	.005765	.095040	.022436	.27079	.010479	.012445
%RSD	.4474922	1.794418	.9573757	1.121499	.4158764	.9684629
#1	1.282641	5.375254	2.345290	24.05759	2.510748	1.289600
#2	1.288065	5.323146	2.364940	24.44915	2.517355	1.294596
#3	1.294164	5.190892	2.320179	23.92934	2.531277	1.270981

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.25527**	**2.398854**	**2.509711**	**24.17296**	**5.434850**	**4.781649**
Stddev	.29031	.024734	.013812	.16246	.063591	.016380
%RSD	1.248348	1.031057	.5503296	.6720828	1.170052	.3425558
#1	23.54617	2.390174	2.517562	24.18159	5.402918	4.765758
#2	23.25408	2.426758	2.517809	24.33093	5.508079	4.780712
#3	22.96556	2.379631	2.493764	24.00635	5.393553	4.798477

Sample Name: CCV04 Acquired: 10/2/2025 15:54:16 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 5.504136	4.685984	F 3.664128	F 6.026209	F 5.746284	F 3.128322
Stddev	.027145	.037774	.037130	.042461	.061997	.025806
%RSD	.4931743	.8060981	1.013338	.7046084	1.078906	.8249044
#1	5.475248	4.690016	3.699307	5.977476	5.684944	3.129702
#2	5.508046	4.721581	3.667762	6.045911	5.744989	3.153410
#3	5.529114	4.646357	3.625315	6.055241	5.808918	3.101854

Elem	Sr4077
Units	ppm
Avg	4.564561
Stddev	.033395
%RSD	.7316245
#1	4.572009
#2	4.593604
#3	4.528071

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7186.475	81123.33	3647.865	5466.335	7827.649
Stddev	18.080	877.84	36.770	50.562	19.715
%RSD	.2515878	1.082110	1.007993	.9249679	.2518667
#1	7207.168	80530.56	3654.753	5418.367	7850.187
#2	7173.728	80707.63	3608.138	5461.493	7813.601
#3	7178.530	82131.81	3680.704	5519.143	7819.158

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: CCB04 Acquired: 10/2/2025 16:05:32 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0057208**	**.0175344**	**.0026717**	**.0091018**	**.0138414**	**-.026790**
Stddev	.0039022	.0018194	.0004715	.0030903	.0011651	.021810
%RSD	68.21193	10.37610	17.64709	33.95249	8.417311	81.41018
#1	.0057282	.0194433	.0022072	.0096325	.0148555	-.050425
#2	.0018148	.0158202	.0031498	.0057805	.0140999	-.022500
#3	.0096193	.0173396	.0026582	.0118923	.0125688	-.007444

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0442226**	**.0002303**	**-.000567**	**-.025679**	**.0018042**	**.0001049**
Stddev	.0029313	.0001597	.000059	.033509	.0001606	.0005301
%RSD	6.628462	69.32743	10.45295	130.4915	8.901980	505.1630
#1	.0451538	.0003507	-.000595	-.060271	.0018237	.0005746
#2	.0409389	.0000492	-.000499	-.023397	.0016347	-.000470
#3	.0465752	.0002911	-.000607	.006630	.0019542	.000210

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012188**	**.0213355**	**.0018489**	**-.012887**	**-.000997**	**-.000705**
Stddev	.0002343	.0094687	.0008906	.060026	.000843	.000475
%RSD	19.22024	44.38005	48.16606	465.8012	84.56999	67.40119
#1	.0013982	.0297997	.0009080	-.081490	-.000025	-.000796
#2	.0013045	.0111097	.0019600	.029974	-.001531	-.001127
#3	.0009538	.0230971	.0026787	.012857	-.001434	-.000191

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.566531**	**.0009889**	**-.000953**	**-.750061**	**.0106800**	**.0004632**
Stddev	.022391	.0060280	.000308	.074582	.0010175	.0001117
%RSD	3.952238	609.5680	32.25983	9.943451	9.527064	24.10486
#1	-.591502	.0079008	-.001046	-.684347	.0101097	.0005453
#2	-.559847	-.001755	-.000610	-.734714	.0118547	.0005083
#3	-.548243	-.003179	-.001204	-.831123	.0100755	.0003361

Sample Name: CCB04 Acquired: 10/2/2025 16:05:32 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.026417	.0054068	-.006872	F -.011394	F .0184804	F -.030926
Stddev	.000616	.0064727	.012584	.001011	.0011539	.006832
%RSD	2.330268	119.7132	183.1248	8.874867	6.243914	22.09304
#1	-.025807	.0038362	-.021070	-.011726	.0174319	-.037304
#2	-.027038	-.000136	-.002450	-.010258	.0197167	-.023715
#3	-.026406	.012520	.002904	-.012197	.0182927	-.031759

Elem	Sr4077
Units	ppm
Avg	-.000164
Stddev	.000161
%RSD	98.61982
#1	-.000003
#2	-.000326
#3	-.000163

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7365.446	85752.86	3620.857	5739.798	8825.908
Stddev	49.319	182.23	19.035	7.156	41.279
%RSD	.6695972	.2125093	.5256981	.1246815	.4677033
#1	7308.977	85790.27	3599.864	5737.198	8778.344
#2	7400.067	85554.82	3636.993	5747.891	8852.380
#3	7387.295	85913.49	3625.713	5734.305	8846.999

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3245-24 Acquired: 10/2/2025 16:47:11 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001008**	**-.004181**	**.0044637**	**-.009674**	**-.002698**	**.0557587**	**.1770536**
Stddev	.001245	.002886	.0014627	.001861	.001445	.0068166	.0026389
%RSD	123.4245	69.02725	32.76920	19.24104	53.57055	12.22522	1.490434
#1	-.002130	-.004482	.0052729	-.009844	-.004365	.0493774	.1743363
#2	-.001226	-.001156	.0053431	-.011444	-.001917	.0549588	.1796064
#3	.000330	-.006905	.0027752	-.007733	-.001811	.0629400	.1772181

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000112**	**.0003060**	**1.599732**	**.0011210**	**-.000222**	**-.000295**	**.0199406**
Stddev	.0000218	.0000402	.011503	.0002376	.000210	.000243	.0152198
%RSD	195.2671	13.12000	.7190413	21.19613	94.52148	82.43253	76.32581
#1	.0000248	.0003517	1.595080	.0012292	-.000405	-.000014	.0347118
#2	-.000014	.0002903	1.612832	.0012853	.000007	-.000434	.0208013
#3	.000023	.0002761	1.591283	.0008486	-.000267	-.000436	.0043087

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0107295**	**.3412988**	**.0013055**	**.0000932**	**310.5134**	**-.000335**	**.1331391**
Stddev	.0006055	.0180242	.0001140	.0000932	2.5921	.002575	.0008084
%RSD	5.643731	5.281059	8.729712	99.98643	.8347820	769.6182	.6071725
#1	.0112364	.3569717	.0014355	.0000334	311.7752	-.000351	.1330667
#2	.0108931	.3453216	.0012231	.0000456	312.2330	-.002902	.1323693
#3	.0100590	.3216031	.0012578	.0002006	307.5320	.002249	.1339812

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6923818**	**.0142466**	**.0001235**	**-.016208**	**.0008962**	**.0539262**	**.0137408**
Stddev	.0231528	.0007751	.0000845	.000441	.0007972	.0079597	.0004915
%RSD	3.343941	5.440289	68.41573	2.720306	88.94672	14.76035	3.576706
#1	.6919196	.0137657	.0001876	-.016619	.0010540	.0516875	.0142998
#2	.7157623	.0151407	.0001550	-.015742	.0016027	.0473256	.0135464
#3	.6694636	.0138334	.0000278	-.016263	.0000320	.0627655	.0133763

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3245-24 Acquired: 10/2/2025 16:47:11 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.1825533	-.011239	.0085688
Stddev	.0039062	.000984	.0001295
%RSD	2.139765	8.754046	1.511066
#1	.1823320	-.012214	.0084240
#2	.1787624	-.011256	.0086736
#3	.1865655	-.010246	.0086087

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7310.285	100097.4	8424.765	5439.943	8323.492
Stddev	93.753	67.7	74.480	24.336	84.354
%RSD	1.282474	.0676095	.8840616	.4473537	1.013443
#1	7204.685	100175.2	8508.635	5420.858	8226.178
#2	7342.447	100064.6	8399.311	5467.348	8368.528
#3	7383.724	100052.3	8366.348	5431.624	8375.769

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3245-16 Acquired: 10/2/2025 16:51:27 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001959**	**.0003118**	**.0011239**	**-.002387**	**-.001900**	**.0609069**	**.1046582**
Stddev	.001181	.0023093	.0011533	.003183	.004543	.0197435	.0002652
%RSD	60.28408	740.7137	102.6142	133.3421	239.1225	32.41585	.2533527
#1	-.003213	.0028772	.0002096	-.000753	.000893	.0817283	.1045254
#2	-.001799	-.000341	.0007426	-.006056	-.007142	.0424552	.1049636
#3	-.000866	-.001601	.0024195	-.000353	.000549	.0585374	.1044857

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000006**	**.0000770**	**.2343913**	**.0009293**	**.0001505**	**.0000776**	**.0018321**
Stddev	.000069	.0000592	.0202547	.0004882	.0001036	.0003217	.0043319
%RSD	1188.550	76.88654	8.641418	52.53574	68.82153	414.4339	236.4420
#1	-.000072	.0001359	.2326719	.0007273	.0000960	-.000281	.0041056
#2	.000066	.0000776	.2554509	.0005745	.0002699	.000340	.0045540
#3	-.000011	.0000175	.2150510	.0014861	.0000856	.000174	-.003163

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0097676**	**.1236953**	**.0006079**	**-.000282**	**168.2693**	**.0038748**	**.0544412**
Stddev	.0005313	.0320884	.0001830	.000501	2.1886	.0048005	.0003094
%RSD	5.438956	25.94148	30.10089	177.9036	1.300639	123.8906	.5683612
#1	.0102258	.0868438	.0006343	-.000394	170.6240	.0094167	.0547984
#2	.0091853	.1454586	.0007762	-.000717	166.2974	.0010068	.0542550
#3	.0098919	.1387837	.0004131	.000266	167.8865	.0012008	.0542702

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0798849**	**.0083488**	**-.000144**	**-.017155**	**.0020762**	**-.004390**	**.0068657**
Stddev	.0646013	.0008873	.000059	.000283	.0018205	.021260	.0013680
%RSD	80.86798	10.62742	41.40810	1.647204	87.68613	484.2443	19.92540
#1	.0112059	.0073249	-.000169	-.017393	.0009263	-.027901	.0074166
#2	.0890110	.0088290	-.000186	-.016843	.0041751	.001247	.0078724
#3	.1394380	.0088924	-.000076	-.017230	.0011271	.013483	.0053081

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3245-16 Acquired: 10/2/2025 16:51:27 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.1161750	-.013204	.0026271
Stddev	.0007346	.001778	.0000349
%RSD	.6323400	13.46416	1.327770
#1	.1154246	-.014413	.0026610
#2	.1168927	-.014036	.0026292
#3	.1162076	-.011163	.0025913

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8003.807	103513.2	7455.516	5978.136	9041.662
Stddev	20.883	729.5	60.471	64.850	39.029
%RSD	.2609144	.7047422	.8110851	1.084789	.4316583
#1	8014.181	102720.1	7480.237	5903.952	9067.732
#2	8017.472	104155.6	7386.601	6024.066	9060.463
#3	7979.768	103663.9	7499.709	6006.389	8996.791

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3245-08 Acquired: 10/2/2025 16:55:39 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001848**	**.0017668**	**.0017024**	**.0024140**	**-.001540**	**.0365913**	**.0801431**
Stddev	.002172	.0032284	.0012783	.0024458	.001857	.0180510	.0006482
%RSD	117.5279	182.7273	75.08758	101.3166	120.5659	49.33132	.8088127
#1	-.004101	.0001230	.0030107	-.000185	-.003395	.0183848	.0802770
#2	.000231	-.000309	.0004565	.002757	.000320	.0544826	.0807139
#3	-.001672	.005486	.0016399	.004670	-.001546	.0369064	.0794384

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000014**	**.0000072**	**1.287903**	**.0017152**	**.0000397**	**-.000317**	**.0146649**
Stddev	.0000228	.0000687	.010629	.0003796	.0002206	.000227	.0086286
%RSD	1676.471	959.2168	.8252780	22.13285	555.2948	71.61437	58.83876
#1	-.000025	.0000412	1.294065	.0013888	-.000021	-.000564	.0214249
#2	.000011	-.000072	1.275630	.0016249	-.000144	-.000267	.0176236
#3	.000018	.000052	1.294013	.0021318	.000284	-.000119	.0049461

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0269666**	**.2086287**	**.0027744**	**-.000701**	**140.0859**	**.0033151**	**.0298442**
Stddev	.0001484	.0163432	.0007416	.000592	1.3349	.0020085	.0001868
%RSD	.5501375	7.833644	26.72987	84.50144	.9529400	60.58588	.6260780
#1	.0270608	.2171978	.0025734	-.000323	141.3895	.0032593	.0298617
#2	.0270435	.1897830	.0035958	-.000397	140.1465	.0013351	.0296493
#3	.0267956	.2189054	.0021540	-.001384	138.7217	.0053510	.0300218

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0078520**	**.0076336**	**.0001559**	**-.016181**	**.0028835**	**.0843420**	**.0019479**
Stddev	.0921727	.0005169	.0001933	.000573	.0017777	.0182030	.0005666
%RSD	1173.873	6.771446	124.0321	3.542501	61.64987	21.58232	29.08831
#1	.0769925	.0074833	-.000055	-.015977	.0014705	.0727590	.0020513
#2	-.096793	.0082090	.000324	-.016828	.0023005	.1053231	.0024557
#3	.043357	.0072085	.000199	-.015737	.0048795	.0749440	.0013367

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3245-08 Acquired: 10/2/2025 16:55:39 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.1052308	-.010666	.0061585
Stddev	.0027194	.005070	.0001731
%RSD	2.584251	47.53868	2.811253
#1	.1059654	-.012156	.0059629
#2	.1022195	-.005017	.0062920
#3	.1075074	-.014824	.0062205

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8034.801	99259.74	6692.990	6083.580	8897.282
Stddev	32.162	205.08	28.296	42.320	28.362
%RSD	.4002898	.2066062	.4227664	.6956369	.3187728
#1	8007.895	99025.83	6718.523	6035.049	8879.398
#2	8026.085	99344.71	6697.879	6102.887	8882.463
#3	8070.424	99408.67	6662.568	6112.802	8929.984

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3245-24DUP Acquired: 10/2/2025 16:59:50 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000328**	**.0063666**	**.0052233**	**.0036143**	**-.002259**	**.0315898**	**.1990507**
Stddev	.001798	.0003546	.0017066	.0013242	.002456	.0083334	.0013132
%RSD	547.8820	5.569651	32.67291	36.63854	108.7058	26.37997	.6597110
#1	.000472	.0065623	.0071839	.0025581	-.005073	.0323742	.1998659
#2	-.002387	.0059573	.0044147	.0050999	-.000547	.0395033	.1997504
#3	.000931	.0065801	.0040712	.0031847	-.001158	.0228920	.1975359

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000570**	**.0001744**	**1.637050**	**.0017518**	**.0002382**	**.0003369**	**.0216440**
Stddev	.0001206	.0000770	.003679	.0002627	.0001216	.0004992	.0009247
%RSD	211.4957	44.16001	.2247371	14.99374	51.04847	148.1625	4.272201
#1	-.000082	.0002234	1.640894	.0016588	.0003571	.0000393	.0212770
#2	.000136	.0000856	1.633562	.0015482	.0001140	.0000583	.0209591
#3	.000117	.0002140	1.636695	.0020483	.0002437	.0009133	.0226958

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0112210**	**.3649699**	**.0012308**	**-.000692**	**217.9976**	**.0034941**	**.1298676**
Stddev	.0011130	.0302129	.0000907	.000546	4.9018	.0004404	.0006354
%RSD	9.919267	8.278181	7.367632	78.90828	2.248544	12.60326	.4892269
#1	.0102815	.3931424	.0012095	-.000884	223.5937	.0039665	.1304701
#2	.0124503	.3687036	.0013303	-.000076	215.9342	.0030949	.1292039
#3	.0109312	.3330637	.0011527	-.001116	214.4647	.0034208	.1299288

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5793166**	**.0241993**	**.0001804**	**-.013465**	**.0013819**	**.0137945**	**.0073141**
Stddev	.0336448	.0008774	.0000304	.000245	.0016193	.0249707	.0008555
%RSD	5.807678	3.625784	16.83966	1.818140	117.1792	181.0200	11.69687
#1	.5761097	.0247348	.0002014	-.013208	-.000404	-.014051	.0067932
#2	.6144500	.0246764	.0001943	-.013696	.002754	.034200	.0083015
#3	.5473900	.0231867	.0001456	-.013492	.001796	.021234	.0068477

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3245-24DUP Acquired: 10/2/2025 16:59:50 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2104447	-.009699	.0081607
Stddev	.0036721	.000592	.0000687
%RSD	1.744905	6.107156	.8418101
#1	.2071964	-.009192	.0081777
#2	.2097087	-.009554	.0082193
#3	.2144290	-.010350	.0080851

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8349.799	98751.99	6117.112	6183.332	9101.303
Stddev	74.411	1125.13	6.144	65.316	66.614
%RSD	.8911749	1.139350	.1004378	1.056327	.7319204
#1	8316.665	97490.22	6115.367	6107.959	9070.584
#2	8297.710	99114.77	6123.940	6218.697	9055.591
#3	8435.022	99650.97	6112.029	6223.340	9177.734

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3245-24LX5 Acquired: 10/2/2025 17:04:00 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011418**	**.0051264**	**.0017172**	**.0095509**	**.0009715**	**.0143656**	**.0581421**
Stddev	.0015334	.0015187	.0017011	.0034742	.0010436	.0210635	.0016125
%RSD	134.2966	29.62544	99.06157	36.37543	107.4262	146.6244	2.773295
#1	.0013890	.0055091	.0007412	.0128198	.0000710	.0367205	.0567256
#2	.0025367	.0064171	.0007290	.0059026	.0021153	.0114865	.0578038
#3	-.000500	.0034529	.0036815	.0099303	.0007282	-.005110	.0598969

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001148**	**-.000085**	**.3795829**	**.0011324**	**-.000065**	**.0001899**	**.0016401**
Stddev	.0000685	.000040	.0125798	.0006317	.000169	.0001124	.0065941
%RSD	59.67917	47.40640	3.314116	55.78465	261.0988	59.17737	402.0608
#1	.0001536	-.000039	.3922756	.0016621	-.000176	.0002251	-.004875
#2	.0001551	-.000105	.3671191	.0004332	-.000147	.0002805	.008310
#3	.0000357	-.000112	.3793539	.0013020	.000129	.0000642	.001485

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0018961**	**.1064998**	**.0003186**	**-.001264**	**45.40097**	**.0005393**	**.0275677**
Stddev	.0005785	.0257986	.0001686	.000455	.35271	.0039532	.0001132
%RSD	30.50977	24.22406	52.92131	35.99661	.7768867	733.0457	.4104643
#1	.0023875	.1351268	.0002043	-.001187	45.32103	-.003080	.0275739
#2	.0012586	.0993232	.0002392	-.001752	45.78680	.004758	.0276777
#3	.0020423	.0850493	.0005122	-.000852	45.09509	-.000060	.0274517

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2413304**	**.0044866**	**-.000200**	**-.006124**	**.0012145**	**-.005669**	**-.001554**
Stddev	.0576870	.0004346	.000045	.000469	.0019865	.006045	.000167
%RSD	23.90376	9.687467	22.48911	7.662800	163.5612	106.6252	10.76424
#1	.2067942	.0044698	-.000245	-.005664	.0032498	-.005738	-.001735
#2	.2092708	.0040606	-.000155	-.006105	.0011132	.000410	-.001520
#3	.3079264	.0049294	-.000199	-.006602	-.000719	-.011680	-.001405

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3245-24LX5 Acquired: 10/2/2025 17:04:00 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0451230	.0026862	.0017429
Stddev	.0029488	.0029329	.0003329
%RSD	6.534918	109.1835	19.10068
#1	.0475235	.0044489	.0020258
#2	.0460139	-.000699	.0018269
#3	.0418315	.004309	.0013761

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8673.200	103427.7	6128.229	6582.865	9761.764
Stddev	12.545	135.6	35.188	25.806	11.496
%RSD	.1446391	.1311112	.5742018	.3920164	.1177609
#1	8658.723	103503.9	6108.579	6591.196	9748.650
#2	8680.866	103508.0	6168.854	6603.476	9770.099
#3	8680.011	103271.1	6107.254	6553.923	9766.542

Sample Name: Q3245-24MS Acquired: 10/2/2025 17:21:31 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8274306**	**2.043047**	**1.022035**	**2.117740**	**.7817203**	**1.874784**	**.3425778**
Stddev	.0021217	.061122	.002975	.006188	.0033648	.011002	.0024130
%RSD	.2564207	2.991718	.2910498	.2922116	.4304297	.5868639	.7043726
#1	.8252927	2.026183	1.018609	2.119390	.7805860	1.886041	.3437318
#2	.8274635	2.110831	1.023960	2.110894	.7855057	1.864056	.3441972
#3	.8295357	1.992127	1.023536	2.122936	.7790693	1.874255	.3398045

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2270035**	**.2066872**	**2.133371**	**.4217875**	**.2005891**	**.3011597**	**2.590914**
Stddev	.0024031	.0004596	.014442	.0049380	.0005076	.0010792	.033434
%RSD	1.058622	.2223913	.6769382	1.170719	.2530432	.3583383	1.290422
#1	.2295651	.2063139	2.140246	.4163036	.2000031	.3001012	2.560085
#2	.2247988	.2065471	2.143091	.4258817	.2008927	.3022585	2.626453
#3	.2266465	.2072006	2.116776	.4231772	.2008715	.3011195	2.586203

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1957057**	**2.205778**	**.5058627**	**.0723130**	**141.9535**	**.2914848**	**.2943503**
Stddev	.0009456	.074476	.0006674	.0007496	2.2855	.0082349	.0025843
%RSD	.4831761	3.376398	.1319288	1.036603	1.610036	2.825172	.8779767
#1	.1956020	2.231226	.5052685	.0720480	140.1389	.3006061	.2914123
#2	.1966989	2.264194	.5065848	.0731591	144.5203	.2845969	.2962720
#3	.1948163	2.121913	.5057349	.0717319	141.2013	.2892515	.2953665

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.606711**	**.3505100**	**.3996465**	**.7399931**	**.1933026**	**.7790194**	**6.583983**
Stddev	.106941	.0031773	.0012277	.0016118	.0014694	.0184984	.019364
%RSD	1.242527	.9064914	.3071991	.2178130	.7601730	2.374580	.2941018
#1	8.497180	.3538005	.4009644	.7381350	.1946034	.7579482	6.578988
#2	8.710858	.3474595	.3985352	.7410143	.1917087	.7925872	6.605354
#3	8.612093	.3502700	.3994400	.7408300	.1935959	.7865229	6.567606

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3245-24MS Acquired: 10/2/2025 17:21:31 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.1785506	.1596589	.1857658
Stddev	.0024958	.0065306	.0011413
%RSD	1.397784	4.090363	.6143768
#1	.1809858	.1635663	.1864186
#2	.1759984	.1521196	.1864307
#3	.1786674	.1632907	.1844479

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8237.008	95124.25	5218.668	6246.140	8921.737
Stddev	32.715	804.75	50.392	68.439	39.612
%RSD	.3971692	.8459970	.9656133	1.095697	.4439956
#1	8215.262	95759.40	5160.683	6305.830	8902.889
#2	8221.131	94219.26	5243.462	6171.443	8895.069
#3	8274.632	95394.11	5251.861	6261.146	8967.254

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: CCV05 Acquired: 10/2/2025 17:31:24 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.058257**	**4.689654**	**5.143387**	**5.154783**	**4.748463**	**9.284757**
Stddev	.011025	.237337	.009506	.012727	.013283	.047594
%RSD	.2179699	5.060861	.1848236	.2468973	.2797240	.5126042
#1	5.056551	4.415608	5.145325	5.141217	4.754569	9.337039
#2	5.070036	4.824976	5.151774	5.166460	4.757594	9.243948
#3	5.048184	4.828378	5.133061	5.156671	4.733225	9.273284

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.164970**	**.2388727**	**2.529301**	**23.88131**	**1.024895**	**2.425427**
Stddev	.039052	.0014130	.003944	.05608	.002578	.004840
%RSD	.4260971	.5915462	.1559214	.2348299	.2515569	.1995618
#1	9.183490	.2393986	2.528514	23.85525	1.021952	2.427037
#2	9.191317	.2399474	2.533579	23.94568	1.025979	2.429257
#3	9.120104	.2372721	2.525811	23.84300	1.026754	2.419987

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.239222**	**5.475423**	**2.354733**	**24.14713**	**2.452081**	**1.233742**
Stddev	.003940	.046738	.013667	.01604	.003780	.001476
%RSD	.3179318	.8536043	.5803956	.0664284	.1541464	.1196527
#1	1.237766	5.485232	2.359257	24.15312	2.453701	1.233582
#2	1.243682	5.424559	2.365565	24.15931	2.454781	1.235292
#3	1.236217	5.516479	2.339378	24.12895	2.447761	1.232352

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.98643**	**2.369933**	**2.433391**	**22.53680**	**4.595943**	**4.691228**
Stddev	.06388	.005273	.004994	.17749	.017784	.015558
%RSD	.2458135	.2224894	.2052478	.7875656	.3869519	.3316416
#1	25.97499	2.374873	2.432706	22.49691	4.602610	4.685942
#2	26.05526	2.364381	2.428775	22.38264	4.609430	4.708741
#3	25.92905	2.370545	2.438693	22.73084	4.575789	4.679003

Sample Name: CCV05 Acquired: 10/2/2025 17:31:24 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.137679**	**4.667963**	F **4.024417**	**5.392253**	**5.184930**	F **3.988608**
Stddev	.011672	.020343	.075279	.034498	.034175	.018951
%RSD	.2271841	.4358082	1.870554	.6397608	.6591149	.4751296
#1	5.127425	4.665991	4.006431	5.353325	5.145473	4.001750
#2	5.150380	4.689221	3.959761	5.419033	5.205181	3.997192
#3	5.135230	4.648677	4.107060	5.404401	5.204135	3.966885

Elem	Sr4077
Units	ppm
Avg	**4.624047**
Stddev	.022117
%RSD	.4782959
#1	4.637446
#2	4.636175
#3	4.598519

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**8044.579**	**94098.39**	**4838.801**	**6169.366**	**8789.558**
Stddev	48.053	258.70	24.013	12.946	43.708
%RSD	.5973278	.2749221	.4962668	.2098432	.4972690
#1	8075.943	94397.07	4843.098	6184.130	8820.885
#2	7989.258	93952.98	4812.929	6164.013	8739.626
#3	8068.536	93945.12	4860.375	6159.955	8808.165

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: CCB05 Acquired: 10/2/2025 17:35:16 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009838**	**.0068293**	**.0028098**	**-.005284**	**.0066484**	**.0206694**	**.0320052**
Stddev	.0020348	.0030005	.0009401	.001480	.0030429	.0018307	.0015042
%RSD	206.8309	43.93494	33.45699	28.01524	45.76933	8.856984	4.699707
#1	-.001134	.0095357	.0023612	-.003791	.0097952	.0196468	.0314307
#2	.002924	.0073494	.0021781	-.005310	.0064288	.0195785	.0308730
#3	.001161	.0036028	.0038902	-.006751	.0037212	.0227829	.0337120

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001268**	**-.000242**	**-.015019**	**.0012116**	**-.000106**	**-.000009**	**-.010022**
Stddev	.0001205	.000045	.006762	.0002407	.000160	.000511	.006638
%RSD	95.06145	18.56803	45.02672	19.86648	151.1060	5605.604	66.23639
#1	.0000751	-.000251	-.018771	.0011027	.000079	.000118	-.014832
#2	.0000407	-.000281	-.007212	.0014875	-.000193	-.000572	-.002449
#3	.0002645	-.000193	-.019073	.0010446	-.000204	.000427	-.012785

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004715**	**-.005563**	**-.000195**	**-.001205**	**-.692335**	**-.004819**	**-.000891**
Stddev	.0003248	.031005	.000301	.000215	.014533	.003583	.000403
%RSD	68.87942	557.2894	153.8976	17.83897	2.099078	74.36148	45.23479
#1	.0007695	.027369	-.000412	-.001446	-.691878	-.006030	-.000487
#2	.0005196	-.009870	.000148	-.001133	-.707091	-.000787	-.000893
#3	.0001254	-.034190	-.000322	-.001035	-.678037	-.007639	-.001294

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.778975**	**.0036295**	**.0006132**	F **-.027578**	**.0063324**	**-.004949**	**-.006901**
Stddev	.072104	.0017950	.0002575	.000523	.0024288	.007547	.000731
%RSD	9.256315	49.45664	41.99787	1.897057	38.35500	152.5194	10.58910
#1	-.751620	.0019734	.0003958	-.027735	.0080003	-.013618	-.006241
#2	-.724551	.0055369	.0005461	-.026994	.0035459	.000157	-.006777
#3	-.860754	.0033782	.0008976	-.028004	.0074511	-.001384	-.007686

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: CCB05 Acquired: 10/2/2025 17:35:16 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.001156	F -.019548	.0000329
Stddev	.002699	.006835	.0003206
%RSD	233.3985	34.96408	974.4029
#1	-.003926	-.018638	-.000105
#2	.001466	-.013213	-.000196
#3	-.001009	-.026791	.000399

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8148.403	97337.33	4808.035	6336.225	9685.934
Stddev	17.405	487.13	29.858	48.029	27.753
%RSD	.2135970	.5004584	.6209999	.7580000	.2865313
#1	8166.242	96803.07	4795.744	6280.766	9717.391
#2	8147.500	97452.06	4842.076	6363.754	9675.506
#3	8131.468	97756.86	4786.283	6364.153	9664.906

Sample Name: Q3245-24MSD Acquired: 10/2/2025 17:45:05 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8695614**	**1.954514**	**1.083995**	**2.239795**	**.8115646**	**1.926043**	**.3571939**
Stddev	.0004783	.013101	.001628	.004333	.0028297	.017348	.0037768
%RSD	.0550093	.6702820	.1502261	.1934597	.3486776	.9007278	1.057363
#1	.8690862	1.939560	1.085418	2.244623	.8145358	1.913329	.3569795
#2	.8700428	1.960012	1.082219	2.236244	.8089015	1.945807	.3610734
#3	.8695552	1.963970	1.084349	2.238518	.8112565	1.918993	.3535288

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2481837**	**.2166749**	**2.202749**	**.4390063**	**.2079800**	**.3140295**	**2.505245**
Stddev	.0006828	.0000952	.023345	.0008163	.0004028	.0003828	.042556
%RSD	.2751150	.0439187	1.059827	.1859458	.1936584	.1219123	1.698678
#1	.2473990	.2167002	2.220129	.4393143	.2083479	.3142725	2.519232
#2	.2486418	.2165696	2.211905	.4396238	.2080424	.3135882	2.539047
#3	.2485104	.2167547	2.176214	.4380808	.2075496	.3142278	2.457456

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1987117**	**2.278375**	**.5256822**	**.0764257**	**131.8615**	**.3019409**	**.3028780**
Stddev	.0035319	.044021	.0004013	.0007263	1.7060	.0014915	.0009182
%RSD	1.777412	1.932139	.0763442	.9502793	1.293766	.4939601	.3031535
#1	.1984258	2.314805	.5261444	.0772348	132.9319	.3022395	.3036094
#2	.2023779	2.229459	.5254797	.0762122	132.7584	.3003228	.3018475
#3	.1953314	2.290860	.5254224	.0758301	129.8941	.3032606	.3031770

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.319028**	**.3830302**	**.4089187**	**.7815952**	**.1969181**	**.7870972**	**7.015113**
Stddev	.036052	.0015792	.0003903	.0006402	.0027765	.0375856	.008141
%RSD	.4333722	.4122781	.0954483	.0819040	1.409974	4.775210	.1160482
#1	8.341933	.3815666	.4090960	.7822311	.1938530	.7463931	7.007385
#2	8.337680	.3847039	.4084712	.7816035	.1976365	.7944087	7.023612
#3	8.277471	.3828200	.4091888	.7809509	.1992647	.8204898	7.014341

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3245-24MSD Acquired: 10/2/2025 17:45:05 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.1914081	.1520672	.1895295
Stddev	.0031042	.0044220	.0020257
%RSD	1.621796	2.907927	1.068821
#1	.1882101	.1491269	.1898956
#2	.1916048	.1571526	.1913473
#3	.1944093	.1499222	.1873457

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7850.603	89912.90	4649.635	5953.707	8444.633
Stddev	23.704	623.85	15.265	30.075	27.320
%RSD	.3019400	.6938353	.3283142	.5051408	.3235198
#1	7850.639	89199.61	4632.445	5919.757	8443.864
#2	7874.289	90182.35	4661.607	5977.008	8472.329
#3	7826.881	90356.73	4654.854	5964.357	8417.705

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3245-24A Acquired: 10/2/2025 17:49:04 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8476387**	**2.032978**	**1.059674**	**2.188309**	**.7924881**	**1.898488**	**.3561074**
Stddev	.0020359	.068847	.002921	.004665	.0007595	.037756	.0007514
%RSD	.2401833	3.386507	.2756619	.2131651	.0958427	1.988749	.2109951
#1	.8452945	1.995928	1.056306	2.184132	.7933154	1.854910	.3558063
#2	.8489637	1.990591	1.061188	2.187451	.7923267	1.921394	.3555532
#3	.8486579	2.112416	1.061527	2.193343	.7918223	1.919160	.3569626

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2471386**	**.2120485**	**2.163472**	**.4259785**	**.2032517**	**.3074714**	**2.387986**
Stddev	.0004964	.0003592	.005090	.0007492	.0001086	.0002337	.031806
%RSD	.2008578	.1694102	.2352702	.1758858	.0534210	.0760211	1.331904
#1	.2465816	.2116964	2.160299	.4254889	.2031965	.3072946	2.399349
#2	.2475340	.2120346	2.169343	.4268410	.2033768	.3073833	2.412550
#3	.2473003	.2124144	2.160775	.4256055	.2031819	.3077364	2.352060

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1970541**	**2.289217**	**.5122138**	**.0733102**	**127.3316**	**.2893246**	**.2957344**
Stddev	.0014291	.051254	.0010000	.0007725	.4882	.0062847	.0012196
%RSD	.7252400	2.238911	.1952208	1.053715	.3834103	2.172191	.4123816
#1	.1954199	2.231877	.5117922	.0741989	127.8617	.2957143	.2943703
#2	.1976729	2.305195	.5114937	.0727993	127.2326	.2891089	.2967194
#3	.1980696	2.330578	.5133555	.0729325	126.9004	.2831505	.2961135

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.070816**	**.3862700**	**.3992229**	**.7642771**	**.1909287**	**.7172831**	**6.954122**
Stddev	.077569	.0010348	.0001407	.0030227	.0036014	.0096113	.050501
%RSD	.9611058	.2678988	.0352371	.3954959	1.886230	1.339959	.7262006
#1	7.998400	.3852432	.3990880	.7608375	.1882414	.7283397	6.904148
#2	8.152674	.3862541	.3992121	.7654836	.1950207	.7109242	6.953085
#3	8.061374	.3873126	.3993687	.7665102	.1895240	.7125853	7.005133

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q3245-24A Acquired: 10/2/2025 17:49:04 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.1914245	.1506228	.1867903
Stddev	.0029684	.0052747	.0003775
%RSD	1.550683	3.501934	.2021189
#1	.1898970	.1475712	.1863934
#2	.1948456	.1567135	.1868327
#3	.1895309	.1475837	.1871449

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7788.128	90176.00	4527.000	6033.292	8379.307
Stddev	19.933	432.72	32.240	18.858	27.139
%RSD	.2559458	.4798642	.7121762	.3125584	.3238788
#1	7805.574	90224.36	4543.982	6025.851	8406.872
#2	7792.408	90582.52	4547.199	6054.735	8378.431
#3	7766.402	89721.13	4489.818	6019.290	8352.616

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q2409-05 Acquired: 10/2/2025 17:53:04 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0474268**	**.0071192**	**1.184164**	**.0266826**	**.0074375**	**87.36869**
Stddev	.0007734	.0046500	.001840	.0018762	.0035661	.71807
%RSD	1.630754	65.31596	.1553735	7.031698	47.94718	.8218848
#1	.0465500	.0034511	1.186286	.0288487	.0058858	86.54463
#2	.0480121	.0055575	1.183016	.0255668	.0115166	87.70120
#3	.0477183	.0123490	1.183190	.0256322	.0049102	87.86023

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4702279**	**.0049177**	**.0472156**	**53.03813**	**.1990818**	**.0150283**
Stddev	.0032861	.0000994	.0000712	.34401	.0010373	.0002278
%RSD	.6988409	2.020238	.1507403	.6486011	.5210638	1.515775
#1	.4666884	.0048218	.0472264	52.64231	.1988235	.0149308
#2	.4708133	.0049112	.0471397	53.20718	.2002239	.0152886
#3	.4731820	.0050202	.0472808	53.26490	.1981980	.0148655

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4147220**	**66.09309**	**.3400032**	**13.22113**	**.0516811**	**.0297534**
Stddev	.0007527	1.07252	.0004820	.07341	.0004426	.0001003
%RSD	.1814987	1.622739	.1417766	.5552462	.8564728	.3369960
#1	.4141207	66.16787	.3397031	13.15348	.0518935	.0298099
#2	.4144792	67.12626	.3397472	13.21072	.0511723	.0298127
#3	.4155662	64.98514	.3405592	13.29919	.0519776	.0296377

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0088673**	**.1648950**	**.7012150**	**2.669670**	**-.078397**	**.0051259**
Stddev	.0453088	.0059470	.0021847	.106010	.008397	.0002451
%RSD	510.9628	3.606535	.3115608	3.970887	10.71114	4.781728
#1	.0299547	.1671200	.7000297	2.642903	-.073915	.0049429
#2	.0397891	.1694087	.7037362	2.786497	-.073192	.0050304
#3	-.043142	.1581563	.6998790	2.579609	-.088084	.0054044

Sample Name: Q2409-05 Acquired: 10/2/2025 17:53:04 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004668	.8238688	F 10.12996	6.710501	4.637948	.0117617
Stddev	.000709	.0478503	.19095	.028436	.024445	.0078818
%RSD	15.19595	5.807995	1.884964	.4237537	.5270691	67.01239
#1	-.005291	.8791165	9.90987	6.726691	4.659242	.0162258
#2	-.003896	.7968914	10.25154	6.677667	4.611254	.0026611
#3	-.004819	.7955986	10.22845	6.727145	4.643349	.0163981

Elem	Sr4077
Units	ppm
Avg	.2373037
Stddev	.0026622
%RSD	1.121857
#1	.2361928
#2	.2353768
#3	.2403414

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8328.049	95808.65	4798.026	6434.250	9028.871
Stddev	18.511	893.07	46.041	55.187	26.894
%RSD	.2222677	.9321431	.9595846	.8577037	.2978669
#1	8336.494	95987.97	4828.882	6480.111	9037.038
#2	8340.831	94839.52	4820.092	6373.003	9050.734
#3	8306.822	96598.45	4745.105	6449.636	8998.840

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q2409-05DUP Acquired: 10/2/2025 17:57:05 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0373446**	**.0057373**	**.9564010**	**.0277357**	**.0093044**	**70.08721**	**.3953858**
Stddev	.0007234	.0004240	.0051602	.0033552	.0047142	.41628	.0062645
%RSD	1.937180	7.391030	.5395482	12.09718	50.66639	.5939525	1.584398
#1	.0374000	.0061407	.9543769	.0242415	.0051039	70.55099	.4004010
#2	.0380387	.0057760	.9525596	.0280335	.0084062	69.96477	.3973926
#3	.0365950	.0052952	.9622665	.0309321	.0144031	69.74588	.3883638

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0039444**	**.0379257**	**43.87625**	**.1629663**	**.0108702**	**.3304013**	**54.43230**
Stddev	.0000231	.0001310	.25355	.0017696	.0005205	.0018861	.29686
%RSD	.5842996	.3454431	.5778862	1.085867	4.788517	.5708555	.5453835
#1	.0039220	.0377763	44.15820	.1610887	.0104549	.3290209	54.30491
#2	.0039430	.0380212	43.80358	.1632069	.0107017	.3296327	54.22040
#3	.0039681	.0379794	43.66696	.1646032	.0114541	.3325504	54.77161

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2815436**	**8.131027**	**.0436612**	**.0225836**	**-.232523**	**.1393278**	**.5733497**
Stddev	.0028346	.084028	.0004964	.0006411	.006429	.0027681	.0020826
%RSD	1.006796	1.033419	1.136954	2.838865	2.764861	1.986717	.3632268
#1	.2847230	8.118019	.0431257	.0224910	-.237311	.1424845	.5710182
#2	.2806272	8.220800	.0437521	.0232660	-.235041	.1373152	.5740052
#3	.2792806	8.054262	.0441059	.0219938	-.225216	.1381837	.5750255

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.585998**	**-.062443**	**.0048932**	**-.008824**	**.6001918**	**3.502271**	**5.520859**
Stddev	.028161	.003868	.0005835	.000416	.0124086	.037765	.014562
%RSD	1.775624	6.193750	11.92507	4.711232	2.067443	1.078297	.2637697
#1	1.611951	-.065659	.0049692	-.008614	.5859654	3.483546	5.505823
#2	1.589988	-.063518	.0054350	-.008556	.6058286	3.545739	5.534896
#3	1.556054	-.058152	.0042754	-.009303	.6087814	3.477527	5.521858

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q2409-05DUP Acquired: 10/2/2025 17:57:05 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	3.677537	.0076811	.2280283
Stddev	.003938	.0028826	.0023428
%RSD	.1070900	37.52854	1.027435
#1	3.682077	.0099575	.2303086
#2	3.675042	.0044398	.2281488
#3	3.675492	.0086460	.2256275

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8244.033	93336.70	4655.360	6342.371	9104.754
Stddev	7.450	624.80	29.750	30.347	10.334
%RSD	.0903724	.6694082	.6390523	.4784865	.1135047
#1	8252.224	93751.73	4632.487	6371.099	9103.944
#2	8242.214	93640.26	4644.599	6345.385	9115.470
#3	8237.660	92618.12	4688.993	6310.629	9094.849

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q2409-05LX5 Acquired: 10/2/2025 18:01:07 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0115213**	**.0090824**	**.2495161**	**.0261535**	**.0033821**	**18.95963**	**.1277694**
Stddev	.0008621	.0019291	.0004857	.0037721	.0043485	.05909	.0014705
%RSD	7.482416	21.24003	.1946557	14.42289	128.5721	.3116800	1.150865
#1	.0108293	.0094140	.2490070	.0234468	.0075283	18.93043	.1286552
#2	.0112476	.0108242	.2495671	.0245516	.0037620	18.92081	.1285810
#3	.0124870	.0070090	.2499744	.0304622	-.001144	19.02764	.1260720

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0013351**	**.0094298**	**11.63492**	**.0439846**	**.0032250**	**.0906460**	**14.05439**
Stddev	.0000949	.0001020	.02906	.0006150	.0001422	.0003110	.02981
%RSD	7.106688	1.081684	.2497311	1.398210	4.410702	.3430872	.2120798
#1	.0014357	.0094542	11.62434	.0432745	.0032737	.0905486	14.07921
#2	.0012473	.0095174	11.61265	.0443467	.0030648	.0903954	14.06264
#3	.0013222	.0093178	11.66779	.0443326	.0033364	.0909941	14.02133

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0725138**	**2.960828**	**.0101887**	**.0062081**	**.0683415**	**.0331272**	**.1497022**
Stddev	.0002907	.062706	.0002277	.0012017	.0537239	.0048705	.0006294
%RSD	.4009202	2.117841	2.234936	19.35652	78.61092	14.70251	.4204155
#1	.0721805	2.999763	.0104314	.0075312	.0183906	.0309318	.1504277
#2	.0726458	2.994227	.0099798	.0059083	.1251751	.0387090	.1493751
#3	.0727150	2.888492	.0101548	.0051847	.0614589	.0297408	.1493037

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3473155**	**-.020799**	**.0010188**	**-.003572**	**.1497492**	**1.272635**	**1.385842**
Stddev	.0252500	.000875	.0004920	.000276	.0032401	.062950	.005593
%RSD	7.270036	4.205537	48.29477	7.738175	2.163651	4.946411	.4035906
#1	.3339145	-.021757	.0005964	-.003743	.1526503	1.209687	1.390219
#2	.3315913	-.020596	.0015591	-.003720	.1503444	1.272633	1.387766
#3	.3764408	-.020044	.0009011	-.003253	.1462527	1.335586	1.379541

Sample Name: Q2409-05LX5 Acquired: 10/2/2025 18:01:07 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.9609183	.0105278	.0516935
Stddev	.0035082	.0030076	.0008257
%RSD	.3650929	28.56860	1.597203
#1	.9601774	.0097134	.0520800
#2	.9647378	.0080112	.0507455
#3	.9578397	.0138588	.0522551

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8062.725	93245.64	4572.661	6218.688	9258.830
Stddev	16.972	612.04	44.342	29.943	31.380
%RSD	.2104996	.6563754	.9697121	.4815014	.3389235
#1	8051.387	93856.72	4612.202	6248.733	9228.699
#2	8054.552	93247.54	4581.060	6218.484	9256.466
#3	8082.238	92632.65	4524.720	6188.848	9291.325

Sample Name: Q2409-05MS Acquired: 10/2/2025 18:05:12 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8541840**	**1.927336**	**1.847260**	**2.106811**	**.1445758**	**76.14743**
Stddev	.0032517	.044763	.004865	.010216	.0010006	.44121
%RSD	.3806812	2.322523	.2633829	.4848892	.6920675	.5794213
#1	.8578792	1.965928	1.850626	2.112805	.1450587	76.61586
#2	.8529134	1.878262	1.841682	2.095016	.1452433	76.08671
#3	.8517594	1.937817	1.849473	2.112614	.1434254	75.73972

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5592283**	**.2526009**	**.2406887**	**39.70218**	**.5981341**	**.2144074**
Stddev	.0069304	.0020401	.0008607	.26799	.0014625	.0008731
%RSD	1.239270	.8076402	.3576103	.6750096	.2445065	.4072195
#1	.5657122	.2520629	.2410653	39.92074	.5976251	.2147173
#2	.5600482	.2548561	.2397039	39.78262	.5969941	.2134217
#3	.5519244	.2508837	.2412969	39.40318	.5997830	.2150834

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5767086**	**56.78543**	**.4855695**	**10.38250**	**.5557283**	**.0868247**
Stddev	.0019955	.35886	.0039571	.11431	.0019155	.0006233
%RSD	.3460105	.6319528	.8149348	1.101034	.3446809	.7179038
#1	.5772681	57.08650	.4889349	10.46628	.5573801	.0866679
#2	.5744931	56.38832	.4865632	10.42896	.5536285	.0862947
#3	.5783646	56.88145	.4812102	10.25227	.5561761	.0875114

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.991577**	**.4324034**	**.7026691**	**9.610464**	**.2203608**	**.3702308**
Stddev	.033902	.0095364	.0033457	.056879	.0015514	.0014125
%RSD	1.702260	2.205449	.4761359	.5918479	.7040339	.3815055
#1	1.988386	.4421845	.6991381	9.675873	.2221440	.3711838
#2	1.959384	.4318935	.7057920	9.582913	.2193209	.3686081
#3	2.026962	.4231321	.7030771	9.572607	.2196174	.3709006

Sample Name: Q2409-05MS Acquired: 10/2/2025 18:05:12 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3063549	1.019222	6.601070	F 11.69985	3.805886	.1607383
Stddev	.0037744	.019335	.153383	.09711	.038777	.0060350
%RSD	1.232027	1.897047	2.323604	.8299803	1.018870	3.754563
#1	.3063282	1.041535	6.776974	11.76961	3.832455	.1673674
#2	.3025940	1.007395	6.495241	11.58895	3.761389	.1555628
#3	.3101426	1.008737	6.530995	11.74100	3.823814	.1592847

Elem	Sr4077
Units	ppm
Avg	.3799224
Stddev	.0040641
%RSD	1.069728
#1	.3835805
#2	.3806390
#3	.3755476

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8212.651	95048.87	4600.312	6267.035	8918.857
Stddev	55.118	354.58	31.801	16.536	64.466
%RSD	.6711332	.3730452	.6912889	.2638583	.7228018
#1	8170.695	94854.78	4583.954	6248.198	8869.303
#2	8275.075	95458.12	4580.019	6273.747	8991.739
#3	8192.184	94833.71	4636.963	6279.159	8895.528

Sample Name: Q2409-05MSD Acquired: 10/2/2025 18:09:08 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8563284**	**2.029048**	**2.068535**	**2.105414**	**.1135112**	**88.39181**
Stddev	.0049176	.051284	.007693	.010051	.0035839	.69307
%RSD	.5742674	2.527500	.3719014	.4773869	3.157345	.7840831
#1	.8619895	2.067611	2.076913	2.116710	.1173493	87.88853
#2	.8531151	2.048686	2.061788	2.102073	.1102519	88.10459
#3	.8538805	1.970847	2.066905	2.097459	.1129323	89.18231

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6041200**	**.2536489**	**.2499619**	**46.03464**	**.6201778**	**.2161742**
Stddev	.0068341	.0034022	.0009857	.36036	.0011116	.0009657
%RSD	1.131254	1.341317	.3943389	.7827935	.1792362	.4467136
#1	.6003848	.2538570	.2510791	45.78681	.6212514	.2172572
#2	.5999676	.2501474	.2495915	45.86907	.6190318	.2158624
#3	.6120077	.2569423	.2492151	46.44802	.6202501	.2154029

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6429418**	**59.78048**	**.4905396**	**10.90420**	**.5620853**	**.0962101**
Stddev	.0023654	.43210	.0020489	.08418	.0019057	.0007109
%RSD	.3678954	.7228110	.4176722	.7719725	.3390334	.7388664
#1	.6456282	59.37986	.4885153	10.83291	.5641968	.0969853
#2	.6420255	60.23835	.4904913	10.88262	.5604931	.0960563
#3	.6411716	59.72323	.4926122	10.99706	.5615659	.0955887

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.953734**	**.4480225**	**.8311023**	**9.650032**	**.2238669**	**.3684782**
Stddev	.029005	.0057681	.0021337	.041626	.0013305	.0017888
%RSD	1.484580	1.287463	.2567362	.4313509	.5943117	.4854617
#1	1.921865	.4434105	.8333129	9.618172	.2248474	.3705041
#2	1.960752	.4461669	.8290548	9.697129	.2223524	.3678140
#3	1.978587	.4544900	.8309391	9.634796	.2244010	.3671165

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: Q2409-05MSD Acquired: 10/2/2025 18:09:08 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2567795	.9097749	4.571431	F 12.46482	4.074005	.1532354
Stddev	.0016744	.0319667	.089299	.10352	.027762	.0055500
%RSD	.6520625	3.513695	1.953409	.8304939	.6814515	3.621870
#1	.2585117	.9067010	4.478577	12.54345	4.092215	.1530558
#2	.2566571	.8794562	4.656689	12.50346	4.087748	.1477773
#3	.2551697	.9431676	4.579029	12.34753	4.042051	.1588730

Elem	Sr4077
Units	ppm
Avg	.4212762
Stddev	.0044427
%RSD	1.054575
#1	.4197414
#2	.4178044
#3	.4262827

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8187.023	93912.56	4608.475	6252.859	8861.561
Stddev	31.631	616.06	36.770	42.519	29.855
%RSD	.3863513	.6559882	.7978762	.6799949	.3369046
#1	8150.499	93504.77	4587.058	6210.215	8827.100
#2	8205.250	93611.67	4650.933	6253.109	8878.009
#3	8205.320	94621.23	4587.434	6295.252	8879.576

Sample Name: Q2409-05A Acquired: 10/2/2025 18:13:04 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8927770**	**1.879640**	**2.247729**	**2.195872**	**.7796038**	**87.80753**
Stddev	.0017193	.051575	.003024	.011206	.0014770	.52844
%RSD	.1925730	2.743898	.1345550	.5103205	.1894609	.6018108
#1	.8911255	1.820602	2.248228	2.182981	.7812809	88.08953
#2	.8945568	1.915936	2.250474	2.201347	.7790340	88.13515
#3	.8926488	1.902383	2.244487	2.203287	.7784965	87.19792

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6465048**	**.2589410**	**.2589182**	**53.90049**	**.6310718**	**.2199459**
Stddev	.0075305	.0017342	.0005071	.32716	.0036360	.0004188
%RSD	1.164797	.6697308	.1958464	.6069640	.5761562	.1903969
#1	.6492299	.2600877	.2591413	53.99348	.6344204	.2203209
#2	.6522933	.2597893	.2592755	54.17108	.6272042	.2194940
#3	.6379911	.2569459	.2583379	53.53690	.6315909	.2200229

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7169022**	**67.47951**	**.5257060**	**15.09777**	**.5677377**	**.1051496**
Stddev	.0005933	.26271	.0072632	.12346	.0015609	.0016663
%RSD	.0827520	.3893219	1.381608	.8177691	.2749273	1.584656
#1	.7171180	67.69959	.5284332	15.05511	.5694739	.1058980
#2	.7173574	67.55029	.5312108	15.23691	.5672886	.1063104
#3	.7162313	67.18866	.5174739	15.00130	.5664507	.1032403

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.096772**	**.4606923**	**.8975877**	**10.23235**	**.2728743**	**.4112531**
Stddev	.044707	.0016872	.0045031	.08814	.0025106	.0007132
%RSD	2.132204	.3662432	.5016935	.8613383	.9200726	.1734114
#1	2.147668	.4612555	.8997413	10.16955	.2755934	.4110707
#2	2.078803	.4620258	.8924122	10.33310	.2723855	.4120397
#3	2.063844	.4587954	.9006097	10.19440	.2706440	.4106488

Sample Name: Q2409-05A Acquired: 10/2/2025 18:13:04 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7755846	.8490733	6.415557	F 13.30535	4.551573	.1535103
Stddev	.0027197	.0453702	.076580	.07522	.034447	.0041989
%RSD	.3506615	5.343492	1.193659	.5653652	.7568264	2.735292
#1	.7760518	.9006726	6.341388	13.22798	4.512245	.1567664
#2	.7780404	.8154258	6.494339	13.37823	4.576394	.1487710
#3	.7726616	.8311216	6.410942	13.30985	4.566080	.1549934

Elem	Sr4077
Units	ppm
Avg	.4141678
Stddev	.0052398
%RSD	1.265139
#1	.4163328
#2	.4179781
#3	.4081924

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8149.411	92146.41	4584.283	6270.761	8761.723
Stddev	32.494	714.60	22.992	74.328	29.519
%RSD	.3987253	.7755100	.5015390	1.185310	.3369043
#1	8160.155	91582.34	4558.609	6217.554	8758.105
#2	8112.906	92950.01	4591.266	6355.686	8734.180
#3	8175.171	91906.88	4602.974	6239.043	8792.884

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: CCV06 Acquired: 10/2/2025 18:17:36 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.206614**	**4.726730**	**5.290842**	**5.013879**	**4.825247**	**9.346682**
Stddev	.003221	.065754	.011992	.000931	.009941	.030670
%RSD	.0618690	1.391114	.2266487	.0185679	.2060104	.3281344
#1	5.210177	4.747123	5.285846	5.013147	4.821039	9.314660
#2	5.205758	4.653196	5.282156	5.014927	4.818102	9.349596
#3	5.203907	4.779872	5.304524	5.013564	4.836599	9.375791

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.141333**	**.2515362**	**2.587963**	**23.96837**	**1.038506**	**2.457932**
Stddev	.028559	.0025755	.004736	.04309	.004587	.004384
%RSD	.3124207	1.023902	.1829937	.1797698	.4416720	.1783737
#1	9.113492	.2517989	2.587483	23.92865	1.033856	2.458759
#2	9.139946	.2539702	2.583485	24.01418	1.038634	2.453193
#3	9.170560	.2488394	2.592920	23.96229	1.043026	2.461844

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.266811**	**5.382978**	**2.356254**	**24.39249**	**2.492329**	**1.249053**
Stddev	.000988	.037232	.007505	.11867	.005621	.002724
%RSD	.0779633	.6916594	.3185271	.4865076	.2255358	.2180694
#1	1.267661	5.390337	2.350585	24.25880	2.490996	1.245959
#2	1.265728	5.342616	2.353410	24.48538	2.487495	1.250116
#3	1.267044	5.415981	2.364765	24.43328	2.498497	1.251086

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.04713**	**2.373202**	**2.454142**	**24.67008**	**4.765401**	**4.749326**
Stddev	.40291	.008008	.004230	.38022	.049591	.003765
%RSD	1.546861	.3374544	.1723502	1.541225	1.040646	.0792720
#1	25.75567	2.378125	2.451392	24.38329	4.768276	4.753640
#2	25.87882	2.377520	2.452020	24.52557	4.813492	4.747634
#3	26.50691	2.363961	2.459012	25.10136	4.714436	4.746703

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: CCV06 Acquired: 10/2/2025 18:17:36 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.289461	4.683671	F 3.912331	F 5.655774	5.344759	F 3.703393
Stddev	.001264	.014106	.054055	.008833	.012545	.017140
%RSD	.0239011	.3011646	1.381662	.1561802	.2347180	.4628251
#1	5.289997	4.672137	3.863423	5.661844	5.330340	3.684018
#2	5.290368	4.679478	3.903200	5.659838	5.350766	3.709585
#3	5.288017	4.699397	3.970370	5.645640	5.353172	3.716577

Elem	Sr4077
Units	ppm
Avg	4.610165
Stddev	.012234
%RSD	.2653632
#1	4.597622
#2	4.610810
#3	4.622064

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7634.857	88706.61	4347.821	5871.127	8338.872
Stddev	27.196	780.85	18.905	61.171	20.818
%RSD	.3562104	.8802608	.4348101	1.041888	.2496464
#1	7634.015	89311.32	4357.184	5904.225	8339.187
#2	7608.091	88983.46	4326.062	5908.617	8317.899
#3	7662.464	87825.06	4360.217	5800.539	8359.531

Sample Name: CCB06 Acquired: 10/2/2025 18:21:29 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005248**	**.0120242**	**.0035312**	**-.002948**	**.0097818**	**-.009440**	**.0375076**
Stddev	.0031469	.0012870	.0017265	.001574	.0009466	.011303	.0004455
%RSD	599.6540	10.70374	48.89180	53.37695	9.677487	119.7369	1.187843
#1	-.001706	.0114947	.0018501	-.003532	.0090160	-.015014	.0375211
#2	.004124	.0110864	.0052997	-.001166	.0094893	-.016874	.0370554
#3	-.000843	.0134916	.0034438	-.004146	.0108402	.003568	.0379462

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002260**	**-.000271**	**-.000500**	**.0005637**	**-.000037**	**.0007213**	**-.001543**
Stddev	.0001165	.000054	.030816	.0001731	.000203	.0008319	.013242
%RSD	51.52671	20.00971	6158.146	30.71105	555.4421	115.3287	858.2648
#1	.0003245	-.000220	-.020450	.0006387	.000188	.0015031	-.016829
#2	.0000975	-.000328	-.016042	.0006868	-.000090	.0008137	.005808
#3	.0002561	-.000264	.034991	.0003658	-.000208	-.000153	.006393

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000691**	**.0351651**	**-.000343**	**-.000647**	**-.630841**	**-.000117**	**.0036024**
Stddev	.000826	.0473944	.000254	.001290	.025570	.004887	.0002564
%RSD	119.5983	134.7770	74.06642	199.3469	4.053308	4189.134	7.117195
#1	.000255	.0538849	-.000051	-.000648	-.657081	-.005719	.0038821
#2	-.001057	-.018730	-.000467	-.001937	-.629443	.003271	.0035467
#3	-.001272	.070341	-.000510	.000643	-.605999	.002098	.0033785

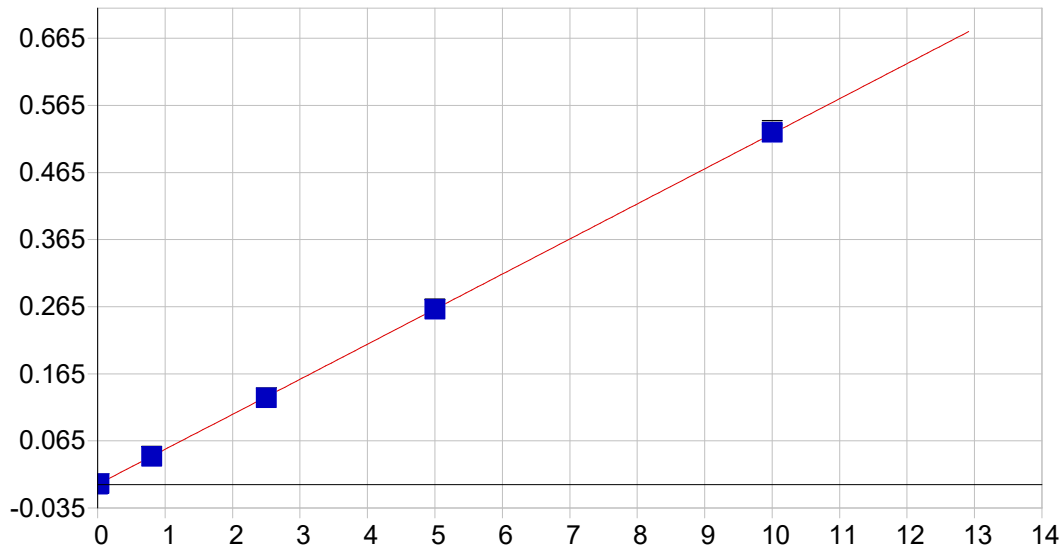
Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.822012**	**.0046176**	**.0006663**	F **-.027487**	**.0034184**	**-.013332**	**-.008285**
Stddev	.086882	.0012655	.0003708	.000224	.0068296	.013592	.001787
%RSD	10.56942	27.40553	55.65061	.8150413	199.7905	101.9472	21.57099
#1	-.869430	.0060238	.0010284	-.027690	-.002313	.000394	-.010166
#2	-.721739	.0042588	.0006830	-.027247	.010975	-.013604	-.008080
#3	-.874867	.0035703	.0002874	-.027524	.001592	-.026786	-.006609

Reviewed By:jaswal
On:10/7/2025 1:56:16 PM
Inst Id :P4
LB :LB137406

Sample Name: CCB06 Acquired: 10/2/2025 18:21:29 Type: Unk
Method: 6010-200.7 NEW(v241) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0033009	F -.019866	-.000110
Stddev	.0028672	.006282	.000144
%RSD	86.86175	31.62249	131.0565
#1	.0042805	-.026536	-.000273
#2	.0055499	-.019001	-.000051
#3	.0000723	-.014062	-.000004

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7881.311	93557.77	4408.938	6149.798	9312.950
Stddev	22.581	299.80	28.797	20.378	22.657
%RSD	.2865128	.3204469	.6531553	.3313634	.2432802
#1	7859.107	93349.35	4388.518	6133.369	9291.581
#2	7904.251	93422.59	4441.875	6143.425	9336.705
#3	7880.573	93901.36	4396.420	6172.601	9310.564

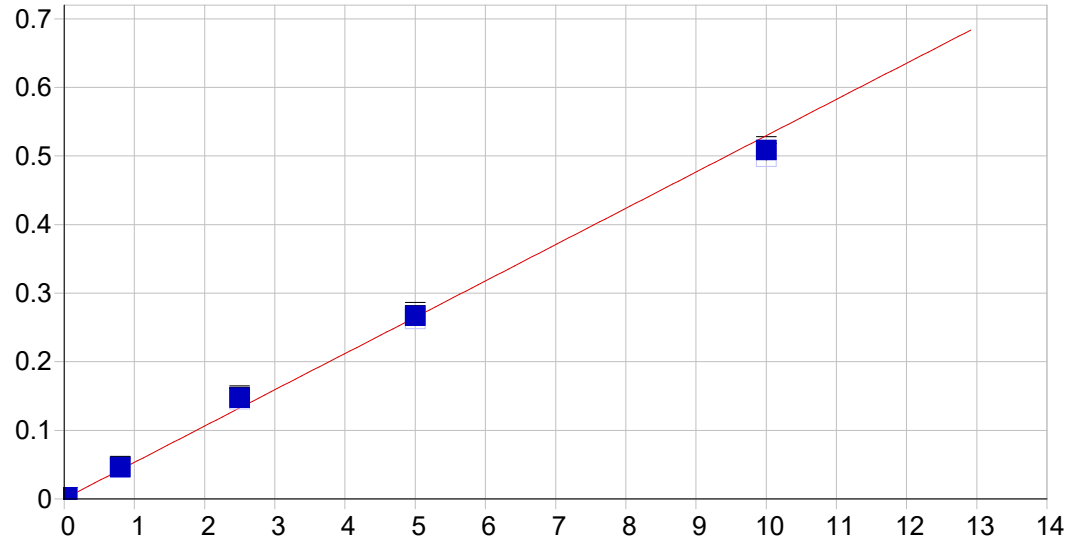


As 189.042 {479}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000072	Re-Slope:	1.000000
A1 (Gain):	0.052272	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999983	Status:	OK.
Std Error of Est:	0.000007		
Predicted MDL:	0.002187		
Predicted MQL:	0.007289		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00007	.000	1
S1	.02000	.02167	.002	8.33	.00120	.000	1
S3	2.5000	2.4716	-.028	-1.14	.12913	.000	1
S4	5.0000	4.9941	-.006	-.118	.26086	.001	1
S5	10.000	10.037	.037	.373	.52420	.003	1
S2	.80000	.79531	-.005	-.586	.04160	.000	1

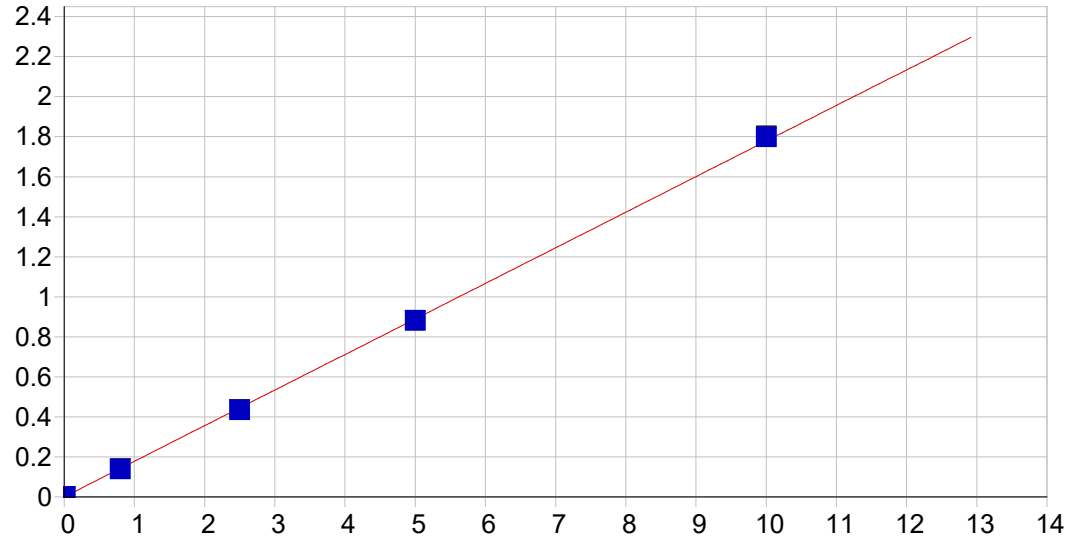


Tl 190.856 {477}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000301	Re-Slope:	1.000000
A1 (Gain):	0.052924	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998479	Status:	OK.
Std Error of Est:	0.000095		
Predicted MDL:	0.003182		
Predicted MQL:	0.010605		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00030	.000	1
S1	.04000	.04529	.005	13.2	.00256	.000	1
S3	2.5000	2.7840	.284	11.4	.14523	.003	1
S4	5.0000	5.0418	.042	.836	.26231	.005	1
S5	10.000	9.6057	-.394	-3.94	.49903	.005	1
S2	.80000	.86350	.063	7.94	.04523	.002	1

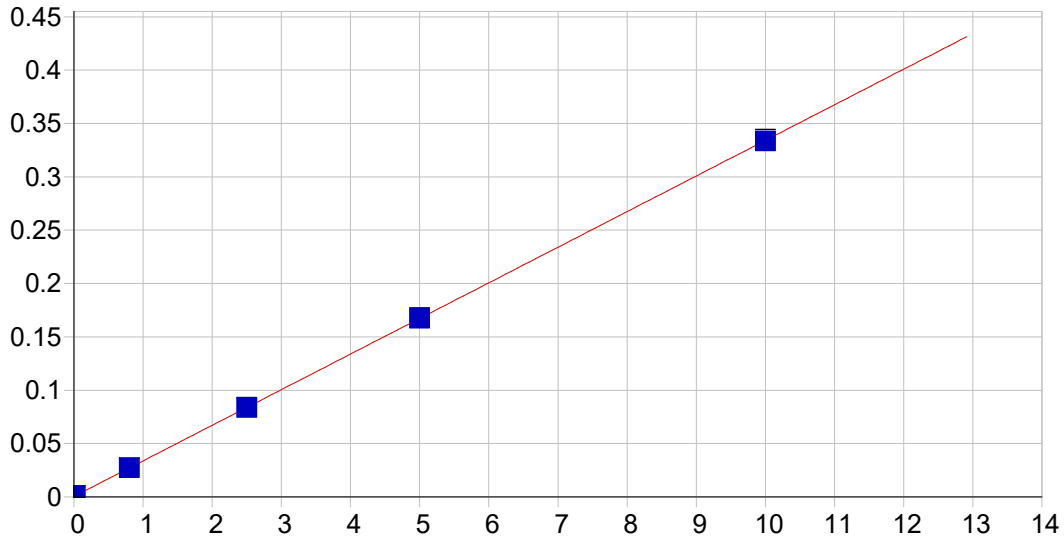


Pb 220.353 {453}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000334	Re-Slope:	1.000000
A1 (Gain):	0.177798	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999908	Status:	OK.
Std Error of Est:	0.000044		
Predicted MDL:	0.001542		
Predicted MQL:	0.005140		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00033	.000	1
S1	.01200	.01132	-.001	-5.65	.00230	.000	1
S3	2.5000	2.4425	-.057	-2.30	.43412	.000	1
S4	5.0000	4.9569	-.043	-.862	.88068	.001	1
S5	10.000	10.116	.116	1.16	1.7970	.005	1
S2	.80000	.78497	-.015	-1.88	.13974	.000	1

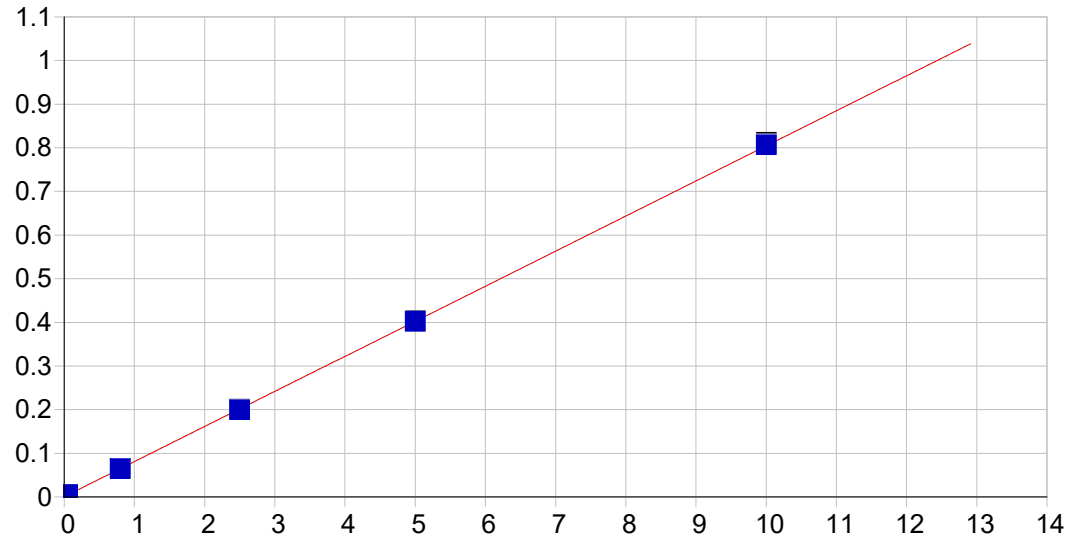


Se 196.090 {472}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000403	Re-Slope:	1.000000
A1 (Gain):	0.033375	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999938	Status:	OK.
Std Error of Est:	0.000009		
Predicted MDL:	0.004121		
Predicted MQL:	0.013738		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00040	.000	1
S1	.02000	.02658	.007	32.9	.00129	.000	1
S3	2.5000	2.4984	-.002	-.065	.08376	.000	1
S4	5.0000	5.0068	.007	.135	.16746	.000	1
S5	10.000	9.9819	-.018	-.181	.33346	.002	1
S2	.80000	.80638	.006	.797	.02731	.000	1

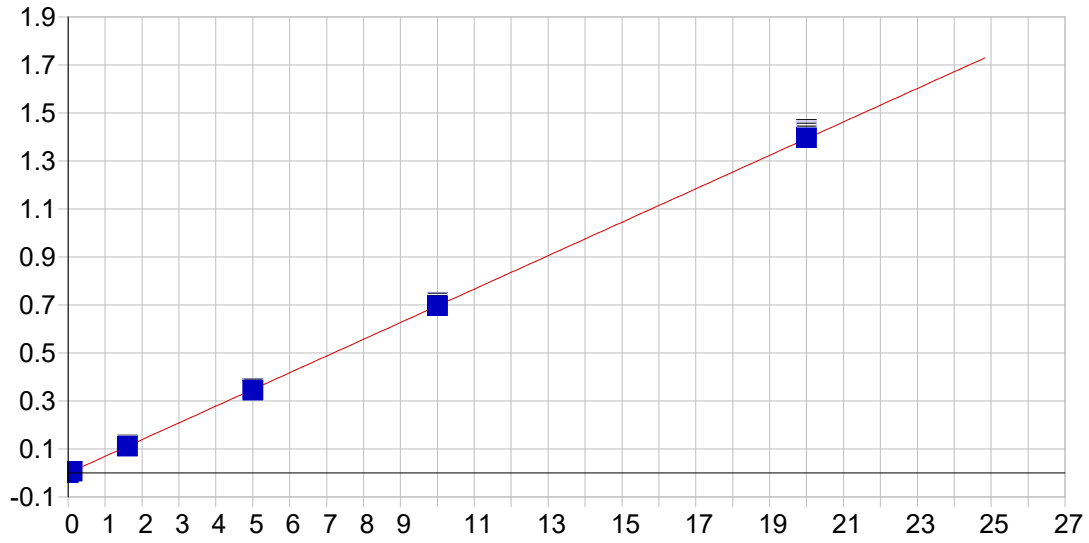


Sb 206.833 {463}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000662	Re-Slope:	1.000000
A1 (Gain):	0.080384	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999989	Status:	OK.
Std Error of Est:	0.000014		
Predicted MDL:	0.002238		
Predicted MQL:	0.007460		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00066	.000	1
S1	.05000	.05174	.002	3.47	.00483	.000	1
S3	2.5000	2.4770	-.023	-.919	.20032	.000	1
S4	5.0000	4.9927	-.007	-.145	.40309	.001	1
S5	10.000	10.031	.031	.312	.80919	.003	1
S2	.80000	.79737	-.003	-.329	.06493	.000	1

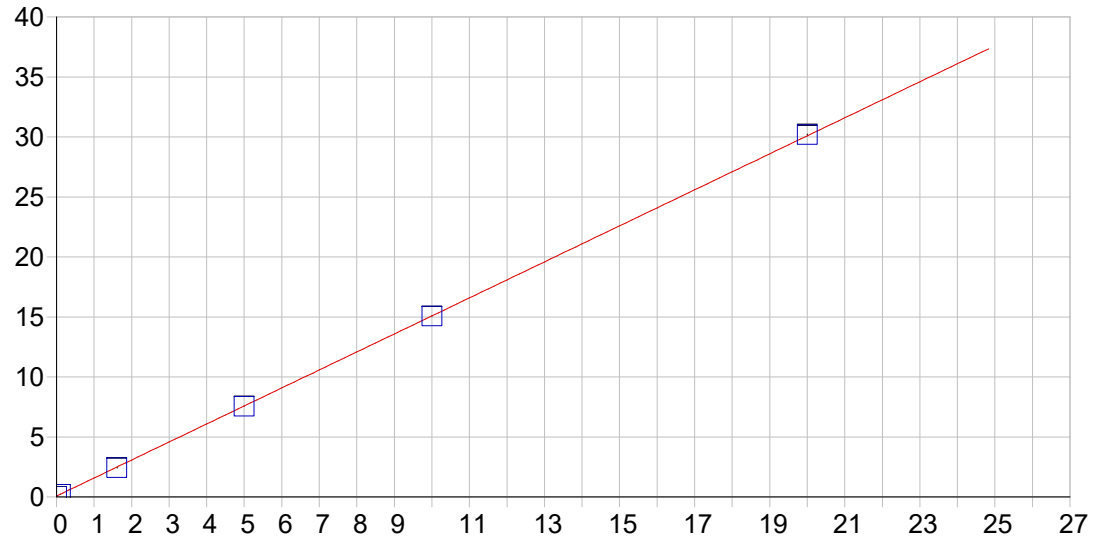


Al 396.152 { 85}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000534	Re-Slope:	1.000000
A1 (Gain):	0.069670	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999981	Status:	OK.
Std Error of Est:	0.000032		
Predicted MDL:	0.014199		
Predicted MQL:	0.047329		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00053	.000	1
S1	.10000	.10827	.008	8.27	.00755	.000	1
S3	5.0000	4.9456	-.054	-1.09	.35078	.001	1
S4	10.000	9.9915	-.008	-.085	.70909	.002	1
S5	20.000	20.051	.051	.256	1.4235	.007	1
S2	1.6000	1.6030	.003	.187	.11331	.002	1

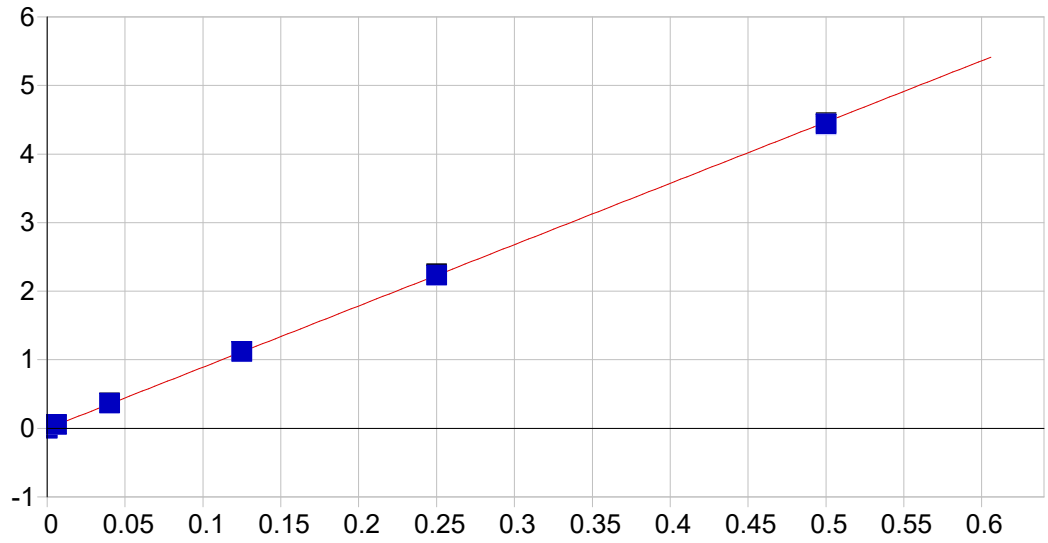


Ba 493.409 { 68}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.075290	Re-Slope:	1.000000
A1 (Gain):	1.500833	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999987	Status:	OK.
Std Error of Est:	0.000575		
Predicted MDL:	0.001708		
Predicted MQL:	0.005692		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.07529	.001	1
S1	.10000	.10034	.000	.342	.22589	.003	1
S3	5.0000	4.9807	-.019	-.385	7.5506	.016	1
S4	10.000	9.9839	-.016	-.161	15.059	.017	1
S5	20.000	20.067	.067	.336	30.193	.050	1
S2	1.6000	1.5677	-.032	-2.02	2.4281	.005	1

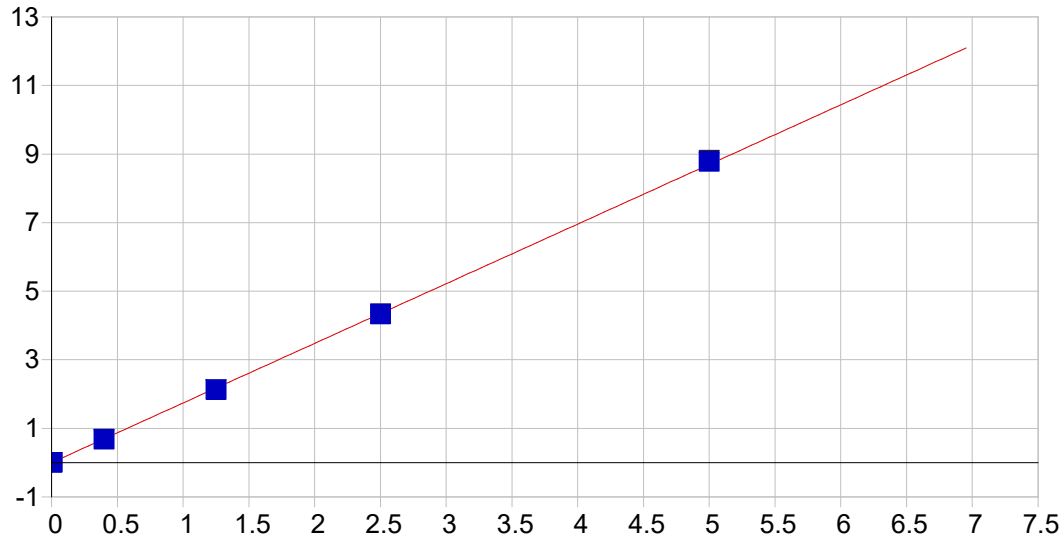


Be 234.861 {144}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.002662	Re-Slope:	1.000000
A1 (Gain):	8.938020	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999954	Status:	OK.
Std Error of Est:	0.000246		
Predicted MDL:	0.000075		
Predicted MQL:	0.000251		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00267	.000	1
S1	.00600	.00643	.000	7.13	.05439	.001	1
S3	.12500	.12549	.000	.393	1.1140	.001	1
S4	.25000	.25045	.000	.180	2.2259	.018	1
S5	.50000	.49741	-.003	-.518	4.4232	.013	1
S2	.04000	.04122	.001	3.06	.36419	.002	1

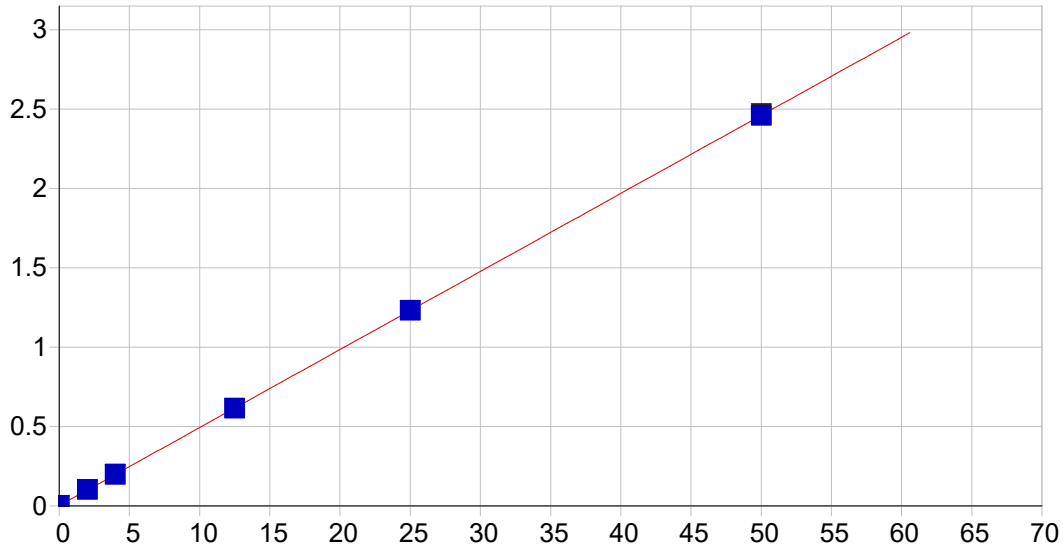


Cd 226.502 {449}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000518	Re-Slope:	1.000000
A1 (Gain):	1.739467	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999920	Status:	OK.
Std Error of Est:	0.000199		
Predicted MDL:	0.000123		
Predicted MQL:	0.000410		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00052	.000	1
S1	.00600	.00616	.000	2.64	.01023	.000	1
S3	1.2500	1.2213	-.029	-2.30	2.1253	.003	1
S4	2.5000	2.4907	-.009	-.372	4.3349	.008	1
S5	5.0000	5.0486	.049	.972	8.7871	.029	1
S2	.40000	.38925	-.011	-2.69	.67703	.002	1

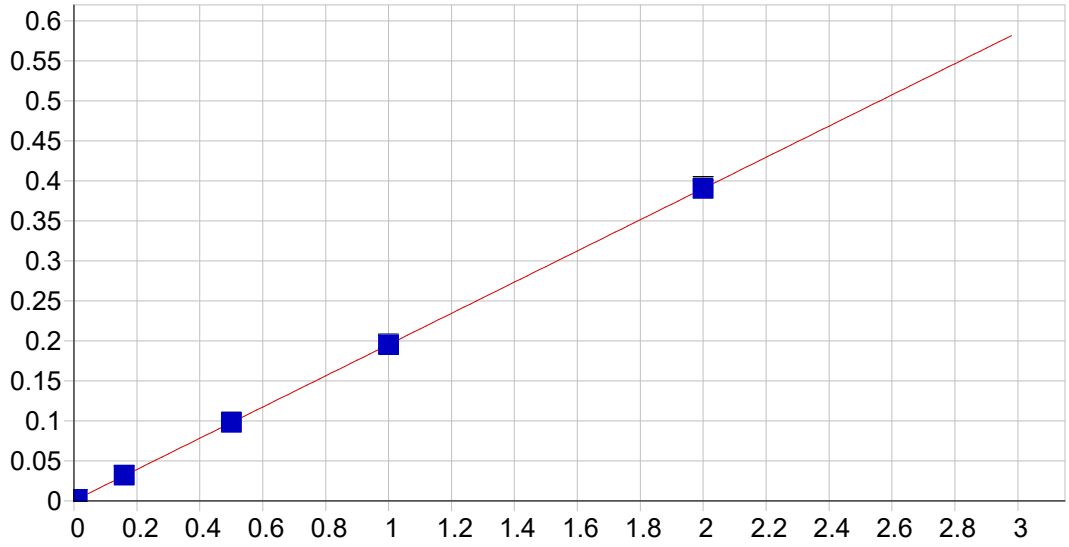


Ca 373.690 { 90}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001787	Re-Slope:	1.000000
A1 (Gain):	0.049187	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999993	Status:	OK.
Std Error of Est:	0.000097		
Predicted MDL:	0.015854		
Predicted MQL:	0.052848		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00004	-.000	.000	.00179	.001	1
S2	4.0000	3.9925	-.007	-.186	.19817	.001	1
S3	12.500	12.455	-.045	-.362	.61439	.001	1
S4	25.000	25.010	.010	.039	1.2319	.001	1
S5	50.000	49.996	-.004	-.009	2.4609	.009	1
S1	2.0000	2.0474	.047	2.37	.10249	.001	1

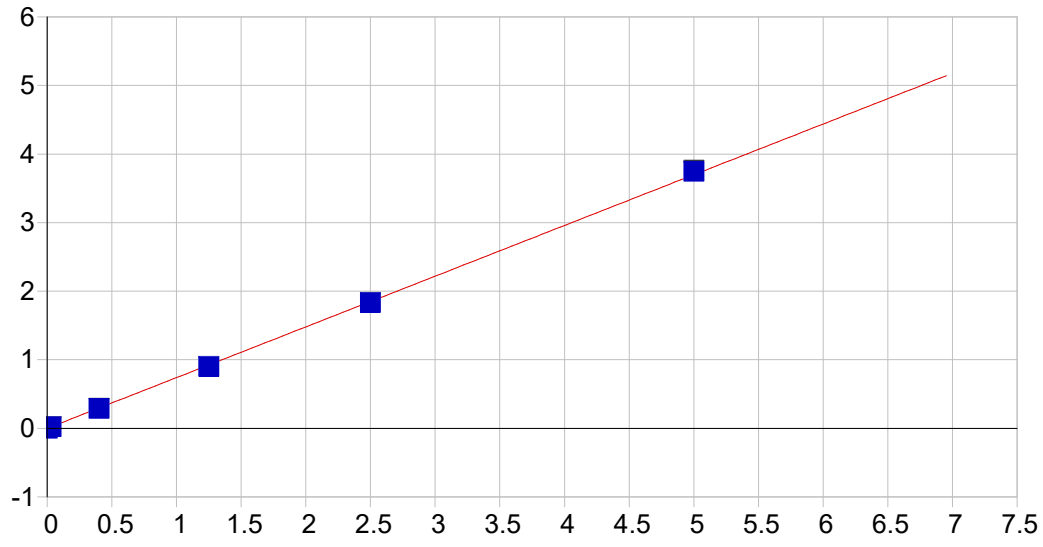


Cr 267.716 {126}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000320	Re-Slope:	1.000000
A1 (Gain):	0.195086	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999997	Status:	OK.
Std Error of Est:	0.000004		
Predicted MDL:	0.000412		
Predicted MQL:	0.001372		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00032	.000	1
S1	.01000	.00977	-.000	-2.27	.00223	.000	1
S3	.50000	.50002	.000	.003	.09794	.001	1
S4	1.0000	.99969	-.000	-.031	.19550	.001	1
S5	2.0000	1.9989	-.001	-.056	.39059	.002	1
S2	.16000	.16163	.002	1.02	.03188	.000	1

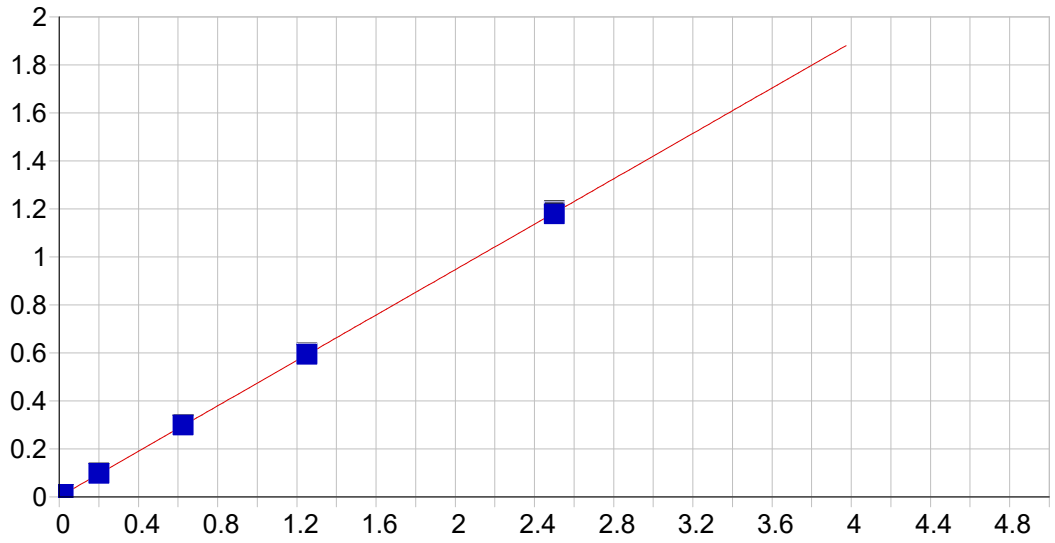


Co 228.616 {448}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000065	Re-Slope:	1.000000
A1 (Gain):	0.739619	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999883	Status:	OK.
Std Error of Est:	0.000230		
Predicted MDL:	0.000265		
Predicted MQL:	0.000884		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00007	.000	1
S1	.03000	.03046	.000	1.54	.02250	.000	1
S3	1.2500	1.2170	-.033	-2.64	.90176	.001	1
S4	2.5000	2.4765	-.023	-.938	1.8349	.002	1
S5	5.0000	5.0651	.065	1.30	3.7526	.014	1
S2	.40000	.39082	-.009	-2.29	.28963	.001	1

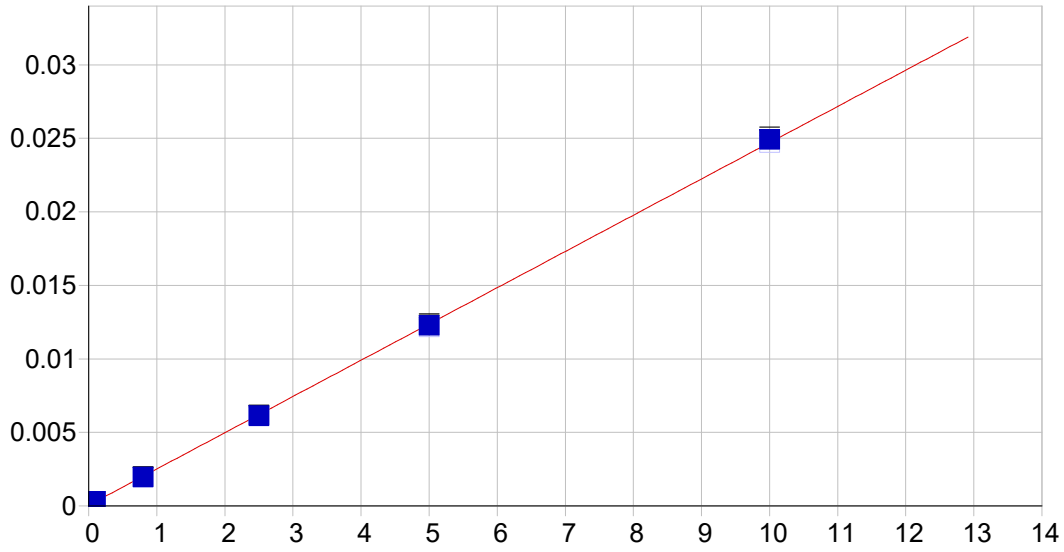


Cu 224.700 {450}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001150	Re-Slope:	1.000000
A1 (Gain):	0.472979	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999976	Status:	OK.
Std Error of Est:	0.000039		
Predicted MDL:	0.000542		
Predicted MQL:	0.001808		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00115	.000	1
S1	.02000	.02110	.001	5.52	.01124	.000	1
S3	.62500	.62786	.003	.457	.30058	.001	1
S4	1.2500	1.2523	.002	.187	.59840	.001	1
S5	2.5000	2.4893	-.011	-.428	1.1884	.004	1
S2	.20000	.20440	.004	2.20	.09862	.000	1

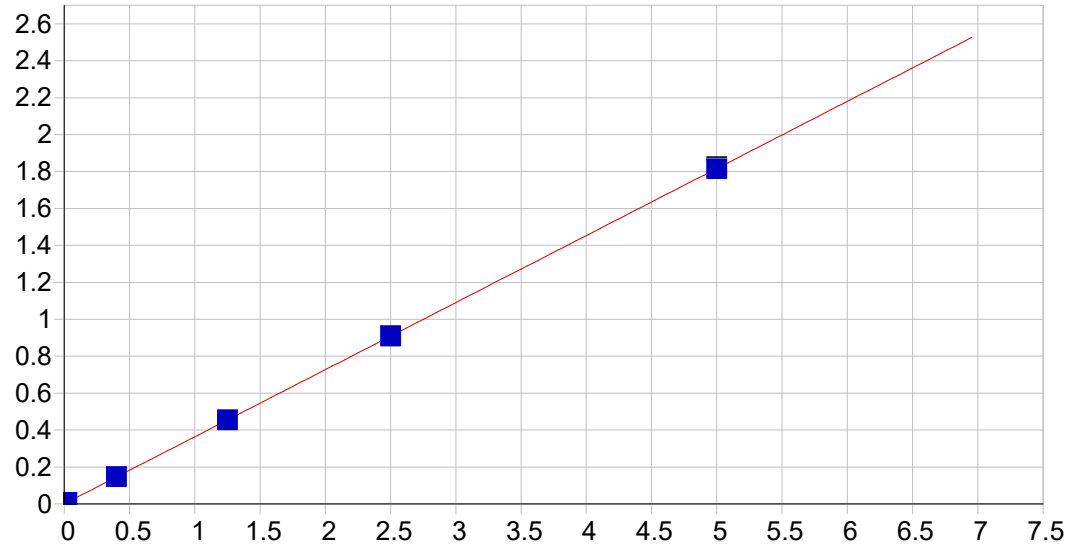


Fe 240.488 {140}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000045	Re-Slope:	1.000000
A1 (Gain):	0.002466	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999936	Status:	OK.
Std Error of Est:	0.000001		
Predicted MDL:	0.009368		
Predicted MQL:	0.031225		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00004	.000	1
S1	.10000	.10480	.005	4.80	.00030	.000	1
S3	2.5000	2.4741	-.026	-1.04	.00609	.000	1
S4	5.0000	4.9563	-.044	-.874	.01216	.000	1
S5	10.000	10.088	.088	.879	.02471	.000	1
S2	.80000	.77693	-.023	-2.88	.00194	.000	1

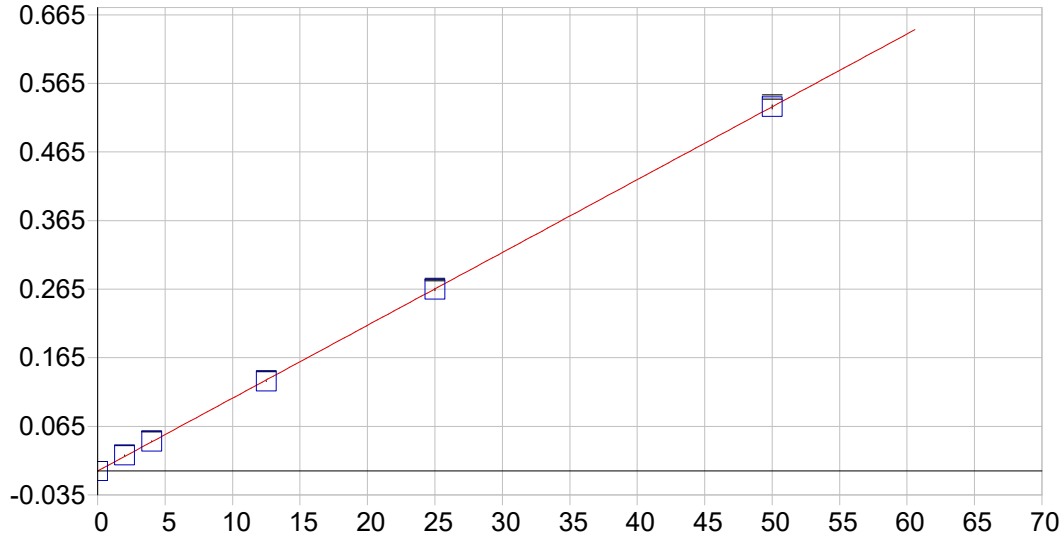


Mn 257.610 {131}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000392	Re-Slope:	1.000000
A1 (Gain):	0.363250	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999992	Status:	OK.
Std Error of Est:	0.000024		
Predicted MDL:	0.000795		
Predicted MQL:	0.002650		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00039	.000	1
S1	.02000	.02124	.001	6.21	.00811	.000	1
S3	1.2500	1.2510	.001	.083	.45492	.000	1
S4	2.5000	2.4979	-.002	-.084	.90794	.002	1
S5	5.0000	4.9950	-.005	-.099	1.8152	.009	1
S2	.40000	.40476	.005	1.19	.14745	.000	1

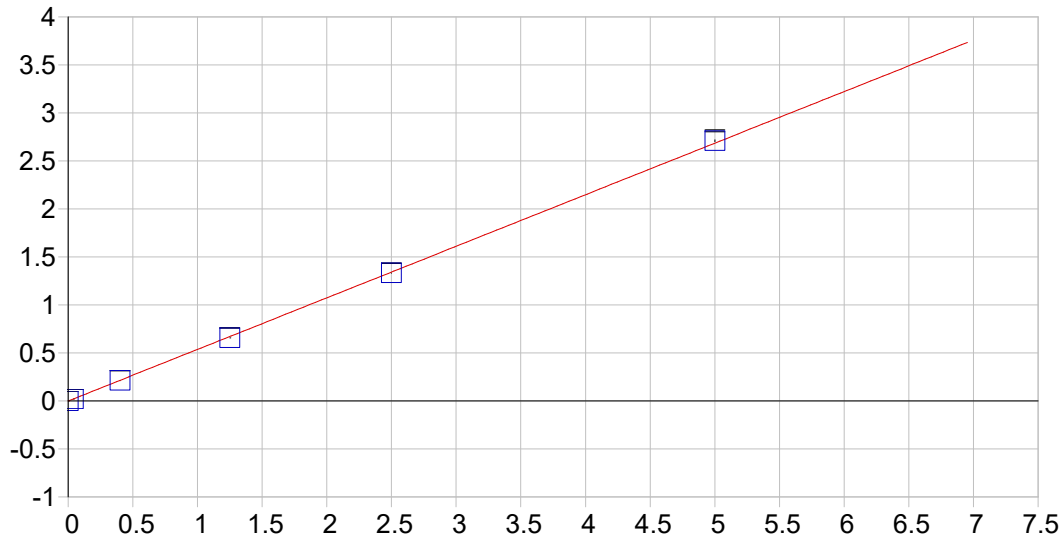


Mg 279.079 {121}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000164	Re-Slope:	1.000000
A1 (Gain):	0.010621	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999903	Status:	OK.
Std Error of Est:	0.000078		
Predicted MDL:	0.035570		
Predicted MQL:	0.118566		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00017	-.000	.000	-.00017	.000	1
S2	4.0000	4.0771	.077	1.93	.04314	.001	1
S3	12.500	12.337	-.163	-1.31	.13086	.001	1
S4	25.000	24.925	-.075	-.302	.26456	.002	1
S5	50.000	49.993	-.007	-.014	.53080	.003	1
S1	2.0000	2.1687	.169	8.44	.02287	.000	1

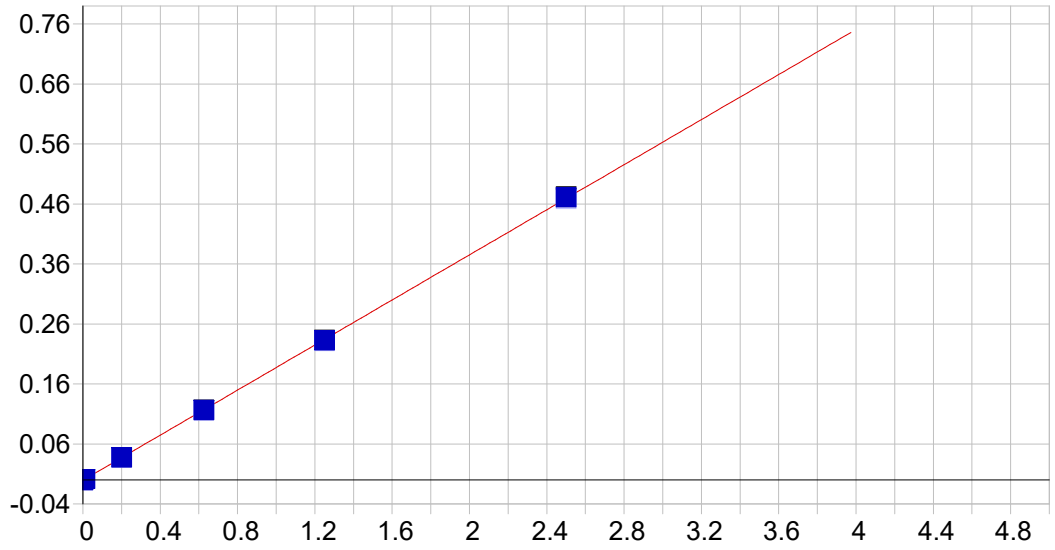


Ni 231.604 {446}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000619	Re-Slope:	1.000000
A1 (Gain):	0.537098	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999932	Status:	OK.
Std Error of Est:	0.000147		
Predicted MDL:	0.000409		
Predicted MQL:	0.001362		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00062	.000	1
S1	.04000	.04103	.001	2.58	.02142	.000	1
S3	1.2500	1.2239	-.026	-2.09	.65675	.001	1
S4	2.5000	2.4811	-.019	-.756	1.3320	.001	1
S5	5.0000	5.0486	.049	.973	2.7110	.010	1
S2	.40000	.39531	-.005	-1.17	.21170	.001	1

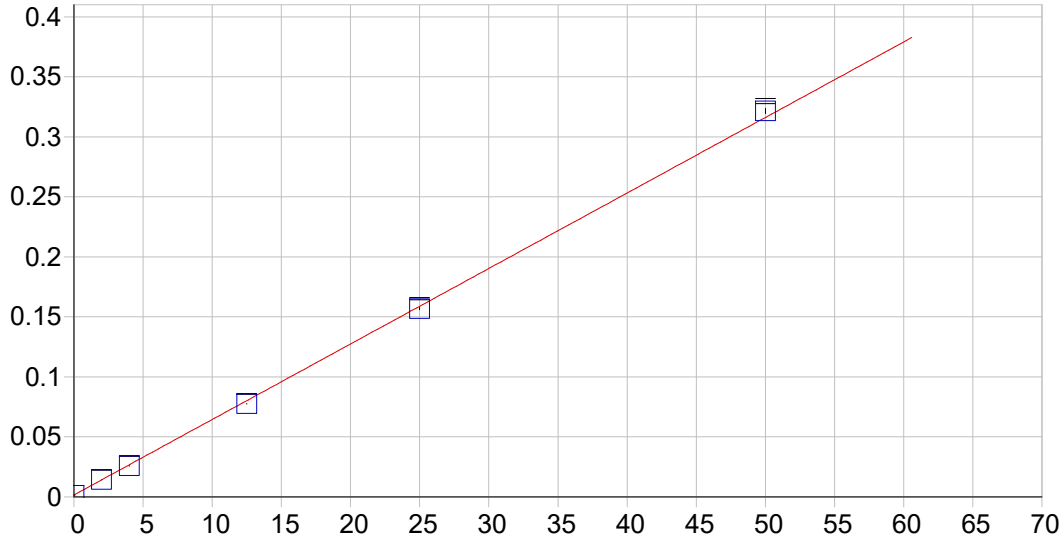


Ag 328.068 {103}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000610	Re-Slope:	1.000000
A1 (Gain):	0.187883	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999983	Status:	OK.
Std Error of Est:	0.000009		
Predicted MDL:	0.000663		
Predicted MQL:	0.002208		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00061	.000	1
S1	.01000	.01061	.001	6.07	.00137	.000	1
S3	.62500	.62199	-.003	-.481	.11568	.000	1
S4	1.2500	1.2416	-.008	-.674	.23152	.000	1
S5	2.5000	2.5090	.009	.361	.46852	.001	1
S2	.20000	.20180	.002	.899	.03712	.000	1

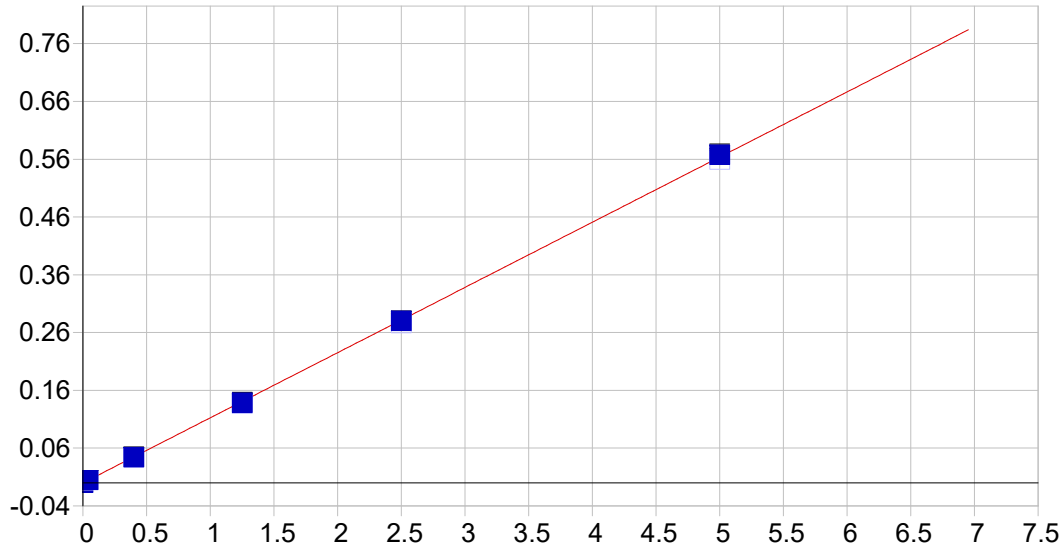


Na 589.592 { 57}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001608	Re-Slope:	1.000000
A1 (Gain):	0.006289	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999794	Status:	OK.
Std Error of Est:	0.000067		
Predicted MDL:	0.025012		
Predicted MQL:	0.083374		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00010	.000	.000	.00161	.000	1
S2	4.0000	3.8566	-.143	-3.58	.02586	.000	1
S3	12.500	12.083	-.417	-3.34	.07760	.000	1
S4	25.000	24.674	-.326	-1.30	.15678	.001	1
S5	50.000	50.860	.860	1.72	.32147	.002	1
S1	2.0000	2.0261	.026	1.31	.01435	.000	1

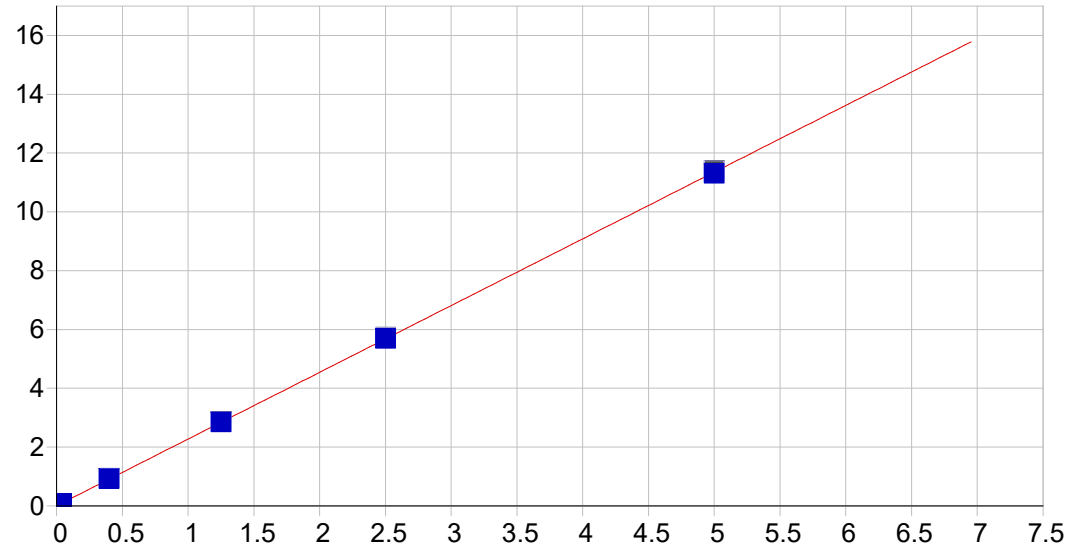


V 292.402 {115}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000338	Re-Slope:	1.000000
A1 (Gain):	0.112805	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999938	Status:	OK.
Std Error of Est:	0.000029		
Predicted MDL:	0.003896		
Predicted MQL:	0.012987		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00034	.000	1
S1	.04000	.04415	.004	10.4	.00447	.000	1
S3	1.2500	1.2310	-.019	-1.52	.13647	.001	1
S4	2.5000	2.4857	-.014	-.572	.27595	.000	1
S5	5.0000	5.0345	.035	.690	.55936	.002	1
S2	.40000	.39474	-.005	-1.32	.04353	.000	1

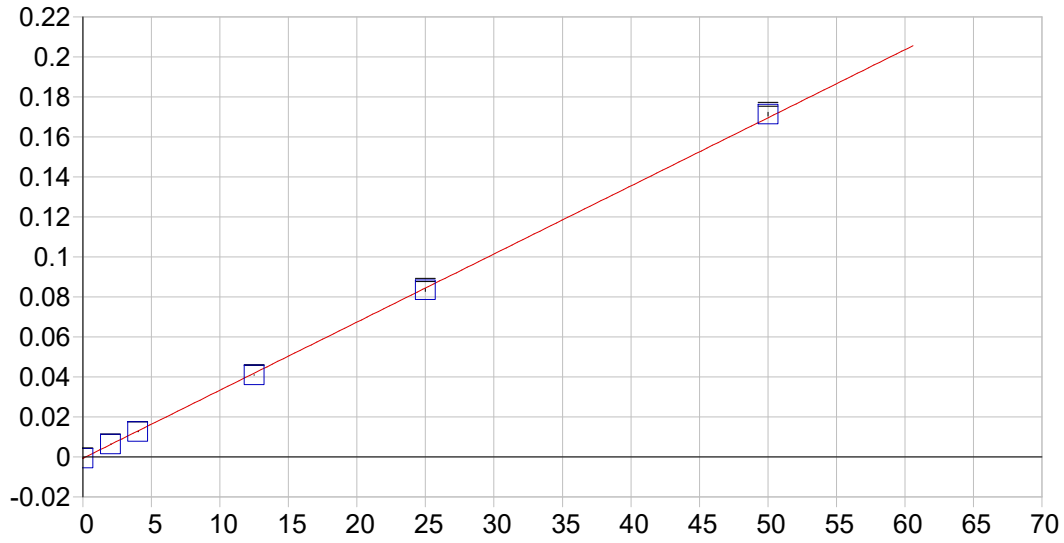


Zn 213.856 {158}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.004073	Re-Slope:	1.000000
A1 (Gain):	2.269730	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999979	Status:	OK.
Std Error of Est:	0.000345		
Predicted MDL:	0.000266		
Predicted MQL:	0.000885		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00407	.000	1
S1	.04000	.04249	.002	6.21	.10114	.001	1
S3	1.2500	1.2522	.002	.176	2.8660	.008	1
S4	2.5000	2.5052	.005	.207	5.7296	.001	1
S5	5.0000	4.9823	-.018	-.354	11.391	.012	1
S2	.40000	.40786	.008	1.96	.93611	.004	1

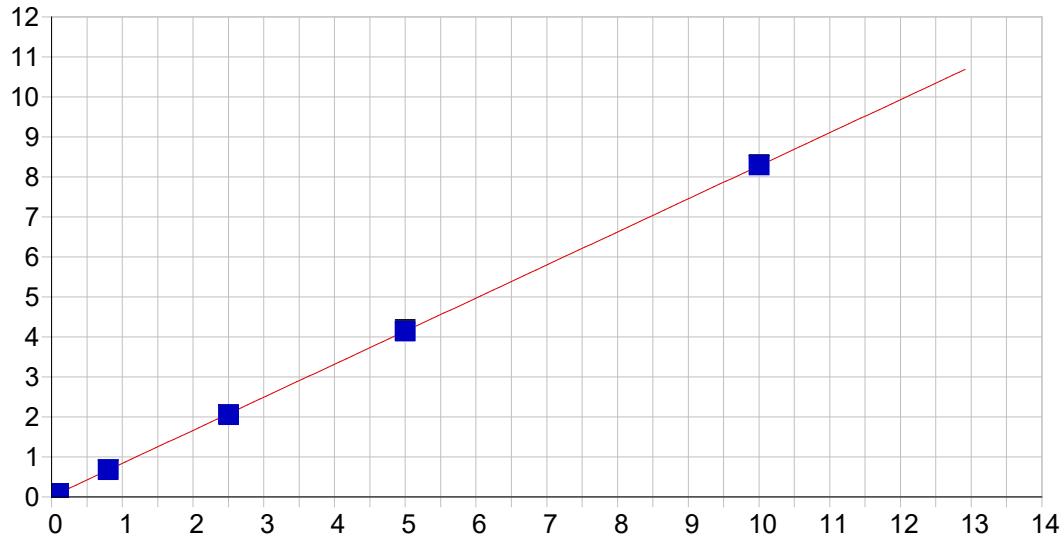


K 766.490 { 44}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000695	Re-Slope:	1.000000
A1 (Gain):	0.003405	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999896	Status:	OK.
Std Error of Est:	0.000026		
Predicted MDL:	0.055693		
Predicted MQL:	0.185642		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00070	.000	1
S2	4.0000	3.8997	-.100	-2.51	.01258	.000	1
S3	12.500	12.248	-.252	-2.02	.04101	.000	1
S4	25.000	24.730	-.270	-1.08	.08351	.001	1
S5	50.000	50.546	.546	1.09	.17141	.001	1
S1	2.0000	2.0768	.077	3.84	.00638	.000	1

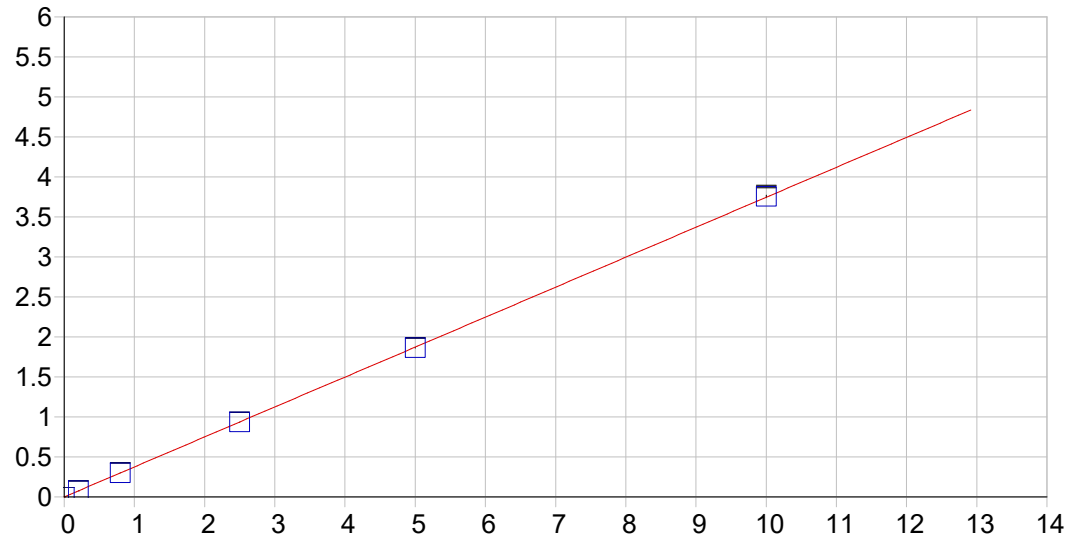


B 249.678 {135}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.010836	Re-Slope:	1.000000
A1 (Gain):	0.826701	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999989	Status:	OK.
Std Error of Est:	0.000201		
Predicted MDL:	0.000857		
Predicted MQL:	0.002858		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.01084	.000	1
S1	.10000	.10073	.001	.734	.09362	.001	1
S3	2.5000	2.4730	-.027	-1.08	2.0478	.003	1
S4	5.0000	5.0017	.002	.035	4.1309	.036	1
S5	10.000	10.017	.017	.172	8.2622	.016	1
S2	.80000	.80733	.007	.917	.67587	.006	1

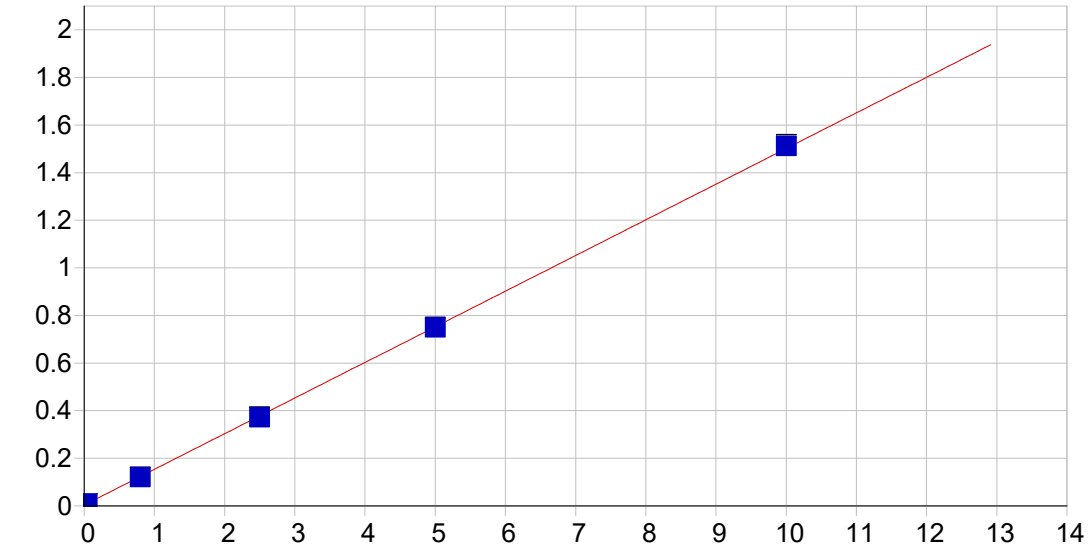


Mo 202.030 {467}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000494	Re-Slope:	1.000000
A1 (Gain):	0.374448	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999994	Status:	OK.
Std Error of Est:	0.000097		
Predicted MDL:	0.000425		
Predicted MQL:	0.001416		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00049	.000	1
S1	.20000	.20198	.002	.989	.07612	.000	1
S3	2.5000	2.4931	-.007	-.278	.93401	.002	1
S4	5.0000	4.9764	-.024	-.472	1.8639	.003	1
S5	10.000	10.027	.027	.266	3.7549	.017	1
S2	.80000	.80193	.002	.241	.30077	.001	1

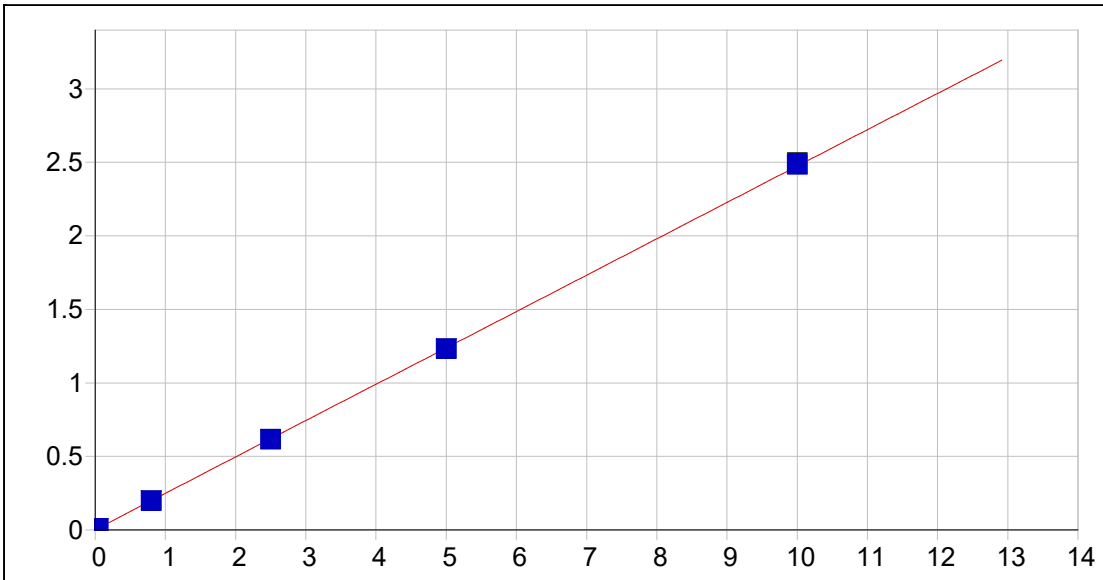


Sn 189.989 {478}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003744	Re-Slope:	1.000000
A1 (Gain):	0.149757	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999942	Status:	OK.
Std Error of Est:	0.000053		
Predicted MDL:	0.000672		
Predicted MQL:	0.002241		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00374	.000	1
S1	.04000	.03539	-.005	-11.5	.00904	.000	1
S3	2.5000	2.4652	-.035	-1.39	.37254	.001	1
S4	5.0000	4.9820	-.018	-.361	.74906	.001	1
S5	10.000	10.076	.076	.763	1.5112	.006	1
S2	.80000	.78121	-.019	-2.35	.12061	.001	1

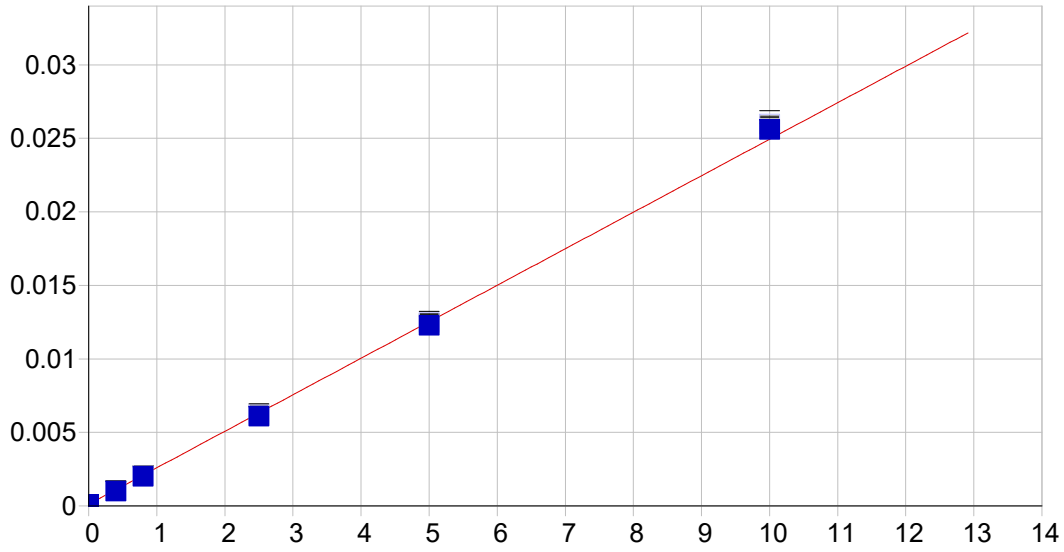


Ti 336.121 {100}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001728	Re-Slope:	1.000000
A1 (Gain):	0.247296	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999987	Status:	OK.
Std Error of Est:	0.000042		
Predicted MDL:	0.002292		
Predicted MQL:	0.007639		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00173	.000	1
S1	.04000	.03956	-.000	-1.10	.01150	.000	1
S3	2.5000	2.4818	-.018	-.729	.61524	.002	1
S4	5.0000	4.9793	-.021	-.414	1.2326	.001	1
S5	10.000	10.046	.046	.455	2.4850	.010	1
S2	.80000	.79385	-.006	-.769	.19797	.001	1

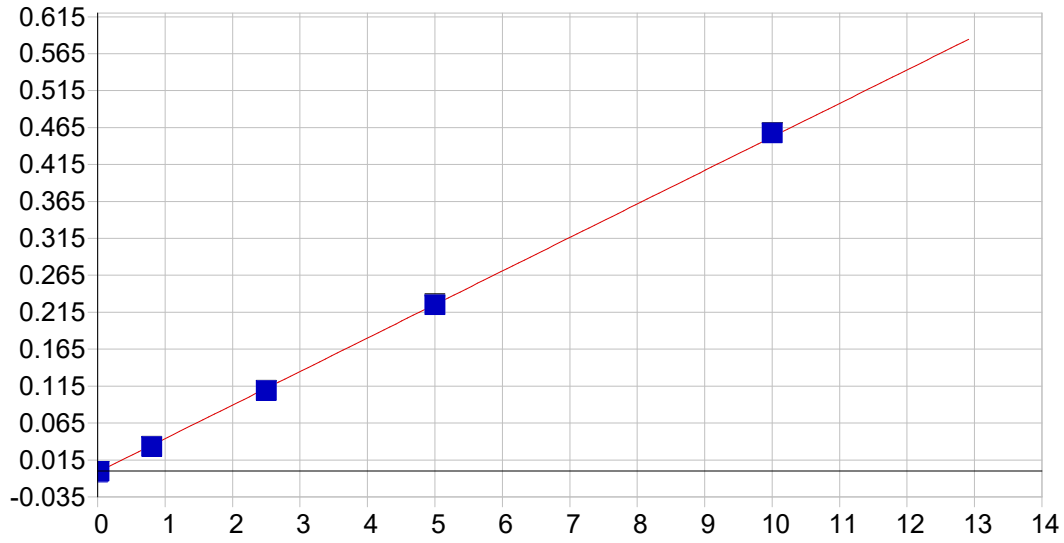


Si 288.158 {117}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000109	Re-Slope:	1.000000
A1 (Gain):	0.002483	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999541	Status:	OK.
Std Error of Est:	0.000008		
Predicted MDL:	0.016906		
Predicted MQL:	0.056354		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00007	.000	.000	.00011	.000	1
S1	.40000	.35951	-.040	-10.1	.00100	.000	1
S3	2.5000	2.4101	-.090	-3.60	.00619	.000	1
S4	5.0000	4.9033	-.097	-1.93	.01247	.000	1
S5	10.000	10.262	.262	2.62	.02597	.000	1
S2	.80000	.76433	-.036	-4.46	.00204	.000	1

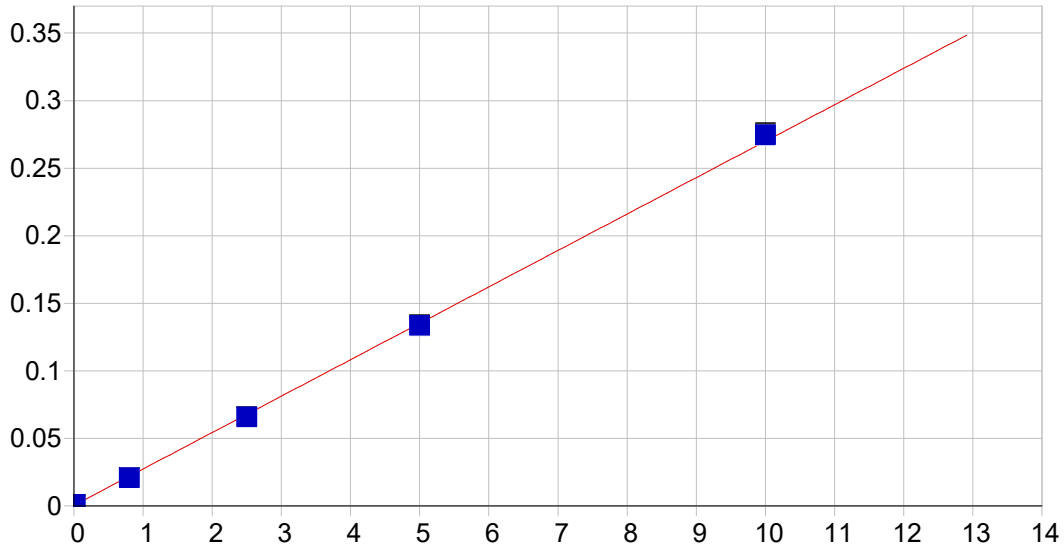


P 177.495 {490}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001444	Re-Slope:	1.000000
A1 (Gain):	0.045375	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999858	Status:	OK.
Std Error of Est:	0.000018		
Predicted MDL:	0.001799		
Predicted MQL:	0.005995		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00144	.000	1
S1	.02000	.02115	.001	5.76	-.00048	.000	1
S3	2.5000	2.4330	-.067	-2.68	.10893	.000	1
S4	5.0000	4.9893	-.011	-.215	.22491	.001	1
S5	10.000	10.116	.116	1.16	.45750	.001	1
S2	.80000	.76046	-.040	-4.94	.03306	.000	1

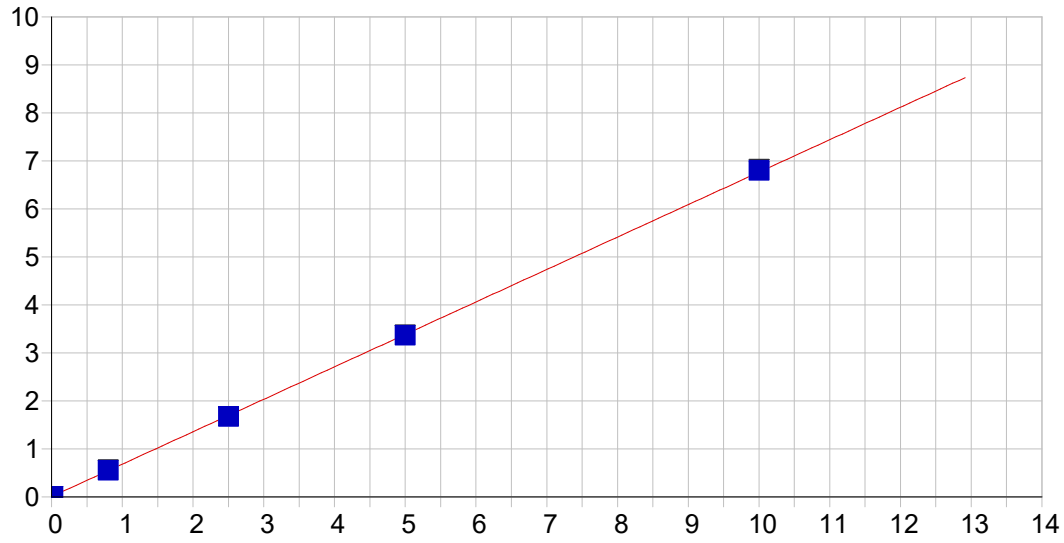


S 182.034 {485}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000396	Re-Slope:	1.000000
A1 (Gain):	0.026956	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999767	Status:	OK.
Std Error of Est:	0.000014		
Predicted MDL:	0.003272		
Predicted MQL:	0.010908		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00040	.000	1
S1	.02000	.01919	-.001	-4.06	.00089	.000	1
S3	2.5000	2.4245	-.075	-3.02	.06558	.000	1
S4	5.0000	4.9371	-.063	-1.26	.13313	.001	1
S5	10.000	10.181	.181	1.81	.27413	.001	1
S2	.80000	.75858	-.041	-5.18	.02079	.000	1

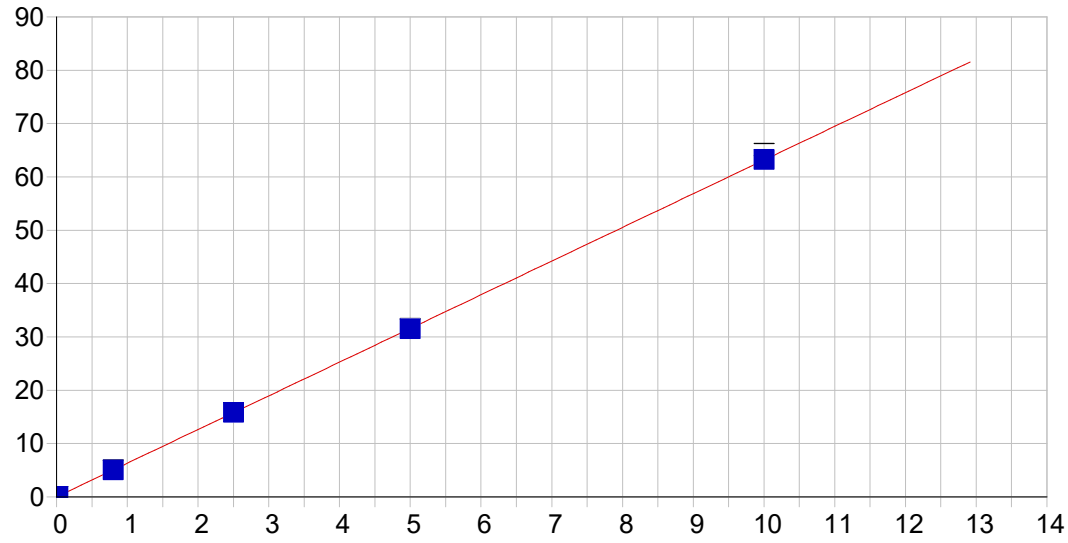


Li 670.784 { 50}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.006366	Re-Slope:	1.000000
A1 (Gain):	0.675904	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999969	Status:	OK.
Std Error of Est:	0.000126		
Predicted MDL:	0.002641		
Predicted MQL:	0.008805		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00637	.001	1
S5	10.000	10.051	.051	.507	6.8051	.023	1
S4	5.0000	4.9696	-.030	-.607	3.3681	.004	1
S3	2.5000	2.4657	-.034	-1.37	1.6743	.002	1
S1	.02000	.02047	.000	2.36	.02044	.002	1
S2	.80000	.81351	.014	1.69	.55666	.002	1

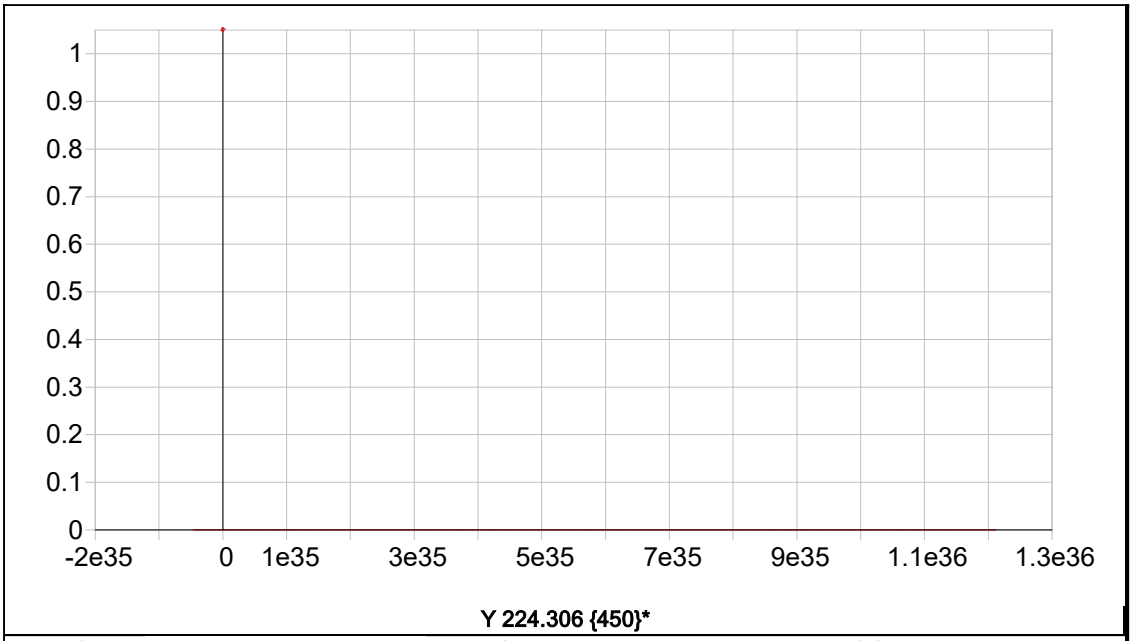


Sr 407.771 { 83}

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002127	Re-Slope:	1.000000
A1 (Gain):	6.316125	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999995	Status:	OK.
Std Error of Est:	0.000459		
Predicted MDL:	0.000151		
Predicted MQL:	0.000502		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00212	.000	1
S1	.02000	.02145	.001	7.27	.13824	.001	1
S3	2.5000	2.5052	.005	.209	15.841	.019	1
S4	5.0000	4.9879	-.012	-.242	31.537	.059	1
S5	10.000	10.010	.010	.095	63.284	1.13	1
S2	.80000	.79587	-.004	-.517	5.0338	.003	1

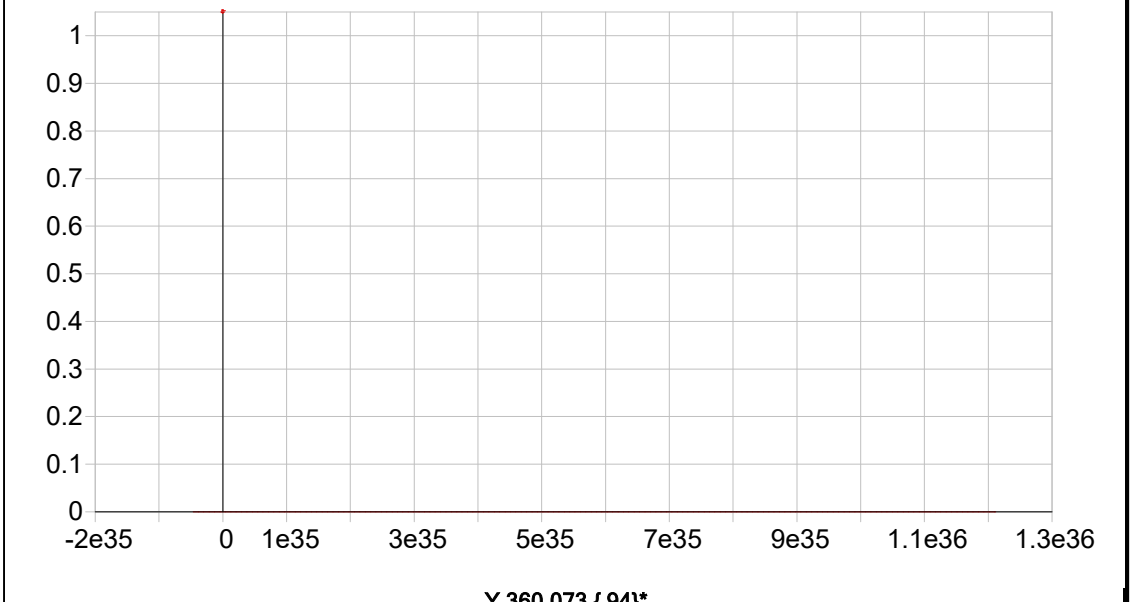


Y 224.306 {450}*

Date of Fit:	10/3/2025 12:15:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.000000	Status:	Warning Zero Gain
Std Error of Est:	0.000000		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



Y 360.073 { 94}*

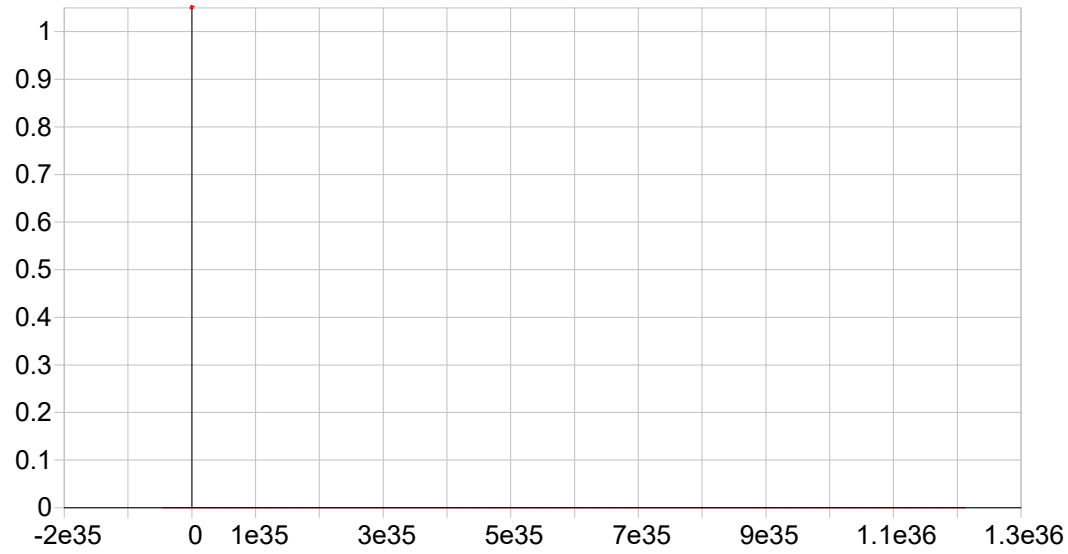
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.000000	Status:	Warning	Zero Gain	
Std Error of Est:	0.000000				
Predicted MDL:	n/a				
Predicted MQL:	n/a				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis

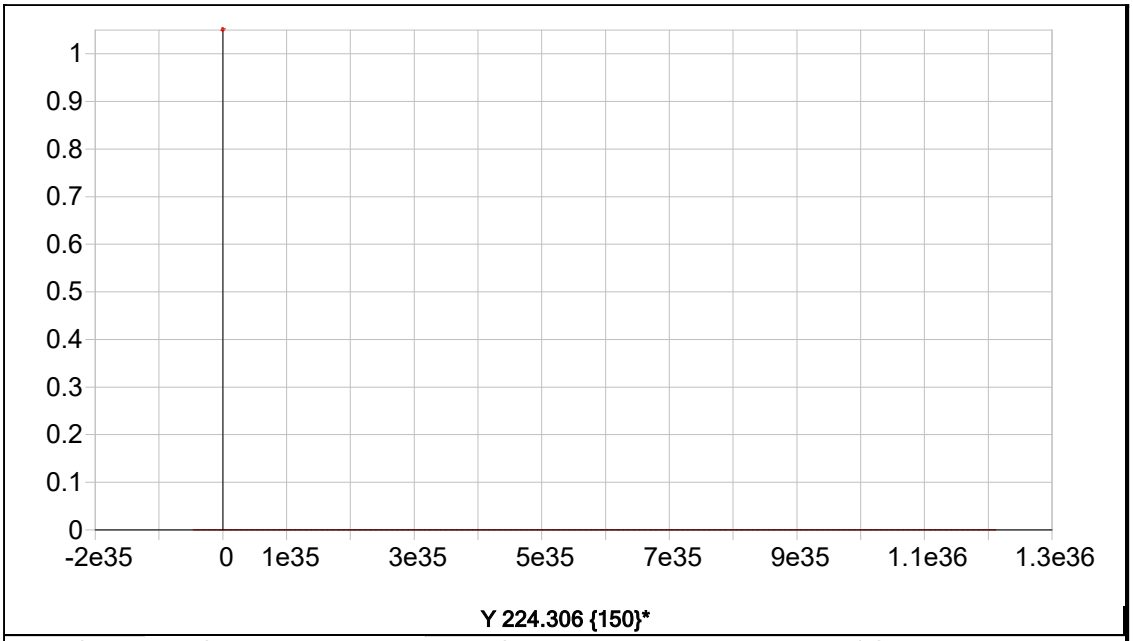


Y 371.030 { 91}*

Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.000000	Status:	Warning Zero Gain
Std Error of Est:	0.000000		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

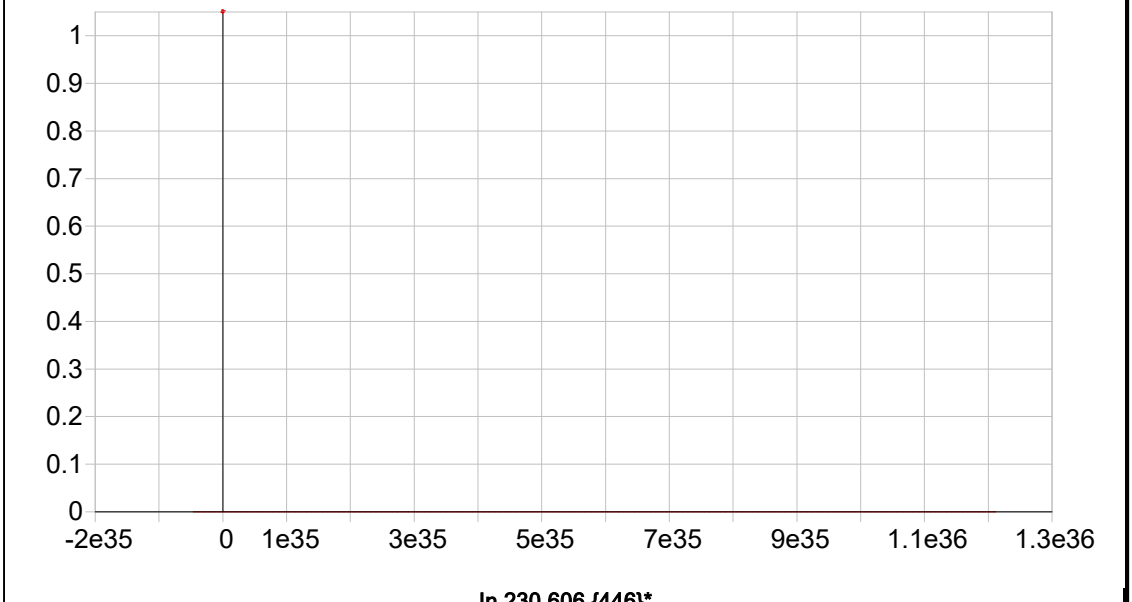
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



Y 224.306 {150}*

Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc
A0 (Offset):	0.000000		Re-Slope:	1.000000	
A1 (Gain):	0.000000		Y-int:	0.000000	
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.000000		Status:	Warning	Zero Gain
Std Error of Est:	0.000000				
Predicted MDL:	n/a				
Predicted MQL:	n/a				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



In 230.606 {446}*

Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc
A0 (Offset):	0.000000		Re-Slope:	1.000000	
A1 (Gain):	0.000000		Y-int:	0.000000	

A2 (Curvature):		0.000000					
n (Exponent):		1.000000					
Correlation:		0.000000		Status:	Warning	Zero Gain	
Std Error of Est:		0.000000					
Predicted MDL:		n/a					
Predicted MQL:		n/a					
Std. Name	**Stated Conc.**	**Found Conc.**	**Difference**	**% Diff.**	**(S)IR**	**Std Dev**	**Emphasis**

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: S0 Acquired: 10/3/2025 11:53:42 Type: Cal
Method: 6010-200.7 NEW(v243) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00007**	**.00030**	**.00033**	**.00040**	**.00066**	**-.00053**	**.07529**	**-.00267**
Stddev	.00008	.00016	.00033	.00006	.00012	.00033	.00126	.00019
%RSD	117.58	53.465	99.774	14.677	17.714	61.420	1.6706	7.2484
#1	.00010	.00048	.00069	.00033	.00076	-.00086	.07671	-.00286
#2	-.00002	.00026	.00003	.00043	.00053	-.00054	.07430	-.00247
#3	.00013	.00016	.00028	.00043	.00070	-.00020	.07488	-.00267

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00052**	**.00179**	**.00032**	**.00007**	**.00115**	**.00004**	**.00039**	**-.00017**
Stddev	.00023	.00067	.00012	.00012	.00017	.00001	.00023	.00038
%RSD	45.027	37.258	36.357	191.01	14.989	17.081	57.697	228.19
#1	-.00044	.00109	.00044	.00004	.00134	.00004	.00036	-.00052
#2	-.00078	.00242	.00031	.00020	.00100	.00004	.00018	.00023
#3	-.00033	.00184	.00021	-.00004	.00111	.00005	.00063	-.00021

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00062**	**-.00061**	**.00161**	**-.00034**	**.00407**	**-.00070**	**.01084**	**.00049**
Stddev	.00016	.00009	.00011	.00034	.00037	.00015	.00035	.00010
%RSD	26.139	15.022	7.1101	100.26	9.2155	21.150	3.2096	20.433
#1	-.00080	-.00065	.00163	-.00004	.00448	-.00053	.01065	.00050
#2	-.00051	-.00051	.00171	-.00027	.00396	-.00073	.01062	.00039
#3	-.00054	-.00068	.00148	-.00071	.00375	-.00082	.01124	.00059

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00374**	**.00173**	**.00011**	**-.00144**	**.00040**	**.00637**	**.00212**
Stddev	.00004	.00030	.00001	.00008	.00001	.00134	.00043
%RSD	1.1204	17.463	9.1073	5.2730	2.7204	21.085	20.440
#1	.00375	.00150	.00010	-.00141	.00038	.00599	.00170
#2	.00378	.00207	.00011	-.00139	.00040	.00525	.00209
#3	.00370	.00162	.00012	-.00153	.00040	.00786	.00257

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: S0 Acquired: 10/3/2025 11:53:42 Type: Cal
Method: 6010-200.7 NEW(v243) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6594.4	93175.	8137.6	5010.4	7869.7
Stddev	31.7	510.	48.2	30.2	30.7
%RSD	.48005	.54750	.59204	.60261	.38956
#1	6629.5	92595.	8091.9	4975.9	7903.3
#2	6568.0	93551.	8187.9	5023.0	7843.3
#3	6585.7	93381.	8132.8	5032.2	7862.6

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: S1 Acquired: 10/3/2025 11:58:04 Type: Cal
Method: 6010-200.7 NEW(v268) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00120**	**.00256**	**.00230**	**.00129**	**.00483**	**.00755**	**.22589**	**.05439**
Stddev	.00010	.00009	.00027	.00006	.00011	.00047	.00268	.00095
%RSD	8.4229	3.4694	11.522	4.4272	2.3345	6.2276	1.1846	1.7407
#1	.00120	.00246	.00260	.00128	.00473	.00701	.22865	.05506
#2	.00130	.00262	.00208	.00124	.00495	.00787	.22570	.05330
#3	.00110	.00261	.00223	.00135	.00481	.00777	.22331	.05480

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.01023**	**.10249**	**.00223**	**.02250**	**.01124**	**.00030**	**.00811**	**.02287**
Stddev	.00021	.00057	.00001	.00017	.00006	.00002	.00004	.00043
%RSD	2.0946	.55985	.65071	.76323	.54242	7.8470	.53913	1.9017
#1	.01015	.10242	.00223	.02258	.01131	.00032	.00809	.02249
#2	.01007	.10196	.00221	.02262	.01122	.00028	.00816	.02335
#3	.01047	.10310	.00224	.02230	.01119	.00030	.00808	.02277

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.02142**	**.00137**	**.01435**	**.00447**	**.10114**	**.00638**	**.09362**	**.07612**
Stddev	.00020	.00001	.00017	.00013	.00070	.00004	.00102	.00050
%RSD	.93689	.80305	1.1804	2.9995	.68889	.62242	1.0909	.65097
#1	.02141	.00136	.01416	.00441	.10048	.00641	.09334	.07578
#2	.02123	.00138	.01448	.00439	.10107	.00639	.09277	.07590
#3	.02163	.00136	.01441	.00463	.10187	.00633	.09476	.07669

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00904**	**.01150**	**.00100**	**-.00048**	**.00089**	**.02044**	**.13824**
Stddev	.00008	.00024	.00001	.00004	.00000	.00195	.00063
%RSD	.86488	2.1138	1.3794	8.8290	.27226	9.5387	.45632
#1	.00913	.01122	.00099	-.00053	.00089	.01950	.13887
#2	.00900	.01165	.00102	-.00047	.00089	.01914	.13761
#3	.00899	.01164	.00100	-.00045	.00089	.02268	.13822

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: S1 Acquired: 10/3/2025 11:58:04 Type: Cal
Method: 6010-200.7 NEW(v268) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6715.9	92248.	8275.7	4984.3	8123.0
Stddev	24.8	320.	15.7	6.1	25.3
%RSD	.36869	.34682	.19012	.12224	.31200
#1	6713.7	92414.	8275.3	4988.3	8113.1
#2	6741.7	91879.	8291.6	4977.3	8151.8
#3	6692.3	92451.	8260.1	4987.3	8104.1

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: S2 Acquired: 10/3/2025 12:02:17 Type: Cal
Method: 6010-200.7 NEW(v268) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.04160**	**.04523**	**.13974**	**.02731**	**.06493**	**.11331**	**2.4281**	**.36419**
Stddev	.00039	.00152	.00042	.00008	.00031	.00215	.0049	.00210
%RSD	.93027	3.3629	.30218	.30669	.47126	1.8974	.20002	.57754
#1	.04148	.04588	.13934	.02721	.06486	.11578	2.4251	.36177
#2	.04129	.04349	.13970	.02734	.06467	.11190	2.4337	.36526
#3	.04203	.04632	.14018	.02737	.06527	.11224	2.4256	.36555

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.67703**	**.19817**	**.03188**	**.28963**	**.09862**	**.00194**	**.14745**	**.04314**
Stddev	.00216	.00071	.00011	.00091	.00032	.00002	.00026	.00071
%RSD	.31878	.35618	.34093	.31303	.32264	1.1956	.17800	1.6395
#1	.67535	.19807	.03185	.28917	.09827	.00197	.14743	.04246
#2	.67629	.19751	.03178	.28903	.09869	.00193	.14720	.04387
#3	.67946	.19892	.03199	.29067	.09889	.00193	.14772	.04308

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.21170**	**.03712**	**.02586**	**.04353**	**.93611**	**.01258**	**.67587**	**.30077**
Stddev	.00050	.00009	.00015	.00041	.00393	.00001	.00561	.00133
%RSD	.23621	.24714	.57292	.93993	.41982	.10384	.83017	.44120
#1	.21136	.03702	.02571	.04323	.93326	.01260	.66967	.30064
#2	.21146	.03715	.02588	.04337	.93449	.01257	.68060	.29952
#3	.21227	.03719	.02600	.04400	.94059	.01258	.67735	.30216

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.12061**	**.19797**	**.00204**	**.03306**	**.02079**	**.55666**	**5.0338**
Stddev	.00051	.00059	.00004	.00030	.00013	.00194	.0032
%RSD	.42394	.29915	2.0440	.89516	.61557	.34831	.06419
#1	.12042	.19729	.00202	.03295	.02078	.55446	5.0312
#2	.12022	.19831	.00201	.03283	.02066	.55812	5.0327
#3	.12119	.19832	.00208	.03339	.02092	.55739	5.0374

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: S2 Acquired: 10/3/2025 12:02:17 Type: Cal
Method: 6010-200.7 NEW(v268) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6656.1	90877.	7984.8	4963.0	7954.3
Stddev	14.9	117.	40.1	8.6	15.7
%RSD	.22399	.12906	.50263	.17262	.19703
#1	6670.1	90912.	8019.8	4961.5	7968.9
#2	6657.8	90973.	7941.0	4972.3	7956.3
#3	6640.4	90746.	7993.5	4955.3	7937.8

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: S3 Acquired: 10/3/2025 12:06:19 Type: Cal
Method: 6010-200.7 NEW(v268) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.12913**	**.14523**	**.43412**	**.08376**	**.20032**	**.35078**	**7.5506**	**1.1140**
Stddev	.00029	.00255	.00024	.00015	.00039	.00117	.0160	.0014
%RSD	.22423	1.7580	.05432	.18130	.19350	.33352	.21224	.12291
#1	.12929	.14792	.43394	.08376	.19993	.34982	7.5322	1.1124
#2	.12880	.14493	.43402	.08362	.20033	.35208	7.5574	1.1147
#3	.12931	.14284	.43438	.08392	.20070	.35045	7.5620	1.1149

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.1253**	**.61439**	**.09794**	**.90176**	**.30058**	**.00609**	**.45492**	**.13086**
Stddev	.0026	.00066	.00055	.00113	.00061	.00004	.00033	.00054
%RSD	.12060	.10779	.56383	.12518	.20138	.60208	.07352	.41045
#1	2.1263	.61376	.09749	.90138	.30077	.00608	.45478	.13044
#2	2.1224	.61434	.09779	.90088	.29990	.00607	.45468	.13068
#3	2.1272	.61508	.09856	.90304	.30106	.00614	.45530	.13147

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.65675**	**.11568**	**.07760**	**.13647**	**2.8660**	**.04101**	**2.0478**	**.93401**
Stddev	.00095	.00009	.00022	.00065	.0077	.00016	.0035	.00161
%RSD	.14456	.07669	.28755	.47411	.27041	.39766	.17011	.17271
#1	.65669	.11565	.07745	.13572	2.8721	.04092	2.0447	.93446
#2	.65583	.11561	.07749	.13687	2.8572	.04091	2.0516	.93222
#3	.65772	.11578	.07786	.13681	2.8686	.04120	2.0472	.93535

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.37254**	**.61524**	**.00619**	**.10893**	**.06558**	**1.6743**	**15.841**
Stddev	.00078	.00157	.00009	.00020	.00018	.0016	.019
%RSD	.20827	.25461	1.4404	.18251	.27410	.09291	.12017
#1	.37314	.61518	.00609	.10915	.06551	1.6726	15.820
#2	.37166	.61370	.00623	.10890	.06544	1.6746	15.845
#3	.37281	.61683	.00625	.10876	.06578	1.6756	15.857

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: S3 Acquired: 10/3/2025 12:06:19 Type: Cal
Method: 6010-200.7 NEW(v268) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6630.8	91211.	8121.5	4908.0	7811.5
Stddev	.7	477.	27.3	23.8	4.4
%RSD	.01062	.52312	.33671	.48399	.05604
#1	6631.0	91591.	8144.5	4914.1	7806.5
#2	6631.5	91366.	8128.7	4928.1	7813.3
#3	6630.1	90676.	8091.2	4881.8	7814.6

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: S4 Acquired: 10/3/2025 12:10:14 Type: Cal
Method: 6010-200.7 NEW(v268) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.26086**	**.26231**	**.88068**	**.16746**	**.40309**	**.70909**	**15.059**	**2.2259**
Stddev	.00051	.00510	.00126	.00035	.00072	.00177	.017	.0183
%RSD	.19379	1.9462	.14270	.20822	.17812	.24918	.11057	.82380
#1	.26089	.25885	.87989	.16753	.40243	.70988	15.068	2.2162
#2	.26033	.25991	.88002	.16708	.40298	.70707	15.070	2.2143
#3	.26134	.26817	.88213	.16777	.40385	.71033	15.040	2.2470

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4.3349**	**1.2319**	**.19550**	**1.8349**	**.59840**	**.01216**	**.90794**	**.26456**
Stddev	.0080	.0007	.00052	.0023	.00095	.00013	.00210	.00165
%RSD	.18328	.05881	.26626	.12478	.15906	1.0297	.23076	.62510
#1	4.3304	1.2313	.19526	1.8347	.59784	.01222	.90877	.26399
#2	4.3301	1.2327	.19610	1.8327	.59787	.01225	.90556	.26326
#3	4.3440	1.2318	.19514	1.8373	.59950	.01202	.90949	.26642

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.3320**	**.23152**	**.15678**	**.27595**	**5.7296**	**.08351**	**4.1309**	**1.8639**
Stddev	.0014	.00030	.00094	.00028	.0011	.00079	.0363	.0025
%RSD	.10229	.13067	.60125	.10063	.01937	.94115	.87950	.13465
#1	1.3310	.23175	.15730	.27590	5.7302	.08377	4.1103	1.8633
#2	1.3314	.23163	.15736	.27570	5.7303	.08413	4.1095	1.8618
#3	1.3335	.23118	.15570	.27625	5.7283	.08263	4.1728	1.8667

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.74906**	**1.2326**	**.01247**	**.22491**	**.13313**	**3.3681**	**31.537**
Stddev	.00133	.0013	.00009	.00143	.00055	.0043	.059
%RSD	.17773	.10438	.70699	.63697	.41246	.12662	.18831
#1	.74940	1.2312	.01247	.22495	.13323	3.3703	31.539
#2	.74759	1.2329	.01256	.22345	.13254	3.3632	31.476
#3	.75019	1.2337	.01238	.22632	.13362	3.3707	31.595

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: S4 Acquired: 10/3/2025 12:10:14 Type: Cal
Method: 6010-200.7 NEW(v268) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6495.6	89547.	7978.6	4797.1	7510.8
Stddev	10.9	182.	53.4	22.7	7.6
%RSD	.16796	.20366	.66912	.47220	.10104
#1	6501.1	89428.	7987.4	4777.9	7513.4
#2	6483.1	89455.	8027.0	4791.4	7502.2
#3	6502.7	89757.	7921.3	4822.1	7516.7

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: S5 Acquired: 10/3/2025 12:14:16 Type: Cal
Method: 6010-200.7 NEW(v268) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.52420**	**.49903**	**1.7970**	**.33346**	**.80919**	**1.4235**	**30.193**	**4.4232**
Stddev	.00292	.00509	.0051	.00170	.00334	.0073	.050	.0126
%RSD	.55796	1.0205	.28392	.51062	.41335	.51074	.16592	.28406
#1	.52271	.49981	1.7917	.33272	.80766	1.4152	30.160	4.4087
#2	.52233	.49359	1.7974	.33225	.80687	1.4263	30.169	4.4300
#3	.52757	.50368	1.8019	.33540	.81302	1.4289	30.251	4.4308

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**8.7871**	**2.4609**	**.39059**	**3.7526**	**1.1884**	**.02471**	**1.8152**	**.53080**
Stddev	.0285	.0094	.00234	.0136	.0040	.00018	.0094	.00300
%RSD	.32471	.38291	.59794	.36195	.33368	.71044	.51658	.56590
#1	8.7614	2.4503	.38893	3.7417	1.1866	.02458	1.8049	.52750
#2	8.7821	2.4640	.39326	3.7483	1.1856	.02491	1.8233	.53337
#3	8.8178	2.4684	.38957	3.7678	1.1929	.02465	1.8174	.53154

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.7110**	**.46852**	**.32147**	**.55936**	**11.391**	**.17141**	**8.2622**	**3.7549**
Stddev	.0095	.00147	.00212	.00154	.012	.00098	.0157	.0168
%RSD	.35161	.31460	.65827	.27442	.10739	.57435	.18998	.44614
#1	2.7025	.46725	.31968	.55785	11.391	.17050	8.2457	3.7481
#2	2.7092	.47013	.32381	.55930	11.404	.17246	8.2641	3.7427
#3	2.7213	.46817	.32093	.56092	11.379	.17127	8.2769	3.7740

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.5112**	**2.4850**	**.02597**	**.45750**	**.27413**	**6.8051**	**63.284**
Stddev	.0062	.0099	.00023	.00078	.00146	.0234	1.132
%RSD	.40781	.39813	.90379	.17062	.53239	.34427	1.7890
#1	1.5077	2.4736	.02570	.45743	.27388	6.7782	61.992
#2	1.5076	2.4903	.02607	.45676	.27280	6.8208	63.756
#3	1.5183	2.4912	.02613	.45832	.27569	6.8163	64.104

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: S5 Acquired: 10/3/2025 12:14:16 Type: Cal
Method: 6010-200.7 NEW(v268) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6402.6	88871.	7986.7	4719.4	7264.5
Stddev	5.9	712.	38.1	41.3	8.6
%RSD	.09177	.80146	.47669	.87463	.11841
#1	6397.2	89351.	8017.5	4745.0	7265.1
#2	6401.8	88052.	7944.1	4671.8	7255.7
#3	6408.8	89209.	7998.4	4741.4	7272.8

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: ICV01 Acquired: 10/3/2025 12:18:28 Type: Unk
Method: 6010-200.7 NEW(v268) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.942105**	**3.752499**	**3.835827**	**3.957510**	**4.032647**	**7.853491**
Stddev	.007778	.042858	.006506	.010102	.005756	.028135
%RSD	.1973009	1.142123	.1696053	.2552630	.1427234	.3582510
#1	3.947841	3.801143	3.842962	3.969133	4.038336	7.852635
#2	3.933252	3.736058	3.830224	3.950839	4.026827	7.825794
#3	3.945222	3.720295	3.834295	3.952559	4.032777	7.882045

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.904980**	**.1991921**	**1.954288**	**19.61760**	**.7992967**	**1.953304**
Stddev	.014916	.0011829	.004548	.04282	.0016961	.004386
%RSD	.1886899	.5938236	.2326940	.2182848	.2121975	.2245677
#1	7.915236	.2001903	1.959537	19.57945	.7976240	1.958360
#2	7.887869	.1978856	1.951533	19.66392	.7992508	1.950509
#3	7.911835	.1995003	1.951794	19.60943	.8010152	1.951044

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.006044**	**3.953503**	**1.982159**	**19.59122**	**1.958695**	**.9601288**
Stddev	.001571	.037101	.000959	.05604	.003890	.0030053
%RSD	.1561372	.9384391	.0483978	.2860599	.1985852	.3130111
#1	1.007212	3.910920	1.982291	19.53119	1.963185	.9573204
#2	1.004258	3.970730	1.981141	19.60031	1.956536	.9597676
#3	1.006662	3.978860	1.983046	19.64216	1.956364	.9632984

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.34078**	**1.958509**	**1.980491**	**19.43479**	**3.952723**	**4.008753**
Stddev	.12358	.002219	.000122	.15538	.029312	.007755
%RSD	.6389780	.1132969	.0061711	.7994897	.7415620	.1934594
#1	19.19817	1.958385	1.980445	19.27146	3.979878	4.016296
#2	19.41656	1.956355	1.980398	19.58075	3.921648	4.000802
#3	19.40761	1.960787	1.980629	19.45218	3.956641	4.009162

Sample Name: ICV01 Acquired: 10/3/2025 12:18:28 Type: Unk
Method: 6010-200.7 NEW(v268) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.961390	4.007454	3.611010	F .0056960	F .0252408	F .0043725
Stddev	.013240	.008061	.038067	.0006660	.0023768	.0024944
%RSD	.3342165	.2011475	1.054196	11.69300	9.416446	57.04761
#1	3.975074	3.999231	3.574142	.0059904	.0225883	.0070209
#2	3.948645	4.015343	3.650173	.0061641	.0271772	.0040291
#3	3.960450	4.007786	3.608716	.0049335	.0259570	.0020676

Elem	Sr4077
Units	ppm
Avg	F -.003086
Stddev	.000059
%RSD	1.912994
#1	-.003020
#2	-.003133
#3	-.003105

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6638.825	91448.11	8181.235	4898.480	7777.874
Stddev	28.204	420.99	36.805	17.465	38.545
%RSD	.4248391	.4603637	.4498771	.3565312	.4955719
#1	6611.710	91900.12	8145.288	4917.712	7736.217
#2	6668.005	91067.18	8218.843	4883.610	7812.277
#3	6636.759	91377.03	8179.573	4894.118	7785.127

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: LLICV01 Acquired: 10/3/2025 13:05:13 Type: Unk
Method: 6010-200.7 NEW(v268) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0219620**	**.0417994**	**.0128358**	**.0192565**	**.0537822**	**.1143579**
Stddev	.0010277	.0026262	.0011422	.0009698	.0016798	.0058608
%RSD	4.679401	6.282821	8.898723	5.036296	3.123386	5.125008
#1	.0210491	.0444769	.0124314	.0203445	.0539732	.1109147
#2	.0217618	.0392277	.0119507	.0189420	.0520150	.1110340
#3	.0230750	.0416937	.0141252	.0184830	.0553583	.1211251

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0991464**	**.0065056**	**.0060503**	**2.062113**	**.0103781**	**.0300579**
Stddev	.0006064	.0000448	.0000953	.011042	.0003110	.0000360
%RSD	.6116069	.6880759	1.574884	.5354535	2.996224	.1198861
#1	.0990166	.0065561	.0061475	2.066924	.0106461	.0300990
#2	.0986154	.0064897	.0059571	2.049482	.0100372	.0300321
#3	.0998072	.0064709	.0060463	2.069933	.0104510	.0300425

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0213234**	**.0929378**	**.0211692**	**2.157802**	**.0413326**	**.0102340**
Stddev	.0007095	.0069687	.0003784	.030386	.0002854	.0001440
%RSD	3.327159	7.498258	1.787672	1.408186	.6905922	1.406550
#1	.0213287	.0850870	.0210397	2.145179	.0410054	.0100915
#2	.0220302	.0953342	.0215954	2.135762	.0415305	.0103794
#3	.0206113	.0983920	.0208726	2.192465	.0414619	.0102313

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.994059**	**.0392204**	**.0424222**	**1.960129**	**.0965091**	**.1997598**
Stddev	.019384	.0025168	.0002121	.042379	.0009384	.0005777
%RSD	.9720973	6.417180	.4999556	2.162039	.9722873	.2891930
#1	1.973202	.0366549	.0423921	1.991214	.0971984	.2002017
#2	1.997453	.0416855	.0426477	1.911856	.0954405	.1991061
#3	2.011522	.0393208	.0422268	1.977316	.0968885	.1999716

Sample Name: LLICV01 Acquired: 10/3/2025 13:05:13 Type: Unk
Method: 6010-200.7 NEW(v268) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0348108	.0406400	.3548723	.0202102	.0226262	F .0275792
Stddev	.0002690	.0023400	.0162999	.0013260	.0005336	.0014067
%RSD	.7726005	5.757916	4.593167	6.561035	2.358180	5.100526
#1	.0345037	.0380107	.3593299	.0200120	.0231479	.0290243
#2	.0350043	.0414154	.3368073	.0216241	.0220815	.0262144
#3	.0349244	.0424939	.3684796	.0189944	.0226493	.0274990

Elem	Sr4077
Units	ppm
Avg	.0218149
Stddev	.0000443
%RSD	.2030138
#1	.0218085
#2	.0217741
#3	.0218620

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6715.912	93385.08	8142.982	5075.280	8080.447
Stddev	22.158	464.64	30.526	38.144	24.435
%RSD	.3299342	.4975496	.3748719	.7515597	.3023922
#1	6739.317	93751.25	8141.815	5112.025	8106.617
#2	6713.162	93541.60	8174.075	5077.939	8076.496
#3	6695.258	92862.39	8113.057	5035.877	8058.229

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: ICB01 Acquired: 10/3/2025 13:12:23 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012477**	**.0017327**	**-.001312**	**.0032150**	**.0018706**	**.0115623**	**.0011530**
Stddev	.0008263	.0010411	.000547	.0005365	.0007462	.0161287	.0010562
%RSD	66.22296	60.08429	41.65125	16.68751	39.88840	139.4935	91.60328
#1	.0021185	.0020202	-.001896	.0031190	.0014278	.0294540	.0009972
#2	.0011498	.0025997	-.000813	.0027330	.0027321	-.001861	.0022784
#3	.0004747	.0005781	-.001227	.0037930	.0014520	.007094	.0001833

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001075**	**-.000048**	**-.022602**	**-.000141**	**.0001089**	**-.000188**	**-.014455**
Stddev	.0000437	.000111	.007569	.000113	.0001601	.000287	.005613
%RSD	40.60731	229.0890	33.48960	79.87976	146.9740	152.7525	38.82990
#1	.0001085	-.000164	-.014189	-.000222	.0000741	-.000346	-.017515
#2	.0000634	.000056	-.028861	-.000012	.0002835	-.000361	-.007977
#3	.0001507	-.000037	-.024756	-.000189	-.000031	.000143	-.017872

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000355**	**.0209007**	**.0003017**	**.0002559**	**-.027516**	**.0061441**	**.0000240**
Stddev	.0003061	.0178250	.0001311	.0004260	.010968	.0050373	.0000676
%RSD	861.0828	85.28449	43.47267	166.5069	39.85916	81.98625	281.6011
#1	-.000183	.0325534	.0002384	.0001762	-.040164	.0049286	-.000027
#2	.000385	.0003810	.0002142	-.000125	-.021742	.0116779	-.000002
#3	-.000095	.0297676	.0004525	.000716	-.020641	.0018257	.000101

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.036987**	**-.007601**	**.0003037**	**-.004518**	**.0014862**	**-.009741**	**.0006305**
Stddev	.004773	.000372	.0001507	.000475	.0016939	.004397	.0019171
%RSD	12.90371	4.891441	49.61475	10.50689	113.9770	45.13757	304.0556
#1	-.042035	-.007261	.0001538	-.004091	.0006565	-.004826	-.001208
#2	-.036379	-.007544	.0003021	-.004434	.0034350	-.013300	.000483
#3	-.032548	-.007998	.0004551	-.005029	.0003670	-.011097	.002617

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: ICB01 Acquired: 10/3/2025 13:12:23 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.000824	.0034130	.0000886
Stddev	.002503	.0014781	.0001589
%RSD	303.8365	43.30795	179.3432
#1	-.002986	.0017228	.0002449
#2	.001918	.0044635	-.000073
#3	-.001403	.0040528	.000094

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6675.727	94421.86	8081.728	5025.570	8069.377
Stddev	21.266	189.70	45.643	4.487	17.527
%RSD	.3185540	.2009066	.5647739	.0892790	.2172044
#1	6662.064	94482.83	8127.544	5030.730	8063.282
#2	6664.889	94573.58	8081.382	5023.395	8055.711
#3	6700.228	94209.17	8036.259	5022.585	8089.138

Sample Name: CRI01 Acquired: 10/3/2025 13:16:40 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0213902**	**.0394143**	**.0102307**	**.0211859**	**.0506307**	**.1179152**	**.1002790**
Stddev	.0007567	.0010319	.0004395	.0013629	.0017346	.0100347	.0017373
%RSD	3.537629	2.617977	4.296014	6.433109	3.426020	8.510081	1.732471
#1	.0219184	.0403829	.0098668	.0226815	.0487820	.1100467	.0996548
#2	.0217289	.0383291	.0101064	.0208620	.0522226	.1292156	.1022422
#3	.0205233	.0395310	.0107190	.0200140	.0508875	.1144834	.0989401

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0064871**	**.0060389**	**2.058792**	**.0099024**	**.0296834**	**.0211963**	**.0912277**
Stddev	.0001217	.0001000	.010035	.0002660	.0001262	.0003266	.0061461
%RSD	1.876638	1.656611	.4874384	2.685967	.4250147	1.540946	6.737136
#1	.0063485	.0060751	2.049468	.0098963	.0297584	.0215302	.0876146
#2	.0065768	.0059258	2.069412	.0096396	.0295377	.0208775	.0983243
#3	.0065358	.0061158	2.057495	.0101714	.0297539	.0211813	.0877444

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0209566**	**2.143149**	**.0408797**	**.0105006**	**1.908141**	**.0397985**	**.0420068**
Stddev	.0006497	.017452	.0003105	.0002907	.027405	.0053346	.0001872
%RSD	3.100269	.8143181	.7596686	2.768295	1.436194	13.40388	.4455888
#1	.0202068	2.135117	.0406115	.0101737	1.880203	.0346269	.0420881
#2	.0213098	2.131159	.0408077	.0105982	1.934979	.0452823	.0421396
#3	.0213531	2.163171	.0412199	.0107300	1.909242	.0394863	.0417928

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.890380**	**.0966190**	**.1995693**	**.0339321**	**.0381501**	**.3426531**	**.0205146**
Stddev	.029689	.0007152	.0002190	.0003516	.0011578	.0123289	.0010539
%RSD	1.570512	.7402545	.1097465	1.036205	3.034880	3.598082	5.137303
#1	1.898292	.0958741	.1993211	.0342907	.0371478	.3499704	.0194110
#2	1.857536	.0966827	.1996513	.0335879	.0378851	.3284187	.0206222
#3	1.915311	.0973003	.1997354	.0339178	.0394175	.3495701	.0215105

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: CRI01 Acquired: 10/3/2025 13:16:40 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0215084	.0223105	.0213053
Stddev	.0001451	.0020927	.0001127
%RSD	.6745064	9.379732	.5289752
#1	.0216422	.0221105	.0211969
#2	.0213542	.0203250	.0214218
#3	.0215288	.0244960	.0212972

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6826.296	94966.60	8176.969	5115.687	8305.685
Stddev	17.138	190.15	27.833	14.836	26.903
%RSD	.2510609	.2002286	.3403796	.2900160	.3239114
#1	6844.779	94823.29	8206.768	5130.311	8333.775
#2	6823.178	94894.20	8172.495	5100.648	8303.130
#3	6810.931	95182.32	8151.645	5116.103	8280.151

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: ICSA01 Acquired: 10/3/2025 13:20:52 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0084058**	**.0113057**	**.0009702**	**.0092732**	**.0035164**	**245.0059**
Stddev	.0018208	.0014838	.0019009	.0038958	.0026309	.7902
%RSD	21.66087	13.12447	195.9310	42.01137	74.81654	.3225282
#1	.0093874	.0097115	-.000824	.0056459	.0010241	244.1166
#2	.0063049	.0115591	.002962	.0087827	.0062668	245.6274
#3	.0095252	.0126464	.000773	.0133910	.0032583	245.2737

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0016618**	**.0014245**	**.0009095**	**236.3756**	**.0465976**	**.0006771**
Stddev	.0018712	.0000973	.0002430	.6289	.0003763	.0001498
%RSD	112.6027	6.831056	26.71993	.2660694	.8075621	22.11856
#1	-.000436	.0013131	.0011901	235.6536	.0467472	.0008404
#2	.002264	.0014929	.0007646	236.8044	.0461695	.0006448
#3	.003158	.0014674	.0007739	236.6688	.0468761	.0005461

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0030598**	**99.62991**	**-.001761**	**246.5722**	**.0039301**	**.0014097**
Stddev	.0014138	.69017	.000869	.5687	.0001061	.0007062
%RSD	46.20724	.6927335	49.37533	.2306547	2.698486	50.09846
#1	.0038459	99.53149	-.000758	245.9210	.0039436	.0010238
#2	.0039059	98.99423	-.002300	246.8241	.0040288	.0009805
#3	.0014276	100.3640	-.002223	246.9714	.0038180	.0022249

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1272052**	**.0048350**	**.0016588**	**.1869151**	**.0340688**	**.0002898**
Stddev	.0065777	.0017064	.0002390	.0425714	.0039496	.0004425
%RSD	5.170960	35.29221	14.40613	22.77578	11.59292	152.6814
#1	.1208341	.0046092	.0019333	.1895428	.0359481	-.000140
#2	.1268097	.0066430	.0015461	.2281118	.0295305	.000744
#3	.1339718	.0032528	.0014971	.1430908	.0367279	.000266

Sample Name: ICSA01 Acquired: 10/3/2025 13:20:52 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0029167	-.004840	.0210824	.0055008	-.005546	F -.023538
Stddev	.0002723	.001269	.0002493	.0017316	.002733	.001933
%RSD	9.335951	26.22115	1.182453	31.47818	49.28042	8.213426
#1	.0026045	-.005280	.0209190	.0046372	-.008536	-.022005
#2	.0031053	-.003409	.0213693	.0074943	-.003177	-.025710
#3	.0030403	-.005830	.0209589	.0043709	-.004926	-.022900

Elem	Sr4077
Units	ppm
Avg	.0062628
Stddev	.0009227
%RSD	14.73375
#1	.0054984
#2	.0072878
#3	.0060022

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6162.894	85309.60	7991.316	4621.101	7000.994
Stddev	3.352	531.95	50.787	34.379	10.831
%RSD	.0543899	.6235480	.6355260	.7439625	.1547135
#1	6159.309	85444.46	8049.592	4624.679	6995.312
#2	6163.425	85761.15	7956.503	4653.552	6994.185
#3	6165.950	84723.21	7967.853	4585.073	7013.484

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: ICSAB01 Acquired: 10/3/2025 13:25:02 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1096902**	**.1046148**	**.0490651**	**.0564404**	**.6093014**	**247.1323**
Stddev	.0050988	.0064425	.0021758	.0014055	.0005689	.3127
%RSD	4.648396	6.158317	4.434419	2.490293	.0933709	.1265159
#1	.1054110	.1096645	.0510951	.0548202	.6098619	246.8229
#2	.1153318	.0973590	.0467683	.0573333	.6087244	247.4481
#3	.1083277	.1068209	.0493320	.0571676	.6093180	247.1259

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4960244**	**.5160295**	**.9803816**	**235.4838**	**.5527621**	**.4911790**
Stddev	.0047421	.0024038	.0011228	.4558	.0017042	.0005778
%RSD	.9560175	.4658156	.1145262	.1935456	.3082974	.1176248
#1	.4920651	.5147618	.9816261	235.0122	.5509712	.4916526
#2	.4947283	.5188017	.9800743	235.5173	.5543637	.4905353
#3	.5012798	.5145250	.9794445	235.9218	.5529513	.4913491

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4843382**	**97.52496**	**.4917773**	**247.9833**	**.9806717**	**.2084624**
Stddev	.0010447	.59858	.0021181	.6029	.0004816	.0002558
%RSD	.2156976	.6137690	.4306977	.2431376	.0491107	.1227178
#1	.4841680	97.29768	.4902728	247.3279	.9811605	.2083636
#2	.4854575	97.07332	.4908597	248.5144	.9801976	.2082708
#3	.4833890	98.20390	.4941995	248.1076	.9806569	.2087529

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0921814**	**.4845262**	**1.030716**	**.0151608**	**1.038336**	**1.019430**
Stddev	.0210221	.0044639	.002734	.0109750	.005219	.000635
%RSD	22.80519	.9212808	.2652972	72.39025	.5026111	.0622846
#1	.0700085	.4793914	1.033300	.0205900	1.037765	1.020134
#2	.1118237	.4867041	1.030995	.0223630	1.043817	1.018899
#3	.0947119	.4874830	1.027853	.0025294	1.033426	1.019258

Sample Name: ICSAB01 Acquired: 10/3/2025 13:25:02 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.011018	1.004461	.9777460	F .0056567	F .0029772	F -.026902
Stddev	.000773	.003947	.0056085	.0030486	.0027922	.001693
%RSD	.0764247	.3929853	.5736190	53.89403	93.78636	6.292398
#1	1.011280	1.005559	.9841180	.0069168	.0002525	-.028581
#2	1.011625	1.000081	.9755619	.0021801	.0028467	-.026931
#3	1.010148	1.007743	.9735580	.0078733	.0058324	-.025196

Elem	Sr4077
Units	ppm
Avg	F .0065928
Stddev	.0002221
%RSD	3.368950
#1	.0065731
#2	.0068242
#3	.0063813

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6157.666	84233.39	7770.782	4597.267	6991.343
Stddev	5.522	180.03	48.595	18.579	3.228
%RSD	.0896744	.2137241	.6253611	.4041393	.0461657
#1	6163.941	84266.63	7792.546	4603.556	6988.410
#2	6155.511	84039.06	7715.109	4576.359	6994.801
#3	6153.547	84394.48	7804.691	4611.885	6990.818

Sample Name: ICSADLX20 Acquired: 10/3/2025 13:29:04 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000029**	**.0038309**	**-.003039**	**.0026796**	**.0005292**	**11.69961**	**-.002589**
Stddev	.002453	.0025905	.001260	.0020429	.0006845	.03065	.001209
%RSD	8474.774	67.61957	41.47013	76.23813	129.3463	.2619635	46.68206
#1	.002180	.0040973	-.002338	.0032980	.0006468	11.66562	-.003526
#2	.000402	.0062779	-.002285	.0043419	-.000206	11.70809	-.001225
#3	-.002668	.0011176	-.004494	.0003990	.001147	11.72513	-.003017

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001838**	**.0000771**	**11.51819**	**.0010831**	**-.000164**	**.0005602**	**4.610414**
Stddev	.0000406	.0000704	.00738	.0002120	.000098	.0003569	.025431
%RSD	22.11629	91.34116	.0640697	19.57789	59.48374	63.70465	.5516034
#1	.0002274	.0000341	11.51508	.0013147	-.000077	.0002798	4.581052
#2	.0001770	.0000388	11.51287	.0008986	-.000269	.0009619	4.625484
#3	.0001470	.0001584	11.52662	.0010359	-.000146	.0004389	4.624707

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003858**	**11.92218**	**.0002703**	**-.000192**	**-.059965**	**.0010390**	**.0004623**
Stddev	.0002588	.10973	.0003143	.000568	.019057	.0051696	.0002738
%RSD	67.07864	.9203966	116.2749	295.9372	31.78042	497.5578	59.21831
#1	.0006818	11.85113	.0003851	-.000807	-.048715	-.001689	.0001920
#2	.0002735	11.86685	.0005111	.000313	-.049212	.007001	.0007393
#3	.0002022	12.04856	-.000085	-.000082	-.081969	-.002196	.0004556

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.088452**	**-.005917**	**.0000893**	**.0049992**	**.0020323**	**-.008148**	**.0008902**
Stddev	.033718	.001377	.0002407	.0001701	.0021634	.005415	.0003125
%RSD	38.11997	23.27996	269.4848	3.401682	106.4500	66.46047	35.10988
#1	-.051919	-.004602	-.000153	.0050321	.0042608	-.014239	.0012408
#2	-.095061	-.005800	.000328	.0048151	.0018958	-.006325	.0007890
#3	-.118376	-.007349	.000093	.0051504	-.000060	-.003880	.0006408

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: ICSADLX20 Acquired: 10/3/2025 13:29:04 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**-.002291**	**-.002655**	**.0003399**
Stddev	.002554	.001004	.0000985
%RSD	111.4680	37.82896	28.96952
#1	-.002387	-.002364	.0004152
#2	.000309	-.001828	.0002285
#3	-.004796	-.003772	.0003761

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6578.491**	**93529.89**	**8296.207**	**4987.898**	**7875.243**
Stddev	19.256	551.88	32.829	32.127	21.928
%RSD	.2927103	.5900524	.3957162	.6441013	.2784458
#1	6597.401	93765.78	8259.349	5006.697	7893.780
#2	6579.164	92899.28	8306.966	4950.801	7880.913
#3	6558.907	93924.63	8322.308	5006.194	7851.037

Sample Name: ICSABDLX20 Acquired: 10/3/2025 13:33:20 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0060679**	**.0074892**	**.0003508**	**.0065567**	**.0305261**	**12.47237**	**.0207692**
Stddev	.0017309	.0021525	.0013541	.0018401	.0005736	.05583	.0023350
%RSD	28.52597	28.74205	386.0501	28.06381	1.879145	.4476625	11.24265
#1	.0041850	.0059717	.0018900	.0064022	.0305382	12.41725	.0205389
#2	.0075900	.0065431	-.000181	.0084692	.0299465	12.47098	.0185578
#3	.0064288	.0099527	-.000657	.0047988	.0310936	12.52889	.0232108

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0256153**	**.0504199**	**12.23789**	**.0275674**	**.0249464**	**.0259230**	**5.013572**
Stddev	.0002138	.0000733	.01909	.0002429	.0000975	.0006086	.011902
%RSD	.8347353	.1453768	.1559814	.8812036	.3908670	2.347800	.2373920
#1	.0253736	.0504838	12.23580	.0273812	.0250015	.0260830	5.020286
#2	.0256929	.0504360	12.21994	.0274787	.0250039	.0264356	4.999830
#3	.0257795	.0503399	12.25794	.0278422	.0248338	.0252504	5.020599

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0253712**	**12.73809**	**.0509261**	**.0096130**	**-.059427**	**.0291911**	**.0520563**
Stddev	.0004626	.02527	.0001671	.0001688	.009908	.0016083	.0000228
%RSD	1.823217	.1983839	.3280839	1.756081	16.67238	5.509430	.0437733
#1	.0259017	12.72536	.0509482	.0094986	-.051426	.0284167	.0520610
#2	.0251605	12.76719	.0507491	.0098069	-.070509	.0281165	.0520316
#3	.0250516	12.72171	.0510811	.0095336	-.056346	.0310400	.0520764

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.142138**	**.0431537**	**.0521389**	**.0551338**	**.0503607**	**.0450863**	**.0009357**
Stddev	.024076	.0007548	.0006230	.0002713	.0013093	.0049960	.0007154
%RSD	16.93835	1.749038	1.194802	.4920222	2.599941	11.08092	76.45652
#1	-.155268	.0423264	.0527829	.0552825	.0499012	.0419461	.0017416
#2	-.114351	.0438048	.0520945	.0552981	.0493429	.0508474	.0003755
#3	-.156794	.0433299	.0515393	.0548207	.0518378	.0424655	.0006901

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: ICSABDLX20 Acquired: 10/3/2025 13:33:20 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.001672	-.003173	.0003607
Stddev	.003074	.000272	.0001143
%RSD	183.8409	8.561382	31.70347
#1	-.004986	-.002896	.0004372
#2	-.001117	-.003440	.0002292
#3	.001087	-.003184	.0004156

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6622.945	92974.65	8443.937	4982.461	7946.943
Stddev	3.530	254.67	60.601	34.360	7.524
%RSD	.0532927	.2739142	.7176832	.6896099	.0946801
#1	6622.357	93012.60	8504.826	4975.226	7942.130
#2	6619.747	93208.22	8443.358	5019.862	7943.086
#3	6626.732	92703.14	8383.629	4952.295	7955.614

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: CCV01 Acquired: 10/3/2025 13:37:30 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.027087**	**4.654689**	**4.940859**	**5.051568**	**5.041431**	**9.960223**	**10.00416**
Stddev	.012510	.114372	.003068	.021207	.014973	.037061	.01996
%RSD	.2488429	2.457145	.0620973	.4198173	.2970072	.3720889	.1994699
#1	5.038414	4.568902	4.940521	5.072061	5.057932	9.928531	9.98608
#2	5.013661	4.610625	4.937975	5.029712	5.028711	9.951165	10.02557
#3	5.029187	4.784539	4.944083	5.052932	5.037649	10.00097	10.00083

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2474300**	**2.489435**	**24.84107**	**.9890580**	**2.477440**	**1.258418**	**4.899870**
Stddev	.0015646	.004319	.01959	.0037028	.004157	.002754	.026947
%RSD	.6323248	.1734977	.0788442	.3743802	.1677807	.2188418	.5499515
#1	.2477189	2.490179	24.82068	.9847965	2.479233	1.261365	4.875778
#2	.2488300	2.484792	24.85974	.9914901	2.472688	1.255910	4.894861
#3	.2457411	2.493334	24.84278	.9908873	2.480399	1.257979	4.928969

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.496228**	**24.68358**	**2.487693**	**1.227064**	**24.35428**	**2.478928**	**2.483204**
Stddev	.005056	.08413	.003862	.002024	.20093	.008812	.007306
%RSD	.2025637	.3408323	.1552263	.1649374	.8250298	.3554700	.2942289
#1	2.492411	24.70265	2.488422	1.224737	24.17607	2.489053	2.482515
#2	2.501963	24.75654	2.483520	1.228046	24.31472	2.474735	2.490831
#3	2.494311	24.59156	2.491139	1.228410	24.57204	2.472996	2.476267

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.18474**	**4.965332**	**4.980293**	**4.968658**	**4.982211**	**4.782607**	**5.006996**
Stddev	.16113	.037911	.010515	.015546	.002631	.053845	.030025
%RSD	.6662400	.7635184	.2111239	.3128786	.0528103	1.125844	.5996582
#1	24.04143	4.978555	4.989411	4.975833	4.981407	4.739254	4.995850
#2	24.15364	4.994862	4.968791	4.950820	4.985151	4.765687	4.984139
#3	24.35915	4.922581	4.982678	4.979321	4.980076	4.842879	5.041001

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: CCV01 Acquired: 10/3/2025 13:37:30 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.936682**	**4.968086**	**5.028514**
Stddev	.030300	.003039	.065439
%RSD	.6137805	.0611729	1.301353
#1	4.927423	4.966810	5.104041
#2	4.912091	4.971555	4.992731
#3	4.970532	4.965893	4.988768

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6503.713**	**92672.92**	**8162.151**	**4917.878**	**7523.614**
Stddev	4.685	375.39	26.785	15.298	7.477
%RSD	.0720370	.4050658	.3281661	.3110621	.0993800
#1	6499.656	93018.60	8156.107	4932.308	7524.771
#2	6508.841	92726.58	8138.904	4919.487	7530.446
#3	6502.641	92273.60	8191.442	4901.840	7515.627

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: CCB01 Acquired: 10/3/2025 13:41:34 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001312**	**.0022777**	**-.001773**	**.0023642**	**.0006716**	**.0096943**	**-.001508**
Stddev	.0007875	.0020174	.000971	.0012621	.0007955	.0139922	.001320
%RSD	600.0102	88.57194	54.72840	53.38343	118.4392	144.3346	87.55179
#1	-.000182	.0035320	-.000730	.0025887	.0003484	.0193991	-.002904
#2	.001027	-.000049	-.002649	.0010049	.0000887	-.006345	-.000281
#3	-.000452	.003350	-.001942	.0034989	.0015779	.016029	-.001338

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000223**	**-.000005**	**-.010500**	**.0002597**	**-.000011**	**-.000214**	**.0005431**
Stddev	.0000311	.000044	.011235	.0004188	.000134	.000174	.0053627
%RSD	139.5165	838.2666	106.9939	161.2235	1258.257	81.29849	987.3952
#1	-.000011	-.000055	-.014248	.0005828	-.000058	-.000091	.0065871
#2	.000051	.000010	.002129	-.000213	.000141	-.000138	-.003645
#3	.000027	.000029	-.019382	.000410	-.000115	-.000412	-.001313

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000490**	**.0247212**	**.0002239**	**-.000258**	**-.058224**	**-.000602**	**.0000749**
Stddev	.000305	.0183503	.0001122	.000266	.008708	.003316	.0000919
%RSD	62.22321	74.22911	50.12272	103.0748	14.95667	550.5652	122.7304
#1	-.000436	.0191484	.0002137	-.000526	-.062427	-.003713	-.000027
#2	-.000818	.0452119	.0003409	.000006	-.064034	-.000981	.000099
#3	-.000216	.0098033	.0001172	-.000255	-.048211	.002887	.000152

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.104072**	**-.003865**	**.0004178**	**-.004544**	**.0003354**	**.0049294**	**.0020892**
Stddev	.053812	.000328	.0003630	.000382	.0011985	.0087109	.0006770
%RSD	51.70669	8.489469	86.87672	8.411390	357.2929	176.7127	32.40465
#1	-.045788	-.003698	.0003190	-.004932	.0017187	-.004935	.0022285
#2	-.151868	-.004243	.0008200	-.004531	-.000318	.011564	.0026858
#3	-.114561	-.003654	.0001145	-.004168	-.000394	.008159	.0013534

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: CCB01 Acquired: 10/3/2025 13:41:34 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0013162	-.000167	.0001834
Stddev	.0013097	.001535	.0001078
%RSD	99.50466	922.2159	58.79215
#1	.0018378	.000196	.0002988
#2	-.000174	-.001851	.0001664
#3	.002285	.001155	.0000851

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6770.690	93924.53	8284.997	5058.027	8233.403
Stddev	11.527	332.76	12.887	23.818	3.114
%RSD	.1702531	.3542843	.1555439	.4708928	.0378197
#1	6779.458	93738.49	8299.846	5041.565	8234.201
#2	6757.633	93726.40	8278.406	5047.178	8236.040
#3	6774.980	94308.71	8276.739	5085.338	8229.968

Sample Name: LR-1 Acquired: 10/3/2025 13:45:54 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0048502**	**.0190015**	**.0196362**	**-.012893**	**.0152151**	**.3218159**	**.0179253**
Stddev	.0040031	.0077207	.0025692	.004073	.0017453	.0077006	.0011837
%RSD	82.53343	40.63199	13.08395	31.58829	11.47079	2.392845	6.603782
#1	.0041941	.0120980	.0208639	-.015888	.0150230	.3210344	.0181004
#2	.0091408	.0175679	.0166834	-.008255	.0135739	.3145359	.0190118
#3	.0012157	.0273384	.0213611	-.014535	.0170486	.3298774	.0166638

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009794**	**.0007092**	**2479.298**	**.0318207**	**.0062063**	**.0079100**	**.5839141**
Stddev	.0000667	.0003158	.318	.0004214	.0001648	.0010454	.0088388
%RSD	6.813083	44.52687	.0128118	1.324154	2.655252	13.21570	1.513722
#1	.0010561	.0008452	2478.981	.0313902	.0060618	.0067100	.5917942
#2	.0009477	.0009343	2479.296	.0322323	.0063857	.0083969	.5743569
#3	.0009345	.0003482	2479.616	.0318397	.0061713	.0086230	.5855912

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0265242**	**2237.920**	**.0281638**	**-.002540**	**2484.963**	**.0173561**	**.0690389**
Stddev	.0009016	4.358	.0006728	.000242	7.881	.0063745	.0006833
%RSD	3.399180	.1947208	2.388873	9.516237	.3171562	36.72743	.9897959
#1	.0270358	2235.927	.0284011	-.002623	2493.329	.0242051	.0694752
#2	.0270538	2242.918	.0274045	-.002268	2477.678	.0115966	.0693901
#3	.0254832	2234.915	.0286857	-.002730	2483.883	.0162667	.0682513

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.710094**	**.0050465**	**.0034561**	**-.016179**	**-.115995**	**-.032334**	**.0196779**
Stddev	.601418	.0010203	.0002613	.001049	.001040	.010442	.0003828
%RSD	12.76870	20.21843	7.561295	6.484175	.8966233	32.29306	1.945434
#1	4.107786	.0060808	.0035876	-.017388	-.114828	-.038745	.0192497
#2	4.711878	.0040408	.0031551	-.015639	-.116337	-.020285	.0197967
#3	5.310617	.0050179	.0036256	-.015511	-.116822	-.037971	.0199872

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: LR-1 Acquired: 10/3/2025 13:45:54 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2310578	-.364245	.0619655
Stddev	.0076571	.001891	.0003055
%RSD	3.313924	.5191746	.4930399
#1	.2398585	-.366428	.0619445
#2	.2259213	-.363094	.0622810
#3	.2273936	-.363215	.0616710

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4696.125	69578.94	7132.793	3542.649	4981.866
Stddev	16.505	278.35	30.867	9.846	18.535
%RSD	.3514683	.4000504	.4327424	.2779334	.3720564
#1	4677.527	69849.63	7134.822	3537.604	4965.196
#2	4701.813	69293.51	7100.962	3536.348	4978.577
#3	4709.033	69593.69	7162.595	3553.995	5001.826

Sample Name: LR-2 Acquired: 10/3/2025 13:50:20 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1000036**	**-.138975**	**.1282224**	**.0126276**	**-.121585**	**1833.351**	**.0171515**
Stddev	.0042198	.004369	.0032227	.0137978	.008410	11.093	.0018173
%RSD	4.219651	3.143430	2.513344	109.2672	6.917150	.6050520	10.59575
#1	.1029560	-.143766	.1276933	.0285033	-.121227	1840.706	.0155963
#2	.1018844	-.135213	.1316768	.0035280	-.113359	1838.755	.0191492
#3	.0951704	-.137945	.1252970	.0058513	-.130168	1820.592	.0167091

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0384663**	**-.003441**	**13.40967**	**-.256274**	**.0374214**	**-.030092**	**2622.225**
Stddev	.0004737	.004960	.13297	.004408	.0003519	.075723	44.738
%RSD	1.231579	144.1474	.9916054	1.719955	.9403200	251.6410	1.706106
#1	.0387889	-.007237	13.40329	-.260512	.0371142	-.092492	2661.753
#2	.0386876	-.005256	13.54572	-.256595	.0373448	-.051934	2631.264
#3	.0379224	.002171	13.28001	-.251714	.0378053	.054152	2573.658

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.467612**	**1.043934**	**.0484548**	**^ *****	**4.842729**	**.0448002**	**.0393710**
Stddev	.002967	.034278	.0017831	-----	.236278	.0034466	.0031568
%RSD	.6344909	3.283562	3.679961	-----	4.879031	7.693184	8.018020
#1	-.466798	1.073767	.0484707	^ -----	5.098899	.0482102	.0423126
#2	-.470902	1.051544	.0502299	^ -----	4.795948	.0448722	.0360360
#3	-.465138	1.006490	.0466638	^ -----	4.633341	.0413182	.0397643

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1803.623**	**^ *****	**-.021068**	**.0113520**	**.0030831**	**.4880018**	**.0785176**
Stddev	61.328	-----	.000662	.0015337	.0019231	.0132223	.0050781
%RSD	3.400283	-----	3.144055	13.51017	62.37653	2.709477	6.467467
#1	1866.932	^ -----	-.021156	.0122674	.0029638	.4864618	.0828892
#2	1799.448	^ -----	-.021681	.0122073	.0012224	.5019266	.0729475
#3	1744.488	^ -----	-.020366	.0095814	.0050631	.4756169	.0797162

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: LR-2 Acquired: 10/3/2025 13:50:20 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.464591	.2697361	-2.51362
Stddev	.022065	.0036762	.04283
%RSD	4.749404	1.362898	1.703980
#1	-.482972	.2726688	-2.55151
#2	-.470681	.2709277	-2.52219
#3	-.440120	.2656119	-2.46715

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5832.064	78667.14	8252.183	4261.171	6294.259
Stddev	7.229	1777.14	56.569	92.428	9.557
%RSD	.1239603	2.259057	.6855091	2.169070	.1518294
#1	5833.834	76633.79	8270.655	4157.336	6301.655
#2	5838.245	79444.34	8188.686	4291.724	6297.653
#3	5824.114	79923.28	8297.207	4334.454	6283.468

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: PB169935BS Acquired: 10/3/2025 14:03:57 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7656510**	**1.898936**	**.9347359**	**1.945138**	**.7981870**	**1.972608**
Stddev	.0010456	.065453	.0026739	.005658	.0011425	.011344
%RSD	.1365646	3.446835	.2860592	.2908707	.1431371	.5751003
#1	.7644669	1.883525	.9376379	1.942483	.7978835	1.976326
#2	.7660385	1.842563	.9341980	1.941297	.7972269	1.981628
#3	.7664474	1.970720	.9323719	1.951635	.7994506	1.959872

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1907776**	**.1984963**	**.1895164**	**.9692747**	**.4163299**	**.1913175**
Stddev	.0002219	.0005603	.0002429	.0045138	.0010908	.0004936
%RSD	.1163124	.2822835	.1281630	.4656903	.2620084	.2579835
#1	.1909512	.1990952	.1897078	.9696027	.4173520	.1915317
#2	.1905276	.1979848	.1895983	.9646058	.4164563	.1916678
#3	.1908540	.1984089	.1892431	.9736155	.4151814	.1907531

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2982146**	**3.018201**	**.1998262**	**1.990444**	**.4955533**	**.0734762**
Stddev	.0007013	.000922	.0012038	.019138	.0011048	.0007426
%RSD	.2351632	.0305318	.6024166	.9614828	.2229331	1.010694
#1	.2986990	3.017488	.2007530	2.011469	.4963687	.0726804
#2	.2974104	3.017874	.1984656	1.985823	.4959951	.0735975
#3	.2985345	3.019242	.2002599	1.974039	.4942960	.0741507

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.015148**	**.2890138**	**.2001947**	**9.812995**	**.2862994**	**.4019731**
Stddev	.036121	.0005003	.0004109	.051161	.0013594	.0006469
%RSD	1.197981	.1730914	.2052312	.5213551	.4748051	.1609318
#1	2.993841	.2889300	.1997873	9.769678	.2871221	.4021749
#2	2.994750	.2895507	.2006089	9.799867	.2847303	.4012493
#3	3.056854	.2885608	.2001879	9.869441	.2870457	.4024950

Sample Name: PB169935BS Acquired: 10/3/2025 14:03:57 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6749739**	**.1967675**	**.8556493**	**5.553910**	F **-.004171**	**.2040102**
Stddev	.0002642	.0020105	.0155935	.019307	.001510	.0015099
%RSD	.0391457	1.021776	1.822419	.3476257	36.20150	.7401064
#1	.6747886	.1975295	.8572249	5.551986	-.005867	.2057416
#2	.6752764	.1944873	.8393278	5.535637	-.003671	.2029674
#3	.6748566	.1982856	.8703952	5.574106	-.002974	.2033214

Elem	Sr4077
Units	ppm
Avg	**.1930544**
Stddev	.0007162
%RSD	.3709852
#1	.1936254
#2	.1922508
#3	.1932870

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6827.546**	**93616.61**	**8256.952**	**4997.356**	**8245.809**
Stddev	15.566	457.77	52.783	33.272	20.229
%RSD	.2279884	.4889891	.6392600	.6657893	.2453205
#1	6809.589	93109.12	8196.193	4969.570	8223.041
#2	6837.204	93742.31	8291.495	4988.272	8252.677
#3	6835.845	93998.41	8283.168	5034.227	8261.710

Sample Name: PB169937BL Acquired: 10/3/2025 14:07:57 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001459**	**.0032993**	**-.002056**	**.0015006**	**-.000098**	**.0171793**	**-.002151**
Stddev	.001197	.0021449	.002283	.0009781	.002118	.0103310	.000163
%RSD	82.03991	65.01081	111.0544	65.18052	2161.050	60.13636	7.568615
#1	-.000699	.0048700	-.001166	.0003880	-.002369	.0258918	-.002191
#2	-.000839	.0008556	-.000351	.0018891	.001823	.0057662	-.002290
#3	-.002838	.0041723	-.004650	.0022248	.000252	.0198800	-.001971

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000515**	**.0000638**	**-.016475**	**.0000465**	**-.000142**	**-.000124**	**-.004083**
Stddev	.0000246	.0000299	.009550	.0002932	.000220	.000512	.005728
%RSD	47.80422	46.88515	57.96709	630.4165	154.4294	412.9129	140.2929
#1	.0000761	.0000979	-.027474	-.000290	-.000345	-.000214	-.010536
#2	.0000269	.0000420	-.011674	.000181	.000092	.000427	.000399
#3	.0000516	.0000516	-.010279	.000248	-.000174	-.000585	-.002112

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000310**	**.0284690**	**.0000862**	**-.000599**	**.1251658**	**.0014205**	**.0001653**
Stddev	.000433	.0202964	.0001615	.000131	.0140202	.0026737	.0001386
%RSD	139.4252	71.29304	187.2517	21.84953	11.20129	188.2221	83.81886
#1	-.000498	.0196283	.0001835	-.000750	.1096430	.0000791	.0001021
#2	-.000618	.0516863	-.000100	-.000528	.1289464	.0044994	.0000696
#3	.000185	.0140924	.000175	-.000519	.1369080	-.000317	.0003242

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1710341**	**-.008991**	**.0002755**	**-.004807**	**-.000433**	**-.008104**	**.0019284**
Stddev	.0349014	.000403	.0002904	.000121	.000563	.012986	.0008578
%RSD	20.40608	4.484636	105.4415	2.520973	130.0847	160.2468	44.47945
#1	.1847968	-.009354	.0006080	-.004947	-.000341	-.014488	.0017249
#2	.1969559	-.009060	.0001469	-.004729	-.001036	-.016662	.0028697
#3	.1313496	-.008557	.0000715	-.004746	.000078	.006839	.0011908

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: PB169937BL Acquired: 10/3/2025 14:07:57 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.001336	.0010665	-.000069
Stddev	.001441	.0012840	.000141
%RSD	107.8756	120.3931	204.8216
#1	-.002976	.0003894	.000052
#2	-.000758	.0025474	-.000224
#3	-.000274	.0002628	-.000035

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6825.726	92874.49	8494.488	5090.301	8260.169
Stddev	4.737	11.97	31.252	17.155	12.752
%RSD	.0693991	.0128859	.3679103	.3370226	.1543769
#1	6827.584	92871.46	8471.487	5081.934	8266.870
#2	6829.253	92864.32	8481.908	5078.935	8268.173
#3	6820.342	92887.68	8530.070	5110.035	8245.464

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: PB169937BS Acquired: 10/3/2025 14:12:17 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7573485**	**1.851059**	**.9223608**	**1.921076**	**.7859770**	**1.920305**
Stddev	.0024984	.116765	.0016151	.015866	.0022709	.003763
%RSD	.3298893	6.308028	.1751058	.8258990	.2889315	.1959653
#1	.7601914	1.958153	.9228381	1.939302	.7885645	1.915967
#2	.7563522	1.868450	.9236834	1.910354	.7843150	1.922266
#3	.7555020	1.726574	.9205608	1.913571	.7850513	1.922683

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1865280**	**.1928282**	**.1869864**	**.9478442**	**.4147283**	**.1889910**
Stddev	.0001725	.0010715	.0001188	.0034580	.0023593	.0002635
%RSD	.0924697	.5556966	.0635324	.3648289	.5688817	.1394443
#1	.1863539	.1937291	.1870788	.9500463	.4157697	.1887738
#2	.1866989	.1916432	.1868524	.9496278	.4163877	.1889149
#3	.1865312	.1931123	.1870280	.9438586	.4120275	.1892842

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2951046**	**2.985575**	**.1959965**	**1.955600**	**.4949650**	**.0709055**
Stddev	.0007724	.022574	.0003192	.026265	.0006120	.0005747
%RSD	.2617508	.7560903	.1628860	1.343083	.1236417	.8105151
#1	.2942134	3.003961	.1962388	1.926458	.4944599	.0704555
#2	.2955809	2.992383	.1956347	1.977447	.4947894	.0707080
#3	.2955196	2.960381	.1961160	1.962894	.4956455	.0715529

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.860932**	**.2888021**	**.1954229**	**9.331624**	**.2778990**	**.3951680**
Stddev	.017950	.0030407	.0006197	.031566	.0018640	.0005402
%RSD	.6274298	1.052856	.3170879	.3382692	.6707372	.1367097
#1	2.879881	.2899301	.1961384	9.351554	.2790970	.3957542
#2	2.858732	.2853586	.1950717	9.348088	.2757515	.3946901
#3	2.844184	.2911176	.1950587	9.295230	.2788486	.3950599

Sample Name: PB169937BS Acquired: 10/3/2025 14:12:17 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6645456	.1906541	.8310113	5.559291	F -.005822	.1954452
Stddev	.0024041	.0018539	.0075996	.042711	.002998	.0025278
%RSD	.3617732	.9723704	.9145008	.7682743	51.49738	1.293330
#1	.6669511	.1886688	.8386204	5.605116	-.004085	.1983512
#2	.6621428	.1909535	.8309922	5.552164	-.009284	.1942282
#3	.6645428	.1923401	.8234213	5.520592	-.004097	.1937561

Elem	Sr4077
Units	ppm
Avg	.1884881
Stddev	.0008731
%RSD	.4631836
#1	.1893022
#2	.1875661
#3	.1885960

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6807.071	94624.17	8365.955	5068.240	8190.146
Stddev	6.661	253.54	44.244	38.729	8.674
%RSD	.0978564	.2679418	.5288534	.7641425	.1059114
#1	6799.526	94558.36	8329.925	5034.951	8180.550
#2	6809.550	94410.02	8415.337	5059.024	8192.458
#3	6812.138	94904.12	8352.602	5110.745	8197.430

Sample Name: PB169958BL Acquired: 10/3/2025 14:16:18 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000656**	**.0024262**	**-.002219**	**.0002165**	**-.000340**	**.0059445**	**-.000737**
Stddev	.001832	.0041440	.000688	.0002713	.001404	.0072632	.001058
%RSD	279.1557	170.8031	31.00085	125.3369	412.6526	122.1843	143.4704
#1	.000804	-.002357	-.001603	.0001843	-.000605	-.002364	-.001882
#2	-.002713	.004927	-.002962	-.000037	-.001593	.011090	-.000532
#3	-.000061	.004709	-.002094	.000502	.001178	.009107	.000203

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000664**	**.0000414**	**-.022754**	**-.000211**	**-.000153**	**-.000081**	**.0005408**
Stddev	.0000922	.0000606	.015606	.000171	.000081	.000239	.0020158
%RSD	138.9552	146.4839	68.58266	80.96983	52.76622	294.9597	372.7419
#1	-.000035	.0001113	-.012844	-.000206	-.000171	-.000011	.0023201
#2	.000088	.0000091	-.040743	-.000043	-.000065	.000115	-.001648
#3	.000146	.0000038	-.014676	-.000384	-.000223	-.000348	.000951

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000547**	**.0129355**	**.0002714**	**-.000593**	**.0401190**	**-.000167**	**.0000183**
Stddev	.000765	.0272091	.0000151	.000510	.0050601	.003373	.0001872
%RSD	139.9793	210.3446	5.543321	86.00462	12.61263	2016.595	1025.595
#1	-.001388	.0217318	.0002834	-.000413	.0395482	-.001988	.0002341
#2	.000108	.0346582	.0002546	-.000197	.0353685	-.002239	-.000079
#3	-.000360	-.017584	.0002763	-.001168	.0454403	.003725	-.000100

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0579605**	**-.008941**	**.0001302**	**-.005555**	**.0007665**	**-.002612**	**.0021693**
Stddev	.0342346	.000438	.0002363	.000461	.0005731	.005469	.0015854
%RSD	59.06533	4.901924	181.5037	8.306248	74.77179	209.3438	73.08554
#1	.0267695	-.008682	.0001584	-.005832	.0008410	-.000791	.0008658
#2	.0525240	-.009447	.0003511	-.005810	.0012987	-.008759	.0017078
#3	.0945880	-.008694	-.000119	-.005022	.0001598	.001713	.0039343

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: PB169958BL Acquired: 10/3/2025 14:16:18 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**-.000428**	**-.000080**	**.0001103**
Stddev	.001204	.002326	.0002152
%RSD	280.9793	2892.456	195.2323
#1	.000863	.002167	.0001265
#2	-.000628	-.002477	.0003169
#3	-.001520	.000069	-.000113

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6758.805**	**95486.59**	**8287.222**	**5073.229**	**8131.757**
Stddev	9.808	339.12	31.494	46.539	17.473
%RSD	.1451132	.3551489	.3800265	.9173411	.2148766
#1	6760.927	95158.08	8251.268	5030.336	8140.512
#2	6767.379	95835.40	8309.925	5122.712	8143.123
#3	6748.110	95466.30	8300.473	5066.640	8111.637

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: PB169958BS Acquired: 10/3/2025 14:20:37 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7681684**	**1.855960**	**.9311728**	**1.941044**	**.7770217**	**1.967929**
Stddev	.0016309	.069137	.0005932	.006986	.0021644	.015311
%RSD	.2123154	3.725112	.0637077	.3599332	.2785454	.7780454
#1	.7697643	1.912942	.9315942	1.947649	.7788368	1.952457
#2	.7682363	1.779048	.9304944	1.933730	.7746264	1.968254
#3	.7665045	1.875891	.9314299	1.941752	.7776020	1.983074

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1876461**	**.1972390**	**.1895834**	**.9615630**	**.4153109**	**.1917797**
Stddev	.0006400	.0005634	.0003590	.0062937	.0000397	.0003921
%RSD	.3410718	.2856196	.1893496	.6545241	.0095504	.2044326
#1	.1883523	.1973779	.1896265	.9544521	.4152665	.1913672
#2	.1874817	.1966192	.1892049	.9638201	.4153234	.1918243
#3	.1871044	.1977200	.1899190	.9664170	.4153428	.1921475

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2993525**	**2.996875**	**.1982647**	**1.977622**	**.4948939**	**.0730314**
Stddev	.0007641	.013752	.0016142	.021072	.0010888	.0006059
%RSD	.2552385	.4588619	.8141547	1.065500	.2200075	.8296563
#1	.2994304	2.987266	.1964822	1.953965	.4947178	.0735389
#2	.2985525	3.012627	.1996279	1.994378	.4939039	.0723606
#3	.3000747	2.990730	.1986839	1.984523	.4960600	.0731947

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.832655**	**.2907774**	**.1990734**	**9.433829**	**.2850469**	**.3924158**
Stddev	.030221	.0016368	.0003044	.014704	.0011584	.0009179
%RSD	1.066897	.5629169	.1529267	.1558672	.4063896	.2339193
#1	2.806686	.2896864	.1987508	9.417115	.2840931	.3923480
#2	2.865828	.2926595	.1991139	9.444776	.2847117	.3915337
#3	2.825453	.2899862	.1993556	9.439594	.2863360	.3933658

Sample Name: PB169958BS Acquired: 10/3/2025 14:20:37 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6565663	.1881081	.8301659	5.550238	F -.008183	.1999248
Stddev	.0015812	.0011791	.0124678	.048424	.002216	.0020036
%RSD	.2408317	.6268187	1.501846	.8724694	27.07599	1.002187
#1	.6567005	.1875710	.8247757	5.560686	-.010078	.1981936
#2	.6549222	.1894601	.8213001	5.497443	-.008725	.2021195
#3	.6580761	.1872932	.8444220	5.592586	-.005747	.1994612

Elem	Sr4077
Units	ppm
Avg	.1912324
Stddev	.0007815
%RSD	.4086772
#1	.1908268
#2	.1921333
#3	.1907370

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6854.029	94725.38	8392.344	5103.956	8287.423
Stddev	3.262	120.17	33.058	27.565	5.766
%RSD	.0475929	.1268649	.3939085	.5400679	.0695806
#1	6853.999	94603.81	8363.994	5101.431	8289.389
#2	6850.782	94728.23	8428.656	5132.697	8291.948
#3	6857.306	94844.10	8384.383	5077.741	8280.930

Sample Name: PB169963BL Acquired: 10/3/2025 14:24:38 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000670**	**.0006195**	**-.003870**	**.0043746**	**.0015602**	**.0129839**	**-.001588**
Stddev	.000941	.0012901	.001013	.0022226	.0021336	.0189586	.000766
%RSD	140.3047	208.2446	26.16320	50.80798	136.7483	146.0167	48.23266
#1	-.001389	-.000512	-.004176	.0064728	.0037788	.0177977	-.000779
#2	.000394	.000346	-.002740	.0046054	-.000477	.0290715	-.001682
#3	-.001017	.002024	-.004694	.0020455	.001379	-.007918	-.002302

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001273**	**.0000265**	**-.023104**	**-.000108**	**-.000216**	**-.000018**	**-.005992**
Stddev	.0000071	.0000489	.002107	.000289	.000274	.000420	.004202
%RSD	5.586315	184.4380	9.121016	268.2435	127.0332	2328.855	70.12754
#1	.0001353	.0000567	-.020672	-.000379	.000071	-.000285	-.003557
#2	.0001218	-.000030	-.024372	-.000142	-.000476	.000466	-.010844
#3	.0001247	.000053	-.024269	.000197	-.000243	-.000235	-.003574

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000609**	**.0650108**	**.0003770**	**-.000517**	**-.002675**	**.0000784**	**-.000097**
Stddev	.000780	.0295682	.0002667	.000610	.005389	.0050240	.000334
%RSD	128.0697	45.48198	70.73151	118.0238	201.4210	6409.539	344.0822
#1	.000161	.0309943	.0001649	.000040	-.008805	-.005481	-.000131
#2	-.000589	.0794820	.0002897	-.000422	-.000538	.001421	.000253
#3	-.001398	.0845561	.0006763	-.001168	.001317	.004295	-.000413

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.016606**	**-.008720**	**.0000548**	**-.004491**	**.0012129**	**.0076659**	**.0028725**
Stddev	.013485	.001076	.0000434	.000417	.0004814	.0072088	.0002708
%RSD	81.20504	12.34401	79.19319	9.292134	39.69086	94.03674	9.427006
#1	-.032129	-.007847	.0000985	-.004933	.0007025	-.000480	.0031846
#2	-.009888	-.009922	.0000117	-.004103	.0016588	.013220	.0027324
#3	-.007799	-.008389	.0000542	-.004438	.0012774	.010258	.0027005

Sample Name: PB169963BL Acquired: 10/3/2025 14:24:38 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**-.004763**	**-.001443**	**.0001133**
Stddev	.003585	.001858	.0000540
%RSD	75.27471	128.7272	47.65765
#1	-.007771	-.002595	.0000768
#2	-.000796	.000700	.0001753
#3	-.005721	-.002435	.0000878

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6759.063**	**95273.93**	**8375.569**	**5012.006**	**8173.572**
Stddev	13.884	412.00	33.535	42.269	16.974
%RSD	.2054109	.4324360	.4003909	.8433602	.2076714
#1	6743.035	94860.66	8337.426	4967.539	8154.258
#2	6767.353	95684.64	8388.856	5051.667	8180.336
#3	6766.802	95276.50	8400.425	5016.811	8186.120

Sample Name: PB169935BL Acquired: 10/3/2025 14:33:49 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008468**	**.0015407**	**.0052763**	**.0019745**	**.0022746**	**.0062917**	**-.001469**
Stddev	.0012154	.0045198	.0046500	.0029148	.0022557	.0088890	.001741
%RSD	143.5247	293.3648	88.13036	147.6196	99.17007	141.2830	118.4799
#1	.0017543	.0065502	.0097886	.0050630	.0031560	.0062610	-.002308
#2	.0013202	-.002232	.0055405	-.000728	.0039565	-.002582	.000532
#3	-.000534	.000304	.0004998	.001589	-.000289	.015196	-.002631

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001015**	**.0000522**	**-.024929**	**.0015662**	**.0000421**	**.0016664**	**-.000923**
Stddev	.0000365	.0000152	.013873	.0003656	.0002751	.0015763	.007941
%RSD	35.99410	29.09233	55.64992	23.34249	652.9716	94.59543	860.8075
#1	.0001363	.0000356	-.014133	.0017098	.0000265	.0031050	-.008001
#2	.0000634	.0000556	-.040577	.0018383	-.000225	.0019127	.007665
#3	.0001049	.0000653	-.020078	.0011507	.000325	-.000019	-.002432

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0050158**	**.0141901**	**.0012135**	**-.000445**	**-.039244**	**-.001711**	**.0027702**
Stddev	.0030378	.0130513	.0008448	.000691	.005148	.001599	.0001960
%RSD	60.56398	91.97495	69.61695	155.3892	13.11732	93.44109	7.074060
#1	.0018935	.0274321	.0021595	.000329	-.044805	-.001297	.0029959
#2	.0079613	.0013382	.0009467	-.001001	-.034645	-.003477	.0026710
#3	.0051927	.0138001	.0005343	-.000661	-.038284	-.000361	.0026437

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.047269**	**-.009212**	**-.000040**	**-.004567**	**-.000891**	**-.017124**	**.0027218**
Stddev	.025262	.000889	.000357	.000431	.002605	.006260	.0004298
%RSD	53.44372	9.651126	883.1231	9.443215	292.4086	36.55430	15.78996
#1	-.067441	-.010201	-.000193	-.004312	-.001997	-.010121	.0023144
#2	-.018935	-.008955	-.000296	-.004323	-.002760	-.022175	.0026800
#3	-.055430	-.008479	.000367	-.005065	.002084	-.019077	.0031708

Sample Name: PB169935BL Acquired: 10/3/2025 14:33:49 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.001285	-.002659	.0000473
Stddev	.003344	.002673	.0000202
%RSD	260.1982	100.5244	42.72068
#1	.002294	-.002654	.0000551
#2	-.004331	-.005335	.0000625
#3	-.001819	.000011	.0000243

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6747.482	95537.38	8455.368	5113.177	8131.812
Stddev	11.486	176.15	21.070	6.083	12.290
%RSD	.1702226	.1843781	.2491958	.1189715	.1511366
#1	6734.765	95597.79	8442.526	5108.619	8117.757
#2	6750.579	95338.97	8479.685	5120.084	8140.539
#3	6757.101	95675.37	8443.892	5110.828	8137.141

Sample Name: LR-3 Acquired: 10/3/2025 14:49:36 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0973122**	**.0366956**	**209.1922**	**.0056699**	**.1838184**	**.0765521**	**-.002128**
Stddev	.0013914	.0007026	.3330	.0006030	.0060169	.0091323	.001916
%RSD	1.429869	1.914715	.1591789	10.63526	3.273300	11.92959	90.03022
#1	.0961918	.0370090	208.8151	.0053561	.1830269	.0776569	-.001668
#2	.0988697	.0371870	209.4456	.0052885	.1782364	.0850818	-.004231
#3	.0968750	.0358909	209.3160	.0063651	.1901920	.0669176	-.000484

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.004661**	**-.004047**	**.1863374**	**23.47182**	**.0072139**	**51.34032**	**.0920015**
Stddev	.000030	.000045	.0171224	.24366	.0002535	.03467	.0037097
%RSD	.6334924	1.108414	9.188907	1.038078	3.513275	.0675362	4.032202
#1	-.004659	-.004031	.1935789	23.44923	.0074422	51.36917	.0915158
#2	-.004692	-.004012	.1986492	23.72599	.0069412	51.30185	.0959302
#3	-.004633	-.004098	.1667841	23.24025	.0072585	51.34995	.0885586

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**53.19982**	**-.190605**	**23.91369**	**.0026008**	**-.009305**	**-.037830**	**30.96804**
Stddev	.13971	.023811	.00864	.0002407	.018741	.004810	.09426
%RSD	.2626146	12.49225	.0361432	9.253828	201.4094	12.71379	.3043689
#1	53.33370	-.163303	23.90371	.0027833	.008682	-.039066	31.07317
#2	53.05493	-.201445	23.91880	.0023280	-.007879	-.041901	30.89108
#3	53.21082	-.207066	23.91856	.0026909	-.028718	-.032523	30.93987

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.026342**	**-.005543**	**-.020835**	**-.015046**	**-.043770**	**-.101788**	**.1476148**
Stddev	.021436	.000701	.000391	.000438	.000768	.010512	.0030311
%RSD	81.37290	12.64308	1.878258	2.913209	1.755727	10.32691	2.053349
#1	-.002090	-.004734	-.020508	-.014590	-.044655	-.113502	.1485528
#2	-.042753	-.005964	-.021268	-.015464	-.043265	-.098685	.1442257
#3	-.034185	-.005931	-.020728	-.015085	-.043392	-.093178	.1500661

Sample Name: LR-3 Acquired: 10/3/2025 14:49:36 Type: Unk
Method: 6010-200.7 NEW(v269) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0834736	-.003454	.0006066
Stddev	.0019947	.000581	.0000824
%RSD	2.389606	16.82974	13.59316
#1	.0851908	-.003891	.0005958
#2	.0839443	-.003678	.0005300
#3	.0812856	-.002794	.0006938

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6436.831	96159.92	8557.234	4943.538	8078.701
Stddev	6.792	786.40	30.300	40.865	14.809
%RSD	.1055137	.8178017	.3540862	.8266257	.1833134
#1	6444.629	96280.23	8577.856	4906.771	8095.801
#2	6433.657	95320.30	8522.446	4936.308	8070.225
#3	6432.207	96879.23	8571.400	4987.535	8070.077

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: CCV02 Acquired: 10/3/2025 15:00:13 Type: Unk
Method: 6010-200.7 NEW(v270) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.986993**	**4.576007**	**4.894219**	**5.036225**	**4.986057**	**9.917474**	**9.880472**
Stddev	.011250	.146792	.013853	.013358	.007419	.009211	.018221
%RSD	.2255958	3.207866	.2830396	.2652285	.1487851	.0928777	.1844173
#1	4.996123	4.724719	4.885229	5.045951	4.988592	9.927676	9.875885
#2	4.990431	4.572087	4.887257	5.041729	4.991876	9.909769	9.900549
#3	4.974424	4.431214	4.910172	5.020995	4.977703	9.914975	9.864983

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2440222**	**2.458732**	**24.69249**	**.9841955**	**2.445613**	**1.239316**	**4.860297**
Stddev	.0004689	.006399	.05242	.0056621	.004592	.001280	.033882
%RSD	.1921701	.2602731	.2122865	.5753057	.1877481	.1033186	.6971248
#1	.2435047	2.455495	24.74626	.9888198	2.442553	1.238199	4.894472
#2	.2441428	2.454598	24.68967	.9858860	2.443394	1.239035	4.859702
#3	.2444190	2.466103	24.64153	.9778807	2.450893	1.240713	4.826715

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.440389**	**24.42386**	**2.449633**	**1.229752**	**24.29238**	**2.469073**	**2.445240**
Stddev	.008148	.01950	.004643	.002790	.14382	.013951	.007727
%RSD	.3338965	.0798453	.1895264	.2268765	.5920536	.5650181	.3159996
#1	2.432225	24.41363	2.446871	1.231633	24.33833	2.474953	2.452102
#2	2.448522	24.41161	2.447035	1.231077	24.40762	2.479121	2.446747
#3	2.440421	24.44635	2.454993	1.226546	24.13120	2.453145	2.436870

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.39906**	**4.892769**	**5.005225**	**4.943587**	**4.918708**	**4.869325**	**4.869176**
Stddev	.15001	.020803	.004654	.005924	.005129	.011623	.008214
%RSD	.6148384	.4251824	.0929783	.1198293	.1042847	.2386999	.1686906
#1	24.37719	4.875598	5.008990	4.943259	4.924551	4.874321	4.871445
#2	24.55880	4.886806	5.006664	4.937834	4.914947	4.877614	4.876017
#3	24.26117	4.915902	5.000022	4.949668	4.916625	4.856039	4.860066

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: CCV02 Acquired: 10/3/2025 15:00:13 Type: Unk
Method: 6010-200.7 NEW(v270) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.991542**	**4.902881**	**4.911770**
Stddev	.030749	.005364	.007385
%RSD	.6160314	.1093985	.1503605
#1	5.014590	4.901077	4.904843
#2	5.003408	4.908914	4.919541
#3	4.956627	4.898652	4.910925

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6715.901**	**94687.17**	**8470.431**	**4959.723**	**7812.848**
Stddev	39.159	183.27	33.874	28.430	49.146
%RSD	.5830746	.1935490	.3999053	.5732145	.6290382
#1	6759.240	94588.10	8494.678	4934.507	7864.198
#2	6705.397	94574.76	8484.888	4954.128	7808.093
#3	6683.065	94898.64	8431.728	4990.534	7766.252

Sample Name: CCB02 Acquired: 10/3/2025 15:04:16 Type: Unk
Method: 6010-200.7 NEW(v270) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002042**	**.0100985**	**.0008555**	**-.000359**	**.0000101**	**.0082021**	**-.000605**
Stddev	.0004018	.0003891	.0005346	.001804	.0013977	.0032954	.001356
%RSD	196.7842	3.853262	62.48578	502.3711	13844.36	40.17745	224.0252
#1	.0006676	.0099343	.0007228	.001576	-.000351	.0110285	.000281
#2	-.000047	.0105428	.0014439	-.001995	-.001172	.0045825	.000069
#3	-.000008	.0098183	.0003998	-.000658	.001553	.0089954	-.002166

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001355**	**.0000403**	**-.023442**	**.0000684**	**-.000012**	**.0002941**	**.0020021**
Stddev	.0000290	.0000534	.011926	.0002802	.000135	.0004902	.0082086
%RSD	21.39201	132.5378	50.87530	409.5904	1122.109	166.6628	409.9939
#1	.0001492	.0000995	-.025741	-.000146	-.000086	-.000160	-.006673
#2	.0001551	-.000004	-.034051	.000385	.000144	.000813	.009647
#3	.0001022	.000026	-.010534	-.000034	-.000094	.000229	.003032

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004628**	**.0173040**	**.0004293**	**-.000581**	**-.063992**	**.0013862**	**.0005296**
Stddev	.0003415	.0263407	.0002592	.000711	.001716	.0022277	.0000904
%RSD	73.79465	152.2238	60.38369	122.2841	2.681799	160.7036	17.07316
#1	.0004011	.0343263	.0007206	-.001239	-.064109	.0016566	.0004713
#2	.0008310	-.013036	.0003435	-.000676	-.065647	-.000964	.0006337
#3	.0001564	.030622	.0002239	.000172	-.062220	.003466	.0004836

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0017591**	**-.003037**	**.0002686**	**-.004700**	**.0016878**	**-.000990**	**.0035700**
Stddev	.0149752	.000626	.0001553	.000161	.0021472	.002237	.0006476
%RSD	851.3056	20.60167	57.81708	3.432206	127.2156	225.9754	18.14066
#1	.0150513	-.002351	.0000912	-.004809	-.000475	-.000878	.0036993
#2	-.014465	-.003185	.0003348	-.004776	.001720	.001189	.0041432
#3	.004691	-.003576	.0003798	-.004515	.003819	-.003281	.0028674

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: CCB02 Acquired: 10/3/2025 15:04:16 Type: Unk
Method: 6010-200.7 NEW(v270) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**-.000901**	**-.001276**	**.0001280**
Stddev	.001576	.001625	.0000757
%RSD	174.9013	127.3050	59.13690
#1	-.001582	-.002268	.0002044
#2	.000901	-.002159	.0000530
#3	-.002022	.000599	.0001267

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6859.127**	**96065.36**	**8347.888**	**5100.163**	**8370.964**
Stddev	25.196	229.05	24.425	6.692	32.499
%RSD	.3673356	.2384342	.2925853	.1312051	.3882407
#1	6854.533	96286.18	8345.150	5093.105	8357.459
#2	6886.304	96081.03	8324.948	5106.415	8408.039
#3	6836.544	95828.88	8373.567	5100.969	8347.395

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: PB169963BS Acquired: 10/3/2025 15:08:36 Type: Unk
Method: 6010-200.7 NEW(v270) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7736824**	**1.671300**	**.9384434**	**1.983531**	**.7936051**	**1.924225**
Stddev	.0010878	.077715	.0028726	.009467	.0007921	.009705
%RSD	.1405986	4.649947	.3061036	.4773015	.0998094	.5043608
#1	.7743436	1.757066	.9370884	1.994112	.7933423	1.933248
#2	.7724269	1.605554	.9364989	1.975861	.7929778	1.925469
#3	.7742767	1.651281	.9417429	1.980619	.7944952	1.913958

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1858895**	**.1916437**	**.1905092**	**.9625553**	**.4257983**	**.1907898**
Stddev	.0016071	.0002422	.0002578	.0089854	.0010842	.0002917
%RSD	.8645493	.1263911	.1353359	.9334966	.2546379	.1528635
#1	.1873767	.1915351	.1907977	.9526542	.4267354	.1904983
#2	.1861072	.1914747	.1903012	.9648197	.4246107	.1910816
#3	.1841847	.1919212	.1904288	.9701919	.4260488	.1907894

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2989966**	**3.080590**	**.1947557**	**1.940618**	**.5036123**	**.0725648**
Stddev	.0002305	.028990	.0008654	.017621	.0003274	.0002821
%RSD	.0770799	.9410492	.4443421	.9080008	.0650130	.3886876
#1	.2991935	3.095695	.1957488	1.925833	.5033059	.0722877
#2	.2987431	3.047167	.1943543	1.960116	.5035737	.0725554
#3	.2990532	3.098908	.1941638	1.935905	.5039573	.0728515

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.818744**	**.2850766**	**.1956873**	**9.506348**	**.2778762**	**.3965452**
Stddev	.017790	.0039001	.0003086	.081276	.0005857	.0012008
%RSD	.6311275	1.368092	.1577278	.8549706	.2107733	.3028159
#1	2.799057	.2805735	.1955902	9.596092	.2778295	.3974777
#2	2.823505	.2873764	.1960329	9.485255	.2773152	.3951902
#3	2.833668	.2872799	.1954389	9.437698	.2784838	.3969675

Sample Name: PB169963BS Acquired: 10/3/2025 15:08:36 Type: Unk
Method: 6010-200.7 NEW(v270) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6731057**	**.1886878**	**.8556436**	**5.622370**	F **-.005727**	**.1902382**
Stddev	.0015233	.0016612	.0066763	.036759	.002188	.0024649
%RSD	.2263109	.8804053	.7802689	.6537952	38.21000	1.295671
#1	.6747722	.1900077	.8592286	5.658276	-.008225	.1916981
#2	.6717851	.1892334	.8597617	5.584814	-.004145	.1873924
#3	.6727599	.1868224	.8479406	5.624019	-.004813	.1916242

Elem	Sr4077
Units	ppm
Avg	**.1862495**
Stddev	.0004197
%RSD	.2253441
#1	.1866724
#2	.1862430
#3	.1858330

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6760.505**	**93327.52**	**8564.899**	**5052.328**	**8091.809**
Stddev	10.412	628.62	32.925	30.929	13.261
%RSD	.1540078	.6735581	.3844180	.6121691	.1638853
#1	6769.890	92690.62	8540.821	5020.638	8101.826
#2	6762.320	93947.51	8602.418	5082.435	8096.831
#3	6749.305	93344.44	8551.457	5053.910	8076.770

Sample Name: PB169960BL Acquired: 10/3/2025 15:12:37 Type: Unk
Method: 6010-200.7 NEW(v270) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000098**	**.0113744**	**-.000063**	**.0016861**	**.0004984**	**.0165076**	**-.002615**
Stddev	.001641	.0021218	.001141	.0029921	.0022536	.0093220	.002768
%RSD	1670.221	18.65393	1823.614	177.4587	452.1303	56.47083	105.8657
#1	.001637	.0089406	-.000901	.0047125	.0005924	.0057665	.000579
#2	-.000306	.0128352	-.000523	.0016164	.0027036	.0224871	-.004318
#3	-.001626	.0123475	.001237	-.001271	-.001801	.0212693	-.004105

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001506**	**.0000735**	**-.019346**	**.0000309**	**.0001138**	**-.000474**	**-.002060**
Stddev	.0000440	.0000786	.007575	.0001572	.0001830	.000087	.019381
%RSD	29.24875	106.9042	39.15546	508.6149	160.8360	18.29172	940.9739
#1	.0001771	-.000014	-.014052	.0002116	.0002670	-.000553	-.024438
#2	.0000997	.000096	-.015963	-.000075	-.000089	-.000381	.009237
#3	.0001749	.000139	-.028023	-.000044	.000163	-.000487	.009022

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000270**	**.0429337**	**.0001886**	**-.000814**	**-.061517**	**.0023498**	**-.000089**
Stddev	.000614	.0420102	.0000623	.000295	.011601	.0003435	.000228
%RSD	227.0561	97.84911	33.03640	36.29721	18.85847	14.61612	256.7579
#1	-.000961	.0598352	.0002095	-.001114	-.069837	.0023104	.000153
#2	.000215	-.004895	.0001185	-.000803	-.048265	.0027112	-.000121
#3	-.000065	.073861	.0002377	-.000524	-.066449	.0020277	-.000298

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.090707**	**-.006523**	**.0003671**	**-.003968**	**-.000144**	**-.004094**	**.0035058**
Stddev	.067856	.000358	.0001040	.000365	.000643	.004291	.0013335
%RSD	74.80802	5.494333	28.33589	9.200935	446.0939	104.8205	38.03848
#1	-.056122	-.006404	.0003513	-.003874	.000341	-.003849	.0036173
#2	-.047112	-.006239	.0002719	-.004371	-.000874	-.008501	.0021200
#3	-.168887	-.006926	.0004781	-.003659	.000100	.000070	.0047800

Sample Name: PB169960BL Acquired: 10/3/2025 15:12:37 Type: Unk
Method: 6010-200.7 NEW(v270) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.002895	-.002276	.0000540
Stddev	.001561	.001929	.0000955
%RSD	53.92777	84.75823	176.9847
#1	-.003053	-.000160	.0001601
#2	-.001261	-.002729	.0000268
#3	-.004371	-.003937	-.000025

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6793.042	95647.66	8424.451	5062.332	8200.089
Stddev	4.078	130.55	8.208	21.718	2.363
%RSD	.0600345	.1364922	.0974348	.4290195	.0288193
#1	6792.172	95533.26	8417.336	5045.430	8199.121
#2	6789.468	95789.88	8422.585	5086.828	8198.363
#3	6797.484	95619.83	8433.432	5054.739	8202.782

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: PB169960BS Acquired: 10/3/2025 15:17:19 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7734990**	**2.277162**	**.9383602**	**1.978264**	**.7789964**	**1.935235**
Stddev	.0022271	.091806	.0021084	.009636	.0021319	.022068
%RSD	.2879242	4.031598	.2246903	.4870894	.2736752	1.140315
#1	.7753437	2.350183	.9385165	1.986147	.7785317	1.917335
#2	.7741283	2.307204	.9403862	1.981123	.7771351	1.959891
#3	.7710250	2.174098	.9361781	1.967522	.7813223	1.928479

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1882650**	**.2065344**	**.1905221**	**.9576555**	**.4033889**	**.1907375**
Stddev	.0029931	.0012010	.0004086	.0098193	.0022418	.0004483
%RSD	1.589850	.5814957	.2144640	1.025344	.5557359	.2350335
#1	.1909029	.2058256	.1903903	.9661323	.4048881	.1903771
#2	.1888799	.2058567	.1909803	.9599384	.4008117	.1912395
#3	.1850121	.2079211	.1901956	.9468959	.4044668	.1905958

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2996468**	**2.922828**	**.1941097**	**1.976695**	**.4889723**	**.0732191**
Stddev	.0012768	.022452	.0016848	.029714	.0010856	.0006836
%RSD	.4260916	.7681525	.8679770	1.503192	.2220077	.9336906
#1	.2986954	2.943088	.1957991	2.003639	.4885967	.0734196
#2	.2991472	2.926705	.1924295	1.981619	.4901957	.0737800
#3	.3010978	2.898690	.1941005	1.944827	.4881244	.0724576

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.734576**	**.2909768**	**.1967143**	**8.732988**	**.2845474**	**.3930222**
Stddev	.036824	.0053807	.0005988	.065859	.0035243	.0017174
%RSD	1.346597	1.849176	.3044211	.7541425	1.238549	.4369795
#1	2.774051	.2962837	.1969776	8.792118	.2831740	.3925590
#2	2.728523	.2911215	.1960289	8.662009	.2819166	.3915838
#3	2.701154	.2855253	.1971363	8.744839	.2885516	.3949237

Sample Name: PB169960BS Acquired: 10/3/2025 15:17:19 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6675900**	**.1867108**	**.8380663**	**5.676140**	F **-.005619**	**.1947083**
Stddev	.0024535	.0013036	.0071259	.016644	.001692	.0025527
%RSD	.3675150	.6981943	.8502731	.2932206	30.11543	1.311029
#1	.6695107	.1852999	.8455145	5.694750	-.006446	.1965905
#2	.6684333	.1878706	.8313138	5.670988	-.006739	.1918027
#3	.6648261	.1869620	.8373708	5.662682	-.003673	.1957316

Elem	Sr4077
Units	ppm
Avg	**.1886097**
Stddev	.0014000
%RSD	.7422715
#1	.1899771
#2	.1871792
#3	.1886729

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6806.870**	**94671.00**	**8376.788**	**5116.720**	**8175.208**
Stddev	12.965	458.69	52.268	26.138	22.944
%RSD	.1904666	.4845074	.6239575	.5108400	.2806480
#1	6797.430	94236.08	8371.465	5089.098	8158.660
#2	6801.529	95150.24	8431.514	5141.065	8165.564
#3	6821.652	94626.68	8327.386	5119.997	8201.399

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: PB169959BL Acquired: 10/3/2025 15:21:21 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000323**	**.0033297**	**.0003043**	**.0004481**	**.0004457**	**.0169396**	**-.000789**
Stddev	.001496	.0011408	.0008111	.0021734	.0004565	.0120840	.000574
%RSD	462.6797	34.26210	266.5849	484.9935	102.4059	71.33548	72.72303
#1	.001206	.0027631	-.000484	.0016937	.0001368	.0229640	-.000601
#2	-.001784	.0025831	.001137	.0017122	.0002303	.0030278	-.000333
#3	-.000392	.0046429	.000260	-.002061	.0009700	.0248271	-.001433

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002218**	**.0001150**	**-.020229**	**-.000183**	**-.000045**	**-.000085**	**-.001779**
Stddev	.0000169	.0001346	.018538	.000361	.000139	.000110	.003474
%RSD	7.637131	117.0893	91.64171	197.4119	312.4292	129.0033	195.2751
#1	.0002212	-.000027	.000867	.000206	-.000110	-.000198	.002114
#2	.0002390	.000240	-.033920	-.000246	.000116	-.000078	-.002888
#3	.0002051	.000132	-.027633	-.000509	-.000140	.000021	-.004563

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000790**	**.0322020**	**.0004188**	**-.001010**	**-.070129**	**.0021743**	**-.000211**
Stddev	.000396	.0087039	.0001573	.000316	.006336	.0033512	.000064
%RSD	50.16214	27.02916	37.54977	31.24037	9.034751	154.1254	30.31336
#1	-.001224	.0270476	.0002980	-.001205	-.077444	.0059688	-.000219
#2	-.000699	.0273072	.0005966	-.000646	-.066381	.0009344	-.000144
#3	-.000448	.0422514	.0003618	-.001179	-.066561	-.000380	-.000271

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0168147**	**-.006657**	**-.000415**	**-.004945**	**-.000352**	**-.007347**	**.0023406**
Stddev	.0248696	.000666	.000268	.000270	.002214	.011190	.0017819
%RSD	147.9037	10.00968	64.62056	5.457090	629.0573	152.2960	76.13299
#1	.0121818	-.006981	-.000660	-.004768	.002073	-.008353	.0027480
#2	-.005413	-.005890	-.000129	-.005255	-.002265	-.018000	.0038835
#3	.043675	-.007099	-.000455	-.004810	-.000864	.004311	.0003902

Sample Name: PB169959BL Acquired: 10/3/2025 15:21:21 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**-.002925**	**-.002660**	**.0000643**
Stddev	.000405	.002956	.0000583
%RSD	13.85309	111.1035	90.55745
#1	-.002635	-.000609	-.000002
#2	-.003388	-.001324	.000105
#3	-.002752	-.006048	.000090

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6952.660**	**95560.87**	**8516.023**	**5089.985**	**8546.399**
Stddev	15.527	284.69	5.301	22.105	12.365
%RSD	.2233254	.2979170	.0622447	.4342766	.1446789
#1	6949.454	95775.67	8520.041	5070.077	8546.533
#2	6969.539	95668.98	8518.013	5086.105	8558.695
#3	6938.985	95237.96	8510.015	5113.772	8533.967

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: PB169959BS Acquired: 10/3/2025 15:25:40 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7654959**	**2.142543**	**.9347145**	**1.957361**	**.7838651**	**1.978545**
Stddev	.0021730	.067819	.0033284	.008033	.0022702	.014017
%RSD	.2838641	3.165367	.3560866	.4104091	.2896184	.7084527
#1	.7630750	2.213996	.9384039	1.960684	.7851226	1.981788
#2	.7661352	2.079062	.9319372	1.948199	.7812444	1.990656
#3	.7672775	2.134572	.9338025	1.963199	.7852282	1.963191

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1894499**	**.2103155**	**.1889477**	**.9712305**	**.3881990**	**.1899167**
Stddev	.0006864	.0017699	.0002886	.0130035	.0012889	.0001904
%RSD	.3622931	.8415630	.1527371	1.338864	.3320274	.1002617
#1	.1887186	.2090006	.1892734	.9712272	.3895832	.1901015
#2	.1895507	.2123279	.1888459	.9842355	.3879807	.1897212
#3	.1900802	.2096181	.1887239	.9582286	.3870332	.1899274

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2986309**	**2.800321**	**.1967844**	**1.978809**	**.4797317**	**.0715823**
Stddev	.0005430	.004535	.0010501	.007689	.0008837	.0001392
%RSD	.1818333	.1619594	.5336461	.3885590	.1842172	.1944032
#1	.2989709	2.800744	.1955925	1.974661	.4801106	.0714353
#2	.2980047	2.804631	.1971872	1.987681	.4787217	.0715997
#3	.2989172	2.795589	.1975735	1.974085	.4803629	.0717120

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.729416**	**.2918995**	**.1985876**	**8.539020**	**.2897970**	**.3949666**
Stddev	.023192	.0051976	.0007522	.044086	.0024943	.0012273
%RSD	.8496928	1.780595	.3787520	.5162904	.8606908	.3107464
#1	2.702974	.2970996	.1986273	8.564712	.2869581	.3961065
#2	2.746307	.2918944	.1993192	8.564233	.2916367	.3936673
#3	2.738965	.2867045	.1978164	8.488114	.2907963	.3951261

Sample Name: PB169959BS Acquired: 10/3/2025 15:25:40 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6684858	.1914883	.8253256	5.560954	F -.008773	.1985204
Stddev	.0018255	.0032305	.0050558	.028813	.001859	.0019394
%RSD	.2730767	1.687027	.6125825	.5181283	21.18934	.9769104
#1	.6704879	.1878137	.8309937	5.586364	-.010759	.1964988
#2	.6669138	.1927699	.8212809	5.529650	-.008483	.2003655
#3	.6680556	.1938813	.8237022	5.566846	-.007075	.1986970

Elem	Sr4077
Units	ppm
Avg	.1899336
Stddev	.0006601
%RSD	.3475227
#1	.1895475
#2	.1906957
#3	.1895576

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6870.426	95761.78	8232.795	5032.758	8297.197
Stddev	13.327	74.50	60.681	8.811	16.072
%RSD	.1939818	.0777963	.7370617	.1750697	.1937013
#1	6861.458	95742.68	8301.064	5029.813	8282.443
#2	6885.740	95698.68	8184.997	5025.797	8314.323
#3	6864.078	95843.96	8212.324	5042.664	8294.826

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: Q3258-06 Acquired: 10/3/2025 15:29:41 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1143940**	**.0171137**	**.0023393**	**1.496430**	**.0052670**	**.2163212**
Stddev	.0013060	.0020964	.0012967	.013280	.0007579	.0029981
%RSD	1.141692	12.24997	55.43016	.8874255	14.38896	1.385946
#1	.1157037	.0159001	.0027298	1.503625	.0054203	.2186242
#2	.1143866	.0159065	.0033958	1.481105	.0059366	.2174081
#3	.1130917	.0195344	.0008922	1.504559	.0044443	.2129312

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.021192**	**.0002849**	**.0000598**	**1.384899**	**.0215404**	**.0017649**
Stddev	.001344	.0000243	.0001613	.013916	.0004129	.0001172
%RSD	6.343825	8.531137	269.7365	1.004828	1.916902	6.639336
#1	-.020879	.0002844	.0001738	1.400272	.0220155	.0016408
#2	-.020032	.0003094	-.000125	1.373163	.0212678	.0017805
#3	-.022665	.0002608	.000130	1.381263	.0213379	.0018736

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0430997**	**.3200727**	**.0187146**	**1.077202**	**.0262755**	**.0008617**
Stddev	.0005710	.0037112	.0004928	.009247	.0001529	.0004073
%RSD	1.324741	1.159475	2.632959	.8583908	.5818105	47.26742
#1	.0426751	.3210088	.0191904	1.082820	.0264386	.0007393
#2	.0437488	.3232261	.0187468	1.066530	.0261355	.0005296
#3	.0428751	.3159830	.0182065	1.082257	.0262525	.0013161

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **5956.795**	**.0069973**	**.7839932**	**26.35847**	**9.097774**	**.0660367**
Stddev	48.680	.0009699	.0009031	2.89179	.107354	.0007376
%RSD	.8172196	13.86141	.1151959	10.97100	1.180004	1.116946
#1	6005.113	.0076522	.7835861	23.37688	9.219482	.0660598
#2	5957.512	.0058830	.7850282	26.54734	9.016541	.0652879
#3	5907.761	.0074565	.7833653	29.15120	9.057298	.0667625

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: Q3258-06 Acquired: 10/3/2025 15:29:41 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.017588	.0069661	F 24.20968	.3415760	F 1877.555	.0230949
Stddev	.000527	.0002722	.71587	.0028699	53.769	.0028891
%RSD	2.997593	3.906905	2.956952	.8401866	2.863779	12.50974
#1	-.016982	.0070351	23.44763	.3446687	1863.701	.0201903
#2	-.017845	.0071972	24.31337	.3389989	1936.895	.0231262
#3	-.017938	.0066661	24.86806	.3410603	1832.069	.0259683

Elem	Sr4077
Units	ppm
Avg	.0140197
Stddev	.0001229
%RSD	.8768955
#1	.0140578
#2	.0141191
#3	.0138822

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4421.636	68925.49	9309.448	3371.050	4692.566
Stddev	23.642	73.79	124.294	8.888	20.238
%RSD	.5346838	.1070641	1.335138	.2636434	.4312686
#1	4423.863	68861.52	9167.907	3366.638	4693.897
#2	4444.085	68908.72	9400.801	3365.232	4712.105
#3	4396.959	69006.22	9359.636	3381.280	4671.695

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: Q3263-01 Acquired: 10/3/2025 15:34:12 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003087**	**-.003237**	**.0017074**	**.0007102**	**.0006846**	**.3095382**
Stddev	.000893	.002036	.0008400	.0029461	.0010713	.0140645
%RSD	28.92054	62.90578	49.19813	414.8569	156.4865	4.543691
#1	-.002056	-.002578	.0007680	.0039064	-.000426	.3238119
#2	-.003600	-.001612	.0023864	-.001897	.001712	.3091099
#3	-.003604	-.005521	.0019677	.000121	.000767	.2956928

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2140027**	**.0002943**	**.0001478**	**38.39719**	**.0055019**	**.0000674**
Stddev	.0015084	.0000502	.0000581	.19331	.0001981	.0000771
%RSD	.7048489	17.05434	39.33646	.5034373	3.600199	114.3217
#1	.2123544	.0003219	.0002145	38.20381	.0052986	.0000741
#2	.2153142	.0003247	.0001214	38.59042	.0055128	-.000013
#3	.2143397	.0002364	.0001076	38.39735	.0056943	.000141

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0028807**	**.5421073**	**.0256838**	**9.110449**	**.0076377**	**-.000483**
Stddev	.0002656	.0063789	.0007033	.072539	.0001354	.000223
%RSD	9.221219	1.176679	2.738131	.7962125	1.772436	46.12114
#1	.0026075	.5358203	.0248811	9.032814	.0075547	-.000624
#2	.0028966	.5419274	.0261917	9.176497	.0077939	-.000226
#3	.0031381	.5485742	.0259785	9.122037	.0075645	-.000600

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**45.20451**	**.0037467**	**.0701022**	**9.164985**	**.0852085**	**.0020850**
Stddev	.33811	.0025438	.0003637	.044286	.0012421	.0001813
%RSD	.7479524	67.89534	.5188457	.4832109	1.457711	8.697482
#1	44.92044	.0036678	.0698140	9.152727	.0852200	.0019690
#2	45.11461	.0012432	.0699817	9.128119	.0864448	.0022940
#3	45.57848	.0063290	.0705108	9.214109	.0839607	.0019921

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: Q3263-01 Acquired: 10/3/2025 15:34:12 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.021939	.0055458	F 18.02433	.3038833	F 11.61404	.0240148
Stddev	.000610	.0005136	.44297	.0013569	.05824	.0010311
%RSD	2.780532	9.261406	2.457620	.4465229	.5014508	4.293646
#1	-.021316	.0052744	18.52025	.3038909	11.55456	.0236773
#2	-.021964	.0061382	17.88488	.3025226	11.67096	.0251723
#3	-.022535	.0052247	17.66787	.3052364	11.61659	.0231947

Elem	Sr4077
Units	ppm
Avg	.5220381
Stddev	.0042220
%RSD	.8087465
#1	.5175367
#2	.5259099
#3	.5226677

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7342.293	107066.0	10226.21	5481.037	8884.514
Stddev	11.359	484.1	101.28	30.325	2.813
%RSD	.1547076	.4521874	.9904033	.5532635	.0316615
#1	7332.273	107170.5	10311.14	5484.342	8885.265
#2	7339.973	107489.4	10114.12	5509.573	8881.402
#3	7354.633	106538.2	10253.38	5449.194	8886.875

Sample Name: Q3263-02 Acquired: 10/3/2025 15:38:27 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003774**	**-.002025**	**-.000620**	**.0020140**	**.0001216**	**.0344705**
Stddev	.000294	.000885	.000417	.0039705	.0005490	.0018408
%RSD	7.777476	43.69618	67.16739	197.1479	451.6798	5.340338
#1	-.003867	-.001725	-.000552	.0065882	-.000381	.0328946
#2	-.003446	-.003021	-.000242	-.000543	.000038	.0364938
#3	-.004011	-.001329	-.001067	-.000003	.000708	.0340231

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1096983**	**.0006543**	**.0003654**	**24.08575**	**-.000379**	**-.000194**
Stddev	.0004416	.0000821	.0000395	.00377	.000096	.000164
%RSD	.4025807	12.55200	10.81414	.0156670	25.21035	84.71585
#1	.1096246	.0005684	.0003200	24.08341	-.000402	-.000310
#2	.1092981	.0007320	.0003917	24.08374	-.000275	-.000266
#3	.1101721	.0006626	.0003846	24.09010	-.000462	-.000006

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0018877**	**.0933152**	**.0141958**	**8.762535**	**.0134149**	**-.000703**
Stddev	.0002749	.0053713	.0005988	.020789	.0001183	.000555
%RSD	14.56327	5.756048	4.218115	.2372482	.8819612	78.94167
#1	.0021751	.0881310	.0148270	8.756518	.0134506	-.001341
#2	.0018609	.0988558	.0141247	8.785669	.0135113	-.000439
#3	.0016273	.0929588	.0136357	8.745419	.0132829	-.000329

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**40.79735**	**.0023067**	**.1512063**	**6.516955**	**.0580341**	**.0008225**
Stddev	.19614	.0024454	.0003751	.029320	.0008904	.0003620
%RSD	.4807724	106.0151	.2480550	.4499028	1.534305	44.00853
#1	40.58174	-.000517	.1510647	6.485518	.0588662	.0009799
#2	40.84510	.003740	.1516315	6.543557	.0581409	.0010791
#3	40.96521	.003697	.1509226	6.521789	.0570950	.0004085

Sample Name: Q3263-02 Acquired: 10/3/2025 15:38:27 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.021871	-.001126	F 10.61180	.2984186	9.902895	.0247844
Stddev	.000370	.001827	.06602	.0041115	.072548	.0011335
%RSD	1.690270	162.2834	.6221729	1.377764	.7325964	4.573515
#1	-.022071	-.003204	10.56107	.3025085	9.972907	.0258066
#2	-.022098	-.000401	10.68645	.2984614	9.907725	.0235653
#3	-.021445	.000228	10.58788	.2942859	9.828052	.0249812

Elem	Sr4077
Units	ppm
Avg	.4519023
Stddev	.0010522
%RSD	.2328298
#1	.4521996
#2	.4507335
#3	.4527738

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7475.213	109201.1	10144.70	5544.024	9093.344
Stddev	14.874	240.5	41.87	10.702	24.972
%RSD	.1989765	.2202625	.4127622	.1930434	.2746190
#1	7459.874	109460.2	10096.50	5556.358	9066.753
#2	7476.192	108985.0	10172.15	5538.521	9096.980
#3	7489.573	109158.2	10165.45	5537.193	9116.298

Sample Name: Q3263-02DUP Acquired: 10/3/2025 15:42:42 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003691**	**-.002991**	**-.001035**	**.0021499**	**-.000037**	**.0609436**
Stddev	.001301	.001808	.000252	.0015150	.000574	.0185124
%RSD	35.24735	60.46068	24.33685	70.47042	1542.238	30.37632
#1	-.004272	-.001193	-.001231	.0018474	.000602	.0439206
#2	-.004599	-.004809	-.000751	.0037933	-.000511	.0806521
#3	-.002201	-.002971	-.001121	.0008089	-.000202	.0582581

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1157529**	**.0005933**	**.0004034**	**25.37204**	**-.000347**	**-.000002**
Stddev	.0016983	.0000325	.0000559	.04223	.000237	.000172
%RSD	1.467202	5.486065	13.86888	.1664601	68.21498	8575.206
#1	.1175266	.0006287	.0004200	25.36575	-.000239	-.000041
#2	.1141417	.0005865	.0003411	25.33331	-.000184	-.000151
#3	.1155903	.0005647	.0004492	25.41707	-.000619	.000186

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0021623**	**.1257897**	**.0143250**	**9.219447**	**.0141869**	**-.000257**
Stddev	.0001707	.0210173	.0002437	.087535	.0000820	.000383
%RSD	7.895170	16.70827	1.701340	.9494655	.5781989	148.8812
#1	.0019683	.1132715	.0142245	9.130336	.0142814	-.000465
#2	.0022287	.1140433	.0141476	9.222689	.0141449	.000185
#3	.0022898	.1500543	.0146029	9.305317	.0141344	-.000493

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**43.42179**	**.0036882**	**.1608374**	**7.032022**	**.0513445**	**.0007224**
Stddev	.10302	.0011313	.0004626	.054802	.0001523	.0003953
%RSD	.2372550	30.67337	.2876303	.7793233	.2967181	54.72282
#1	43.31579	.0040876	.1607535	6.969841	.0515131	.0003675
#2	43.52155	.0024114	.1604225	7.052947	.0512168	.0006511
#3	43.42802	.0045656	.1613362	7.073280	.0513035	.0011484

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: Q3263-02DUP Acquired: 10/3/2025 15:42:42 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.022538	-.000236	F 11.04384	.3185313	F 10.52275	.0279462
Stddev	.000226	.001502	.05218	.0010172	.02938	.0011562
%RSD	1.003738	636.3684	.4725204	.3193381	.2792504	4.137416
#1	-.022529	-.001215	10.98376	.3196760	10.54326	.0277425
#2	-.022768	.001494	11.06987	.3177309	10.53590	.0269054
#3	-.022316	-.000987	11.07789	.3181871	10.48908	.0291908

Elem	Sr4077
Units	ppm
Avg	.4768458
Stddev	.0005448
%RSD	.1142448
#1	.4774393
#2	.4763686
#3	.4767294

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7324.680	106369.5	10223.78	5441.126	8858.312
Stddev	10.769	306.0	56.06	33.950	16.998
%RSD	.1470300	.2876998	.5483241	.6239478	.1918839
#1	7312.497	106711.7	10229.59	5477.186	8838.987
#2	7328.615	106275.0	10276.71	5436.413	8865.005
#3	7332.929	106121.9	10165.04	5409.780	8870.945

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: Q3263-02LX5 Acquired: 10/3/2025 15:46:56 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000583**	**-.001780**	**-.000126**	**.0005390**	**-.000954**	**.0252251**	**.0186879**
Stddev	.000407	.000997	.000871	.0020997	.000523	.0106886	.0007258
%RSD	69.80069	56.00707	691.9450	389.5701	54.86331	42.37273	3.883846
#1	-.000573	-.000933	-.000021	.0009172	-.000395	.0338226	.0193801
#2	-.000181	-.002879	.000688	-.001724	-.001033	.0132577	.0179326
#3	-.000994	-.001529	-.001045	.002424	-.001433	.0285949	.0187511

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003334**	**.0001737**	**5.603371**	**-.000400**	**.0000002**	**-.000065**	**.0387998**
Stddev	.0000377	.0000605	.003799	.000456	.0001789	.000527	.0351335
%RSD	11.29387	34.82570	.0677988	113.8872	74262.14	815.1780	90.55063
#1	.0003697	.0001545	5.607646	.000066	-.000198	-.000146	.0792354
#2	.0003360	.0001252	5.602085	-.000422	.000149	-.000546	.0214254
#3	.0002945	.0002415	5.600382	-.000844	.000050	.000498	.0157387

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0027157**	**2.049799**	**.0035207**	**-.000716**	**13.34549**	**.0013610**	**.0345183**
Stddev	.0005490	.021371	.0002935	.000139	.09560	.0015848	.0002742
%RSD	20.21422	1.042611	8.336593	19.48033	.7163557	116.4431	.7944408
#1	.0031956	2.062979	.0032733	-.000555	13.36105	.0000899	.0348328
#2	.0028344	2.061276	.0038450	-.000809	13.43236	.0008565	.0343288
#3	.0021171	2.025141	.0034437	-.000783	13.24307	.0031366	.0343933

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.027470**	**.0115150**	**.0001231**	**-.008880**	**-.000657**	**2.385472**	**.0715767**
Stddev	.041751	.0008273	.0001952	.000757	.000815	.016580	.0009916
%RSD	1.036654	7.184191	158.6176	8.520966	124.1193	.6950422	1.385323
#1	3.994549	.0122598	.0000270	-.009008	-.000390	2.396163	.0721823
#2	4.013430	.0106246	.0003477	-.009565	-.000008	2.393880	.0721154
#3	4.074431	.0116606	-.000005	-.008068	-.001571	2.366372	.0704324

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: Q3263-02LX5 Acquired: 10/3/2025 15:46:56 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	2.368851	.0194766	.1055758
Stddev	.028996	.0021029	.0001837
%RSD	1.224035	10.79729	.1739839
#1	2.382298	.0190115	.1056575
#2	2.388682	.0176451	.1053654
#3	2.335574	.0217732	.1057044

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7502.727	105676.3	10078.06	5523.581	9234.522
Stddev	10.982	595.7	59.89	42.884	20.088
%RSD	.1463705	.5636912	.5942350	.7763785	.2175333
#1	7497.708	106240.2	10081.51	5564.456	9230.249
#2	7495.150	105053.3	10136.15	5478.937	9216.914
#3	7515.321	105735.5	10016.53	5527.350	9256.403

Sample Name: CCV03 Acquired: 10/3/2025 15:51:13 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.081387**	**5.247102**	**4.855276**	**5.170957**	**5.144282**	**9.676817**	**10.04953**
Stddev	.014524	.174274	.013564	.025802	.002434	.021987	.04960
%RSD	.2858321	3.321347	.2793697	.4989823	.0473144	.2272106	.4935368
#1	5.085731	5.302568	4.869252	5.196356	5.144470	9.661550	10.06614
#2	5.065187	5.051845	4.842166	5.144770	5.141759	9.702018	10.08869
#3	5.093244	5.386893	4.854411	5.171745	5.146616	9.666884	9.99376

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2393390**	**2.442581**	**24.23300**	**.9722512**	**2.445173**	**1.247900**	**5.230441**
Stddev	.0013755	.004675	.06252	.0046243	.003175	.000770	.022309
%RSD	.5747013	.1914089	.2580034	.4756282	.1298535	.0617410	.4265259
#1	.2380556	2.446430	24.19102	.9696445	2.447465	1.248789	5.249138
#2	.2391703	2.437378	24.30486	.9695187	2.441548	1.247432	5.236439
#3	.2407910	2.443934	24.20312	.9775903	2.446504	1.247480	5.205746

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.419642**	**23.53158**	**2.452877**	**1.242162**	**27.25490**	**2.450239**	**2.492261**
Stddev	.006028	.00965	.005631	.001005	.14164	.010674	.005641
%RSD	.2491327	.0409923	.2295813	.0809112	.5196847	.4356173	.2263565
#1	2.425056	23.52159	2.458738	1.241373	27.29985	2.444893	2.486256
#2	2.420723	23.54084	2.447507	1.241819	27.36861	2.462529	2.493078
#3	2.413146	23.53230	2.452387	1.243293	27.09624	2.443294	2.497449

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.68416**	**4.554459**	**5.025027**	**4.880178**	**4.901147**	**5.300990**	**4.783770**
Stddev	.05942	.008915	.007515	.017509	.012554	.037653	.022498
%RSD	.2313294	.1957444	.1495454	.3587693	.2561345	.7103018	.4703025
#1	25.73774	4.545119	5.030416	4.892209	4.907959	5.267508	4.781557
#2	25.69448	4.555381	5.016443	4.860092	4.908822	5.293712	4.762460
#3	25.62026	4.562878	5.028222	4.888235	4.886660	5.341751	4.807293

Sample Name: CCV03 Acquired: 10/3/2025 15:51:13 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**5.274023**	**4.837885**	**4.976396**
Stddev	.040470	.012604	.038254
%RSD	.7673501	.2605361	.7687172
#1	5.304253	4.830487	4.939107
#2	5.228046	4.852438	4.974534
#3	5.289769	4.830729	5.015547

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7094.715**	**101807.7**	**9890.494**	**5304.262**	**8293.906**
Stddev	16.021	105.6	17.691	14.224	12.874
%RSD	.2258119	.1037437	.1788668	.2681692	.1552175
#1	7086.554	101882.4	9908.289	5319.657	8284.915
#2	7084.418	101853.9	9872.909	5301.520	8288.150
#3	7113.173	101686.9	9890.285	5291.608	8308.653

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: CCB03 Acquired: 10/3/2025 16:00:25 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003336**	**-.001137**	**.0002298**	**-.000355**	**-.002418**	**-.004146**
Stddev	.000600	.001132	.0003544	.001397	.001272	.002686
%RSD	17.97471	99.60460	154.2198	393.8259	52.61217	64.79597
#1	-.003088	-.000532	-.000177	-.001908	-.003603	-.004562
#2	-.004020	-.000435	.000396	.000042	-.001074	-.006600
#3	-.002900	-.002442	.000470	.000801	-.002577	-.001276

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.008878**	**.0001599**	**.0000385**	**-.032940**	**-.000916**	**-.000008**
Stddev	.000419	.0000262	.0000450	.005987	.000177	.000119
%RSD	4.715422	16.38271	116.8235	18.17457	19.37481	1495.349
#1	-.009348	.0001299	.0000094	-.037065	-.000745	.000125
#2	-.008545	.0001782	.0000903	-.026073	-.000902	-.000045
#3	-.008741	.0001716	.0000158	-.035682	-.001099	-.000104

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000326**	**-.007937**	**-.000910**	**.0191392**	**.0003053**	**-.000572**
Stddev	.000210	.004305	.000095	.0125020	.0003829	.000160
%RSD	64.48234	54.24028	10.48966	65.32144	125.4089	28.02106
#1	-.000568	-.003678	-.000927	.0047631	-.000033	-.000508
#2	-.000179	-.007845	-.000807	.0251891	.000228	-.000755
#3	-.000232	-.012287	-.000995	.0274655	.000721	-.000454

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.085400**	**.0007668**	**-.000073**	**.0175859**	**-.003721**	**.0004816**
Stddev	.015768	.0016752	.000124	.0218891	.000611	.0000819
%RSD	18.46412	218.4603	169.5024	124.4695	16.41208	17.01084
#1	-.067442	.0022113	.000033	.0335118	-.003016	.0004652
#2	-.091776	-.001070	-.000043	-.007374	-.004055	.0005704
#3	-.096982	.001159	-.000210	.026620	-.004092	.0004091

Sample Name: CCB03 Acquired: 10/3/2025 16:00:25 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.023444	.0004206	.0020213	.0065486	F .0112327	-.008164
Stddev	.000153	.0004466	.0088967	.0011385	.0014115	.000261
%RSD	.6528128	106.1908	440.1514	17.38500	12.56617	3.194802
#1	-.023501	.0002637	-.005113	.0077752	.0096050	-.007863
#2	-.023560	.0009245	-.000813	.0063447	.0121184	-.008308
#3	-.023271	.0000736	.011990	.0055258	.0119749	-.008322

Elem	Sr4077
Units	ppm
Avg	.0000293
Stddev	.0000627
%RSD	214.0569
#1	-.000032
#2	.000026
#3	.000094

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7646.224	110163.8	10143.10	5672.968	9495.062
Stddev	4.038	141.5	28.30	23.008	21.829
%RSD	.0528062	.1284171	.2789899	.4055770	.2298974
#1	7647.711	110210.2	10111.13	5692.761	9493.289
#2	7641.653	110004.9	10153.24	5678.420	9474.173
#3	7649.307	110276.2	10164.93	5647.724	9517.722

Sample Name: Q3263-02MS Acquired: 10/3/2025 16:04:44 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7632494**	**2.092143**	**.8598688**	**1.922507**	**.7845129**	**1.881796**
Stddev	.0027319	.033034	.0019435	.000841	.0024779	.010099
%RSD	.3579261	1.578956	.2260270	.0437493	.3158453	.5366822
#1	.7602332	2.054385	.8598053	1.922142	.7832998	1.870618
#2	.7639577	2.115715	.8618434	1.921910	.7828753	1.884507
#3	.7655574	2.106327	.8579579	1.923469	.7873636	1.890263

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3023966**	**.1773878**	**.1765854**	**25.32980**	**.3758497**	**.1821507**
Stddev	.0009382	.0014910	.0004299	.06645	.0012147	.0001011
%RSD	.3102725	.8405124	.2434321	.2623259	.3231851	.0555167
#1	.3014839	.1781579	.1762134	25.26741	.3755748	.1821497
#2	.3033585	.1783363	.1764868	25.32232	.3771784	.1820500
#3	.3023474	.1756693	.1770560	25.39967	.3747961	.1822523

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2814994**	**3.098447**	**.2046561**	**10.59026**	**.4650024**	**.0663776**
Stddev	.0005685	.017937	.0015021	.04354	.0004021	.0001933
%RSD	.2019583	.5789186	.7339835	.4111183	.0864746	.2912276
#1	.2809982	3.079869	.2053039	10.55457	.4651248	.0661741
#2	.2821172	3.099803	.2057256	10.57743	.4653292	.0664000
#3	.2813828	3.115667	.2029387	10.63877	.4645533	.0665587

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**45.52817**	**.2869158**	**.3455578**	**15.60856**	**.2828896**	**.4180381**
Stddev	.13146	.0044897	.0006745	.10153	.0015101	.0010305
%RSD	.2887482	1.564833	.1951877	.6505069	.5338134	.2464986
#1	45.41306	.2817524	.3450062	15.53391	.2824926	.4168951
#2	45.50001	.2898999	.3453574	15.56759	.2845586	.4183234
#3	45.67142	.2890952	.3463098	15.72418	.2816177	.4188959

Sample Name: Q3263-02MS Acquired: 10/3/2025 16:04:44 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6342723	.1870208	F 11.33799	5.356984	9.993358	.2111196
Stddev	.0019775	.0013380	.07863	.019122	.028562	.0017085
%RSD	.3117812	.7154312	.6935364	.3569627	.2858125	.8092716
#1	.6320480	.1854848	11.27954	5.336107	9.960637	.2091991
#2	.6349372	.1879323	11.30706	5.373650	10.01329	.2124708
#3	.6358317	.1876455	11.42739	5.361196	10.00614	.2116891

Elem	Sr4077
Units	ppm
Avg	.6478864
Stddev	.0021144
%RSD	.3263538
#1	.6460083
#2	.6501765
#3	.6474745

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7418.818	105998.3	10142.35	5535.129	8998.626
Stddev	12.807	144.6	45.76	20.875	10.182
%RSD	.1726332	.1364239	.4511302	.3771446	.1131482
#1	7427.862	105908.0	10117.75	5514.819	9005.717
#2	7404.163	106165.0	10114.16	5556.527	8986.959
#3	7424.429	105921.7	10195.15	5534.040	9003.202

Sample Name: Q3263-02MSD Acquired: 10/3/2025 16:08:41 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7617137**	**2.061470**	**.8592936**	**1.911334**	**.7739854**	**1.863370**
Stddev	.0014924	.054186	.0005388	.006891	.0002403	.008171
%RSD	.1959227	2.628529	.0627007	.3605361	.0310482	.4385214
#1	.7622101	2.008549	.8593773	1.903390	.7737869	1.868312
#2	.7628946	2.116839	.8587179	1.915707	.7742526	1.867859
#3	.7600364	2.059022	.8597856	1.914904	.7739168	1.853938

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2988211**	**.1737808**	**.1759345**	**25.48303**	**.3701737**	**.1811369**
Stddev	.0011605	.0011421	.0001889	.03774	.0006889	.0004145
%RSD	.3883662	.6571822	.1073601	.1480926	.1861059	.2288395
#1	.2988087	.1750376	.1757534	25.44986	.3706491	.1809690
#2	.2976669	.1728065	.1761303	25.47513	.3693837	.1808326
#3	.2999878	.1734983	.1759199	25.52409	.3704884	.1816090

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2793193**	**3.039727**	**.1967284**	**10.70039**	**.4633550**	**.0642879**
Stddev	.0002961	.022377	.0014225	.02362	.0011815	.0002793
%RSD	.1059887	.7361467	.7231007	.2207102	.2549864	.4345216
#1	.2791332	3.021150	.1969018	10.71387	.4646521	.0639731
#2	.2791640	3.033461	.1952271	10.71418	.4623404	.0643843
#3	.2796607	3.064568	.1980563	10.67312	.4630724	.0645063

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**44.98263**	**.2810949**	**.3450985**	**15.44354**	**.2792827**	**.4119752**
Stddev	.55899	.0031876	.0012499	.16200	.0016825	.0004317
%RSD	1.242682	1.133987	.3621946	1.048986	.6024283	.1047796
#1	44.60129	.2776018	.3448236	15.32342	.2811964	.4115328
#2	44.72230	.2838461	.3440089	15.37942	.2786156	.4119973
#3	45.62431	.2818367	.3464630	15.62779	.2780361	.4123953

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: Q3263-02MSD Acquired: 10/3/2025 16:08:41 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6300838	.1833617	F 11.35753	5.295605	F 10.14881	.2068859
Stddev	.0005114	.0022218	.05893	.011269	.03717	.0026130
%RSD	.0811630	1.211693	.5188229	.2128040	.3662054	1.263022
#1	.6298176	.1823182	11.29126	5.306418	10.13405	.2064144
#2	.6297605	.1818538	11.40405	5.296467	10.19109	.2045408
#3	.6306734	.1859131	11.37727	5.283929	10.12129	.2097026

Elem	Sr4077
Units	ppm
Avg	.6474209
Stddev	.0051181
%RSD	.7905421
#1	.6446179
#2	.6443165
#3	.6533282

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7393.237	106556.5	10167.28	5476.806	8935.959
Stddev	17.313	225.3	74.87	30.958	24.417
%RSD	.2341748	.2114671	.7364220	.5652577	.2732391
#1	7374.670	106307.0	10080.89	5475.012	8910.388
#2	7408.940	106745.1	10213.54	5508.622	8959.029
#3	7396.100	106617.5	10207.40	5446.783	8938.460

Sample Name: Q3263-02A Acquired: 10/3/2025 16:12:39 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7747725**	**1.873544**	**.8791134**	**1.947708**	**.7917320**	**1.859035**
Stddev	.0030838	.152989	.0017185	.010060	.0022997	.019797
%RSD	.3980295	8.165761	.1954790	.5165175	.2904668	1.064924
#1	.7773633	2.047117	.8807417	1.958722	.7906732	1.880433
#2	.7755927	1.815216	.8773171	1.945397	.7943704	1.855301
#3	.7713615	1.758299	.8792814	1.939004	.7901524	1.841371

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2943601**	**.1711416**	**.1794407**	**24.94233**	**.3661696**	**.1831811**
Stddev	.0007990	.0003200	.0004887	.11595	.0006915	.0005917
%RSD	.2714210	.1870016	.2723664	.4648552	.1888526	.3230356
#1	.2952690	.1712283	.1799920	24.96527	.3664929	.1829407
#2	.2940429	.1714094	.1790605	25.04509	.3666402	.1827475
#3	.2937685	.1707872	.1792696	24.81663	.3653756	.1838552

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2843713**	**2.983681**	**.1966477**	**10.49444**	**.4706588**	**.0638673**
Stddev	.0004511	.011148	.0009007	.05059	.0010221	.0011699
%RSD	.1586418	.3736332	.4580254	.4820236	.2171545	1.831768
#1	.2843116	2.971130	.1966752	10.52762	.4714995	.0638390
#2	.2839529	2.992435	.1975344	10.51947	.4695212	.0650511
#3	.2848492	2.987477	.1957336	10.43621	.4709558	.0627118

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**43.03652**	**.2814580**	**.3401014**	**15.04669**	**.2768188**	**.4093813**
Stddev	.15112	.0020453	.0004278	.02942	.0024282	.0012340
%RSD	.3511508	.7266833	.1257891	.1955001	.8771830	.3014227
#1	42.91170	.2791111	.3405821	15.02323	.2785794	.4104344
#2	43.20454	.2824026	.3397624	15.03714	.2778285	.4096860
#3	42.99334	.2828603	.3399596	15.07969	.2740487	.4080236

Sample Name: Q3263-02A Acquired: 10/3/2025 16:12:39 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6370599	.1824687	F 11.04394	5.349441	9.972890	.2061181
Stddev	.0019660	.0012365	.09356	.065305	.149600	.0015366
%RSD	.3086100	.6776543	.8471981	1.220775	1.500068	.7454713
#1	.6393290	.1825030	10.94876	5.424560	10.14289	.2073416
#2	.6358661	.1836877	11.13580	5.317582	9.91446	.2066191
#3	.6359846	.1812154	11.04726	5.306180	9.86132	.2043935

Elem	Sr4077
Units	ppm
Avg	.6351386
Stddev	.0018962
%RSD	.2985576
#1	.6357182
#2	.6366774
#3	.6330202

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7242.582	108356.1	10235.07	5426.043	8710.611
Stddev	8.879	336.1	52.02	7.150	17.442
%RSD	.1225931	.3101881	.5082991	.1317627	.2002403
#1	7234.167	108310.1	10196.85	5419.734	8690.684
#2	7241.719	108045.3	10214.04	5424.587	8723.107
#3	7251.861	108712.8	10294.32	5433.809	8718.041

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: Q3269-01 Acquired: 10/3/2025 16:16:37 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0616222**	**-.026729**	**2.871152**	**.0062256**	**-.013815**	**178.4955**	**1.187273**
Stddev	.0019398	.006120	.003397	.0012049	.002445	.2754	.011235
%RSD	3.147905	22.89801	.1183073	19.35346	17.69802	.1543018	.9463053
#1	.0608188	-.027952	2.869004	.0072931	-.013710	178.1836	1.176062
#2	.0602131	-.020090	2.875068	.0064645	-.016311	178.7054	1.187226
#3	.0638346	-.032146	2.869384	.0049191	-.011425	178.5974	1.198532

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0041883**	**.0103408**	**108.8283**	**.1519641**	**.1724066**	**6.491009**	**286.1913**
Stddev	.0000681	.0001669	.4540	.0005168	.0002574	.005954	.7932
%RSD	1.626447	1.613758	.4171567	.3400959	.1492939	.0917279	.2771623
#1	.0042649	.0104560	108.3864	.1518727	.1725306	6.485406	287.1064
#2	.0041654	.0101494	108.8050	.1525205	.1721107	6.497261	285.7684
#3	.0041346	.0104170	109.2935	.1514991	.1725786	6.490360	285.6992

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.194861**	**67.89447**	**1.124494**	**.1495337**	**9.435990**	**.4255336**	**2.208369**
Stddev	.041613	.21089	.001369	.0003426	.020151	.0037923	.007287
%RSD	.8010466	.3106087	.1217544	.2291051	.2135524	.8911762	.3299584
#1	5.158921	67.66108	1.126004	.1497313	9.454268	.4217242	2.215343
#2	5.185209	67.95101	1.123333	.1497316	9.439319	.4255680	2.208959
#3	5.240452	68.07133	1.124145	.1491381	9.414381	.4293085	2.200806

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**13.57736**	**.3120422**	**.0016446**	**.0311161**	**2.575290**	**4.211161**	**8.118538**
Stddev	.05532	.0035106	.0002743	.0005081	.015919	.070953	.049114
%RSD	.4074746	1.125030	16.67979	1.632911	.6181357	1.684886	.6049624
#1	13.62872	.3160930	.0015530	.0305883	2.559353	4.289243	8.135035
#2	13.51878	.3098872	.0014278	.0311581	2.575327	4.193607	8.063299
#3	13.58459	.3101462	.0019530	.0316019	2.591191	4.150632	8.157279

Sample Name: Q3269-01 Acquired: 10/3/2025 16:16:37 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**3.341702**	**.2021547**	**.1359923**
Stddev	.018927	.0007654	.0034502
%RSD	.5663743	.3786253	2.537087
#1	3.358768	.2013082	.1325297
#2	3.321346	.2023576	.1360172
#3	3.344991	.2027982	.1394300

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**8073.089**	**118427.2**	**11731.91**	**6025.485**	**8156.283**
Stddev	3.150	769.3	58.43	25.567	9.875
%RSD	.0390239	.6495647	.4980419	.4243214	.1210738
#1	8071.953	117881.5	11799.24	5996.100	8144.890
#2	8070.664	118093.1	11694.58	6037.714	8162.383
#3	8076.650	119307.1	11701.90	6042.641	8161.576

Sample Name: Q3269-04 Acquired: 10/3/2025 16:20:40 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0414899**	**-.015151**	**.1966668**	**.0078052**	**-.011929**	**209.7829**	**.9585390**
Stddev	.0028594	.001830	.0006488	.0019402	.000691	2.7391	.0166212
%RSD	6.891724	12.08016	.3298748	24.85849	5.789410	1.305666	1.734012
#1	.0410952	-.014799	.1968246	.0098870	-.012098	210.2141	.9679155
#2	.0445261	-.013522	.1972221	.0060472	-.011170	206.8539	.9393482
#3	.0388484	-.017131	.1959537	.0074814	-.012520	212.2808	.9683534

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0055909**	**.0015078**	**14.30748**	**.1511149**	**.1026361**	**.4065106**	**233.1599**
Stddev	.0000108	.0001735	.21368	.0009362	.0001960	.0013773	1.3742
%RSD	.1922464	11.50747	1.493503	.6195266	.1909325	.3388172	.5893702
#1	.0056018	.0015097	14.35133	.1500499	.1027613	.4080372	232.1876
#2	.0055906	.0016803	14.07527	.1514867	.1027368	.4061334	232.5602
#3	.0055803	.0013333	14.49584	.1518080	.1024103	.4053612	234.7320

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.678593**	**38.80770**	**.2182674**	**.0134731**	**2.381067**	**.2410415**	**.5544919**
Stddev	.073410	.46939	.0001520	.0004490	.014773	.0064426	.0004468
%RSD	1.569067	1.209526	.0696414	3.332505	.6204429	2.672827	.0805702
#1	4.717885	38.81709	.2181670	.0134320	2.364373	.2446972	.5540116
#2	4.593900	38.33368	.2184423	.0130461	2.386373	.2336026	.5548951
#3	4.723994	39.27232	.2181930	.0139413	2.392454	.2448247	.5545689

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**13.48869**	**.2394274**	**.0005973**	**-.013580**	**1.786230**	**3.509896**	**4.115936**
Stddev	.12205	.0079720	.0001963	.000491	.025624	.050831	.016042
%RSD	.9048116	3.329618	32.85948	3.614395	1.434555	1.448214	.3897445
#1	13.34778	.2308733	.0006211	-.014058	1.792249	3.461443	4.112371
#2	13.56092	.2466496	.0003902	-.013607	1.758131	3.505435	4.101977
#3	13.55737	.2407593	.0007805	-.013077	1.808309	3.562810	4.133461

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: Q3269-04 Acquired: 10/3/2025 16:20:40 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2691331	.2059258	-.143045
Stddev	.0050265	.0032554	.001120
%RSD	1.867659	1.580867	.7826716
#1	.2739742	.2069970	-.141762
#2	.2694854	.2022698	-.143826
#3	.2639398	.2085107	-.143546

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7761.940	110334.9	11010.43	5744.611	8611.175
Stddev	18.091	523.1	161.23	11.707	21.029
%RSD	.2330683	.4741348	1.464295	.2037874	.2442093
#1	7744.863	110804.9	10929.51	5753.647	8589.666
#2	7760.059	110428.6	11196.09	5748.800	8612.168
#3	7780.898	109771.3	10905.70	5731.386	8631.690

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: Q3262-01 Acquired: 10/3/2025 16:24:43 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0586371**	**-.019904**	**.0909584**	**-.011724**	**.0097891**	**141.0223**
Stddev	.0019680	.004928	.0020909	.003708	.0015760	.3074
%RSD	3.356245	24.76077	2.298728	31.62478	16.09932	.2179888
#1	.0574805	-.020910	.0886240	-.014507	.0080374	140.9180
#2	.0575215	-.024251	.0915919	-.007515	.0102379	141.3683
#3	.0609095	-.014550	.0926592	-.013148	.0110919	140.7806

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.207156**	**.0054961**	**.0048432**	**1753.150**	**.2516194**	**.0871106**
Stddev	.002301	.0000423	.0000774	5.897	.0004722	.0003262
%RSD	.1906038	.7696509	1.598578	.3363595	.1876459	.3744898
#1	1.205129	.0054473	.0048463	1758.723	.2511491	.0874816
#2	1.206681	.0055177	.0049191	1753.753	.2520934	.0869815
#3	1.209656	.0055232	.0047643	1746.975	.2516156	.0868687

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3693287**	**170.8007**	**2.025459**	**84.20452**	**.1997136**	**.0051653**
Stddev	.0012417	.5405	.005139	.29765	.0003354	.0006642
%RSD	.3362096	.3164644	.2537225	.3534819	.1679291	12.85912
#1	.3707529	170.1797	2.021367	83.86164	.1999132	.0049135
#2	.3684726	171.0574	2.031227	84.35551	.1993264	.0046637
#3	.3687607	171.1650	2.023784	84.39641	.1999012	.0059186

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**17.37629**	**.3188260**	**.5860252**	**41.86234**	**.4055004**	**.0105831**
Stddev	.09173	.0015066	.0008271	.17442	.0027463	.0004311
%RSD	.5279017	.4725554	.1411351	.4166628	.6772560	4.073207
#1	17.27803	.3191309	.5869502	41.70910	.4025008	.0101856
#2	17.39117	.3171902	.5857687	41.82576	.4061093	.0110413
#3	17.45968	.3201568	.5853568	42.05215	.4078911	.0105223

Sample Name: Q3262-01 Acquired: 10/3/2025 16:24:43 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0117538	5.427969	3.798833	7.093195	F 94.44582	-.115723
Stddev	.0006193	.004030	.018275	.051661	.93872	.000531
%RSD	5.269054	.0742411	.4810672	.7283112	.9939286	.4592618
#1	.0112035	5.427346	3.778521	7.142533	95.10197	-.116205
#2	.0124244	5.432274	3.813941	7.097563	94.86494	-.115153
#3	.0116334	5.424287	3.804038	7.039490	93.37055	-.115810

Elem	Sr4077
Units	ppm
Avg	8.084368
Stddev	.045850
%RSD	.5671428
#1	8.136861
#2	8.052160
#3	8.064082

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6827.339	100437.3	10735.50	5107.139	6832.464
Stddev	6.115	161.9	17.75	24.406	5.267
%RSD	.0895641	.1611579	.1653585	.4778896	.0770842
#1	6828.665	100594.8	10738.16	5096.502	6838.544
#2	6832.683	100271.4	10716.56	5089.855	6829.525
#3	6820.670	100445.6	10751.76	5135.058	6829.322

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: Q3266-01 Acquired: 10/3/2025 16:29:02 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1854951**	**-.063705**	**.7776624**	**.0152256**	**-.028829**	**288.1304**	**3.170015**
Stddev	.0042965	.003896	.0031063	.0034580	.001416	1.1839	.015278
%RSD	2.316236	6.116234	.3994467	22.71204	4.912400	.4108737	.4819685
#1	.1876998	-.068091	.7758529	.0146816	-.029453	286.7635	3.186935
#2	.1882417	-.062383	.7758851	.0120718	-.027208	288.8273	3.165880
#3	.1805438	-.060642	.7812492	.0189234	-.029826	288.8005	3.157229

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0151415**	**.0129305**	**47.46234**	**.4785622**	**.3936110**	**1.172440**	**729.9121**
Stddev	.0001135	.0011253	.15814	.0013821	.0011539	.009252	8.9320
%RSD	.7497508	8.702637	.3331960	.2888042	.2931554	.7891204	1.223708
#1	.0152643	.0116367	47.60158	.4801542	.3923971	1.162307	740.0349
#2	.0150403	.0134729	47.49505	.4776683	.3937421	1.174575	726.5613
#3	.0151201	.0136818	47.29041	.4778643	.3946937	1.180437	723.1399

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**27.43893**	**116.5654**	**.6787527**	**.0239286**	**3.866450**	**.8011849**	**1.660553**
Stddev	.17586	.2531	.0008588	.0031498	.031104	.0038468	.006107
%RSD	.6408976	.2171423	.1265333	13.16337	.8044707	.4801408	.3677570
#1	27.60443	116.7733	.6778071	.0272012	3.891406	.8001072	1.655800
#2	27.45808	116.6393	.6789664	.0236666	3.876341	.8054556	1.667441
#3	27.25428	116.2836	.6794845	.0209179	3.831603	.7979919	1.658419

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**30.47922**	**^ *****	**.0056424**	**.0327213**	**5.704349**	**4.460363**	**9.832825**
Stddev	.13647	-----	.0003855	.0001807	.019389	.053932	.033494
%RSD	.4477566	-----	6.832914	.5521734	.3398943	1.209148	.3406396
#1	30.63679	^ -----	.0059689	.0327915	5.716094	4.491448	9.866295
#2	30.40237	^ -----	.0057414	.0325161	5.714983	4.491554	9.799306
#3	30.39850	^ -----	.0052171	.0328564	5.681970	4.398087	9.832874

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: Q3266-01 Acquired: 10/3/2025 16:29:02 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**2.739584**	**1.166956**	**-.402104**
Stddev	.015295	.006607	.007313
%RSD	.5582911	.5661407	1.818558
#1	2.752912	1.172005	-.410511
#2	2.722885	1.169384	-.398581
#3	2.742955	1.159479	-.397220

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**8049.620**	**117356.1**	**11657.51**	**6033.583**	**7986.890**
Stddev	12.941	337.4	51.27	13.861	5.784
%RSD	.1607671	.2874927	.4397776	.2297304	.0724183
#1	8063.976	117029.1	11655.64	6037.921	7993.471
#2	8046.035	117336.1	11607.20	6018.072	7984.584
#3	8038.850	117703.0	11709.68	6044.757	7982.614

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: Q3266-02 Acquired: 10/3/2025 16:33:18 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1570517**	**-.048148**	**.8212467**	**.0091517**	**-.020170**	**249.1504**	**2.611876**
Stddev	.0014773	.003651	.0013135	.0030739	.000960	.8653	.006802
%RSD	.9406165	7.582647	.1599395	33.58854	4.761622	.3472983	.2604189
#1	.1557417	-.050684	.8223069	.0056901	-.019878	249.8350	2.616386
#2	.1567606	-.049795	.8197773	.0102025	-.019389	249.4383	2.615189
#3	.1586529	-.043963	.8216559	.0115624	-.021242	248.1778	2.604052

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0135585**	**.0113473**	**55.71654**	**.4214698**	**.3084142**	**1.487592**	**572.8396**
Stddev	.0001137	.0004609	.23432	.0013663	.0003043	.004904	6.1929
%RSD	.8388745	4.061407	.4205532	.3241643	.0986565	.3296319	1.081094
#1	.0136874	.0114094	55.90506	.4206504	.3081457	1.487821	574.1041
#2	.0135154	.0108586	55.79036	.4207120	.3083522	1.482577	578.3027
#3	.0134726	.0117740	55.45420	.4230470	.3087447	1.492377	566.1120

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.15927**	**107.9886**	**.5653550**	**.0254309**	**2.454725**	**.6418996**	**1.619489**
Stddev	.11458	.3293	.0005416	.0026852	.030027	.0049682	.001870
%RSD	.5170766	.3049817	.0957960	10.55892	1.223239	.7739864	.1154685
#1	22.24643	108.2848	.5652926	.0255334	2.423636	.6443291	1.621575
#2	22.20190	108.0470	.5648474	.0280634	2.456975	.6451855	1.617964
#3	22.02949	107.6339	.5659251	.0226959	2.483563	.6361841	1.618926

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**34.10414**	**^ *****	**.0049765**	**.0387748**	**4.656037**	**4.935064**	**9.656260**
Stddev	.28644	-----	.0001490	.0005292	.011340	.001637	.055077
%RSD	.8398929	-----	2.995176	1.364904	.2435544	.0331692	.5703772
#1	33.82100	^ -----	.0051425	.0389371	4.662668	4.936753	9.649365
#2	34.09765	^ -----	.0048542	.0381835	4.662500	4.934953	9.714460
#3	34.39377	^ -----	.0049327	.0392040	4.642943	4.933485	9.604954

Sample Name: Q3266-02 Acquired: 10/3/2025 16:33:18 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	2.967312	.9355691	-.240240
Stddev	.017099	.0025566	.005406
%RSD	.5762456	.2732632	2.250318
#1	2.972840	.9385204	-.240945
#2	2.980963	.9341495	-.245259
#3	2.948133	.9340373	-.234516

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8093.035	118944.0	12044.41	6110.576	8038.471
Stddev	15.238	212.6	109.74	9.497	16.797
%RSD	.1882815	.1787387	.9111368	.1554223	.2089533
#1	8102.538	119011.9	11933.76	6115.711	8045.514
#2	8075.460	119114.4	12046.26	6116.401	8019.300
#3	8101.108	118705.8	12153.22	6099.617	8050.601

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: Q3266-02DUP Acquired: 10/3/2025 16:37:20 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1463714**	**-.041159**	**.7836078**	**.0089884**	**-.020115**	**252.9556**	**2.966183**
Stddev	.0022528	.001900	.0032164	.0063207	.002628	1.4344	.013322
%RSD	1.539069	4.616418	.4104539	70.32112	13.06391	.5670497	.4491351
#1	.1466700	-.043238	.7826439	.0042278	-.018018	254.6055	2.970305
#2	.1439843	-.040726	.7809836	.0161598	-.023062	252.2565	2.951287
#3	.1484600	-.039513	.7871959	.0065776	-.019264	252.0048	2.976956

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0131648**	**.0131068**	**59.40651**	**.3896301**	**.3176847**	**1.647882**	**555.2090**
Stddev	.0001569	.0003786	.07405	.0005978	.0004448	.007417	5.6390
%RSD	1.192038	2.888729	.1246530	.1534368	.1400103	.4501139	1.015647
#1	.0132932	.0130460	59.45816	.3898504	.3174532	1.646692	556.6731
#2	.0129899	.0127623	59.32167	.3889534	.3174033	1.641131	559.9715
#3	.0132114	.0135122	59.43970	.3900866	.3181975	1.655822	548.9824

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.38203**	**114.8884**	**.6062978**	**.0238631**	**2.509858**	**.6149176**	**1.691700**
Stddev	.06982	.0866	.0011288	.0024345	.032230	.0034609	.004674
%RSD	.3119382	.0753920	.1861801	10.20179	1.284131	.5628152	.2763059
#1	22.40482	114.8854	.6060706	.0238879	2.478366	.6147160	1.694282
#2	22.30366	114.8033	.6052999	.0262851	2.508431	.6115620	1.694513
#3	22.43760	114.9765	.6075229	.0214164	2.542778	.6184749	1.686304

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**35.28833**	**^ *****	**.0049454**	**.0402817**	**4.591376**	**4.170157**	**8.980153**
Stddev	.14308	-----	.0005522	.0008048	.012891	.092960	.008611
%RSD	.4054674	-----	11.16647	1.998015	.2807709	2.229183	.0958902
#1	35.12958	^ -----	.0055755	.0402987	4.593359	4.072694	8.986071
#2	35.32810	^ -----	.0045458	.0410779	4.577609	4.257843	8.970274
#3	35.40733	^ -----	.0047149	.0394685	4.603161	4.179933	8.984114

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: Q3266-02DUP Acquired: 10/3/2025 16:37:20 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**3.418969**	**.9819598**	**-.215728**
Stddev	.011368	.0037795	.006726
%RSD	.3324854	.3848887	3.117886
#1	3.428600	.9821433	-.216617
#2	3.406430	.9780919	-.221966
#3	3.421878	.9856441	-.208602

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**8262.915**	**120571.5**	**12070.90**	**6263.849**	**8010.492**
Stddev	6.777	199.5	76.65	22.972	7.566
%RSD	.0820182	.1654551	.6349662	.3667355	.0944532
#1	8266.427	120352.0	11988.73	6241.467	8019.229
#2	8267.215	120620.7	12140.46	6262.711	8006.182
#3	8255.102	120741.7	12083.53	6287.368	8006.066

Sample Name: Q3266-02LX5 Acquired: 10/3/2025 16:41:28 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0346398**	**-.009450**	**.1748214**	**-.000317**	**-.008402**	**58.66648**	**.5968533**
Stddev	.0015919	.000708	.0022105	.001342	.001052	.18019	.0036131
%RSD	4.595534	7.489448	1.264445	423.8705	12.51719	.3071349	.6053626
#1	.0363146	-.008890	.1736772	.000477	-.009559	58.45960	.5948829
#2	.0344583	-.009215	.1773695	-.001866	-.007503	58.75077	.6010233
#3	.0331464	-.010246	.1734177	.000439	-.008146	58.78908	.5946538

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0034641**	**.0014443**	**13.57978**	**.1010639**	**.0641367**	**.3676513**	**133.7656**
Stddev	.0000883	.0000136	.09525	.0001984	.0001117	.0004124	.4536
%RSD	2.548217	.9425477	.7014104	.1963382	.1741101	.1121759	.3390753
#1	.0034175	.0014567	13.47164	.1011403	.0641263	.3681162	133.7271
#2	.0034089	.0014298	13.65126	.1012128	.0642532	.3673295	134.2371
#3	.0035659	.0014464	13.61643	.1008387	.0640306	.3675083	133.3324

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.399247**	**26.23301**	**.1202341**	**.0051876**	**1.173093**	**.1510084**	**.3810955**
Stddev	.041851	.14139	.0004346	.0004319	.015106	.0022043	.0017472
%RSD	.7751240	.5389794	.3614341	8.325026	1.287675	1.459684	.4584767
#1	5.359662	26.07067	.1201471	.0054012	1.156470	.1488332	.3819439
#2	5.443045	26.29912	.1207056	.0046905	1.185981	.1509515	.3822565
#3	5.395032	26.32923	.1198496	.0054710	1.176828	.1532406	.3790860

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.014671**	**.1200563**	**.0007212**	**.0030105**	**1.118330**	**1.094788**	**1.967289**
Stddev	.038260	.0031602	.0002304	.0002380	.005243	.020018	.015549
%RSD	.4773761	2.632289	31.95219	7.906597	.4688340	1.828457	.7903586
#1	8.058703	.1236720	.0009804	.0032768	1.115152	1.107869	1.985181
#2	7.995773	.1178218	.0006440	.0029364	1.124382	1.071744	1.959638
#3	7.989537	.1186752	.0005393	.0028184	1.115457	1.104751	1.957048

Reviewed By:jaswal
On:10/7/2025 4:45:27 PM
Inst Id :P4
LB :LB137426

Sample Name: Q3266-02LX5 Acquired: 10/3/2025 16:41:28 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.5985679	.2224568	-.054079
Stddev	.0019302	.0015535	.000193
%RSD	.3224697	.6983302	.3577712
#1	.6002119	.2217664	-.054181
#2	.5964426	.2242358	-.054199
#3	.5990491	.2213682	-.053856

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7577.332	109996.8	10339.13	5675.271	8758.159
Stddev	19.719	340.8	82.29	20.348	13.288
%RSD	.2602382	.3098467	.7959525	.3585425	.1517239
#1	7599.761	110379.4	10429.67	5670.517	8773.503
#2	7569.519	109725.5	10268.88	5657.720	8750.489
#3	7562.717	109885.6	10318.84	5697.575	8750.486

Sample Name: CCV04 Acquired: 10/3/2025 16:45:32 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.933448**	**5.246645**	**4.696208**	**5.059970**	**5.018065**	**9.417425**
Stddev	.008142	.037183	.010291	.013651	.006821	.041399
%RSD	.1650364	.7086980	.2191299	.2697799	.1359194	.4396016
#1	4.924452	5.211995	4.695968	5.044800	5.010219	9.370301
#2	4.935583	5.242012	4.706617	5.071263	5.022578	9.447946
#3	4.940310	5.285927	4.686039	5.063847	5.021397	9.434027

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.781563**	**.2335683**	**2.362950**	**23.56993**	**.9381022**	**2.366274**
Stddev	.182587	.0018242	.005033	.12919	.0038482	.004981
%RSD	1.866641	.7810311	.2129829	.5480956	.4102125	.2105144
#1	9.572816	.2322365	2.362797	23.43019	.9398151	2.364000
#2	9.860312	.2328210	2.368058	23.59460	.9407965	2.371987
#3	9.911559	.2356476	2.357996	23.68501	.9336949	2.362835

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.210032**	**5.124981**	**2.371863**	**22.71524**	**2.373609**	**1.213483**
Stddev	.000833	.043002	.013221	.22829	.004487	.004870
%RSD	.0688629	.8390607	.5574035	1.004997	.1890236	.4013243
#1	1.209097	5.157858	2.359161	22.45172	2.372315	1.217369
#2	1.210696	5.140768	2.370879	22.85256	2.378600	1.215060
#3	1.210303	5.076318	2.385548	22.84145	2.369911	1.208020

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.41222**	**2.391289**	**2.418260**	**24.10455**	F **4.458670**	**4.872827**
Stddev	.18396	.009250	.014140	.06551	.043576	.010217
%RSD	.7239222	.3868282	.5847149	.2717834	.9773393	.2096686
#1	25.47765	2.380608	2.427608	24.09588	4.423681	4.862703
#2	25.55454	2.396707	2.425178	24.17396	4.444847	4.883134
#3	25.20449	2.396552	2.401993	24.04380	4.507481	4.872644

Sample Name: CCV04 Acquired: 10/3/2025 16:45:32 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.719723**	**4.777069**	**5.051511**	**4.595194**	**4.985802**	**4.709911**
Stddev	.016234	.026666	.030799	.029411	.026010	.021847
%RSD	.3439644	.5582186	.6097077	.6400381	.5216792	.4638611
#1	4.718736	4.746790	5.030263	4.596824	4.970074	4.685771
#2	4.736428	4.787362	5.086833	4.623756	5.015824	4.715638
#3	4.704004	4.797055	5.037437	4.565002	4.971507	4.728325

Elem	Sr4077
Units	ppm
Avg	**4.878822**
Stddev	.008443
%RSD	.1730500
#1	4.870131
#2	4.879342
#3	4.886992

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7309.695**	**104011.2**	**10079.19**	**5466.502**	**8554.740**
Stddev	5.873	529.7	77.58	46.947	18.468
%RSD	.0803483	.5092385	.7697084	.8588182	.2158848
#1	7304.548	103984.4	10160.10	5462.153	8544.380
#2	7308.445	103495.4	10072.04	5421.881	8543.777
#3	7316.093	104553.7	10005.43	5515.473	8576.062

Sample Name: CCB04 Acquired: 10/3/2025 16:49:57 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.002337**	**-.001141**	**-.000236**	**.0016643**	**-.000544**	**-.000148**
Stddev	.001994	.000876	.001402	.0012379	.000576	.012527
%RSD	85.29430	76.79486	595.2958	74.38067	105.9294	8460.128
#1	-.003544	-.000133	.001051	.0002661	-.000026	.013840
#2	-.000036	-.001571	-.001730	.0026207	-.000441	-.003952
#3	-.003432	-.001719	-.000027	.0021062	-.001164	-.010333

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.010298**	**.0001723**	**.0000390**	**-.021500**	**-.000737**	**-.000063**
Stddev	.000242	.0000540	.0000449	.005693	.000086	.000215
%RSD	2.350485	31.35780	115.0906	26.47783	11.72657	339.1794
#1	-.010019	.0001103	.0000765	-.015230	-.000796	.000093
#2	-.010415	.0002089	.0000513	-.022926	-.000638	-.000308
#3	-.010459	.0001978	-.000011	-.026345	-.000777	.000026

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000361**	**-.004288**	**.0002076**	**.0168827**	**.0002755**	**-.000779**
Stddev	.000201	.003687	.0006358	.0227277	.0005202	.000147
%RSD	55.48384	85.98785	306.2486	134.6210	188.8191	18.81839
#1	-.000297	-.000072	-.000519	.0107681	.0007658	-.000786
#2	-.000586	-.005881	.000660	-.002162	-.000270	-.000630
#3	-.000201	-.006910	.000482	.042042	.000331	-.000923

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.125696**	**-.001272**	**-.000046**	**.0379385**	**-.005137**	**.0006877**
Stddev	.020782	.001437	.000128	.0276111	.000734	.0003540
%RSD	16.53367	112.9652	279.7049	72.77855	14.28735	51.47863
#1	-.133877	-.000697	-.000181	.0599321	-.004632	.0010822
#2	-.102068	-.000212	.000075	.0469312	-.004799	.0003975
#3	-.141142	-.002907	-.000032	.0069521	-.005979	.0005835

Sample Name: CCB04 Acquired: 10/3/2025 16:49:57 Type: Unk
Method: 6010-200.7 NEW(v271) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.023343	-.000871	.0049208	.0073944	-.001678	-.006741
Stddev	.000188	.001334	.0123598	.0005795	.003083	.001252
%RSD	.8035729	153.1352	251.1743	7.837244	183.7130	18.57225
#1	-.023233	-.001112	.0049301	.0071923	-.004825	-.006489
#2	-.023237	.000567	-.007444	.0069431	-.001547	-.005635
#3	-.023559	-.002068	.017276	.0080479	.001337	-.008100

Elem	Sr4077
Units	ppm
Avg	-.000004
Stddev	.000119
%RSD	2876.302
#1	.000067
#2	-.000141
#3	.000062

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7601.350	109140.7	9985.879	5696.663	9417.114
Stddev	10.431	83.6	21.935	13.579	5.342
%RSD	.1372239	.0765870	.2196584	.2383655	.0567313
#1	7601.520	109175.4	10011.16	5705.078	9416.590
#2	7611.695	109201.3	9974.60	5703.912	9422.699
#3	7590.835	109045.3	9971.88	5680.998	9412.052

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB169937

SOP ID : M3010A-Digestion-17

SDG No : N/A

Matrix : WATER

Pippete ID: ICP A

Balance ID : N/A

Filter paper ID : N/A

pH Strip ID : M6069

Hood ID : #3

Block ID: 1. HOT BOCK #1 2. N/A

Start Digest Date: 10/01/2025 **Time :** 10:45 **Temp :** 96 °C

End Digest Date: 10/01/2025 **Time :** 13:50 **Temp :** 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: SLB,

Supervisor Signature:

Temp : 1. 96°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
LFS-1	0.25	M6180
LFS-2	0.25	M6181
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Conc. HNO3	3.00	M6158
1:1 HCL	5.00	MP87148
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
10/01/25 14:50	SLB met dig	SLB Metals Cage
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB169937

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
PB169937BL	PBW937	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	9
PB169937BS	LCS937	<2	50	25	Colorless	Colorless	Clear	Clear	M6180,M6181	10
Q3254-01	MW-1	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	11
Q3254-02	MW-1	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	12
Q3254-03	MW-2	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	13
Q3254-04	MW-2	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	14
Q3254-05	MW-3	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	15
Q3254-06	MW-3	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	16
Q3254-07	MW-4	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	17
Q3254-07MS	MW-4MS	<2	50	25	Colorless	Colorless	Clear	Clear	M6180,M6181	19
Q3254-07MSD	MW-4MSD	<2	50	25	Colorless	Colorless	Clear	Clear	M6180,M6181	20
Q3254-07DUP	MW-4DUP	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	18
Q3254-08	MW-4	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	21

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB169937 **WorkList ID :** 192213 **Department :** Digestion **Date :** 10-01-2025 09:59:50

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3254-01	MW-1	Water	Metals Group4	1:1 HNO3 to pH < 2	LOCK01	D31	09/29/2025	6010D
Q3254-02	MW-1	Water	Dissolved Metals Group5	1:1 HNO3 to pH < 2	LOCK01	D31	09/29/2025	6010D
Q3254-03	MW-2	Water	Metals Group4	1:1 HNO3 to pH < 2	LOCK01	D31	09/29/2025	6010D
Q3254-04	MW-2	Water	Dissolved Metals Group5	1:1 HNO3 to pH < 2	LOCK01	D31	09/29/2025	6010D
Q3254-05	MW-3	Water	Metals Group4	1:1 HNO3 to pH < 2	LOCK01	D31	09/29/2025	6010D
Q3254-06	MW-3	Water	Dissolved Metals Group5	1:1 HNO3 to pH < 2	LOCK01	D31	09/29/2025	6010D
Q3254-07	MW-4	Water	Metals Group4	1:1 HNO3 to pH < 2	LOCK01	D31	09/29/2025	6010D
Q3254-08	MW-4	Water	Dissolved Metals Group5	1:1 HNO3 to pH < 2	LOCK01	D31	09/29/2025	6010D

Date/Time 10/01/25 10:20
Raw Sample Received by: SKS metdig
Raw Sample Relinquished by: CCCSM

Date/Time 10/01/2025 11:20
Raw Sample Received by: CPCSM
Raw Sample Relinquished by: SKS metdig

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB137406

Review By	Janvi	Review On	10/3/2025 3:35:00 PM
Supervise By	jaswal	Supervise On	10/7/2025 1:56:16 PM

STD. NAME	STD REF.#
ICAL Standard	MP87031,MP87038,MP87035,MP87034,MP87033,MP87032
ICV Standard	MP87047,MP87038
CCV Standard	MP87042
ICSA Standard	MP87040,MP87048
CRI Standard	MP87038
LCS Standard	
Chk Standard	MP87043,MP87044,MP87045,MP87046,MP87049

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	10/02/25 10:37		Jaswal	OK
2	S1	S1	CAL2	10/02/25 10:42		Jaswal	OK
3	S2	S2	CAL3	10/02/25 10:46		Jaswal	OK
4	S3	S3	CAL4	10/02/25 10:50		Jaswal	OK
5	S4	S4	CAL5	10/02/25 10:54		Jaswal	OK
6	S5	S5	CAL6	10/02/25 10:58		Jaswal	OK
7	ICV01	ICV01	ICV	10/02/25 11:07		Jaswal	OK
8	LLICV01	LLICV01	LLICV	10/02/25 11:11		Jaswal	OK
9	ICB01	ICB01	ICB	10/02/25 11:27		Jaswal	OK
10	CRI01	CRI01	CRDL	10/02/25 11:36		Jaswal	OK
11	ICSA01	ICSA01	ICSA	10/02/25 11:42		Jaswal	OK
12	ICSAB01	ICSAB01	ICSAB	10/02/25 11:46		Jaswal	OK
13	ICSADL	ICSADL	ICSA	10/02/25 11:50		Jaswal	OK
14	ICSABDL	ICSABDL	ICSAB	10/02/25 11:54		Jaswal	OK
15	CCV01	CCV01	CCV	10/02/25 11:58		Jaswal	OK
16	CCB01	CCB01	CCB	10/02/25 12:02		Jaswal	OK
17	LR-1	LR-1	HIGH STD	10/02/25 12:06		Jaswal	OK
18	LR-2	LR-2	HIGH STD	10/02/25 12:11		Jaswal	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB137406

Review By	Janvi	Review On	10/3/2025 3:35:00 PM
Supervise By	jaswal	Supervise On	10/7/2025 1:56:16 PM

STD. NAME	STD REF.#
ICAL Standard	MP87031,MP87038,MP87035,MP87034,MP87033,MP87032
ICV Standard	MP87047,MP87038
CCV Standard	MP87042
ICSA Standard	MP87040,MP87048
CRI Standard	MP87038
LCS Standard	
Chk Standard	MP87043,MP87044,MP87045,MP87046,MP87049

19	LR-3	LR-3	HIGH STD	10/02/25 12:42		Jaswal	OK
20	Q3255-01	CONCRETE-1-WC	SAM	10/02/25 12:55		Jaswal	OK
21	Q3256-01	SOIL-PILE-1-WC	SAM	10/02/25 13:00		Jaswal	OK
22	Q3256-01DUP	SOIL-PILE-1-WCDUP	DUP	10/02/25 13:04		Jaswal	OK
23	CCV02	CCV02	CCV	10/02/25 13:48		Jaswal	OK
24	CCB02	CCB02	CCB	10/02/25 13:52		Jaswal	OK
25	Q3256-01L	SOIL-PILE-1-WCL	SD	10/02/25 14:07		Jaswal	OK
26	Q3256-01MS	SOIL-PILE-1-WCMS	MS	10/02/25 14:11		Jaswal	OK
27	Q3256-01MSD	SOIL-PILE-1-WCMSD	MSD	10/02/25 14:15		Jaswal	OK
28	Q3256-01A	SOIL-PILE-1-WCA	PS	10/02/25 14:19	0.1ml of M6007 and M6017 in 10ml sample.	Jaswal	OK
29	Q3256-05	SOIL-PILE-2-WC	SAM	10/02/25 14:22		Jaswal	OK
30	Q3257-01	ENV1-6FT	SAM	10/02/25 14:26	Ag is oversaturate	Jaswal	Dilution
31	Q3257-02	ENV2-6FT	SAM	10/02/25 14:30	Ag is oversaturate	Jaswal	Dilution
32	Q3254-01	MW-1	SAM	10/02/25 14:34		Jaswal	OK
33	Q3254-02	MW-1	SAM	10/02/25 14:38		Jaswal	OK
34	Q3254-03	MW-2	SAM	10/02/25 14:43		Jaswal	OK
35	CCV03	CCV03	CCV	10/02/25 14:47		Jaswal	OK
36	CCB03	CCB03	CCB	10/02/25 14:53		Jaswal	OK
37	Q3254-04	MW-2	SAM	10/02/25 14:57		Jaswal	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB137406

Review By	Janvi	Review On	10/3/2025 3:35:00 PM
Supervise By	jaswal	Supervise On	10/7/2025 1:56:16 PM

STD. NAME	STD REF.#
ICAL Standard	MP87031,MP87038,MP87035,MP87034,MP87033,MP87032
ICV Standard	MP87047,MP87038
CCV Standard	MP87042
ICSA Standard	MP87040,MP87048
CRI Standard	MP87038
LCS Standard	
Chk Standard	MP87043,MP87044,MP87045,MP87046,MP87049

38	Q3254-05	MW-3	SAM	10/02/25 15:01		Jaswal	OK
39	Q3254-06	MW-3	SAM	10/02/25 15:05		Jaswal	OK
40	Q3254-07	MW-4	SAM	10/02/25 15:09		Jaswal	OK
41	Q3254-07DUP	MW-4DUP	DUP	10/02/25 15:13		Jaswal	OK
42	Q3254-07L	MW-4L	SD	10/02/25 15:18		Jaswal	OK
43	Q3254-07MS	MW-4MS	MS	10/02/25 15:22		Jaswal	OK
44	Q3254-07MSD	MW-4MSD	MSD	10/02/25 15:26		Jaswal	OK
45	Q3254-07A	MW-4A	PS	10/02/25 15:30	0.1ml of M6007 and M6017 in 10ml sample.	Jaswal	OK
46	Q3254-08	MW-4	SAM	10/02/25 15:34		Jaswal	OK
47	CCV04	CCV04	CCV	10/02/25 15:54		Jaswal	OK
48	CCB04	CCB04	CCB	10/02/25 16:05		Jaswal	OK
49	Q3245-24	12-1	SAM	10/02/25 16:47		Jaswal	OK
50	Q3245-16	12-8	SAM	10/02/25 16:51		Jaswal	OK
51	Q3245-08	13-1	SAM	10/02/25 16:55		Jaswal	OK
52	Q3245-24DUP	12-1DUP	DUP	10/02/25 16:59		Jaswal	OK
53	Q3245-24L	12-1L	SD	10/02/25 17:04		Jaswal	OK
54	Q3245-24MS	12-1MS	MS	10/02/25 17:21		Jaswal	OK
55	CCV05	CCV05	CCV	10/02/25 17:31		Jaswal	OK
56	CCB05	CCB05	CCB	10/02/25 17:35		Jaswal	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB137406

Review By	Janvi	Review On	10/3/2025 3:35:00 PM
Supervise By	jaswal	Supervise On	10/7/2025 1:56:16 PM

STD. NAME	STD REF.#
ICAL Standard	MP87031,MP87038,MP87035,MP87034,MP87033,MP87032
ICV Standard	MP87047,MP87038
CCV Standard	MP87042
ICSA Standard	MP87040,MP87048
CRI Standard	MP87038
LCS Standard	
Chk Standard	MP87043,MP87044,MP87045,MP87046,MP87049

57	Q3245-24MSD	12-1MSD	MSD	10/02/25 17:45		Jaswal	OK
58	Q3245-24A	12-1A	PS	10/02/25 17:49	0.1ml of M6007 and M6017 in 10ml sample.	Jaswal	OK
59	Q2409-05	COP-SOIL-PILE	SAM	10/02/25 17:53		Jaswal	OK
60	Q2409-05DUP	COP-SOIL-PILEDUP	DUP	10/02/25 17:57		Jaswal	OK
61	Q2409-05L	COP-SOIL-PILEL	SD	10/02/25 18:01		Jaswal	OK
62	Q2409-05MS	COP-SOIL-PILEMS	MS	10/02/25 18:05		Jaswal	OK
63	Q2409-05MSD	COP-SOIL-PILEMSD	MSD	10/02/25 18:09		Jaswal	OK
64	Q2409-05A	COP-SOIL-PILEA	PS	10/02/25 18:13	0.1ml of M6007 and M6017 in 10ml sample.	Jaswal	OK
65	CCV06	CCV06	CCV	10/02/25 18:17		Jaswal	OK
66	CCB06	CCB06	CCB	10/02/25 18:21		Jaswal	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB137426

Review By	Janvi	Review On	10/7/2025 3:33:56 PM
Supervise By	jaswal	Supervise On	10/7/2025 4:45:27 PM

STD. NAME	STD REF.#
ICAL Standard	MP87031,MP87038,MP87035,MP87034,MP87033,MP87032
ICV Standard	MP87047,MP87038
CCV Standard	MP87042
ICSA Standard	MP87040,MP87048
CRI Standard	MP87038
LCS Standard	
Chk Standard	MP87043,MP87044,MP87045,MP87046,MP87049

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	10/03/25 11:53		Jaswal	OK
2	S1	S1	CAL2	10/03/25 11:58		Jaswal	OK
3	S2	S2	CAL3	10/03/25 12:02		Jaswal	OK
4	S3	S3	CAL4	10/03/25 12:06		Jaswal	OK
5	S4	S4	CAL5	10/03/25 12:10		Jaswal	OK
6	S5	S5	CAL6	10/03/25 12:14		Jaswal	OK
7	ICV01	ICV01	ICV	10/03/25 12:18		Jaswal	OK
8	LLICV01	LLICV01	LLICV	10/03/25 13:05		Jaswal	OK
9	ICB01	ICB01	ICB	10/03/25 13:12		Jaswal	OK
10	CRI01	CRI01	CRDL	10/03/25 13:16		Jaswal	OK
11	ICSA01	ICSA01	ICSA	10/03/25 13:20		Jaswal	OK
12	ICSAB01	ICSAB01	ICSAB	10/03/25 13:25		Jaswal	OK
13	ICSADL	ICSADL	ICSA	10/03/25 13:29		Jaswal	OK
14	ICSABDL	ICSABDL	ICSAB	10/03/25 13:33		Jaswal	OK
15	CCV01	CCV01	CCV	10/03/25 13:37		Jaswal	OK
16	CCB01	CCB01	CCB	10/03/25 13:41		Jaswal	OK
17	LR-1	LR-1	HIGH STD	10/03/25 13:45		Jaswal	OK
18	LR-2	LR-2	HIGH STD	10/03/25 13:50		Jaswal	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB137426

Review By	Janvi	Review On	10/7/2025 3:33:56 PM
Supervise By	jaswal	Supervise On	10/7/2025 4:45:27 PM

STD. NAME	STD REF.#
ICAL Standard	MP87031,MP87038,MP87035,MP87034,MP87033,MP87032
ICV Standard	MP87047,MP87038
CCV Standard	MP87042
ICSA Standard	MP87040,MP87048
CRI Standard	MP87038
LCS Standard	
Chk Standard	MP87043,MP87044,MP87045,MP87046,MP87049

19	PB169935BS	PB169935BS	LCS	10/03/25 14:03		Jaswal	OK
20	PB169937BL	PB169937BL	MB	10/03/25 14:07		Jaswal	OK
21	PB169937BS	PB169937BS	LCS	10/03/25 14:12		Jaswal	OK
22	PB169958BL	PB169958BL	MB	10/03/25 14:16		Jaswal	OK
23	PB169958BS	PB169958BS	LCS	10/03/25 14:20		Jaswal	OK
24	PB169963BL	PB169963BL	MB	10/03/25 14:24		Jaswal	OK
25	PB169935BL	PB169935BL	MB	10/03/25 14:33		Jaswal	OK
26	LR-3	LR-3	HIGH STD	10/03/25 14:49		Jaswal	OK
27	CCV02	CCV02	CCV	10/03/25 15:00		Jaswal	OK
28	CCB02	CCB02	CCB	10/03/25 15:04		Jaswal	OK
29	PB169963BS	PB169963BS	LCS	10/03/25 15:08		Jaswal	OK
30	PB169960BL	PB169960BL	MB	10/03/25 15:12		Jaswal	OK
31	PB169960BS	PB169960BS	LCS	10/03/25 15:17		Jaswal	OK
32	PB169959BL	PB169959BL	MB	10/03/25 15:21		Jaswal	OK
33	PB169959BS	PB169959BS	LCS	10/03/25 15:25		Jaswal	OK
34	Q3258-06	COMPOSITE	SAM	10/03/25 15:29		Jaswal	OK
35	Q3263-01	251818	SAM	10/03/25 15:34		Jaswal	OK
36	Q3263-02	266380	SAM	10/03/25 15:38		Jaswal	OK
37	Q3263-02DUP	266380DUP	DUP	10/03/25 15:42		Jaswal	OK
38	Q3263-02L	266380L	SD	10/03/25 15:46		Jaswal	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB137426

Review By	Janvi	Review On	10/7/2025 3:33:56 PM
Supervise By	jaswal	Supervise On	10/7/2025 4:45:27 PM

STD. NAME	STD REF.#
ICAL Standard	MP87031,MP87038,MP87035,MP87034,MP87033,MP87032
ICV Standard	MP87047,MP87038
CCV Standard	MP87042
ICSA Standard	MP87040,MP87048
CRI Standard	MP87038
LCS Standard	
Chk Standard	MP87043,MP87044,MP87045,MP87046,MP87049

39	CCV03	CCV03	CCV	10/03/25 15:51		Jaswal	OK
40	CCB03	CCB03	CCB	10/03/25 16:00		Jaswal	OK
41	Q3263-02MS	266380MS	MS	10/03/25 16:04		Jaswal	OK
42	Q3263-02MSD	266380MSD	MSD	10/03/25 16:08		Jaswal	OK
43	Q3263-02A	266380A	PS	10/03/25 16:12	0.1 ml of each m6008 and m6017 in 10ml sample.	Jaswal	OK
44	Q3269-01	EG1-TP1	SAM	10/03/25 16:16		Jaswal	OK
45	Q3269-04	EG1-TP2	SAM	10/03/25 16:20		Jaswal	OK
46	Q3262-01	PAD-100125	SAM	10/03/25 16:24		Jaswal	OK
47	Q3266-01	ENV-3-6FT	SAM	10/03/25 16:29		Jaswal	OK
48	Q3266-02	ENV-4-6FT	SAM	10/03/25 16:33	NOT USE	Jaswal	Not Ok
49	Q3266-02DUP	ENV-4-6FTDUP	DUP	10/03/25 16:37	NOT USE	Jaswal	Not Ok
50	Q3266-02L	ENV-4-6FTL	SD	10/03/25 16:41	NOT USE	Jaswal	Not Ok
51	CCV04	CCV04	CCV	10/03/25 16:45		Jaswal	OK
52	CCB04	CCB04	CCB	10/03/25 16:49		Jaswal	OK

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Prep Standard - Chemical Standard Summary

Order ID : Q3254

Test : Dissolved Metals Group5,Metals Group4

Prepbatch ID : PB169937,

Sequence ID/Qc Batch ID: LB137406,LB137406,LB137426,

Standard ID :
MP87031,MP87032,MP87033,MP87034,MP87035,MP87036,MP87038,MP87040,MP87042,MP87043,MP87044,MP87045,MP87046,MP87047,MP87048,MP87049,MP87148,

Chemical ID :
M5467,M5658,M5748,M5751,M5798,M5799,M5800,M5801,M5814,M5820,M5962,M5969,M5971,M5979,M5985,M5998,M6021,M6023,M6026,M6027,M6028,M6030,M6032,M6058,M6076,M6077,M6128,M6137,M6138,M6140,M6142,M6144,M6145,M6151,M6158,M6159,M6160,M6163,M6164,M6165,M6171,M6174,M6176,M6177,M6178,M6179,M6180,M6181,M6182,M6184,M6187,W3112,

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
902	ICP AES CAL BLK (SO/ICB/CCB)	MP87031	09/02/2025	10/10/2025	Sarabjit Jaswal	None	None	Janvi Patel 09/04/2025

FROM 125.00000ml of M6151 + 2350.00000ml of W3112 + 25.00000ml of M6187 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
907	ICP AES STD S (S5)	MP87032	09/02/2025	10/10/2025	Sarabjit Jaswal	None	None	Janvi Patel 09/04/2025

FROM 5.00000ml of M5467 + 5.00000ml of M5820 + 5.00000ml of M5969 + 5.00000ml of M5971 + 5.00000ml of M5998 + 5.00000ml of M6077 + 5.00000ml of M6160 + 5.00000ml of M6174 + 5.00000ml of M6176 + 455.00000ml of MP87031 = Final Quantity: 500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
910	ICP AES STD S4	MP87033	09/02/2025	10/10/2025	Sarabjit Jaswal	None	None	Janvi Patel 09/04/2025

FROM 50.00000ml of MP87031 + 50.00000ml of MP87032 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
909	ICP AES STD S3	MP87034	09/02/2025	10/10/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Janvi Patel 09/04/2025

FROM 25.00000ml of MP87032 + 75.00000ml of MP87031 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3913	ICP AES STD S2	MP87035	09/02/2025	10/10/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Janvi Patel 09/04/2025

FROM 16.00000ml of MP87032 + 184.00000ml of MP87031 = Final Quantity: 200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2950	ICP AES S1/CRI STOCK STD	MP87036	09/02/2025	10/10/2025	Sarabjit Jaswal	None	None	Janvi Patel 09/04/2025

FROM 0.03000ml of M5798 + 0.03000ml of M6028 + 0.04000ml of M6137 + 0.05000ml of M5658 + 0.05000ml of M6030 + 0.05000ml of M6140 + 0.05000ml of M6159 + 0.06000ml of M6177 + 0.10000ml of M5751 + 0.10000ml of M5801 + 0.10000ml of M5820 + 0.10000ml of M5962 + 0.10000ml of M5971 + 0.10000ml of M6128 + 0.10000ml of M6176 + 0.15000ml of M5800 + 0.20000ml of M5799 + 0.20000ml of M6021 + 0.20000ml of M6023 + 0.20000ml of M6027 + 0.20000ml of M6145 + 0.25000ml of M5467 + 0.25000ml of M6160 + 0.50000ml of M5814 + 0.50000ml of M6032 + 1.00000ml of M5979 + 1.00000ml of M6138 + 1.00000ml of M6142 + 1.00000ml of M6144 + 1.00000ml of M6171 + 1.00000ml of M6178 + 2.00000ml of M5969 + 88.29000ml of MP87031 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2951	ICP AES S1/CRI WORK STD	MP87038	09/02/2025	10/10/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Janvi Patel 09/04/2025

FROM 2.00000ml of MP87036 + 98.00000ml of MP87031 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
904	ICP AES ICSA SOLN	MP87040	09/02/2025	10/10/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Janvi Patel 09/04/2025

FROM 25.00000ml of M6182 + 225.00000ml of MP87031 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
911	ICP AES CCV SOLN	MP87042	09/02/2025	10/10/2025	Sarabjit Jaswal	None	None	Janvi Patel 09/04/2025

FROM 50.00000ml of MP87031 + 50.00000ml of MP87032 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
919	ICP AES INTERNAL STD	MP87043	09/02/2025	10/10/2025	Sarabjit Jaswal	None	None	Janvi Patel 09/04/2025

FROM 1.00000ml of M6179 + 10.00000ml of M5985 + 1969.00000ml of W3112 + 20.00000ml of M6187 = Final Quantity: 2000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
903	ICP AES RINSE SOLN	MP87044	09/02/2025	10/10/2025	Sarabjit Jaswal	None	None	Janvi Patel 09/04/2025

FROM 200.00000ml of M6187 + 9800.00000ml of W3112 = Final Quantity: 10000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4225	LR-1	MP87045	09/02/2025	10/10/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Janvi Patel 09/04/2025

FROM 11.50000ml of M6138 + 11.50000ml of M6144 + 11.50000ml of M6171 + 15.50000ml of MP87031 = Final Quantity: 50.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4226	LR-2	MP87046	09/02/2025	10/10/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Janvi Patel 09/04/2025

FROM 13.50000ml of M6140 + 9.00000ml of M6142 + 9.50000ml of M6159 + 18.00000ml of MP87031 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4163	NEW ICV-060925	MP87047	09/02/2025	10/10/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 09/04/2025

FROM 0.20000ml of M6058 + 0.40000ml of M6163 + 0.40000ml of M6164 + 0.40000ml of M6165 + 48.60000ml of MP87031 = Final Quantity: 50.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3494	ICP AES ICSAB SOLN-1	MP87048	09/02/2025	10/10/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 09/04/2025

FROM 0.05000ml of M6076 + 5.00000ml of M6182 + 5.00000ml of M6184 + 39.95000ml of MP87031 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4227	LR-3	MP87049	09/02/2025	10/10/2025	Sarabjit Jaswal	None	None	Janvi Patel 09/04/2025

FROM 1.15000ml of M6026 + 1.25000ml of M5658 + 1.25000ml of M5748 + 1.50000ml of M6145 + 2.50000ml of M5751 + 2.50000ml of M6128 + 39.85000ml of MP87031 = Final Quantity: 50.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
170	1:1HCL	MP87148	09/09/2025	02/17/2026	Sagar Kanani	None	None	Sarabjit Jaswal 09/10/2025

FROM 1250.00000ml of M6151 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57058 / Cerium, 1000PPM, 100ML	020623	02/06/2026	03/06/2023 / bin	03/01/2023 / bin	M5467

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58024 / Chromium, Cr, 500 ml, 1000 PPM	060523	06/05/2026	08/28/2023 / jaswal	08/25/2023 / jaswal	M5658

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ Nickel (Ni) 1000PPM	091223	09/12/2026	01/02/2024 / bin	12/20/2023 / jaswal	M5748

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	071723	07/17/2026	10/01/2024 / Jaswal	08/25/2023 / jaswal	M5751

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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.	57005 / B, 1000 PPM, 125 ml	071123	07/11/2026	03/26/2024 / Sohil	01/03/2024 / jaswal	M5814

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57015 / P, 1000 PPM, 125 ml	091123	09/11/2026	05/01/2024 / jaswal	02/09/2024 / jaswal	M5820

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57034 / Se, 1000 PPM, 125 ml	060624	06/06/2027	07/02/2024 / Jaswal	06/14/2024 / Jaswal	M5962

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57016 / S, 1000 PPM, 125 ml	122923	03/31/2026	03/31/2025 / kareem	06/11/2024 / Jaswal	M5969

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57003 / Li, 1000 PPM, 125 ml	061224	06/21/2027	06/06/2025 / Janvi	07/01/2024 / Jaswal	M5971

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGTI1-1 / TITANIUM 125mL 1000ug/mL	T2-TI719972	08/05/2026	08/06/2025 / Janvi	02/22/2024 / Jaswal	M5979

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGIN10-5 / INDIUM 1 x 500 ml	U2-IN729349	02/21/2028	10/08/2024 / Jaswal	06/14/2024 / Jaswal	M5985

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CLPP-CAL-3 / CLP CAL SOLUTION #3, 125mL	T2-MEB727800	07/30/2026	07/30/2025 / Janvi	02/22/2024 / kareem	M5998

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57023 / V, 1000 PPM, 125 ml	062424	06/24/2027	09/28/2024 / jaswal	08/05/2024 / Jaswal	M6021

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57081 / Tl, 1000 PPM, 125 ml	0624724	06/27/2027	08/05/2024 / kareem	08/05/2024 / Jaswal	M6023

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57182 / Pb, 10000 PPM, 125 ml	110923	11/09/2026	12/05/2024 / janvi	08/05/2024 / Jaswal	M6026

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57028 / Ni, 1000 PPM, 125 ml	062024	06/20/2027	06/04/2025 / Janvi	08/05/2024 / Jaswal	M6027

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	CHEM-QC-4 / CHEM-QC-4, Second Source, 1000 ug/ml, B, Mo, Si, Sn, Ti	V2-MEB746173	01/29/2026	01/29/2025 / JANVI	08/22/2024 / Jaswal	M6058

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	Z9651Q / CHEM-CLP-4/.25L	V2-MEB746762	01/01/2026	01/01/2025 / kareem	09/19/2024 / kareem	M6076

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	Z9651Q / CHEM-CLP-4/.25L	V2-MEB746762	09/06/2029	01/23/2025 / kareem	09/19/2024 / kareem	M6077

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.	58120 / Ca, 10000 PPM, 500 ml	121824	12/18/2027	04/17/2025 / Janvi	01/13/2025 / Jaswal	M6138

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58126 / Fe, 10000 PPM, 500 ml	011025	01/10/2028	06/25/2025 / Janvi	01/13/2025 / Jaswal	M6140

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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

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	02/17/2026	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 #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	10/09/2025	03/10/2025 / Eman	02/02/2025 / Sagar	M6158

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / Al, 10000 PPM, 500 ml	011325	03/18/2026	03/18/2025 / kareem	02/09/2025 / kareem	M6159

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57051 / Sb, 1000 PPM, 125 ml	071724	07/17/2027	03/24/2025 / kareem	10/18/2024 / kareem	M6160

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	QCP-CICV-1-125ML / EPA CLP ICP Verification Standard1	V2-MEB744107	06/08/2026	06/09/2025 / jaswal	06/06/2025 / jaswal	M6163

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	QCP-CICV-2-125ML / EPA CLP ICP Verification Standard2	U2-MEB733713	06/08/2026	06/09/2025 / jaswal	06/09/2025 / jaswal	M6164

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	QCP-CICV-3-125ML / EPA CLP ICP Verification Standard3	V2-MEB749572	06/08/2026	06/09/2025 / jaswal	06/09/2025 / jaswal	M6165

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	011525	01/15/2028	07/15/2025 / Janvi	02/13/2025 / Janvi	M6171

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CLPP-CAL-1 / CLP CAL SOLUTION #1, 125mL	V2-MEB742428	07/31/2026	07/31/2025 / Janvi	05/05/2025 / Janvi	M6174

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57038 / Sr, 1000 PPM, 125 ml	092724	09/27/2027	08/06/2025 / Janvi	08/06/2025 / Janvi	M6176

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ Lead (Pb) 1000PPM	031525	03/15/2028	08/06/2025 / Janvi	08/06/2025 / Janvi	M6177

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57042 / Mo, 1000 PPM, 125 ml	080528	08/05/2028	08/06/2025 / Janvi	08/06/2025 / Janvi	M6178

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGY10-1 / YTTRIUM 125mL 10,000ug/mL	V2-Y740548	08/05/2026	08/06/2025 / Janvi	06/02/2024 / Janvi	M6179

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	WW-LFS-1 / Laboratory Fortified Stock Solution 1, 125 ml	W2-MEB752149	02/05/2026	08/06/2025 / Janvi	07/22/2025 / Janvi	M6180

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	WW-LFS-2 / Laboratory Fortified Stock Solution 2, 125 ml	V2-MEB7433480	02/05/2026	08/06/2025 / Janvi	07/22/2025 / Janvi	M6181

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART A / ICSA (ICP) STOCK SOLN	ICSA-1211	02/05/2026	08/06/2025 / Janvi	03/06/2024 / Janvi	M6182

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART B / ICSAB (ICP) STOCK SOLN	ICSB-0710	02/05/2026	08/06/2025 / Janvi	03/06/2024 / Janvi	M6184

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24H0162012	01/28/2026	08/29/2025 / Sagar	08/08/2025 / Sagar	M6187

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6032

R: 8/5/24

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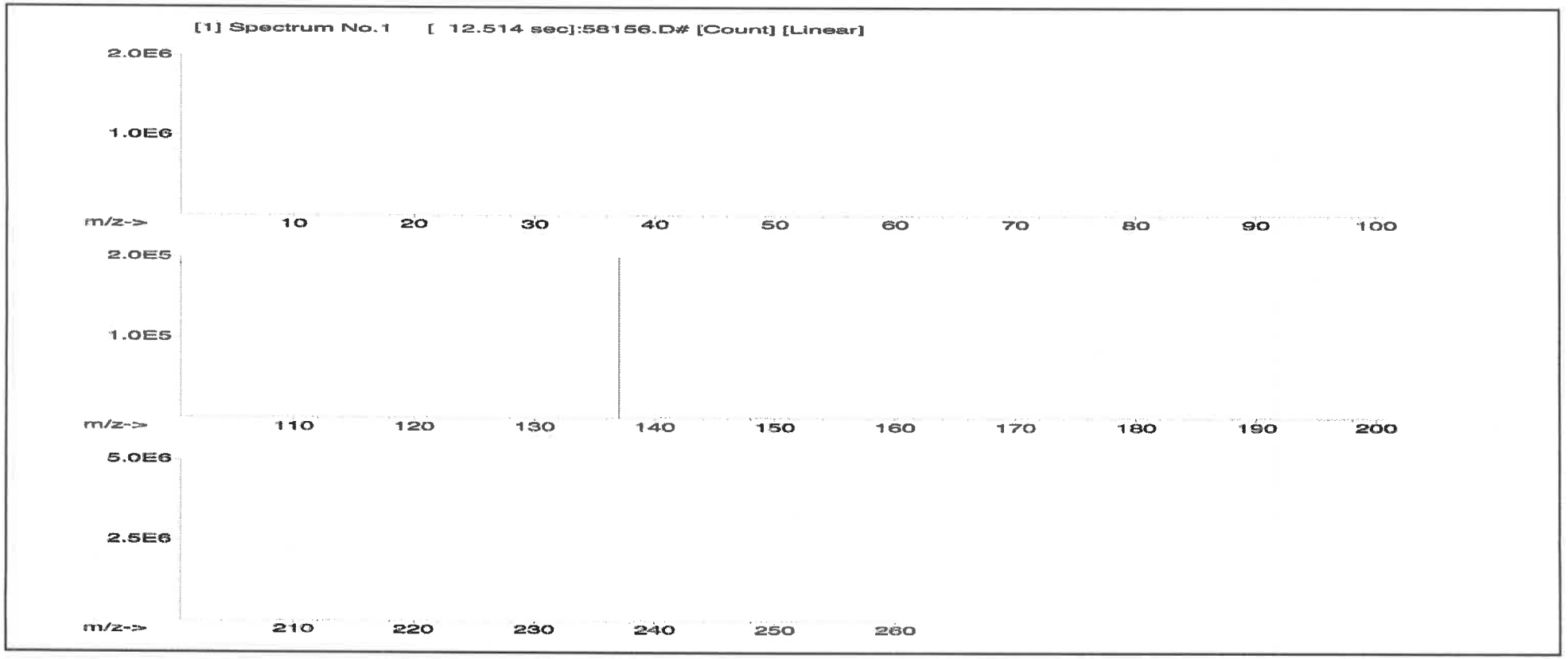
CERTIFIED WEIGHT REPORT:

Part Number:	**57056**		**Lot #**		
Lot Number:	**010924**	**Solvent:**	24002546	Nitric Acid	
Description:	**Barium (Ba)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	010927				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Giovanni Esposito		
Formulated By:	Giovanni Esposito	010924
Pedro Rentas		
Reviewed By:	Pedro L. Rentas	010924

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Barium nitrate (Ba)	IN023	BAD022019A1	1000	99.999	0.10	52.3	3.82417	3.82441	**1000.1**	**2.0**	10022-31-8	0.5 mg/m3	orl-rat 355 mg/kg	3104a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

M6028

R 8/5/24

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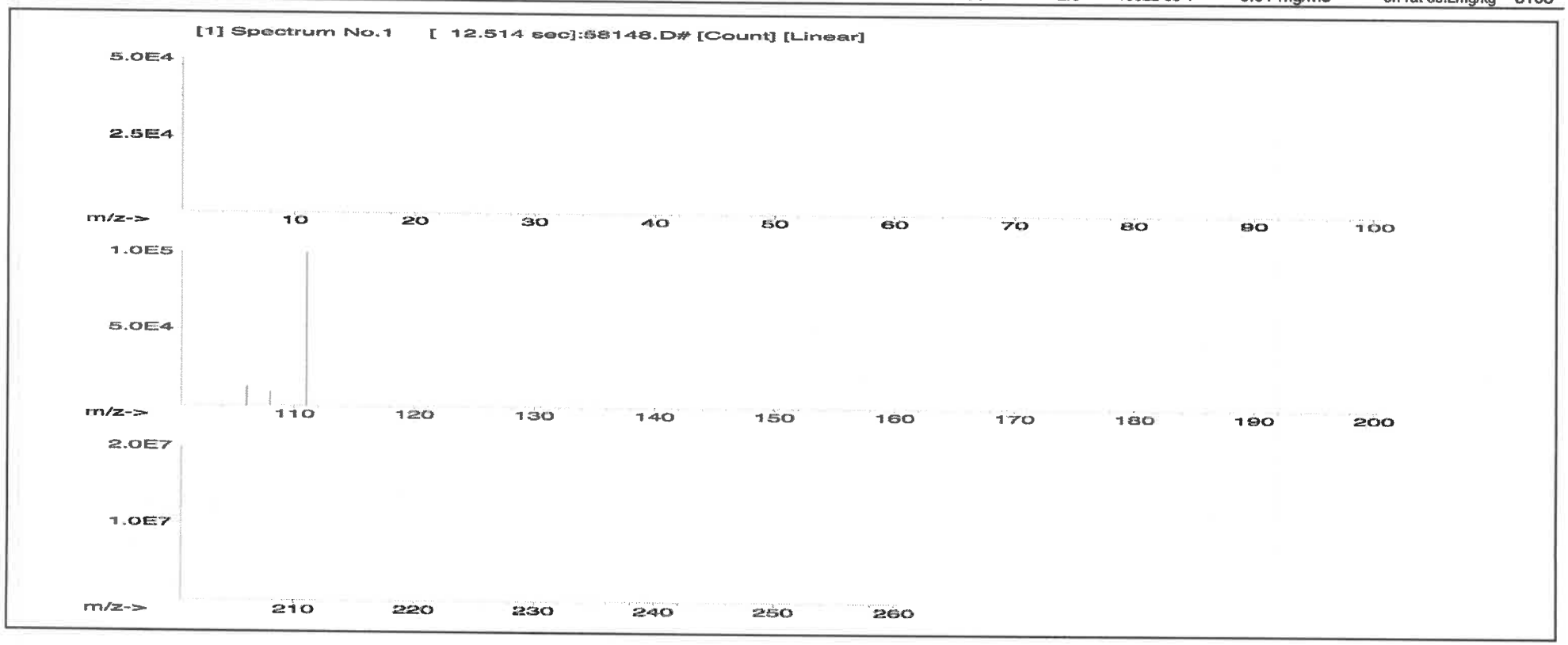
CERTIFIED WEIGHT REPORT:

Part Number:	**57048**			**Lot #**	
Lot Number:	**070124**		**Solvent:**	24002546	Nitric Acid
Description:	**Cadmium (Cd)**				
			2%	40.0 (mL)	Nitric Acid
Expiration Date:	070127				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty		

Aleah O'Brady		
Formulated By:	Aleah O'Brady	070124
Pedro Rentas		
Reviewed By:	Pedro L. Rentas	070124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cadmium nitrate tetrahydrate (Cd)	IN024	CDM092021A1	1000	99.999	0.10	36.5	5.4797	5.4804	**1000.1**	**2.0**	10022-68-1	0.01 mg/m3	orl-rat 60.2mg/kg	3108



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	T	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

M6026

R: 8/5/24

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CERTIFIED WEIGHT REPORT:

Part Number: 57182
Lot Number: 110923
Description: Lead (Pb)

Expiration Date: 110926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

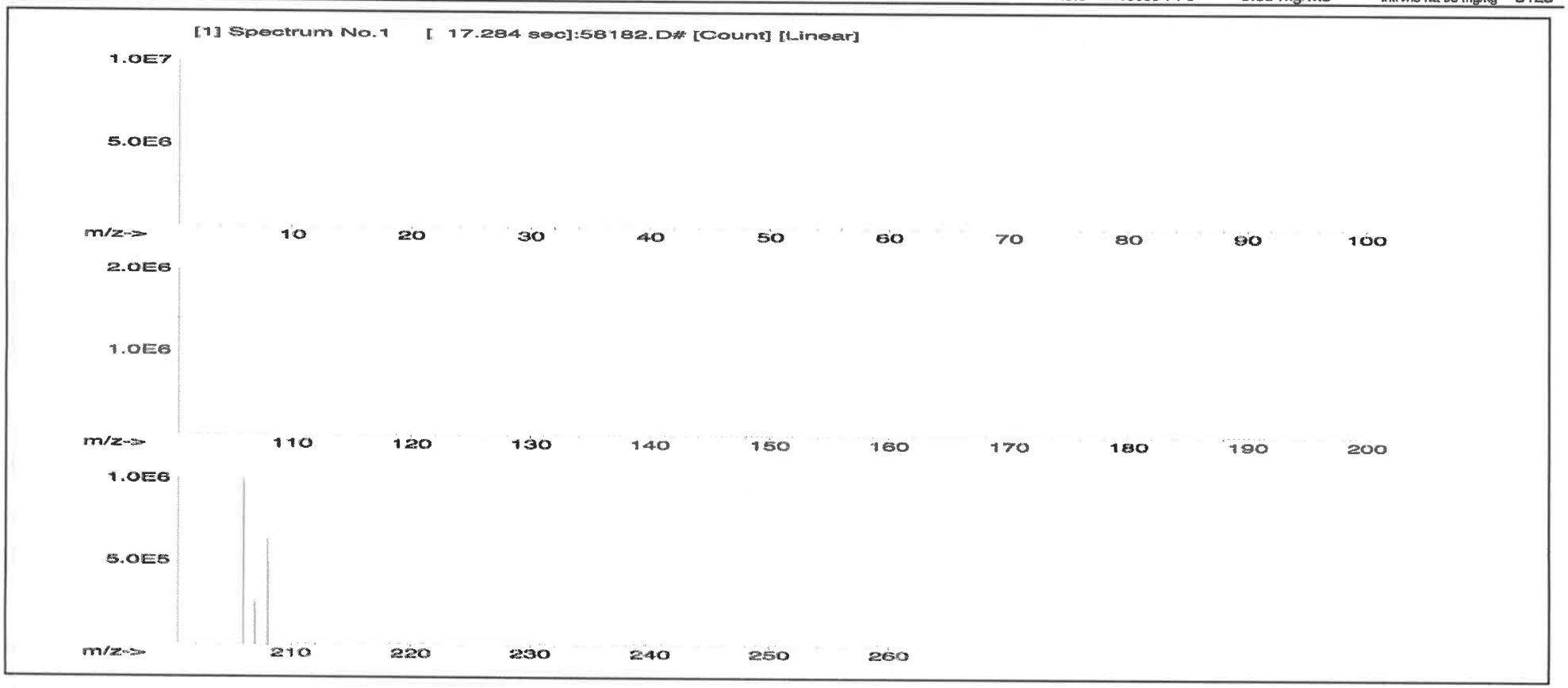
Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty

		Lot #	
Solvent:	24002546		Nitric Acid
	2%	40.0 (mL)	Nitric Acid

5E-05 Balance Uncertainty

Formulated By:	Lawence Barry	110923
Reviewed By:	Pedro L. Rentas	110923

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lead(II) nitrate (Pb)	IN029	PBD122016A1	10000	99.999	0.10	62.5	32.0006	32.0040	**10001.1**	**20.0**	10099-74-8	0.05 mg/m3	intrvns-rat 93 mg/kg	3128



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AR-1539 Certificate Number
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	T	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

M5467 R: 03/01/23 (LA)

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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CERTIFIED WEIGHT REPORT:

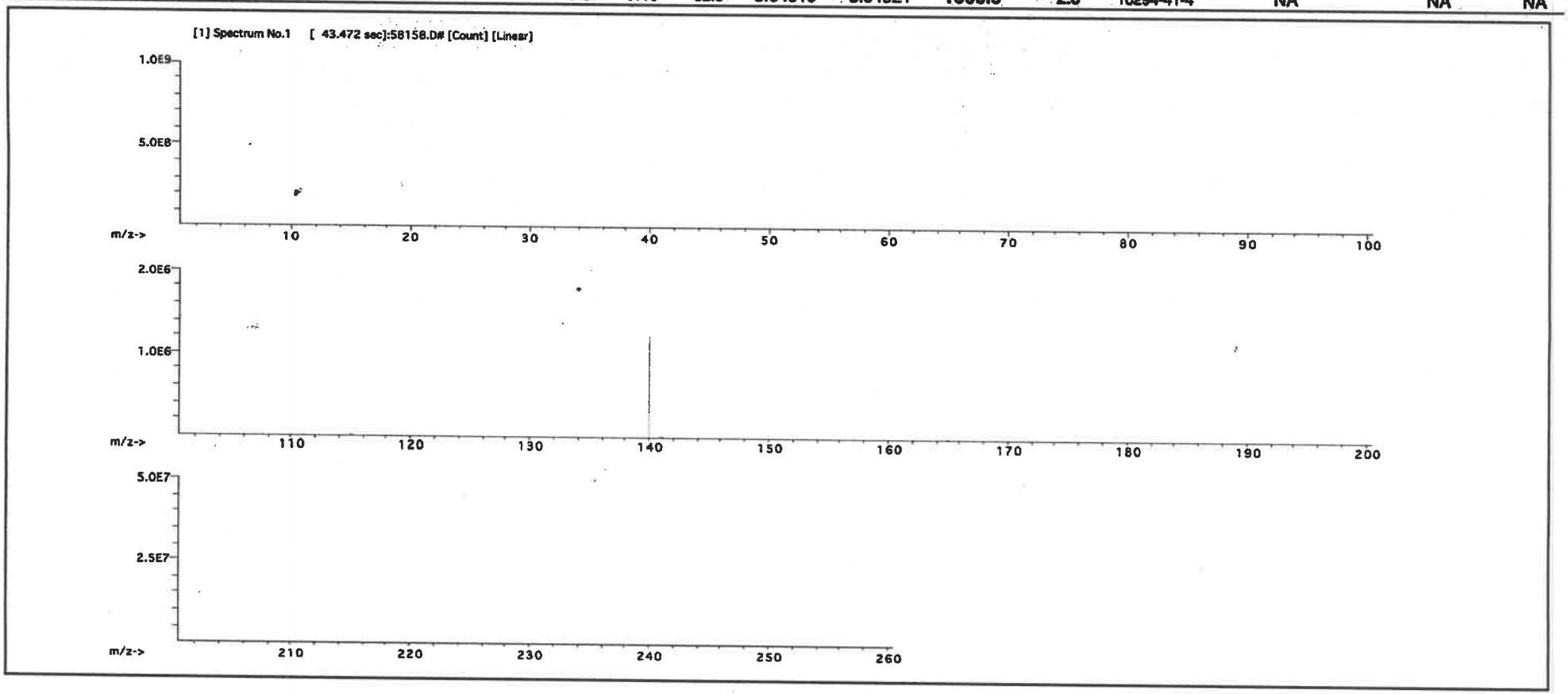
Part Number: 57058
Lot Number: 020623
Description: Cerium (Ce)

Expiration Date: 020626
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12

	Lot #		
Solvent:	21110221	Nitric Acid	
2%	20.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	020623
Reviewed By:	Pedro L. Rentas	020623

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cerium nitrate hexahydrate (Ce)	IN146	Z512CEB1	1000	99.999	0.10	32.8	3.04919	3.04921	1000.0	2.0	10294-41-4	NA	NA	NA



ICP-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	T	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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M5658 R ! 8/25/23

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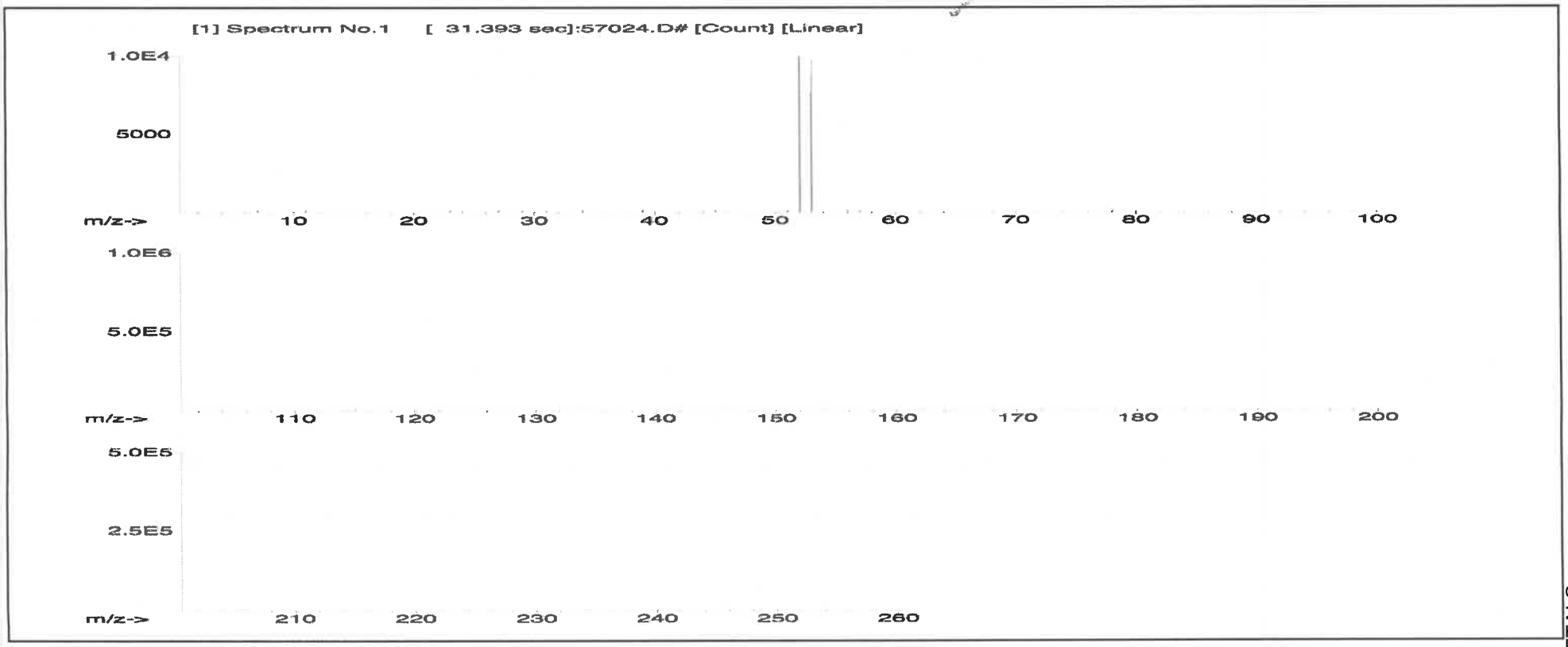
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58024**	21110221	Nitric Acid	
Lot Number:	**060523**			
Description:	**Chromium (Cr)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	060523
Reviewed By:	Pedro L. Rentas	060523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Chromium(III) nitrate nonahydrate (Cr)	58124	071122	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	7789-02-8	0.5 mg(Cr)/m3	orl-rat 3250 mg/kg	3112a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	T	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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Certified Reference Material CRM

R: 12/20/23 M5748

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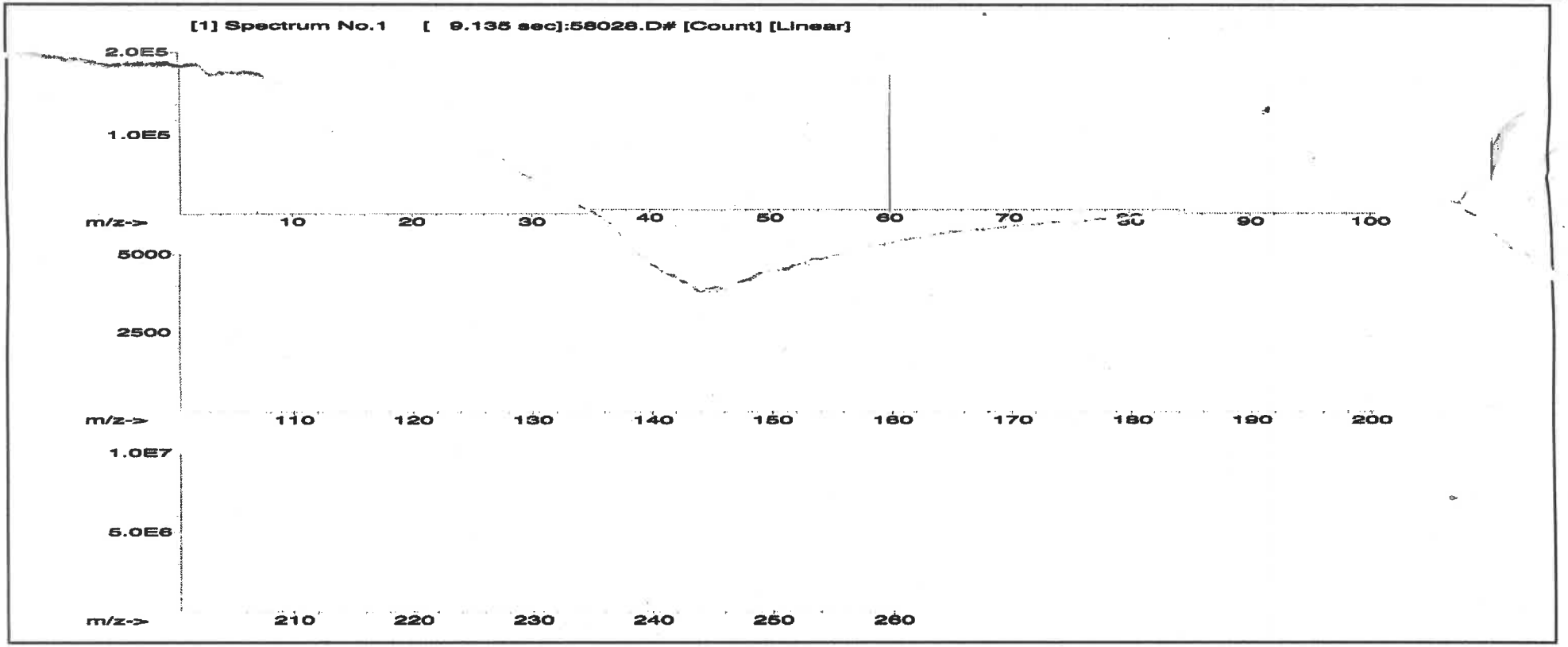
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57028**	24002546	Nitric Acid	
Lot Number:	**091223**			
Description:	**Nickel (Ni)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	091226			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	091223
Reviewed By:	Pedro L. Rentas	091223

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Nickel(II) nitrate hexahydrate (Ni)	58128	062023	0.1000	200.0	0.084	1000	10000.4	**1000.0**	2.2	13478-00-7	1 mg/m3	orl-rat 1620 mg/kg	3136



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	T	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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R: 8/25/23 M5751

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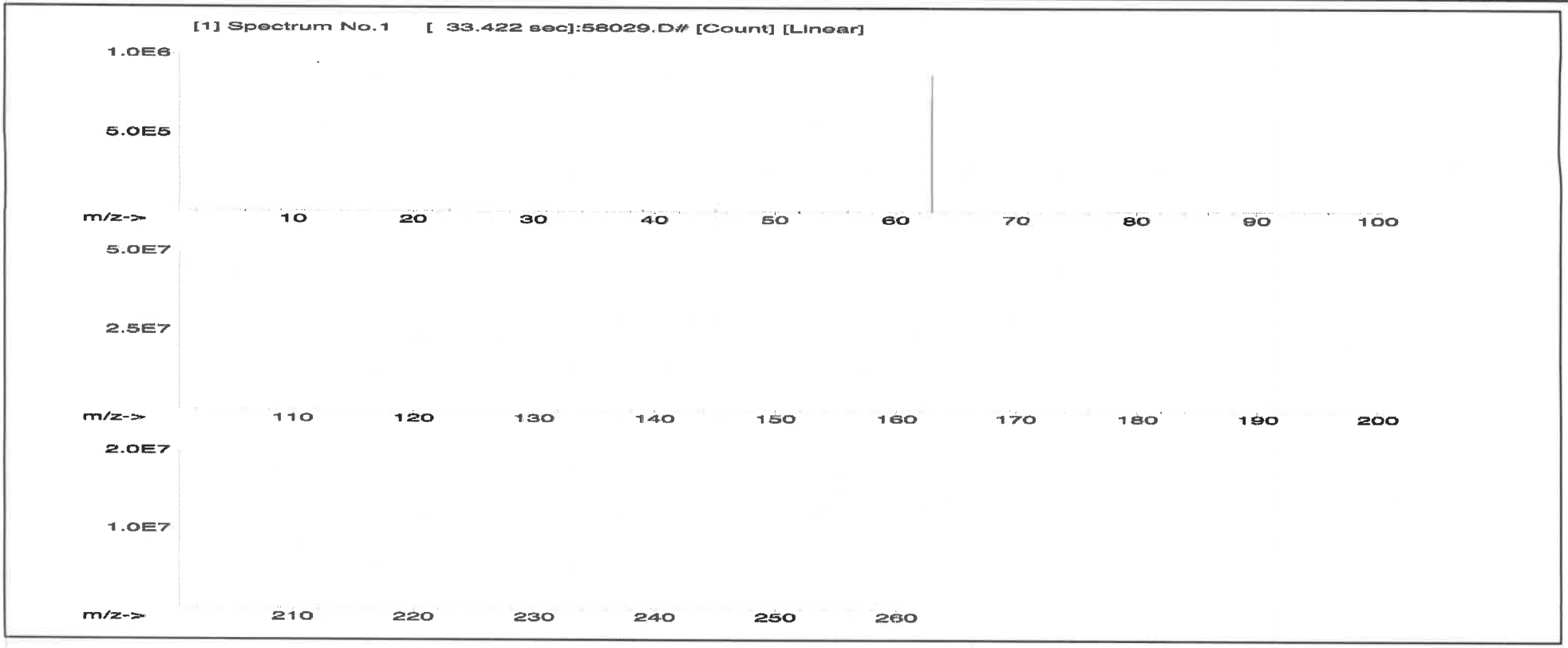
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58029**	21110221	Nitric Acid	
Lot Number:	**071723**			
Description:	**Copper (Cu)**	2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	071726			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	071723
Reviewed By:	Pedro L. Rentas	071723

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Copper(II) nitrate trihydrate (Cu)	58129	022723	0.1000	200.0	0.084	1000	10000.5	**1000.0**	**2.2**	10031-43-3	1 mg/m3	orl-rat 794 mg/kg	3114



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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R: 02/09/24 M5798

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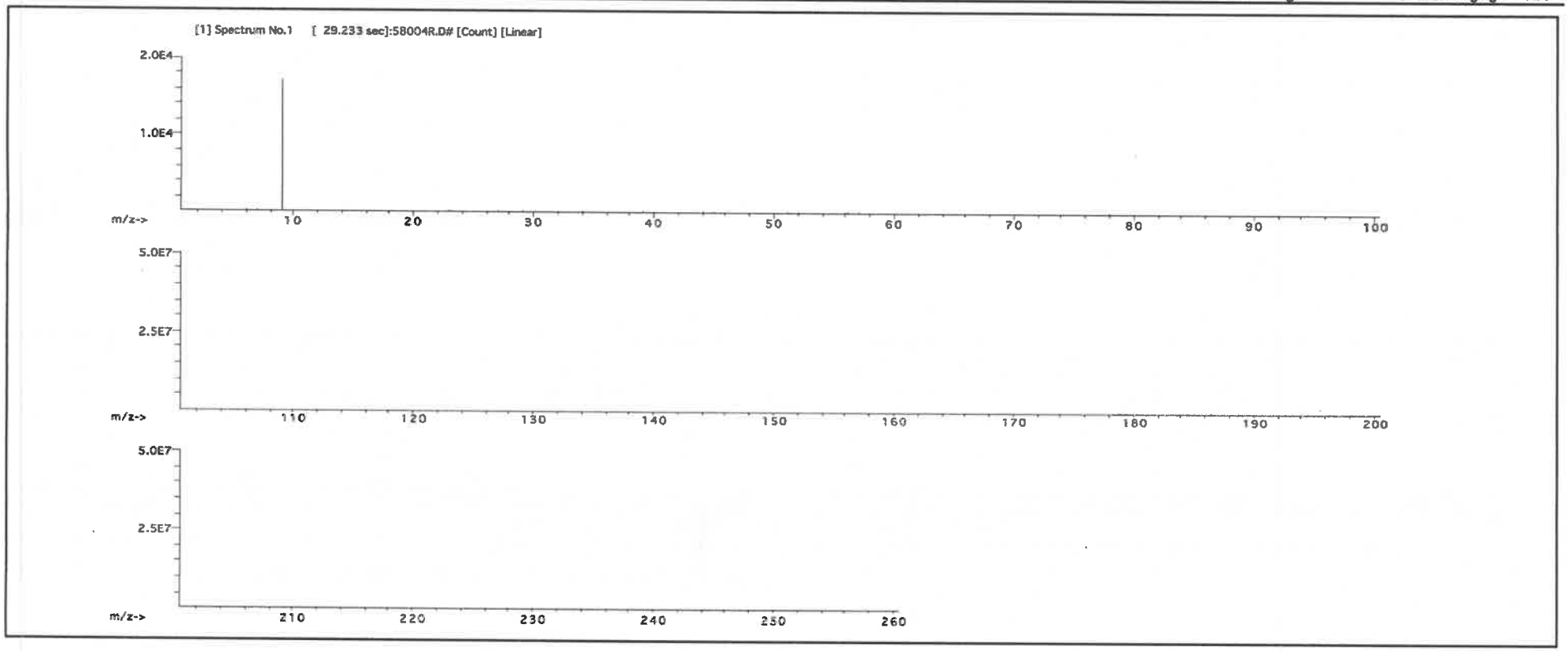
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57004**	24002546	Nitric Acid		
Lot Number:	**102523**				
Description:	**Beryllium (Be)**	2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	102526				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Beryllium nitrate (Be)	58104	091423	0.1000	200.0	0.084	1000	10001.5	**1000.0**	**2.2**	13597-99-4	0.2ug/m3	intrvns-rat 3.16mg/kg	NA



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	T	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

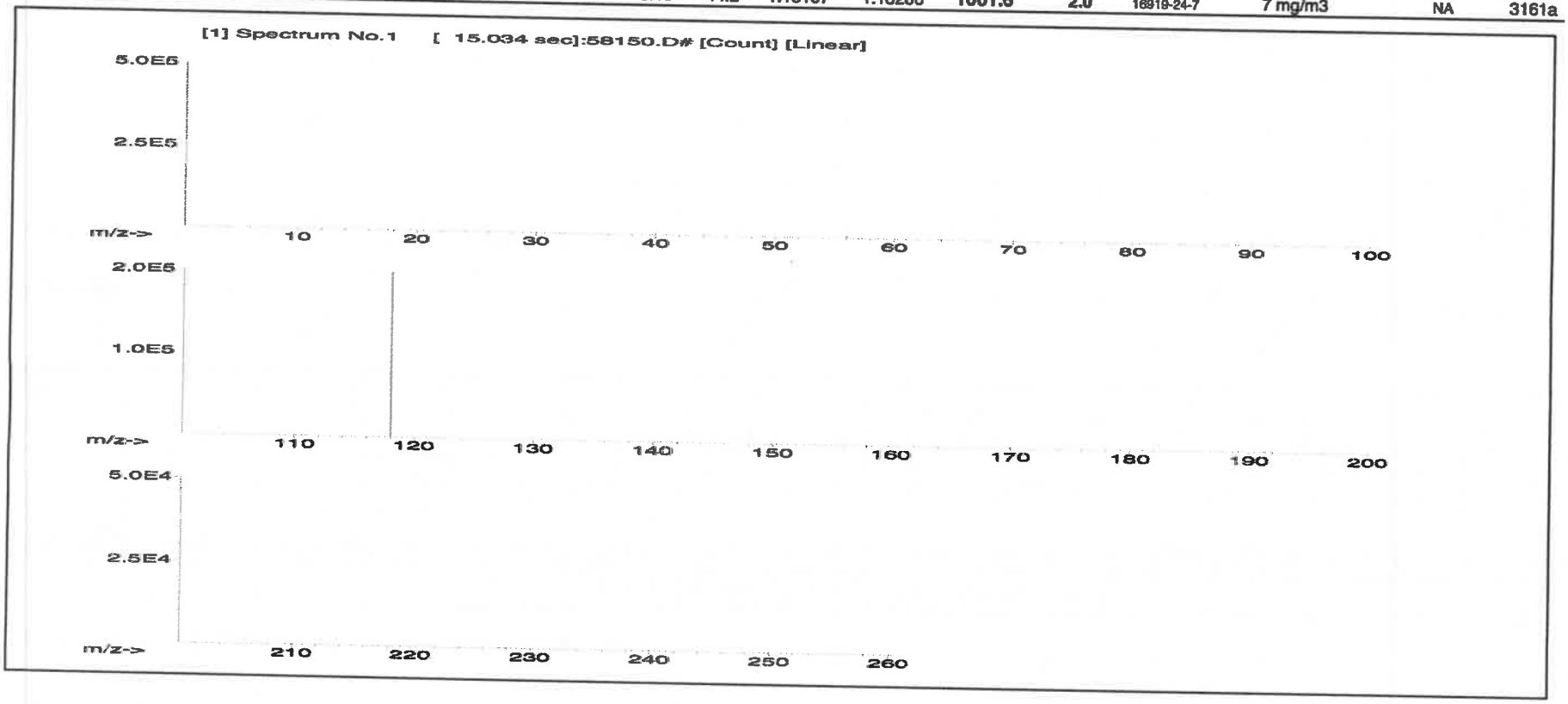
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	Lot #		
Solvents:	21110221	Nitric Acid	
	22D0562008	Hydrochloric acid	
2%	10.0	Nitric Acid	
6%	30.0	Hydrochloric acid	
	(mL)		

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Benson Chan	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium hexafluorostannate(IV) (Sn)	IN010	SND042023A1	1000	99.999	0.10	44.2	1.13107	1.13286	**1001.6**	**2.0**	16919-24-7	7 mg/m3	NA	3161a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<500	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	T	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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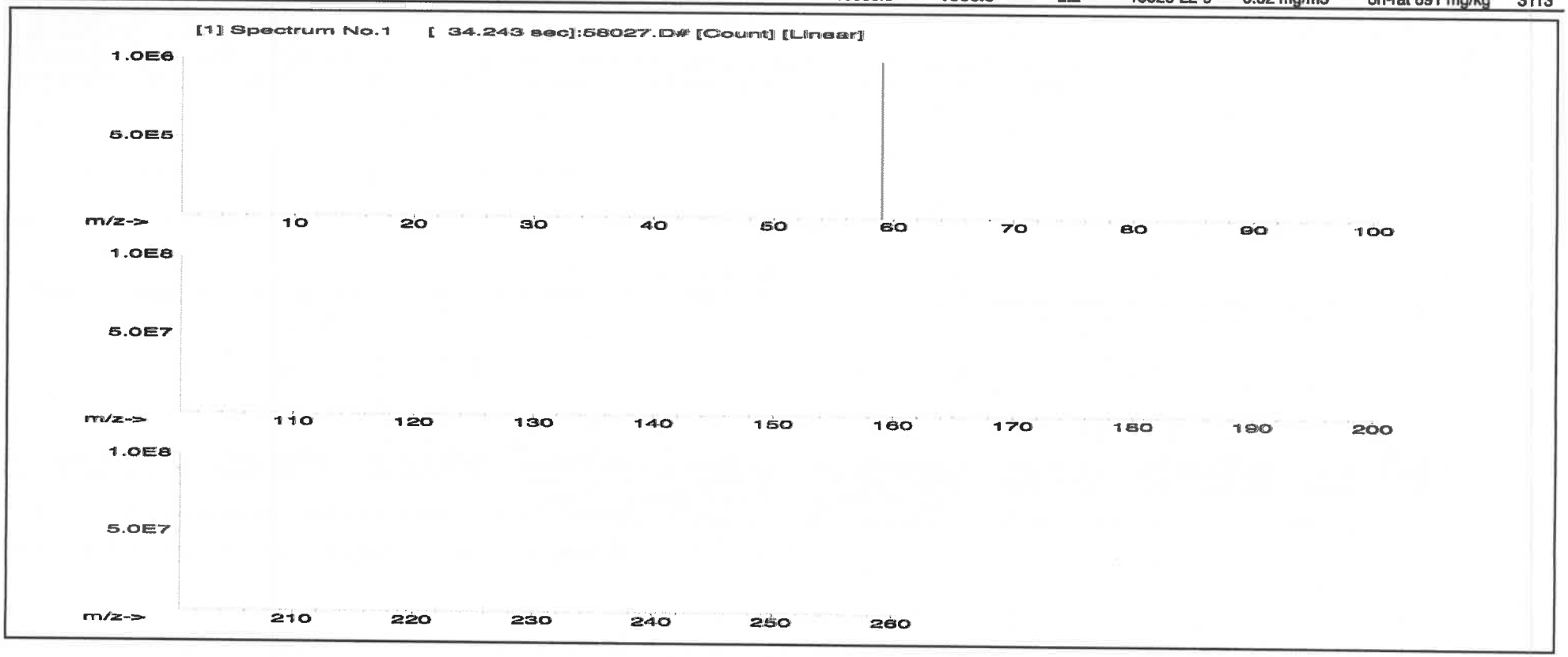
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:
Part Number:	**57027**	24002546	Nitric Acid
Lot Number:	**091923**		
Description:	**Cobalt (Co)**		
		2.0%	40.0 (mL) Nitric Acid
Expiration Date:	091926		
Recommended Storage:	Ambient (20 °C)		
Nominal Concentration (µg/mL):	**1000**		
NIST Test Number:	6UTB	5E-05	Balance Uncertainty
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty

Formulated By: Lawrence Barry 091923

Reviewed By: Pedro L. Rentas 091923

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cobalt(II) nitrate hexahydrate (Co)	58127	050923	0.1000	200.0	0.084	1000	10000.0	**1000.0**	**2.2**	10026-22-9	0.02 mg/m3	orl-rat 691 mg/kg	3113



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	T	Gé	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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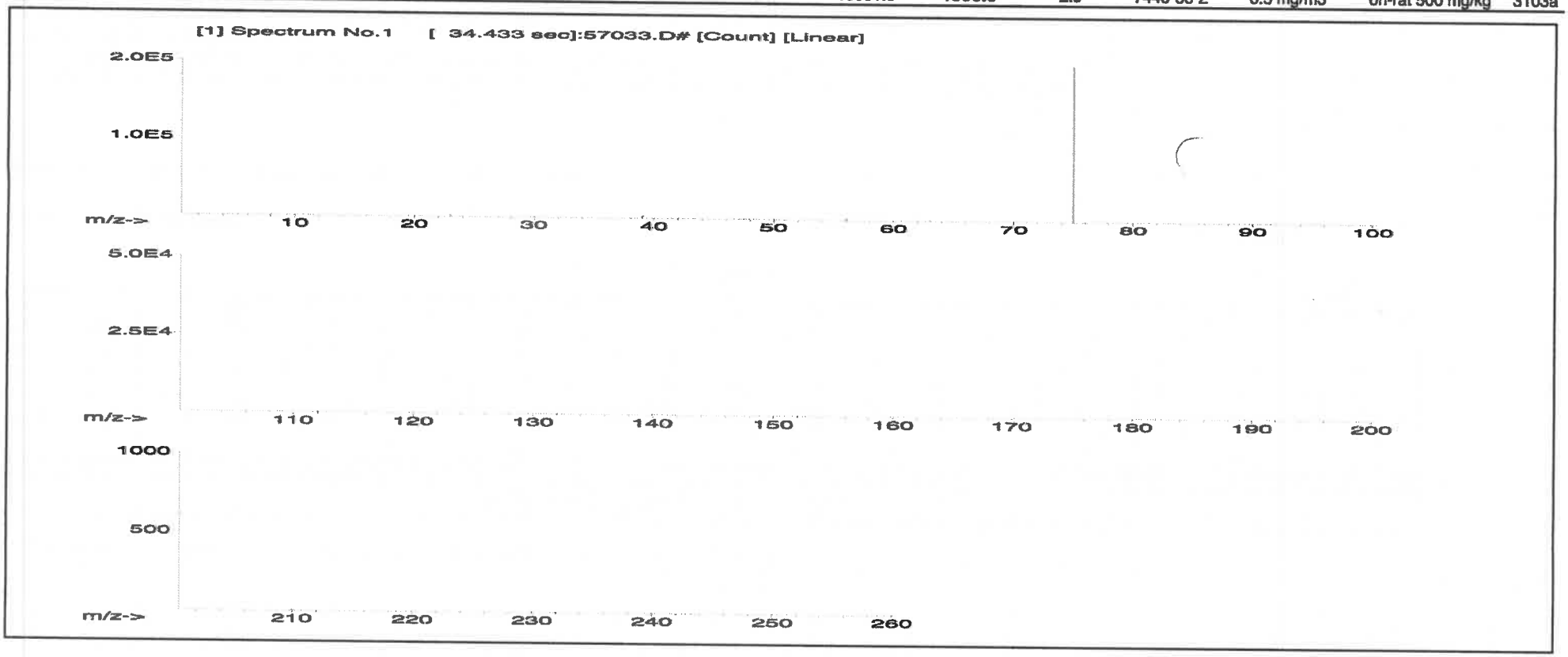
CERTIFIED **WEIGHT** REPORT:

		Lot #	Solvent:		
Part Number:	**57033**	24002546	Nitric Acid		
Lot Number:	**111323**				
Description:	**Arsenic (As)**	2.0%	80.0 (mL)	Nitric Acid	
Expiration Date:	111326				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty		

Formulated By:	Lawrence Barry	111323
Reviewed By:	Pedro L. Rentas	111323

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Arsenic (As)	58133	020522	0.1000	400.0	0.084	1000	10001.0	**1000.0**	**2.0**	7440-38-2	0.5 mg/m3	orl-rat 500 mg/kg	3103a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	T	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge*	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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Certified Reference Material CRM

A: 02/09/24 M.5814

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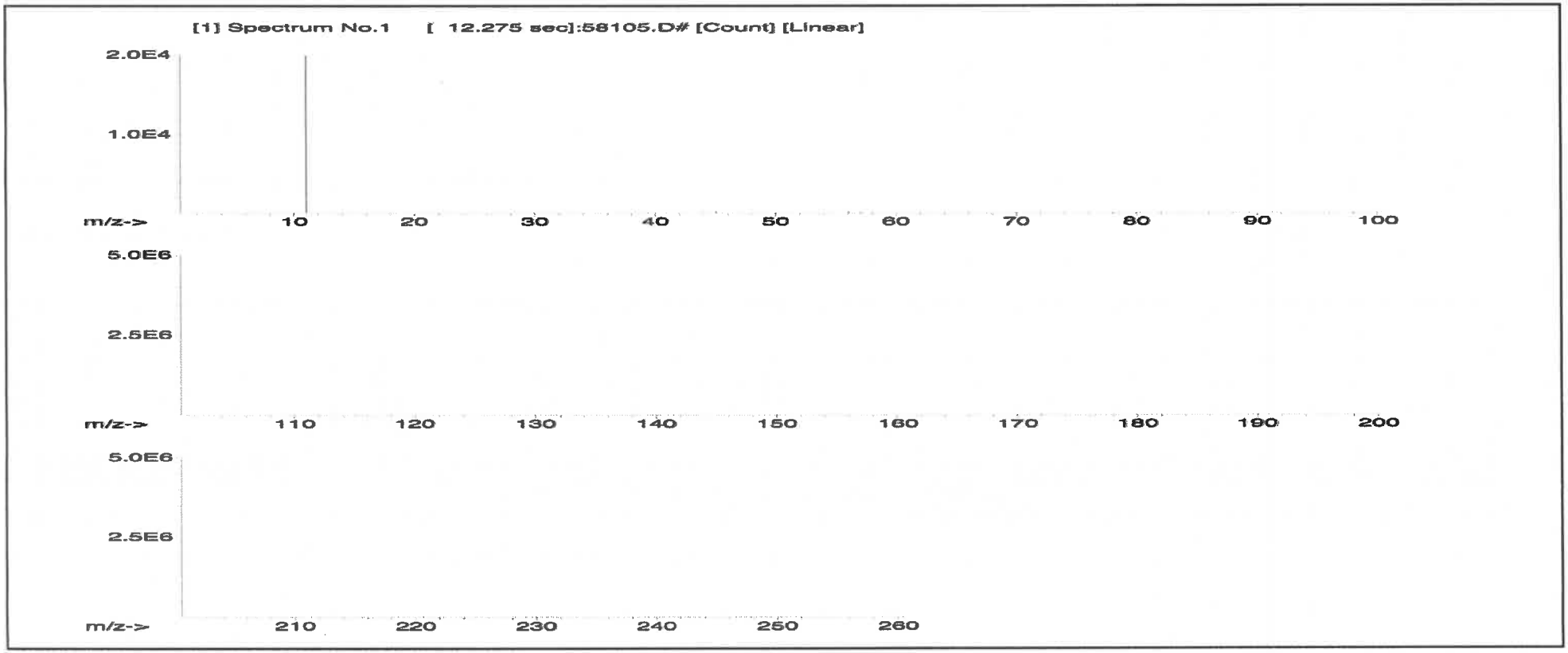
CERTIFIED WEIGHT REPORT:

Part Number:	**57005**		**Lot #**		
Lot Number:	**071123**	**Solvent:**	MKBQ8597V	Ammonium hydroxide	
Description:	**Boron (B)**	2.0%	40.0 (mL)	Ammonium hydroxide	
Expiration Date:	071126				
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):	1999.48	0.058	Flask Uncertainty		

Formulated By:	Benson Chan	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Boric acid (B)	IN018	BV092016A1	1000	99.9999	0.10	17.3	11.55772	11.56201	**1000.4**	**2.0**	10043-35-3	2 mg/m3	orl-rat 2660 mg/kg	3107



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<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	T	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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R: 02/09/24 M5820

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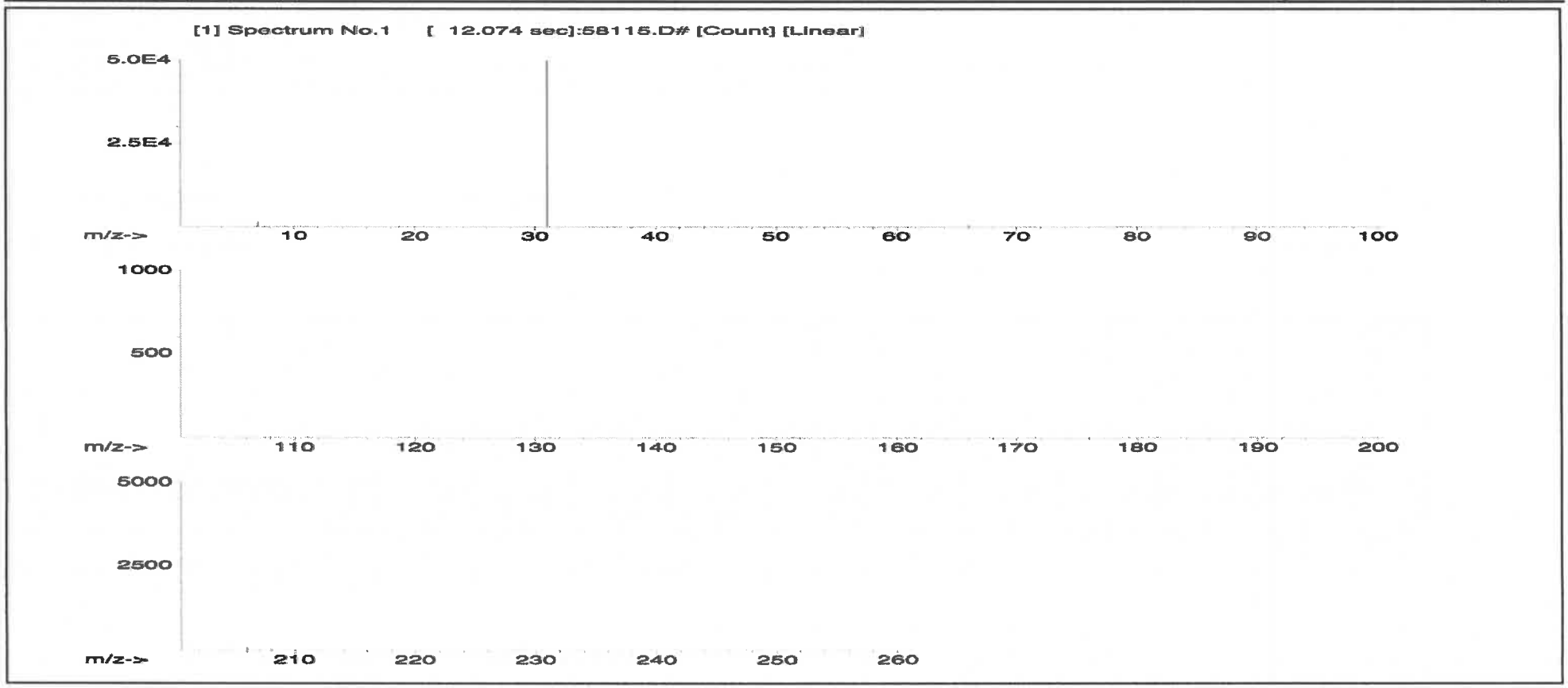
CERTIFIED WEIGHT REPORT:

Part Number:	**57015**		**Lot #**		
Lot Number:	**091123**	**Solvent:**	24002546	Nitric Acid	
Description:	**Phosphorous (P)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	091126				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	091123
Reviewed By:	Pedro L. Rentas	091123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium dihydrogen phosphate (P)	IN008	PV082019A1	1000	99.999	0.10	27.5	7.2729	7.2730	**1000.0**	**2.0**	7722-76-1	5 mg/m3	orl-rat >2000mg/k	3186



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

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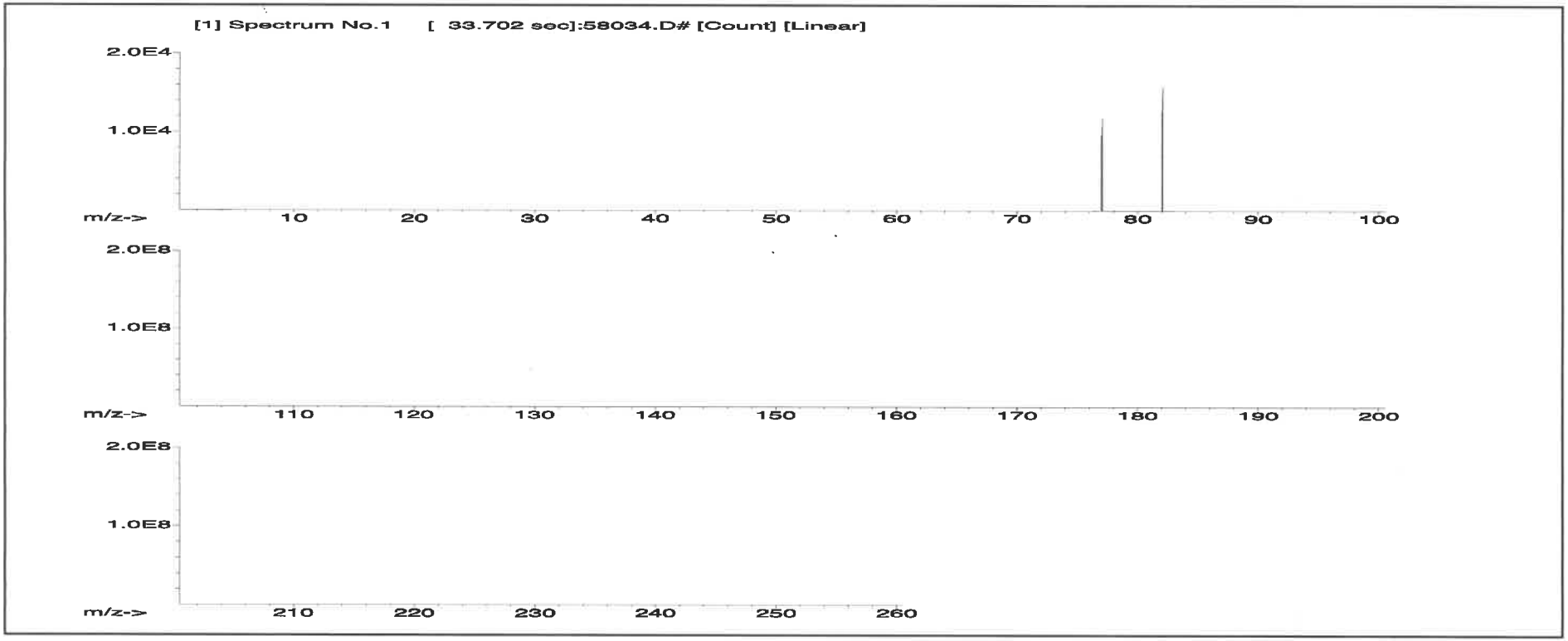
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57034**	24002546	Nitric Acid	
Lot Number:	**060624**			
Description:	**Selenium (Se)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060627			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty	

Formulated By:	Benson Chan	060624
Reviewed By:	Pedro L. Rentas	060624

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Selenium (Se)	58134	071223	0.1000	200.0	0.084	1000	10002.5	**1000.0**	**2.2**	7782-49-2	0.2 mg/m3	orl-rat 6700 mg/kg	3149



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	T	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

M5969 R: 06/11/24

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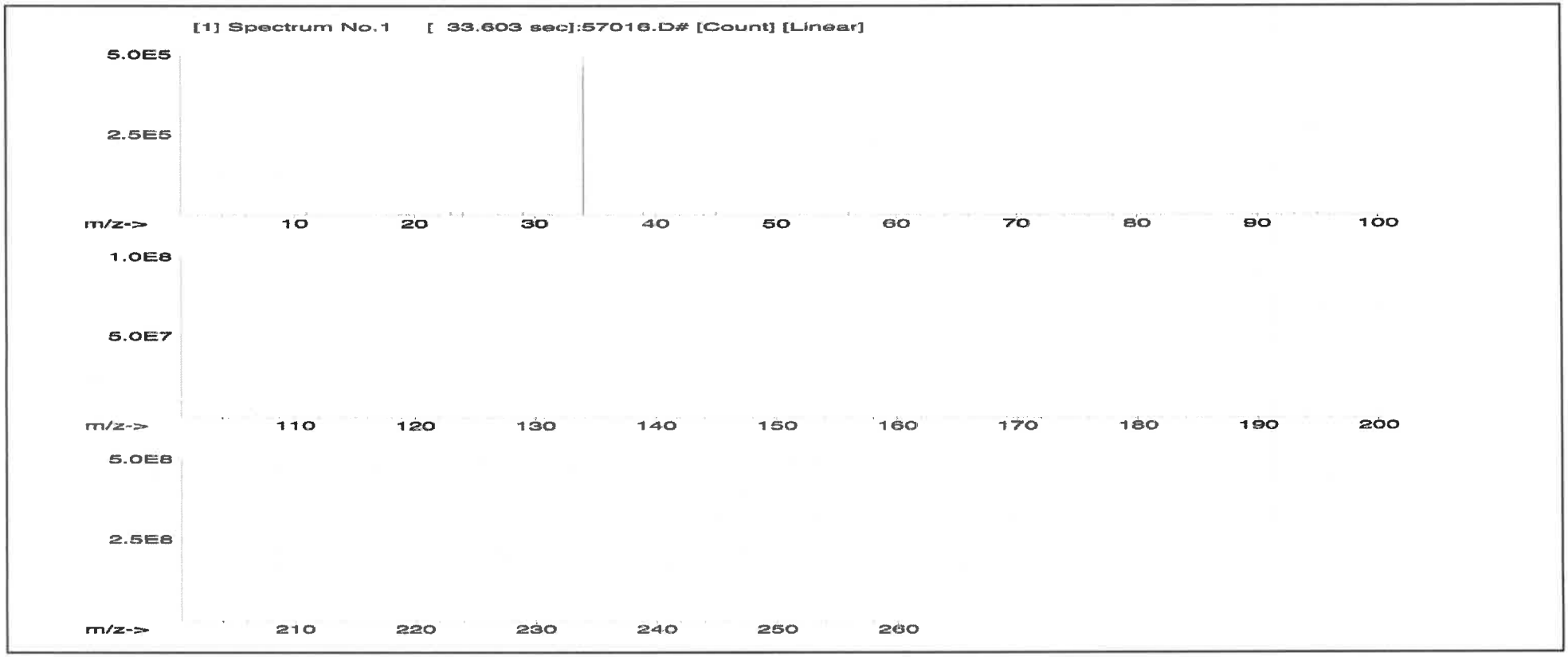
CERTIFIED WEIGHT REPORT:

Part Number:	**57016**		**Solvent:**	**Lot #** 122923	ASTM Type 1 Water
Lot Number:	**122923**				
Description:	**Sulfur (S)**				
Expiration Date:	122926				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty		

Formulated By:	Benson Chan	122923
Reviewed By:	Pedro L. Rentas	122923

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium sulfate (S)	IN117	SLBR7225V	1000	99.9	0.10	24.3	16.4979	16.4980	**1000.0**	**2.0**	7783-20-2	NA	orl-rat 4250mg/kg	3181



Q3254-METALS

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Certified Reference Material CRM

M5970, M5971 R: 7/01/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57003
Lot Number: 062124
Description: Lithium (Li)
Expiration Date: 062127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 250.11

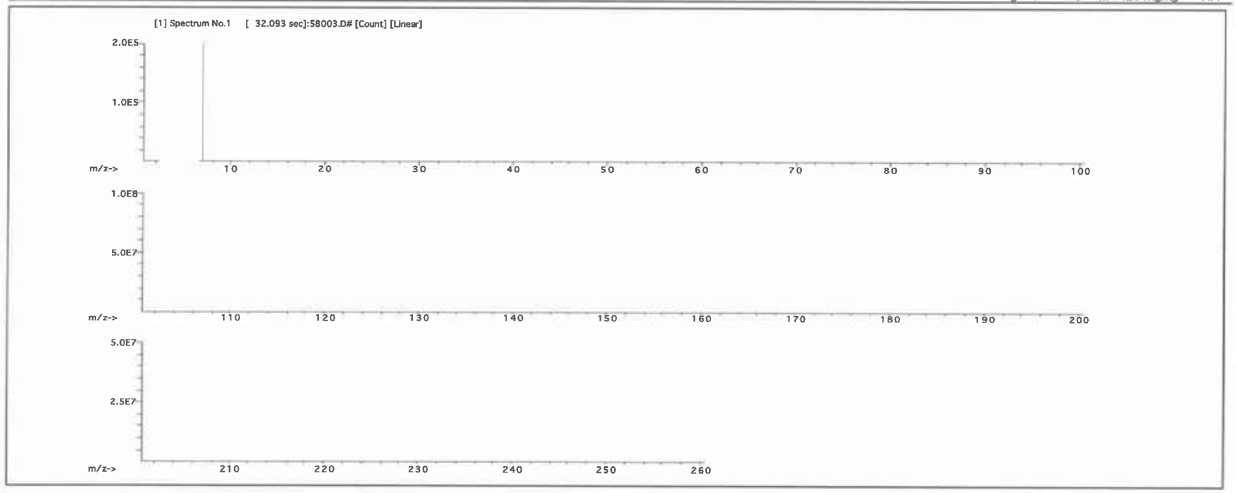
Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	5.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.016 Flask Uncertainty

Giovanni Esposito
Formulated By: Giovanni Esposito 062124

Pedro Rentas
Reviewed By: Pedro L. Rentas 062124

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lithium nitrate (Li)	58103	070622	0.1000	25.0	0.004	1000	10000.4	**1000.0**	**2.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/kg	NA



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ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	T	Ni	<0.02	Pr	<0.02	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

MS978, MS979

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info@inorganicventures.com

R: 2/22/24

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 865.01

ACCREDITED Reference Material Producer Certificate 865.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGT11
Lot Number:	T2-TI719972
Matrix:	2% (v/v) HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Titanium Ti Metal
Starting Material:	
Starting Material Lot#:	2094
Starting Material Purity:	99.9975%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 5 µg/mL

Density: 1.012 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**1002 ± 4 µg/mL**
	ICP Assay NIST SRM 3162a Lot Number: 130925

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/MM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \Sigma(w_i)\,(x_i)$$

x_i = mean of Assay Method i with standard uncertainty $u_{Char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance

$$w_i = (1/u_{Char\ i})^2 \,/\, (\Sigma(1/u_{Char\ i})^2)$$

CRM/RM Expanded Uncertainty ($\pm$) = $u_{CRM/RM} = k\,(u^2_{Char} + u^2_{Bb} + u^2_{Its} + u^2_{Ts})^{1/2}$

k = coverage factor = 2

$u_{Char} = [\Sigma((w_i)^2\,(u_{Char\ i})^2)]^{1/2}$, where $u_{Char\ i}$ are the errors from each characterization method

u_{Bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{Ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a)\,(u_{Char\ a})$$

X_a = mean of Assay Method A with

$u_{Char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty ($\pm$) = $u_{CRM/RM} = k\,(u^2_{Char\ a} + u^2_{Bb} + u^2_{Its} + u^2_{Ts})^{1/2}$

k = coverage factor = 2

$u_{Char\ a}$ = the errors from characterization

u_{Bb} = bottle to bottle homogeneity standard uncertainty

u_{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)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000536	M	Eu	<	0.000268	O	Na	<	0.032670	M	Se		0.001204	O	Zn	<	0.003267
O	Al		0.000872	O	Fe		0.003225	O	Nb	<	0.043560	O	Si		0.004735	O	Zr	<	0.043560
M	As	<	0.008586	M	Ga	<	0.000268	M	Nd	<	0.000268	M	Sm	<	0.000268				
M	Au	<	0.004577	M	Gd	<	0.000268	O	Ni	<	0.010890	M	Sn		0.000096				
O	B	<	0.008929	M	Ge	<	0.002146	M	Os	<	0.000269	O	Sr		0.000096				
M	Ba	<	0.002683	M	Hf		0.002161	O	P	<	0.054450	M	Ta		0.010560				
M	Be	<	0.005366	M	Hg	<	0.003231	M	Pb	<	0.001073	M	Tb	<	0.000268				
M	Bi	<	0.001609	M	Ho	<	0.000268	M	Pd	<	0.000268	M	Te	<	0.001341				
O	Ca		0.000676	M	In	<	0.002683	M	Pr	<	0.000268	M	Th	<	0.053663				
M	Cd	<	0.000268	M	Ir	<	0.000269	M	Pt	<	0.000536	s	Ti	<					
M	Ce	<	0.000268	M	K		0.001172	M	Rb	<	0.000268	M	Tl	<	0.000268				
M	Co	<	0.004293	M	La	<	0.000268	M	Re	<	0.000268	M	Tm	<	0.000268				
M	Cr		0.000752	O	Li	<	0.027225	M	Rh	<	0.000268	M	U	<	0.000268				
M	Cs	<	0.000268	M	Lu	<	0.000268	M	Ru	<	0.000269	M	V	<	0.019855				
O	Cu	<	0.010890	O	Mg	<	0.005445	i	S	<		M	W		0.000473				
M	Dy	<	0.000268	O	Mn	<	0.003267	M	Sb	<	0.006976	M	Y	<	0.002146				
M	Er	<	0.000268	M	Mo		0.000774	O	Sc	<	0.004900	M	Yb	<	0.000536				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form In Solution - 47.87 +4 6 Ti(F)6-2

Chemical Compatibility - Soluble in concentrated HCl, HF, H3PO4 H2SO4 and HNO3. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths or high levels of transition elements unless they are fluorinated). Stable with most inorganic anions with a tendency to hydrolyze forming the hydrated oxide in all dilute acids except HF.

Stability - 2-100 ppb levels stable (Alone or mixed with all other metals) as the Ti(F)6-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the Ti(F)6-2 for months in 1% 2-5% HNO3 / trace HF in an LDPE container.

Ti Containing Samples (Preparation and Solution) - Metal (Soluble in H2O / HF caution -powder reacts violently); Oxide - low temperature history anatase or rutile (Dissolved by heating in 1:1:1 H2O / HF / H2SO4); Oxide - high temperature history (~800EC) brookite (fuse in Pt0 with K2S2O7); Ores (fuse in Pt0 with KF + K2S2O7 - no KF if silica not present); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve by heating with 1:1:1 H2O / HF / H2SO4 or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite crystalline form).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 48 amu	14 ppt	N/A	32S16O, 32S14N, 14N16O18O, 14N17N2, 36Ar12C, 48Ca, [96X=2 (where X = Zr, Mo, Ru)]
ICP-OES 323.452 nm	0.0054 / 0.00092 µg/mL	1	Ce, Ar, Ni
ICP-OES 334.941 nm	0.0038 / 0.000028 µg/mL	1	Nb, Ta, Cr, U
ICP-OES 336.121 nm	0.0053 / 0.000034 µg/mL	1	W, Mo, Co

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.5798; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 17, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on property stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozlkowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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MS985
R: 6/14/24

1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGIN10
Lot Number:	U2-IN729349
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Indium
Starting Material:	Indium Metal
Starting Material Lot#:	2511
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.044 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10021 ± 56 µg/mL** ICP Assay NIST SRM 3124a Lot Number: 110516
Assay Method #2	**10035 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	**10001 ± 33 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000760	M	Eu	<	0.000760	O	Na		0.012771	M	Se	<	0.023000	M	Zn	<	0.006100
M	Al		0.003385	O	Fe		0.004462	M	Nb	<	0.000760	O	Si		0.024619	M	Zr	<	0.000760
M	As	<	0.004600	M	Ga	<	0.000760	M	Nd	<	0.000760	M	Sm	<	0.000760				
M	Au	<	0.002300	M	Gd	<	0.000760	O	Ni	<	0.005100	M	Sn	<	0.000760				
O	B		0.003692	M	Ge	<	0.001600	M	Os	<	0.000760	O	Sr	<	0.000610				
M	Ba	<	0.001600	M	Hf	<	0.000760	n	P	<		M	Ta	<	0.000760				
O	Be	<	0.000130	M	Hg	<	0.003100	M	Pb		0.001400	M	Tb	<	0.000760				
M	Bi	<	0.000760	M	Ho	<	0.000760	M	Pd	<	0.001600	M	Te	<	0.000760				
O	Ca		0.004616	s	In	<		M	Pr	<	0.000760	M	Th	<	0.000760				
M	Cd	<	0.000760	M	Ir	<	0.000760	M	Pt	<	0.000760	O	Ti	<	0.001100				
M	Ce	<	0.000760	O	K		0.007078	M	Rb	<	0.000760	M	Tl	<	0.000760				
M	Co	<	0.000760	M	La	<	0.000760	M	Re	<	0.000760	M	Tm	<	0.000760				
O	Cr	<	0.001300	O	Li	<	0.000130	M	Rh	<	0.000760	M	U	<	0.000760				
M	Cs	<	0.000760	M	Lu	<	0.000760	M	Ru	<	0.000760	M	V	<	0.001600				
M	Cu	<	0.003800	O	Mg		0.000707	n	S	<		M	W	<	0.001600				
M	Dy	<	0.000760	O	Mn		0.000149	M	Sb	<	0.000760	M	Y	<	0.000760				
M	Er	<	0.000760	M	Mo	<	0.002300	M	Sc	<	0.000760	M	Yb	<	0.000760				

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 - 114.82 +3 6 In(H2O)6+3

Chemical Compatibility -Soluble in HCl, HNO3, and H2SO4. Avoid neutral and basic media. Stable with most metals and inorganic anions. The oxalate, sulfide, carbonate, hydroxide and phosphate are insoluble in water.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

In Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); Oxide (Soluble in mineral acids); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or 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 115 amu	1 ppt	n/a	115Sn, 99Ru16O
ICP-OES 158.583 nm	0.05 / 0.002 µg/mL	1	
ICP-OES 230.606 nm	0.1 / 0.03 µg/mL	1	Ni, Os
ICP-OES 325.609 nm	0.2 / 0.05 µg/mL	1	Mn, Mo, Th

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

February 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

- February 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

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Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

R: 2/22/24
MS-997

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-CAL-3
Lot Number:	T2-MEB727800
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Arsenic, Lead, Selenium, Thallium, 500 µg/mL ea: Cadmium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Arsenic, As	1 000 ± 7 µg/mL	Cadmium, Cd	500.0 ± 2.2 µg/mL
Lead, Pb	1 000 ± 4 µg/mL	Selenium, Se	1 000 ± 6 µg/mL
Thallium, Tl	1 000 ± 7 µg/mL		

Density: 1.042 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	ICP Assay	3103a	100818
As	Calculated		See Sec. 4.2
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Tl	ICP Assay	3158	151215

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i}^2) / (\Sigma(1/(u_{char\ i}^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i}^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

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

December 21, 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

- December 21, 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

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300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CHEM-CLP-4
Lot Number:	V2-MEB746172
Matrix:	3% (v/v) HNO3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	1 000 ± 5 µg/mL	Molybdenum, Mo	1 000 ± 5 µg/mL
Silicon, Si	1 000 ± 7 µg/mL	Tin, Sn	1 000 ± 5 µg/mL
Titanium, Ti	1 000 ± 6 µg/mL		

Density: 1.032 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	190605
B	Calculated		See Sec. 4.2
Mo	ICP Assay	traceable to 3134	U2-MO739068
Si	ICP Assay	Traceable to 3150	S2-SI702546
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	traceable to 3162a	T2-TI725816

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

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

August 12, 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 12, 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 Approved By:

Joseph Burns
Custom VS Manager

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

EXP.: 9/6/2029

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CHEM-CLP-4
Lot Number:	V2-MEB746762
Matrix:	3% (v/v) HNO3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	1 000 ± 5 µg/mL	Molybdenum, Mo	1 000 ± 5 µg/mL
Silicon, Si	1 000 ± 7 µg/mL	Tin, Sn	1 000 ± 5 µg/mL
Titanium, Ti	1 000 ± 6 µg/mL		

Density: 1.033 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	190605
B	Calculated		See Sec. 4.2
Mo	ICP Assay	traceable to 3134	U2-MO739068
Si	ICP Assay	Traceable to 3150	S2-SI702546
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	traceable to 3162a	T2-TI725816

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 06, 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

- September 06, 2029

- The date after which this CRM/RM should not be used.

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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:

Joseph Burns
Custom VS Manager

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

EXP.: 9/6/2029

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CHEM-CLP-4
Lot Number:	V2-MEB746762
Matrix:	3% (v/v) HNO3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	1 000 ± 5 µg/mL	Molybdenum, Mo	1 000 ± 5 µg/mL
Silicon, Si	1 000 ± 7 µg/mL	Tin, Sn	1 000 ± 5 µg/mL
Titanium, Ti	1 000 ± 6 µg/mL		

Density: 1.033 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	190605
B	Calculated		See Sec. 4.2
Mo	ICP Assay	traceable to 3134	U2-MO739068
Si	ICP Assay	Traceable to 3150	S2-SI702546
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	traceable to 3162a	T2-TI725816

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

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X_a = mean of Assay Method A with

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CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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- 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

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HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

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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

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 06, 2024

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- September 06, 2029

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- Sealed TCT Bag Open Date: _____

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Certificate Approved By:

Joseph Burns
Custom VS Manager

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

R->1/13/25
M6128

Part Number: 58025
Lot Number: 101124
Description: Manganese (Mn)
Expiration Date: 101127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

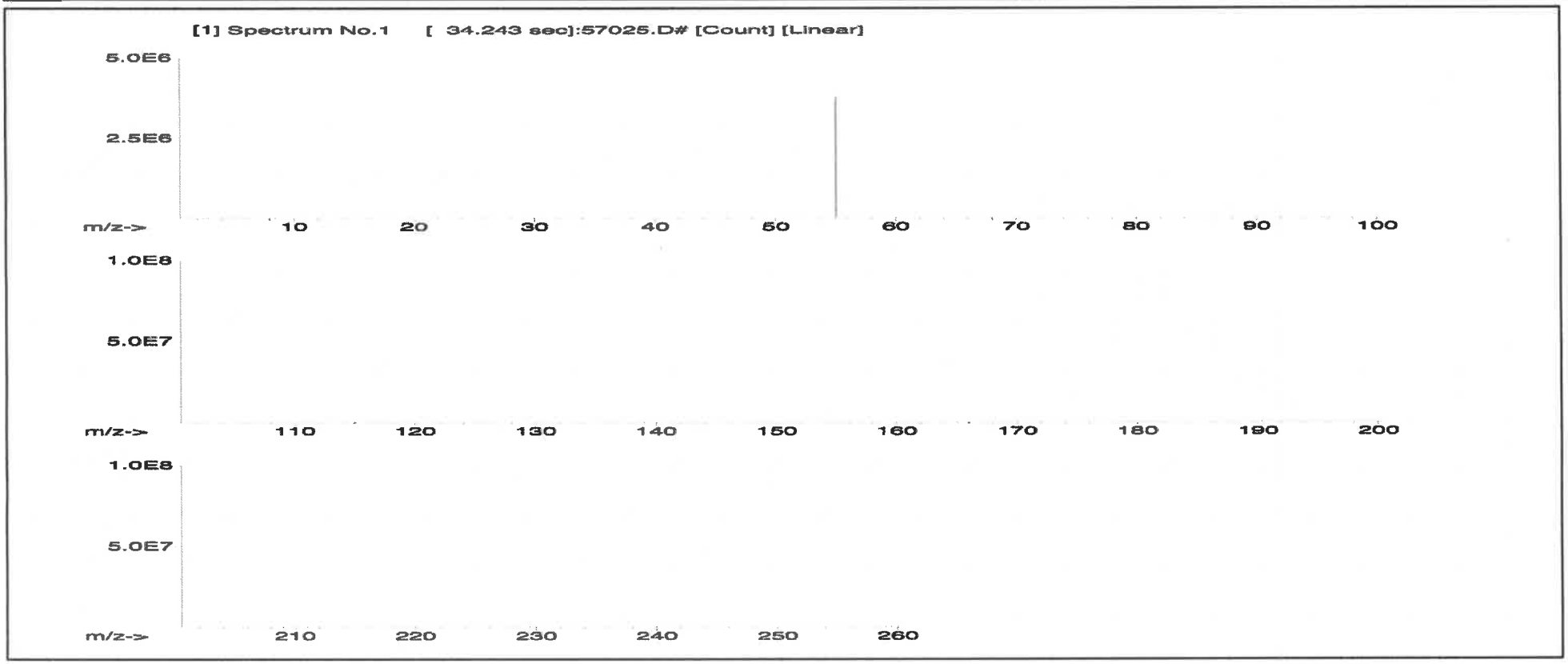
		Lot #	
Solvent:	24002546	Nitric Acid	
	2%	80.0 (mL)	Nitric Acid

5E-05 Balance Uncertainty

Weight shown below was diluted to (mL): 4000.2 0.10 Flask Uncertainty

Giovanni Esposito
Formulated By: Giovanni Esposito 101124
Pedro Rentas
Reviewed By: Pedro L. Rentas 101124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Manganese(II) nitrate hydrate (Mn)	IN031	MNM092020A1	1000	99.999	0.10	20.8	19.2322	19.2344	**1000.1**	**2.0**	15710-66-4	5 mg/m3	orl-rat >300mg/kg	3132



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Certified Reference Material CRM

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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	T	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certificate of Analysis

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M6137 R→10/3/24

1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	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:

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X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

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$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

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- 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.

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- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 28.09 +4 6 Si(OH)x(F)y2-

Chemical Compatibility -Soluble in HCl, HF, H3PO4 H2SO4 and HNO3 as the Si(OH)x(F)y2-. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths, or high levels of transition elements unless they are fluorinated. Stable with most inorganic anions with a tendency to hydrolyze forming silicic acid (silicic acid is soluble up to ∼100 ppm in water) in all dilute acids except HF.

Stability - 2-100 ppb levels - stability unknown - (alone or mixed with all other metals) as the Si(OH)x(F)y2-. 1-10,000 ppm single element solutions as the Si(OH)x(F)y2- chemically stable for years in 2-5 % HNO3 / trace HF in a LDPE container.

Si Containing Samples (Preparation and Solution) -Metal (Soluble in 1:1:1 H2O / HF / HNO3); Oxide - SiO2, amorphic (dissolve by heating in 1:1:1 H2O / HF / HNO3); Oxide - quartz (fuse in Pt0 with Na2CO3); Geological Samples(fuse in Pt0with Na2CO3 followed by HCl solution of the fuseate); Organic Matrices containing silicates and non volatile silicon compounds (dry ash at 4500C in Pt0 and dissolve by gently warming with 1:1:1 H2O / HF / H2SO4 or fuse / ash with Na2CO3 and dissolve fuseate with HCl / H2O); Silicone Oils - dimethyl silicones depolymerize to form volatile monomer units when heated (Measure directly in alcoholic KOH / xylene mixture where sample is treated first with the KOH at 60-1000C to "unzip" the Si- O-Si polymeric structure or digest with conc. H2SO4 / H2O2 followed by cooling and dissolution of the dehydrated silica with HF.) Note that the direct analysis of silicone oils in an organic solvent will result in false high results due to high vapor pressure of volatile monomer units like hexamethylcyclotrisiloxane. The KOH forms the K2+Si(CH3)2O= salt which is not volatile at room temperature.

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 28 amu	4000 - 8000 ppt	N/A	N2, 12C16O
ICP-OES 212.412 nm	0.02/0.01 µg/mL	1	Hf, Os, Mo, Ta
ICP-OES 251.611 nm	0.012/0.003 µg/mL	1	Ta, U, Zn, Th
ICP-OES 288.158 nm	0.03/0.004 µg/mL	1	Ta, Ce, Cr, Cd, Th

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 10, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 10, 2029**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor

Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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M6138
R->1/13/25

CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 121824
Description: Calcium (Ca)

Expiration Date: 121827
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 4000.1

	Lot #			
Solvent:	24012496	Nitric Acid		
2%	80.0 (mL)	Nitric Acid		
	5E-05	Balance Uncertainty		
	0.15	Flask Uncertainty		

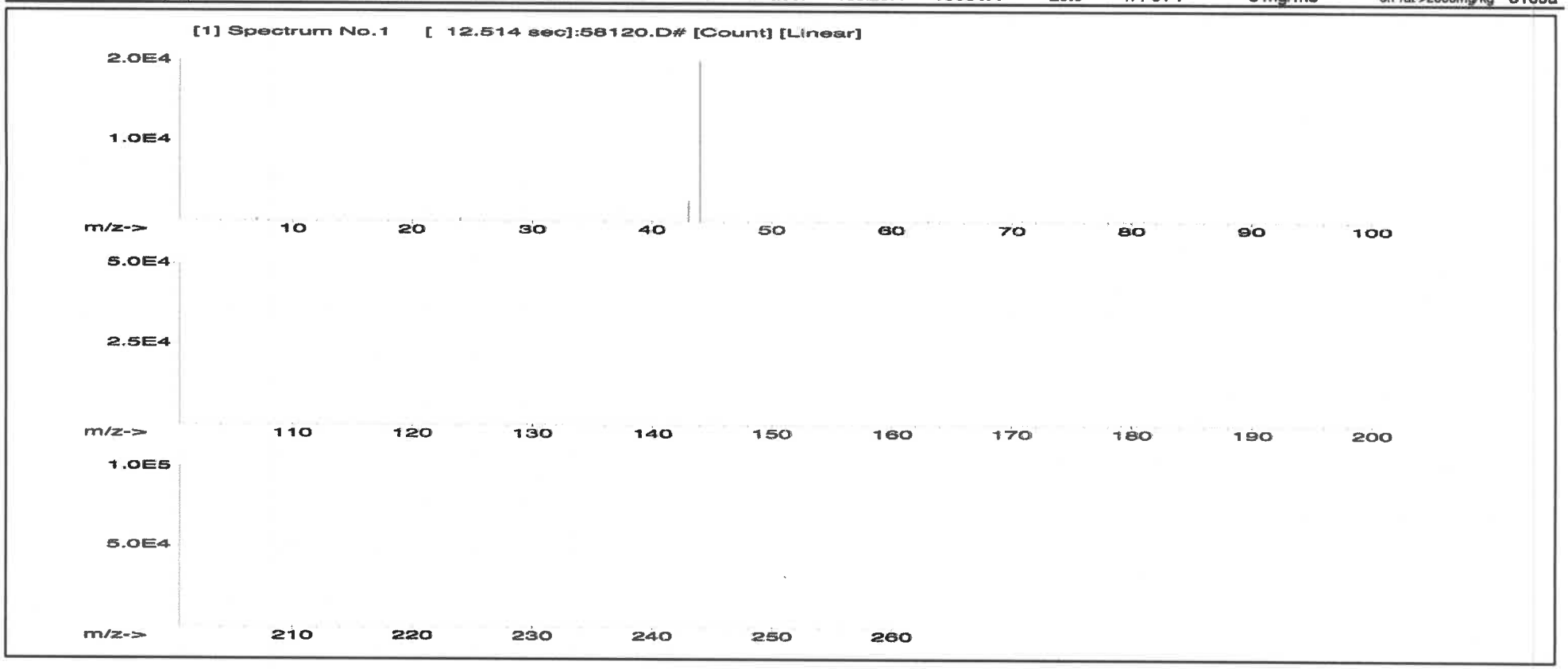
Giovanni Esposito

Formulated By:	Giovanni Esposito	121824

Pedro Rentas

Reviewed By:	Pedro L. Rentas	121824

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD03203B3	10000	99.999	0.10	39.9	100.2537	100.2677	**10001.4**	**20.0**	471-34-1	5 mg/m3	orl-rat >2000mg/kg	3109a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	30	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Part # **58120** Lot # **121824**

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CERTIFIED WEIGHT REPORT:

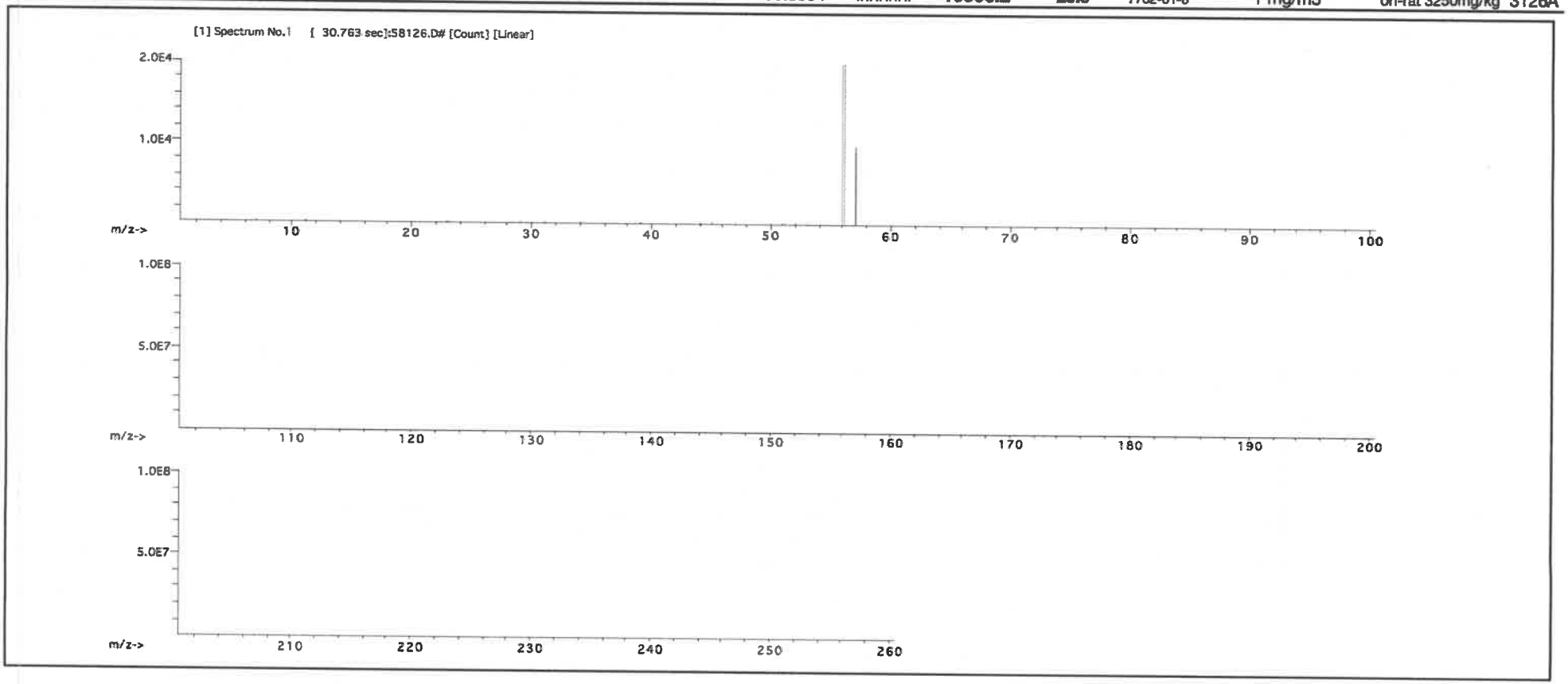
Part Number: 58126 R->1|B|2S
Lot Number: 011025
Description: Iron (Fe) M6140
Expiration Date: 011028
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.07

	Lot #		
Solvent:	24012496	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.100 Flask Uncertainty

Formulated By:	Benson Chan	011025
Reviewed By:	Pedro L. Rentas	011025

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Iron(III) nitrate nonahydrate (Fe)	IN028	FED082023A1	10000	99.999	0.10	13.0	153.8534	######	**10000.2**	**20.0**	7782-61-8	1 mg/m3	orl-rat 3250mg/kg	3126A



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	T	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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CERTIFIED WEIGHT REPORT:

R-> 1/13/25

Part Number: 57119
Lot Number: 103024
Description: Potassium (K)

M6141
M6142
M6143

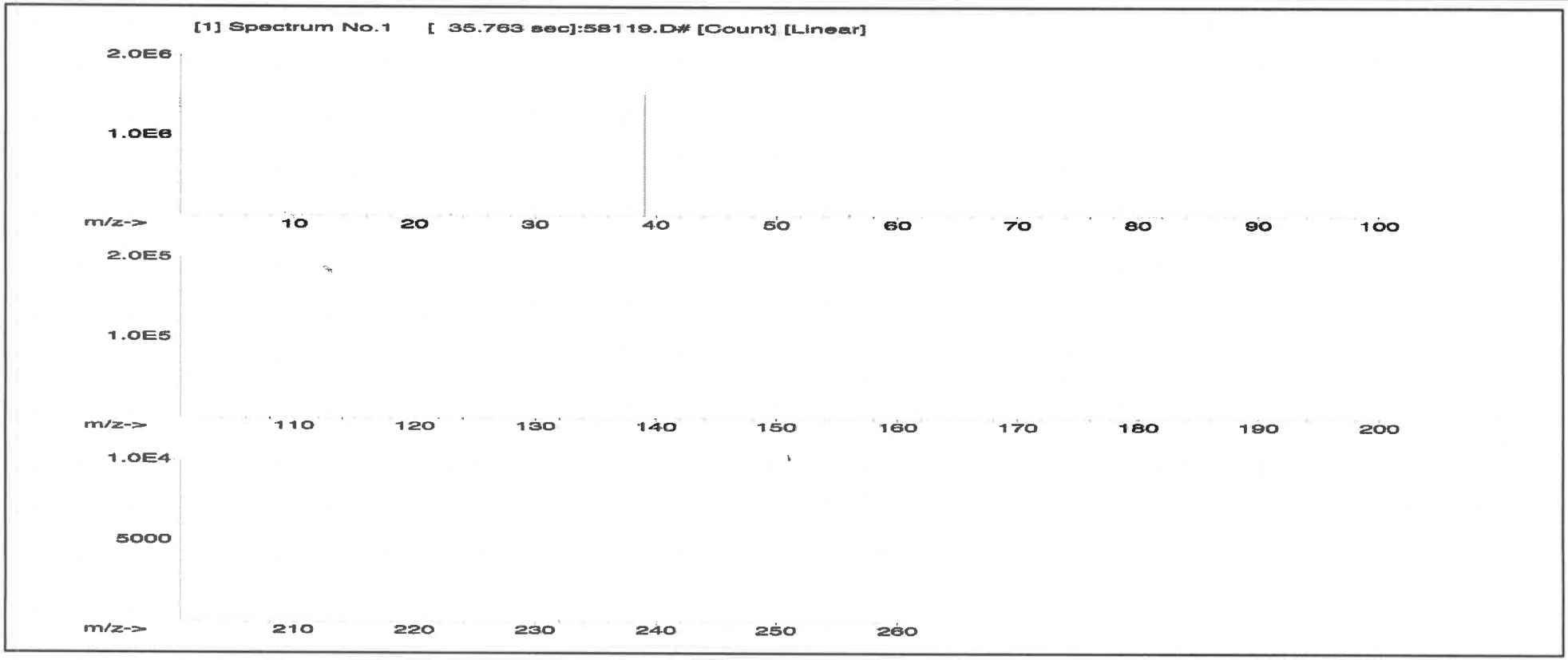
Expiration Date: 103027
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 4000.1

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	80.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.15	Flask Uncertainty	

Giovanni Esposito

Formulated By:	Giovanni Esposito	103024
Reviewed By:	Pedro L. Rentas	103024

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Potassium nitrate (K)	IN034	KD062022A1	10000	99.999	0.10	37.7	106.1040	######	**10001.1**	**20.0**	7757-79-1	5 mg/m3	orl-rat 3750 mg/kg	3141a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	T	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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CERTIFIED WEIGHT REPORT:

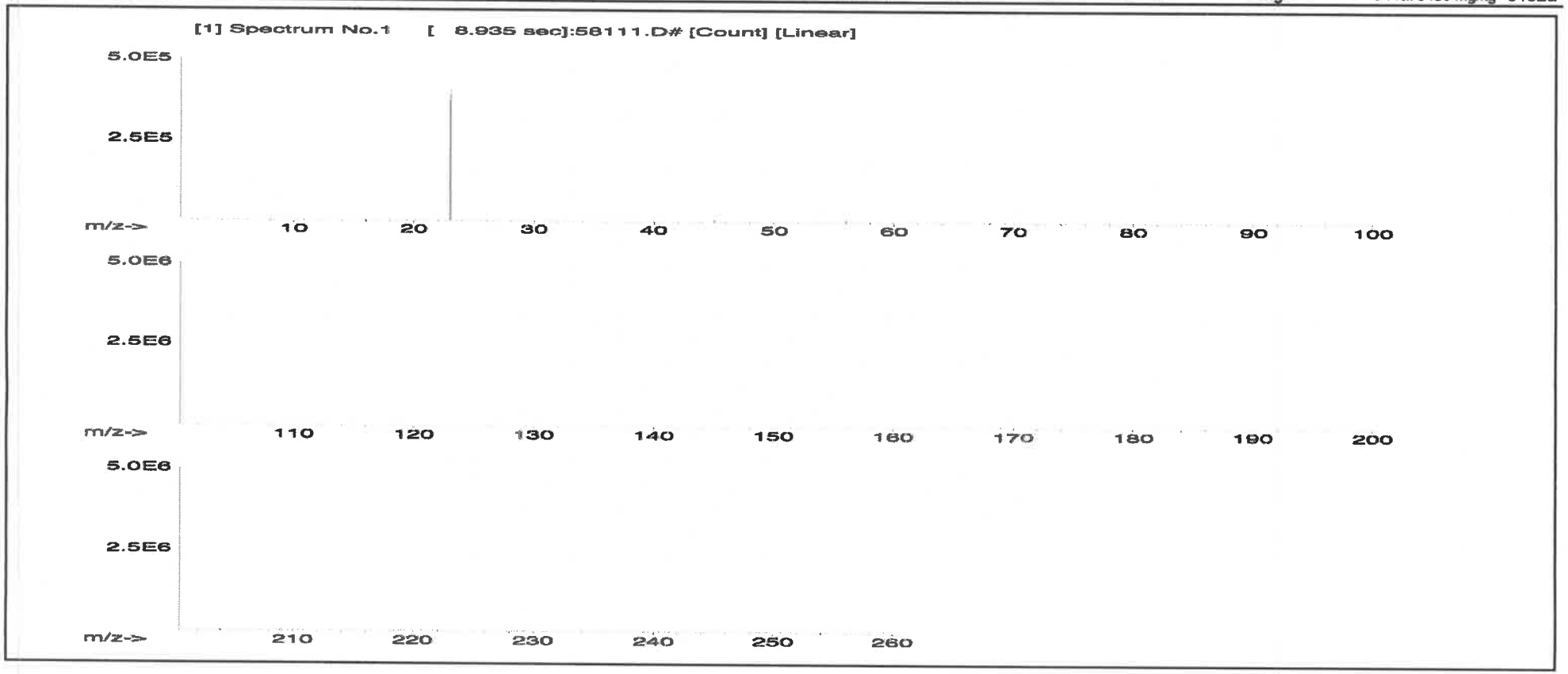
R->1/13/25

M6144

Part Number:	**58111**		**Lot #**		
Lot Number:	**072424**	**Solvent:**	24002546	Nitric Acid	
Description:	**Sodium (Na)**				
		2%	80.0 (mL)	Nitric Acid	
Expiration Date:	072427				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	4000.2	0.10	Flask Uncertainty		

Formulated By:	Benson Chan	072424
Reviewed By:	Pedro L. Rentas	072424

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Sodium nitrate (Na)	IN036	NAV012015I1	10000	99.999	0.10	26.9	148.7096	######	**10000.0**	**20.0**	7631-99-4	5 mg/m3	orl-rat 3430 mg/kg	3152a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	T	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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CERTIFIED WEIGHT REPORT:

Part Number: 58030
Lot Number: 121724
Description: Zinc (Zn)

R → 1/13/25

M6145

Expiration Date: 121727
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

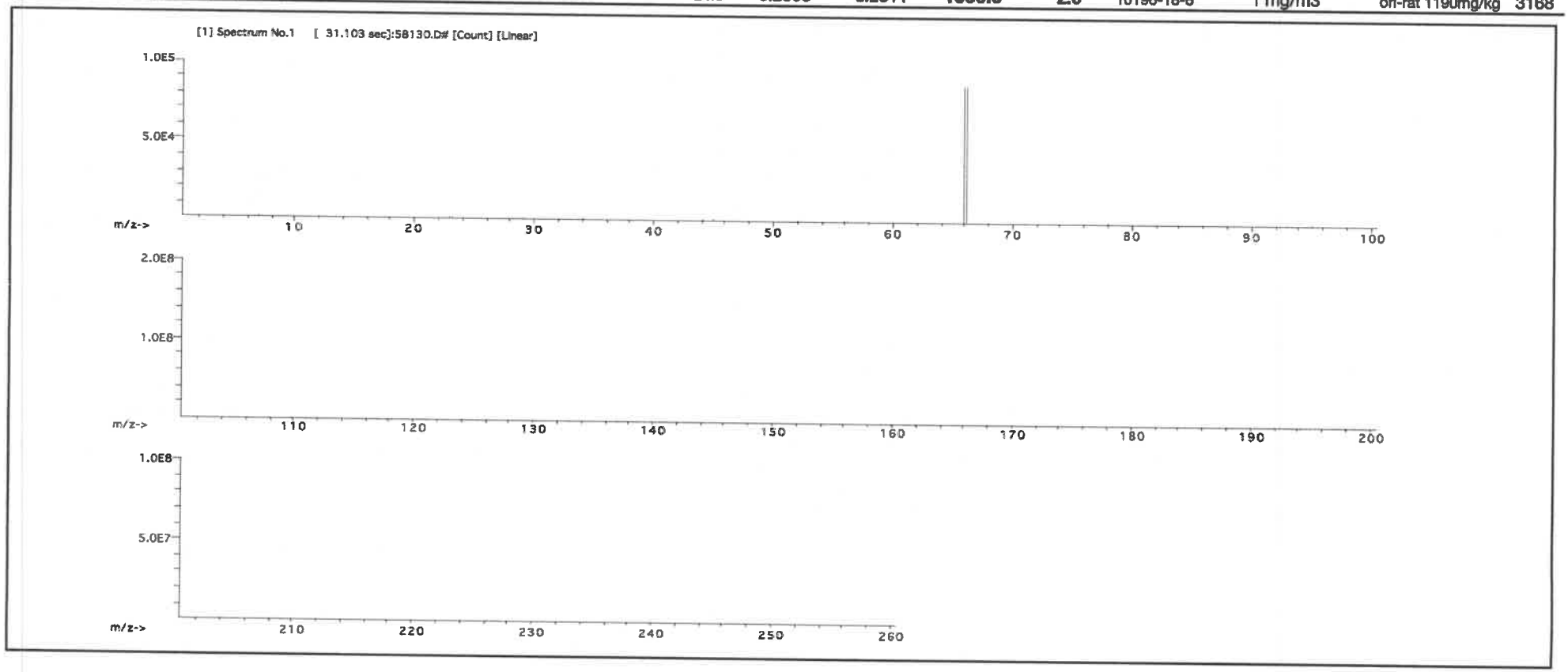
		Lot #	
Solvent:	24012496	Nitric Acid	
	2%	40.0 (mL)	Nitric Acid

5E-05 Balance Uncertainty
Weight shown below was diluted to (mL): 2000.1 0.10 Flask Uncertainty

Aleah O'Brady

Formulated By:	Aleah O'Brady	121724
Reviewed By:	Pedro L. Rentas	121724

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Zinc nitrate hexahydrate (Zn)	IN016	ZNE032021A1	1000	99.999	0.10	24.3	8.2308	8.2311	**1000.0**	**2.0**	10196-18-6	1 mg/m3	ori-rat 1190mg/kg	3168



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	T
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

M6151

R→ 1/15/25

Material No.: 9530-33
Batch No.: 22G2862015
Manufactured Date: 2022-06-15
Retest Date: 2027-06-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl_2)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO_4)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO_3)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH_4)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
Trace Impurities – Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities – Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	2.9 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities – Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities – Niobium (Nb)	≤ 1.0 ppb	0.8 ppb
Trace Impurities – Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	0.5 ppb
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	2.3 ppb
Trace Impurities – Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Tantalum (Ta)	≤ 1.0 ppb	1.6 ppb
Trace Impurities – Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	4.0 ppb
Trace Impurities – Titanium (Ti)	≤ 1.0 ppb	1.5 ppb
Trace Impurities – Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities – Zirconium (Zr)	≤ 1.0 ppb	0.3 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result

For Laboratory,Research,or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

R-02102/2025

M-6158

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
Trace Impurities - Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities - Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities - Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities - Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities - Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count - 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count - 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

INORGANIC VENTURES™
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Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	QCP-CICV-1
Lot Number:	V2-MEB744107
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	2 500 µg/mL ea: Calcium, Potassium, Magnesium, Sodium, 1 000 µg/mL ea: Aluminum, Barium, 500 µg/mL ea: Iron, 250 µg/mL ea: Nickel, Vanadium, Zinc, Cobalt, Manganese, 125 µg/mL ea: Silver, Copper, 100 µg/mL ea: Chromium, 25 µg/mL ea: Beryllium

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	1 000 ± 4 µg/mL	Barium, Ba	1 000 ± 6 µg/mL
Beryllium, Be	24.98 ± 0.12 µg/mL	Calcium, Ca	2 500 ± 8 µg/mL
Chromium, Cr	99.9 ± 0.6 µg/mL	Cobalt, Co	250.2 ± 1.2 µg/mL
Copper, Cu	125.0 ± 0.5 µg/mL	Iron, Fe	500.0 ± 2.2 µg/mL
Magnesium, Mg	2 500 ± 11 µg/mL	Manganese, Mn	249.9 ± 1.1 µg/mL
Nickel, Ni	250.0 ± 1.2 µg/mL	Potassium, K	2 500 ± 11 µg/mL
Silver, Ag	125.0 ± 0.6 µg/mL	Sodium, Na	2 500 ± 11 µg/mL
Vanadium, V	250.0 ± 1.1 µg/mL	Zinc, Zn	249.9 ± 1.1 µg/mL

Density: 1.081 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	120618
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	200413
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information (https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver)

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 22, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 22, 2029**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

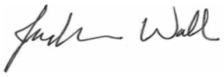
12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Justin Dirico
Stock Processing Supervisor

Certificate Approved By:

Jodie Wall
Stock VSM Coordinator



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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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

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	QCP-CICV-2
Lot Number:	U2-MEB733713
Matrix:	3% (w/v) Tartaric acid 1% (v/v) HNO3
Value / Analyte(s):	500 µg/mL ea: Antimony

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**500.0 ± 2.8 µg/mL**		

Density: 1.017 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Sb	ICP Assay	3102a	140911

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$
w_i = the weighting factors for each method calculated using the inverse square of the variance:
$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2
$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method
u_{bb} = bottle to bottle homogeneity standard uncertainty
u_{lts} = long term stability standard uncertainty (storage)
u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with
$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2
$u_{char\ a}$ = the errors from characterization
u_{bb} = bottle to bottle homogeneity standard uncertainty
u_{lts} = long term stability standard uncertainty (storage)
u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 01, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 01, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

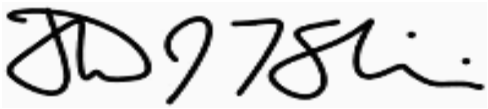
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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Christiansburg, VA 24073 USA
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).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	QCP-CICV-3
Lot Number:	V2-MEB749572
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	500 µg/mL ea: Arsenic, Lead, Selenium, Thallium, 250 µg/mL ea: Cadmium

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Arsenic, As	**500.0 ± 3.1 µg/mL**	**Cadmium, Cd**	**250.1 ± 1.1 µg/mL**
Lead, Pb	**500.0 ± 2.3 µg/mL**	**Selenium, Se**	**500.0 ± 3.2 µg/mL**
Thallium, Tl	**500.0 ± 3.0 µg/mL**		

Density: 1.040 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	ICP Assay	3103a	100818
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Tl	ICP Assay	3158	151215

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 02, 2025

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 02, 2030**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

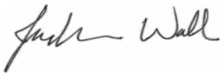
12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Justin Dirico
Stock Processing Supervisor

Certificate Approved By:

Jodie Wall
Stock VSM Coordinator



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

R -> 013125

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

M 6171

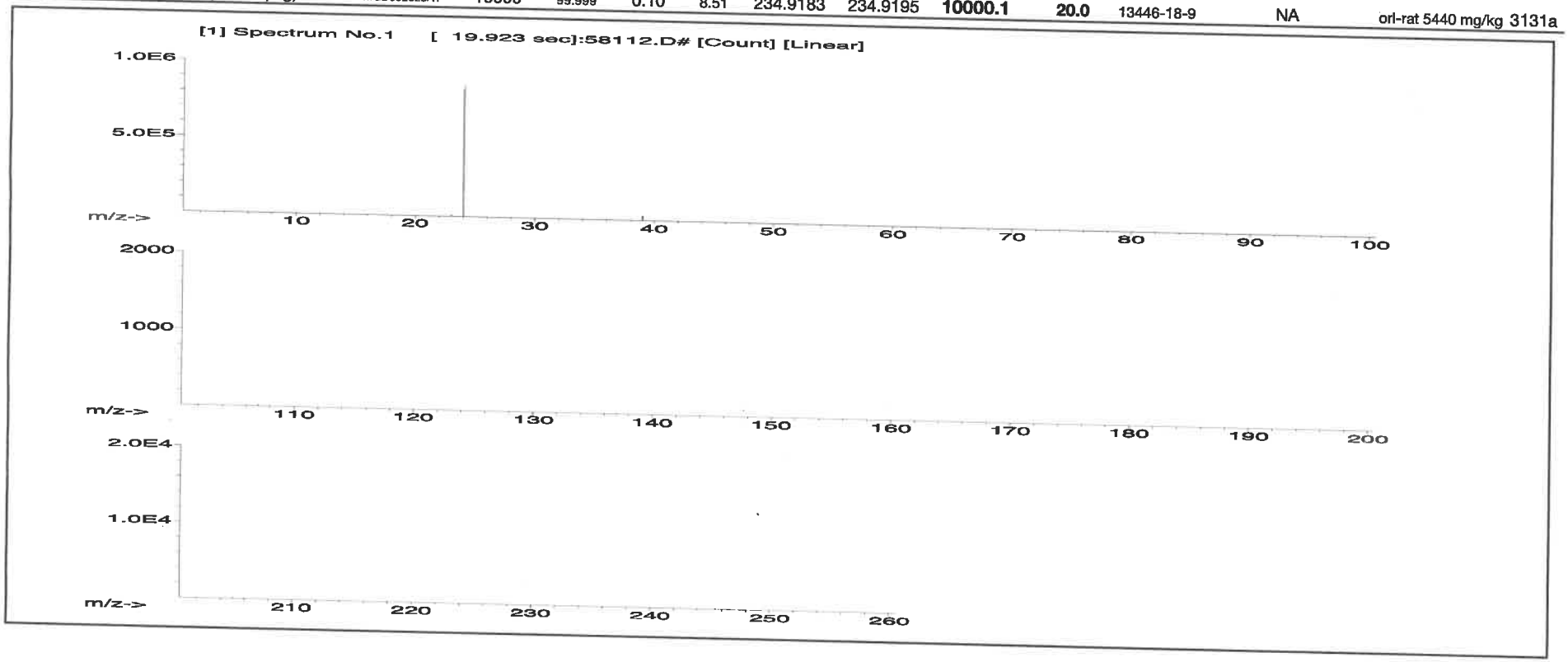
Part Number: 58112
Lot Number: 011525
Description: Magnesium (Mg)

Expiration Date: 011528
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.07

	Lot #		
Solvent:	24012496	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.100	Flask Uncertainty	

Formulated By:	Benson Chan	011525
Reviewed By:	Pedro L. Rentas	011525

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Magnesium nitrate hexahydrate (Mg)	IN030	MGD052023A1	10000	99.999	0.10	8.51	234.9183	234.9195	**10000.1**	**20.0**	13446-18-9	NA	orl-rat 5440 mg/kg	3131a



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	T	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* 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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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-CAL-1
Lot Number:	V2-MEB742428
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea:
	Calcium, Potassium,
	Magnesium, Sodium,
	2 000 µg/mL ea:
	Aluminum, Barium,
	1 000 µg/mL ea:
	Iron,
	500 µg/mL ea:
	Nickel, Vanadium,
	Zinc, Cobalt,
	Manganese,
	250 µg/mL ea:
	Silver, Copper,
	200 µg/mL ea:
	Chromium,
	50 µg/mL ea:
	Beryllium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	2 000 ± 7 µg/mL	Barium, Ba	2 000 ± 9 µg/mL
Beryllium, Be	50.03 ± 0.30 µg/mL	Calcium, Ca	5 000 ± 16 µg/mL
Chromium, Cr	200.0 ± 1.1 µg/mL	Cobalt, Co	500.0 ± 2.3 µg/mL
Copper, Cu	250.0 ± 1.1 µg/mL	Iron, Fe	1 000 ± 4 µg/mL
Magnesium, Mg	5 000 ± 22 µg/mL	Manganese, Mn	499.9 ± 2.2 µg/mL
Nickel, Ni	500.1 ± 2.3 µg/mL	Potassium, K	5 000 ± 22 µg/mL
Silver, Ag	250.0 ± 1.1 µg/mL	Sodium, Na	5 000 ± 22 µg/mL
Vanadium, V	500.0 ± 2.2 µg/mL	Zinc, Zn	500.0 ± 2.2 µg/mL

Density: 1.117 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
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
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	120618
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	200413
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information (https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver)

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 22, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- March 22, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor

Certificate Approved By:

Jodie Wall
Stock VSM Coordinator

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

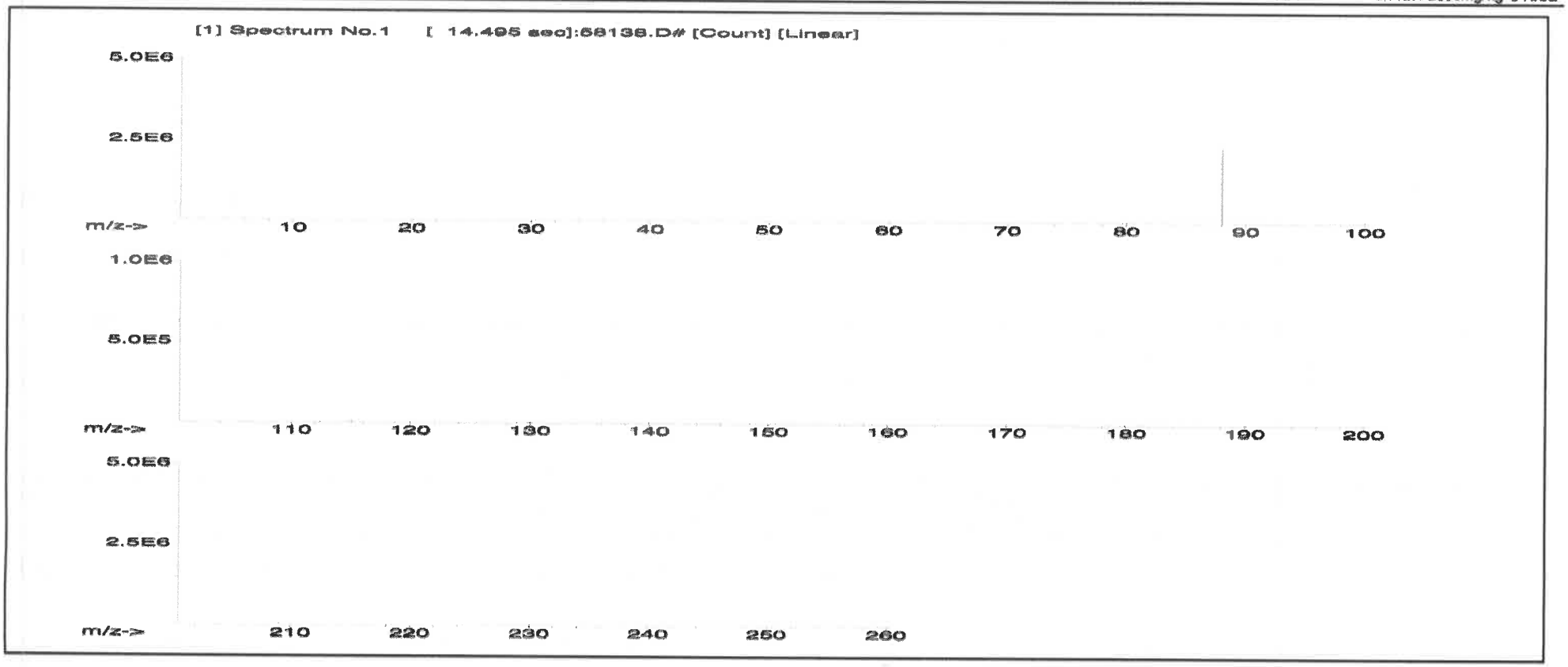
R->8/6/29

M6176

Part Number:	**57038**		**Lot #**		
Lot Number:	**092724**	**Solvent:**	24002546	Nitric Acid	
Description:	**Strontium (Sr)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	092727				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty		

Formulated By:	Benson Chan 092724
Reviewed By:	Pedro L. Rentas 092724

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Strontium nitrate (Sr)	IN017	SRZ022018A1	1000	99.997	0.10	41.2	4.85470	4.85481	**1000.0**	**2.0**	10042-76-9	NA	orl-rat >2000mg/kg	3153a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	T	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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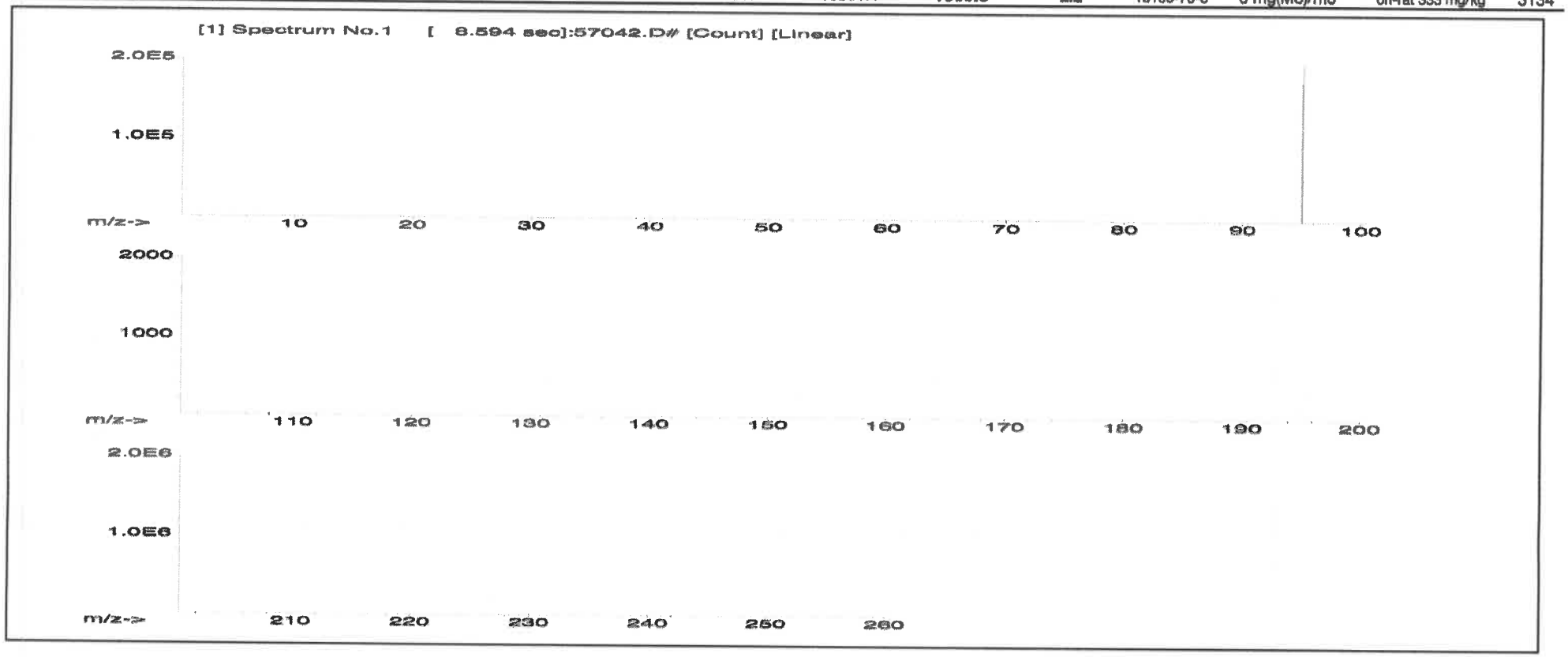
CERTIFIED WEIGHT REPORT:

R→ 8/6/25
M6177

		Lot #	Solvent:		
Part Number:	57042	MKBQ8597V	Ammonium hydroxide		
Lot Number:	080525	080525	ASTM Type 1 Water		
Description:	Molybdenum (Mo)	0.5%	10.0 (mL)	Ammonium hydroxide	
Expiration Date:	080528				
Recommended Storage:	Ambient (15 - 30 °C)				
Nominal Concentration (µg/mL):	1000				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	1999.41	0.058	Flask Uncertainty		

Formulated By:	Benson Chan	080525
Reviewed By:	Pedro L. Rentas	080525

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium molybdate (Mo)	58142	112322	0.1000	200.0	0.084	1000	10001.4	**1000.5**	**2.2**	13106-76-8	5 mg(Mo)/m3	orl-rat 333 mg/kg	3134



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AR-1539 Certificate Number
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	T	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

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 by an ISO17025 certified organization with weights traceable through NIST to the SI kilogram (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).
Rev 1.0, 2/25/2025

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CERTIFIED WEIGHT REPORT:

R>8/6/28
M6178

Part Number:	**57082**		**Lot #**		
Lot Number:	**031525**	**Solvent:**	24014457	Nitric Acid	
Description:	**Lead (Pb)**		2%	40.0 (mL)	Nitric Acid
Expiration Date:	031528				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.07	0.10	Flask Uncertainty		

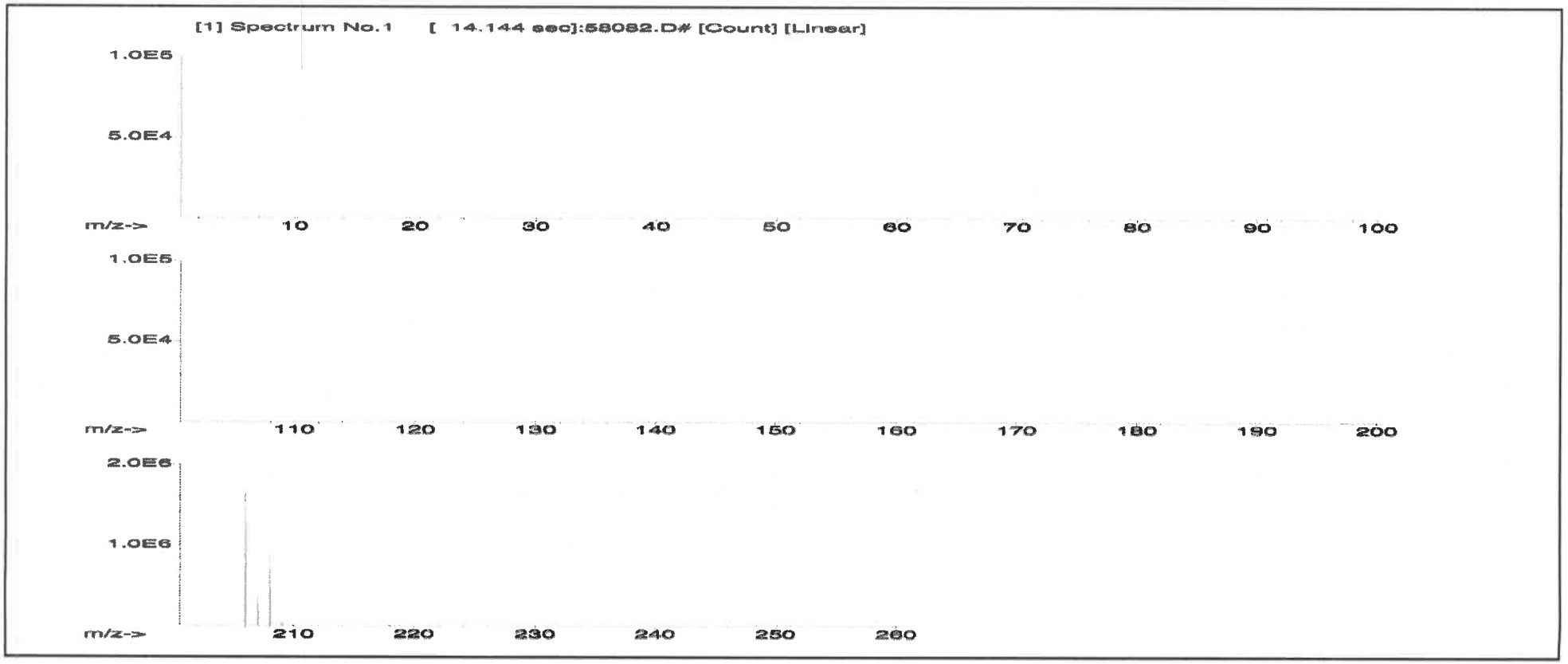
Giovanni Esposito

Formulated By:	Giovanni Esposito	031525

Pedro Rentas

Reviewed By:	Pedro L. Rentas	031525

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lead(II) nitrate (Pb)	IN029	PBD122016A1	1000	99.999	0.10	62.5	3.20015	3.20067	**1000.2**	**2.0**	10099-74-8	0.05 mg/m3	intrvns-rat 93 mg/kg	3128



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Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	T	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

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Certificate of Analysis

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inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

M6179
R -> 6/2/24

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGY10
Lot Number:	V2-Y740548
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Yttrium
Starting Material:	Yttrium Oxide
Starting Material Lot#:	2661 and 06230520YL
Starting Material Purity:	99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10000 ± 30 µg/mL

Density: 1.032 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 — **10011 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #2 — **9997 ± 50 µg/mL**
ICP Assay NIST SRM 3167a Lot Number: 190730

Assay Method #3 — **9984 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.004600	M	Eu		0.009037	M	Na		0.086360	M	Se	<	0.005200	M	Zn		0.030125
M	Al		0.014862	O	Fe		0.002410	M	Nb	<	0.000570	O	Si		0.024100	O	Zr	<	0.002600
M	As	<	0.003500	M	Ga	<	0.000570	M	Nd		0.000923	M	Sm		0.000461				
M	Au	<	0.001700	M	Gd	<	0.003500	M	Ni	<	0.005700	M	Sn	<	0.002300				
O	B		0.002209	M	Ge	<	0.005200	M	Os	<	0.001200	M	Sr	<	0.004600				
O	Ba	<	0.002500	M	Hf	<	0.000570	n	P	<		M	Ta	<	0.000570				
O	Be	<	0.001400	M	Hg	<	0.000570	M	Pb		0.005020	M	Tb		0.001044				
M	Bi	<	0.003500	M	Ho		0.009037	M	Pd	<	0.005100	M	Te	<	0.002300				
O	Ca		0.009841	M	In	<	0.002300	M	Pr	<	0.002300	M	Th	<	0.000570				
M	Cd	<	0.000570	M	Ir	<	0.000570	M	Pt	<	0.000570	M	Ti	<	0.003500				
M	Ce	<	0.002300	O	K		0.018677	M	Rb	<	0.000570	M	Tl	<	0.000570				
M	Co	<	0.000570	M	La		0.000461	M	Re	<	0.000570	M	Tm	<	0.003500				
M	Cr	<	0.004000	O	Li	<	0.009300	M	Rh	<	0.008000	M	U	<	0.000570				
M	Cs	<	0.000570	M	Lu		0.000582	M	Ru	<	0.000570	M	V		0.001265				
M	Cu		0.002610	O	Mg		0.001486	n	S	<		M	W	<	0.002300				
M	Dy		0.003815	M	Mn		0.000582	M	Sb		0.005422	s	Y	<					
M	Er		0.003615	M	Mo	<	0.005700	M	Sc	<	0.001200	M	Yb		0.001827				

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 - 88.91 +3 6 Y(OH)(H2O)x+2

Chemical Compatibility -Soluble in HCl, H2SO4 and HNO3. Avoid HF, H3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming an insoluble carbonate, oxide, oxalate, and fluoride. Avoid mixing with elements / solutions containing moderate amounts of fluoride.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

Y Containing Samples (Preparation and Solution) - Metal (Soluble in acids); Oxide (Dissolve by heating in H2O/ HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolve in 1:1 H2O / HCl or HNO3).

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 89 amu	0.8 ppt	N/A	73Ge16O, 178Hf+2
ICP-OES 360.073 nm	0.005 / 0.000036 µg/mL	1	Ce, Th
ICP-OES 371.030 nm	0.004 / 0.00007 µg/mL	1	Ce
ICP-OES 377.433 nm	0.005 / 0.0009 µg/mL	1	Ta, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 20, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- February 20, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor

Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-1
Lot Number:	W2-MEB752149
Matrix:	5% (v/v) HNO3

M6180
R-3 7/22/23

Value / Analyte(s):	1 000 µg/mL ea: Potassium,	
	600 µg/mL ea: Phosphorus,	
	300 µg/mL ea: Sodium,	Iron,
	200 µg/mL ea: Magnesium, Cerium, Thallium,	Aluminum, Selenium,
	100 µg/mL ea: Lead,	Calcium,
	80 µg/mL ea: Arsenic,	
	70 µg/mL ea: Mercury,	
	50 µg/mL ea: Nickel,	
	40 µg/mL ea: Chromium,	
	30 µg/mL ea: Copper, Vanadium,	Boron,
	20 µg/mL ea: Zinc, Barium, Cadmium, Manganese,	Strontium, Beryllium, Cobalt, Lithium,
	7.5 µg/mL ea: Silver	

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	200.2 ± 0.7 µg/mL	Arsenic, As	80.1 ± 0.5 µg/mL
Barium, Ba	20.02 ± 0.12 µg/mL	Beryllium, Be	20.02 ± 0.11 µg/mL
Boron, B	30.02 ± 0.15 µg/mL	Cadmium, Cd	20.04 ± 0.09 µg/mL
Calcium, Ca	100.1 ± 0.3 µg/mL	Cerium, Ce	200.2 ± 1.0 µg/mL
Chromium, Cr	40.02 ± 0.26 µg/mL	Cobalt, Co	20.03 ± 0.09 µg/mL
Copper, Cu	30.03 ± 0.13 µg/mL	Iron, Fe	300.3 ± 1.3 µg/mL
Lead, Pb	100.1 ± 0.5 µg/mL	Lithium, Li	20.03 ± 0.09 µg/mL
Magnesium, Mg	200.2 ± 0.9 µg/mL	Manganese, Mn	19.99 ± 0.09 µg/mL
Mercury, Hg	70.0 ± 0.3 µg/mL	Nickel, Ni	50.05 ± 0.22 µg/mL
Phosphorus, P	600.5 ± 2.9 µg/mL	Potassium, K	1 001 ± 4 µg/mL
Selenium, Se	200.2 ± 1.1 µg/mL	Silver, Ag	7.52 ± 0.03 µg/mL
Sodium, Na	300.3 ± 1.3 µg/mL	Strontium, Sr	20.02 ± 0.10 µg/mL
Thallium, Tl	200.2 ± 1.0 µg/mL	Vanadium, V	30.02 ± 0.13 µg/mL
Zinc, Zn	20.05 ± 0.09 µg/mL		

Density: 1.037 g/mL (measured at 20 ± 5 °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
B	ICP Assay	3107	190605
B	Calculated		See Sec. 4.2
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Ce	ICP Assay	3110	160830
Ce	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	120618
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	200413
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Tl	ICP Assay	3158	151215
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 25° C to minimize the effects of transpiration. Use at 20° ± 5° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information (https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver)

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 08, 2025

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 08, 2029**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Justin Dirico
Stock Processing Supervisor

Certificate Approved By:

Jodie Wall
Stock VSM Coordinator

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Refine your results. Redefine your industry.

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300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

M6181
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-2
Lot Number:	V2-MEB743480
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	200 µg/mL ea: Silica, 80 µg/mL ea: Antimony, 70 µg/mL ea: Tin, 40 µg/mL ea: Molybdenum, 20 µg/mL ea: Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	80.1 ± 0.5 µg/mL	Molybdenum, Mo	40.05 ± 0.22 µg/mL
Silica, SiO2	200.3 ± 1.4 µg/mL	Tin, Sn	70.1 ± 0.4 µg/mL
Titanium, Ti	20.03 ± 0.12 µg/mL		

Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Sb	ICP Assay	3102a	140911
SiO2	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	traceable to 3162a	T2-TI725816

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method I with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{¼}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 07, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- May 07, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Justin Dirico
Stock Processing Supervisor

Certificate Approved By:

Thomas Kozikowski
Stock VS Manager

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

QATS LABORATORY INORGANIC REFERENCE MATERIAL
INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (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.

M6182

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 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-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. 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 ICP-AES 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-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, 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 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES 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-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 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-AES (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

M6184

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of 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-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. 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 ICP-AES 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-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, 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 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES 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-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

Nitric Acid 69%
CMOS

M6187
R.D :- 08/08/25

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Material No.: 9606-03
Batch No.: 24H0162012
Manufactured Date: 2024-06-28
Retest Date: 2029-06-27
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	< 1 ppm
Chloride (Cl)	≤ 0.08 ppm	0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	0.1 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	0.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	0.1 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 1 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 1 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 1.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

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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

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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

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Certified Reference Material CRM

M6027

R1 8/05/24

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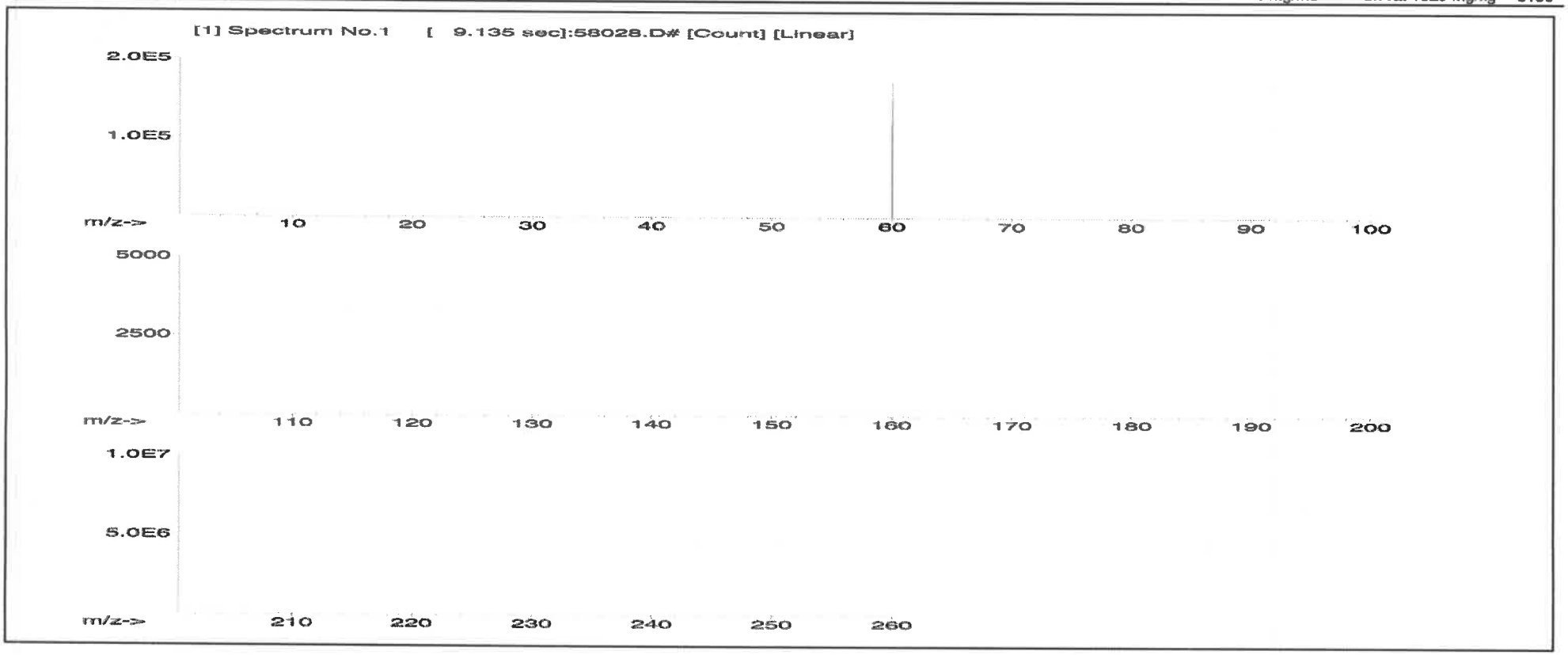
CERTIFIED WEIGHT REPORT:

Part Number:	57028
Lot Number:	062024
Description:	Nickel (Ni)
Expiration Date:	062027
Recommended Storage:	Ambient (20 °C)
Nominal Concentration (µg/mL):	1000
NIST Test Number:	6UTB
Volume shown below was diluted to (mL):	2000.07

Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	40.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.100	Flask Uncertainty	

Formulated **By:**	Benson Chan	062024
Reviewed By:	Pedro L. Rentas	062024

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Nickel(II) nitrate hexahydrate (Ni)	58128	062023	0.1000	200.0	0.084	1000	10000.4	**1000.0**	2.2	13478-00-7	1 mg/m3	orl-rat 1620 mg/kg	3136



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	T	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M6030

R: 8/5/24

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CERTIFIED WEIGHT REPORT:

Part Number: 57047
Lot Number: 122823
Description: Silver (Ag)

Expiration Date: 122826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

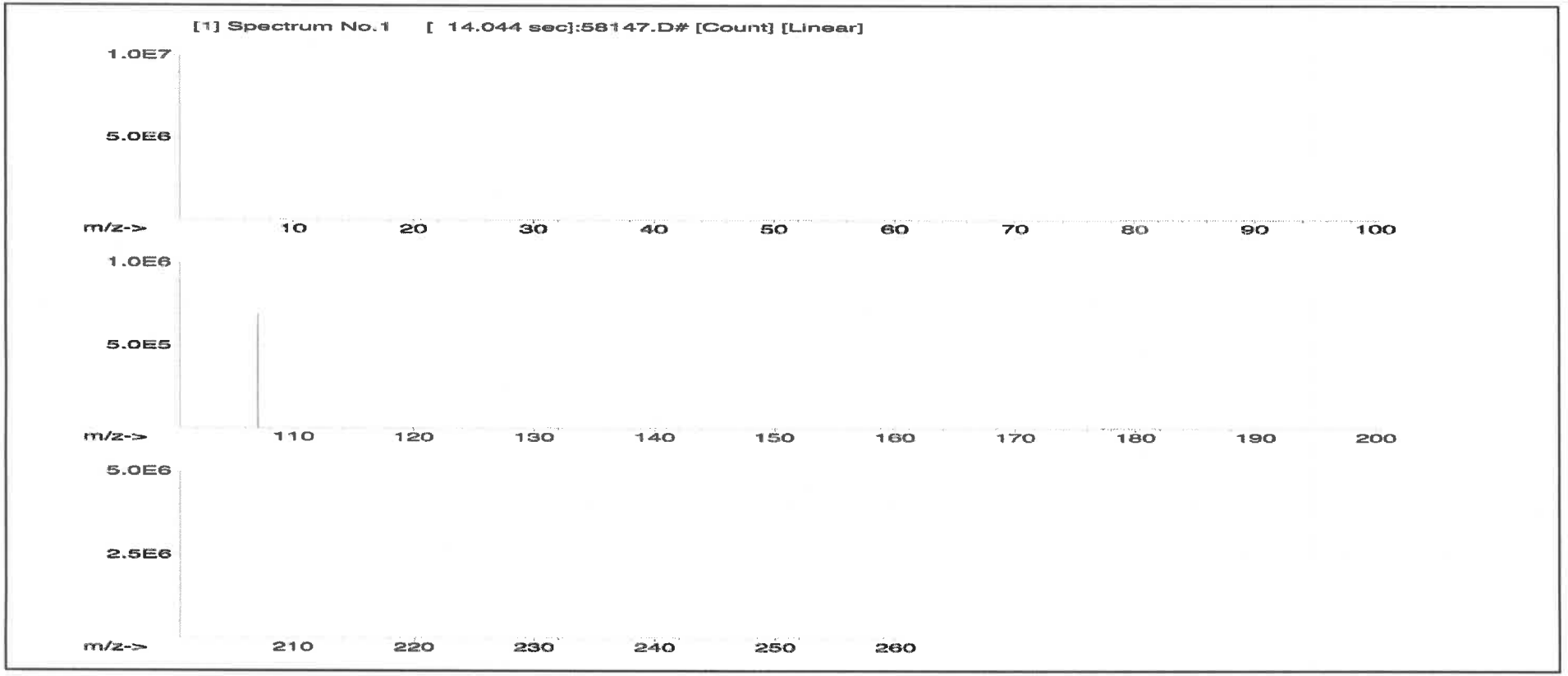
Weight shown below was diluted to (mL): 4000.30 0.058 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	80.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Benson Chan	122823
Reviewed By:	Pedro L. Rentas	122823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Silver nitrate (Ag)	IN035	J0612AGA1	1000.0	99.9999	0.10	63.7	6.27992	6.27998	**1000.0**	**2.0**	7761-88-8	10 ug/m3	NA	3151



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	T	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

opened : 3/24/25

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CERTIFIED WEIGHT REPORT:

M6160

Part Number: 57051
Lot Number: 071724
Description: Antimony (Sb)

Expiration Date: 071727
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 2000.26

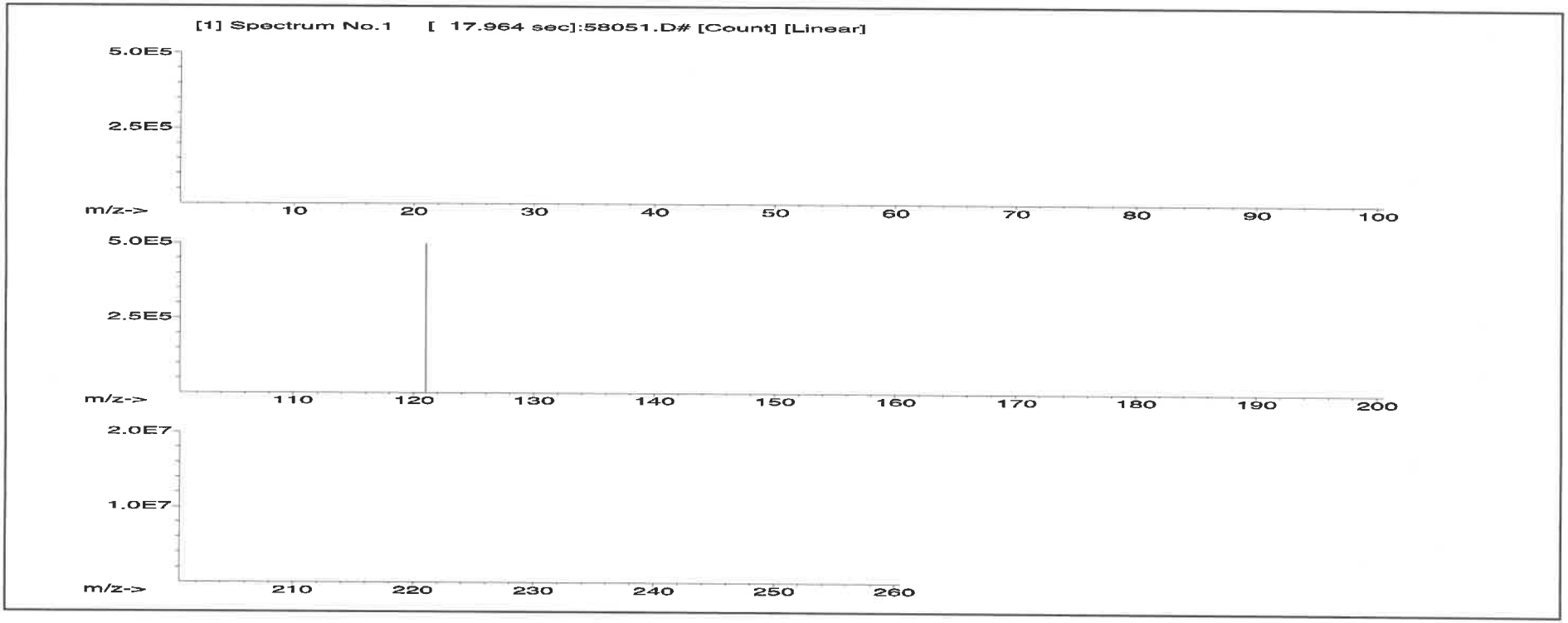
Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Giovanni Esposito
Formulated By: Giovanni Esposito 071724

Pedro Rentas
Reviewed By: Pedro L. Rentas 071724

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Antimony (Sb)	58151	060324	0.1000	200.0	0.084	1000	10001.4	**1000.0**	**2.2**	7440-36-0	0.5 mg/m3	orl-rat 7000 mg/kg	3102a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	T	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
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* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

M6023

R ! 8/5/24

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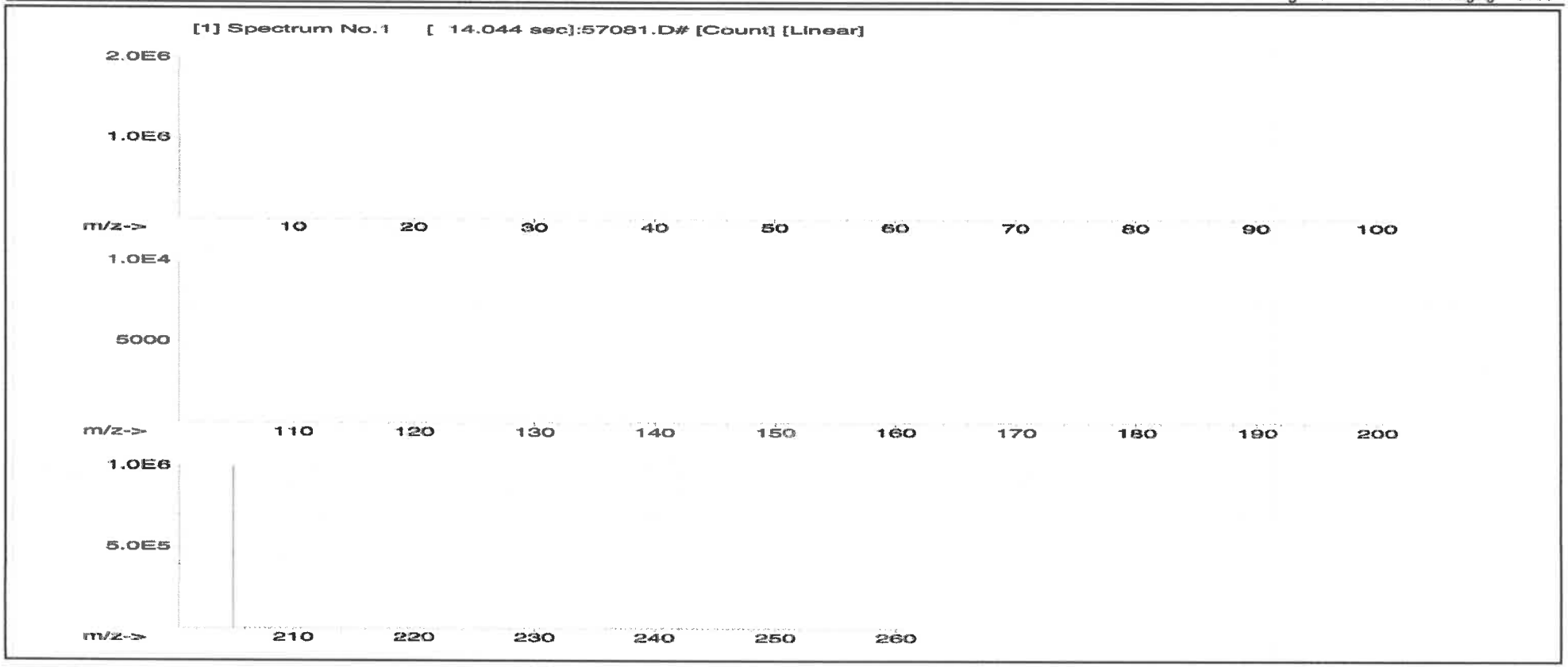
CERTIFIED WEIGHT REPORT:

Part Number:	**57081**			**Lot #**	
Lot Number:	**062724**		**Solvent:**	24002546	Nitric Acid
Description:	**Thallium (Tl)**				
			2%	40.0 (mL)	Nitric Acid
Expiration Date:	062727				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.1	0.10	Flask Uncertainty		

Aleah O'Brady

Formulated By:	Aleah O'Brady	062724
Reviewed By:	Pedro L. Rentas	062724

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Thallium nitrate (Tl)	IN037	BCCF4399	1000	99.999	0.10	77.0	2.5975	2.5977	**1000.1**	**2.0**	10102-45-1	0.1 mg/m3	orl-mus 15mg/kg	3158



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AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	T	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

M6021

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Rc. 8/5/24

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57023**			
Lot Number:	**062424**	24002546	Nitric Acid	
Description:	**Vanadium (V)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	062427			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.3	0.06	Flask Uncertainty	

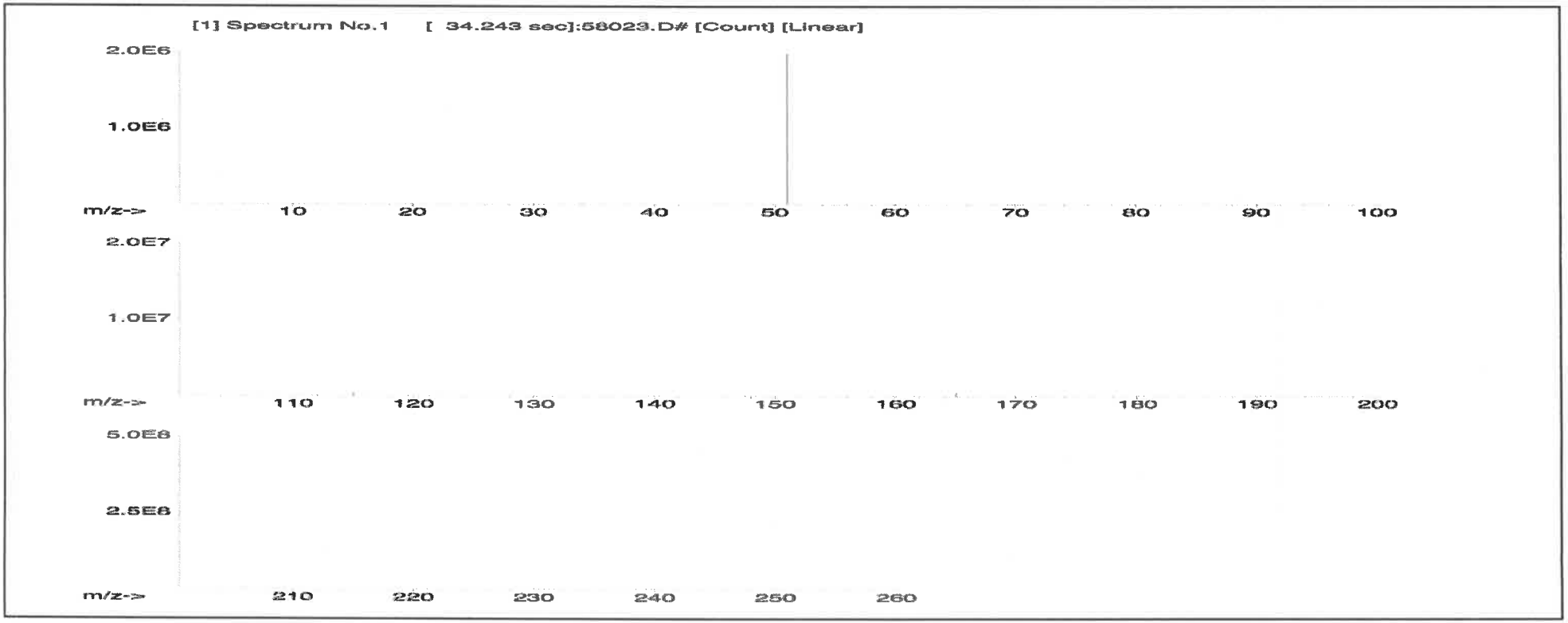
Aleah O'Brady

Formulated By:	Aleah O'Brady	062424

Pedro Rentas

Reviewed By:	Pedro L. Rentas	062424

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium metavanadate (V)	58123	021224	0.1000	200.0	0.084	1000	10000.3	**1000.0**	**2.2**	7803-55-6	0.05 mg/m3	orl-rat 58.1mg/kg	3165



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	T
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

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SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO. Q3254
QUOTE NO. BOTTLE ORDER # B250937
COC Number 2045119

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: LKB ENGINEERING, PLLC.
ADDRESS: 1 AERIAL WAY
CITY SYOSSET STATE: NY ZIP: 11791
ATTENTION: JOHN GERLACH
PHONE: 516-240-8931 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: ANSONIA LANDFILL
PROJECT NO.: 0774-08 LOCATION: CT
PROJECT MANAGER: JOHN GERLACH
e-mail: jgerlach@LKB-ENGINEERING.COM
PHONE: SAME FAX:

CLIENT BILLING INFORMATION

BILL TO: LKB ENGINEERING PO#: N/A for lab
ADDRESS: SAME
CITY STATE: ZIP:
ATTENTION: SHARON. F. PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): STD. DAYS*
EDD: _____ DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☑ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC + Raw Data) ☐ NYS ASP A ☐ NYS ASP B
☐ Other _____
☑ EDD FORMAT NYSDEC

ANALYSIS

1: VOCs 2: SEE 3: BOTTLE 4: ORDER # 5: B250937 6: 7: 8: 9:

PRESERVATIVES

A/E E+OTHERS AS APPROPRIATE

COMMENTS

← Specify Preservatives
A-HCl D-NaOH
B-HNO3 E-ICE
C-H2SO4 F-OTHER

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRES 1	PRES 2	PRES 3	PRES 4	PRES 5	PRES 6	PRES 7	PRES 8	PRES 9	COMMENTS
1.	MW-1	GW		X	9/29/25	9:45	10		X								SAMPLES FOR DISS. Fe+Mn FILTERED IN FIELD
2.	MW-2	GW		X		11:15	10		X								
3.	MW-3	GW		X		12:30	10		X								
4.	MW-4	GW		X		11:45	10		X								
5.	TRIPBLANK	DI		X	↓		2	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:	DATE/TIME:
1.	9/30/25 1050	1.	9-30-25 1050
2.		2.	
3.	9-30-25 1245	3.	

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 2.1 °C
Comments:

Page _____ of

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

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Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255425
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
Virginia	460312

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q3254 LOCK01
Client Name : Lockwood, Kessler & Bartl
Client Contact : John Gerlach
Invoice Name : Lockwood, Kessler & Bartl
Invoice Contact : John Gerlach

Order Date : 9/30/2025 12:37:00 PM
Project Name : Ansonia Landfill 2025
Receive DateTime : 9/30/2025 12:45:00 PM
Purchase Order :

Project Mgr : Yazmeen
Report Type : NYS ASP B
EDD Type : EXCEL NOCLEANUP
Hard Copy Date :
Date Signoff : 9/30/2025 3:06:33 PM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q3254-01	MW-1	Water	09/29/2025	09:45					
					VOCMS Group1		8260-Low		10 Bus. Days
Q3254-03	MW-2	Water	09/29/2025	11:15					
					VOCMS Group1		8260-Low		10 Bus. Days
Q3254-05	MW-3	Water	09/29/2025	12:30					
					VOCMS Group1		8260-Low		10 Bus. Days
Q3254-07	MW-4	Water	09/29/2025	11:45					
					VOCMS Group1		8260-Low		10 Bus. Days
Q3254-09	TRIP-BLANK	Water	09/29/2025	00:00					
					VOCMS Group1		8260-Low		10 Bus. Days

Relinguished By :
Date / Time : 9/30/25 13:00

Received By :
Date / Time : 9/30/25 13:00
Storage Area : VOA Refridgerator Room