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Cover Page

Order ID : Q2303

Project ID : Amtrak Sawtooth Bridges 2025

Client : Portal Partners Tri-Venture

Lab Sample Number	Client Sample Number
Q2303-01	B-165-SB01
Q2303-02	B-170-SB03

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

Signature : _____

Date: 6/19/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

Alliance TECHNICAL GROUP

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

DATA REPORTING QUALIFIERS- INORGANIC

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

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

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **Q2303**

	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: **PRADIP PRAJAPATI** **Date:** **06/19/2025**

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LAB CHRONICLE

OrderID:	Q2303	**OrderDate:**	6/12/2025 12:09:00 PM
Client:	Portal Partners Tri-Venture	**Project:**	Amtrak Sawtooth Bridges 2025
Contact:	Joseph Krupansky	**Location:**	D41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2303-01	**B-165-SB01**	**SOIL**			**06/11/25**			**06/11/25**
			Mercury	7471B		06/13/25	06/16/25	
			Metals ICP-TAL	6010D		06/13/25	06/16/25	
Q2303-02	**B-170-SB03**	**SOIL**			**06/11/25**			**06/11/25**
			Mercury	7471B		06/13/25	06/16/25	
			Metals ICP-TAL	6010D		06/13/25	06/16/25	

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Hit Summary Sheet
SW-846

SDG No.: Q2303 **Order ID:** Q2303

Client: Portal Partners Tri-Venture **Project ID:** Amtrak Sawtooth Bridges 2025

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : B-165-SB01								
Q2303-01	B-165-SB01	SOIL	Aluminum	7950		0.87	5.20	mg/Kg
Q2303-01	B-165-SB01	SOIL	Antimony	1.38	J	0.23	2.60	mg/Kg
Q2303-01	B-165-SB01	SOIL	Arsenic	4.45		0.20	1.04	mg/Kg
Q2303-01	B-165-SB01	SOIL	Barium	130		0.76	5.20	mg/Kg
Q2303-01	B-165-SB01	SOIL	Beryllium	0.57		0.026	0.31	mg/Kg
Q2303-01	B-165-SB01	SOIL	Cadmium	0.080	J	0.025	0.31	mg/Kg
Q2303-01	B-165-SB01	SOIL	Calcium	59800		11.5	104	mg/Kg
Q2303-01	B-165-SB01	SOIL	Chromium	14.9		0.049	0.52	mg/Kg
Q2303-01	B-165-SB01	SOIL	Cobalt	7.88		0.10	1.56	mg/Kg
Q2303-01	B-165-SB01	SOIL	Copper	22.2		0.23	1.04	mg/Kg
Q2303-01	B-165-SB01	SOIL	Iron	13000		4.15	5.20	mg/Kg
Q2303-01	B-165-SB01	SOIL	Lead	70.7		0.14	0.62	mg/Kg
Q2303-01	B-165-SB01	SOIL	Magnesium	8960		12.5	104	mg/Kg
Q2303-01	B-165-SB01	SOIL	Manganese	231		0.15	1.04	mg/Kg
Q2303-01	B-165-SB01	SOIL	Mercury	0.23		0.0090	0.016	mg/Kg
Q2303-01	B-165-SB01	SOIL	Nickel	19.3		0.14	2.08	mg/Kg
Q2303-01	B-165-SB01	SOIL	Potassium	1050		28.8	104	mg/Kg
Q2303-01	B-165-SB01	SOIL	Selenium	0.94	J	0.27	1.04	mg/Kg
Q2303-01	B-165-SB01	SOIL	Silver	0.55		0.13	0.52	mg/Kg
Q2303-01	B-165-SB01	SOIL	Sodium	422		18.5	104	mg/Kg
Q2303-01	B-165-SB01	SOIL	Vanadium	25.5		0.26	2.08	mg/Kg
Q2303-01	B-165-SB01	SOIL	Zinc	88.1		0.11	2.08	mg/Kg
Client ID : B-170-SB03								
Q2303-02	B-170-SB03	SOIL	Aluminum	4040		0.82	4.88	mg/Kg
Q2303-02	B-170-SB03	SOIL	Antimony	1.33	J	0.22	2.44	mg/Kg
Q2303-02	B-170-SB03	SOIL	Arsenic	3.28		0.19	0.98	mg/Kg
Q2303-02	B-170-SB03	SOIL	Barium	67.5		0.71	4.88	mg/Kg
Q2303-02	B-170-SB03	SOIL	Beryllium	0.36		0.024	0.29	mg/Kg
Q2303-02	B-170-SB03	SOIL	Calcium	9840		10.8	97.6	mg/Kg
Q2303-02	B-170-SB03	SOIL	Chromium	14.4		0.046	0.49	mg/Kg
Q2303-02	B-170-SB03	SOIL	Cobalt	5.81		0.098	1.46	mg/Kg
Q2303-02	B-170-SB03	SOIL	Copper	19.8		0.22	0.98	mg/Kg
Q2303-02	B-170-SB03	SOIL	Iron	10500		3.90	4.88	mg/Kg
Q2303-02	B-170-SB03	SOIL	Lead	168		0.13	0.59	mg/Kg
Q2303-02	B-170-SB03	SOIL	Magnesium	2640		11.7	97.6	mg/Kg
Q2303-02	B-170-SB03	SOIL	Manganese	269		0.14	0.98	mg/Kg
Q2303-02	B-170-SB03	SOIL	Mercury	0.90	D	0.015	0.026	mg/Kg

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Hit Summary Sheet
SW-846

SDG No.: Q2303 **Order ID:** Q2303

Client: Portal Partners Tri-Venture **Project ID:** Amtrak Sawtooth Bridges 2025

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2303-02	B-170-SB03	SOIL	Nickel	15.6		0.13	1.95	mg/Kg
Q2303-02	B-170-SB03	SOIL	Potassium	701		27.0	97.6	mg/Kg
Q2303-02	B-170-SB03	SOIL	Selenium	1.13		0.25	0.98	mg/Kg
Q2303-02	B-170-SB03	SOIL	Silver	3.24		0.12	0.49	mg/Kg
Q2303-02	B-170-SB03	SOIL	Sodium	114		17.4	97.6	mg/Kg
Q2303-02	B-170-SB03	SOIL	Thallium	0.36	J	0.23	1.95	mg/Kg
Q2303-02	B-170-SB03	SOIL	Vanadium	11.5		0.24	1.95	mg/Kg
Q2303-02	B-170-SB03	SOIL	Zinc	72.8		0.11	1.95	mg/Kg



SAMPLE DATA

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	06/11/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	06/11/25
Client Sample ID:	B-165-SB01	SDG No.:	Q2303
Lab Sample ID:	Q2303-01	Matrix:	SOIL
Level (low/med):	low	% Solid:	83.6

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	7950		1	0.87	5.20	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7440-36-0	Antimony	1.38	JN	1	0.23	2.60	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7440-38-2	Arsenic	4.45		1	0.20	1.04	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7440-39-3	Barium	130		1	0.76	5.20	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7440-41-7	Beryllium	0.57		1	0.026	0.31	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7440-43-9	Cadmium	0.080	J	1	0.025	0.31	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7440-70-2	Calcium	59800		1	11.5	104	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7440-47-3	Chromium	14.9	N	1	0.049	0.52	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7440-48-4	Cobalt	7.88		1	0.10	1.56	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7440-50-8	Copper	22.2	N	1	0.23	1.04	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7439-89-6	Iron	13000		1	4.15	5.20	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7439-92-1	Lead	70.7		1	0.14	0.62	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7439-95-4	Magnesium	8960		1	12.5	104	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7439-96-5	Manganese	231		1	0.15	1.04	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7439-97-6	Mercury	0.23		1	0.0090	0.016	mg/Kg	06/13/25 16:00	06/16/25 13:15	7471B	
7440-02-0	Nickel	19.3		1	0.14	2.08	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7440-09-7	Potassium	1050	N	1	28.8	104	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7782-49-2	Selenium	0.94	JN	1	0.27	1.04	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7440-22-4	Silver	0.55	N	1	0.13	0.52	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7440-23-5	Sodium	422		1	18.5	104	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7440-28-0	Thallium	0.24	U	1	0.24	2.08	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7440-62-2	Vanadium	25.5	N	1	0.26	2.08	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050
7440-66-6	Zinc	88.1	N	1	0.11	2.08	mg/Kg	06/13/25 11:15	06/16/25 15:49	6010D	SW3050

Color Before:	Brown	Clarity Before:		Texture:	Medium
Color After:	Yellow	Clarity After:		Artifacts:	
Comments:	METALS-TAL				

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:	Portal Partners Tri-Venture	Date Collected:	06/11/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	06/11/25
Client Sample ID:	B-170-SB03	SDG No.:	Q2303
Lab Sample ID:	Q2303-02	Matrix:	SOIL
Level (low/med):	low	% Solid:	92.7

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	4040		1	0.82	4.88	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7440-36-0	Antimony	1.33	JN	1	0.22	2.44	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7440-38-2	Arsenic	3.28		1	0.19	0.98	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7440-39-3	Barium	67.5		1	0.71	4.88	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7440-41-7	Beryllium	0.36		1	0.024	0.29	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7440-43-9	Cadmium	0.023	U	1	0.023	0.29	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7440-70-2	Calcium	9840		1	10.8	97.6	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7440-47-3	Chromium	14.4	N	1	0.046	0.49	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7440-48-4	Cobalt	5.81		1	0.098	1.46	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7440-50-8	Copper	19.8	N	1	0.22	0.98	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7439-89-6	Iron	10500		1	3.90	4.88	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7439-92-1	Lead	168		1	0.13	0.59	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7439-95-4	Magnesium	2640		1	11.7	97.6	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7439-96-5	Manganese	269		1	0.14	0.98	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7439-97-6	Mercury	0.90	D	2	0.015	0.026	mg/Kg	06/13/25 16:00	06/16/25 13:54	7471B	
7440-02-0	Nickel	15.6		1	0.13	1.95	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7440-09-7	Potassium	701	N	1	27.0	97.6	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7782-49-2	Selenium	1.13	N	1	0.25	0.98	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7440-22-4	Silver	3.24	N	1	0.12	0.49	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7440-23-5	Sodium	114		1	17.4	97.6	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7440-28-0	Thallium	0.36	J	1	0.23	1.95	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7440-62-2	Vanadium	11.5	N	1	0.24	1.95	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050
7440-66-6	Zinc	72.8	N	1	0.11	1.95	mg/Kg	06/13/25 11:15	06/16/25 15:53	6010D	SW3050

Color Before:	Brown	Clarity Before:		Texture:	Medium
Color After:	Yellow	Clarity After:		Artifacts:	
Comments:	METALS-TAL				

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

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

METAL CALIBRATION DATA

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV39	Mercury	3.96	4.0	99	90 - 110	CV	06/16/2025	12:52	LB136159

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV45	Mercury	5.20	5.0	104	90 - 110	CV	06/16/2025	12:56	LB136159
CCV46	Mercury	4.96	5.0	99	90 - 110	CV	06/16/2025	13:30	LB136159
CCV47	Mercury	5.00	5.0	100	90 - 110	CV	06/16/2025	13:49	LB136159
CCV48	Mercury	5.04	5.0	101	90 - 110	CV	06/16/2025	14:11	LB136159

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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	Aluminum	7940	8000	99	90 - 110	P	06/16/2025	14:03	lb136164
	Antimony	4090	4000	102	90 - 110	P	06/16/2025	14:03	lb136164
	Arsenic	3820	4000	96	90 - 110	P	06/16/2025	14:03	lb136164
	Barium	7830	8000	98	90 - 110	P	06/16/2025	14:03	lb136164
	Beryllium	203	200	102	90 - 110	P	06/16/2025	14:03	lb136164
	Cadmium	1950	2000	98	90 - 110	P	06/16/2025	14:03	lb136164
	Calcium	19700	20000	98	90 - 110	P	06/16/2025	14:03	lb136164
	Chromium	812	800	102	90 - 110	P	06/16/2025	14:03	lb136164
	Cobalt	1970	2000	99	90 - 110	P	06/16/2025	14:03	lb136164
	Copper	1030	1000	103	90 - 110	P	06/16/2025	14:03	lb136164
	Iron	3880	4000	97	90 - 110	P	06/16/2025	14:03	lb136164
	Lead	3820	4000	96	90 - 110	P	06/16/2025	14:03	lb136164
	Magnesium	19600	20000	98	90 - 110	P	06/16/2025	14:03	lb136164
	Manganese	1950	2000	98	90 - 110	P	06/16/2025	14:03	lb136164
	Nickel	1980	2000	99	90 - 110	P	06/16/2025	14:03	lb136164
	Potassium	20300	20000	102	90 - 110	P	06/16/2025	14:03	lb136164
	Selenium	3940	4000	99	90 - 110	P	06/16/2025	14:03	lb136164
	Silver	963	1000	96	90 - 110	P	06/16/2025	14:03	lb136164
	Sodium	20200	20000	101	90 - 110	P	06/16/2025	14:03	lb136164
	Thallium	4040	4000	101	90 - 110	P	06/16/2025	14:03	lb136164
	Vanadium	1940	2000	97	90 - 110	P	06/16/2025	14:03	lb136164
	Zinc	1980	2000	99	90 - 110	P	06/16/2025	14:03	lb136164

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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	Aluminum	116	100	116	80 - 120	P	06/16/2025	14:42	lb136164
	Antimony	53.4	50.0	107	80 - 120	P	06/16/2025	14:42	lb136164
	Arsenic	16.6	20.0	83	80 - 120	P	06/16/2025	14:42	lb136164
	Barium	101	100	101	80 - 120	P	06/16/2025	14:42	lb136164
	Beryllium	6.39	6.0	106	80 - 120	P	06/16/2025	14:42	lb136164
	Cadmium	5.68	6.0	95	80 - 120	P	06/16/2025	14:42	lb136164
	Calcium	2050	2000	103	80 - 120	P	06/16/2025	14:42	lb136164
	Chromium	9.87	10.0	99	80 - 120	P	06/16/2025	14:42	lb136164
	Cobalt	30.1	30.0	100	80 - 120	P	06/16/2025	14:42	lb136164
	Copper	22.6	20.0	113	80 - 120	P	06/16/2025	14:42	lb136164
	Iron	101	100	101	80 - 120	P	06/16/2025	14:42	lb136164
	Lead	12.5	12.0	104	80 - 120	P	06/16/2025	14:42	lb136164
	Magnesium	2090	2000	105	80 - 120	P	06/16/2025	14:42	lb136164
	Manganese	20.8	20.0	104	80 - 120	P	06/16/2025	14:42	lb136164
	Nickel	39.0	40.0	98	80 - 120	P	06/16/2025	14:42	lb136164
	Potassium	1620	2000	81	80 - 120	P	06/16/2025	14:42	lb136164
	Selenium	18.6	20.0	93	80 - 120	P	06/16/2025	14:42	lb136164
	Silver	10.8	10.0	108	80 - 120	P	06/16/2025	14:42	lb136164
	Sodium	1840	2000	92	80 - 120	P	06/16/2025	14:42	lb136164
	Thallium	37.2	40.0	93	80 - 120	P	06/16/2025	14:42	lb136164
	Vanadium	41.0	40.0	103	80 - 120	P	06/16/2025	14:42	lb136164
	Zinc	41.4	40.0	104	80 - 120	P	06/16/2025	14:42	lb136164

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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	Aluminum	10400	10000	104	90 - 110	P	06/16/2025	15:26	lb136164
	Antimony	5180	5000	104	90 - 110	P	06/16/2025	15:26	lb136164
	Arsenic	5140	5000	103	90 - 110	P	06/16/2025	15:26	lb136164
	Barium	10300	10000	103	90 - 110	P	06/16/2025	15:26	lb136164
	Beryllium	262	250	105	90 - 110	P	06/16/2025	15:26	lb136164
	Cadmium	2580	2500	103	90 - 110	P	06/16/2025	15:26	lb136164
	Calcium	26100	25000	104	90 - 110	P	06/16/2025	15:26	lb136164
	Chromium	1050	1000	105	90 - 110	P	06/16/2025	15:26	lb136164
	Cobalt	2560	2500	102	90 - 110	P	06/16/2025	15:26	lb136164
	Copper	1300	1250	104	90 - 110	P	06/16/2025	15:26	lb136164
	Iron	5140	5000	103	90 - 110	P	06/16/2025	15:26	lb136164
	Lead	5100	5000	102	90 - 110	P	06/16/2025	15:26	lb136164
	Magnesium	25400	25000	102	90 - 110	P	06/16/2025	15:26	lb136164
	Manganese	2570	2500	103	90 - 110	P	06/16/2025	15:26	lb136164
	Nickel	2580	2500	103	90 - 110	P	06/16/2025	15:26	lb136164
	Potassium	25300	25000	101	90 - 110	P	06/16/2025	15:26	lb136164
	Selenium	5180	5000	104	90 - 110	P	06/16/2025	15:26	lb136164
	Silver	1320	1250	106	90 - 110	P	06/16/2025	15:26	lb136164
	Sodium	25600	25000	102	90 - 110	P	06/16/2025	15:26	lb136164
	Thallium	5260	5000	105	90 - 110	P	06/16/2025	15:26	lb136164
	Vanadium	2560	2500	102	90 - 110	P	06/16/2025	15:26	lb136164
	Zinc	2580	2500	103	90 - 110	P	06/16/2025	15:26	lb136164
CCV02	Aluminum	10100	10000	101	90 - 110	P	06/16/2025	16:29	lb136164
	Antimony	5070	5000	101	90 - 110	P	06/16/2025	16:29	lb136164
	Arsenic	5040	5000	101	90 - 110	P	06/16/2025	16:29	lb136164
	Barium	10100	10000	101	90 - 110	P	06/16/2025	16:29	lb136164
	Beryllium	260	250	104	90 - 110	P	06/16/2025	16:29	lb136164
	Cadmium	2520	2500	101	90 - 110	P	06/16/2025	16:29	lb136164
	Calcium	25500	25000	102	90 - 110	P	06/16/2025	16:29	lb136164
	Chromium	1020	1000	102	90 - 110	P	06/16/2025	16:29	lb136164
	Cobalt	2500	2500	100	90 - 110	P	06/16/2025	16:29	lb136164
	Copper	1290	1250	103	90 - 110	P	06/16/2025	16:29	lb136164
	Iron	4960	5000	99	90 - 110	P	06/16/2025	16:29	lb136164
	Lead	4990	5000	100	90 - 110	P	06/16/2025	16:29	lb136164

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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	Magnesium	24800	25000	99	90 - 110	P	06/16/2025	16:29	lb136164
	Manganese	2490	2500	100	90 - 110	P	06/16/2025	16:29	lb136164
	Nickel	2510	2500	100	90 - 110	P	06/16/2025	16:29	lb136164
	Potassium	25100	25000	100	90 - 110	P	06/16/2025	16:29	lb136164
	Selenium	5090	5000	102	90 - 110	P	06/16/2025	16:29	lb136164
	Silver	1280	1250	102	90 - 110	P	06/16/2025	16:29	lb136164
	Sodium	25500	25000	102	90 - 110	P	06/16/2025	16:29	lb136164
	Thallium	5110	5000	102	90 - 110	P	06/16/2025	16:29	lb136164
	Vanadium	2490	2500	100	90 - 110	P	06/16/2025	16:29	lb136164
	Zinc	2510	2500	100	90 - 110	P	06/16/2025	16:29	lb136164
CCV03	Aluminum	10100	10000	101	90 - 110	P	06/16/2025	17:31	lb136164
	Antimony	5060	5000	101	90 - 110	P	06/16/2025	17:31	lb136164
	Arsenic	5060	5000	101	90 - 110	P	06/16/2025	17:31	lb136164
	Barium	10200	10000	102	90 - 110	P	06/16/2025	17:31	lb136164
	Beryllium	258	250	103	90 - 110	P	06/16/2025	17:31	lb136164
	Cadmium	2530	2500	101	90 - 110	P	06/16/2025	17:31	lb136164
	Calcium	25300	25000	101	90 - 110	P	06/16/2025	17:31	lb136164
	Chromium	1010	1000	101	90 - 110	P	06/16/2025	17:31	lb136164
	Cobalt	2510	2500	100	90 - 110	P	06/16/2025	17:31	lb136164
	Copper	1280	1250	102	90 - 110	P	06/16/2025	17:31	lb136164
	Iron	4950	5000	99	90 - 110	P	06/16/2025	17:31	lb136164
	Lead	4990	5000	100	90 - 110	P	06/16/2025	17:31	lb136164
	Magnesium	25000	25000	100	90 - 110	P	06/16/2025	17:31	lb136164
	Manganese	2480	2500	99	90 - 110	P	06/16/2025	17:31	lb136164
	Nickel	2510	2500	100	90 - 110	P	06/16/2025	17:31	lb136164
	Potassium	24900	25000	99	90 - 110	P	06/16/2025	17:31	lb136164
	Selenium	5070	5000	102	90 - 110	P	06/16/2025	17:31	lb136164
	Silver	1260	1250	101	90 - 110	P	06/16/2025	17:31	lb136164
	Sodium	25600	25000	102	90 - 110	P	06/16/2025	17:31	lb136164
	Thallium	5150	5000	103	90 - 110	P	06/16/2025	17:31	lb136164
	Vanadium	2490	2500	100	90 - 110	P	06/16/2025	17:31	lb136164
	Zinc	2500	2500	100	90 - 110	P	06/16/2025	17:31	lb136164
CCV04	Aluminum	10000	10000	100	90 - 110	P	06/16/2025	18:29	lb136164
	Antimony	5030	5000	101	90 - 110	P	06/16/2025	18:29	lb136164

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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	Arsenic	4970	5000	99	90 - 110	P	06/16/2025	18:29	lb136164
	Barium	10200	10000	102	90 - 110	P	06/16/2025	18:29	lb136164
	Beryllium	258	250	103	90 - 110	P	06/16/2025	18:29	lb136164
	Cadmium	2500	2500	100	90 - 110	P	06/16/2025	18:29	lb136164
	Calcium	25000	25000	100	90 - 110	P	06/16/2025	18:29	lb136164
	Chromium	988	1000	99	90 - 110	P	06/16/2025	18:29	lb136164
	Cobalt	2490	2500	99	90 - 110	P	06/16/2025	18:29	lb136164
	Copper	1290	1250	103	90 - 110	P	06/16/2025	18:29	lb136164
	Iron	4870	5000	97	90 - 110	P	06/16/2025	18:29	lb136164
	Lead	4960	5000	99	90 - 110	P	06/16/2025	18:29	lb136164
	Magnesium	24700	25000	99	90 - 110	P	06/16/2025	18:29	lb136164
	Manganese	2450	2500	98	90 - 110	P	06/16/2025	18:29	lb136164
	Nickel	2490	2500	100	90 - 110	P	06/16/2025	18:29	lb136164
	Potassium	25700	25000	103	90 - 110	P	06/16/2025	18:29	lb136164
	Selenium	5010	5000	100	90 - 110	P	06/16/2025	18:29	lb136164
	Silver	1230	1250	99	90 - 110	P	06/16/2025	18:29	lb136164
	Sodium	25900	25000	104	90 - 110	P	06/16/2025	18:29	lb136164
	Thallium	5090	5000	102	90 - 110	P	06/16/2025	18:29	lb136164
	Vanadium	2480	2500	99	90 - 110	P	06/16/2025	18:29	lb136164
	Zinc	2520	2500	101	90 - 110	P	06/16/2025	18:29	lb136164
CCV05	Aluminum	10100	10000	101	90 - 110	P	06/16/2025	19:17	lb136164
	Antimony	5050	5000	101	90 - 110	P	06/16/2025	19:17	lb136164
	Arsenic	4990	5000	100	90 - 110	P	06/16/2025	19:17	lb136164
	Barium	10400	10000	104	90 - 110	P	06/16/2025	19:17	lb136164
	Beryllium	267	250	107	90 - 110	P	06/16/2025	19:17	lb136164
	Cadmium	2510	2500	100	90 - 110	P	06/16/2025	19:17	lb136164
	Calcium	25300	25000	101	90 - 110	P	06/16/2025	19:17	lb136164
	Chromium	989	1000	99	90 - 110	P	06/16/2025	19:17	lb136164
	Cobalt	2480	2500	99	90 - 110	P	06/16/2025	19:17	lb136164
	Copper	1320	1250	106	90 - 110	P	06/16/2025	19:17	lb136164
	Iron	4930	5000	99	90 - 110	P	06/16/2025	19:17	lb136164
	Lead	4950	5000	99	90 - 110	P	06/16/2025	19:17	lb136164
	Magnesium	24800	25000	99	90 - 110	P	06/16/2025	19:17	lb136164
	Manganese	2470	2500	99	90 - 110	P	06/16/2025	19:17	lb136164

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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
CCV05	Nickel	2500	2500	100	90 - 110	P	06/16/2025	19:17	lb136164
	Potassium	26600	25000	106	90 - 110	P	06/16/2025	19:17	lb136164
	Selenium	5040	5000	101	90 - 110	P	06/16/2025	19:17	lb136164
	Silver	1240	1250	99	90 - 110	P	06/16/2025	19:17	lb136164
	Sodium	26400	25000	106	90 - 110	P	06/16/2025	19:17	lb136164
	Thallium	5130	5000	103	90 - 110	P	06/16/2025	19:17	lb136164
	Vanadium	2500	2500	100	90 - 110	P	06/16/2025	19:17	lb136164
	Zinc	2530	2500	101	90 - 110	P	06/16/2025	19:17	lb136164
CCV06	Aluminum	10200	10000	102	90 - 110	P	06/16/2025	20:04	lb136164
	Antimony	5030	5000	100	90 - 110	P	06/16/2025	20:04	lb136164
	Arsenic	4950	5000	99	90 - 110	P	06/16/2025	20:04	lb136164
	Barium	10100	10000	101	90 - 110	P	06/16/2025	20:04	lb136164
	Beryllium	266	250	106	90 - 110	P	06/16/2025	20:04	lb136164
	Cadmium	2500	2500	100	90 - 110	P	06/16/2025	20:04	lb136164
	Calcium	25200	25000	101	90 - 110	P	06/16/2025	20:04	lb136164
	Chromium	1020	1000	102	90 - 110	P	06/16/2025	20:04	lb136164
	Cobalt	2490	2500	100	90 - 110	P	06/16/2025	20:04	lb136164
	Copper	1320	1250	106	90 - 110	P	06/16/2025	20:04	lb136164
	Iron	4870	5000	97	90 - 110	P	06/16/2025	20:04	lb136164
	Lead	4940	5000	99	90 - 110	P	06/16/2025	20:04	lb136164
	Magnesium	24100	25000	96	90 - 110	P	06/16/2025	20:04	lb136164
	Manganese	2410	2500	96	90 - 110	P	06/16/2025	20:04	lb136164
	Nickel	2500	2500	100	90 - 110	P	06/16/2025	20:04	lb136164
	Potassium	26600	25000	106	90 - 110	P	06/16/2025	20:04	lb136164
	Selenium	5010	5000	100	90 - 110	P	06/16/2025	20:04	lb136164
	Silver	1280	1250	102	90 - 110	P	06/16/2025	20:04	lb136164
	Sodium	26700	25000	107	90 - 110	P	06/16/2025	20:04	lb136164
	Thallium	5060	5000	101	90 - 110	P	06/16/2025	20:04	lb136164
	Vanadium	2420	2500	97	90 - 110	P	06/16/2025	20:04	lb136164
	Zinc	2480	2500	99	90 - 110	P	06/16/2025	20:04	lb136164
CCV07	Aluminum	9940	10000	99	90 - 110	P	06/16/2025	20:52	lb136164
	Antimony	4960	5000	99	90 - 110	P	06/16/2025	20:52	lb136164
	Arsenic	4910	5000	98	90 - 110	P	06/16/2025	20:52	lb136164
	Barium	10100	10000	101	90 - 110	P	06/16/2025	20:52	lb136164

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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
CCV07	Beryllium	263	250	105	90 - 110	P	06/16/2025	20:52	lb136164
	Cadmium	2460	2500	98	90 - 110	P	06/16/2025	20:52	lb136164
	Calcium	24600	25000	98	90 - 110	P	06/16/2025	20:52	lb136164
	Chromium	982	1000	98	90 - 110	P	06/16/2025	20:52	lb136164
	Cobalt	2460	2500	98	90 - 110	P	06/16/2025	20:52	lb136164
	Copper	1310	1250	105	90 - 110	P	06/16/2025	20:52	lb136164
	Iron	4710	5000	94	90 - 110	P	06/16/2025	20:52	lb136164
	Lead	4880	5000	98	90 - 110	P	06/16/2025	20:52	lb136164
	Magnesium	23800	25000	95	90 - 110	P	06/16/2025	20:52	lb136164
	Manganese	2380	2500	95	90 - 110	P	06/16/2025	20:52	lb136164
	Nickel	2460	2500	98	90 - 110	P	06/16/2025	20:52	lb136164
	Potassium	26400	25000	106	90 - 110	P	06/16/2025	20:52	lb136164
	Selenium	4960	5000	99	90 - 110	P	06/16/2025	20:52	lb136164
	Silver	1230	1250	99	90 - 110	P	06/16/2025	20:52	lb136164
	Sodium	26700	25000	107	90 - 110	P	06/16/2025	20:52	lb136164
	Thallium	4990	5000	100	90 - 110	P	06/16/2025	20:52	lb136164
	Vanadium	2410	2500	96	90 - 110	P	06/16/2025	20:52	lb136164
	Zinc	2440	2500	98	90 - 110	P	06/16/2025	20:52	lb136164
CCV08	Aluminum	9810	10000	98	90 - 110	P	06/16/2025	21:14	lb136164
	Antimony	4940	5000	99	90 - 110	P	06/16/2025	21:14	lb136164
	Arsenic	4870	5000	97	90 - 110	P	06/16/2025	21:14	lb136164
	Barium	9880	10000	99	90 - 110	P	06/16/2025	21:14	lb136164
	Beryllium	259	250	103	90 - 110	P	06/16/2025	21:14	lb136164
	Cadmium	2450	2500	98	90 - 110	P	06/16/2025	21:14	lb136164
	Calcium	24400	25000	98	90 - 110	P	06/16/2025	21:14	lb136164
	Chromium	984	1000	98	90 - 110	P	06/16/2025	21:14	lb136164
	Cobalt	2440	2500	98	90 - 110	P	06/16/2025	21:14	lb136164
	Copper	1290	1250	103	90 - 110	P	06/16/2025	21:14	lb136164
	Iron	4660	5000	93	90 - 110	P	06/16/2025	21:14	lb136164
	Lead	4850	5000	97	90 - 110	P	06/16/2025	21:14	lb136164
	Magnesium	23500	25000	94	90 - 110	P	06/16/2025	21:14	lb136164
	Manganese	2350	2500	94	90 - 110	P	06/16/2025	21:14	lb136164
	Nickel	2440	2500	98	90 - 110	P	06/16/2025	21:14	lb136164
	Potassium	26100	25000	104	90 - 110	P	06/16/2025	21:14	lb136164

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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
CCV08	Selenium	4930	5000	98	90 - 110	P	06/16/2025	21:14	lb136164
	Silver	1230	1250	99	90 - 110	P	06/16/2025	21:14	lb136164
	Sodium	26300	25000	105	90 - 110	P	06/16/2025	21:14	lb136164
	Thallium	4970	5000	100	90 - 110	P	06/16/2025	21:14	lb136164
	Vanadium	2380	2500	95	90 - 110	P	06/16/2025	21:14	lb136164
	Zinc	2440	2500	97	90 - 110	P	06/16/2025	21:14	lb136164

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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	Aluminum	7940	8000	99	90 - 110	P	06/17/2025	12:25	LB136187
	Antimony	4130	4000	103	90 - 110	P	06/17/2025	12:25	LB136187
	Arsenic	3880	4000	97	90 - 110	P	06/17/2025	12:25	LB136187
	Barium	8170	8000	102	90 - 110	P	06/17/2025	12:25	LB136187
	Beryllium	208	200	104	90 - 110	P	06/17/2025	12:25	LB136187
	Cadmium	1970	2000	99	90 - 110	P	06/17/2025	12:25	LB136187
	Calcium	19800	20000	99	90 - 110	P	06/17/2025	12:25	LB136187
	Chromium	816	800	102	90 - 110	P	06/17/2025	12:25	LB136187
	Cobalt	1990	2000	100	90 - 110	P	06/17/2025	12:25	LB136187
	Copper	1050	1000	104	90 - 110	P	06/17/2025	12:25	LB136187
	Iron	3960	4000	99	90 - 110	P	06/17/2025	12:25	LB136187
	Lead	3890	4000	97	90 - 110	P	06/17/2025	12:25	LB136187
	Magnesium	20200	20000	101	90 - 110	P	06/17/2025	12:25	LB136187
	Manganese	2010	2000	100	90 - 110	P	06/17/2025	12:25	LB136187
	Nickel	2000	2000	100	90 - 110	P	06/17/2025	12:25	LB136187
	Potassium	20500	20000	102	90 - 110	P	06/17/2025	12:25	LB136187
	Selenium	3980	4000	99	90 - 110	P	06/17/2025	12:25	LB136187
	Silver	956	1000	96	90 - 110	P	06/17/2025	12:25	LB136187
	Sodium	20700	20000	104	90 - 110	P	06/17/2025	12:25	LB136187
	Thallium	4050	4000	101	90 - 110	P	06/17/2025	12:25	LB136187
	Vanadium	2010	2000	101	90 - 110	P	06/17/2025	12:25	LB136187
	Zinc	2020	2000	101	90 - 110	P	06/17/2025	12:25	LB136187

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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	Aluminum	89.5	100	90	80 - 120	P	06/17/2025	12:41	LB136187
	Antimony	54.3	50.0	109	80 - 120	P	06/17/2025	12:41	LB136187
	Arsenic	19.7	20.0	99	80 - 120	P	06/17/2025	12:41	LB136187
	Barium	101	100	101	80 - 120	P	06/17/2025	12:41	LB136187
	Beryllium	6.43	6.0	107	80 - 120	P	06/17/2025	12:41	LB136187
	Cadmium	5.76	6.0	96	80 - 120	P	06/17/2025	12:41	LB136187
	Calcium	2060	2000	103	80 - 120	P	06/17/2025	12:41	LB136187
	Chromium	9.74	10.0	97	80 - 120	P	06/17/2025	12:41	LB136187
	Cobalt	29.8	30.0	100	80 - 120	P	06/17/2025	12:41	LB136187
	Copper	23.3	20.0	117	80 - 120	P	06/17/2025	12:41	LB136187
	Iron	110	100	110	80 - 120	P	06/17/2025	12:41	LB136187
	Lead	12.5	12.0	104	80 - 120	P	06/17/2025	12:41	LB136187
	Magnesium	2130	2000	106	80 - 120	P	06/17/2025	12:41	LB136187
	Manganese	21.1	20.0	105	80 - 120	P	06/17/2025	12:41	LB136187
	Nickel	39.7	40.0	99	80 - 120	P	06/17/2025	12:41	LB136187
	Potassium	1650	2000	82	80 - 120	P	06/17/2025	12:41	LB136187
	Selenium	20.9	20.0	105	80 - 120	P	06/17/2025	12:41	LB136187
	Silver	10.7	10.0	107	80 - 120	P	06/17/2025	12:41	LB136187
	Sodium	1840	2000	92	80 - 120	P	06/17/2025	12:41	LB136187
	Thallium	40.2	40.0	101	80 - 120	P	06/17/2025	12:41	LB136187
	Vanadium	44.7	40.0	112	80 - 120	P	06/17/2025	12:41	LB136187
	Zinc	41.5	40.0	104	80 - 120	P	06/17/2025	12:41	LB136187

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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	Aluminum	9700	10000	97	90 - 110	P	06/17/2025	13:40	LB136187
	Antimony	4870	5000	97	90 - 110	P	06/17/2025	13:40	LB136187
	Arsenic	4780	5000	96	90 - 110	P	06/17/2025	13:40	LB136187
	Barium	9770	10000	98	90 - 110	P	06/17/2025	13:40	LB136187
	Beryllium	250	250	100	90 - 110	P	06/17/2025	13:40	LB136187
	Cadmium	2420	2500	97	90 - 110	P	06/17/2025	13:40	LB136187
	Calcium	24300	25000	97	90 - 110	P	06/17/2025	13:40	LB136187
	Chromium	983	1000	98	90 - 110	P	06/17/2025	13:40	LB136187
	Cobalt	2400	2500	96	90 - 110	P	06/17/2025	13:40	LB136187
	Copper	1250	1250	100	90 - 110	P	06/17/2025	13:40	LB136187
	Iron	4850	5000	97	90 - 110	P	06/17/2025	13:40	LB136187
	Lead	4790	5000	96	90 - 110	P	06/17/2025	13:40	LB136187
	Magnesium	24100	25000	96	90 - 110	P	06/17/2025	13:40	LB136187
	Manganese	2430	2500	97	90 - 110	P	06/17/2025	13:40	LB136187
	Nickel	2410	2500	96	90 - 110	P	06/17/2025	13:40	LB136187
	Potassium	25100	25000	100	90 - 110	P	06/17/2025	13:40	LB136187
	Selenium	4860	5000	97	90 - 110	P	06/17/2025	13:40	LB136187
	Silver	1230	1250	98	90 - 110	P	06/17/2025	13:40	LB136187
	Sodium	24800	25000	99	90 - 110	P	06/17/2025	13:40	LB136187
	Thallium	4910	5000	98	90 - 110	P	06/17/2025	13:40	LB136187
	Vanadium	2420	2500	97	90 - 110	P	06/17/2025	13:40	LB136187
	Zinc	2430	2500	97	90 - 110	P	06/17/2025	13:40	LB136187
CCV02	Aluminum	9910	10000	99	90 - 110	P	06/17/2025	14:43	LB136187
	Antimony	5000	5000	100	90 - 110	P	06/17/2025	14:43	LB136187
	Arsenic	4880	5000	98	90 - 110	P	06/17/2025	14:43	LB136187
	Barium	10100	10000	100	90 - 110	P	06/17/2025	14:43	LB136187
	Beryllium	253	250	101	90 - 110	P	06/17/2025	14:43	LB136187
	Cadmium	2460	2500	99	90 - 110	P	06/17/2025	14:43	LB136187
	Calcium	25200	25000	101	90 - 110	P	06/17/2025	14:43	LB136187
	Chromium	1000	1000	100	90 - 110	P	06/17/2025	14:43	LB136187
	Cobalt	2450	2500	98	90 - 110	P	06/17/2025	14:43	LB136187
	Copper	1260	1250	101	90 - 110	P	06/17/2025	14:43	LB136187
	Iron	4990	5000	100	90 - 110	P	06/17/2025	14:43	LB136187
	Lead	4900	5000	98	90 - 110	P	06/17/2025	14:43	LB136187

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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	Magnesium	24800	25000	99	90 - 110	P	06/17/2025	14:43	LB136187
	Manganese	2490	2500	99	90 - 110	P	06/17/2025	14:43	LB136187
	Nickel	2460	2500	98	90 - 110	P	06/17/2025	14:43	LB136187
	Potassium	26000	25000	104	90 - 110	P	06/17/2025	14:43	LB136187
	Selenium	4930	5000	98	90 - 110	P	06/17/2025	14:43	LB136187
	Silver	1270	1250	102	90 - 110	P	06/17/2025	14:43	LB136187
	Sodium	25100	25000	100	90 - 110	P	06/17/2025	14:43	LB136187
	Thallium	5030	5000	100	90 - 110	P	06/17/2025	14:43	LB136187
	Vanadium	2500	2500	100	90 - 110	P	06/17/2025	14:43	LB136187
	Zinc	2510	2500	100	90 - 110	P	06/17/2025	14:43	LB136187
CCV03	Aluminum	9900	10000	99	90 - 110	P	06/17/2025	15:38	LB136187
	Antimony	4860	5000	97	90 - 110	P	06/17/2025	15:38	LB136187
	Arsenic	4740	5000	95	90 - 110	P	06/17/2025	15:38	LB136187
	Barium	9710	10000	97	90 - 110	P	06/17/2025	15:38	LB136187
	Beryllium	247	250	99	90 - 110	P	06/17/2025	15:38	LB136187
	Cadmium	2400	2500	96	90 - 110	P	06/17/2025	15:38	LB136187
	Calcium	24400	25000	98	90 - 110	P	06/17/2025	15:38	LB136187
	Chromium	981	1000	98	90 - 110	P	06/17/2025	15:38	LB136187
	Cobalt	2370	2500	95	90 - 110	P	06/17/2025	15:38	LB136187
	Copper	1230	1250	99	90 - 110	P	06/17/2025	15:38	LB136187
	Iron	4870	5000	97	90 - 110	P	06/17/2025	15:38	LB136187
	Lead	4740	5000	95	90 - 110	P	06/17/2025	15:38	LB136187
	Magnesium	23800	25000	95	90 - 110	P	06/17/2025	15:38	LB136187
	Manganese	2400	2500	96	90 - 110	P	06/17/2025	15:38	LB136187
	Nickel	2390	2500	96	90 - 110	P	06/17/2025	15:38	LB136187
	Potassium	25100	25000	100	90 - 110	P	06/17/2025	15:38	LB136187
	Selenium	4770	5000	96	90 - 110	P	06/17/2025	15:38	LB136187
	Silver	1230	1250	99	90 - 110	P	06/17/2025	15:38	LB136187
	Sodium	24400	25000	98	90 - 110	P	06/17/2025	15:38	LB136187
	Thallium	4890	5000	98	90 - 110	P	06/17/2025	15:38	LB136187
	Vanadium	2390	2500	96	90 - 110	P	06/17/2025	15:38	LB136187
	Zinc	2420	2500	97	90 - 110	P	06/17/2025	15:38	LB136187
CCV04	Aluminum	10000	10000	100	90 - 110	P	06/17/2025	16:30	LB136187
	Antimony	4980	5000	100	90 - 110	P	06/17/2025	16:30	LB136187

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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	Arsenic	4840	5000	97	90 - 110	P	06/17/2025	16:30	LB136187
	Barium	10100	10000	101	90 - 110	P	06/17/2025	16:30	LB136187
	Beryllium	260	250	104	90 - 110	P	06/17/2025	16:30	LB136187
	Cadmium	2460	2500	98	90 - 110	P	06/17/2025	16:30	LB136187
	Calcium	25400	25000	101	90 - 110	P	06/17/2025	16:30	LB136187
	Chromium	1010	1000	101	90 - 110	P	06/17/2025	16:30	LB136187
	Cobalt	2430	2500	97	90 - 110	P	06/17/2025	16:30	LB136187
	Copper	1290	1250	103	90 - 110	P	06/17/2025	16:30	LB136187
	Iron	4980	5000	100	90 - 110	P	06/17/2025	16:30	LB136187
	Lead	4850	5000	97	90 - 110	P	06/17/2025	16:30	LB136187
	Magnesium	24500	25000	98	90 - 110	P	06/17/2025	16:30	LB136187
	Manganese	2470	2500	99	90 - 110	P	06/17/2025	16:30	LB136187
	Nickel	2460	2500	98	90 - 110	P	06/17/2025	16:30	LB136187
	Potassium	26400	25000	105	90 - 110	P	06/17/2025	16:30	LB136187
	Selenium	4880	5000	98	90 - 110	P	06/17/2025	16:30	LB136187
	Silver	1280	1250	102	90 - 110	P	06/17/2025	16:30	LB136187
	Sodium	25400	25000	102	90 - 110	P	06/17/2025	16:30	LB136187
	Thallium	5020	5000	100	90 - 110	P	06/17/2025	16:30	LB136187
	Vanadium	2460	2500	98	90 - 110	P	06/17/2025	16:30	LB136187
	Zinc	2490	2500	100	90 - 110	P	06/17/2025	16:30	LB136187
CCV05	Aluminum	10000	10000	100	90 - 110	P	06/17/2025	17:37	LB136187
	Antimony	4950	5000	99	90 - 110	P	06/17/2025	17:37	LB136187
	Arsenic	4820	5000	96	90 - 110	P	06/17/2025	17:37	LB136187
	Barium	10000	10000	100	90 - 110	P	06/17/2025	17:37	LB136187
	Beryllium	257	250	103	90 - 110	P	06/17/2025	17:37	LB136187
	Cadmium	2460	2500	98	90 - 110	P	06/17/2025	17:37	LB136187
	Calcium	25000	25000	100	90 - 110	P	06/17/2025	17:37	LB136187
	Chromium	1010	1000	101	90 - 110	P	06/17/2025	17:37	LB136187
	Cobalt	2420	2500	97	90 - 110	P	06/17/2025	17:37	LB136187
	Copper	1280	1250	102	90 - 110	P	06/17/2025	17:37	LB136187
	Iron	4900	5000	98	90 - 110	P	06/17/2025	17:37	LB136187
	Lead	4850	5000	97	90 - 110	P	06/17/2025	17:37	LB136187
	Magnesium	24300	25000	97	90 - 110	P	06/17/2025	17:37	LB136187
	Manganese	2440	2500	98	90 - 110	P	06/17/2025	17:37	LB136187

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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
CCV05	Nickel	2450	2500	98	90 - 110	P	06/17/2025	17:37	LB136187
	Potassium	25900	25000	104	90 - 110	P	06/17/2025	17:37	LB136187
	Selenium	4880	5000	98	90 - 110	P	06/17/2025	17:37	LB136187
	Silver	1270	1250	102	90 - 110	P	06/17/2025	17:37	LB136187
	Sodium	25200	25000	101	90 - 110	P	06/17/2025	17:37	LB136187
	Thallium	5010	5000	100	90 - 110	P	06/17/2025	17:37	LB136187
	Vanadium	2430	2500	97	90 - 110	P	06/17/2025	17:37	LB136187
	Zinc	2480	2500	99	90 - 110	P	06/17/2025	17:37	LB136187
CCV06	Aluminum	9900	10000	99	90 - 110	P	06/17/2025	18:38	LB136187
	Antimony	4920	5000	98	90 - 110	P	06/17/2025	18:38	LB136187
	Arsenic	4800	5000	96	90 - 110	P	06/17/2025	18:38	LB136187
	Barium	9840	10000	98	90 - 110	P	06/17/2025	18:38	LB136187
	Beryllium	256	250	102	90 - 110	P	06/17/2025	18:38	LB136187
	Cadmium	2440	2500	98	90 - 110	P	06/17/2025	18:38	LB136187
	Calcium	24800	25000	99	90 - 110	P	06/17/2025	18:38	LB136187
	Chromium	987	1000	99	90 - 110	P	06/17/2025	18:38	LB136187
	Cobalt	2420	2500	97	90 - 110	P	06/17/2025	18:38	LB136187
	Copper	1270	1250	102	90 - 110	P	06/17/2025	18:38	LB136187
	Iron	4900	5000	98	90 - 110	P	06/17/2025	18:38	LB136187
	Lead	4820	5000	96	90 - 110	P	06/17/2025	18:38	LB136187
	Magnesium	23900	25000	96	90 - 110	P	06/17/2025	18:38	LB136187
	Manganese	2400	2500	96	90 - 110	P	06/17/2025	18:38	LB136187
	Nickel	2430	2500	97	90 - 110	P	06/17/2025	18:38	LB136187
	Potassium	25800	25000	103	90 - 110	P	06/17/2025	18:38	LB136187
	Selenium	4890	5000	98	90 - 110	P	06/17/2025	18:38	LB136187
	Silver	1250	1250	100	90 - 110	P	06/17/2025	18:38	LB136187
	Sodium	25100	25000	100	90 - 110	P	06/17/2025	18:38	LB136187
	Thallium	4980	5000	100	90 - 110	P	06/17/2025	18:38	LB136187
	Vanadium	2400	2500	96	90 - 110	P	06/17/2025	18:38	LB136187
	Zinc	2420	2500	97	90 - 110	P	06/17/2025	18:38	LB136187
CCV07	Aluminum	9890	10000	99	90 - 110	P	06/17/2025	19:25	LB136187
	Antimony	4960	5000	99	90 - 110	P	06/17/2025	19:25	LB136187
	Arsenic	4860	5000	97	90 - 110	P	06/17/2025	19:25	LB136187
	Barium	10100	10000	100	90 - 110	P	06/17/2025	19:25	LB136187

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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
CCV07	Beryllium	259	250	103	90 - 110	P	06/17/2025	19:25	LB136187
	Cadmium	2450	2500	98	90 - 110	P	06/17/2025	19:25	LB136187
	Calcium	24800	25000	99	90 - 110	P	06/17/2025	19:25	LB136187
	Chromium	986	1000	99	90 - 110	P	06/17/2025	19:25	LB136187
	Cobalt	2440	2500	98	90 - 110	P	06/17/2025	19:25	LB136187
	Copper	1300	1250	104	90 - 110	P	06/17/2025	19:25	LB136187
	Iron	4900	5000	98	90 - 110	P	06/17/2025	19:25	LB136187
	Lead	4870	5000	97	90 - 110	P	06/17/2025	19:25	LB136187
	Magnesium	24200	25000	97	90 - 110	P	06/17/2025	19:25	LB136187
	Manganese	2430	2500	97	90 - 110	P	06/17/2025	19:25	LB136187
	Nickel	2440	2500	98	90 - 110	P	06/17/2025	19:25	LB136187
	Potassium	26200	25000	105	90 - 110	P	06/17/2025	19:25	LB136187
	Selenium	4940	5000	99	90 - 110	P	06/17/2025	19:25	LB136187
	Silver	1240	1250	99	90 - 110	P	06/17/2025	19:25	LB136187
	Sodium	26000	25000	104	90 - 110	P	06/17/2025	19:25	LB136187
	Thallium	4990	5000	100	90 - 110	P	06/17/2025	19:25	LB136187
	Vanadium	2450	2500	98	90 - 110	P	06/17/2025	19:25	LB136187
	Zinc	2470	2500	99	90 - 110	P	06/17/2025	19:25	LB136187
CCV08	Aluminum	9820	10000	98	90 - 110	P	06/17/2025	20:17	LB136187
	Antimony	4930	5000	99	90 - 110	P	06/17/2025	20:17	LB136187
	Arsenic	4850	5000	97	90 - 110	P	06/17/2025	20:17	LB136187
	Barium	9910	10000	99	90 - 110	P	06/17/2025	20:17	LB136187
	Beryllium	251	250	100	90 - 110	P	06/17/2025	20:17	LB136187
	Cadmium	2440	2500	98	90 - 110	P	06/17/2025	20:17	LB136187
	Calcium	24500	25000	98	90 - 110	P	06/17/2025	20:17	LB136187
	Chromium	968	1000	97	90 - 110	P	06/17/2025	20:17	LB136187
	Cobalt	2440	2500	98	90 - 110	P	06/17/2025	20:17	LB136187
	Copper	1270	1250	101	90 - 110	P	06/17/2025	20:17	LB136187
	Iron	4770	5000	95	90 - 110	P	06/17/2025	20:17	LB136187
	Lead	4870	5000	98	90 - 110	P	06/17/2025	20:17	LB136187
	Magnesium	24100	25000	96	90 - 110	P	06/17/2025	20:17	LB136187
	Manganese	2390	2500	96	90 - 110	P	06/17/2025	20:17	LB136187
	Nickel	2440	2500	97	90 - 110	P	06/17/2025	20:17	LB136187
	Potassium	26000	25000	104	90 - 110	P	06/17/2025	20:17	LB136187

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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
CCV08	Selenium	4940	5000	99	90 - 110	P	06/17/2025	20:17	LB136187
	Silver	1230	1250	98	90 - 110	P	06/17/2025	20:17	LB136187
	Sodium	25700	25000	103	90 - 110	P	06/17/2025	20:17	LB136187
	Thallium	4970	5000	99	90 - 110	P	06/17/2025	20:17	LB136187
	Vanadium	2410	2500	96	90 - 110	P	06/17/2025	20:17	LB136187
	Zinc	2440	2500	98	90 - 110	P	06/17/2025	20:17	LB136187

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Metals

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CRDL STANDARD FOR AA & ICP

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRA	Mercury	0.21	0.2	105	70 - 130	CV	06/16/2025	13:01	LB136159
CRI01	Aluminum	104	100	104	65 - 135	P	06/16/2025	14:53	lb136164
	Antimony	53.0	50.0	106	65 - 135	P	06/16/2025	14:53	lb136164
	Arsenic	16.3	20.0	82	65 - 135	P	06/16/2025	14:53	lb136164
	Barium	101	100	101	65 - 135	P	06/16/2025	14:53	lb136164
	Beryllium	6.39	6.0	106	65 - 135	P	06/16/2025	14:53	lb136164
	Cadmium	5.66	6.0	94	65 - 135	P	06/16/2025	14:53	lb136164
	Calcium	2030	2000	101	65 - 135	P	06/16/2025	14:53	lb136164
	Chromium	9.79	10.0	98	65 - 135	P	06/16/2025	14:53	lb136164
	Cobalt	29.9	30.0	100	65 - 135	P	06/16/2025	14:53	lb136164
	Copper	23.0	20.0	115	65 - 135	P	06/16/2025	14:53	lb136164
	Iron	110	100	110	65 - 135	P	06/16/2025	14:53	lb136164
	Lead	11.5	12.0	96	65 - 135	P	06/16/2025	14:53	lb136164
	Magnesium	2080	2000	104	65 - 135	P	06/16/2025	14:53	lb136164
	Manganese	21.2	20.0	106	65 - 135	P	06/16/2025	14:53	lb136164
	Nickel	38.8	40.0	97	65 - 135	P	06/16/2025	14:53	lb136164
	Potassium	1610	2000	81	65 - 135	P	06/16/2025	14:53	lb136164
	Selenium	17.6	20.0	88	65 - 135	P	06/16/2025	14:53	lb136164
	Silver	11.0	10.0	110	65 - 135	P	06/16/2025	14:53	lb136164
	Sodium	1830	2000	91	65 - 135	P	06/16/2025	14:53	lb136164
	Thallium	39.1	40.0	98	65 - 135	P	06/16/2025	14:53	lb136164
	Vanadium	37.5	40.0	94	65 - 135	P	06/16/2025	14:53	lb136164
	Zinc	41.7	40.0	104	65 - 135	P	06/16/2025	14:53	lb136164
CRI01	Aluminum	114	100	114	65 - 135	P	06/17/2025	12:50	LB136187
	Antimony	52.5	50.0	105	65 - 135	P	06/17/2025	12:50	LB136187
	Arsenic	19.4	20.0	97	65 - 135	P	06/17/2025	12:50	LB136187
	Barium	104	100	104	65 - 135	P	06/17/2025	12:50	LB136187
	Beryllium	6.43	6.0	107	65 - 135	P	06/17/2025	12:50	LB136187
	Cadmium	5.77	6.0	96	65 - 135	P	06/17/2025	12:50	LB136187
	Calcium	2040	2000	102	65 - 135	P	06/17/2025	12:50	LB136187
	Chromium	9.38	10.0	94	65 - 135	P	06/17/2025	12:50	LB136187
	Cobalt	30.0	30.0	100	65 - 135	P	06/17/2025	12:50	LB136187
	Copper	23.2	20.0	116	65 - 135	P	06/17/2025	12:50	LB136187
	Iron	103	100	103	65 - 135	P	06/17/2025	12:50	LB136187
	Lead	11.7	12.0	97	65 - 135	P	06/17/2025	12:50	LB136187

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Metals

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CRDL STANDARD FOR AA & ICP

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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	Magnesium	2150	2000	108	65 - 135	P	06/17/2025	12:50	LB136187
	Manganese	20.6	20.0	103	65 - 135	P	06/17/2025	12:50	LB136187
	Nickel	39.1	40.0	98	65 - 135	P	06/17/2025	12:50	LB136187
	Potassium	1660	2000	83	65 - 135	P	06/17/2025	12:50	LB136187
	Selenium	18.0	20.0	90	65 - 135	P	06/17/2025	12:50	LB136187
	Silver	10.8	10.0	108	65 - 135	P	06/17/2025	12:50	LB136187
	Sodium	1870	2000	94	65 - 135	P	06/17/2025	12:50	LB136187
	Thallium	39.8	40.0	99	65 - 135	P	06/17/2025	12:50	LB136187
	Vanadium	43.2	40.0	108	65 - 135	P	06/17/2025	12:50	LB136187
	Zinc	41.8	40.0	104	65 - 135	P	06/17/2025	12:50	LB136187

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB39	Mercury	0.076	+/-0.2	U	0.20	CV	06/16/2025	12:54	LB136159

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB45	Mercury	0.076	+/-0.2	U	0.20	CV	06/16/2025	12:58	LB136159
CCB46	Mercury	0.076	+/-0.2	U	0.20	CV	06/16/2025	13:33	LB136159
CCB47	Mercury	0.076	+/-0.2	U	0.20	CV	06/16/2025	13:52	LB136159
CCB48	Mercury	0.076	+/-0.2	U	0.20	CV	06/16/2025	14:14	LB136159

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Aluminum	39.0	+/-50	J	100	P	06/16/2025	14:49	lb136164
	Antimony	6.76	+/-25	U	50.0	P	06/16/2025	14:49	lb136164
	Arsenic	5.12	+/-10	U	20.0	P	06/16/2025	14:49	lb136164
	Barium	14.6	+/-50	U	100	P	06/16/2025	14:49	lb136164
	Beryllium	0.56	+/-3	U	6.00	P	06/16/2025	14:49	lb136164
	Cadmium	0.50	+/-3	U	6.00	P	06/16/2025	14:49	lb136164
	Calcium	234	+/-1000	U	2000	P	06/16/2025	14:49	lb136164
	Chromium	2.12	+/-5	U	10.0	P	06/16/2025	14:49	lb136164
	Cobalt	2.26	+/-15	U	30.0	P	06/16/2025	14:49	lb136164
	Copper	4.60	+/-10	U	20.0	P	06/16/2025	14:49	lb136164
	Iron	49.2	+/-50	J	100	P	06/16/2025	14:49	lb136164
	Lead	2.30	+/-6	U	12.0	P	06/16/2025	14:49	lb136164
	Magnesium	244	+/-1000	U	2000	P	06/16/2025	14:49	lb136164
	Manganese	5.94	+/-10	U	20.0	P	06/16/2025	14:49	lb136164
	Nickel	3.06	+/-20	U	40.0	P	06/16/2025	14:49	lb136164
	Potassium	918	+/-1000	U	2000	P	06/16/2025	14:49	lb136164
	Selenium	9.64	+/-10	U	20.0	P	06/16/2025	14:49	lb136164
	Silver	1.62	+/-5	U	10.0	P	06/16/2025	14:49	lb136164
	Sodium	868	+/-1000	U	2000	P	06/16/2025	14:49	lb136164
	Thallium	4.38	+/-20	U	40.0	P	06/16/2025	14:49	lb136164
	Vanadium	6.26	+/-20	U	40.0	P	06/16/2025	14:49	lb136164
	Zinc	3.50	+/-20	U	40.0	P	06/16/2025	14:49	lb136164

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Aluminum	45.3	+/-50	J	100	P	06/16/2025	15:30	lb136164
	Antimony	7.24	+/-25	J	50.0	P	06/16/2025	15:30	lb136164
	Arsenic	5.12	+/-10	U	20.0	P	06/16/2025	15:30	lb136164
	Barium	14.6	+/-50	U	100	P	06/16/2025	15:30	lb136164
	Beryllium	0.56	+/-3	U	6.00	P	06/16/2025	15:30	lb136164
	Cadmium	1.35	+/-3	J	6.00	P	06/16/2025	15:30	lb136164
	Calcium	234	+/-1000	U	2000	P	06/16/2025	15:30	lb136164
	Chromium	2.12	+/-5	U	10.0	P	06/16/2025	15:30	lb136164
	Cobalt	2.26	+/-15	U	30.0	P	06/16/2025	15:30	lb136164
	Copper	4.60	+/-10	U	20.0	P	06/16/2025	15:30	lb136164
	Iron	26.0	+/-50	J	100	P	06/16/2025	15:30	lb136164
	Lead	3.27	+/-6	J	12.0	P	06/16/2025	15:30	lb136164
	Magnesium	244	+/-1000	U	2000	P	06/16/2025	15:30	lb136164
	Manganese	5.94	+/-10	U	20.0	P	06/16/2025	15:30	lb136164
	Nickel	3.06	+/-20	U	40.0	P	06/16/2025	15:30	lb136164
	Potassium	918	+/-1000	U	2000	P	06/16/2025	15:30	lb136164
	Selenium	9.64	+/-10	U	20.0	P	06/16/2025	15:30	lb136164
	Silver	1.62	+/-5	U	10.0	P	06/16/2025	15:30	lb136164
	Sodium	868	+/-1000	U	2000	P	06/16/2025	15:30	lb136164
	Thallium	4.48	+/-20	J	40.0	P	06/16/2025	15:30	lb136164
	Vanadium	6.26	+/-20	U	40.0	P	06/16/2025	15:30	lb136164
	Zinc	5.12	+/-20	J	40.0	P	06/16/2025	15:30	lb136164
CCB02	Aluminum	11.3	+/-50	U	100	P	06/16/2025	16:34	lb136164
	Antimony	6.76	+/-25	U	50.0	P	06/16/2025	16:34	lb136164
	Arsenic	5.12	+/-10	U	20.0	P	06/16/2025	16:34	lb136164
	Barium	14.6	+/-50	U	100	P	06/16/2025	16:34	lb136164
	Beryllium	0.56	+/-3	U	6.00	P	06/16/2025	16:34	lb136164
	Cadmium	0.50	+/-3	U	6.00	P	06/16/2025	16:34	lb136164
	Calcium	234	+/-1000	U	2000	P	06/16/2025	16:34	lb136164
	Chromium	2.12	+/-5	U	10.0	P	06/16/2025	16:34	lb136164
	Cobalt	2.26	+/-15	U	30.0	P	06/16/2025	16:34	lb136164
	Copper	4.60	+/-10	U	20.0	P	06/16/2025	16:34	lb136164
	Iron	37.5	+/-50	J	100	P	06/16/2025	16:34	lb136164
	Lead	2.30	+/-6	U	12.0	P	06/16/2025	16:34	lb136164
	Magnesium	244	+/-1000	U	2000	P	06/16/2025	16:34	lb136164
	Manganese	5.94	+/-10	U	20.0	P	06/16/2025	16:34	lb136164
	Nickel	3.06	+/-20	U	40.0	P	06/16/2025	16:34	lb136164
	Potassium	918	+/-1000	U	2000	P	06/16/2025	16:34	lb136164
	Selenium	9.64	+/-10	U	20.0	P	06/16/2025	16:34	lb136164

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Silver	1.62	+/-5	U	10.0	P	06/16/2025	16:34	lb136164
	Sodium	868	+/-1000	U	2000	P	06/16/2025	16:34	lb136164
	Thallium	4.38	+/-20	U	40.0	P	06/16/2025	16:34	lb136164
	Vanadium	6.26	+/-20	U	40.0	P	06/16/2025	16:34	lb136164
	Zinc	3.50	+/-20	U	40.0	P	06/16/2025	16:34	lb136164
CCB03	Aluminum	11.3	+/-50	U	100	P	06/16/2025	17:49	lb136164
	Antimony	6.76	+/-25	U	50.0	P	06/16/2025	17:49	lb136164
	Arsenic	5.12	+/-10	U	20.0	P	06/16/2025	17:49	lb136164
	Barium	14.6	+/-50	U	100	P	06/16/2025	17:49	lb136164
	Beryllium	0.56	+/-3	U	6.00	P	06/16/2025	17:49	lb136164
	Cadmium	0.50	+/-3	U	6.00	P	06/16/2025	17:49	lb136164
	Calcium	234	+/-1000	U	2000	P	06/16/2025	17:49	lb136164
	Chromium	2.12	+/-5	U	10.0	P	06/16/2025	17:49	lb136164
	Cobalt	2.26	+/-15	U	30.0	P	06/16/2025	17:49	lb136164
	Copper	4.60	+/-10	U	20.0	P	06/16/2025	17:49	lb136164
	Iron	23.4	+/-50	U	100	P	06/16/2025	17:49	lb136164
	Lead	2.30	+/-6	U	12.0	P	06/16/2025	17:49	lb136164
	Magnesium	244	+/-1000	U	2000	P	06/16/2025	17:49	lb136164
	Manganese	5.94	+/-10	U	20.0	P	06/16/2025	17:49	lb136164
	Nickel	3.06	+/-20	U	40.0	P	06/16/2025	17:49	lb136164
	Potassium	918	+/-1000	U	2000	P	06/16/2025	17:49	lb136164
	Selenium	9.64	+/-10	U	20.0	P	06/16/2025	17:49	lb136164
	Silver	1.62	+/-5	U	10.0	P	06/16/2025	17:49	lb136164
	Sodium	868	+/-1000	U	2000	P	06/16/2025	17:49	lb136164
	Thallium	4.38	+/-20	U	40.0	P	06/16/2025	17:49	lb136164
	Vanadium	6.26	+/-20	U	40.0	P	06/16/2025	17:49	lb136164
	Zinc	3.50	+/-20	U	40.0	P	06/16/2025	17:49	lb136164
CCB04	Aluminum	22.0	+/-50	J	100	P	06/16/2025	18:33	lb136164
	Antimony	6.76	+/-25	U	50.0	P	06/16/2025	18:33	lb136164
	Arsenic	5.12	+/-10	U	20.0	P	06/16/2025	18:33	lb136164
	Barium	14.6	+/-50	U	100	P	06/16/2025	18:33	lb136164
	Beryllium	0.56	+/-3	U	6.00	P	06/16/2025	18:33	lb136164
	Cadmium	0.50	+/-3	U	6.00	P	06/16/2025	18:33	lb136164
	Calcium	234	+/-1000	U	2000	P	06/16/2025	18:33	lb136164
	Chromium	2.12	+/-5	U	10.0	P	06/16/2025	18:33	lb136164
	Cobalt	2.26	+/-15	U	30.0	P	06/16/2025	18:33	lb136164
	Copper	4.60	+/-10	U	20.0	P	06/16/2025	18:33	lb136164
	Iron	23.4	+/-50	U	100	P	06/16/2025	18:33	lb136164
	Lead	2.30	+/-6	U	12.0	P	06/16/2025	18:33	lb136164

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Magnesium	244	+/-1000	U	2000	P	06/16/2025	18:33	lb136164
	Manganese	5.94	+/-10	U	20.0	P	06/16/2025	18:33	lb136164
	Nickel	3.06	+/-20	U	40.0	P	06/16/2025	18:33	lb136164
	Potassium	918	+/-1000	U	2000	P	06/16/2025	18:33	lb136164
	Selenium	9.64	+/-10	U	20.0	P	06/16/2025	18:33	lb136164
	Silver	1.62	+/-5	U	10.0	P	06/16/2025	18:33	lb136164
	Sodium	868	+/-1000	U	2000	P	06/16/2025	18:33	lb136164
	Thallium	4.38	+/-20	U	40.0	P	06/16/2025	18:33	lb136164
	Vanadium	6.26	+/-20	U	40.0	P	06/16/2025	18:33	lb136164
	Zinc	3.50	+/-20	U	40.0	P	06/16/2025	18:33	lb136164
CCB05	Aluminum	11.3	+/-50	U	100	P	06/16/2025	19:21	lb136164
	Antimony	12.3	+/-25	J	50.0	P	06/16/2025	19:21	lb136164
	Arsenic	5.12	+/-10	U	20.0	P	06/16/2025	19:21	lb136164
	Barium	14.6	+/-50	U	100	P	06/16/2025	19:21	lb136164
	Beryllium	0.56	+/-3	U	6.00	P	06/16/2025	19:21	lb136164
	Cadmium	3.56	+/-3	J*	6.00	P	06/16/2025	19:21	lb136164
	Calcium	234	+/-1000	U	2000	P	06/16/2025	19:21	lb136164
	Chromium	2.12	+/-5	U	10.0	P	06/16/2025	19:21	lb136164
	Cobalt	3.66	+/-15	J	30.0	P	06/16/2025	19:21	lb136164
	Copper	4.60	+/-10	U	20.0	P	06/16/2025	19:21	lb136164
	Iron	23.5	+/-50	J	100	P	06/16/2025	19:21	lb136164
	Lead	5.87	+/-6	J	12.0	P	06/16/2025	19:21	lb136164
	Magnesium	244	+/-1000	U	2000	P	06/16/2025	19:21	lb136164
	Manganese	5.94	+/-10	U	20.0	P	06/16/2025	19:21	lb136164
	Nickel	3.47	+/-20	J	40.0	P	06/16/2025	19:21	lb136164
	Potassium	918	+/-1000	U	2000	P	06/16/2025	19:21	lb136164
	Selenium	9.64	+/-10	U	20.0	P	06/16/2025	19:21	lb136164
	Silver	1.62	+/-5	U	10.0	P	06/16/2025	19:21	lb136164
	Sodium	868	+/-1000	U	2000	P	06/16/2025	19:21	lb136164
	Thallium	7.90	+/-20	J	40.0	P	06/16/2025	19:21	lb136164
	Vanadium	6.26	+/-20	U	40.0	P	06/16/2025	19:21	lb136164
	Zinc	3.50	+/-20	U	40.0	P	06/16/2025	19:21	lb136164
CCB06	Aluminum	11.3	+/-50	U	100	P	06/16/2025	20:08	lb136164
	Antimony	6.76	+/-25	U	50.0	P	06/16/2025	20:08	lb136164
	Arsenic	5.12	+/-10	U	20.0	P	06/16/2025	20:08	lb136164
	Barium	14.6	+/-50	U	100	P	06/16/2025	20:08	lb136164
	Beryllium	0.56	+/-3	U	6.00	P	06/16/2025	20:08	lb136164
	Cadmium	0.50	+/-3	U	6.00	P	06/16/2025	20:08	lb136164
	Calcium	234	+/-1000	U	2000	P	06/16/2025	20:08	lb136164

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Chromium	2.12	+/-5	U	10.0	P	06/16/2025	20:08	lb136164
	Cobalt	2.26	+/-15	U	30.0	P	06/16/2025	20:08	lb136164
	Copper	4.60	+/-10	U	20.0	P	06/16/2025	20:08	lb136164
	Iron	23.4	+/-50	U	100	P	06/16/2025	20:08	lb136164
	Lead	2.30	+/-6	U	12.0	P	06/16/2025	20:08	lb136164
	Magnesium	244	+/-1000	U	2000	P	06/16/2025	20:08	lb136164
	Manganese	5.94	+/-10	U	20.0	P	06/16/2025	20:08	lb136164
	Nickel	3.06	+/-20	U	40.0	P	06/16/2025	20:08	lb136164
	Potassium	918	+/-1000	U	2000	P	06/16/2025	20:08	lb136164
	Selenium	9.64	+/-10	U	20.0	P	06/16/2025	20:08	lb136164
	Silver	1.62	+/-5	U	10.0	P	06/16/2025	20:08	lb136164
	Sodium	868	+/-1000	U	2000	P	06/16/2025	20:08	lb136164
	Thallium	4.38	+/-20	U	40.0	P	06/16/2025	20:08	lb136164
	Vanadium	6.26	+/-20	U	40.0	P	06/16/2025	20:08	lb136164
	Zinc	3.50	+/-20	U	40.0	P	06/16/2025	20:08	lb136164
CCB07	Aluminum	11.3	+/-50	U	100	P	06/16/2025	20:56	lb136164
	Antimony	6.76	+/-25	U	50.0	P	06/16/2025	20:56	lb136164
	Arsenic	5.12	+/-10	U	20.0	P	06/16/2025	20:56	lb136164
	Barium	14.6	+/-50	U	100	P	06/16/2025	20:56	lb136164
	Beryllium	0.56	+/-3	U	6.00	P	06/16/2025	20:56	lb136164
	Cadmium	0.50	+/-3	U	6.00	P	06/16/2025	20:56	lb136164
	Calcium	234	+/-1000	U	2000	P	06/16/2025	20:56	lb136164
	Chromium	2.12	+/-5	U	10.0	P	06/16/2025	20:56	lb136164
	Cobalt	2.26	+/-15	U	30.0	P	06/16/2025	20:56	lb136164
	Copper	4.60	+/-10	U	20.0	P	06/16/2025	20:56	lb136164
	Iron	23.4	+/-50	U	100	P	06/16/2025	20:56	lb136164
	Lead	2.30	+/-6	U	12.0	P	06/16/2025	20:56	lb136164
	Magnesium	244	+/-1000	U	2000	P	06/16/2025	20:56	lb136164
	Manganese	5.94	+/-10	U	20.0	P	06/16/2025	20:56	lb136164
	Nickel	3.06	+/-20	U	40.0	P	06/16/2025	20:56	lb136164
	Potassium	918	+/-1000	U	2000	P	06/16/2025	20:56	lb136164
	Selenium	9.64	+/-10	U	20.0	P	06/16/2025	20:56	lb136164
	Silver	1.62	+/-5	U	10.0	P	06/16/2025	20:56	lb136164
	Sodium	868	+/-1000	U	2000	P	06/16/2025	20:56	lb136164
	Thallium	4.38	+/-20	U	40.0	P	06/16/2025	20:56	lb136164
	Vanadium	6.26	+/-20	U	40.0	P	06/16/2025	20:56	lb136164
	Zinc	3.50	+/-20	U	40.0	P	06/16/2025	20:56	lb136164
CCB08	Aluminum	11.3	+/-50	U	100	P	06/16/2025	21:18	lb136164
	Antimony	6.76	+/-25	U	50.0	P	06/16/2025	21:18	lb136164

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB08	Arsenic	5.12	+/-10	U	20.0	P	06/16/2025	21:18	lb136164
	Barium	14.6	+/-50	U	100	P	06/16/2025	21:18	lb136164
	Beryllium	0.56	+/-3	U	6.00	P	06/16/2025	21:18	lb136164
	Cadmium	0.50	+/-3	U	6.00	P	06/16/2025	21:18	lb136164
	Calcium	234	+/-1000	U	2000	P	06/16/2025	21:18	lb136164
	Chromium	2.12	+/-5	U	10.0	P	06/16/2025	21:18	lb136164
	Cobalt	2.26	+/-15	U	30.0	P	06/16/2025	21:18	lb136164
	Copper	4.60	+/-10	U	20.0	P	06/16/2025	21:18	lb136164
	Iron	23.4	+/-50	U	100	P	06/16/2025	21:18	lb136164
	Lead	2.30	+/-6	U	12.0	P	06/16/2025	21:18	lb136164
	Magnesium	244	+/-1000	U	2000	P	06/16/2025	21:18	lb136164
	Manganese	5.94	+/-10	U	20.0	P	06/16/2025	21:18	lb136164
	Nickel	3.06	+/-20	U	40.0	P	06/16/2025	21:18	lb136164
	Potassium	918	+/-1000	U	2000	P	06/16/2025	21:18	lb136164
	Selenium	9.64	+/-10	U	20.0	P	06/16/2025	21:18	lb136164
	Silver	1.62	+/-5	U	10.0	P	06/16/2025	21:18	lb136164
	Sodium	868	+/-1000	U	2000	P	06/16/2025	21:18	lb136164
	Thallium	4.38	+/-20	U	40.0	P	06/16/2025	21:18	lb136164
	Vanadium	6.26	+/-20	U	40.0	P	06/16/2025	21:18	lb136164
	Zinc	3.50	+/-20	U	40.0	P	06/16/2025	21:18	lb136164

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Aluminum	11.3	+/-50	U	100	P	06/17/2025	12:46	LB136187
	Antimony	6.76	+/-25	U	50.0	P	06/17/2025	12:46	LB136187
	Arsenic	5.12	+/-10	U	20.0	P	06/17/2025	12:46	LB136187
	Barium	14.6	+/-50	U	100	P	06/17/2025	12:46	LB136187
	Beryllium	0.56	+/-3	U	6.00	P	06/17/2025	12:46	LB136187
	Cadmium	0.50	+/-3	U	6.00	P	06/17/2025	12:46	LB136187
	Calcium	234	+/-1000	U	2000	P	06/17/2025	12:46	LB136187
	Chromium	2.12	+/-5	U	10.0	P	06/17/2025	12:46	LB136187
	Cobalt	2.26	+/-15	U	30.0	P	06/17/2025	12:46	LB136187
	Copper	4.60	+/-10	U	20.0	P	06/17/2025	12:46	LB136187
	Iron	38.5	+/-50	J	100	P	06/17/2025	12:46	LB136187
	Lead	2.30	+/-6	U	12.0	P	06/17/2025	12:46	LB136187
	Magnesium	244	+/-1000	U	2000	P	06/17/2025	12:46	LB136187
	Manganese	5.94	+/-10	U	20.0	P	06/17/2025	12:46	LB136187
	Nickel	3.06	+/-20	U	40.0	P	06/17/2025	12:46	LB136187
	Potassium	918	+/-1000	U	2000	P	06/17/2025	12:46	LB136187
	Selenium	9.64	+/-10	U	20.0	P	06/17/2025	12:46	LB136187
	Silver	1.62	+/-5	U	10.0	P	06/17/2025	12:46	LB136187
	Sodium	868	+/-1000	U	2000	P	06/17/2025	12:46	LB136187
	Thallium	4.38	+/-20	U	40.0	P	06/17/2025	12:46	LB136187
	Vanadium	6.26	+/-20	U	40.0	P	06/17/2025	12:46	LB136187
	Zinc	3.50	+/-20	U	40.0	P	06/17/2025	12:46	LB136187

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Aluminum	11.3	+/-50	U	100	P	06/17/2025	13:48	LB136187
	Antimony	6.76	+/-25	U	50.0	P	06/17/2025	13:48	LB136187
	Arsenic	5.12	+/-10	U	20.0	P	06/17/2025	13:48	LB136187
	Barium	14.6	+/-50	U	100	P	06/17/2025	13:48	LB136187
	Beryllium	0.56	+/-3	U	6.00	P	06/17/2025	13:48	LB136187
	Cadmium	0.50	+/-3	U	6.00	P	06/17/2025	13:48	LB136187
	Calcium	234	+/-1000	U	2000	P	06/17/2025	13:48	LB136187
	Chromium	2.12	+/-5	U	10.0	P	06/17/2025	13:48	LB136187
	Cobalt	2.26	+/-15	U	30.0	P	06/17/2025	13:48	LB136187
	Copper	4.60	+/-10	U	20.0	P	06/17/2025	13:48	LB136187
	Iron	23.4	+/-50	U	100	P	06/17/2025	13:48	LB136187
	Lead	2.30	+/-6	U	12.0	P	06/17/2025	13:48	LB136187
	Magnesium	244	+/-1000	U	2000	P	06/17/2025	13:48	LB136187
	Manganese	5.94	+/-10	U	20.0	P	06/17/2025	13:48	LB136187
	Nickel	3.06	+/-20	U	40.0	P	06/17/2025	13:48	LB136187
	Potassium	918	+/-1000	U	2000	P	06/17/2025	13:48	LB136187
	Selenium	9.64	+/-10	U	20.0	P	06/17/2025	13:48	LB136187
	Silver	1.62	+/-5	U	10.0	P	06/17/2025	13:48	LB136187
	Sodium	868	+/-1000	U	2000	P	06/17/2025	13:48	LB136187
	Thallium	4.38	+/-20	U	40.0	P	06/17/2025	13:48	LB136187
	Vanadium	7.99	+/-20	J	40.0	P	06/17/2025	13:48	LB136187
	Zinc	3.50	+/-20	U	40.0	P	06/17/2025	13:48	LB136187
CCB02	Aluminum	11.3	+/-50	U	100	P	06/17/2025	14:50	LB136187
	Antimony	6.76	+/-25	U	50.0	P	06/17/2025	14:50	LB136187
	Arsenic	5.12	+/-10	U	20.0	P	06/17/2025	14:50	LB136187
	Barium	14.6	+/-50	U	100	P	06/17/2025	14:50	LB136187
	Beryllium	0.56	+/-3	U	6.00	P	06/17/2025	14:50	LB136187
	Cadmium	0.50	+/-3	U	6.00	P	06/17/2025	14:50	LB136187
	Calcium	234	+/-1000	U	2000	P	06/17/2025	14:50	LB136187
	Chromium	2.12	+/-5	U	10.0	P	06/17/2025	14:50	LB136187
	Cobalt	2.26	+/-15	U	30.0	P	06/17/2025	14:50	LB136187
	Copper	4.60	+/-10	U	20.0	P	06/17/2025	14:50	LB136187
	Iron	23.4	+/-50	U	100	P	06/17/2025	14:50	LB136187
	Lead	2.30	+/-6	U	12.0	P	06/17/2025	14:50	LB136187
	Magnesium	244	+/-1000	U	2000	P	06/17/2025	14:50	LB136187
	Manganese	5.94	+/-10	U	20.0	P	06/17/2025	14:50	LB136187
	Nickel	3.06	+/-20	U	40.0	P	06/17/2025	14:50	LB136187
	Potassium	918	+/-1000	U	2000	P	06/17/2025	14:50	LB136187
	Selenium	9.64	+/-10	U	20.0	P	06/17/2025	14:50	LB136187

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Silver	1.62	+/-5	U	10.0	P	06/17/2025	14:50	LB136187
	Sodium	868	+/-1000	U	2000	P	06/17/2025	14:50	LB136187
	Thallium	4.38	+/-20	U	40.0	P	06/17/2025	14:50	LB136187
	Vanadium	6.26	+/-20	U	40.0	P	06/17/2025	14:50	LB136187
	Zinc	3.50	+/-20	U	40.0	P	06/17/2025	14:50	LB136187
CCB03	Aluminum	11.3	+/-50	U	100	P	06/17/2025	15:42	LB136187
	Antimony	6.76	+/-25	U	50.0	P	06/17/2025	15:42	LB136187
	Arsenic	5.12	+/-10	U	20.0	P	06/17/2025	15:42	LB136187
	Barium	14.6	+/-50	U	100	P	06/17/2025	15:42	LB136187
	Beryllium	0.56	+/-3	U	6.00	P	06/17/2025	15:42	LB136187
	Cadmium	0.50	+/-3	U	6.00	P	06/17/2025	15:42	LB136187
	Calcium	234	+/-1000	U	2000	P	06/17/2025	15:42	LB136187
	Chromium	2.12	+/-5	U	10.0	P	06/17/2025	15:42	LB136187
	Cobalt	2.26	+/-15	U	30.0	P	06/17/2025	15:42	LB136187
	Copper	4.60	+/-10	U	20.0	P	06/17/2025	15:42	LB136187
	Iron	27.5	+/-50	J	100	P	06/17/2025	15:42	LB136187
	Lead	2.30	+/-6	U	12.0	P	06/17/2025	15:42	LB136187
	Magnesium	244	+/-1000	U	2000	P	06/17/2025	15:42	LB136187
	Manganese	5.94	+/-10	U	20.0	P	06/17/2025	15:42	LB136187
	Nickel	3.06	+/-20	U	40.0	P	06/17/2025	15:42	LB136187
	Potassium	918	+/-1000	U	2000	P	06/17/2025	15:42	LB136187
	Selenium	9.64	+/-10	U	20.0	P	06/17/2025	15:42	LB136187
	Silver	1.62	+/-5	U	10.0	P	06/17/2025	15:42	LB136187
	Sodium	868	+/-1000	U	2000	P	06/17/2025	15:42	LB136187
	Thallium	4.38	+/-20	U	40.0	P	06/17/2025	15:42	LB136187
	Vanadium	7.56	+/-20	J	40.0	P	06/17/2025	15:42	LB136187
	Zinc	3.50	+/-20	U	40.0	P	06/17/2025	15:42	LB136187
CCB04	Aluminum	11.3	+/-50	U	100	P	06/17/2025	16:34	LB136187
	Antimony	6.76	+/-25	U	50.0	P	06/17/2025	16:34	LB136187
	Arsenic	5.12	+/-10	U	20.0	P	06/17/2025	16:34	LB136187
	Barium	14.6	+/-50	U	100	P	06/17/2025	16:34	LB136187
	Beryllium	0.56	+/-3	U	6.00	P	06/17/2025	16:34	LB136187
	Cadmium	0.50	+/-3	U	6.00	P	06/17/2025	16:34	LB136187
	Calcium	234	+/-1000	U	2000	P	06/17/2025	16:34	LB136187
	Chromium	2.12	+/-5	U	10.0	P	06/17/2025	16:34	LB136187
	Cobalt	2.26	+/-15	U	30.0	P	06/17/2025	16:34	LB136187
	Copper	4.60	+/-10	U	20.0	P	06/17/2025	16:34	LB136187
	Iron	23.4	+/-50	U	100	P	06/17/2025	16:34	LB136187
	Lead	2.30	+/-6	U	12.0	P	06/17/2025	16:34	LB136187

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Magnesium	244	+/-1000	U	2000	P	06/17/2025	16:34	LB136187
	Manganese	5.94	+/-10	U	20.0	P	06/17/2025	16:34	LB136187
	Nickel	3.06	+/-20	U	40.0	P	06/17/2025	16:34	LB136187
	Potassium	918	+/-1000	U	2000	P	06/17/2025	16:34	LB136187
	Selenium	9.64	+/-10	U	20.0	P	06/17/2025	16:34	LB136187
	Silver	1.62	+/-5	U	10.0	P	06/17/2025	16:34	LB136187
	Sodium	868	+/-1000	U	2000	P	06/17/2025	16:34	LB136187
	Thallium	4.38	+/-20	U	40.0	P	06/17/2025	16:34	LB136187
	Vanadium	6.26	+/-20	U	40.0	P	06/17/2025	16:34	LB136187
	Zinc	3.50	+/-20	U	40.0	P	06/17/2025	16:34	LB136187
CCB05	Aluminum	19.3	+/-50	J	100	P	06/17/2025	17:41	LB136187
	Antimony	6.76	+/-25	U	50.0	P	06/17/2025	17:41	LB136187
	Arsenic	5.12	+/-10	U	20.0	P	06/17/2025	17:41	LB136187
	Barium	14.6	+/-50	U	100	P	06/17/2025	17:41	LB136187
	Beryllium	0.56	+/-3	U	6.00	P	06/17/2025	17:41	LB136187
	Cadmium	1.06	+/-3	J	6.00	P	06/17/2025	17:41	LB136187
	Calcium	234	+/-1000	U	2000	P	06/17/2025	17:41	LB136187
	Chromium	2.12	+/-5	U	10.0	P	06/17/2025	17:41	LB136187
	Cobalt	2.26	+/-15	U	30.0	P	06/17/2025	17:41	LB136187
	Copper	4.60	+/-10	U	20.0	P	06/17/2025	17:41	LB136187
	Iron	23.4	+/-50	U	100	P	06/17/2025	17:41	LB136187
	Lead	2.94	+/-6	J	12.0	P	06/17/2025	17:41	LB136187
	Magnesium	244	+/-1000	U	2000	P	06/17/2025	17:41	LB136187
	Manganese	5.94	+/-10	U	20.0	P	06/17/2025	17:41	LB136187
	Nickel	3.06	+/-20	U	40.0	P	06/17/2025	17:41	LB136187
	Potassium	918	+/-1000	U	2000	P	06/17/2025	17:41	LB136187
	Selenium	9.64	+/-10	U	20.0	P	06/17/2025	17:41	LB136187
	Silver	1.62	+/-5	U	10.0	P	06/17/2025	17:41	LB136187
	Sodium	868	+/-1000	U	2000	P	06/17/2025	17:41	LB136187
	Thallium	4.38	+/-20	U	40.0	P	06/17/2025	17:41	LB136187
	Vanadium	6.26	+/-20	U	40.0	P	06/17/2025	17:41	LB136187
	Zinc	3.50	+/-20	U	40.0	P	06/17/2025	17:41	LB136187
CCB06	Aluminum	11.3	+/-50	U	100	P	06/17/2025	18:42	LB136187
	Antimony	6.76	+/-25	U	50.0	P	06/17/2025	18:42	LB136187
	Arsenic	5.12	+/-10	U	20.0	P	06/17/2025	18:42	LB136187
	Barium	14.6	+/-50	U	100	P	06/17/2025	18:42	LB136187
	Beryllium	0.56	+/-3	U	6.00	P	06/17/2025	18:42	LB136187
	Cadmium	0.50	+/-3	U	6.00	P	06/17/2025	18:42	LB136187
	Calcium	234	+/-1000	U	2000	P	06/17/2025	18:42	LB136187

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Chromium	2.12	+/-5	U	10.0	P	06/17/2025	18:42	LB136187
	Cobalt	2.26	+/-15	U	30.0	P	06/17/2025	18:42	LB136187
	Copper	4.60	+/-10	U	20.0	P	06/17/2025	18:42	LB136187
	Iron	23.4	+/-50	U	100	P	06/17/2025	18:42	LB136187
	Lead	2.30	+/-6	U	12.0	P	06/17/2025	18:42	LB136187
	Magnesium	244	+/-1000	U	2000	P	06/17/2025	18:42	LB136187
	Manganese	5.94	+/-10	U	20.0	P	06/17/2025	18:42	LB136187
	Nickel	3.06	+/-20	U	40.0	P	06/17/2025	18:42	LB136187
	Potassium	918	+/-1000	U	2000	P	06/17/2025	18:42	LB136187
	Selenium	9.64	+/-10	U	20.0	P	06/17/2025	18:42	LB136187
	Silver	1.62	+/-5	U	10.0	P	06/17/2025	18:42	LB136187
	Sodium	868	+/-1000	U	2000	P	06/17/2025	18:42	LB136187
	Thallium	4.38	+/-20	U	40.0	P	06/17/2025	18:42	LB136187
	Vanadium	12.6	+/-20	J	40.0	P	06/17/2025	18:42	LB136187
	Zinc	3.50	+/-20	U	40.0	P	06/17/2025	18:42	LB136187
CCB07	Aluminum	11.3	+/-50	U	100	P	06/17/2025	19:30	LB136187
	Antimony	6.76	+/-25	U	50.0	P	06/17/2025	19:30	LB136187
	Arsenic	5.12	+/-10	U	20.0	P	06/17/2025	19:30	LB136187
	Barium	14.6	+/-50	U	100	P	06/17/2025	19:30	LB136187
	Beryllium	0.56	+/-3	U	6.00	P	06/17/2025	19:30	LB136187
	Cadmium	0.50	+/-3	U	6.00	P	06/17/2025	19:30	LB136187
	Calcium	234	+/-1000	U	2000	P	06/17/2025	19:30	LB136187
	Chromium	2.12	+/-5	U	10.0	P	06/17/2025	19:30	LB136187
	Cobalt	2.26	+/-15	U	30.0	P	06/17/2025	19:30	LB136187
	Copper	4.60	+/-10	U	20.0	P	06/17/2025	19:30	LB136187
	Iron	27.8	+/-50	J	100	P	06/17/2025	19:30	LB136187
	Lead	2.30	+/-6	U	12.0	P	06/17/2025	19:30	LB136187
	Magnesium	244	+/-1000	U	2000	P	06/17/2025	19:30	LB136187
	Manganese	5.94	+/-10	U	20.0	P	06/17/2025	19:30	LB136187
	Nickel	3.06	+/-20	U	40.0	P	06/17/2025	19:30	LB136187
	Potassium	918	+/-1000	U	2000	P	06/17/2025	19:30	LB136187
	Selenium	9.64	+/-10	U	20.0	P	06/17/2025	19:30	LB136187
	Silver	1.62	+/-5	U	10.0	P	06/17/2025	19:30	LB136187
	Sodium	868	+/-1000	U	2000	P	06/17/2025	19:30	LB136187
	Thallium	4.38	+/-20	U	40.0	P	06/17/2025	19:30	LB136187
	Vanadium	9.70	+/-20	J	40.0	P	06/17/2025	19:30	LB136187
	Zinc	3.50	+/-20	U	40.0	P	06/17/2025	19:30	LB136187
CCB08	Aluminum	31.0	+/-50	J	100	P	06/17/2025	20:22	LB136187
	Antimony	6.76	+/-25	U	50.0	P	06/17/2025	20:22	LB136187

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB08	Arsenic	5.12	+/-10	U	20.0	P	06/17/2025	20:22	LB136187
	Barium	37.6	+/-50	J	100	P	06/17/2025	20:22	LB136187
	Beryllium	0.56	+/-3	U	6.00	P	06/17/2025	20:22	LB136187
	Cadmium	2.24	+/-3	J	6.00	P	06/17/2025	20:22	LB136187
	Calcium	234	+/-1000	U	2000	P	06/17/2025	20:22	LB136187
	Chromium	2.12	+/-5	U	10.0	P	06/17/2025	20:22	LB136187
	Cobalt	2.26	+/-15	U	30.0	P	06/17/2025	20:22	LB136187
	Copper	4.60	+/-10	U	20.0	P	06/17/2025	20:22	LB136187
	Iron	41.7	+/-50	J	100	P	06/17/2025	20:22	LB136187
	Lead	4.53	+/-6	J	12.0	P	06/17/2025	20:22	LB136187
	Magnesium	244	+/-1000	U	2000	P	06/17/2025	20:22	LB136187
	Manganese	9.42	+/-10	J	20.0	P	06/17/2025	20:22	LB136187
	Nickel	3.06	+/-20	U	40.0	P	06/17/2025	20:22	LB136187
	Potassium	918	+/-1000	U	2000	P	06/17/2025	20:22	LB136187
	Selenium	9.64	+/-10	U	20.0	P	06/17/2025	20:22	LB136187
	Silver	2.69	+/-5	J	10.0	P	06/17/2025	20:22	LB136187
	Sodium	868	+/-1000	U	2000	P	06/17/2025	20:22	LB136187
	Thallium	6.25	+/-20	J	40.0	P	06/17/2025	20:22	LB136187
	Vanadium	6.26	+/-20	U	40.0	P	06/17/2025	20:22	LB136187
	Zinc	4.70	+/-20	J	40.0	P	06/17/2025	20:22	LB136187

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Metals
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PREPARATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Instrument: CV1

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB168482BL		**SOLID**		**Batch Number:**	**PB168482**		**Prep Date:**	**06/13/2025**	
	Mercury	0.0080	<0.013	U	0.013	CV	06/16/2025	13:08	LB136159

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Metals
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PREPARATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Instrument: P5

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB168472BL		**SOLID**		**Batch Number:**	**PB168472**		**Prep Date:**	**06/13/2025**	
	Aluminum	0.84	<2.5	U	5.00	P	06/16/2025	16:44	lb136164
	Antimony	0.22	<1.25	U	2.50	P	06/16/2025	16:44	lb136164
	Arsenic	0.19	<0.5	U	1.00	P	06/16/2025	16:44	lb136164
	Barium	0.73	<2.5	U	5.00	P	06/16/2025	16:44	lb136164
	Beryllium	0.025	<0.15	U	0.30	P	06/16/2025	16:44	lb136164
	Cadmium	0.024	<0.15	U	0.30	P	06/16/2025	16:44	lb136164
	Calcium	11.1	<50	U	100	P	06/16/2025	16:44	lb136164
	Chromium	0.068	<0.25	J	0.50	P	06/16/2025	16:44	lb136164
	Cobalt	0.10	<0.75	U	1.50	P	06/16/2025	16:44	lb136164
	Copper	0.22	<0.5	U	1.00	P	06/16/2025	16:44	lb136164
	Iron	3.99	<2.5	U	5.00	P	06/16/2025	16:44	lb136164
	Lead	0.13	<0.3	U	0.60	P	06/16/2025	16:44	lb136164
	Magnesium	12.0	<50	U	100	P	06/16/2025	16:44	lb136164
	Manganese	0.14	<0.5	U	1.00	P	06/16/2025	16:44	lb136164
	Nickel	0.13	<1	U	2.00	P	06/16/2025	16:44	lb136164
	Potassium	27.7	<50	U	100	P	06/16/2025	16:44	lb136164
	Selenium	0.26	<0.5	U	1.00	P	06/16/2025	16:44	lb136164
	Silver	0.12	<0.25	U	0.50	P	06/16/2025	16:44	lb136164
	Sodium	17.8	<50	U	100	P	06/16/2025	16:44	lb136164
	Thallium	0.23	<1	U	2.00	P	06/16/2025	16:44	lb136164
	Vanadium	0.25	<1	U	2.00	P	06/16/2025	16:44	lb136164
	Zinc	0.17	<1	J	2.00	P	06/16/2025	16:44	lb136164

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

ICS Source: EPA **Instrument ID:** P5

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Aluminum	257000	250000	103	216000	294000	06/16/2025	14:59	lb136164
	Antimony	23.3			-50	50	06/16/2025	14:59	lb136164
	Arsenic	-2.78			-20	20	06/16/2025	14:59	lb136164
	Barium	7.67	6.0	128	-94	106	06/16/2025	14:59	lb136164
	Beryllium	1.43			-6	6	06/16/2025	14:59	lb136164
	Cadmium	-1.53	1.0	153	-5	7	06/16/2025	14:59	lb136164
	Calcium	248000	240000	103	208000	282000	06/16/2025	14:59	lb136164
	Chromium	51.2	52.0	98	42	62	06/16/2025	14:59	lb136164
	Cobalt	22.8			-30	30	06/16/2025	14:59	lb136164
	Copper	-9.05	2.0	452	-18	22	06/16/2025	14:59	lb136164
	Iron	106000	100000	106	85600	116500	06/16/2025	14:59	lb136164
	Lead	4.50			-12	12	06/16/2025	14:59	lb136164
	Magnesium	254000	260000	98	216000	294000	06/16/2025	14:59	lb136164
	Manganese	5.70	7.0	81	-13	27	06/16/2025	14:59	lb136164
	Nickel	1.27	2.0	64	-38	42	06/16/2025	14:59	lb136164
	Potassium	1.45			0	0	06/16/2025	14:59	lb136164
	Selenium	-0.94			-20	20	06/16/2025	14:59	lb136164
	Silver	5.28			-10	10	06/16/2025	14:59	lb136164
	Sodium	116			0	0	06/16/2025	14:59	lb136164
	Thallium	19.4			-40	40	06/16/2025	14:59	lb136164
	Vanadium	-4.49			-40	40	06/16/2025	14:59	lb136164
	Zinc	11.4			-40	40	06/16/2025	14:59	lb136164
ICSAB01	Aluminum	253000	250000	101	209000	285000	06/16/2025	15:06	lb136164
	Antimony	638	620	103	525	711	06/16/2025	15:06	lb136164
	Arsenic	94.4	100	94	88.4	120	06/16/2025	15:06	lb136164
	Barium	539	540	100	437	637	06/16/2025	15:06	lb136164
	Beryllium	533	500	107	420	570	06/16/2025	15:06	lb136164
	Cadmium	1030	970	106	826	1120	06/16/2025	15:06	lb136164
	Calcium	246000	230000	107	199000	271000	06/16/2025	15:06	lb136164
	Chromium	563	540	104	460	624	06/16/2025	15:06	lb136164
	Cobalt	524	480	109	404	548	06/16/2025	15:06	lb136164
	Copper	495	510	97	434	588	06/16/2025	15:06	lb136164
	Iron	105000	99000	106	84400	114500	06/16/2025	15:06	lb136164
	Lead	52.7	49.0	108	37	61	06/16/2025	15:06	lb136164
	Magnesium	253000	250000	101	210000	286000	06/16/2025	15:06	lb136164
	Manganese	519	510	102	430	584	06/16/2025	15:06	lb136164
	Nickel	1010	950	106	810	1100	06/16/2025	15:06	lb136164
	Potassium	-3.59			0	0	06/16/2025	15:06	lb136164
	Selenium	55.7	46.0	121	26	66	06/16/2025	15:06	lb136164
	Silver	173	200	86	170	232	06/16/2025	15:06	lb136164
	Sodium	103			0	0	06/16/2025	15:06	lb136164
	Thallium	104	110	94	68	148	06/16/2025	15:06	lb136164

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

ICS Source: EPA **Instrument ID:** P5

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSAB01	Vanadium	507	490	104	417	565	06/16/2025	15:06	lb136164
	Zinc	1070	950	113	809	1095	06/16/2025	15:06	lb136164
ICSA01	Aluminum	247000	250000	99	216000	294000	06/17/2025	13:11	LB136187
	Antimony	21.2			-50	50	06/17/2025	13:11	LB136187
	Arsenic	-3.71			-20	20	06/17/2025	13:11	LB136187
	Barium	5.50	6.0	92	-94	106	06/17/2025	13:11	LB136187
	Beryllium	0.28			-6	6	06/17/2025	13:11	LB136187
	Cadmium	-1.65	1.0	165	-5	7	06/17/2025	13:11	LB136187
	Calcium	238000	240000	99	208000	282000	06/17/2025	13:11	LB136187
	Chromium	48.2	52.0	93	42	62	06/17/2025	13:11	LB136187
	Cobalt	22.0			-30	30	06/17/2025	13:11	LB136187
	Copper	-8.46	2.0	423	-18	22	06/17/2025	13:11	LB136187
	Iron	103000	100000	103	85600	116500	06/17/2025	13:11	LB136187
	Lead	5.50			-12	12	06/17/2025	13:11	LB136187
	Magnesium	245000	260000	94	216000	294000	06/17/2025	13:11	LB136187
	Manganese	5.99	7.0	86	-13	27	06/17/2025	13:11	LB136187
	Nickel	2.10	2.0	105	-38	42	06/17/2025	13:11	LB136187
	Potassium	0.58			0	0	06/17/2025	13:11	LB136187
	Selenium	0.58			-20	20	06/17/2025	13:11	LB136187
	Silver	4.61			-10	10	06/17/2025	13:11	LB136187
	Sodium	116			0	0	06/17/2025	13:11	LB136187
	Thallium	14.1			-40	40	06/17/2025	13:11	LB136187
	Vanadium	1.78			-40	40	06/17/2025	13:11	LB136187
	Zinc	10.3			-40	40	06/17/2025	13:11	LB136187
ICSAB01	Aluminum	251000	250000	100	209000	285000	06/17/2025	13:22	LB136187
	Antimony	630	620	102	525	711	06/17/2025	13:22	LB136187
	Arsenic	94.8	100	95	88.4	120	06/17/2025	13:22	LB136187
	Barium	523	540	97	437	637	06/17/2025	13:22	LB136187
	Beryllium	524	500	105	420	570	06/17/2025	13:22	LB136187
	Cadmium	1020	970	105	826	1120	06/17/2025	13:22	LB136187
	Calcium	242000	230000	105	199000	271000	06/17/2025	13:22	LB136187
	Chromium	564	540	104	460	624	06/17/2025	13:22	LB136187
	Cobalt	522	480	109	404	548	06/17/2025	13:22	LB136187
	Copper	492	510	96	434	588	06/17/2025	13:22	LB136187
	Iron	104000	99000	105	84400	114500	06/17/2025	13:22	LB136187
	Lead	53.1	49.0	108	37	61	06/17/2025	13:22	LB136187
	Magnesium	249000	250000	100	210000	286000	06/17/2025	13:22	LB136187
	Manganese	509	510	100	430	584	06/17/2025	13:22	LB136187
	Nickel	1000	950	105	810	1100	06/17/2025	13:22	LB136187
	Potassium	-2.54			0	0	06/17/2025	13:22	LB136187
	Selenium	50.7	46.0	110	26	66	06/17/2025	13:22	LB136187
	Silver	173	200	86	170	232	06/17/2025	13:22	LB136187

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

ICS Source: EPA **Instrument ID:** P5

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSAB01	Sodium	122			0	0	06/17/2025	13:22	LB136187
	Thallium	97.4	110	88	68	148	06/17/2025	13:22	LB136187
	Vanadium	503	490	103	417	565	06/17/2025	13:22	LB136187
	Zinc	1050	950	110	809	1095	06/17/2025	13:22	LB136187

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metals
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MATRIX SPIKE SUMMARY

client: Portal Partners Tri-Venture **level:** low **sdg no.:** Q2303

contract: PORT06 **lab code:** CHEM **case no.:** Q2303 **sas no.:** Q2303

matrix: Solid **sample id:** Q2303-02 **client id:** B-170-SB03MS

Percent Solids for Sample: 92.7 **Spiked ID:** Q2303-02MS **Percent Solids for Spike Sample:** 92.7

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	80 - 120	1.16	D	0.90	D	0.28	91		CV

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MATRIX SPIKE DUPLICATE SUMMARY

client: Portal Partners Tri-Venture **level:** low **sdg no.:** Q2303

contract: PORT06 **lab code:** CHEM **case no.:** Q2303 **sas no.:** Q2303

matrix: Solid **sample id:** Q2303-02 **client id:** B-170-SB03MSD

Percent Solids for Sample: 92.7 **Spiked ID:** Q2303-02MSD **Percent Solids for Spike Sample:** 92.7

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	80 - 120	1.17	D	0.90	D	0.28	95		CV

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metals
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MATRIX SPIKE SUMMARY

client: Portal Partners Tri-Venture **level:** low **sdg no.:** Q2303

contract: PORT06 **lab code:** CHEM **case no.:** Q2303 **sas no.:** Q2303

matrix: Solid **sample id:** Q2310-01 **client id:** TP-7MS

Percent Solids for Sample: 88.7 **Spiked ID:** Q2310-01MS **Percent Solids for Spike Sample:** 88.7

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	5700		5180		100	518		P
Antimony	mg/Kg	75 - 125	16.5		0.94	J	40.1	39	N	P
Arsenic	mg/Kg	75 - 125	43.3		3.11		40.1	100		P
Barium	mg/Kg	75 - 125	50.8		40.7		10.0	101		P
Beryllium	mg/Kg	75 - 125	8.36		0.53		10.0	78		P
Cadmium	mg/Kg	75 - 125	10.3		0.30	U	10.0	102		P
Calcium	mg/Kg	75 - 125	2150		1790		50.1	721		P
Chromium	mg/Kg	75 - 125	25.9		10.5		20.0	77		P
Cobalt	mg/Kg	75 - 125	18.4		7.73		10.0	107		P
Copper	mg/Kg	75 - 125	57.8		36.3		15.0	143	N	P
Iron	mg/Kg	75 - 125	11800		11700		150	69		P
Lead	mg/Kg	75 - 125	64.3		14.3		50.1	100		P
Magnesium	mg/Kg	75 - 125	3110		2850		100	265		P
Manganese	mg/Kg	75 - 125	392		378		10.0	140		P
Nickel	mg/Kg	75 - 125	40.7		14.1		25.1	106		P
Potassium	mg/Kg	75 - 125	1390		957		500	87		P
Selenium	mg/Kg	75 - 125	70.3		1.61		100	69	N	P
Silver	mg/Kg	75 - 125	3.35		0.50		3.8	76		P
Sodium	mg/Kg	75 - 125	792		699		150	62		P
Thallium	mg/Kg	75 - 125	101		1.99	U	100	101		P
Vanadium	mg/Kg	75 - 125	27.2		15.8		15.0	76		P
Zinc	mg/Kg	75 - 125	43.2		33.4		10.0	98		P

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MATRIX SPIKE DUPLICATE SUMMARY

client: Portal Partners Tri-Venture **level:** low **sdg no.:** Q2303

contract: PORT06 **lab code:** CHEM **case no.:** Q2303 **sas no.:** Q2303

matrix: Solid **sample id:** Q2310-01 **client id:** TP-7MSD

Percent Solids for Sample: 88.7 **Spiked ID:** Q2310-01MSD **Percent Solids for Spike Sample:** 88.7

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	5200		5180		95.9	16		P
Antimony	mg/Kg	75 - 125	15.4		0.94	J	38.4	38	N	P
Arsenic	mg/Kg	75 - 125	40.4		3.11		38.4	97		P
Barium	mg/Kg	75 - 125	46.4		40.7		9.6	59		P
Beryllium	mg/Kg	75 - 125	7.76		0.53		9.6	75		P
Cadmium	mg/Kg	75 - 125	9.54		0.30	U	9.6	99		P
Calcium	mg/Kg	75 - 125	2090		1790		48.0	627		P
Chromium	mg/Kg	75 - 125	24.0		10.5		19.2	70	N	P
Cobalt	mg/Kg	75 - 125	17.0		7.73		9.6	97		P
Copper	mg/Kg	75 - 125	49.4		36.3		14.4	91		P
Iron	mg/Kg	75 - 125	10900		11700		140	-553		P
Lead	mg/Kg	75 - 125	59.1		14.3		48.0	94		P
Magnesium	mg/Kg	75 - 125	2760		2850		95.9	-88		P
Manganese	mg/Kg	75 - 125	331		378		9.6	-498		P
Nickel	mg/Kg	75 - 125	37.6		14.1		24.0	98		P
Potassium	mg/Kg	75 - 125	1270		957		480	65	N	P
Selenium	mg/Kg	75 - 125	65.1		1.61		95.9	66	N	P
Silver	mg/Kg	75 - 125	3.16		0.50		3.6	74	N	P
Sodium	mg/Kg	75 - 125	738		699		140	28		P
Thallium	mg/Kg	75 - 125	94.5		1.99	U	95.9	98		P
Vanadium	mg/Kg	75 - 125	25.4		15.8		14.4	67	N	P
Zinc	mg/Kg	75 - 125	39.0		33.4		9.6	58	N	P

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POST DIGEST SPIKE SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Matrix: Solid **Level:** LOW **Client ID:** TP-7A

Sample ID: Q2310-01 **Spiked ID:** Q2310-01A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	mg/Kg	75 - 125	28.3		0.94	J	39.7	69	N	P
Chromium	mg/Kg	75 - 125	24.5		10.5		19.9	70	N	P
Copper	mg/Kg	75 - 125	46.1		36.3		14.9	66	N	P
Potassium	mg/Kg	75 - 125	1300		957		500	68	N	P
Selenium	mg/Kg	75 - 125	66.2		1.61		99.3	65	N	P
Silver	mg/Kg	75 - 125	3.05		0.50		3.70	69	N	P
Vanadium	mg/Kg	75 - 125	25.7		15.8		14.9	66	N	P
Zinc	mg/Kg	75 - 125	40.3		33.4		9.90	70	N	P

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: Portal Partners Tri-Venture **Level:** LOW **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Matrix: Solid **Sample ID:** Q2303-02 **Client ID:** B-170-SB03DUP

Percent Solids for Sample: 92.7 **Duplicate ID** Q2303-02DUP **Percent Solids for Spike Sample:** 92.7

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	mg/Kg	20	0.90	D	1.03	D	13		CV

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

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DUPLICATE SAMPLE SUMMARY

Client: Portal Partners Tri-Venture **Level:** LOW **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Matrix: Solid **Sample ID:** Q2303-02MS **Client ID:** B-170-SB03MSD

Percent Solids for Sample: 92.7 **Duplicate ID** Q2303-02MSD **Percent Solids for Spike Sample:** 92.7

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	mg/Kg	20	1.16	D	1.17	D	1		CV

"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: Portal Partners Tri-Venture **Level:** LOW **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Matrix: Solid **Sample ID:** Q2310-01 **Client ID:** TP-7DUP

Percent Solids for Sample: 88.7 **Duplicate ID** Q2310-01DUP **Percent Solids for Spike Sample:** 88.7

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	mg/Kg	20	5180		4840		7		P
Antimony	mg/Kg	20	0.94	J	0.90	J	3		P
Arsenic	mg/Kg	20	3.11		3.20		3		P
Barium	mg/Kg	20	40.7		40.7		0		P
Beryllium	mg/Kg	20	0.53		0.57		7		P
Cadmium	mg/Kg	20	0.30	U	0.28	U			P
Calcium	mg/Kg	20	1790		1960		9		P
Chromium	mg/Kg	20	10.5		10.2		3		P
Cobalt	mg/Kg	20	7.73		8.01		4		P
Copper	mg/Kg	20	36.3		34.0		7		P
Iron	mg/Kg	20	11700		11200		4		P
Lead	mg/Kg	20	14.3		15.0		5		P
Magnesium	mg/Kg	20	2850		2850		0		P
Manganese	mg/Kg	20	378		328		14		P
Nickel	mg/Kg	20	14.1		13.7		3		P
Potassium	mg/Kg	20	957		1050		9		P
Selenium	mg/Kg	20	1.61		1.56		3		P
Silver	mg/Kg	20	0.50		0.48		4		P
Sodium	mg/Kg	20	699		649		7		P
Thallium	mg/Kg	20	1.99	U	1.85	U			P
Vanadium	mg/Kg	20	15.8		15.6		1		P
Zinc	mg/Kg	20	33.4		32.3		3		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: Portal Partners Tri-Venture **Level:** LOW **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Matrix: Solid **Sample ID:** Q2310-01MS **Client ID:** TP-7MSD

Percent Solids for Sample: 88.7 **Duplicate ID** Q2310-01MSD **Percent Solids for Spike Sample:** 88.7

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	mg/Kg	20	5700		5200		9		P
Antimony	mg/Kg	20	16.5		15.4		7		P
Arsenic	mg/Kg	20	43.3		40.4		7		P
Barium	mg/Kg	20	50.8		46.4		9		P
Beryllium	mg/Kg	20	8.36		7.76		7		P
Cadmium	mg/Kg	20	10.3		9.54		7		P
Calcium	mg/Kg	20	2150		2090		3		P
Chromium	mg/Kg	20	25.9		24.0		8		P
Cobalt	mg/Kg	20	18.4		17.0		8		P
Copper	mg/Kg	20	57.8		49.4		16		P
Iron	mg/Kg	20	11800		10900		8		P
Lead	mg/Kg	20	64.3		59.1		8		P
Magnesium	mg/Kg	20	3110		2760		12		P
Manganese	mg/Kg	20	392		331		17		P
Nickel	mg/Kg	20	40.7		37.6		8		P
Potassium	mg/Kg	20	1390		1270		9		P
Selenium	mg/Kg	20	70.3		65.1		8		P
Silver	mg/Kg	20	3.35		3.16		6		P
Sodium	mg/Kg	20	792		738		7		P
Thallium	mg/Kg	20	101		94.5		7		P
Vanadium	mg/Kg	20	27.2		25.4		7		P
Zinc	mg/Kg	20	43.2		39.0		10		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: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB168472BS							
Aluminum	mg/Kg	100	104		104	80 - 120	P
Antimony	mg/Kg	40.0	42.3		106	80 - 120	P
Arsenic	mg/Kg	40.0	38.2		96	80 - 120	P
Barium	mg/Kg	10.0	10.6		106	80 - 120	P
Beryllium	mg/Kg	10.0	11.1		111	80 - 120	P
Cadmium	mg/Kg	10.0	9.93		99	80 - 120	P
Calcium	mg/Kg	50.0	53.1	J	106	80 - 120	P
Chromium	mg/Kg	20.0	20.5		102	80 - 120	P
Cobalt	mg/Kg	10.0	10.0		100	80 - 120	P
Copper	mg/Kg	15.0	17.3		115	80 - 120	P
Iron	mg/Kg	150	168		112	80 - 120	P
Lead	mg/Kg	50.0	49.1		98	80 - 120	P
Magnesium	mg/Kg	100	106		106	80 - 120	P
Manganese	mg/Kg	10.0	10.6		106	80 - 120	P
Nickel	mg/Kg	25.0	25.4		102	80 - 120	P
Potassium	mg/Kg	500	474		95	80 - 120	P
Selenium	mg/Kg	100	103		103	80 - 120	P
Silver	mg/Kg	3.8	3.85		101	80 - 120	P
Sodium	mg/Kg	150	157		105	80 - 120	P
Thallium	mg/Kg	100	106		106	80 - 120	P
Vanadium	mg/Kg	15.0	15.1		101	80 - 120	P
Zinc	mg/Kg	10.0	11.1		111	80 - 120	P

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB168482BS							
Mercury	mg/Kg	0.26	0.26		101	80 - 120	CV

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ICP SERIAL DILUTIONS

SAMPLE NO.

B-170-SB03L

Lab Name: Chemtech Consulting Group **Contract:** PORT06

Lab Code: CHEM **Lb No.:** lb136159 **Lab Sample ID :** Q2303-02L **SDG No.:** Q2303

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

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Mercury	0.87	OR	0.72		17		CV

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ICP SERIAL DILUTIONS

SAMPLE NO.

TP-7L

Lab Name: Chemtech Consulting Group **Contract:** PORT06

Lab Code: CHEM **Lb No.:** lb136187 **Lab Sample ID :** Q2310-01L **SDG No.:** Q2303

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

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	5180		6810		31		P
Antimony	0.94	J	12.4	U	100.0		P
Arsenic	3.11		3.71	J	19		P
Barium	40.7		53.2		31		P
Beryllium	0.53		0.71	J	34		P
Cadmium	0.30	U	1.49	U			P
Calcium	1790		2310		29		P
Chromium	10.5		13.7		30		P
Cobalt	7.73		8.03		4		P
Copper	36.3		49.7		37		P
Iron	11700		15300		31		P
Lead	14.3		14.9		4		P
Magnesium	2850		3780		33		P
Manganese	378		509		35		P
Nickel	14.1		14.0		1		P
Potassium	957		1030		8		P
Selenium	1.61		1.91	J	18		P
Silver	0.50		0.80	J	60		P
Sodium	699		916		31		P
Thallium	1.99	U	9.93	U			P
Vanadium	15.8		21.5		37		P
Zinc	33.4		44.2		33		P

METAL PREPARATION & INSTRUMENT DATA

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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
Aluminum	396.100	0.0000000	-0.0002060	0.0000000	0.0000000	0.0000000
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
Calcium	373.690	0.0000000	0.0000000	-0.0075970	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
Magnesium	279.079	0.0000000	0.0000000	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	-0.0001440	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: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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
Aluminum	396.100	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
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
Calcium	373.690	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	0.0000000	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
Magnesium	279.079	0.0000000	0.0000000	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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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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
Aluminum	396.100	0.0000000	0.0000000	0.0000590	0.0000000	0.0396900
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
Calcium	373.690	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
Magnesium	279.079	0.0000000	0.0000000	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	0.0007460	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: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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
Aluminum	396.100	0.0000000	0.0000000	0.0012800	0.0000000	0.0000000
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
Calcium	373.690	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
Magnesium	279.079	0.0000000	0.0000000	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	0.0003330	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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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2303 **SAS No.:** Q2303

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
Aluminum	396.100	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
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
Calcium	373.690	0.0000000	0.0000000	0.0000000	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
Magnesium	279.079	0.0000000	0.0000000	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

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

Metals
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SAMPLE PREPARATION SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Method:**

Case No.: Q2303 **SAS No.:** Q2303

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB168472**						
PB168472BL	PB168472BL	MB	SOLID	06/13/2025	2.00	100.0	100.00
PB168472BS	PB168472BS	LCS	SOLID	06/13/2025	2.00	100.0	100.00
Q2303-01	B-165-SB01	SAM	SOLID	06/13/2025	2.30	100.0	83.60
Q2303-02	B-170-SB03	SAM	SOLID	06/13/2025	2.21	100.0	92.70
Q2310-01DUP	TP-7DUP	DUP	SOLID	06/13/2025	2.44	100.0	88.70
Q2310-01MS	TP-7MS	MS	SOLID	06/13/2025	2.25	100.0	88.70
Q2310-01MSD	TP-7MSD	MSD	SOLID	06/13/2025	2.35	100.0	88.70

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Fax : 908 789 8922

Metals
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SAMPLE PREPARATION SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2303

Contract: PORT06 **Lab Code:** CHEM **Method:**

Case No.: Q2303 **SAS No.:** Q2303

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB168482**						
PB168482BL	PB168482BL	MB	SOLID	06/13/2025	0.52	35.0	100.00
PB168482BS	PB168482BS	LCS	SOLID	06/13/2025	0.54	35.0	100.00
Q2303-01	B-165-SB01	SAM	SOLID	06/13/2025	0.53	35.0	83.60
Q2303-02	B-170-SB03	SAM	SOLID	06/13/2025	0.57	35.0	92.70
Q2303-02DUP	B-170-SB03DUP	DUP	SOLID	06/13/2025	0.55	35.0	92.70
Q2303-02MS	B-170-SB03MS	MS	SOLID	06/13/2025	0.53	35.0	92.70
Q2303-02MSD	B-170-SB03MSD	MSD	SOLID	06/13/2025	0.54	35.0	92.70

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metals
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ANALYSIS RUN LOG

Client: Portal Partners Tri-Venture **Contract:** PORT06

Lab code: CHEM **Case no.:** Q2303 **Sas no.:** Q2303 **Sdg no.:** Q2303

Instrument id number: **Method:** **Run number:** LB136159

Start date: 06/16/2025 **End date:** 06/16/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1225	HG
S0.2	S0.2	1	1227	HG
S2.5	S2.5	1	1229	HG
S5	S5	1	1231	HG
S7.5	S7.5	1	1234	HG
S10	S10	1	1244	HG
ICV39	ICV39	1	1252	HG
ICB39	ICB39	1	1254	HG
CCV45	CCV45	1	1256	HG
CCB45	CCB45	1	1258	HG
CRA	CRA	1	1301	HG
PB168482BL	PB168482BL	1	1308	HG
PB168482BS	PB168482BS	1	1313	HG
Q2303-01	B-165-SB01	1	1315	HG
CCV46	CCV46	1	1330	HG
CCB46	CCB46	1	1333	HG
Q2303-02L	B-170-SB03L	5	1344	HG
CCV47	CCV47	1	1349	HG
CCB47	CCB47	1	1352	HG
Q2303-02	B-170-SB03	2	1354	HG
Q2303-02DUP	B-170-SB03DUP	2	1356	HG
Q2303-02MS	B-170-SB03MS	2	1359	HG
Q2303-02MSD	B-170-SB03MSD	2	1404	HG
CCV48	CCV48	1	1411	HG
CCB48	CCB48	1	1414	HG

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metals
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ANALYSIS RUN LOG

Client: Portal Partners Tri-Venture **Contract:** PORT06

Lab code: CHEM **Case no.:** Q2303 **Sas no.:** Q2303 **Sdg no.:** Q2303

Instrument id number: **Method:** **Run number:** lb136164

Start date: 06/16/2025 **End date:** 06/16/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1252	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S1	S1	1	1256	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S2	S2	1	1301	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S3	S3	1	1305	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S4	S4	1	1309	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S5	S5	1	1313	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICV01	ICV01	1	1403	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
LLICV01	LLICV01	1	1442	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICB01	ICB01	1	1449	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CRI01	CRI01	1	1453	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA01	ICSA01	1	1459	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB01	ICSAB01	1	1506	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV01	CCV01	1	1526	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB01	CCB01	1	1530	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q2303-01	B-165-SB01	1	1549	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q2303-02	B-170-SB03	1	1553	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV02	CCV02	1	1629	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB02	CCB02	1	1634	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB168472BL	PB168472BL	1	1644	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB168472BS	PB168472BS	1	1648	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV03	CCV03	1	1731	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB03	CCB03	1	1749	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV04	CCV04	1	1829	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB04	CCB04	1	1833	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV05	CCV05	1	1917	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB05	CCB05	1	1921	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV06	CCV06	1	2004	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB06	CCB06	1	2008	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV07	CCV07	1	2052	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB07	CCB07	1	2056	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV08	CCV08	1	2114	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB08	CCB08	1	2118	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn

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metals
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ANALYSIS RUN LOG

Client: Portal Partners Tri-Venture **Contract:** PORT06

Lab code: CHEM **Case no.:** Q2303 **Sas no.:** Q2303 **Sdg no.:** Q2303

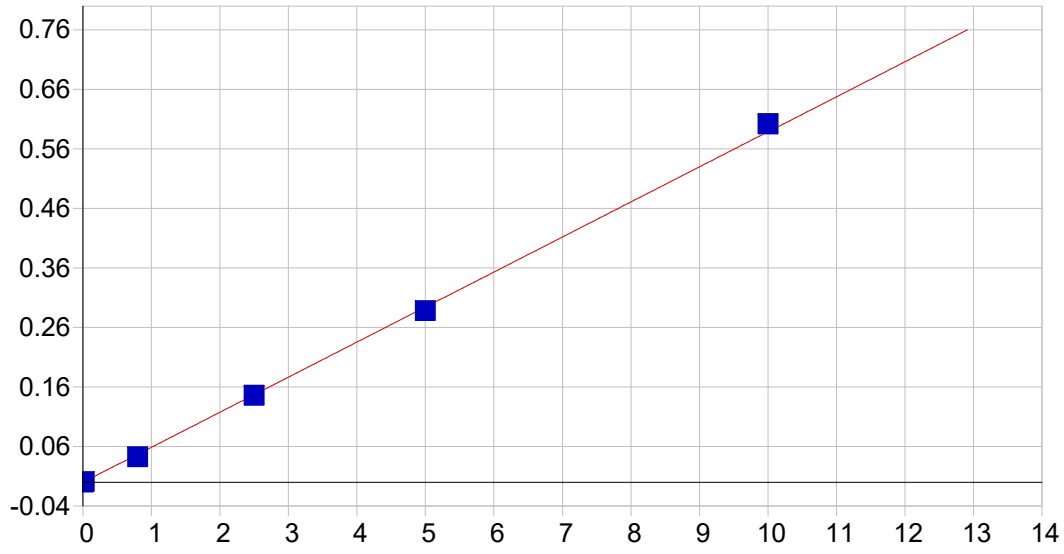
Instrument id number: **Method:** **Run number:** LB136187

Start date: 06/17/2025 **End date:** 06/17/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1158	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S1	S1	1	1203	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S2	S2	1	1207	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S3	S3	1	1211	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S4	S4	1	1216	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S5	S5	1	1220	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICV01	ICV01	1	1225	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
LLICV01	LLICV01	1	1241	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICB01	ICB01	1	1246	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CRI01	CRI01	1	1250	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA01	ICSA01	1	1311	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB01	ICSAB01	1	1322	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV01	CCV01	1	1340	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB01	CCB01	1	1348	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV02	CCV02	1	1443	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB02	CCB02	1	1450	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV03	CCV03	1	1538	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB03	CCB03	1	1542	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q2310-01DUP	TP-7DUP	1	1608	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q2310-01L	TP-7L	5	1612	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q2310-01MS	TP-7MS	1	1617	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q2310-01MSD	TP-7MSD	1	1621	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q2310-01A	TP-7A	1	1625	Ag,Cr,Cu,K,Sb,Se,V,Zn
CCV04	CCV04	1	1630	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB04	CCB04	1	1634	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV05	CCV05	1	1737	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB05	CCB05	1	1741	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV06	CCV06	1	1838	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB06	CCB06	1	1842	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV07	CCV07	1	1925	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB07	CCB07	1	1930	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV08	CCV08	1	2017	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB08	CCB08	1	2022	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn

METAL
RAW DATA

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



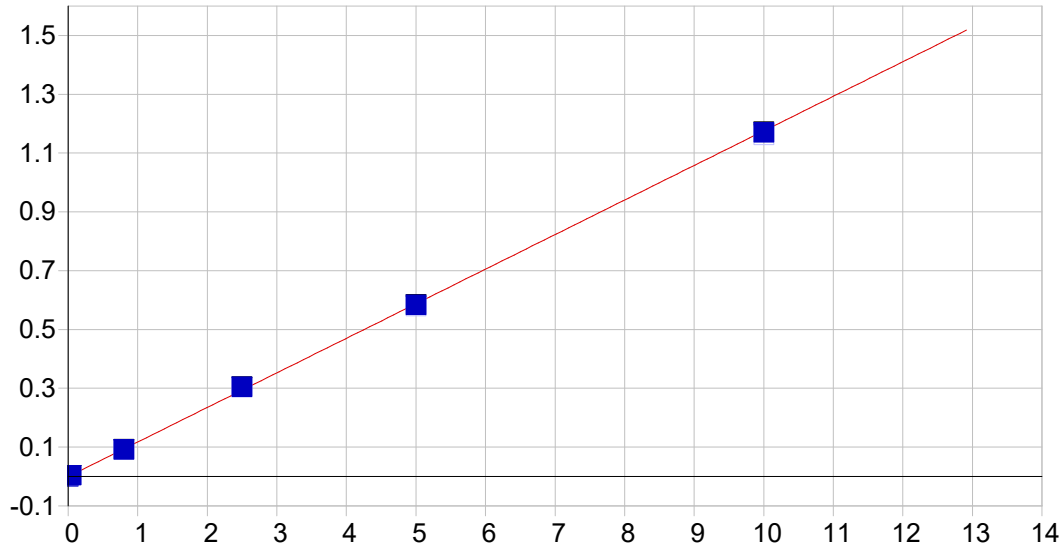
As 189.042 {479}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000175	Re-Slope:	1.000000
A1 (Gain):	0.058892	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999564	Status:	OK.
Std Error of Est:	0.000041		
Predicted MDL:	0.002746		
Predicted MQL:	0.009152		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00017	.000	1
S1	.02000	.01806	-.002	-9.72	.00089	.000	1
S2	.80000	.71825	-.082	-10.2	.04212	.000	1
S3	2.5000	2.4717	-.028	-1.13	.14538	.001	1
S4	5.0000	4.8926	-.107	-2.15	.28794	.001	1
S5	10.000	10.219	.219	2.19	.60162	.001	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



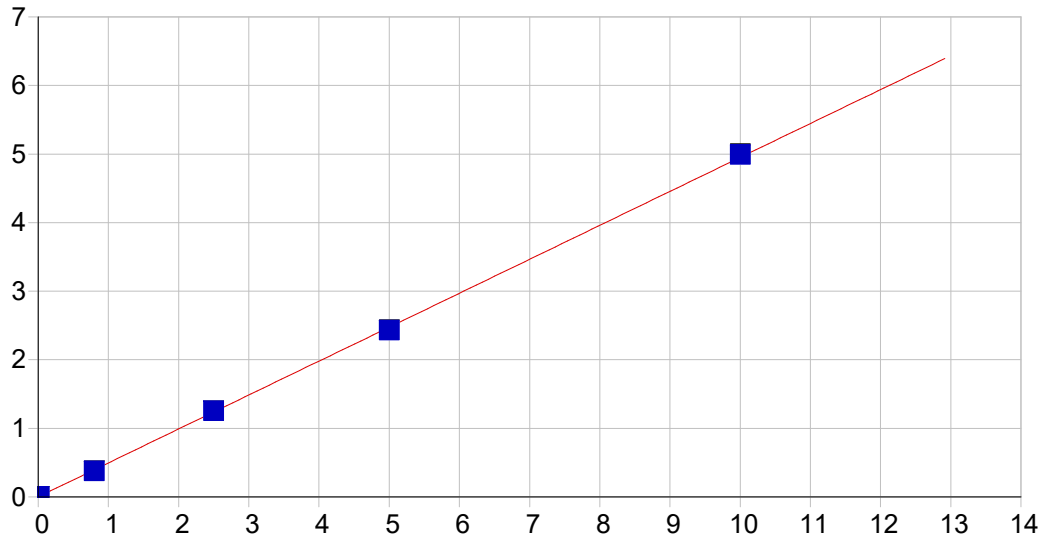
Tl 190.856 {477}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000232	Re-Slope:	1.000000
A1 (Gain):	0.117567	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999886	Status:	OK.
Std Error of Est:	0.000058		
Predicted MDL:	0.002149		
Predicted MQL:	0.007164		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00023	.000	1
S1	.04000	.04016	.000	.388	.00438	.000	1
S2	.80000	.78397	-.016	-2.00	.09120	.000	1
S3	2.5000	2.5922	.092	3.69	.30223	.001	1
S4	5.0000	4.9681	-.032	-.639	.57925	.000	1
S5	10.000	9.9556	-.044	-.444	1.1610	.002	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



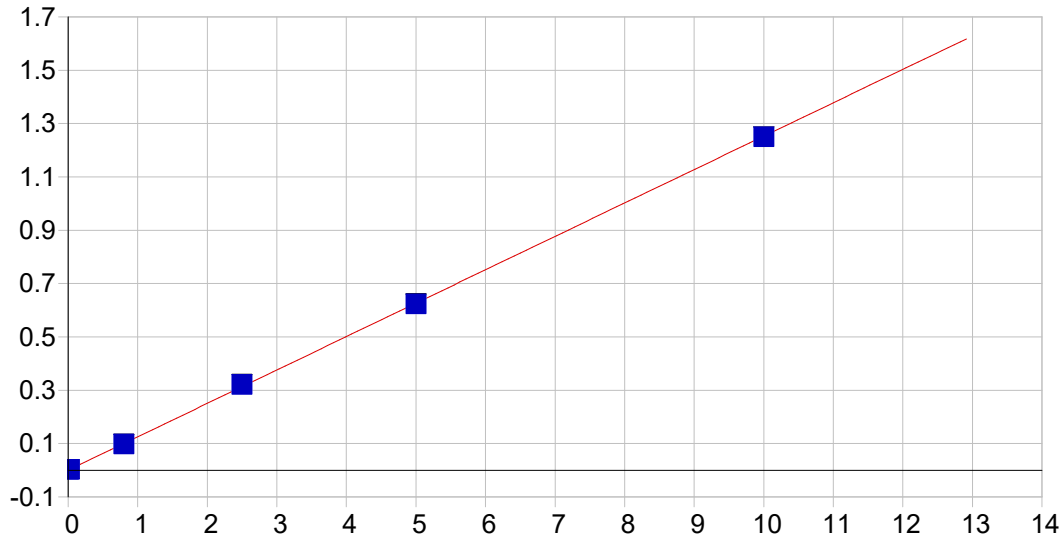
Pb 220.353 {453}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000686	Re-Slope:	1.000000
A1 (Gain):	0.494937	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999874	Status:	OK.
Std Error of Est:	0.000142		
Predicted MDL:	0.001211		
Predicted MQL:	0.004037		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00069	.000	1
S1	.01200	.01220	.000	1.69	.00660	.000	1
S2	.80000	.76309	-.037	-4.61	.37801	.001	1
S3	2.5000	2.5383	.038	1.53	1.2559	.000	1
S4	5.0000	4.9117	-.088	-1.77	2.4295	.003	1
S5	10.000	10.087	.087	.867	4.9885	.010	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



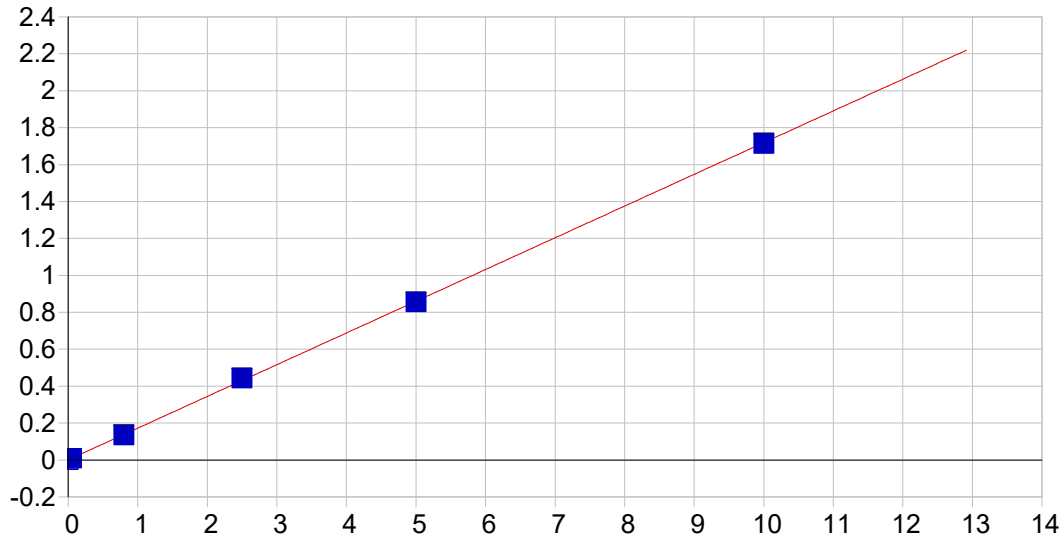
Se 196.090 {472}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000229	Re-Slope:	1.000000
A1 (Gain):	0.125252	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999927	Status:	OK.
Std Error of Est:	0.000035		
Predicted MDL:	0.002931		
Predicted MQL:	0.009770		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00023	.000	1
S1	.02000	.02100	.001	4.99	.00286	.000	1
S2	.80000	.77762	-.022	-2.80	.09761	.000	1
S3	2.5000	2.5672	.067	2.69	.32172	.000	1
S4	5.0000	4.9723	-.028	-.555	.62290	.001	1
S5	10.000	9.9819	-.018	-.181	1.2503	.001	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



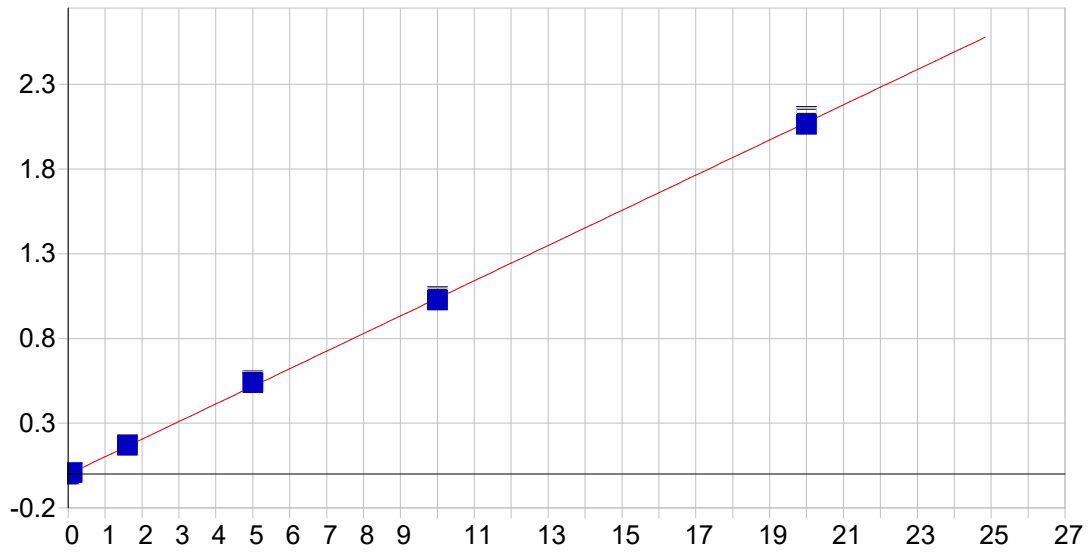
Sb 206.833 {463}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000678	Re-Slope:	1.000000
A1 (Gain):	0.171839	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999924	Status:	OK.
Std Error of Est:	0.000078		
Predicted MDL:	0.002539		
Predicted MQL:	0.008464		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00068	.001	1
S1	.05000	.05091	.001	1.82	.00934	.000	1
S2	.80000	.78399	-.016	-2.00	.13519	.000	1
S3	2.5000	2.5737	.074	2.95	.44229	.000	1
S4	5.0000	4.9712	-.029	-.576	.85363	.000	1
S5	10.000	9.9702	-.030	-.298	1.7114	.004	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



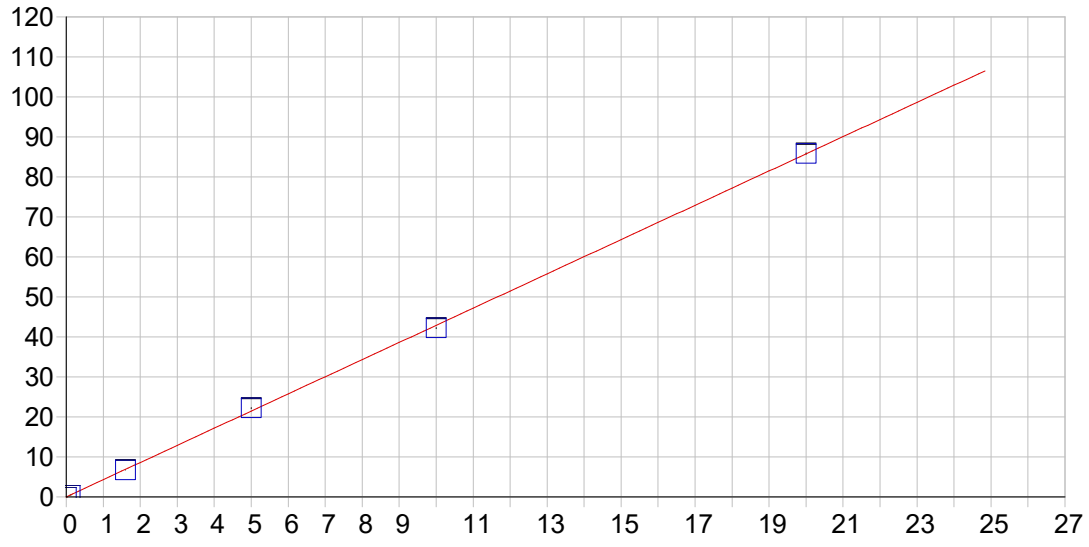
Al 396.152 { 85}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001701	Re-Slope:	1.000000
A1 (Gain):	0.103856	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999847	Status:	OK.
Std Error of Est:	0.000137		
Predicted MDL:	0.023093		
Predicted MQL:	0.076977		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00170	.003	1
S1	.10000	.09154	-.008	-8.46	.00858	.003	1
S2	1.6000	1.6451	.045	2.82	.17225	.002	1
S3	5.0000	5.1955	.195	3.91	.54755	.003	1
S4	10.000	9.8843	-.116	-1.16	1.0442	.004	1
S5	20.000	19.884	-.116	-.579	2.1021	.007	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



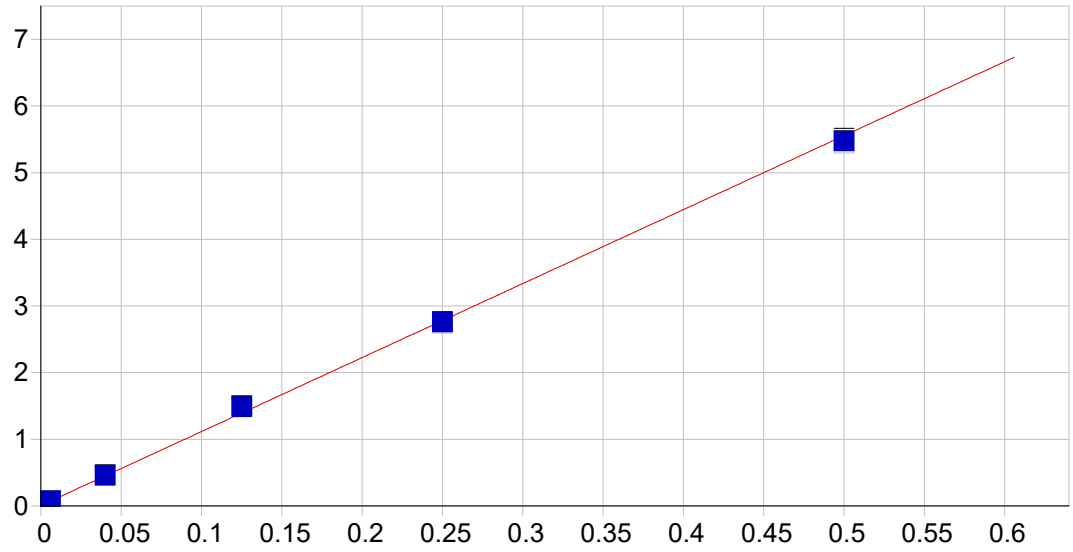
Ba 493.409 { 68}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.023158	Re-Slope:	1.000000
A1 (Gain):	4.287390	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999874	Status:	OK.
Std Error of Est:	0.005046		
Predicted MDL:	0.000953		
Predicted MQL:	0.003177		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.02316	.003	1
S1	.10000	.09971	-.000	-.289	.45066	.004	1
S2	1.6000	1.5688	-.031	-1.95	6.7493	.052	1
S3	5.0000	5.1753	.175	3.51	22.212	.093	1
S4	10.000	9.8424	-.158	-1.58	42.222	.121	1
S5	20.000	20.014	.014	.069	85.830	.144	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



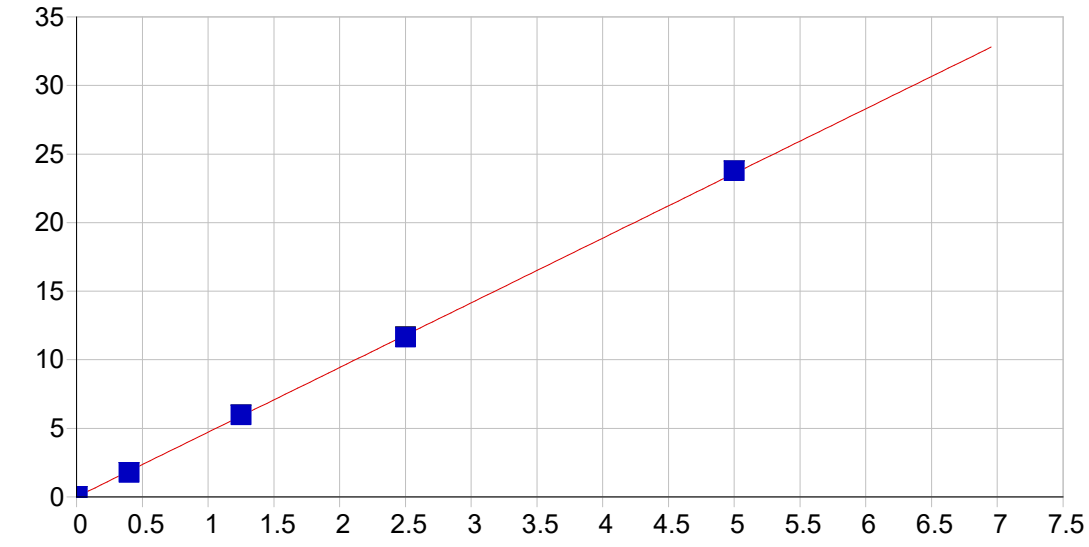
Be 234.861 {144}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.005822	Re-Slope:	1.000000
A1 (Gain):	11.100260	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999589	Status:	OK.
Std Error of Est:	0.000910		
Predicted MDL:	0.000124		
Predicted MQL:	0.000413		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00581	.002	1
S1	.00600	.00643	.000	7.25	.07654	.001	1
S2	.04000	.04071	.001	1.77	.45471	.006	1
S3	.12500	.13348	.008	6.79	1.4783	.017	1
S4	.25000	.24762	-.002	-.953	2.7359	.011	1
S5	.50000	.49276	-.007	-1.45	5.4386	.042	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



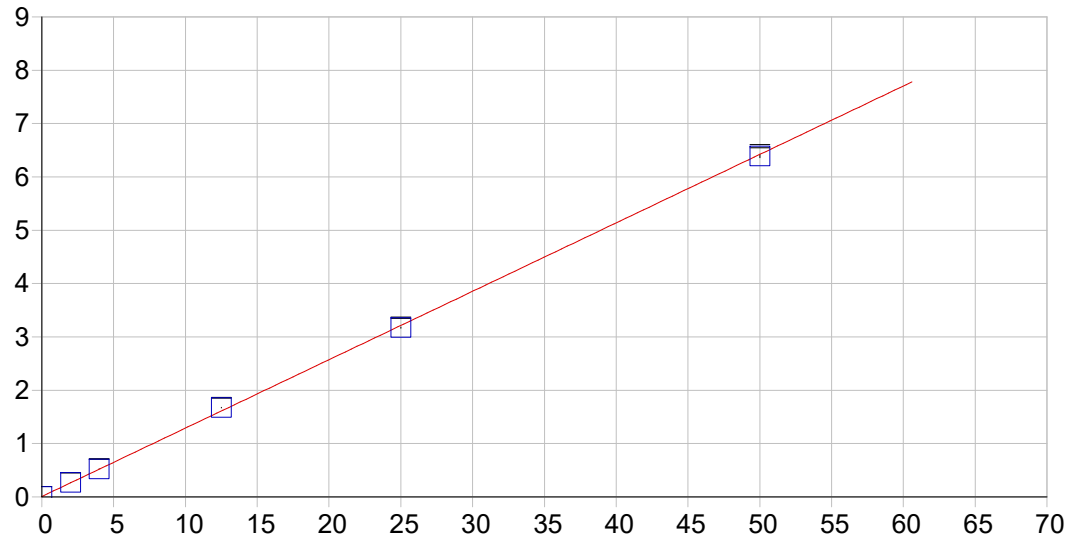
Cd 214.438 {457}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000572	Re-Slope:	1.000000
A1 (Gain):	4.716622	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999864	Status:	OK.
Std Error of Est:	0.000705		
Predicted MDL:	0.000073		
Predicted MQL:	0.000244		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00058	.000	1
S1	.00600	.00556	-.000	-7.30	.02683	.000	1
S2	.40000	.37536	-.025	-6.16	1.7712	.002	1
S3	1.2500	1.2668	.017	1.34	5.9758	.009	1
S4	2.5000	2.4686	-.031	-1.26	11.645	.011	1
S5	5.0000	5.0397	.040	.794	23.773	.024	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



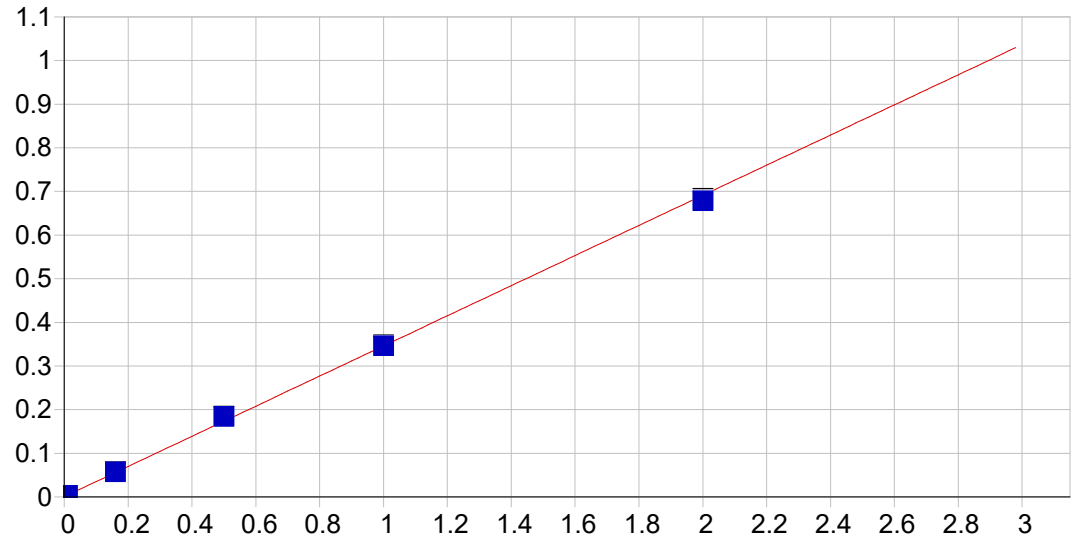
Ca 373.690 { 90}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.006817	Re-Slope:	1.000000
A1 (Gain):	0.128288	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999871	Status:	OK.
Std Error of Est:	0.001089		
Predicted MDL:	0.016878		
Predicted MQL:	0.056260		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00009	-.000	.000	.00681	.002	1
S1	2.0000	2.0310	.031	1.55	.26737	.002	1
S2	4.0000	4.0249	.025	.622	.52316	.003	1
S3	12.500	12.983	.483	3.86	1.6723	.006	1
S4	25.000	24.695	-.305	-1.22	3.1749	.011	1
S5	50.000	49.766	-.234	-.468	6.3912	.031	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



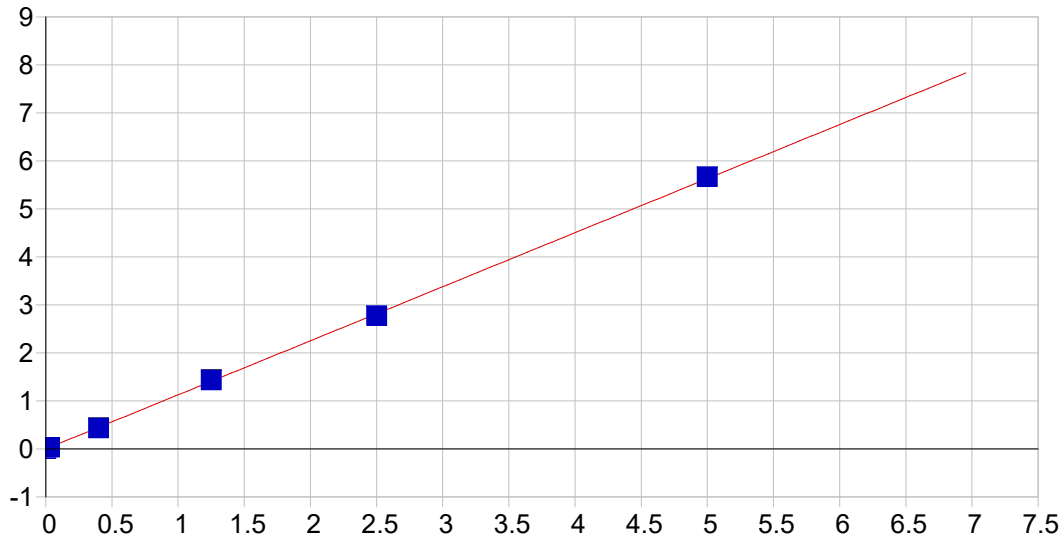
Cr 267.716 {126}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000714	Re-Slope:	1.000000
A1 (Gain):	0.345257	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999616	Status:	OK.
Std Error of Est:	0.000071		
Predicted MDL:	0.000837		
Predicted MQL:	0.002792		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00071	.000	1
S1	.01000	.01029	.000	2.93	.00427	.000	1
S2	.16000	.16440	.004	2.75	.05752	.000	1
S3	.50000	.53150	.031	6.30	.18437	.000	1
S4	1.0000	1.0015	.002	.153	.34681	.001	1
S5	2.0000	1.9623	-.038	-1.89	.67883	.005	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



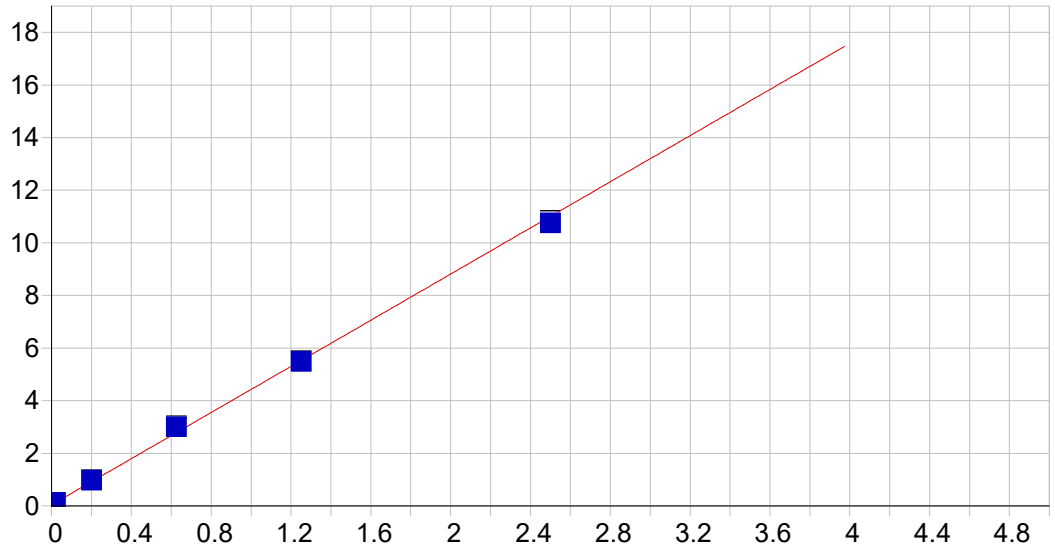
Co 228.616 {448}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000087	Re-Slope:	1.000000
A1 (Gain):	1.126206	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999901	Status:	OK.
Std Error of Est:	0.000322		
Predicted MDL:	0.000320		
Predicted MQL:	0.001068		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00009	.000	1
S1	.03000	.03039	.000	1.28	.03411	.000	1
S2	.40000	.38249	-.018	-4.38	.43140	.001	1
S3	1.2500	1.2721	.022	1.77	1.4344	.004	1
S4	2.5000	2.4653	-.035	-1.39	2.7799	.002	1
S5	5.0000	5.0297	.030	.595	5.6715	.005	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



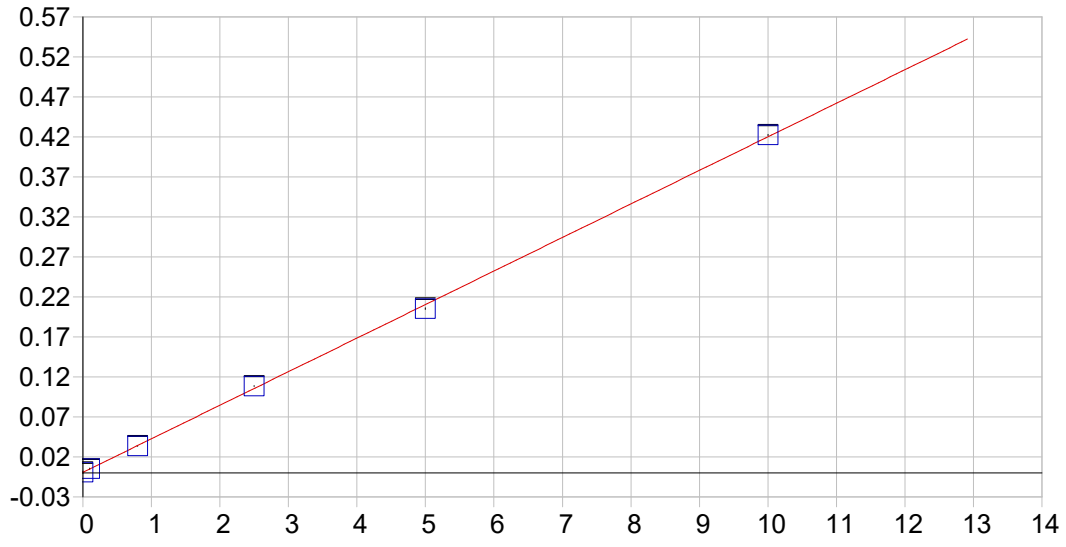
Cu 324.754 {104}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.042506	Re-Slope:	1.000000
A1 (Gain):	4.385271	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999298	Status:	OK.
Std Error of Est:	0.001930		
Predicted MDL:	0.000698		
Predicted MQL:	0.002327		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.04248	.003	1
S1	.02000	.02299	.003	15.0	.14338	.002	1
S2	.20000	.21195	.012	5.97	.97238	.014	1
S3	.62500	.67471	.050	7.95	3.0026	.032	1
S4	1.2500	1.2425	-.008	-.601	5.4938	.020	1
S5	2.5000	2.4429	-.057	-2.29	10.760	.084	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



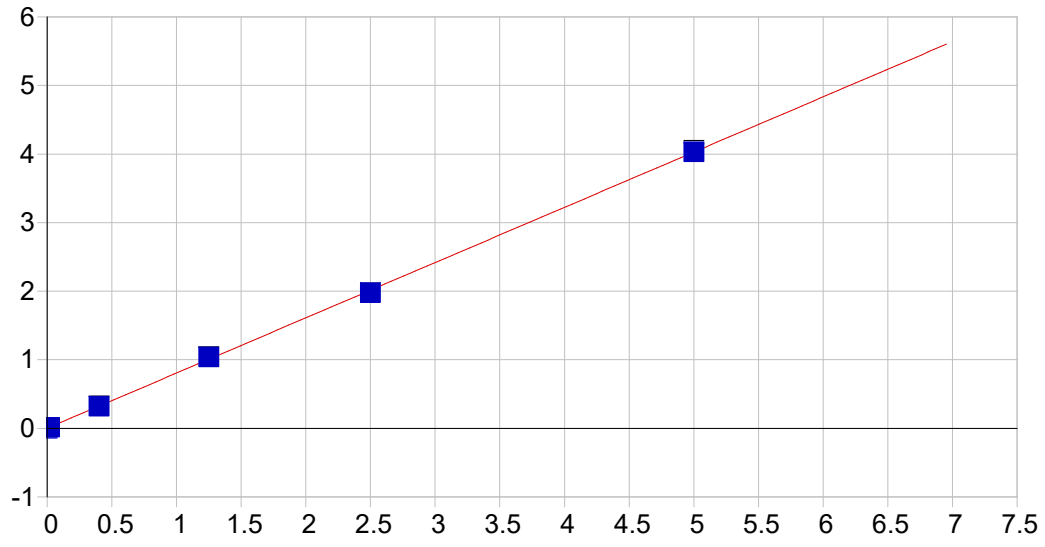
Fe 259.837 {130}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000706	Re-Slope:	1.000000
A1 (Gain):	0.041939	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999839	Status:	OK.
Std Error of Est:	0.000040		
Predicted MDL:	0.016495		
Predicted MQL:	0.054984		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00071	.002	1
S1	.10000	.10761	.008	7.61	.00522	.001	1
S2	.80000	.78732	-.013	-1.59	.03373	.001	1
S3	2.5000	2.5695	.070	2.78	.10847	.001	1
S4	5.0000	4.8794	-.121	-2.41	.20534	.001	1
S5	10.000	10.056	.056	.562	.42246	.001	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



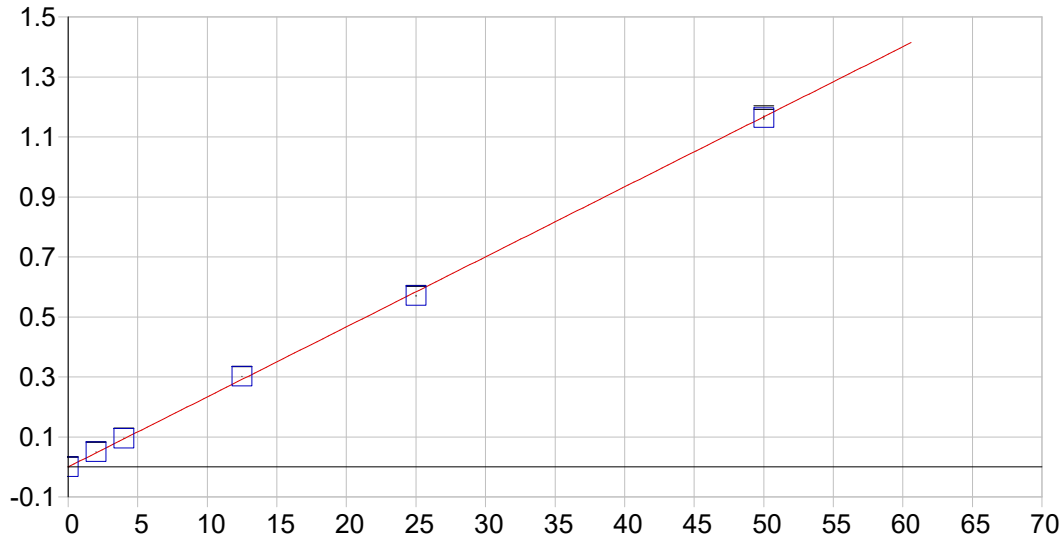
Mn 257.610 {131}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000736	Re-Slope:	1.000000
A1 (Gain):	0.805520	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999874	Status:	OK.
Std Error of Est:	0.000212		
Predicted MDL:	0.000881		
Predicted MQL:	0.002938		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00073	.001	1
S1	.02000	.02128	.001	6.38	.01790	.000	1
S2	.40000	.39978	-.000	-.054	.32306	.002	1
S3	1.2500	1.2909	.041	3.27	1.0415	.004	1
S4	2.5000	2.4530	-.047	-1.88	1.9785	.003	1
S5	5.0000	5.0050	.005	.100	4.0360	.018	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



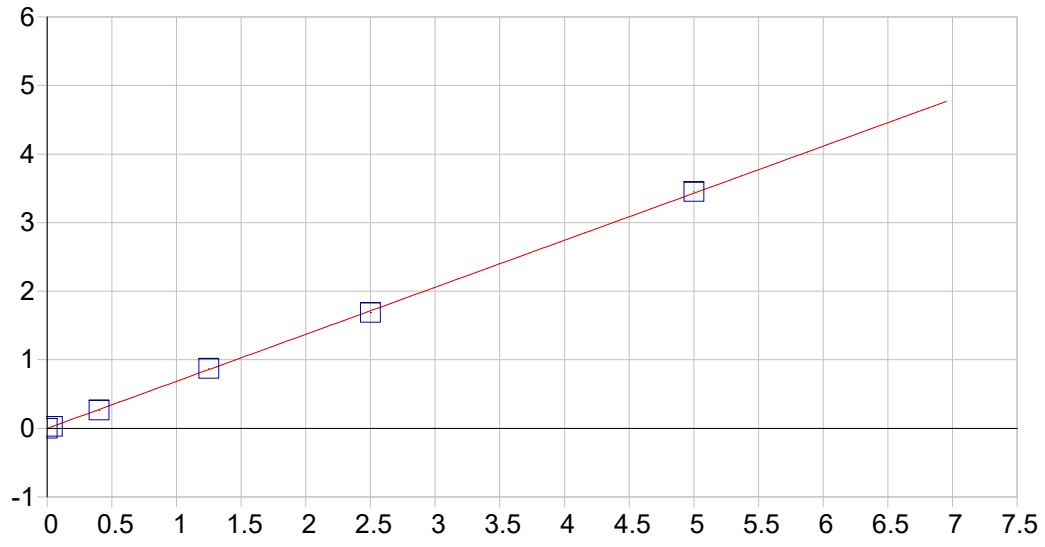
Mg 279.079 {121}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000023	Re-Slope:	1.000000
A1 (Gain):	0.023340	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999789	Status:	OK.
Std Error of Est:	0.000253		
Predicted MDL:	0.037661		
Predicted MQL:	0.125536		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00020	-.000	.000	-.00003	.001	1
S1	2.0000	2.1384	.138	6.92	.04989	.001	1
S2	4.0000	4.0899	.090	2.25	.09544	.000	1
S3	12.500	12.936	.436	3.49	.30190	.001	1
S4	25.000	24.445	-.555	-2.22	.57053	.002	1
S5	50.000	49.891	-.109	-.219	1.1644	.005	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



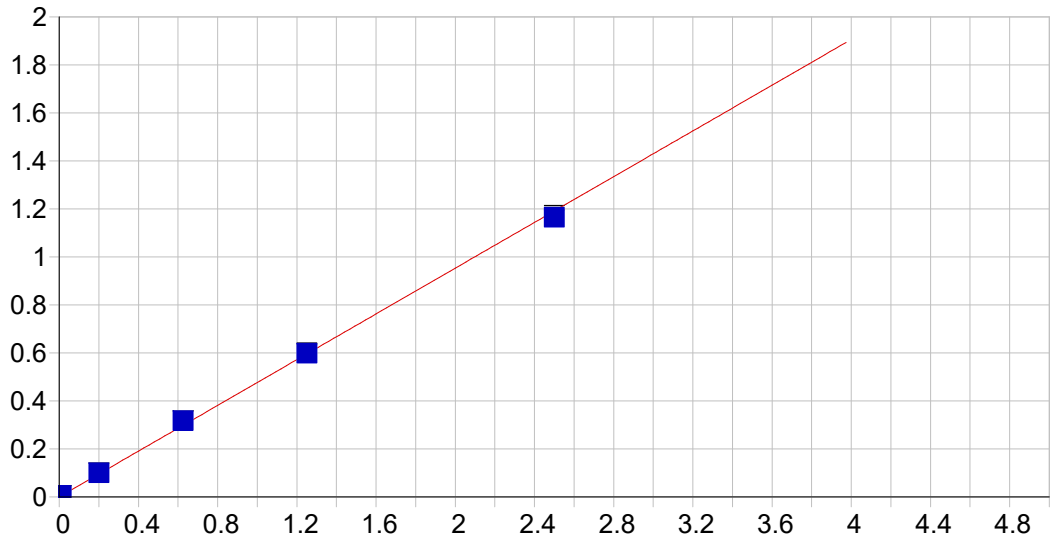
Ni 231.604 {446}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000301	Re-Slope:	1.000000
A1 (Gain):	0.685761	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999896	Status:	OK.
Std Error of Est:	0.000232		
Predicted MDL:	0.000555		
Predicted MQL:	0.001850		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00030	.000	1
S1	.04000	.03899	-.001	-2.51	.02644	.000	1
S2	.40000	.38318	-.017	-4.21	.26247	.000	1
S3	1.2500	1.2736	.024	1.89	.87308	.001	1
S4	2.5000	2.4633	-.037	-1.47	1.6890	.000	1
S5	5.0000	5.0309	.031	.618	3.4497	.001	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



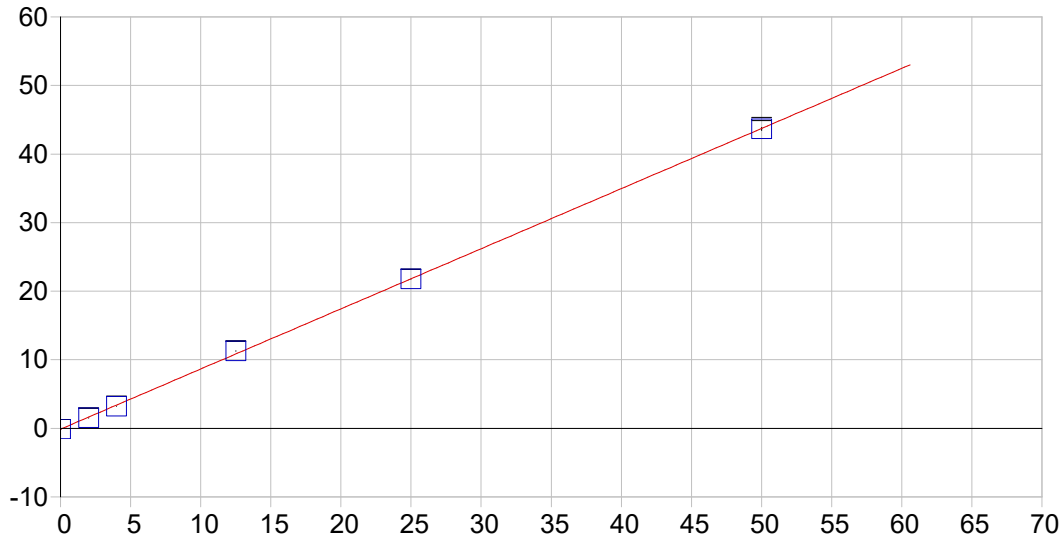
Ag 328.068 {103}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000252	Re-Slope:	1.000000
A1 (Gain):	0.476493	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999505	Status:	OK.
Std Error of Est:	0.000124		
Predicted MDL:	0.000808		
Predicted MQL:	0.002692		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00025	.000	1
S1	.01000	.01076	.001	7.62	.00536	.000	1
S2	.20000	.20927	.009	4.64	.09978	.000	1
S3	.62500	.66648	.041	6.64	.31725	.001	1
S4	1.2500	1.2548	.005	.381	.59699	.002	1
S5	2.5000	2.4437	-.056	-2.25	1.1624	.009	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



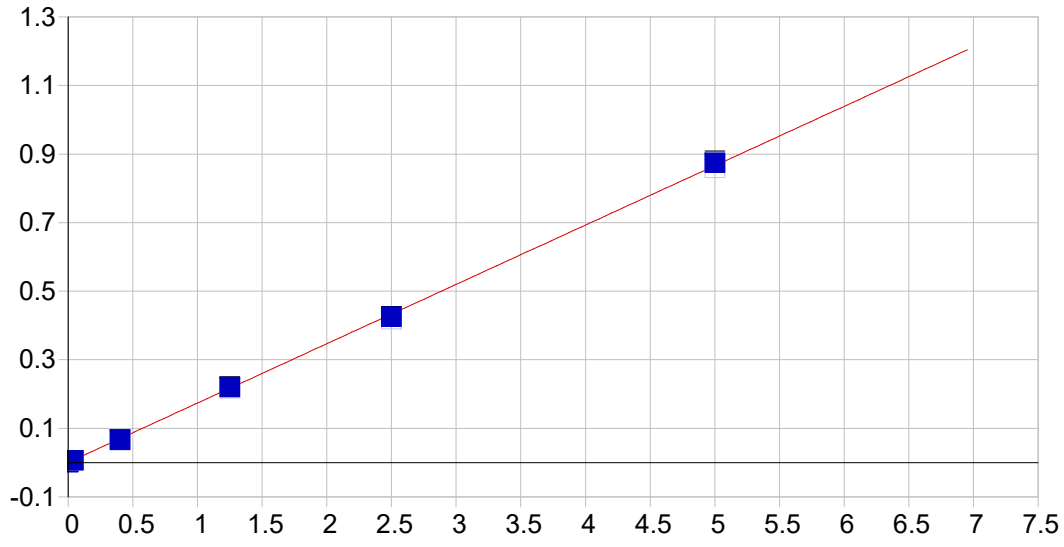
Na 818.326 { 41}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.114619	Re-Slope:	1.000000
A1 (Gain):	0.876880	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999784	Status:	OK.
Std Error of Est:	0.009636		
Predicted MDL:	0.010598		
Predicted MQL:	0.035326		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00018	.000	.000	-.11446	.016	1
S1	2.0000	1.8495	-.151	-7.53	1.5072	.018	1
S2	4.0000	3.7956	-.204	-5.11	3.2136	.019	1
S3	12.500	12.979	.479	3.83	11.266	.042	1
S4	25.000	24.951	-.049	-.198	21.764	.036	1
S5	50.000	49.926	-.074	-.149	43.664	.232	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



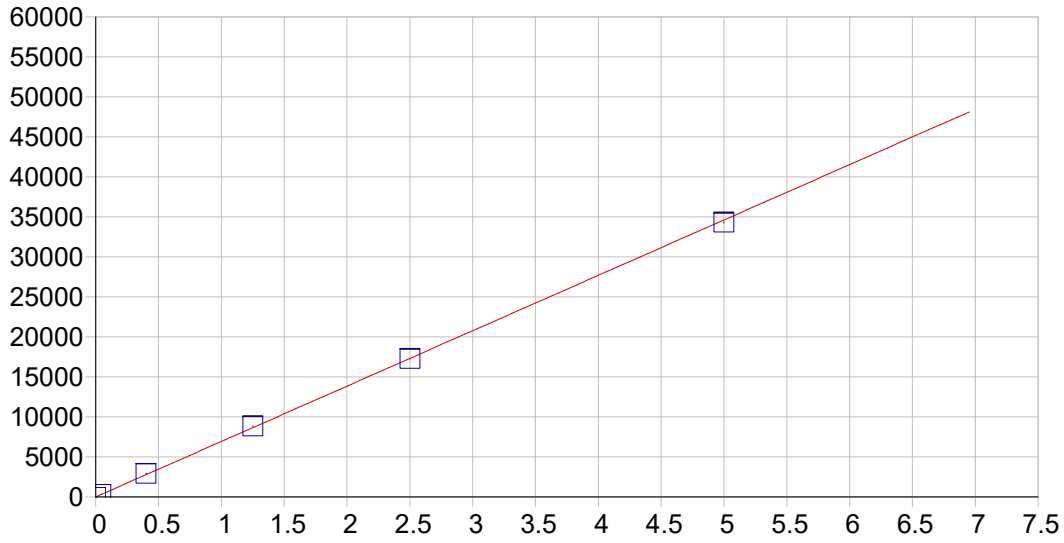
V 292.402 {115}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000660	Re-Slope:	1.000000
A1 (Gain):	0.173069	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999783	Status:	OK.
Std Error of Est:	0.000083		
Predicted MDL:	0.005969		
Predicted MQL:	0.019895		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00066	.001	1
S1	.04000	.03298	-.007	-17.5	.00607	.001	1
S2	.40000	.38007	-.020	-4.98	.06520	.000	1
S3	1.2500	1.2703	.020	1.63	.21665	.001	1
S4	2.5000	2.4559	-.044	-1.76	.41798	.000	1
S5	5.0000	5.0505	.051	1.01	.85931	.005	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



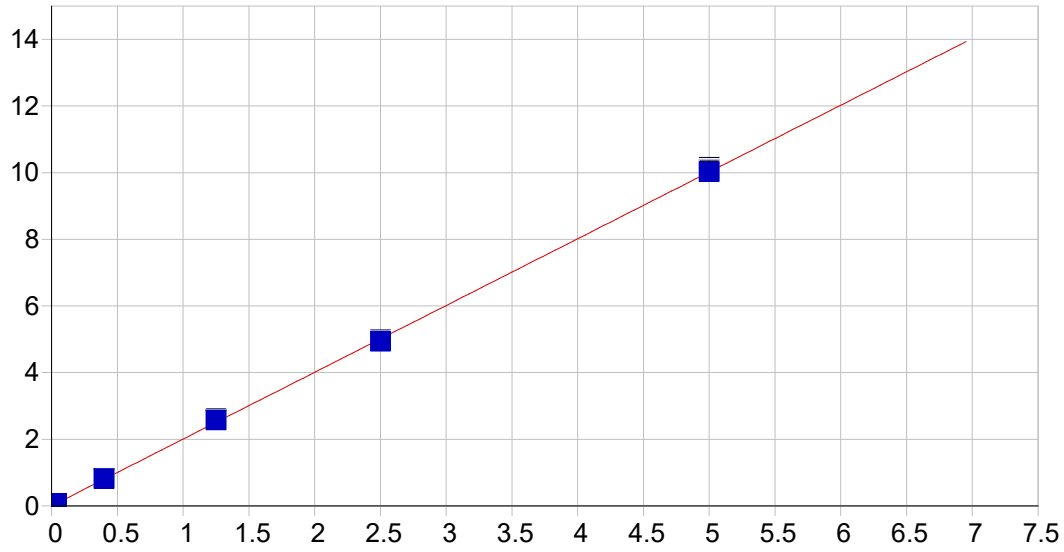
Zn 206.200 {464}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	6.004886	Re-Slope:	1.000000
A1 (Gain):	6921.944813	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999872	Status:	OK.
Std Error of Est:	2.594323		
Predicted MDL:	0.000219		
Predicted MQL:	0.000731		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	5.9690	1.65	1
S1	.04000	.04257	.003	6.44	300.71	.476	1
S2	.40000	.42246	.022	5.61	2930.2	.796	1
S3	1.2500	1.2749	.025	1.99	8830.7	29.4	1
S4	2.5000	2.4955	-.004	-.179	17280.	21.9	1
S5	5.0000	4.9546	-.045	-.909	34301.	42.7	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



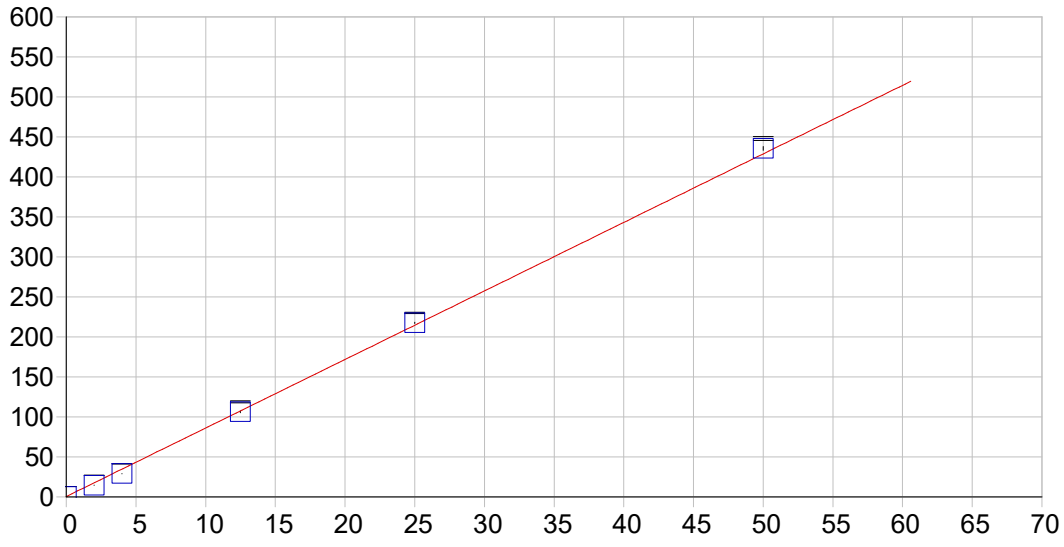
Zn 213.856 {158}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001511	Re-Slope:	1.000000
A1 (Gain):	2.004017	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999921	Status:	OK.
Std Error of Est:	0.000595		
Predicted MDL:	0.000433		
Predicted MQL:	0.001445		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00151	.001	1
S1	.04000	.04022	.000	.544	.08269	.001	1
S2	.40000	.40434	.004	1.09	.81765	.005	1
S3	1.2500	1.2822	.032	2.57	2.5892	.019	1
S4	2.5000	2.4614	-.039	-1.54	4.9706	.012	1
S5	5.0000	5.0019	.002	.038	10.098	.059	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



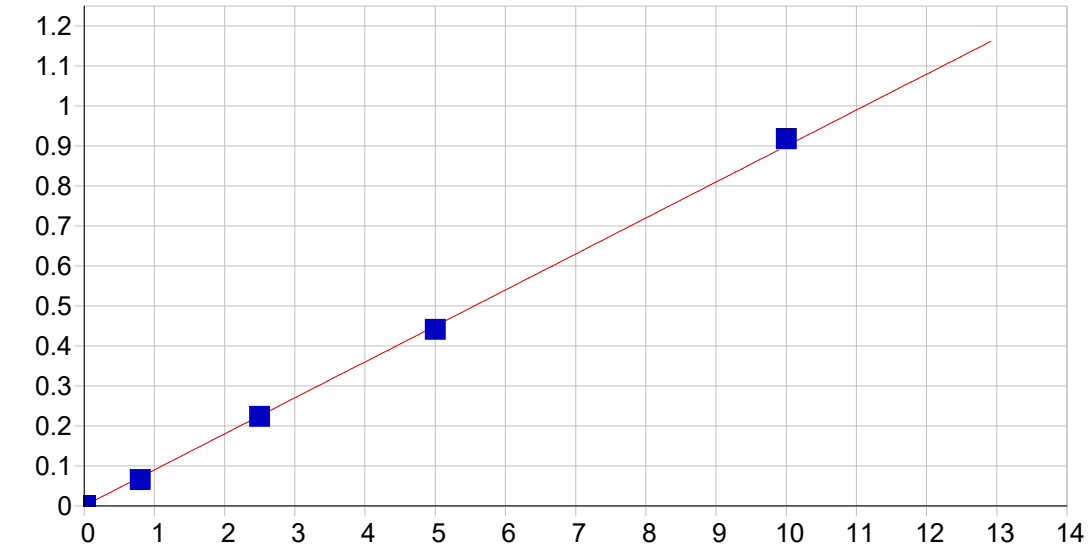
K 769.896 { 44}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.470661	Re-Slope:	1.000000
A1 (Gain):	8.566490	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998975	Status:	OK.
Std Error of Est:	0.205384		
Predicted MDL:	0.000978		
Predicted MQL:	0.003261		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00065	.001	.000	.47621	.008	1
S1	2.0000	1.6439	-.356	-17.8	14.553	.074	1
S2	4.0000	3.3389	-.661	-16.5	29.074	.286	1
S3	12.500	12.368	-.132	-1.06	106.42	1.13	1
S4	25.000	25.348	.348	1.39	217.62	.841	1
S5	50.000	50.801	.801	1.60	435.66	2.41	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



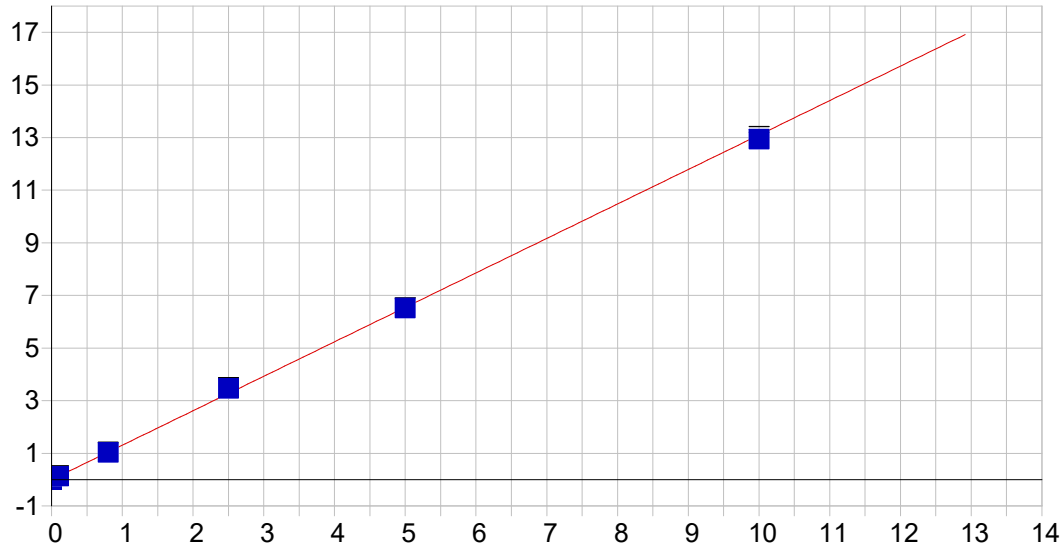
P 177.495 {490}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000270	Re-Slope:	1.000000
A1 (Gain):	0.089956	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999623	Status:	OK.
Std Error of Est:	0.000058		
Predicted MDL:	0.001982		
Predicted MQL:	0.006607		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00027	.000	1
S1	.02000	.01958	-.000	-2.12	.00201	.000	1
S2	.80000	.72262	-.077	-9.67	.06511	.000	1
S3	2.5000	2.4796	-.020	-.815	.22281	.001	1
S4	5.0000	4.8978	-.102	-2.04	.43981	.001	1
S5	10.000	10.200	.200	2.00	.91577	.001	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



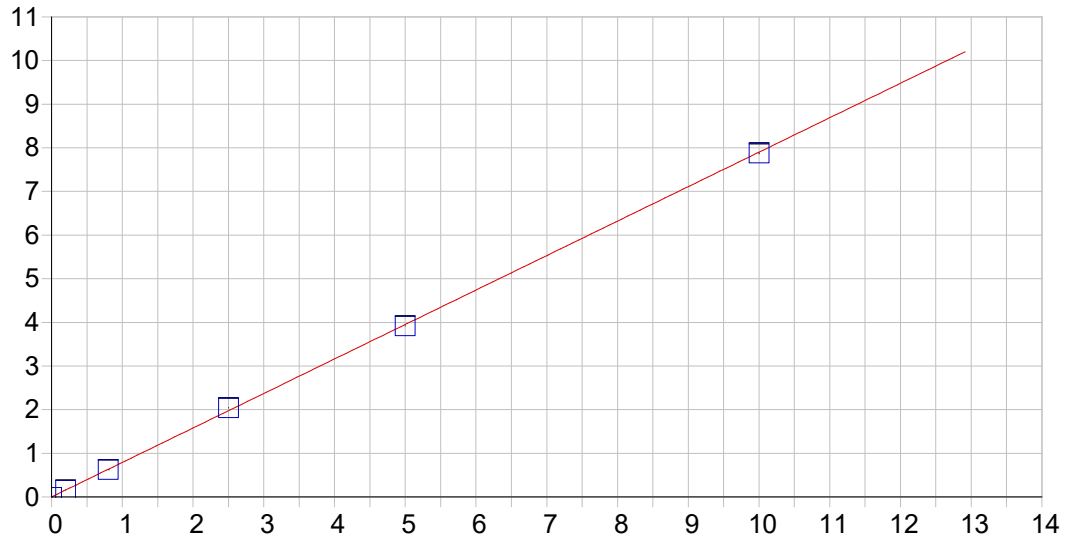
B 249.678 {135}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000822	Re-Slope:	1.000000
A1 (Gain):	1.309816	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999715	Status:	OK.
Std Error of Est:	0.001640		
Predicted MDL:	0.001325		
Predicted MQL:	0.004418		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00083	.002	1
S1	.10000	.10470	.005	4.70	.13617	.003	1
S2	.80000	.79203	-.008	-.996	1.0358	.012	1
S3	2.5000	2.6463	.146	5.85	3.4629	.036	1
S4	5.0000	4.9797	-.020	-.406	6.5167	.020	1
S5	10.000	9.8772	-.123	-1.23	12.927	.108	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



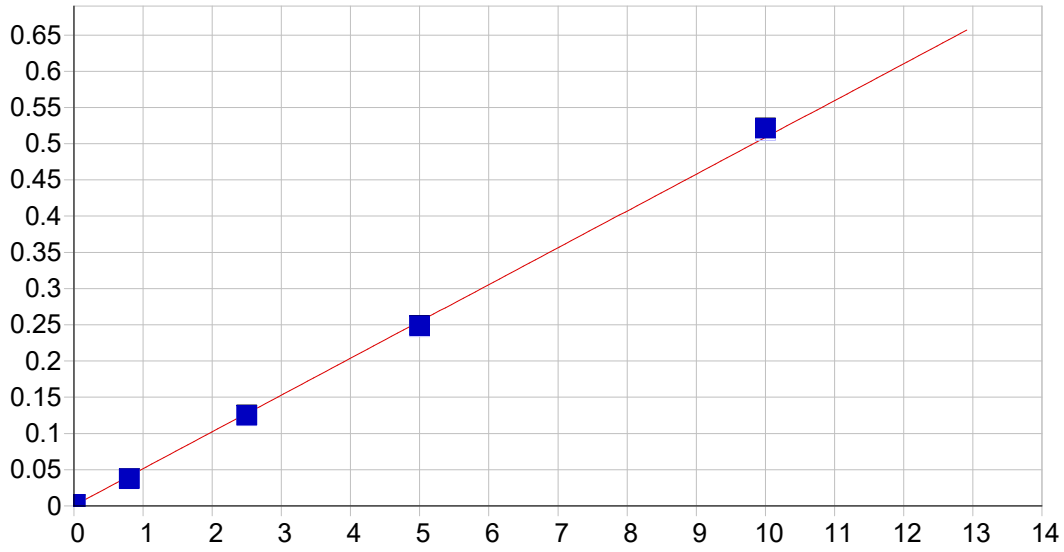
Mo 202.030 {467}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000806	Re-Slope:	1.000000
A1 (Gain):	0.789871	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999905	Status:	OK.
Std Error of Est:	0.000809		
Predicted MDL:	0.000459		
Predicted MQL:	0.001531		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00081	.000	1
S1	.20000	.19791	-.002	-1.05	.15713	.001	1
S2	.80000	.78674	-.013	-1.66	.62223	.001	1
S3	2.5000	2.5844	.084	3.38	2.0421	.004	1
S4	5.0000	4.9596	-.040	-.807	3.9183	.006	1
S5	10.000	9.9713	-.029	-.287	7.8769	.015	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



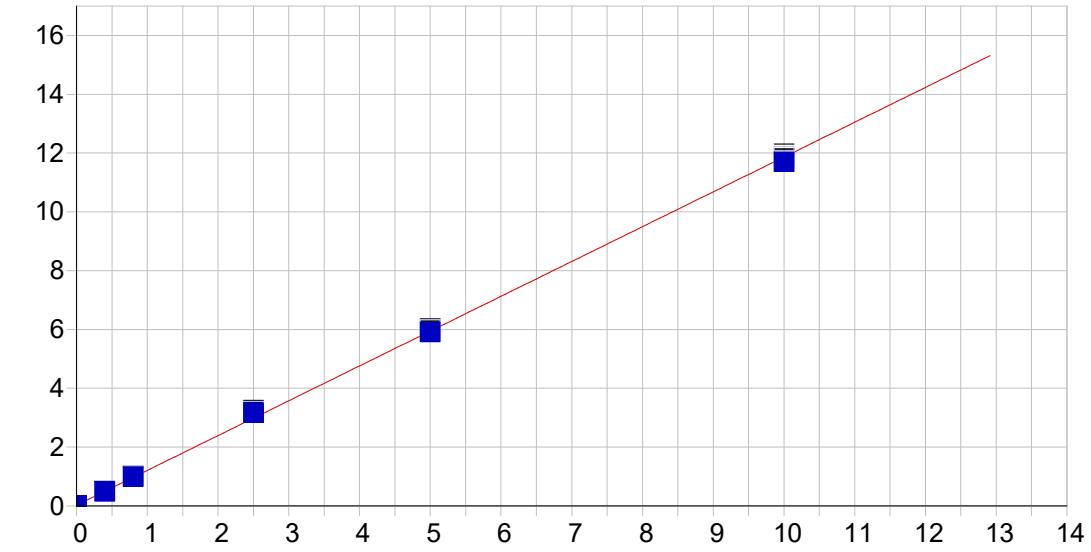
S 182.034 {485}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000651	Re-Slope:	1.000000
A1 (Gain):	0.050805	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999526	Status:	OK.
Std Error of Est:	0.000036		
Predicted MDL:	0.003404		
Predicted MQL:	0.011347		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00065	.000	1
S1	.02000	.01948	-.001	-2.59	.00156	.000	1
S2	.80000	.72254	-.077	-9.68	.03709	.000	1
S3	2.5000	2.4510	-.049	-1.96	.12433	.000	1
S4	5.0000	4.8830	-.117	-2.34	.24704	.000	1
S5	10.000	10.244	.244	2.44	.51772	.000	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



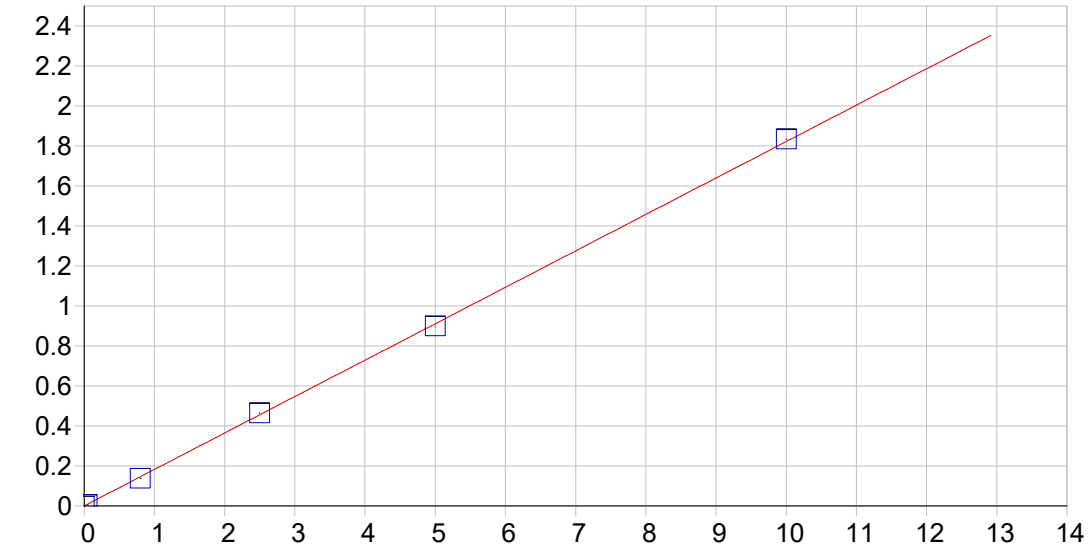
Si 251.611 {134}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.023715	Re-Slope:	1.000000
A1 (Gain):	1.184152	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999682	Status:	OK.
Std Error of Est:	0.003211		
Predicted MDL:	0.001328		
Predicted MQL:	0.004426		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	.02369	.002	1
S1	.40000	.39314	-.007	-1.72	.49201	.003	1
S2	.80000	.81871	.019	2.34	1.0085	.009	1
S3	2.5000	2.6549	.155	6.20	3.2154	.034	1
S4	5.0000	4.9738	-.026	-.524	6.0092	.023	1
S5	10.000	9.8593	-.141	-1.41	11.890	.082	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



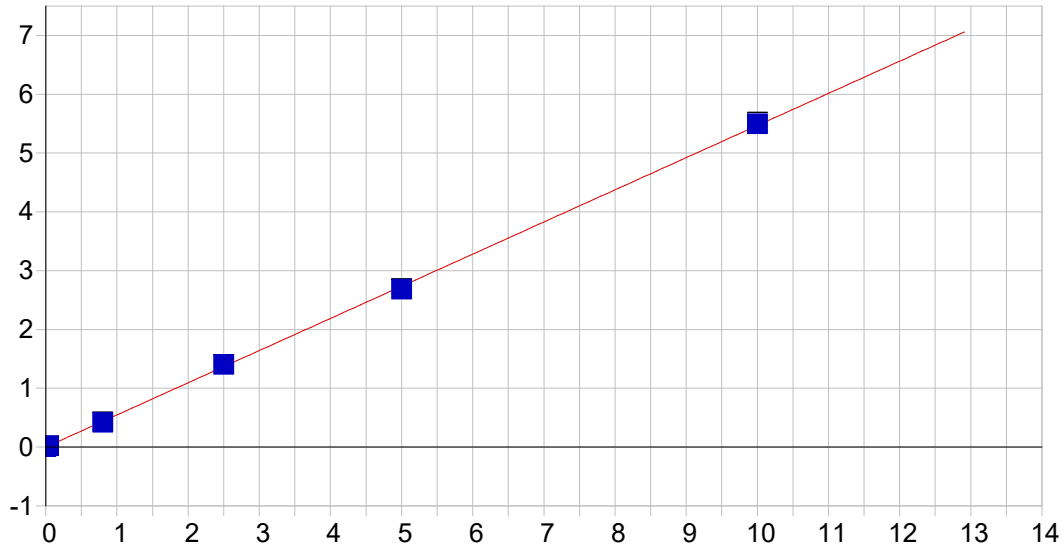
Sn 189.989 {478}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000200	Re-Slope:	1.000000
A1 (Gain):	0.182196	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999867	Status:	OK.
Std Error of Est:	0.000099		
Predicted MDL:	0.000918		
Predicted MQL:	0.003059		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00020	.000	1
S1	.04000	.03705	-.003	-7.38	.00695	.000	1
S2	.80000	.75538	-.045	-5.58	.13783	.000	1
S3	2.5000	2.5447	.045	1.79	.46383	.001	1
S4	5.0000	4.9330	-.067	-1.34	.89896	.000	1
S5	10.000	10.070	.070	.700	1.8349	.002	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



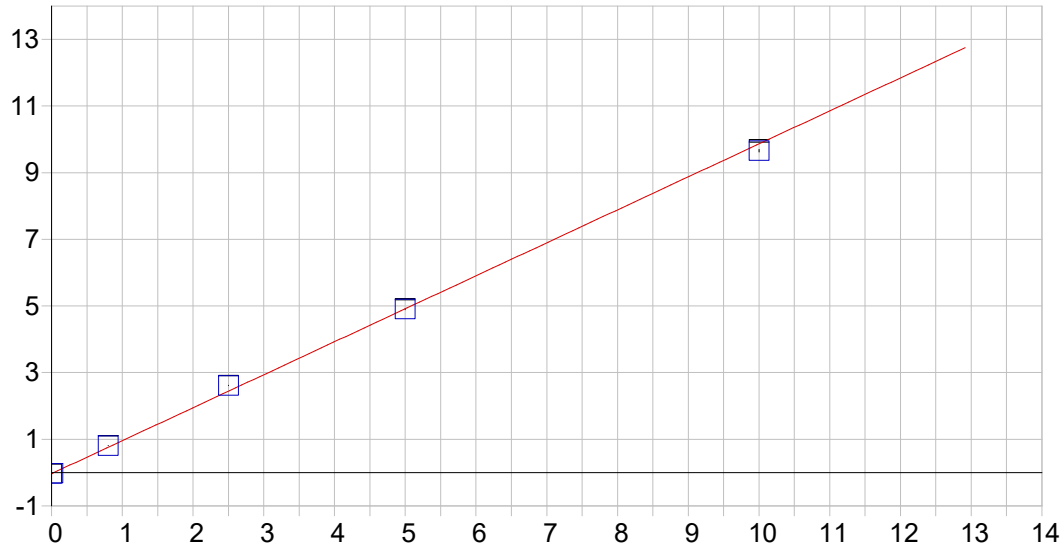
Ti 336.121 {100}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000517	Re-Slope:	1.000000
A1 (Gain):	0.546828	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999878	Status:	OK.
Std Error of Est:	0.000283		
Predicted MDL:	0.002707		
Predicted MQL:	0.009022		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00052	.001	1
S1	.04000	.04157	.002	3.93	.02323	.001	1
S2	.80000	.77241	-.028	-3.45	.42268	.002	1
S3	2.5000	2.5642	.064	2.57	1.4020	.003	1
S4	5.0000	4.9115	-.089	-1.77	2.6849	.010	1
S5	10.000	10.050	.050	.504	5.4936	.031	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



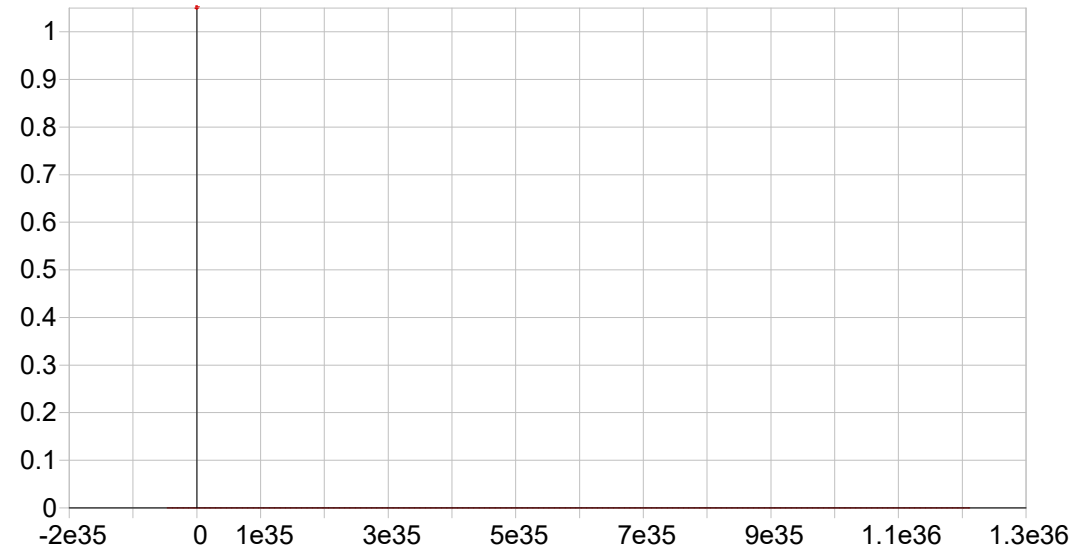
Li 670.784 { 50}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.032906	Re-Slope:	1.000000
A1 (Gain):	0.989742	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999406	Status:	OK.
Std Error of Est:	0.000800		
Predicted MDL:	0.006006		
Predicted MQL:	0.020020		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.03290	.008	1
S5	10.000	9.7940	-.206	-2.06	9.6606	.040	1
S4	5.0000	4.9881	-.012	-.238	4.9040	.021	1
S3	2.5000	2.6744	.174	6.97	2.6140	.003	1
S2	.80000	.85019	.050	6.27	.80857	.005	1
S1	.02000	.01336	-.007	-33.2	-.01968	.006	1

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164

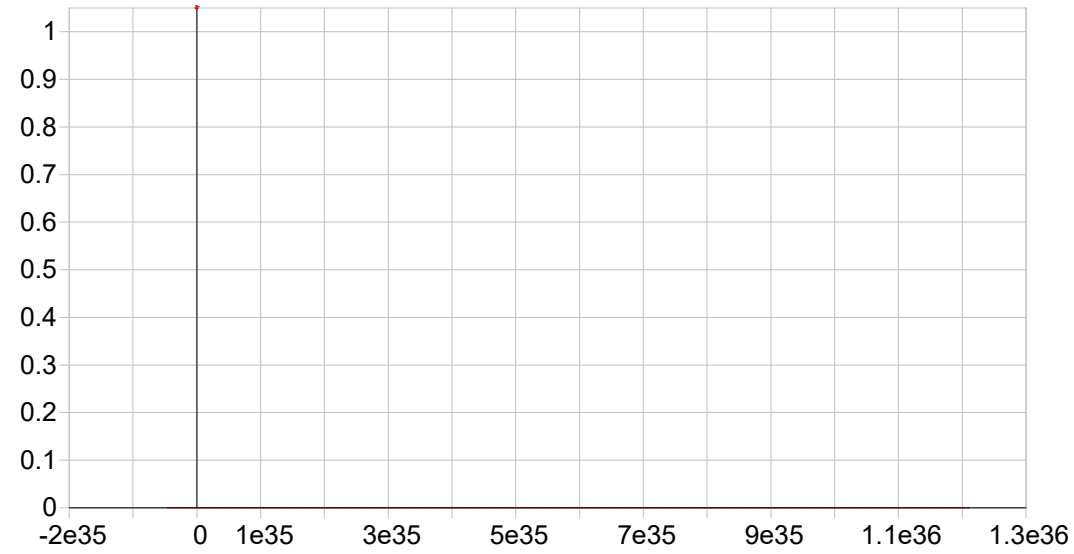


Y 224.306 {450}*

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 360.073 { 94}*

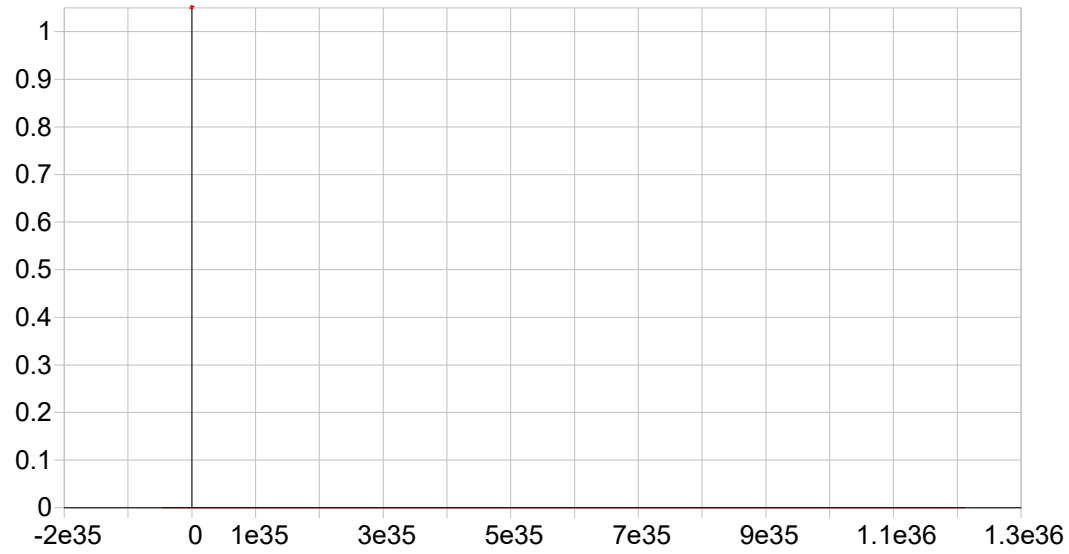
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164

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



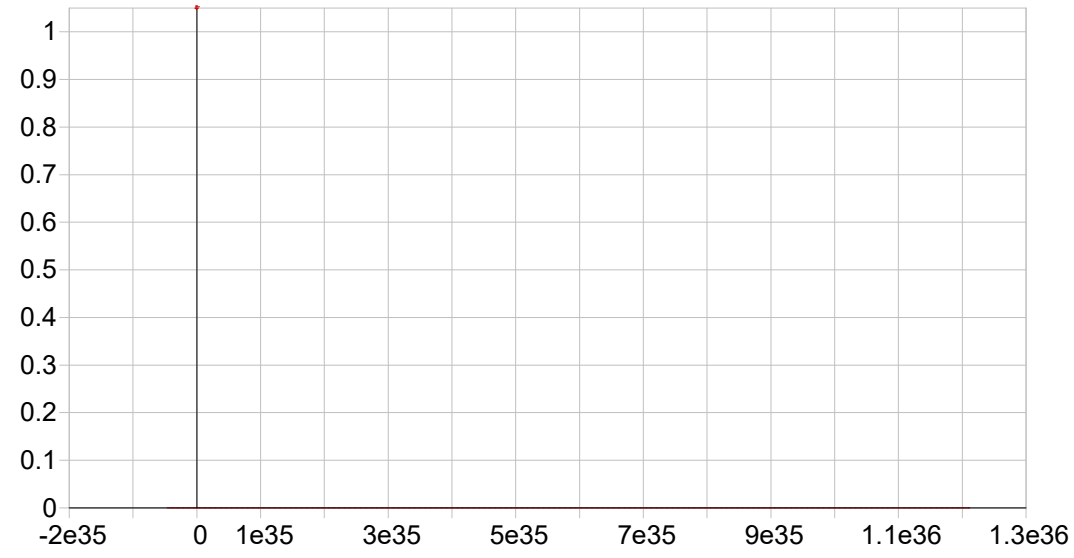
Y 371.030 { 91}*

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

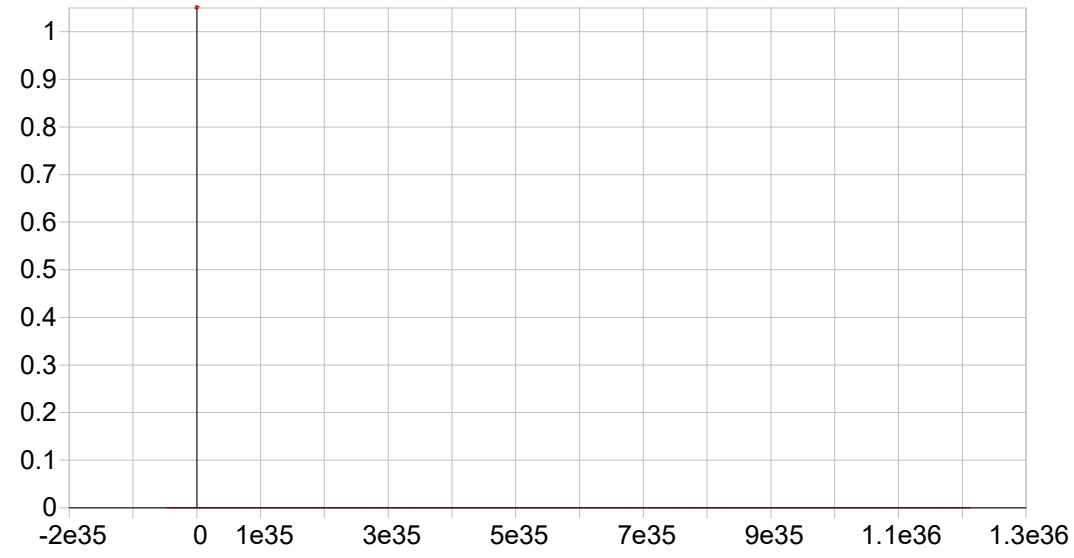
Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164



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



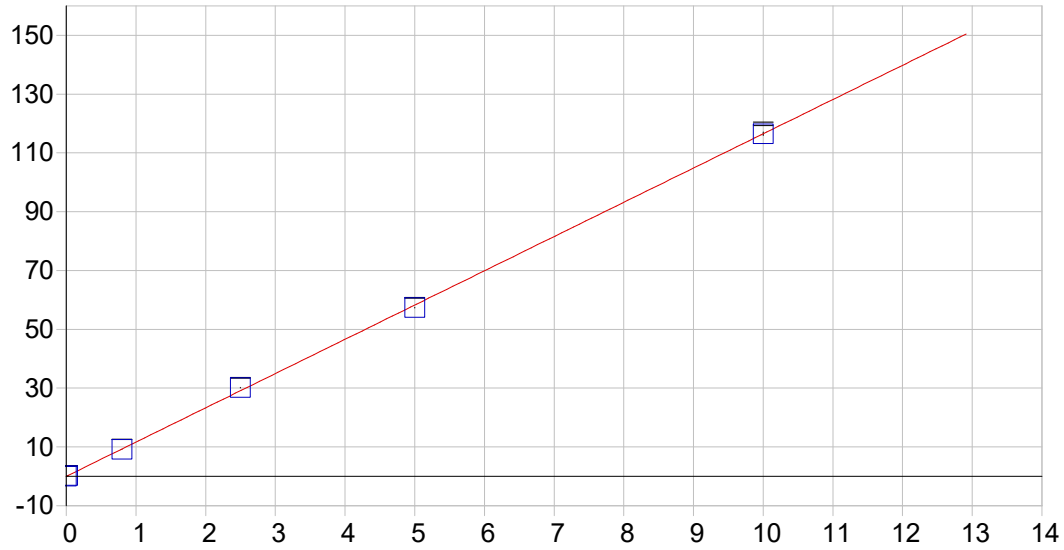
In 230.606 {446}*

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	

Reviewed By:MOHAN
On:6/19/2025 12:49:54 PM
Inst Id :P5
LB :LB136164

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



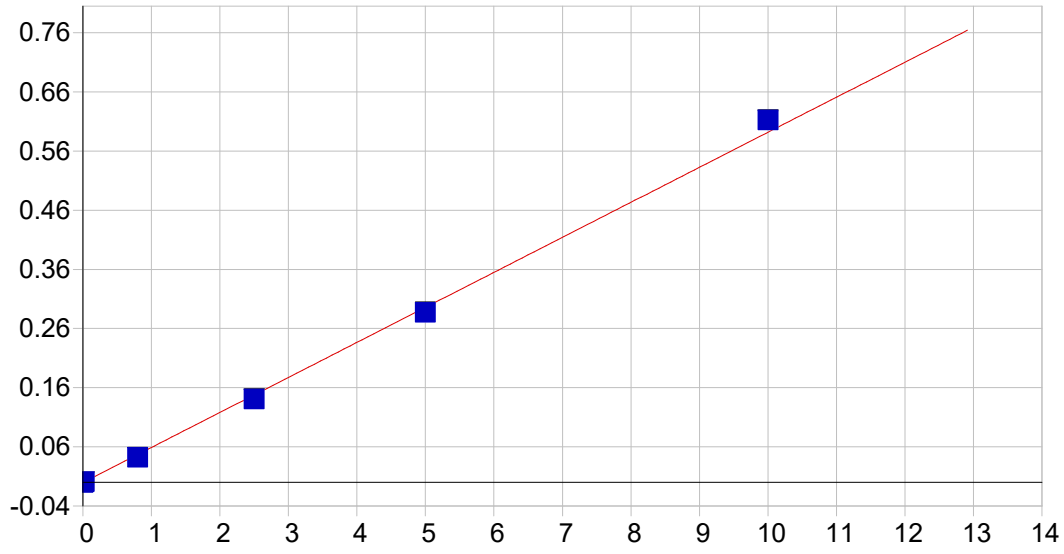
Sr 407.771 { 83}

Date of Fit:	6/16/2025 13:18:20	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001808	Re-Slope:	1.000000
A1 (Gain):	11.650963	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999882	Status:	OK.
Std Error of Est:	0.004191		
Predicted MDL:	0.000202		
Predicted MQL:	0.000675		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00181	.001	1
S1	.02000	.01974	-.000	-1.29	.22821	.001	1
S2	.80000	.78751	-.012	-1.56	9.1734	.048	1
S3	2.5000	2.5866	.087	3.47	30.135	.124	1
S4	5.0000	4.9253	-.075	-1.49	57.383	.116	1
S5	10.000	10.001	.001	.008	116.52	.648	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



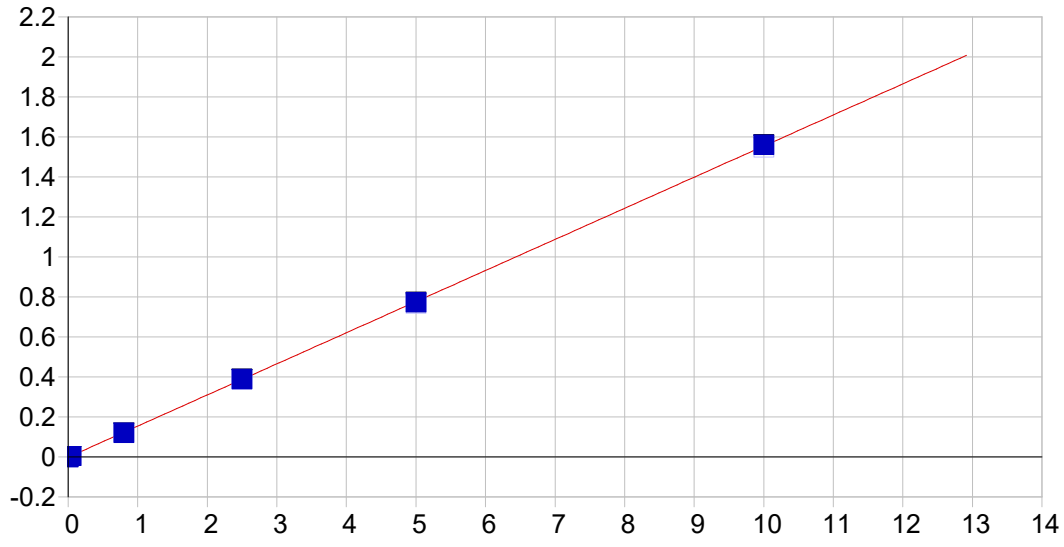
As 189.042 {479}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000303	Re-Slope:	1.000000
A1 (Gain):	0.059208	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999168	Status:	OK.
Std Error of Est:	0.000057		
Predicted MDL:	0.002734		
Predicted MQL:	0.009114		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00030	.000	1
S1	.02000	.01968	-.000	-1.58	.00086	.000	1
S2	.80000	.71511	-.085	-10.6	.04203	.000	1
S3	2.5000	2.3822	-.118	-4.71	.14073	.000	1
S4	5.0000	4.8579	-.142	-2.84	.28730	.000	1
S5	10.000	10.345	.345	3.45	.61217	.001	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



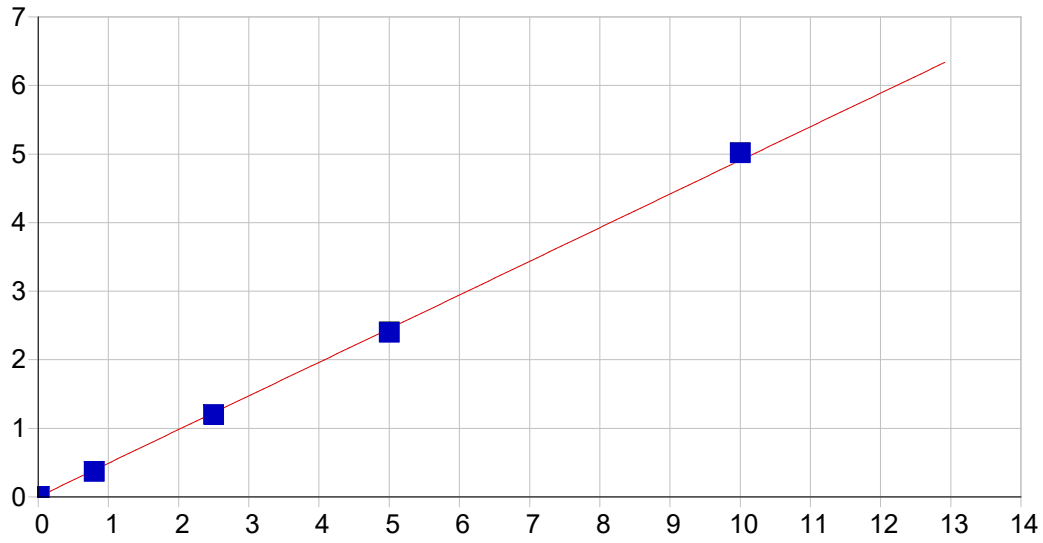
Tl 190.856 {477}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001324	Re-Slope:	1.000000
A1 (Gain):	0.155550	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999978	Status:	OK.
Std Error of Est:	0.000034		
Predicted MDL:	0.001717		
Predicted MQL:	0.005724		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00132	.000	1
S1	.04000	.03873	-.001	-3.17	.00456	.000	1
S2	.80000	.78125	-.019	-2.34	.11923	.000	1
S3	2.5000	2.5106	.011	.426	.38617	.000	1
S4	5.0000	4.9729	-.027	-.542	.76613	.002	1
S5	10.000	10.036	.036	.365	1.5477	.002	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



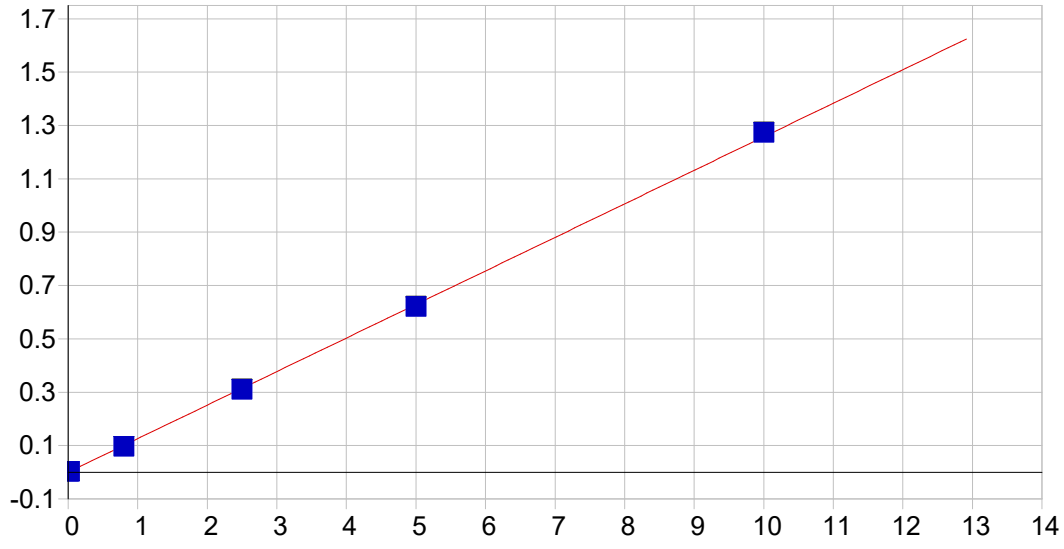
Pb 220.353 {453}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000376	Re-Slope:	1.000000
A1 (Gain):	0.490663	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999677	Status:	OK.
Std Error of Est:	0.000226		
Predicted MDL:	0.001218		
Predicted MQL:	0.004060		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00038	.000	1
S1	.01200	.01180	-.000	-1.68	.00604	.001	1
S2	.80000	.75047	-.050	-6.19	.36825	.001	1
S3	2.5000	2.4423	-.058	-2.31	1.1976	.002	1
S4	5.0000	4.8871	-.113	-2.26	2.3961	.005	1
S5	10.000	10.220	.220	2.20	5.0107	.003	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



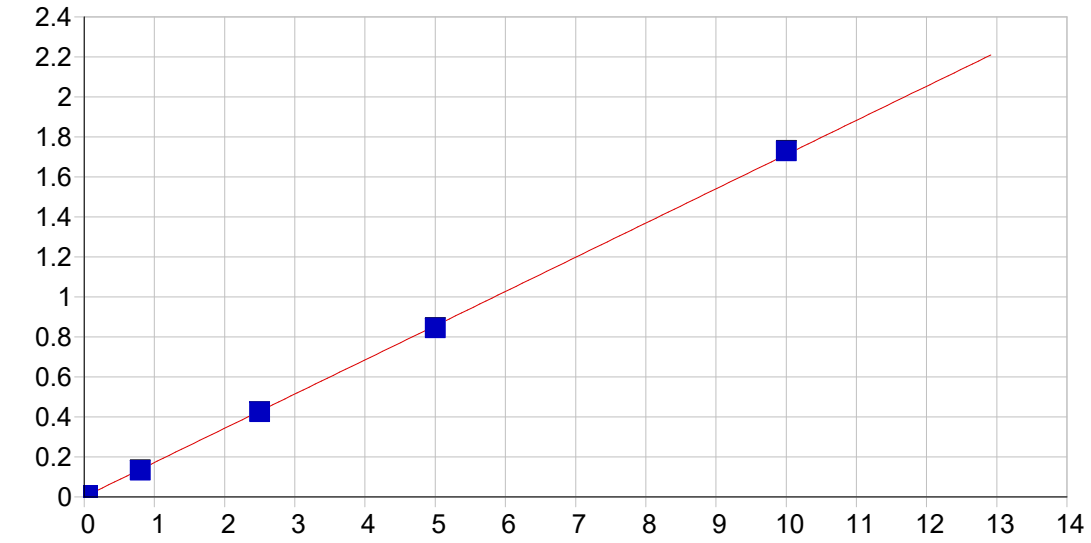
Se 196.090 {472}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000180	Re-Slope:	1.000000
A1 (Gain):	0.125746	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999880	Status:	OK.
Std Error of Est:	0.000046		
Predicted MDL:	0.002908		
Predicted MQL:	0.009693		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00018	.000	1
S1	.02000	.02006	.000	.303	.00270	.000	1
S2	.80000	.76660	-.033	-4.17	.09654	.000	1
S3	2.5000	2.4684	-.032	-1.26	.31045	.001	1
S4	5.0000	4.9340	-.066	-1.32	.62038	.002	1
S5	10.000	10.131	.131	1.31	1.2736	.001	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



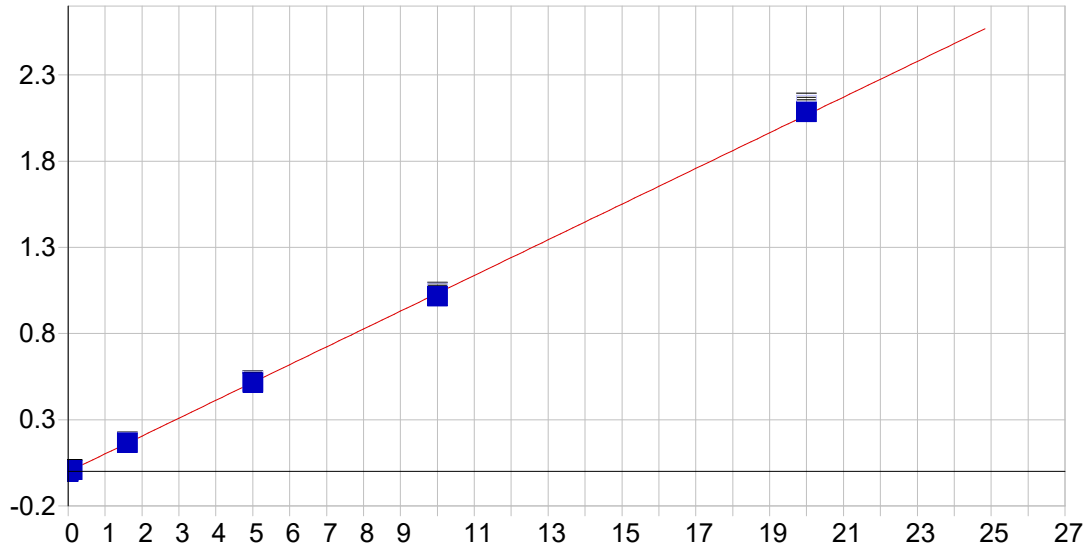
Sb 206.833 {463}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000892	Re-Slope:	1.000000
A1 (Gain):	0.171036	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999921	Status:	OK.
Std Error of Est:	0.000080		
Predicted MDL:	0.002540		
Predicted MQL:	0.008466		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00089	.000	1
S1	.05000	.04973	-.000	-.547	.00931	.000	1
S2	.80000	.77519	-.025	-3.10	.13327	.000	1
S3	2.5000	2.4799	-.020	-.806	.42439	.001	1
S4	5.0000	4.9368	-.063	-1.26	.84397	.001	1
S5	10.000	10.108	.108	1.08	1.7272	.003	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



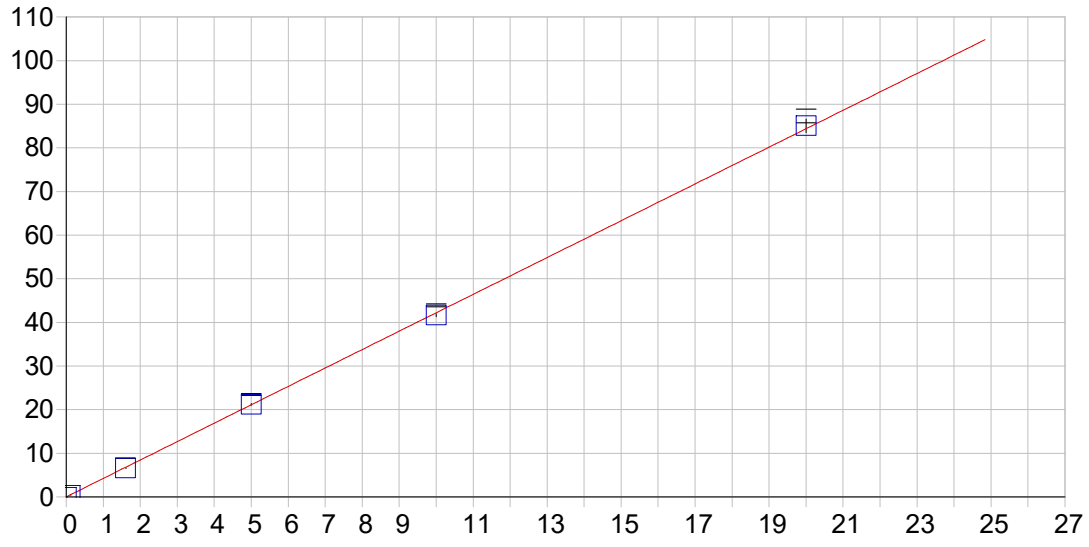
Al 396.152 { 85}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001366	Re-Slope:	1.000000
A1 (Gain):	0.103480	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999918	Status:	OK.
Std Error of Est:	0.000100		
Predicted MDL:	0.023768		
Predicted MQL:	0.079226		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00136	.001	1
S1	.10000	.08789	-.012	-12.1	.00850	.002	1
S2	1.6000	1.6227	.023	1.42	.16963	.001	1
S3	5.0000	4.9881	-.012	-.238	.52444	.001	1
S4	10.000	9.8285	-.172	-1.72	1.0349	.005	1
S5	20.000	20.173	.173	.867	2.1247	.012	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



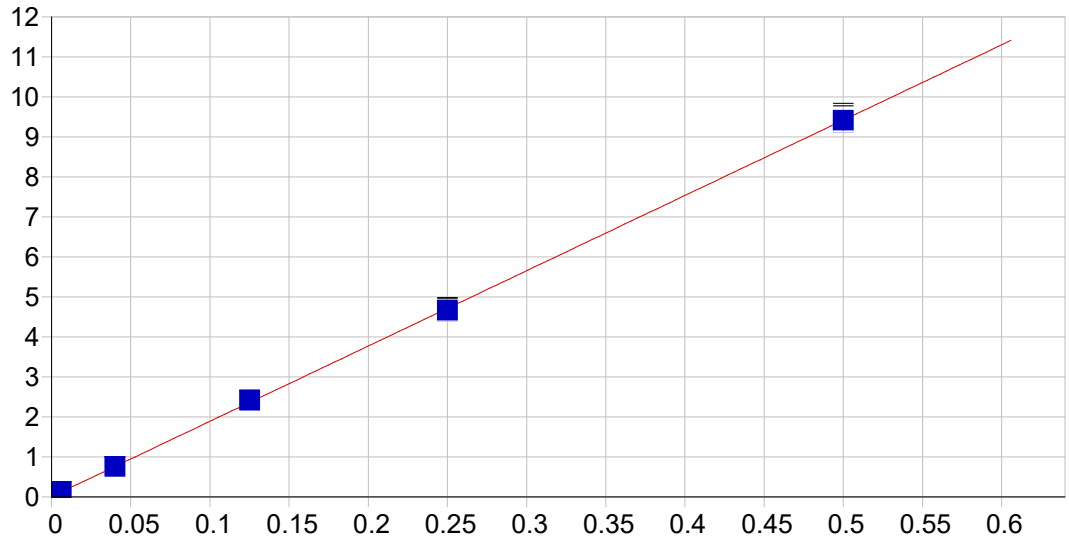
Ba 493.409 { 68}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.020416	Re-Slope:	1.000000
A1 (Gain):	4.218944	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999944	Status:	OK.
Std Error of Est:	0.003317		
Predicted MDL:	0.000993		
Predicted MQL:	0.003310		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.02043	.002	1
S1	.10000	.09859	-.001	-1.41	.43635	.002	1
S2	1.6000	1.5587	-.041	-2.58	6.5967	.023	1
S3	5.0000	5.0149	.015	.298	21.178	.210	1
S4	10.000	9.8685	-.131	-1.31	41.655	.326	1
S5	20.000	20.159	.159	.796	85.071	1.59	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



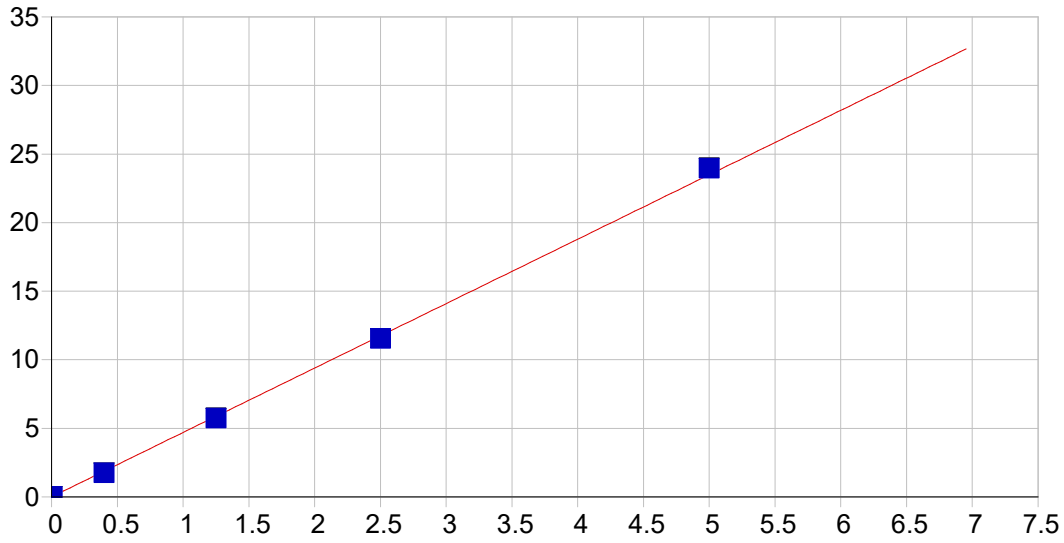
Be 234.861 {144}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.006933	Re-Slope:	1.000000
A1 (Gain):	18.824435	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999946	Status:	OK.
Std Error of Est:	0.000559		
Predicted MDL:	0.000084		
Predicted MQL:	0.000281		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00693	.002	1
S1	.00600	.00623	.000	3.80	.12296	.001	1
S2	.04000	.03984	-.000	-.403	.75185	.003	1
S3	.12500	.12780	.003	2.24	2.3970	.015	1
S4	.25000	.24744	-.003	-1.02	4.6336	.070	1
S5	.50000	.49969	-.000	-.062	9.3506	.179	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



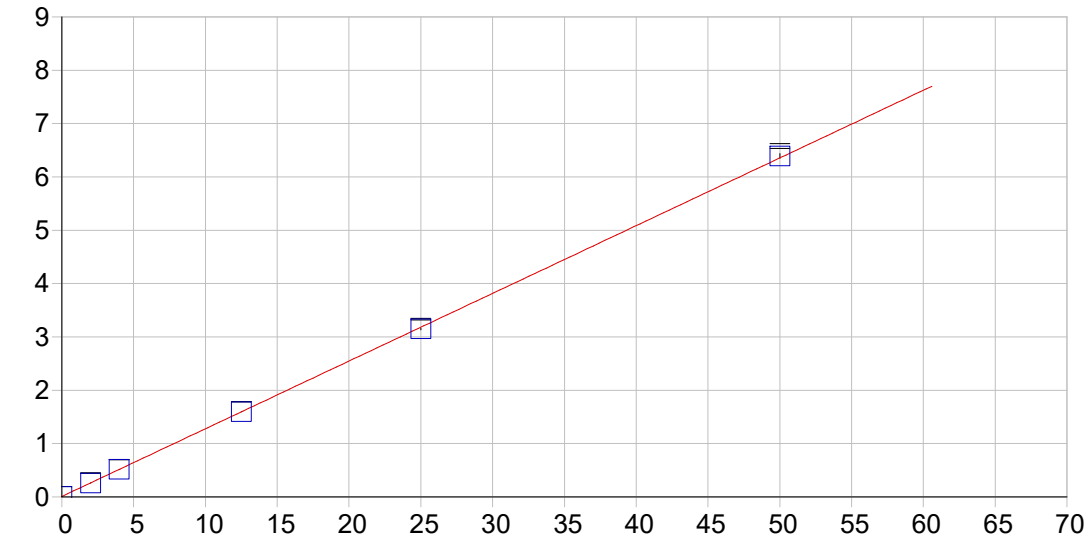
Cd 214.438 {457}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000369	Re-Slope:	1.000000
A1 (Gain):	4.697852	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999695	Status:	OK.
Std Error of Est:	0.001053		
Predicted MDL:	0.000073		
Predicted MQL:	0.000244		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00037	.000	1
S1	.00600	.00560	-.000	-6.60	.02672	.000	1
S2	.40000	.37034	-.030	-7.41	1.7403	.002	1
S3	1.2500	1.2209	-.029	-2.32	5.7367	.007	1
S4	2.5000	2.4588	-.041	-1.65	11.552	.005	1
S5	5.0000	5.1003	.100	2.01	23.963	.023	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



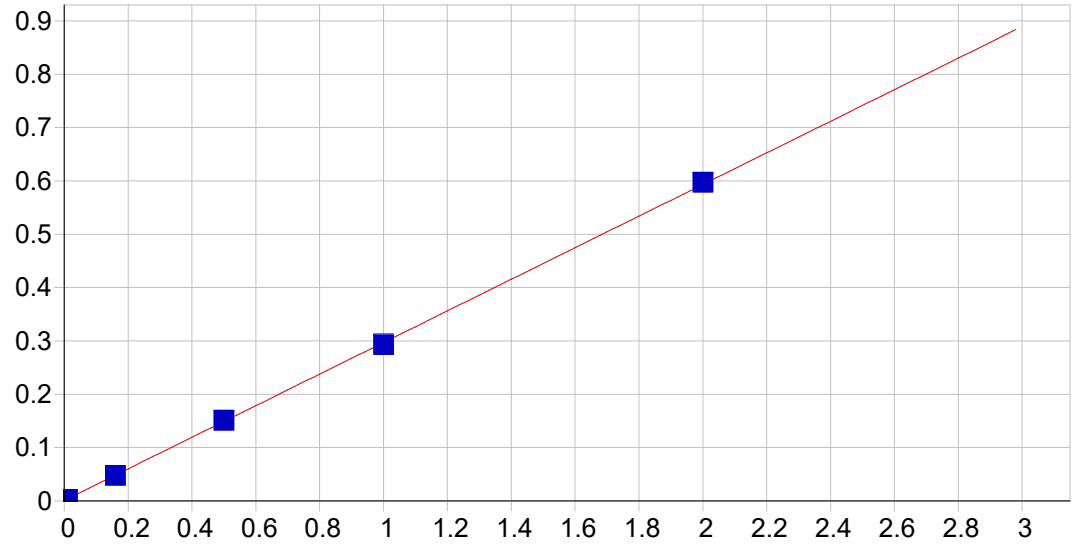
Ca 373.690 { 90}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.008053	Re-Slope:	1.000000
A1 (Gain):	0.126944	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999975	Status:	OK.
Std Error of Est:	0.000478		
Predicted MDL:	0.017375		
Predicted MQL:	0.057916		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00003	.000	.000	.00806	.001	1
S1	2.0000	1.9869	-.013	-.655	.26028	.002	1
S2	4.0000	3.9791	-.021	-.522	.51318	.002	1
S3	12.500	12.528	.028	.227	1.5985	.005	1
S4	25.000	24.729	-.271	-1.08	3.1472	.015	1
S5	50.000	50.277	.277	.554	6.3904	.045	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



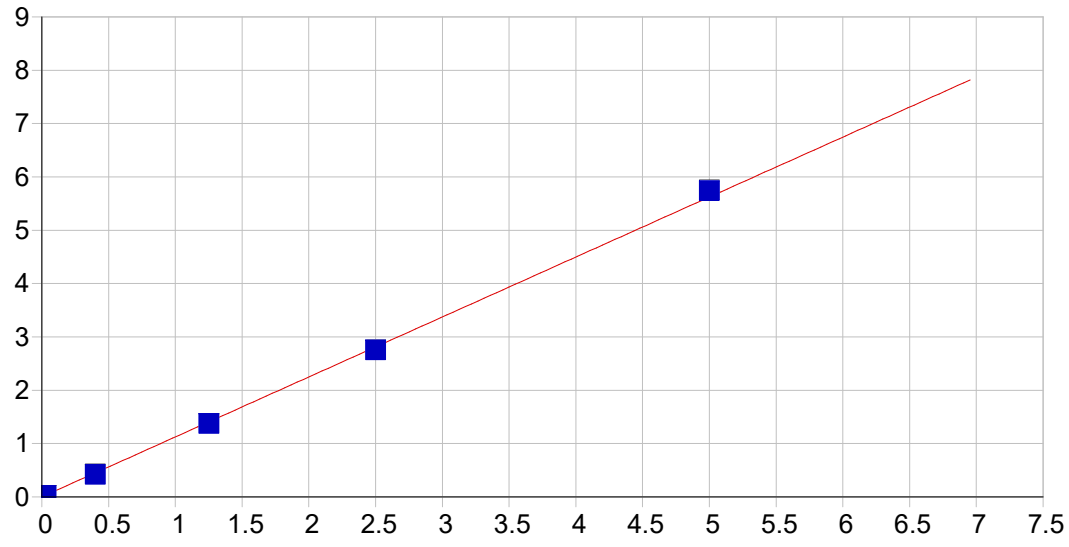
Cr 267.716 {126}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000792	Re-Slope:	1.000000
A1 (Gain):	0.296234	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999939	Status:	OK.
Std Error of Est:	0.000024		
Predicted MDL:	0.000838		
Predicted MQL:	0.002794		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00079	.000	1
S1	.01000	.00913	-.001	-8.69	.00350	.000	1
S2	.16000	.15735	-.003	-1.66	.04745	.000	1
S3	.50000	.50578	.006	1.16	.15075	.000	1
S4	1.0000	.98599	-.014	-1.40	.29314	.001	1
S5	2.0000	2.0118	.012	.588	.59727	.000	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



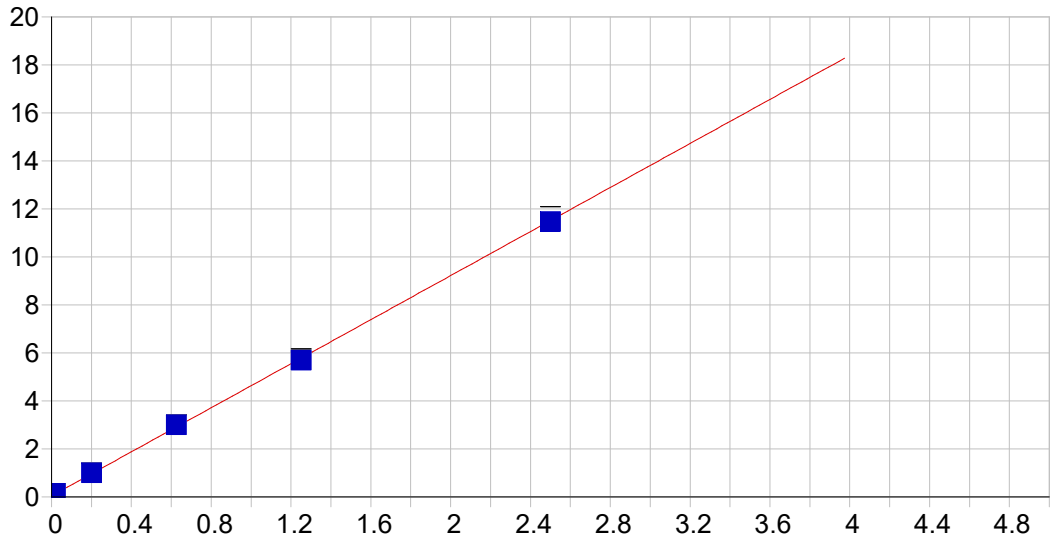
Co 228.616 {448}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000318	Re-Slope:	1.000000
A1 (Gain):	1.124406	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999709	Status:	OK.
Std Error of Est:	0.000552		
Predicted MDL:	0.000320		
Predicted MQL:	0.001065		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00032	.000	1
S1	.03000	.02896	-.001	-3.46	.03269	.000	1
S2	.40000	.37583	-.024	-6.04	.42345	.001	1
S3	1.2500	1.2216	-.028	-2.27	1.3757	.001	1
S4	2.5000	2.4491	-.051	-2.03	2.7576	.003	1
S5	5.0000	5.1044	.104	2.09	5.7466	.009	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



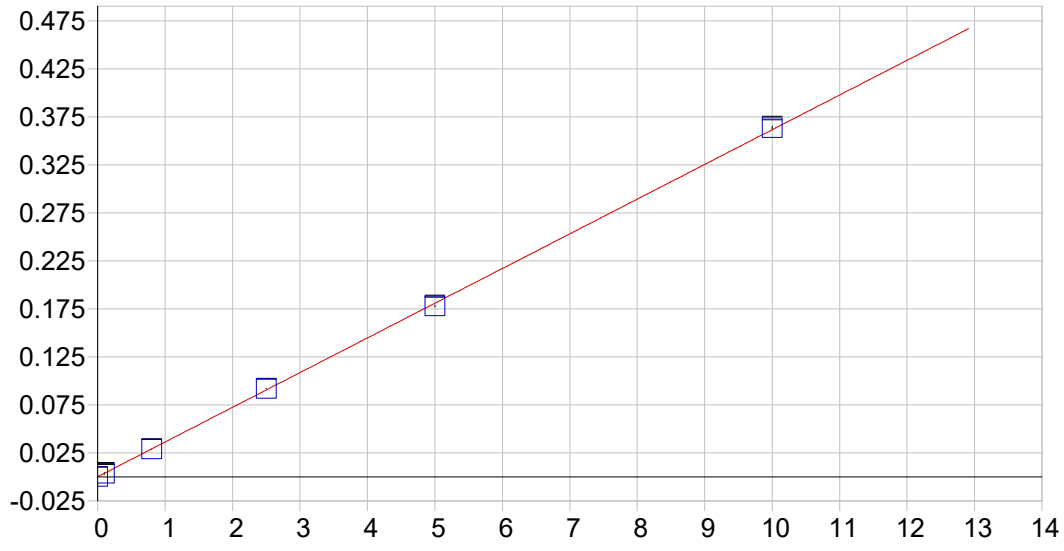
Cu 324.754 {104}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.043905	Re-Slope:	1.000000
A1 (Gain):	4.588524	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999841	Status:	OK.
Std Error of Est:	0.000961		
Predicted MDL:	0.000703		
Predicted MQL:	0.002344		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.04389	.003	1
S1	.02000	.02201	.002	10.1	.14494	.001	1
S2	.20000	.20788	.008	3.94	.99822	.006	1
S3	.62500	.64455	.020	3.13	3.0028	.014	1
S4	1.2500	1.2308	-.019	-1.54	5.6941	.062	1
S5	2.5000	2.4898	-.010	-.408	11.474	.206	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



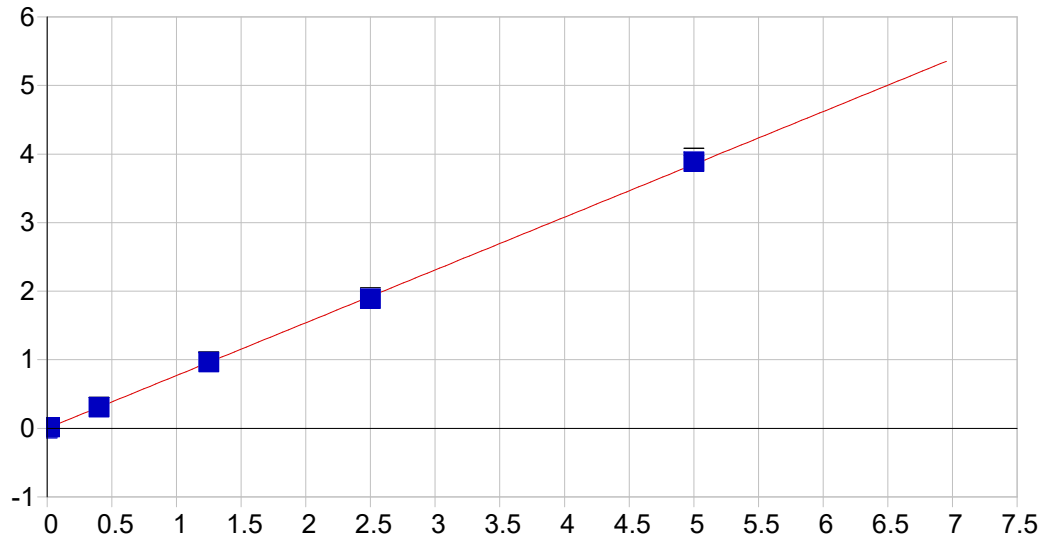
Fe 259.837 {130}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000202	Re-Slope:	1.000000
A1 (Gain):	0.036138	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999935	Status:	OK.
Std Error of Est:	0.000022		
Predicted MDL:	0.018517		
Predicted MQL:	0.061725		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00020	.000	1
S1	.10000	.09633	-.004	-3.67	.00368	.001	1
S2	.80000	.79393	-.006	-.759	.02889	.000	1
S3	2.5000	2.5397	.040	1.59	.09198	.000	1
S4	5.0000	4.9188	-.081	-1.62	.17796	.001	1
S5	10.000	10.051	.051	.512	.36343	.002	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



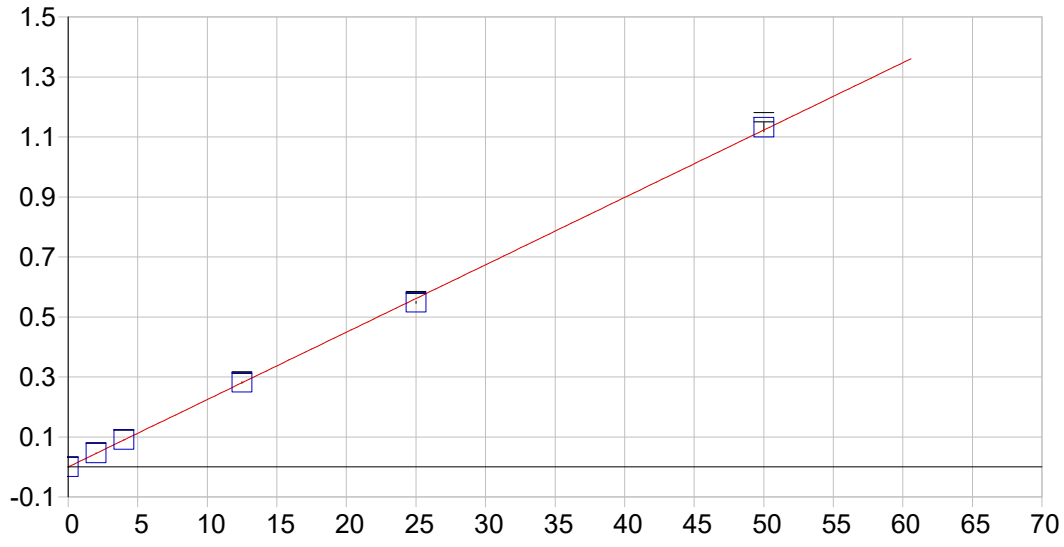
Mn 257.610 {131}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000575	Re-Slope:	1.000000
A1 (Gain):	0.769755	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999929	Status:	OK.
Std Error of Est:	0.000152		
Predicted MDL:	0.000933		
Predicted MQL:	0.003109		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00057	.001	1
S1	.02000	.02027	.000	1.34	.01620	.001	1
S2	.40000	.39624	-.004	-.941	.30586	.001	1
S3	1.2500	1.2496	-.000	-.035	.96329	.007	1
S4	2.5000	2.4555	-.045	-1.78	1.8924	.012	1
S5	5.0000	5.0485	.048	.969	3.8901	.051	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



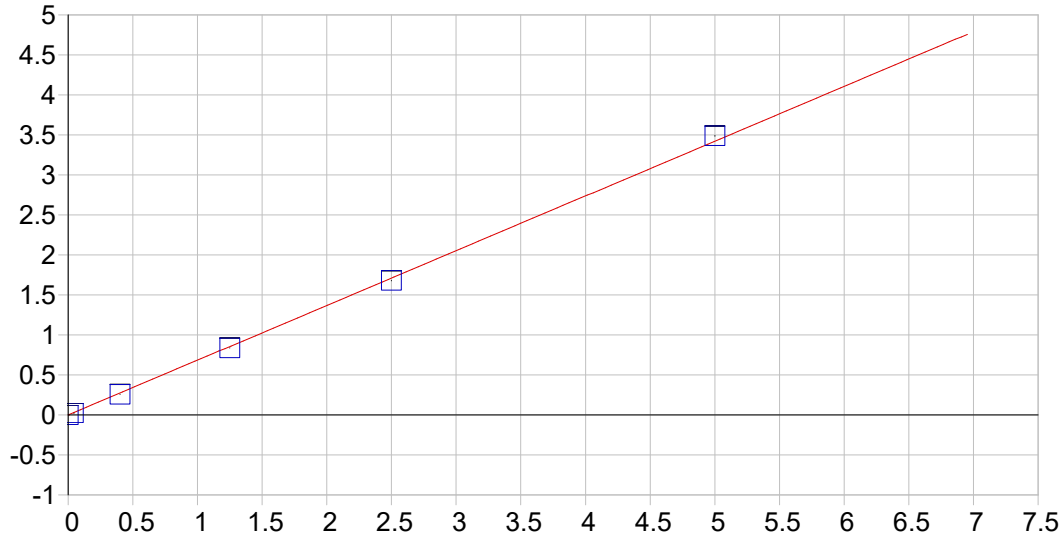
Mg 279.079 {121}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000095	Re-Slope:	1.000000
A1 (Gain):	0.022457	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999891	Status:	OK.
Std Error of Est:	0.000176		
Predicted MDL:	0.039478		
Predicted MQL:	0.131593		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00007	-.000	.000	-.00010	.000	1
S1	2.0000	2.0790	.079	3.95	.04659	.000	1
S2	4.0000	4.0306	.031	.765	.09042	.000	1
S3	12.500	12.535	.035	.284	.28142	.002	1
S4	25.000	24.425	-.575	-2.30	.54842	.003	1
S5	50.000	50.430	.430	.860	1.1324	.015	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



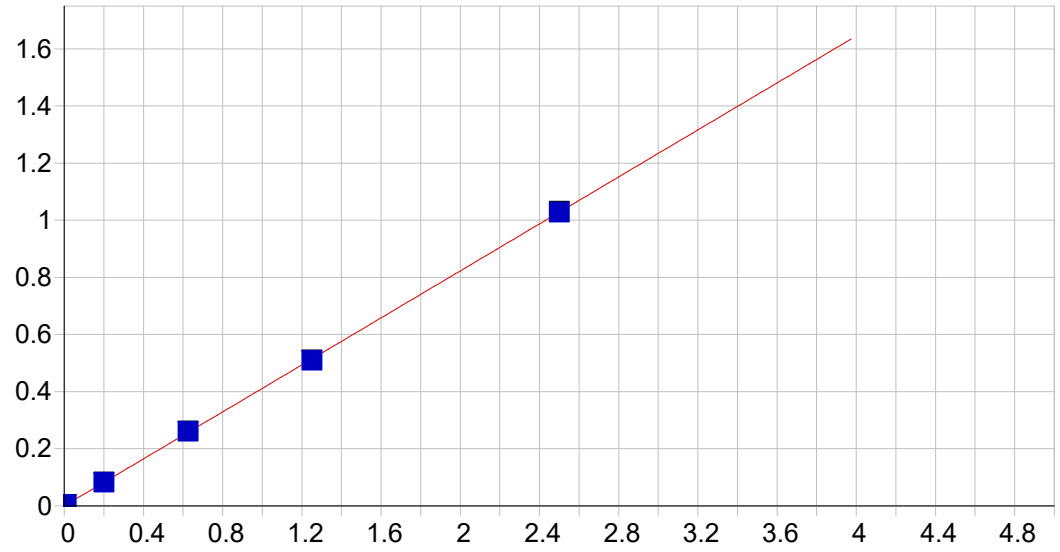
Ni 231.604 {446}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000348	Re-Slope:	1.000000
A1 (Gain):	0.684312	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999751	Status:	OK.
Std Error of Est:	0.000359		
Predicted MDL:	0.000554		
Predicted MQL:	0.001848		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00034	.000	1
S1	.04000	.03810	-.002	-4.75	.02572	.000	1
S2	.40000	.37751	-.022	-5.62	.25799	.000	1
S3	1.2500	1.2248	-.025	-2.02	.83777	.001	1
S4	2.5000	2.4535	-.047	-1.86	1.6786	.001	1
S5	5.0000	5.0962	.096	1.92	3.4870	.005	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



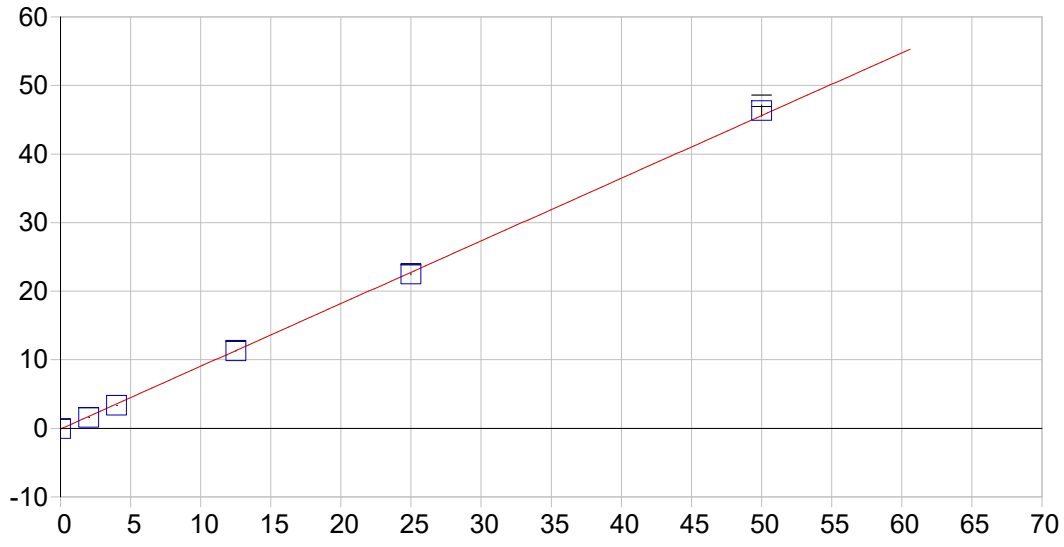
Ag 328.068 {103}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000219	Re-Slope:	1.000000
A1 (Gain):	0.411330	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999969	Status:	OK.
Std Error of Est:	0.000027		
Predicted MDL:	0.000807		
Predicted MQL:	0.002691		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00022	.000	1
S1	.01000	.01051	.001	5.14	.00452	.000	1
S2	.20000	.19995	-.000	-.026	.08229	.000	1
S3	.62500	.63497	.010	1.60	.26086	.000	1
S4	1.2500	1.2391	-.011	-.874	.50881	.001	1
S5	2.5000	2.5005	.000	.020	1.0266	.004	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



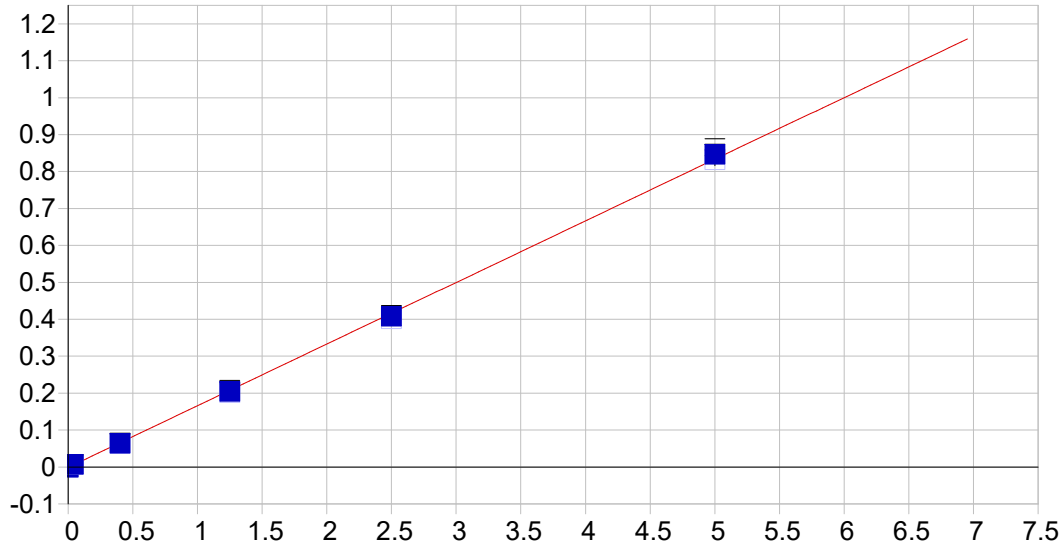
Na 818.326 { 41}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.082865	Re-Slope:	1.000000
A1 (Gain):	0.913801	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999737	Status:	OK.
Std Error of Est:	0.011079		
Predicted MDL:	0.010741		
Predicted MQL:	0.035804		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00031	.000	.000	-.08258	.009	1
S1	2.0000	1.8200	-.180	-9.00	1.5802	.015	1
S2	4.0000	3.7435	-.257	-6.41	3.3379	.003	1
S3	12.500	12.445	-.055	-.438	11.290	.080	1
S4	25.000	24.700	-.300	-1.20	22.488	.090	1
S5	50.000	50.792	.792	1.58	46.330	.847	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



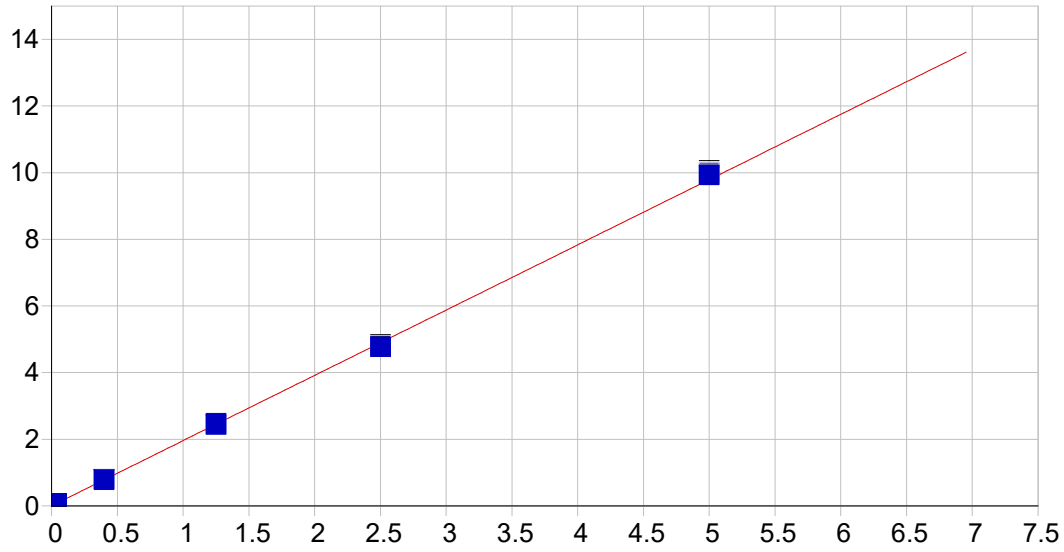
V 292.402 {115}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000803	Re-Slope:	1.000000
A1 (Gain):	0.166812	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999811	Status:	OK.
Std Error of Est:	0.000075		
Predicted MDL:	0.006245		
Predicted MQL:	0.020815		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00080	.001	1
S1	.04000	.04391	.004	9.78	.00624	.001	1
S2	.40000	.38663	-.013	-3.34	.06250	.001	1
S3	1.2500	1.2304	-.020	-1.57	.20072	.003	1
S4	2.5000	2.4507	-.049	-1.97	.40055	.002	1
S5	5.0000	5.0785	.079	1.57	.83147	.015	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



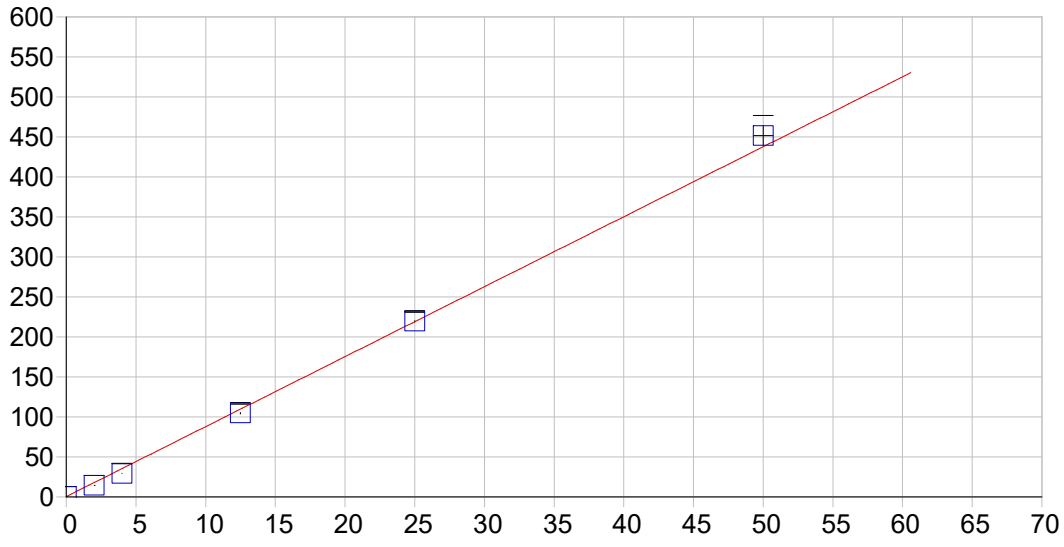
Zn 213.856 {158}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001485	Re-Slope:	1.000000
A1 (Gain):	1.958170	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999864	Status:	OK.
Std Error of Est:	0.000764		
Predicted MDL:	0.000439		
Predicted MQL:	0.001463		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00149	.001	1
S1	.04000	.04015	.000	.366	.08067	.000	1
S2	.40000	.40075	.001	.187	.79192	.000	1
S3	1.2500	1.2430	-.007	-.563	2.4532	.021	1
S4	2.5000	2.4376	-.062	-2.50	4.8103	.030	1
S5	5.0000	5.0686	.069	1.37	9.9979	.065	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



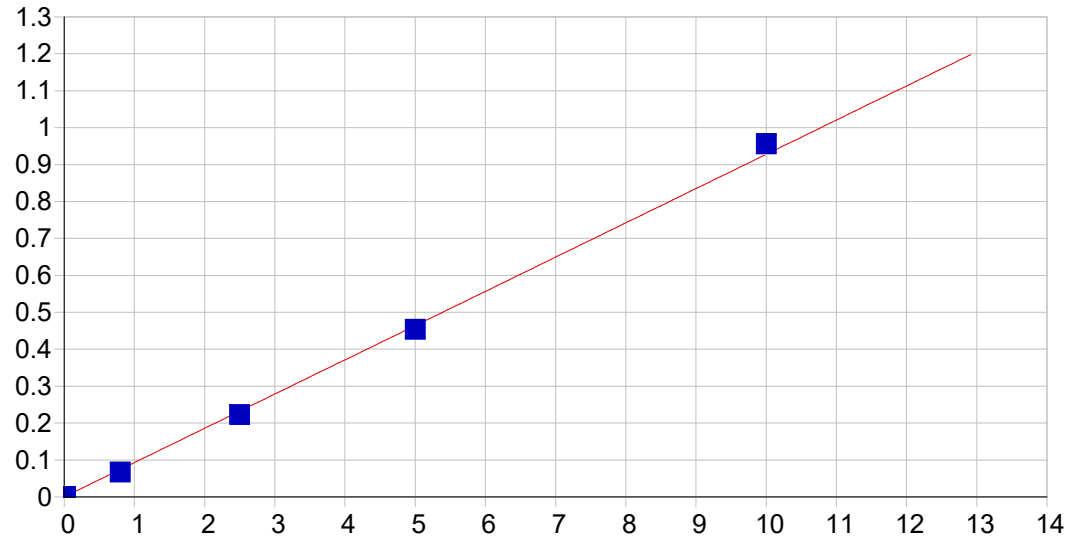
K 769.896 { 44}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.432178	Re-Slope:	1.000000
A1 (Gain):	8.745001	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998518	Status:	OK.
Std Error of Est:	0.252117		
Predicted MDL:	0.001013		
Predicted MQL:	0.003377		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00077	.001	.000	.43888	.007	1
S1	2.0000	1.6028	-.397	-19.9	14.449	.097	1
S2	4.0000	3.3074	-.693	-17.3	29.355	.142	1
S3	12.500	11.927	-.573	-4.58	104.74	1.01	1
S4	25.000	25.048	.048	.194	219.48	1.03	1
S5	50.000	51.614	1.61	3.23	451.80	12.6	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



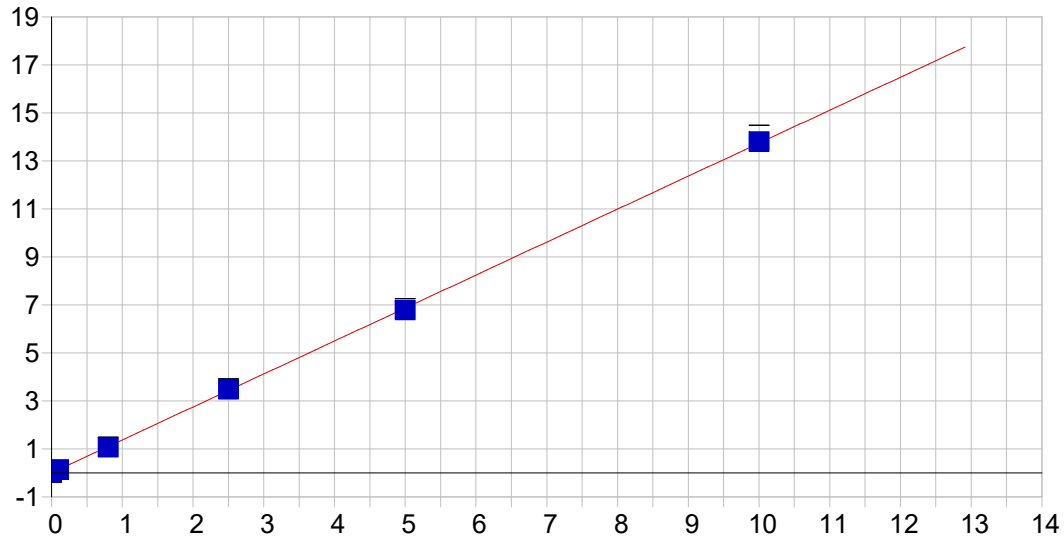
P 177.495 {490}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000241	Re-Slope:	1.000000
A1 (Gain):	0.092744	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999312	Status:	OK.
Std Error of Est:	0.000080		
Predicted MDL:	0.001942		
Predicted MQL:	0.006472		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00024	.000	1
S1	.02000	.01994	-.000	-.281	.00207	.000	1
S2	.80000	.71627	-.084	-10.5	.06650	.000	1
S3	2.5000	2.3946	-.105	-4.22	.22179	.000	1
S4	5.0000	4.8849	-.115	-2.30	.45222	.001	1
S5	10.000	10.304	.304	3.04	.95376	.001	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



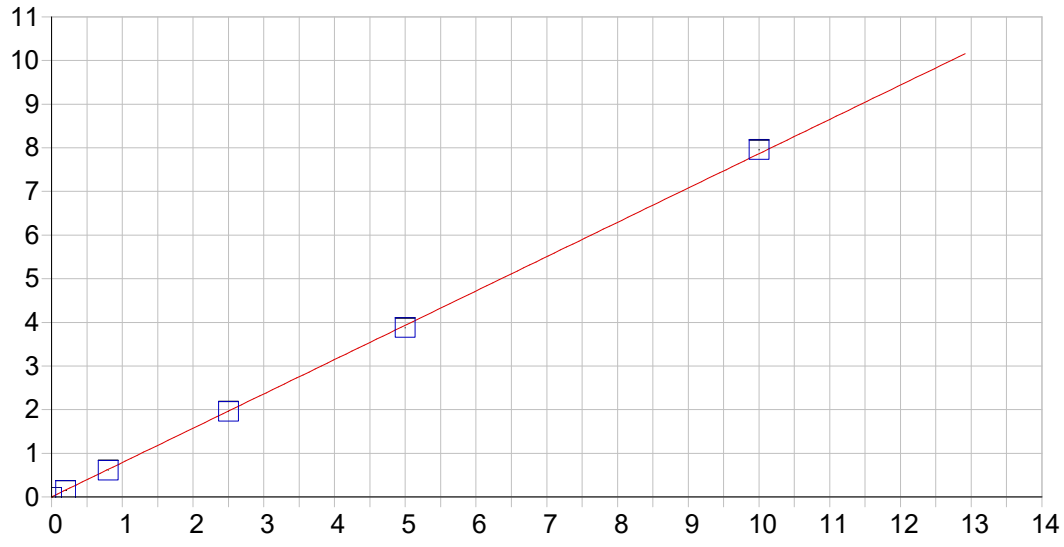
B 249.678 {135}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000655	Re-Slope:	1.000000
A1 (Gain):	1.373848	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999943	Status:	OK.
Std Error of Est:	0.000768		
Predicted MDL:	0.001329		
Predicted MQL:	0.004430		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00066	.002	1
S1	.10000	.10034	.000	.337	.13835	.001	1
S2	.80000	.77902	-.021	-2.62	1.0701	.003	1
S3	2.5000	2.5356	.036	1.42	3.4815	.023	1
S4	5.0000	4.9369	-.063	-1.26	6.7780	.069	1
S5	10.000	10.048	.048	.482	13.795	.273	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



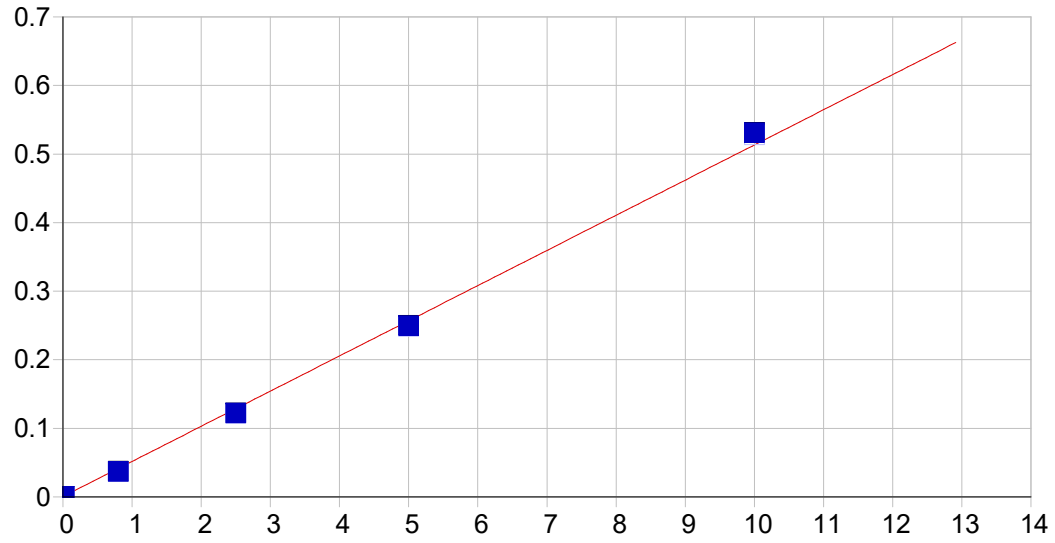
Mo 202.030 {467}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000656	Re-Slope:	1.000000
A1 (Gain):	0.786437	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999893	Status:	OK.
Std Error of Est:	0.000858		
Predicted MDL:	0.000460		
Predicted MQL:	0.001534		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	.00067	.000	1
S1	.20000	.18654	-.013	-6.73	.14736	.001	1
S2	.80000	.77751	-.022	-2.81	.61212	.001	1
S3	2.5000	2.4908	-.009	-.368	1.9595	.003	1
S4	5.0000	4.9281	-.072	-1.44	3.8763	.005	1
S5	10.000	10.117	.117	1.17	7.9571	.008	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



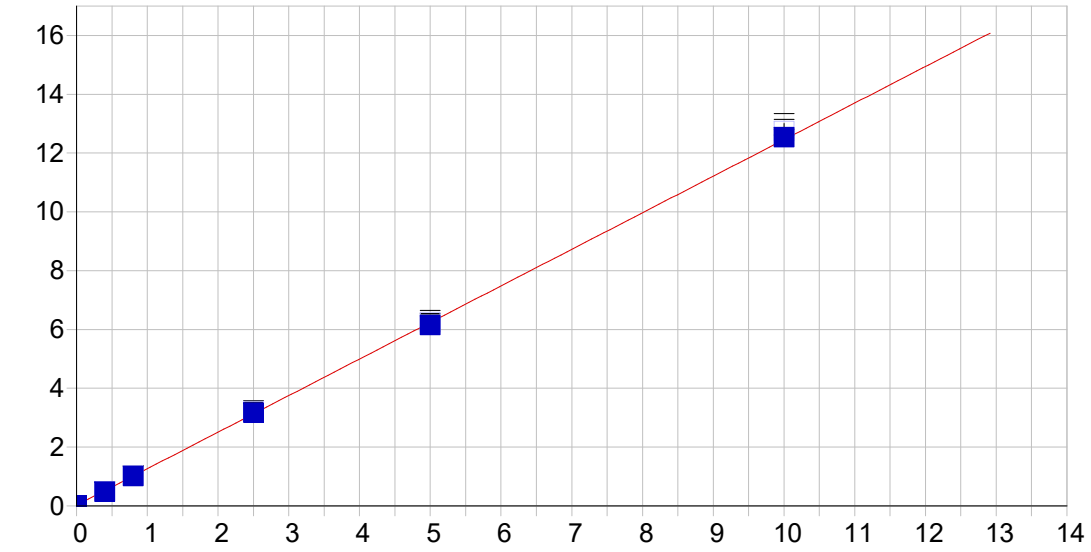
S 182.034 {485}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000468	Re-Slope:	1.000000
A1 (Gain):	0.051282	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999121	Status:	OK.
Std Error of Est:	0.000050		
Predicted MDL:	0.003373		
Predicted MQL:	0.011242		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00047	.000	1
S1	.02000	.02005	.000	.229	.00142	.000	1
S2	.80000	.71346	-.087	-10.8	.03678	.000	1
S3	2.5000	2.3728	-.127	-5.09	.12129	.000	1
S4	5.0000	4.8636	-.136	-2.73	.24818	.000	1
S5	10.000	10.350	.350	3.50	.52783	.000	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



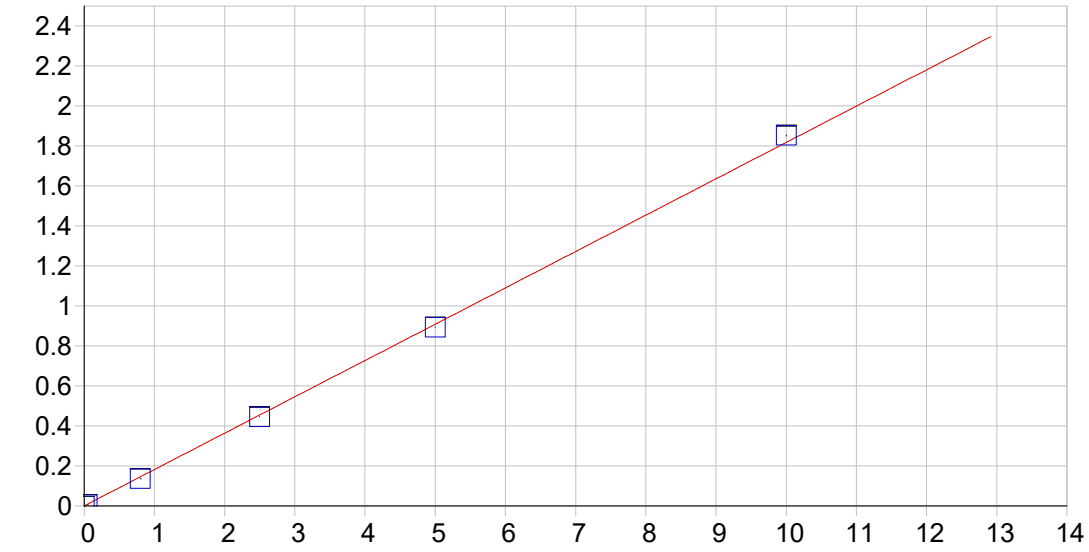
Si 251.611 {134}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.020906	Re-Slope:	1.000000
A1 (Gain):	1.243618	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999896	Status:	OK.
Std Error of Est:	0.001929		
Predicted MDL:	0.001333		
Predicted MQL:	0.004445		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00003	.000	.000	.02094	.002	1
S1	.40000	.37094	-.029	-7.27	.48511	.001	1
S2	.80000	.80022	.000	.027	1.0322	.007	1
S3	2.5000	2.5336	.034	1.34	3.2220	.022	1
S4	5.0000	4.9288	-.071	-1.42	6.2509	.057	1
S5	10.000	10.066	.066	.662	12.740	.266	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



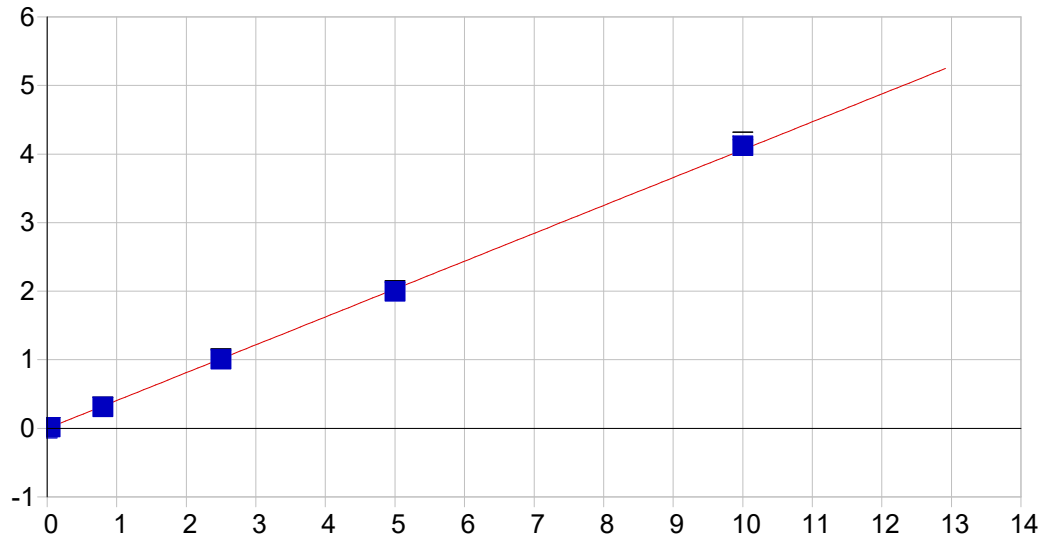
Sn 189.989 {478}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000221	Re-Slope:	1.000000
A1 (Gain):	0.181739	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999726	Status:	OK.
Std Error of Est:	0.000141		
Predicted MDL:	0.000919		
Predicted MQL:	0.003065		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00022	.000	1
S1	.04000	.03638	-.004	-9.04	.00683	.000	1
S2	.80000	.74697	-.053	-6.63	.13598	.000	1
S3	2.5000	2.4500	-.050	-2.00	.44548	.001	1
S4	5.0000	4.9139	-.086	-1.72	.89327	.001	1
S5	10.000	10.193	.193	1.93	1.8526	.002	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



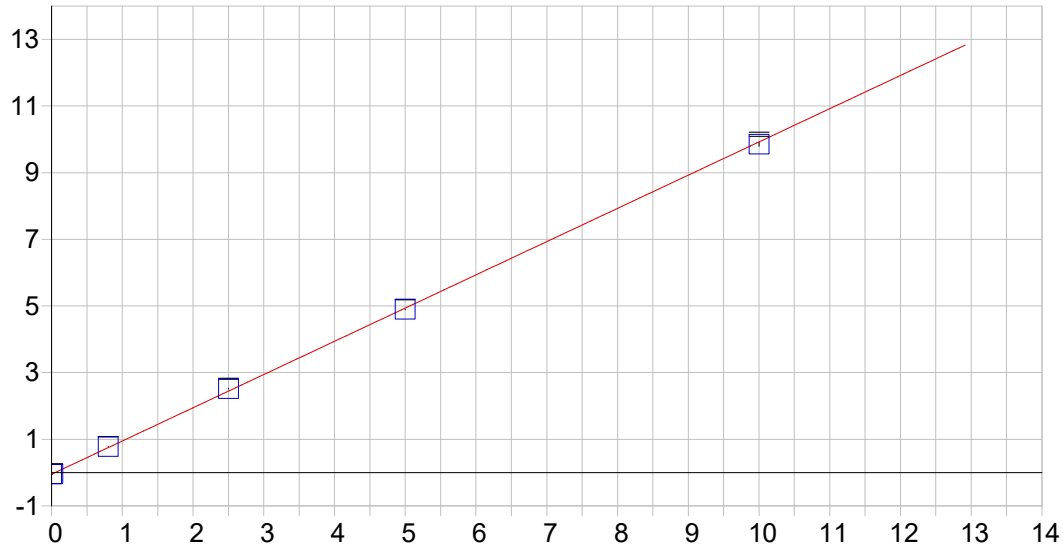
Ti 336.121 {100}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001181	Re-Slope:	1.000000
A1 (Gain):	0.406419	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999859	Status:	OK.
Std Error of Est:	0.000226		
Predicted MDL:	0.003505		
Predicted MQL:	0.011684		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00118	.003	1
S1	.04000	.04168	.002	4.20	.01574	.000	1
S2	.80000	.76737	-.033	-4.08	.31053	.002	1
S3	2.5000	2.4762	-.024	-.950	1.0047	.009	1
S4	5.0000	4.9125	-.088	-1.75	1.9943	.013	1
S5	10.000	10.142	.142	1.42	4.1188	.057	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



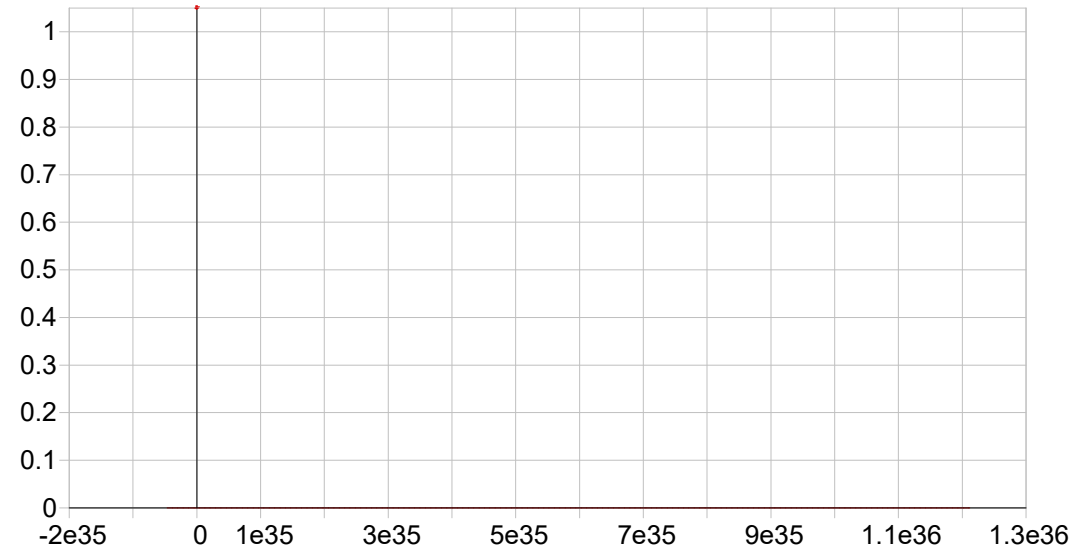
Li 670.784 { 50}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.053184	Re-Slope:	1.000000
A1 (Gain):	0.997531	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999842	Status:	OK.
Std Error of Est:	0.000415		
Predicted MDL:	0.006146		
Predicted MQL:	0.020486		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.05318	.003	1
S5	10.000	9.9330	-.067	-.670	9.8553	.062	1
S4	5.0000	4.9623	-.038	-.754	4.8969	.009	1
S3	2.5000	2.5763	.076	3.05	2.5168	.014	1
S2	.80000	.83350	.033	4.19	.77825	.004	1
S1	.02000	.01486	-.005	-25.7	-.03836	.005	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

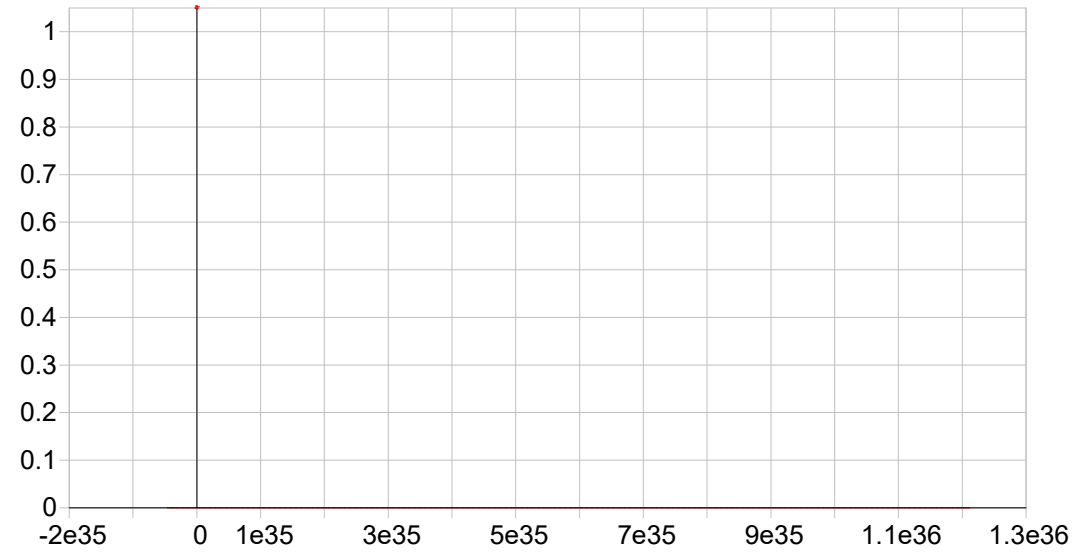


Y 224.306 {450}*

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 360.073 { 94}*

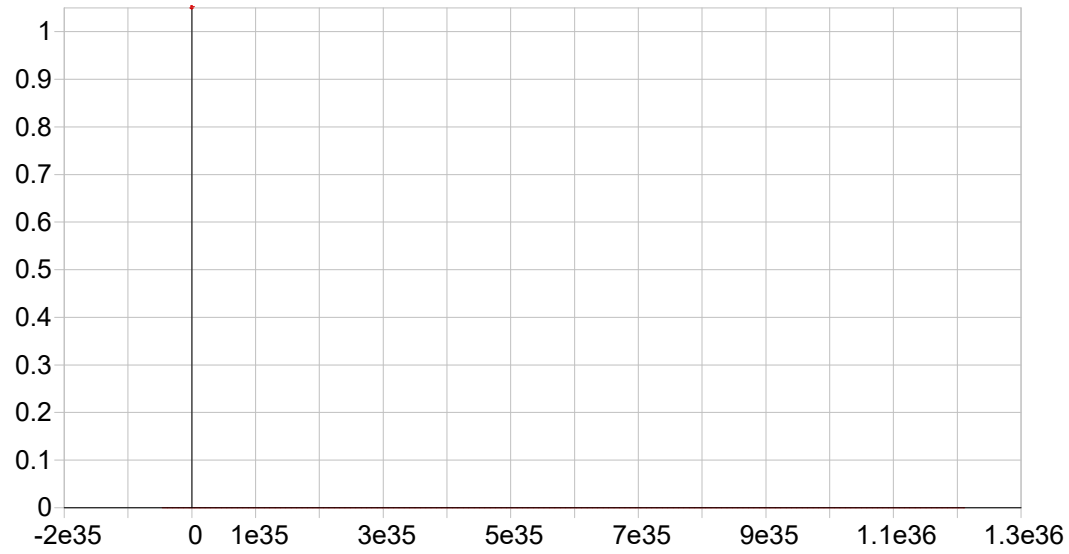
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

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



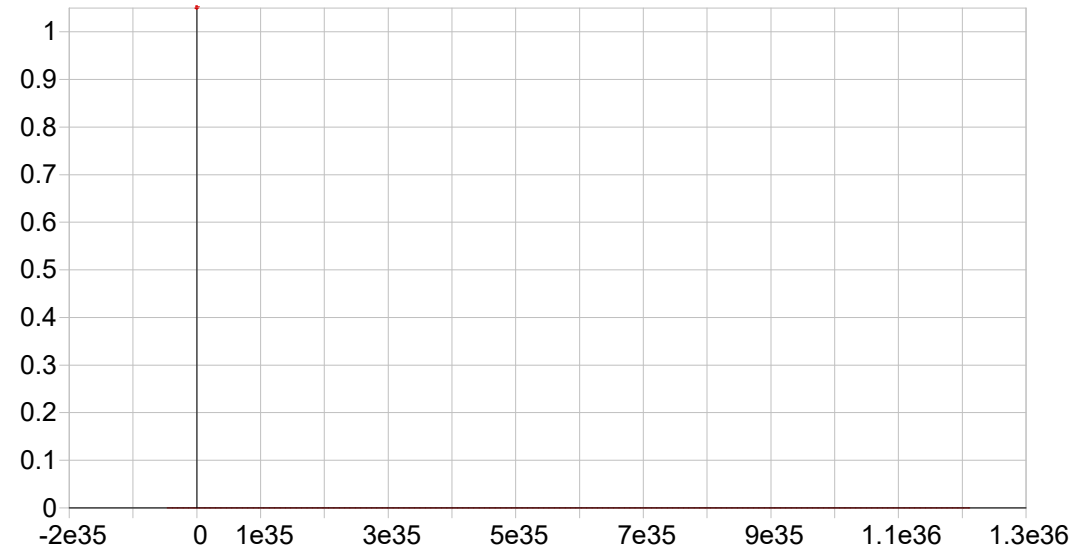
Y 371.030 { 91}*

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

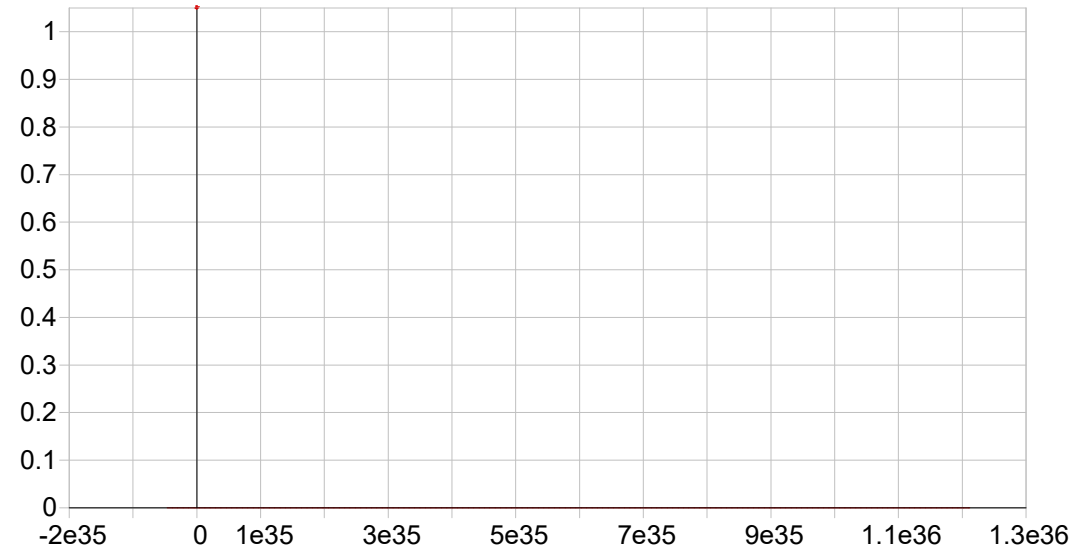
Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187



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



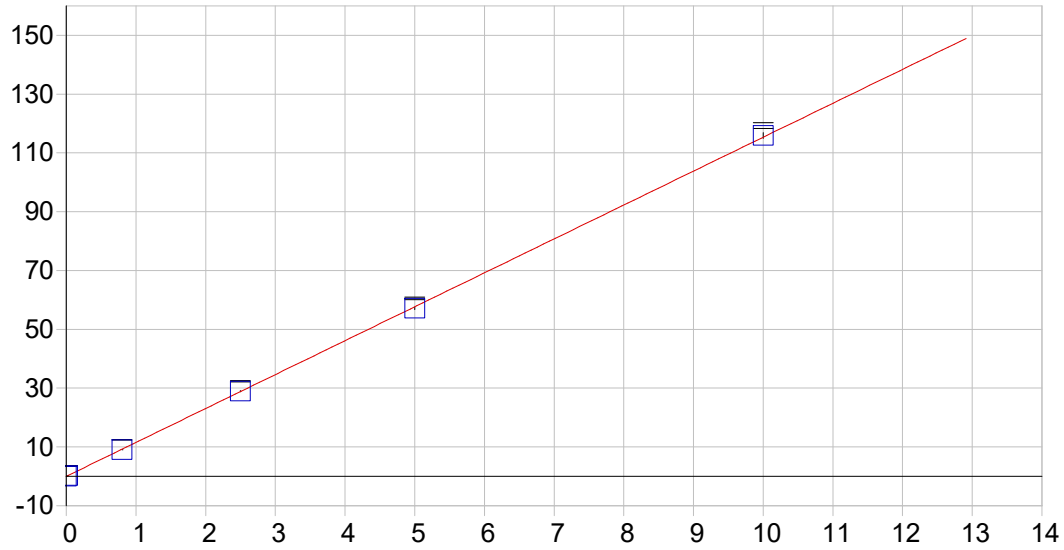
In 230.606 {446}*

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	

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

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



Sr 407.771 { 83}

Date of Fit:	6/17/2025 12:25:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001397	Re-Slope:	1.000000
A1 (Gain):	11.534903	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999969	Status:	OK.
Std Error of Est:	0.002128		
Predicted MDL:	0.000210		
Predicted MQL:	0.000699		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00140	.002	1
S1	.02000	.02093	.001	4.65	.24003	.000	1
S2	.80000	.78451	-.015	-1.94	9.0479	.022	1
S3	2.5000	2.5120	.012	.482	28.975	.221	1
S4	5.0000	4.9514	-.049	-.973	57.112	.424	1
S5	10.000	10.051	.051	.511	115.94	.977	1

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: S0 Acquired: 6/17/2025 11:58:38 Type: Cal
Method: METHOD 6010D, 200.7(v6) Mode: IR Corr. Factor: 1.000000
User: admin 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	-.00030	-.00132	.00038	.00018	.00089	-.00136	.02043	.00693
Stddev	.00010	.00026	.00029	.00043	.00012	.00093	.00208	.00204
%RSD	32.947	19.476	76.475	236.15	13.133	68.508	10.162	29.474
#1	-.00019	-.00161	.00047	.00066	.00092	-.00075	.02125	.00479
#2	-.00035	-.00125	.00061	-.00016	.00076	-.00091	.02198	.00885
#3	-.00037	-.00111	.00005	.00004	.00100	-.00244	.01807	.00714

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00037	.00806	.00079	.00032	.04389	.00020	.00057	-.00010
Stddev	.00020	.00097	.00005	.00013	.00267	.00032	.00059	.00044
%RSD	53.967	12.023	5.9207	41.336	6.0873	157.93	102.84	454.35
#1	.00037	.00708	.00079	.00022	.04690	-.00015	-.00008	-.00059
#2	.00058	.00808	.00084	.00047	.04297	.00047	.00107	.00023
#3	.00018	.00901	.00075	.00027	.04180	.00029	.00073	.00008

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00034	.00022	-.08258	-.00080	.00149	.43888	.00024	.00066
Stddev	.00025	.00021	.00949	.00113	.00055	.00748	.00020	.00190
%RSD	72.426	96.350	11.489	141.12	36.733	1.7037	84.754	289.29
#1	-.00063	.00038	-.07163	-.00047	.00209	.44273	.00009	.00156
#2	-.00020	.00030	-.08827	.00013	.00104	.44365	.00047	-.00153
#3	-.00021	-.00002	-.08785	-.00207	.00133	.43027	.00016	.00194

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00067	.00047	.02094	.00022	-.00118	-.05318	-.00140
Stddev	.00020	.00011	.00196	.00010	.00253	.00349	.00179
%RSD	29.865	22.811	9.3414	45.302	214.50	6.5655	127.84
#1	.00090	.00040	.01908	.00029	.00160	-.05466	.00061
#2	.00055	.00059	.02075	.00027	-.00179	-.05569	-.00284
#3	.00056	.00041	.02298	.00011	-.00335	-.04919	-.00198

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: S0 Acquired: 6/17/2025 11:58:38 Type: Cal
Method: METHOD 6010D, 200.7(v6) Mode: IR Corr. Factor: 1.000000
User: admin 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	3530.1	45066.	3197.9	4160.1	4974.2
Stddev	5.5	292.	17.4	24.0	12.4
%RSD	.15513	.64688	.54260	.57760	.24836
#1	3535.2	45034.	3180.5	4148.9	4980.3
#2	3530.7	44791.	3197.9	4143.7	4982.4
#3	3524.3	45372.	3215.2	4187.7	4960.0

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: S1 Acquired: 6/17/2025 12:03:10 Type: Cal
Method: METHOD 6010D, 200.7(v6) Mode: IR Corr. Factor: 1.000000
User: admin 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	**.00086**	**.00456**	**.00604**	**.00270**	**.00931**	**.00850**	**.43635**	**.12296**
Stddev	.00004	.00015	.00092	.00015	.00009	.00248	.00220	.00075
%RSD	4.2669	3.2449	15.177	5.4322	.98285	29.213	.50480	.61004
#1	.00082	.00458	.00688	.00255	.00938	.01106	.43867	.12332
#2	.00089	.00469	.00619	.00270	.00933	.00610	.43609	.12210
#3	.00088	.00440	.00506	.00285	.00920	.00834	.43428	.12347

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.02672**	**.26028**	**.00350**	**.03269**	**.14494**	**.00368**	**.01620**	**.04659**
Stddev	.00010	.00176	.00031	.00042	.00131	.00093	.00084	.00047
%RSD	.38694	.67733	8.7172	1.2726	.90276	25.336	5.2130	1.0148
#1	.02677	.26229	.00349	.03267	.14640	.00451	.01542	.04712
#2	.02678	.25899	.00381	.03229	.14387	.00387	.01609	.04645
#3	.02660	.25956	.00320	.03312	.14455	.00267	.01710	.04621

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.02572**	**.00452**	**1.5802**	**.00624**	**.08067**	**14.449**	**.00207**	**.13835**
Stddev	.00019	.00036	.0151	.00068	.00028	.097	.00011	.00144
%RSD	.72542	8.0035	.95370	10.884	.35036	.67280	5.4007	1.0382
#1	.02593	.00413	1.5707	.00641	.08058	14.405	.00198	.13682
#2	.02558	.00484	1.5723	.00681	.08099	14.382	.00204	.13855
#3	.02566	.00461	1.5976	.00549	.08044	14.560	.00220	.13967

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.14736**	**.00142**	**.48511**	**.00683**	**.01574**	**-.03836**	**.24003**
Stddev	.00088	.00011	.00088	.00018	.00035	.00511	.00032
%RSD	.59618	7.6150	.18119	2.6265	2.2536	13.312	.13196
#1	.14772	.00142	.48410	.00663	.01544	-.04382	.23995
#2	.14636	.00152	.48562	.00695	.01613	-.03370	.24038
#3	.14800	.00131	.48561	.00692	.01565	-.03757	.23977

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: S1 Acquired: 6/17/2025 12:03:10 Type: Cal
Method: METHOD 6010D, 200.7(v6) Mode: IR Corr. Factor: 1.000000
User: admin 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	3567.7	45625.	3258.3	4217.4	4939.2
Stddev	4.0	132.	20.2	11.3	3.0
%RSD	.11199	.28822	.62103	.26801	.06014
#1	3563.2	45569.	3265.1	4224.7	4935.9
#2	3569.1	45775.	3274.4	4223.1	4941.6
#3	3570.7	45531.	3235.6	4204.4	4940.2

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: S2 Acquired: 6/17/2025 12:07:37 Type: Cal
Method: METHOD 6010D, 200.7(v6) Mode: IR Corr. Factor: 1.000000
User: admin 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	**.04203**	**.11923**	**.36825**	**.09654**	**.13327**	**.16963**	**6.5967**	**.75185**
Stddev	.00010	.00022	.00064	.00019	.00036	.00085	.0232	.00332
%RSD	.24165	.18389	.17302	.19314	.26659	.50401	.35229	.44101
#1	.04195	.11901	.36859	.09670	.13286	.16955	6.6098	.75536
#2	.04200	.11945	.36865	.09658	.13347	.16882	6.6103	.75144
#3	.04215	.11923	.36752	.09633	.13348	.17053	6.5698	.74877

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.7403**	**.51318**	**.04745**	**.42345**	**.99822**	**.02889**	**.30586**	**.09042**
Stddev	.0016	.00150	.00021	.00066	.00617	.00037	.00093	.00021
%RSD	.09087	.29274	.44622	.15694	.61767	1.2866	.30248	.23740
#1	1.7420	.51474	.04722	.42321	1.0035	.02895	.30484	.09067
#2	1.7403	.51175	.04747	.42420	.99145	.02850	.30607	.09026
#3	1.7388	.51306	.04764	.42294	.99971	.02923	.30665	.09033

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.25799**	**.08229**	**3.3379**	**.06250**	**.79192**	**29.355**	**.06650**	**1.0701**
Stddev	.00026	.00015	.0030	.00056	.00041	.142	.00024	.0032
%RSD	.10228	.18055	.08912	.89050	.05212	.48456	.35913	.29515
#1	.25778	.08215	3.3413	.06224	.79227	29.452	.06643	1.0736
#2	.25789	.08244	3.3360	.06314	.79147	29.192	.06676	1.0675
#3	.25828	.08228	3.3364	.06212	.79202	29.422	.06630	1.0691

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.61212**	**.03678**	**1.0322**	**.13598**	**.31053**	**.77825**	**9.0479**
Stddev	.00069	.00034	.0066	.00046	.00195	.00382	.0221
%RSD	.11344	.91846	.63860	.34147	.62720	.49109	.24398
#1	.61158	.03640	1.0378	.13603	.31141	.78195	9.0506
#2	.61188	.03703	1.0249	.13549	.31188	.77432	9.0685
#3	.61290	.03692	1.0337	.13641	.30830	.77849	9.0246

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: S2 Acquired: 6/17/2025 12:07:37 Type: Cal
Method: METHOD 6010D, 200.7(v6) Mode: IR Corr. Factor: 1.000000
User: admin 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	**3474.2**	**44594.**	**3195.9**	**4108.6**	**4682.5**
Stddev	12.8	192.	20.2	17.4	13.8
%RSD	.36910	.43081	.63355	.42390	.29410
#1	3482.7	44435.	3173.0	4088.6	4689.1
#2	3459.5	44539.	3211.4	4117.0	4666.7
#3	3480.5	44807.	3203.3	4120.3	4691.8

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: S3 Acquired: 6/17/2025 12:11:57 Type: Cal
Method: METHOD 6010D, 200.7(v6) Mode: IR Corr. Factor: 1.000000
User: admin 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	**.14073**	**.38617**	**1.1976**	**.31045**	**.42439**	**.52444**	**21.178**	**2.3970**
Stddev	.00027	.00037	.0024	.00064	.00067	.00125	.210	.0146
%RSD	.19532	.09673	.20450	.20545	.15904	.23827	.99096	.61082
#1	.14053	.38576	1.1952	.31026	.42419	.52493	20.978	2.3818
#2	.14104	.38625	1.2001	.31117	.42383	.52302	21.397	2.3981
#3	.14062	.38649	1.1976	.30993	.42514	.52537	21.159	2.4110

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5.7367**	**1.5985**	**.15075**	**1.3757**	**3.0028**	**.09198**	**.96329**	**.28142**
Stddev	.0073	.0048	.00032	.0013	.0137	.00034	.00701	.00223
%RSD	.12690	.29872	.21048	.09752	.45451	.37020	.72756	.79374
#1	5.7307	1.5940	.15040	1.3753	2.9871	.09197	.95585	.27955
#2	5.7448	1.6035	.15102	1.3771	3.0096	.09233	.96977	.28389
#3	5.7345	1.5979	.15084	1.3746	3.0118	.09165	.96424	.28081

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.83777**	**.26086**	**11.290**	**.20072**	**2.4532**	**104.74**	**.22179**	**3.4815**
Stddev	.00079	.00050	.080	.00298	.0206	1.01	.00045	.0227
%RSD	.09395	.19025	.70530	1.4840	.84150	.96039	.20280	.65195
#1	.83736	.26129	11.198	.19777	2.4433	103.58	.22223	3.4563
#2	.83868	.26098	11.334	.20372	2.4770	105.42	.22182	3.4878
#3	.83728	.26032	11.338	.20066	2.4394	105.20	.22133	3.5004

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.9595**	**.12129**	**3.2220**	**.44548**	**1.0047**	**2.5168**	**28.975**
Stddev	.0033	.00024	.0216	.00054	.0090	.0138	.221
%RSD	.16612	.19528	.67083	.12094	.89345	.54955	.76388
#1	1.9592	.12136	3.1981	.44490	.99462	2.5045	28.728
#2	1.9564	.12149	3.2279	.44596	1.0118	2.5317	29.156
#3	1.9629	.12103	3.2401	.44558	1.0077	2.5141	29.040

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: S3 Acquired: 6/17/2025 12:11:57 Type: Cal
Method: METHOD 6010D, 200.7(v6) Mode: IR Corr. Factor: 1.000000
User: admin 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	**3434.5**	**43494.**	**3159.0**	**4044.8**	**4497.4**
Stddev	12.7	314.	28.5	48.0	16.8
%RSD	.36873	.72131	.90140	1.1877	.37409
#1	3448.3	43732.	3190.8	4078.6	4516.6
#2	3431.9	43138.	3135.9	3989.8	4485.2
#3	3423.4	43611.	3150.2	4065.8	4490.5

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: S4 Acquired: 6/17/2025 12:16:21 Type: Cal
Method: METHOD 6010D, 200.7(v6) Mode: IR Corr. Factor: 1.000000
User: admin 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	.28730	.76613	2.3961	.62038	.84397	1.0349	41.655	4.6336
Stddev	.00036	.00190	.0051	.00156	.00149	.0046	.326	.0697
%RSD	.12464	.24761	.21317	.25141	.17624	.44294	.78360	1.5039
#1	.28767	.76423	2.3902	.61870	.84362	1.0323	41.330	4.6905
#2	.28695	.76616	2.3995	.62179	.84560	1.0402	41.983	4.6543
#3	.28729	.76802	2.3986	.62064	.84269	1.0323	41.653	4.5558

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	11.552	3.1472	.29314	2.7576	5.6941	.17796	1.8924	.54842
Stddev	.005	.0150	.00098	.0032	.0619	.00097	.0118	.00341
%RSD	.04402	.47680	.33290	.11526	1.0863	.54515	.62416	.62233
#1	11.548	3.1389	.29228	2.7541	5.7388	.17695	1.8837	.54475
#2	11.558	3.1646	.29294	2.7603	5.7200	.17802	1.9059	.55150
#3	11.552	3.1382	.29420	2.7583	5.6235	.17889	1.8876	.54900

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.6786	.50881	22.488	.40055	4.8103	219.48	.45222	6.7780
Stddev	.0006	.00092	.090	.00202	.0295	1.03	.00075	.0692
%RSD	.03587	.18161	.40182	.50533	.61412	.46903	.16547	1.0212
#1	1.6792	.50775	22.521	.39872	4.7817	218.64	.45169	6.8294
#2	1.6785	.50927	22.557	.40273	4.8085	220.63	.45188	6.8053
#3	1.6781	.50942	22.386	.40021	4.8407	219.18	.45307	6.6993

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.8763	.24818	6.2509	.89327	1.9943	4.8969	57.112
Stddev	.0050	.00018	.0569	.00094	.0129	.0093	.424
%RSD	.12785	.07305	.91070	.10548	.64513	.19049	.74176
#1	3.8706	.24819	6.2887	.89229	1.9810	4.8876	56.725
#2	3.8795	.24799	6.2787	.89336	2.0067	4.9062	57.565
#3	3.8788	.24835	6.1855	.89417	1.9953	4.8968	57.047

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: S4 Acquired: 6/17/2025 12:16:21 Type: Cal
Method: METHOD 6010D, 200.7(v6) Mode: IR Corr. Factor: 1.000000
User: admin 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	3376.4	42700.	3151.9	3985.0	4324.2
Stddev	12.0	517.	23.1	43.4	13.5
%RSD	.35633	1.2106	.73324	1.0894	.31156
#1	3388.3	43268.	3156.2	4030.6	4335.0
#2	3364.3	42574.	3127.0	3980.3	4309.1
#3	3376.5	42257.	3172.6	3944.2	4328.5

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: S5 Acquired: 6/17/2025 12:20:43 Type: Cal
Method: METHOD 6010D, 200.7(v6) Mode: IR Corr. Factor: 1.000000
User: admin 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	.61217	1.5477	5.0107	1.2736	1.7272	2.1247	85.071	9.3506
Stddev	.00085	.0019	.0028	.0014	.0034	.0123	1.587	.1788
%RSD	.13839	.11949	.05505	.10701	.19560	.57795	1.8651	1.9124
#1	.61287	1.5483	5.0117	1.2731	1.7234	2.1132	83.276	9.1441
#2	.61241	1.5492	5.0129	1.2752	1.7285	2.1376	86.285	9.4526
#3	.61123	1.5456	5.0076	1.2726	1.7298	2.1233	85.653	9.4550

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	23.963	6.3904	.59727	5.7466	11.474	.36343	3.8901	1.1324
Stddev	.023	.0447	.00014	.0089	.206	.00179	.0508	.0153
%RSD	.09509	.69988	.02421	.15480	1.7952	.49308	1.3057	1.3519
#1	23.988	6.3702	.59733	5.7528	11.237	.36177	3.8397	1.1178
#2	23.956	6.4417	.59711	5.7506	11.571	.36319	3.9413	1.1484
#3	23.944	6.3593	.59738	5.7364	11.613	.36533	3.8894	1.1311

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.4870	1.0266	46.330	.83147	9.9979	451.80	.95376	13.795
Stddev	.0050	.0036	.847	.01522	.0650	12.62	.00117	.273
%RSD	.14370	.34760	1.8290	1.8304	.65042	2.7921	.12249	1.9764
#1	3.4915	1.0262	45.354	.81585	9.9343	438.28	.95433	13.481
#2	3.4880	1.0232	46.878	.84626	9.9952	463.25	.95452	13.938
#3	3.4816	1.0303	46.759	.83229	10.064	453.86	.95241	13.966

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7.9571	.52783	12.740	1.8526	4.1188	9.8553	115.94
Stddev	.0081	.00047	.266	.0019	.0567	.0624	.98
%RSD	.10155	.08894	2.0888	.10078	1.3759	.63322	.84278
#1	7.9506	.52777	12.434	1.8547	4.0662	9.8214	114.93
#2	7.9544	.52833	12.870	1.8521	4.1788	9.9273	116.88
#3	7.9661	.52740	12.917	1.8511	4.1114	9.8172	116.01

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: S5 Acquired: 6/17/2025 12:20:43 Type: Cal
Method: METHOD 6010D, 200.7(v6) Mode: IR Corr. Factor: 1.000000
User: admin 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	**3268.2**	**41667.**	**3070.2**	**3866.6**	**4088.7**
Stddev	5.0	223.	55.4	9.6	11.0
%RSD	.15306	.53541	1.8050	.24906	.26933
#1	3263.5	41585.	3130.4	3868.5	4076.0
#2	3273.5	41496.	3021.3	3856.2	4094.9
#3	3267.8	41919.	3058.9	3875.2	4095.2

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: ICV01 Acquired: 6/17/2025 12:25:15 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.879333**	**4.051495**	**3.886118**	**3.975694**	**4.134775**	**7.944982**
Stddev	.005422	.003596	.007071	.005280	.003848	.035866
%RSD	.1397649	.0887485	.1819553	.1328130	.0930538	.4514274
#1	3.880462	4.051944	3.883597	3.975002	4.134984	7.906468
#2	3.873435	4.047695	3.880653	3.981285	4.130828	7.951053
#3	3.884101	4.054844	3.894104	3.970793	4.138515	7.977425

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.174096**	**.2075246**	**1.972521**	**19.82175**	**.8156680**	**1.993102**
Stddev	.034342	.0020027	.002838	.05021	.0012872	.003368
%RSD	.4201351	.9650243	.1438736	.2532942	.1578115	.1689966
#1	8.134823	.2064672	1.975194	19.76394	.8153414	1.995767
#2	8.188980	.2098343	1.969543	19.84695	.8170871	1.989316
#3	8.198486	.2062723	1.972826	19.85437	.8145756	1.994222

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.045175**	**3.962061**	**2.008642**	**20.24289**	**1.995563**	**.9563283**
Stddev	.008008	.046648	.007092	.13984	.002631	.0018841
%RSD	.7661774	1.177355	.3530524	.6908279	.1318333	.1970140
#1	1.042408	3.908223	2.000735	20.08177	1.997120	.9584285
#2	1.054200	3.990420	2.014438	20.31410	1.992526	.9557697
#3	1.038918	3.987540	2.010754	20.33279	1.997044	.9547866

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**20.71066**	**2.012594**	F **2.019087**	**20.45330**	F **.0254471**	**4.002420**
Stddev	.10400	.011200	.007588	.09754	.0034932	.029198
%RSD	.5021557	.5564894	.3758317	.4768784	13.72736	.7295132
#1	20.68035	2.001947	2.027588	20.40642	.0221942	3.990298
#2	20.82645	2.011560	2.012996	20.56542	.0250081	4.035726
#3	20.62519	2.024275	2.016676	20.38804	.0291391	3.981235

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: ICV01 Acquired: 6/17/2025 12:25:15 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.009705	F .0424869	3.791165	3.985675	4.048246	F .0151796
Stddev	.003976	.0029811	.028493	.012233	.014944	.0017039
%RSD	.0991510	7.016473	.7515598	.3069302	.3691515	11.22523
#1	4.011664	.0456533	3.779748	3.996034	4.031050	.0149085
#2	4.005130	.0397344	3.823596	3.972179	4.058087	.0170028
#3	4.012322	.0420730	3.770152	3.988814	4.055602	.0136274

Elem	Sr4077
Units	ppm
Avg	F .0011753
Stddev	.0002303
%RSD	19.59692
#1	.0012930
#2	.0009099
#3	.0013230

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3453.619	42903.58	3156.979	4020.647	4475.477
Stddev	5.727	218.22	11.755	20.660	8.171
%RSD	.1658322	.5086375	.3723433	.5138384	.1825651
#1	3447.096	42863.27	3165.093	4006.828	4467.589
#2	3457.825	43139.15	3143.498	4044.397	4483.904
#3	3455.936	42708.32	3162.344	4010.716	4474.939

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: LLICV01 Acquired: 6/17/2025 12:41:46 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0197302**	**.0402477**	**.0125348**	**.0209381**	**.0543128**	**.0894522**
Stddev	.0015812	.0015836	.0009309	.0012985	.0012330	.0215288
%RSD	8.014321	3.934671	7.426243	6.201478	2.270101	24.06739
#1	.0206861	.0420559	.0125363	.0206062	.0557293	.0771037
#2	.0179051	.0395798	.0134650	.0223703	.0534811	.1143114
#3	.0205996	.0391075	.0116033	.0198378	.0537278	.0769416

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1009738**	F **.0064289**	F **.0057626**	**2.055588**	**.0097366**	**.0298433**
Stddev	.0005320	.0001392	.0001359	.014925	.0005452	.0000596
%RSD	.5269156	2.165771	2.357928	.7260734	5.599774	.1996190
#1	.1011134	.0063844	.0057166	2.040127	.0091158	.0298100
#2	.1014221	.0065849	.0056556	2.056723	.0101376	.0299120
#3	.1003859	.0063173	.0059155	2.069913	.0099563	.0298078

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0233276**	**.1104679**	**.0210641**	**2.129709**	**.0396608**	**.0106652**
Stddev	.0009371	.0150758	.0009691	.023990	.0004480	.0004774
%RSD	4.017294	13.64722	4.600584	1.126443	1.129496	4.476659
#1	.0226920	.1008905	.0208555	2.151326	.0400997	.0107538
#2	.0244038	.1026676	.0202163	2.133903	.0392043	.0110921
#3	.0228868	.1278457	.0221204	2.103899	.0396784	.0101496

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.843068**	**.0446728**	**.0414835**	**1.649751**	**.0204399**	**.1078346**
Stddev	.024345	.0027005	.0001040	.018661	.0014245	.0003130
%RSD	1.320871	6.045056	.2508307	1.131115	6.969007	.2902516
#1	1.836490	.0443460	.0413930	1.647460	.0194510	.1080013
#2	1.870025	.0421506	.0414602	1.669452	.0197961	.1080290
#3	1.822688	.0475218	.0415972	1.632343	.0220726	.1074736

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: LLICV01 Acquired: 6/17/2025 12:41:46 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1914851	.0214869	.3795816	.0381386	.0445279	F .0312849
Stddev	.0002466	.0034109	.0052875	.0003907	.0038137	.0077583
%RSD	.1287792	15.87452	1.392970	1.024401	8.564617	24.79897
#1	.1914302	.0208172	.3785028	.0385803	.0425488	.0366824
#2	.1912706	.0251830	.3853252	.0378384	.0489243	.0347782
#3	.1917546	.0184605	.3749167	.0379970	.0421107	.0223941

Elem	Sr4077
Units	ppm
Avg	.0214003
Stddev	.0001972
%RSD	.9215577
#1	.0214465
#2	.0211841
#3	.0215703

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3507.006	44518.85	3185.044	4126.803	4856.701
Stddev	3.361	174.36	27.673	20.063	5.338
%RSD	.0958305	.3916640	.8688445	.4861520	.1099118
#1	3503.898	44336.88	3192.188	4109.740	4851.929
#2	3506.546	44684.46	3154.500	4148.904	4862.465
#3	3510.572	44535.20	3208.446	4121.763	4855.708

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: ICB01 Acquired: 6/17/2025 12:46:18 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin 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	**.0030125**	**.0007505**	**.0003389**	**-.001536**	**.0040056**	**-.007322**	**-.000383**
Stddev	.0015945	.0022175	.0014109	.002429	.0038502	.011497	.001427
%RSD	52.92989	295.4512	416.3169	158.1768	96.11899	157.0302	372.7118
#1	.0035965	-.001569	-.000224	-.001116	.0065146	.003858	.001091
#2	.0012084	.000972	-.000703	.000656	-.000427	-.019112	-.001758
#3	.0042328	.002849	.001944	-.004148	.005930	-.006711	-.000481

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000398**	**-.000025**	**.0234290**	**.0007042**	**.0000703**	**.0004162**	**.0384526**
Stddev	.0000556	.000039	.0262198	.0010523	.0003950	.0005112	.0084376
%RSD	139.6131	155.2507	111.9115	149.4372	562.1816	122.8415	21.94287
#1	-.000008	-.000046	-.003690	.0018916	-.000350	.0010028	.0294867
#2	.000026	-.000049	.048646	.0003333	.000434	.0000659	.0462374
#3	.000101	.000020	.025330	-.000113	.000127	.0001799	.0396336

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004379**	**.0438695**	**.0007756**	**-.000023**	**.0192310**	**.0011215**	**.0028455**
Stddev	.0002798	.0361675	.0000925	.000478	.0133620	.0051313	.0006394
%RSD	63.88067	82.44347	11.92067	2112.878	69.48153	457.5344	22.47197
#1	.0001628	.0021080	.0008120	-.000444	.0287190	.0069671	.0026496
#2	.0004289	.0644763	.0008443	-.000121	.0039501	-.000963	.0035599
#3	.0007221	.0650241	.0006705	.000497	.0250240	-.002639	.0023269

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0166405**	**.0037589**	**.0047814**	**.0001976**	**-.001397**	**.0094198**	**.0021016**
Stddev	.0012333	.0022591	.0019562	.0001984	.001380	.0009980	.0011106
%RSD	7.411496	60.10038	40.91372	100.3874	98.73004	10.59517	52.84558
#1	.0163841	.0062985	.0036996	.0004225	.000160	.0094710	.0033823
#2	.0155556	.0019729	.0070396	.0001230	-.002466	.0103913	.0014047
#3	.0179819	.0030054	.0036049	.0000474	-.001886	.0083972	.0015177

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: ICB01 Acquired: 6/17/2025 12:46:18 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0026827	.0063715	.0001381
Stddev	.0034855	.0051354	.0002913
%RSD	129.9235	80.59941	210.8937
#1	.0011012	.0083071	.0002355
#2	.0002683	.0005496	-.000189
#3	.0066786	.0102579	.000368

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3500.488	44554.06	3198.330	4112.654	4888.282
Stddev	15.819	74.60	22.353	8.793	28.108
%RSD	.4519007	.1674452	.6988849	.2138123	.5750091
#1	3499.790	44591.82	3199.854	4122.235	4886.431
#2	3485.029	44468.13	3175.255	4110.773	4861.146
#3	3516.643	44602.23	3219.882	4104.953	4917.270

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CRI01 Acquired: 6/17/2025 12:50:42 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0193742**	**.0397557**	**.0116822**	**.0179859**	**.0524921**	**.1135448**
Stddev	.0009447	.0019044	.0012328	.0024298	.0016028	.0245477
%RSD	4.876175	4.790355	10.55320	13.50943	3.053455	21.61944
#1	.0199889	.0378131	.0102628	.0157960	.0524379	.0958481
#2	.0198472	.0398344	.0122973	.0205998	.0509170	.1032173
#3	.0182864	.0416195	.0124865	.0175620	.0541213	.1415690

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1036534**	F **.0064301**	F **.0057716**	**2.039425**	**.0093846**	**.0299695**
Stddev	.0002445	.0000740	.0000475	.002840	.0008040	.0001319
%RSD	.2358867	1.151067	.8234046	.1392704	8.567437	.4400297
#1	.1036331	.0064853	.0058199	2.036726	.0098207	.0298908
#2	.1034197	.0063460	.0057700	2.039163	.0084567	.0301217
#3	.1039075	.0064590	.0057249	2.042388	.0098763	.0298959

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0232468**	**.1032549**	**.0206006**	**2.153729**	**.0390558**	**.0107719**
Stddev	.0000953	.0106221	.0006005	.025553	.0002627	.0007317
%RSD	.4098874	10.28727	2.914925	1.186444	.6725888	6.792710
#1	.0232313	.1075139	.0207386	2.183012	.0393360	.0110525
#2	.0231603	.0911642	.0211200	2.135948	.0390164	.0099414
#3	.0233490	.1110865	.0199431	2.142228	.0388151	.0113218

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.872079**	**.0432292**	**.0417540**	**1.659478**	**.0179149**	**.1063155**
Stddev	.016826	.0046362	.0002643	.011004	.0008883	.0019550
%RSD	.8988086	10.72474	.6328794	.6631013	4.958199	1.838881
#1	1.872601	.0391039	.0419589	1.664609	.0172870	.1053519
#2	1.854997	.0423370	.0414558	1.646846	.0175264	.1050293
#3	1.888638	.0482467	.0418473	1.666980	.0189312	.1085653

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CRI01 Acquired: 6/17/2025 12:50:42 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1919522	.0173160	.3831138	.0376811	.0420374	.0193606
Stddev	.0001866	.0042883	.0050494	.0008265	.0008352	.0043852
%RSD	.0972159	24.76523	1.317983	2.193330	1.986674	22.65002
#1	.1921639	.0207480	.3885022	.0370252	.0413152	.0149913
#2	.1918118	.0125087	.3784909	.0374088	.0418451	.0193290
#3	.1918808	.0186912	.3823481	.0386094	.0429519	.0237615

Elem	Sr4077
Units	ppm
Avg	.0214000
Stddev	.0001984
%RSD	.9270603
#1	.0215184
#2	.0211710
#3	.0215106

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3503.737	44518.81	3163.739	4123.116	4857.528
Stddev	8.527	280.27	13.331	5.332	18.218
%RSD	.2433570	.6295480	.4213547	.1293226	.3750545
#1	3494.419	44711.81	3162.424	4123.127	4837.347
#2	3505.640	44197.33	3177.679	4117.779	4862.478
#3	3511.151	44647.27	3151.115	4128.443	4872.760

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: ICSA01 Acquired: 6/17/2025 13:11:11 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003705**	**.0141458**	**.0055005**	**.0005823**	**.0211756**	**246.7200**
Stddev	.003107	.0024151	.0013954	.0074406	.0036124	1.0265
%RSD	83.87297	17.07298	25.36920	1277.843	17.05915	.4160572
#1	-.001748	.0131998	.0044035	-.007435	.0176628	247.8953
#2	-.002079	.0168908	.0050268	.007267	.0248799	246.2650
#3	-.007288	.0123470	.0070710	.001915	.0209839	245.9996

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0054969**	**.0002769**	**-.001653**	**238.2526**	**.0481675**	**.0219515**
Stddev	.0008332	.0000944	.000066	.7086	.0008090	.0004186
%RSD	15.15793	34.09204	3.997593	.2974080	1.679612	1.906738
#1	.0046099	.0003229	-.001718	239.0462	.0472574	.0223388
#2	.0056177	.0001683	-.001656	237.6834	.0488051	.0215075
#3	.0062632	.0003395	-.001586	238.0280	.0484399	.0220083

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.008459**	**102.8050**	**.0059930**	**245.4287**	**.0020953**	**.0046057**
Stddev	.000616	.5248	.0007151	1.4287	.0013759	.0008961
%RSD	7.282220	.5104868	11.93204	.5821411	65.66435	19.45677
#1	-.009147	103.3632	.0051773	246.1826	.0024150	.0042540
#2	-.008272	102.7303	.0065121	243.7809	.0032831	.0039388
#3	-.007958	102.3216	.0062894	246.3226	.0005877	.0056243

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1163653**	**.0017813**	**.0103255**	**.0005776**	**.0077533**	F **.0411546**
Stddev	.0073386	.0056065	.0002004	.0006183	.0030250	.0011090
%RSD	6.306535	314.7365	1.940607	107.0386	39.01597	2.694767
#1	.1080790	.0049404	.0105486	.0009676	.0111630	.0404153
#2	.1220440	.0050954	.0102672	-.000135	.0067053	.0424298
#3	.1189730	-.004692	.0101607	.000901	.0053916	.0406187

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: ICSA01 Acquired: 6/17/2025 13:11:11 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.008871	.0181528	-.003728	.0050435	.0107274	-.003504
Stddev	.000379	.0047475	.002583	.0030643	.0017732	.004045
%RSD	4.267509	26.15305	69.29632	60.75666	16.52954	115.4442
#1	-.008735	.0236219	-.001764	.0017692	.0093774	-.002928
#2	-.009299	.0157431	-.002766	.0078421	.0100693	-.007807
#3	-.008580	.0150934	-.006655	.0055193	.0127356	.000222

Elem	Sr4077
Units	ppm
Avg	.0999828
Stddev	.0005198
%RSD	.5198455
#1	.1002365
#2	.0993849
#3	.1003271

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3193.571	39278.92	3052.420	3725.377	3961.631
Stddev	9.186	222.25	37.217	21.198	9.488
%RSD	.2876556	.5658271	1.219277	.5690219	.2394973
#1	3203.700	39076.77	3019.291	3706.316	3968.270
#2	3191.233	39516.91	3092.691	3748.207	3965.858
#3	3185.779	39243.08	3045.276	3721.608	3950.764

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: ICSAB01 Acquired: 6/17/2025 13:22:04 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0948043**	**.0973854**	**.0530686**	**.0506694**	**.6299909**	**250.5020**
Stddev	.0043349	.0026104	.0003246	.0031851	.0028988	.1041
%RSD	4.572467	2.680438	.6116412	6.286056	.4601274	.0415635
#1	.0982382	.0973263	.0533761	.0543459	.6301855	250.5644
#2	.0962412	.0948051	.0527293	.0489154	.6269997	250.3818
#3	.0899333	.1000248	.0531003	.0487468	.6327875	250.5598

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5232721**	**.5243625**	**1.017303**	**242.4944**	**.5642554**	**.5221870**
Stddev	.0010646	.0042200	.001320	.1435	.0017161	.0008454
%RSD	.2034477	.8047935	.1297272	.0591854	.3041391	.1618959
#1	.5230866	.5209899	1.017529	242.4412	.5662285	.5228986
#2	.5244172	.5290948	1.015884	242.6569	.5634275	.5212525
#3	.5223125	.5230030	1.018494	242.3850	.5631101	.5224098

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4924850**	**104.2141**	**.5093427**	**248.8037**	**1.002386**	**.1732658**
Stddev	.0050638	.1046	.0024972	.7074	.001018	.0012493
%RSD	1.028222	.1003814	.4902740	.2843193	.1015893	.7210136
#1	.4903040	104.1956	.5115257	249.1915	1.002452	.1746922
#2	.4982739	104.3267	.5098828	249.2325	1.001337	.1727385
#3	.4888770	104.1199	.5066197	247.9873	1.003370	.1723666

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1219016**	**.5025043**	**1.053614**	**-.002544**	F **.0187230**	F **1.008938**
Stddev	.0178682	.0075588	.001553	.000498	.0035889	.005139
%RSD	14.65786	1.504222	.1473565	19.55796	19.16837	.5093557
#1	.1077313	.5045803	1.053681	-.002039	.0209477	1.004445
#2	.1419741	.4941244	1.052029	-.003034	.0145827	1.014542
#3	.1159992	.5088082	1.055132	-.002560	.0206385	1.007827

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: ICSAB01 Acquired: 6/17/2025 13:22:04 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .9969571	.0272436	F .8830533	F 1.014534	F 1.009466	-.004230
Stddev	.0007734	.0047403	.0077937	.001142	.002677	.001967
%RSD	.0775736	17.39975	.8825859	.1125292	.2652029	46.48890
#1	.9964011	.0310612	.8787134	1.015723	1.009648	-.004145
#2	.9978403	.0287318	.8920509	1.013446	1.006703	-.006238
#3	.9966299	.0219377	.8783957	1.014431	1.012048	-.002307

Elem	Sr4077
Units	ppm
Avg	F .1014309
Stddev	.0005797
%RSD	.5714698
#1	.1018384
#2	.1016870
#3	.1007673

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3235.935	39903.21	3097.254	3771.075	4017.123
Stddev	4.745	366.89	18.082	22.444	6.625
%RSD	.1466369	.9194544	.5837984	.5951693	.1649278
#1	3241.410	39483.10	3090.815	3745.515	4024.739
#2	3233.025	40160.58	3083.273	3787.565	4012.689
#3	3233.369	40065.95	3117.674	3780.146	4013.940

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: ICSA01DLX20 Acquired: 6/17/2025 13:28:02 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin 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	**-.002681**	**.0056287**	**.0005139**	**-.002720**	**.0041294**	**12.88931**	**-.000517**
Stddev	.005736	.0008999	.0021302	.003345	.0018372	.01463	.000633
%RSD	213.9409	15.98810	414.5158	122.9733	44.49036	.1134919	122.4259
#1	-.004729	.0064946	-.001801	-.005035	.0053705	12.89483	-.001239
#2	-.007112	.0056932	.002391	-.004242	.0049989	12.87272	-.000258
#3	.003797	.0046982	.000951	.001115	.0020189	12.90037	-.000055

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000032**	**-.000158**	**12.63209**	**.0025681**	**.0054850**	**-.000329**	**5.521515**
Stddev	.0000321	.000078	.04192	.0007438	.0004022	.000167	.023422
%RSD	989.3286	49.76620	.3318686	28.96404	7.333147	50.83632	.4242027
#1	.0000168	-.000077	12.68041	.0027239	.0052102	-.000269	5.548097
#2	-.000033	-.000233	12.61047	.0032217	.0052981	-.000200	5.503905
#3	.000026	-.000163	12.60540	.0017587	.0059466	-.000518	5.512543

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002310**	**13.32312**	**-.000491**	**.0010230**	**.0087497**	**.0028064**	**.0012109**
Stddev	.0008163	.11092	.000536	.0009488	.0163447	.0108494	.0002347
%RSD	353.3671	.8325550	109.1574	92.74417	186.8040	386.5931	19.37737
#1	-.000213	13.45096	-.000968	.0011970	.0004794	.0152654	.0009417
#2	.001173	13.26603	-.000596	-.000001	.0275767	-.004559	.0013191
#3	-.000267	13.25237	.000090	.001873	-.001807	-.002287	.0013719

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0061058**	**.0019505**	**.0032805**	**-.002303**	**.0028959**	**.0044613**	**.0002608**
Stddev	.0002672	.0009806	.0007369	.000195	.0001802	.0009393	.0004564
%RSD	4.376359	50.27401	22.46377	8.485302	6.221376	21.05430	175.0176
#1	.0064048	.0027246	.0040214	-.002079	.0030011	.0035163	-.000238
#2	.0058902	.0008478	.0025477	-.002393	.0026879	.0044728	.000657
#3	.0060225	.0022790	.0032724	-.002438	.0029988	.0053948	.000364

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: ICSA01DLX20 Acquired: 6/17/2025 13:28:02 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0009860	-.016024	.0052277
Stddev	.0009987	.001665	.0001344
%RSD	101.2841	10.38998	2.571315
#1	-.000073	-.017297	.0052404
#2	.001121	-.014140	.0050874
#3	.001910	-.016636	.0053554

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3497.407	44054.40	3176.612	4109.832	4743.774
Stddev	11.223	353.41	19.283	25.339	5.550
%RSD	.3209032	.8022132	.6070345	.6165355	.1169926
#1	3510.366	43695.84	3154.521	4081.640	4750.147
#2	3490.885	44402.43	3185.242	4117.152	4740.004
#3	3490.969	44064.93	3190.073	4130.706	4741.172

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: ICSAB01DLX20 Acquired: 6/17/2025 13:35:13 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin 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	.0034646	.0064977	.0032758	-.001432	.0331312	12.55715	.0253812
Stddev	.0019859	.0022038	.0009883	.002904	.0015998	.04374	.0010443
%RSD	57.31929	33.91612	30.17008	202.8592	4.828604	.3483135	4.114518
#1	.0040914	.0076333	.0030460	-.004388	.0346359	12.58338	.0265756
#2	.0050615	.0039577	.0024226	-.001324	.0314509	12.58141	.0249281
#3	.0012410	.0079021	.0043587	.001417	.0333069	12.50666	.0246400

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0271594	.0482236	12.35394	.0287157	.0294438	.0273048	5.351570
Stddev	.0003480	.0000530	.03993	.0003537	.0004112	.0003673	.019861
%RSD	1.281265	.1099637	.3232437	1.231603	1.396476	1.345183	.3711179
#1	.0275545	.0482100	12.39938	.0283544	.0294464	.0276265	5.334115
#2	.0268981	.0482821	12.33803	.0290612	.0298537	.0269046	5.347415
#3	.0270257	.0481786	12.32442	.0287317	.0290314	.0273832	5.373179

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0271922	13.15786	.0482351	.0085364	-.003461	.0241786	.0521965
Stddev	.0006596	.12045	.0006154	.0001182	.007924	.0076501	.0005410
%RSD	2.425572	.9153953	1.275799	1.385049	228.9642	31.63986	1.036457
#1	.0268991	13.28929	.0480999	.0083999	-.004212	.0236638	.0518267
#2	.0279476	13.05276	.0489068	.0086067	.004812	.0167990	.0528174
#3	.0267301	13.13152	.0476985	.0086026	-.010983	.0320731	.0519453

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0029826	.0029720	.0535306	.0496533	.0013601	.0532524	.0499419
Stddev	.0003611	.0008239	.0008458	.0003272	.0017814	.0005955	.0013026
%RSD	12.10606	27.72171	1.579958	.6589212	130.9734	1.118306	2.608163
#1	.0033973	.0038236	.0543694	.0495376	-.000595	.0531059	.0506881
#2	.0027376	.0021789	.0535443	.0493997	.002891	.0527437	.0506998
#3	.0028131	.0029135	.0526780	.0500226	.001784	.0539075	.0484379

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: ICSAB01DLX20 Acquired: 6/17/2025 13:35:13 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0519060	-.015341	.0050368
Stddev	.0015927	.002212	.0001808
%RSD	3.068350	14.41568	3.588635
#1	.0505993	-.017800	.0052374
#2	.0536801	-.014710	.0049866
#3	.0514387	-.013514	.0048865

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3496.911	44291.04	3158.729	4115.718	4753.523
Stddev	5.976	183.97	23.802	28.391	4.435
%RSD	.1709061	.4153754	.7535249	.6898226	.0932959
#1	3503.768	44357.58	3131.276	4139.155	4753.386
#2	3492.812	44083.06	3171.336	4084.148	4749.159
#3	3494.151	44432.49	3173.576	4123.853	4758.025

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCV01 Acquired: 6/17/2025 13:40:12 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin 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	**4.784505**	**4.911499**	**4.788888**	**4.859942**	**4.871255**	**9.699720**	**9.771120**
Stddev	.002553	.008962	.013735	.007105	.008130	.028090	.031932
%RSD	.0533667	.1824781	.2868022	.1461988	.1668901	.2895935	.3268047
#1	4.783513	4.909743	4.788873	4.860556	4.864468	9.694160	9.744781
#2	4.782596	4.903545	4.775161	4.852550	4.869033	9.730175	9.806636
#3	4.787405	4.921210	4.802630	4.866720	4.880265	9.674827	9.761943

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2499363**	**2.415679**	**24.32687**	**.9828058**	**2.403719**	**1.246311**	**4.846489**
Stddev	.0019113	.002924	.07364	.0016413	.002874	.009284	.011612
%RSD	.7647007	.1210565	.3027218	.1670053	.1195650	.7449362	.2395972
#1	.2486799	2.413533	24.24368	.9819461	2.401397	1.239758	4.838272
#2	.2521358	2.414495	24.38372	.9846984	2.402826	1.256935	4.859773
#3	.2489933	2.419010	24.35322	.9817730	2.406933	1.242239	4.841421

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.428938**	**24.10687**	**2.409497**	**1.231171**	**24.79542**	**2.419627**	**2.430530**
Stddev	.003017	.26679	.001121	.003942	.18850	.022692	.005240
%RSD	.1241939	1.106708	.0465415	.3201458	.7602357	.9378285	.2155754
#1	2.425778	24.04092	2.408483	1.226640	24.65593	2.407159	2.426638
#2	2.429247	24.40045	2.409307	1.233807	25.00987	2.405902	2.436488
#3	2.431788	23.87924	2.410701	1.233067	24.72044	2.445819	2.428466

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.05531**	**4.868345**	**4.997659**	**4.871813**	**4.784436**	**4.928310**	**4.847473**
Stddev	.27112	.002367	.039986	.006678	.017321	.038160	.004658
%RSD	1.082082	.0486289	.8000861	.1370796	.3620364	.7742943	.0960856
#1	24.82909	4.871072	4.969263	4.866250	4.770186	4.899831	4.847860
#2	25.35583	4.866817	5.043386	4.869969	4.779407	4.971667	4.842634
#3	24.98101	4.867147	4.980328	4.879219	4.803716	4.913430	4.851925

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCV01 Acquired: 6/17/2025 13:40:12 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	4.860574	4.866048	4.903286
Stddev	.001308	.007690	.021594
%RSD	.0269007	.1580339	.4404070
#1	4.859086	4.861410	4.887704
#2	4.861093	4.861809	4.927936
#3	4.861542	4.874924	4.894219

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3373.121	42570.80	3104.334	3986.297	4333.721
Stddev	4.496	94.85	18.891	7.664	4.753
%RSD	.1332839	.2228144	.6085399	.1922499	.1096680
#1	3378.245	42664.01	3121.360	3994.667	4339.165
#2	3369.837	42574.01	3084.012	3984.599	4331.597
#3	3371.282	42474.38	3107.631	3979.625	4330.400

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCB01 Acquired: 6/17/2025 13:48:41 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin 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	**.0023889**	**.0006605**	**-.000433**	**-.000201**	**.0010245**	**-.018698**	**.0000796**
Stddev	.0020299	.0008434	.000319	.002473	.0033036	.014632	.0010652
%RSD	84.97179	127.6963	73.62063	1233.184	322.4607	78.25275	1338.837
#1	.0003502	.0009913	-.000228	-.002030	.0015434	-.006099	-.000812
#2	.0044098	-.000298	-.000271	-.001185	-.002508	-.034746	-.000208
#3	.0024066	.001288	-.000801	.002613	.004038	-.015249	.001259

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000033**	**.0000233**	**.0209922**	**.0005217**	**.0001478**	**-.000160**	**.0052126**
Stddev	.000071	.0000555	.0184468	.0004710	.0001189	.000313	.0104065
%RSD	217.5028	238.4274	87.87475	90.28313	80.47866	195.7818	199.6421
#1	-.000044	-.000041	.0029344	-.000015	.0001879	-.000403	.0143766
#2	.000043	.000052	.0398049	.000867	.0000140	.000193	-.006101
#3	-.000097	.000058	.0202373	.000713	.0002415	-.000268	.007362

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008425**	**.0310227**	**.0011286**	**.0008734**	**.0081059**	**.0079877**	**.0005199**
Stddev	.0004209	.0344754	.0005391	.0004480	.0096457	.0079984	.0003996
%RSD	49.95964	111.1296	47.76182	51.28850	118.9961	100.1343	76.85889
#1	.0004630	.0484498	.0005125	.0013710	.0055543	-.001185	.0009813
#2	.0012952	-.008687	.0015131	.0005023	.0187710	.013508	.0002923
#3	.0007692	.053305	.0013603	.0007469	-.000007	.011640	.0002861

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0189673**	**.0021510**	**.0048023**	**.0010239**	**.0009563**	**.0080552**	**.0026241**
Stddev	.0014964	.0022769	.0012606	.0004217	.0036043	.0020186	.0008471
%RSD	7.889494	105.8508	26.25016	41.18871	376.9112	25.05931	32.28086
#1	.0197458	.0030479	.0033941	.0009361	-.000116	.0058927	.0028093
#2	.0199141	-.000438	.0058257	.0014826	-.001990	.0098897	.0016997
#3	.0172422	.003843	.0051869	.0006529	.004975	.0083830	.0033632

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCB01 Acquired: 6/17/2025 13:48:41 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0023689	-.004576	.0001303
Stddev	.0047246	.004360	.0000416
%RSD	199.4399	95.28475	31.96046
#1	.0077018	.000283	.0000961
#2	-.001294	-.005863	.0001181
#3	.000699	-.008147	.0001766

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3536.451	44982.00	3194.159	4155.348	4951.549
Stddev	5.304	253.52	5.635	29.011	7.685
%RSD	.1499757	.5636123	.1764108	.6981535	.1552138
#1	3530.337	44891.27	3193.945	4133.809	4944.306
#2	3539.816	45268.40	3199.897	4188.336	4950.731
#3	3539.199	44786.32	3188.633	4143.899	4959.611

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2264-04 Acquired: 6/17/2025 13:53:16 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.010372**	**.0052444**	**.0435573**	**-.004509**	**.0050911**	**.0253747**	**.0108326**
Stddev	.000727	.0021208	.0016474	.001625	.0020237	.0302691	.0013276
%RSD	7.007576	40.43930	3.782194	36.03630	39.74937	119.2885	12.25593
#1	-.009578	.0032511	.0416868	-.005950	.0055626	.0022051	.0118862
#2	-.011005	.0050090	.0447924	-.002748	.0028733	.0142969	.0112702
#3	-.010533	.0074730	.0441927	-.004829	.0068375	.0596221	.0093414

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000146**	**.0000356**	**28.82567**	**.0012579**	**.0106987**	**2.507506**	**1.397798**
Stddev	.000062	.0000586	.05991	.0007653	.0001562	.011438	.049328
%RSD	42.17122	164.3487	.2078524	60.83516	1.459516	.4561345	3.528949
#1	-.000148	-.000003	28.86576	.0021152	.0105213	2.518230	1.412648
#2	-.000207	.000007	28.85446	.0010147	.0107596	2.508820	1.437994
#3	-.000084	.000103	28.75680	.0006438	.0108152	2.495469	1.342751

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0593270**	**4.654325**	**.0026161**	**.0004289**	**109.5145**	**.0110860**	**.4735454**
Stddev	.0006706	.055843	.0001224	.0003459	1.3286	.0018049	.0021113
%RSD	1.130378	1.199813	4.677705	80.65249	1.213133	16.28105	.4458536
#1	.0591669	4.589856	.0026707	.0006323	107.9854	.0091573	.4719633
#2	.0600632	4.685425	.0024759	.0000295	110.3863	.0113665	.4759428
#3	.0587509	4.687694	.0027016	.0006248	110.1717	.0127343	.4727300

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.78070**	**1.668411**	**.0311214**	**-.003518**	**4.492871**	**3.731658**	**.0038894**
Stddev	.01174	.002590	.0007044	.000364	.007622	.018161	.0006054
%RSD	.1088800	.1552234	2.263460	10.34505	.1696444	.4866624	15.56516
#1	10.76721	1.666795	.0308332	-.003934	4.487218	3.744448	.0040389
#2	10.78635	1.667040	.0306067	-.003360	4.489856	3.739654	.0044060
#3	10.78855	1.671398	.0319242	-.003259	4.501539	3.710871	.0032233

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2264-04 Acquired: 6/17/2025 13:53:16 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0023964	-.006562	.2039061
Stddev	.0020513	.008409	.0011199
%RSD	85.59875	128.1540	.5492200
#1	.0022703	.001662	.2051852
#2	.0045078	-.006202	.2034312
#3	.0004110	-.015145	.2031019

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3443.799	43302.50	3182.833	4020.749	4462.491
Stddev	2.185	280.17	9.056	19.927	9.108
%RSD	.0634595	.6470021	.2845180	.4955934	.2040952
#1	3441.667	43538.04	3187.507	4038.600	4456.490
#2	3446.034	43376.80	3188.596	4024.396	4472.971
#3	3443.696	42992.68	3172.395	3999.250	4458.013

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2264-04LX5 Acquired: 6/17/2025 14:02:28 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000794**	**.0016684**	**.0071836**	**-.001505**	**.0040416**	**-.018832**	**.0009427**
Stddev	.001829	.0016422	.0012076	.004108	.0007675	.015869	.0007106
%RSD	230.5112	98.43258	16.81091	272.9372	18.98949	84.26619	75.37874
#1	-.000034	.0016381	.0058955	-.005830	.0048549	-.000525	.0004053
#2	.000534	.0033254	.0073652	-.001029	.0039396	-.027297	.0017484
#3	-.002880	.0000415	.0082903	.002344	.0033301	-.028673	.0006744

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000078**	**-.000015**	**5.768921**	**-.000271**	**.0032070**	**.5137947**	**.2662599**
Stddev	.000051	.000025	.024875	.000784	.0001036	.0059299	.0146248
%RSD	64.51505	168.4061	.4311855	289.5568	3.231192	1.154139	5.492660
#1	-.000115	-.000027	5.795722	-.001135	.0031651	.5204253	.2808935
#2	-.000099	-.000031	5.764467	.000396	.0031309	.5089996	.2662422
#3	-.000021	.000014	5.746575	-.000074	.0033251	.5119592	.2516440

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0123096**	**.9359203**	**.0008563**	**.0000719**	**22.06628**	**.0073715**	**.0931215**
Stddev	.0001526	.0155270	.0005442	.0007245	.28573	.0079319	.0005775
%RSD	1.239563	1.659012	63.54928	1007.325	1.294891	107.6018	.6202012
#1	.0123081	.9421041	.0014846	-.000741	22.38264	.0136106	.0927041
#2	.0121578	.9474026	.0005308	.000309	21.82698	-.001555	.0937806
#3	.0124630	.9182541	.0005536	.000648	21.98922	.010059	.0928797

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.819365**	**.3148889**	**.0071143**	**-.000879**	**.8569475**	**.7693860**	**.0009227**
Stddev	.020407	.0018536	.0008927	.000130	.0038283	.0076973	.0015192
%RSD	1.121648	.5886631	12.54831	14.73262	.4467427	1.000442	164.6601
#1	1.842102	.3169553	.0074451	-.001028	.8613433	.7781162	.0025064
#2	1.802637	.3143390	.0061033	-.000792	.8543450	.7635767	.0007842
#3	1.813358	.3133725	.0077943	-.000817	.8551541	.7664652	-.000523

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2264-04LX5 Acquired: 6/17/2025 14:02:28 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0006137	-.003869	.0410317
Stddev	.0046130	.003649	.0001587
%RSD	751.6918	94.29261	.3867439
#1	.0044236	-.003067	.0412118
#2	-.004515	-.007852	.0409710
#3	.001933	-.000689	.0409123

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3529.597	44891.03	3243.562	4142.836	4765.500
Stddev	12.423	252.38	30.468	38.351	23.044
%RSD	.3519667	.5622090	.9393368	.9257233	.4835504
#1	3515.648	45060.82	3219.303	4174.770	4739.839
#2	3539.471	45011.27	3277.758	4153.440	4784.426
#3	3533.672	44601.01	3233.624	4100.299	4772.235

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2264-04MS Acquired: 6/17/2025 14:06:50 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7602605	1.921893	.9662696	1.867495	.7949657	1.962986	.2107016
Stddev	.0006898	.001177	.0017450	.002355	.0004022	.016290	.0019568
%RSD	.0907349	.0612254	.1805890	.1260863	.0505977	.8298599	.9287132
#1	.7610360	1.921979	.9657396	1.866620	.7952601	1.979587	.2119979
#2	.7600299	1.920676	.9648511	1.870162	.7951297	1.962346	.2084507
#3	.7597154	1.923025	.9682181	1.865703	.7945074	1.947026	.2116563

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2000125	.1942991	30.13039	.4057735	.2073132	2.825658	4.459047
Stddev	.0014270	.0001218	.09460	.0012589	.0002109	.020907	.038405
%RSD	.7134374	.0626678	.3139702	.3102405	.1017504	.7398833	.8612923
#1	.1983800	.1941780	30.19850	.4069012	.2070737	2.802578	4.488923
#2	.2006353	.1944216	30.02237	.4044153	.2073947	2.831066	4.415727
#3	.2010221	.1942978	30.17029	.4060040	.2074712	2.843329	4.472491

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2583242	6.651441	.4950224	.0363888	112.0203	.3133189	.6815104
Stddev	.0018231	.079981	.0004544	.0006063	.1053	.0056074	.0045022
%RSD	.7057507	1.202460	.0917870	1.666189	.0939978	1.789682	.6606168
#1	.2596688	6.616928	.4954248	.0363937	112.1340	.3102924	.6763128
#2	.2562491	6.594512	.4951129	.0369927	111.9261	.3098751	.6840150
#3	.2590548	6.742884	.4945296	.0357801	112.0008	.3197893	.6842032

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.88149	7.550219	.3038360	.4034430	4.514667	4.651575	.6773310
Stddev	.03324	.023119	.0043148	.0011055	.004535	.039092	.0012825
%RSD	.1519255	.3062072	1.420102	.2740199	.1004509	.8404137	.1893417
#1	21.90185	7.540853	.2988765	.4022515	4.509581	4.608544	.6759066
#2	21.84312	7.533252	.3067279	.4044354	4.518288	4.661280	.6776921
#3	21.89949	7.576551	.3059037	.4036421	4.516132	4.684900	.6783941

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2264-04MS Acquired: 6/17/2025 14:06:50 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2050264	.1715873	.4009260
Stddev	.0018232	.0069432	.0021448
%RSD	.8892527	4.046454	.5349489
#1	.2068204	.1647228	.4011005
#2	.2031754	.1714324	.3986993
#3	.2050832	.1786066	.4029781

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3454.554	43325.00	3174.119	4014.988	4458.223
Stddev	11.774	472.67	8.306	23.092	13.117
%RSD	.3408353	1.090991	.2616732	.5751492	.2942312
#1	3467.496	42780.04	3165.549	3991.677	4471.356
#2	3451.693	43623.58	3182.133	4015.432	4458.194
#3	3444.474	43571.39	3174.676	4037.855	4445.121

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2264-04MSD Acquired: 6/17/2025 14:11:23 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7534879	1.903068	.9545787	1.856147	.7867443	1.968819	.2082236
Stddev	.0015745	.003044	.0025319	.007087	.0035617	.031194	.0023858
%RSD	.2089543	.1599422	.2652328	.3818065	.4527143	1.584398	1.145797
#1	.7534015	1.901317	.9565414	1.864311	.7884737	1.983972	.2086906
#2	.7551037	1.901304	.9517209	1.851583	.7826481	1.989542	.2103414
#3	.7519584	1.906583	.9554738	1.852546	.7891111	1.932943	.2056388

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1945179	.1926310	30.11807	.4028750	.2051658	2.755629	4.424077
Stddev	.0001240	.0002812	.04975	.0026916	.0002904	.004696	.015454
%RSD	.0637460	.1460045	.1651709	.6680909	.1415569	.1704322	.3493084
#1	.1945598	.1929557	30.11069	.3997923	.2054651	2.753054	4.441018
#2	.1946156	.1924755	30.17110	.4047591	.2048852	2.761050	4.420463
#3	.1943784	.1924619	30.07243	.4040735	.2051471	2.752784	4.410751

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2619027	6.652626	.4908746	.0355958	110.6388	.3100397	.6765678
Stddev	.0005703	.075034	.0006963	.0001774	1.1173	.0012892	.0010812
%RSD	.2177719	1.127879	.1418406	.4984941	1.009873	.4158231	.1598063
#1	.2622947	6.732735	.4916077	.0357757	109.9926	.3104082	.6767688
#2	.2612484	6.641153	.4907939	.0355910	111.9289	.3086064	.6775344
#3	.2621651	6.583989	.4902222	.0354209	109.9948	.3111046	.6754002

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.62884	7.503612	.2956318	.3997325	4.552768	4.532977	.6730652
Stddev	.13977	.007149	.0030793	.0006774	.012014	.016860	.0017449
%RSD	.6462108	.0952807	1.041593	.1694543	.2638864	.3719354	.2592449
#1	21.59843	7.505920	.2924179	.3996941	4.562021	4.524735	.6746196
#2	21.78131	7.509322	.2985560	.3990751	4.539190	4.552372	.6733982
#3	21.50678	7.495593	.2959214	.4004282	4.557093	4.521822	.6711778

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2264-04MSD Acquired: 6/17/2025 14:11:23 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2035181	.1697208	.3975948
Stddev	.0024281	.0063503	.0016397
%RSD	1.193056	3.741614	.4124148
#1	.2063091	.1623884	.3980821
#2	.2018918	.1733241	.3989356
#3	.2023533	.1734497	.3957666

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3444.053	42723.87	3197.242	3970.887	4453.124
Stddev	3.951	296.38	19.544	17.362	7.977
%RSD	.1147320	.6937141	.6112838	.4372275	.1791345
#1	3446.079	42833.22	3200.869	3961.722	4455.189
#2	3439.500	42388.35	3176.138	3960.028	4444.318
#3	3446.581	42950.05	3214.718	3990.911	4459.866

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2264-04A Acquired: 6/17/2025 14:15:51 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7416038	1.876852	.9537454	1.830515	.7869084	1.957835	.2078045
Stddev	.0009682	.001378	.0011090	.006993	.0016887	.021742	.0019258
%RSD	.1305503	.0734113	.1162803	.3820219	.2146032	1.110496	.9267578
#1	.7427126	1.875740	.9546843	1.822792	.7853742	1.946574	.2075936
#2	.7409255	1.878394	.9525218	1.836419	.7866332	1.944035	.2098271
#3	.7411734	1.876423	.9540301	1.832333	.7887179	1.982898	.2059928

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1946927	.1897911	30.00752	.3964503	.2025142	2.761884	4.442980
Stddev	.0019280	.0003725	.14274	.0014567	.0003826	.025568	.025087
%RSD	.9902774	.1962459	.4756905	.3674443	.1889147	.9257338	.5646444
#1	.1925957	.1902074	29.95227	.3977267	.2029494	2.734289	4.454796
#2	.1950936	.1896765	30.16963	.3948633	.2023624	2.766593	4.414167
#3	.1963887	.1894894	29.90067	.3967608	.2022309	2.784769	4.459978

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2555092	6.602221	.4839292	.0682359	109.5583	.3073283	.6709679
Stddev	.0002702	.040803	.0015843	.0011715	.8778	.0045623	.0018320
%RSD	.1057395	.6180197	.3273893	1.716832	.8012132	1.484514	.2730438
#1	.2552048	6.555152	.4857337	.0686073	110.0816	.3098654	.6689246
#2	.2557205	6.623943	.4827663	.0669237	108.5449	.3100582	.6724640
#3	.2556023	6.627568	.4832876	.0691767	110.0484	.3020614	.6715150

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.35267	7.410567	.2947303	.4010046	4.426592	4.585282	.6902393
Stddev	.10036	.017434	.0044006	.0001387	.005587	.052390	.0014885
%RSD	.4699891	.2352597	1.493109	.0345825	.1262092	1.142560	.2156456
#1	21.23786	7.430689	.2900507	.4008733	4.431477	4.526636	.6917698
#2	21.42368	7.399984	.2953548	.4009909	4.427799	4.601752	.6887967
#3	21.39647	7.401027	.2987853	.4011497	4.420500	4.627456	.6901514

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2264-04A Acquired: 6/17/2025 14:15:51 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2078806	.1772850	.3964824
Stddev	.0024147	.0075783	.0019632
%RSD	1.161593	4.274621	.4951589
#1	.2101276	.1810095	.3959907
#2	.2081869	.1685652	.3986447
#3	.2053273	.1822803	.3948117

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3444.971	43087.47	3180.271	3990.707	4455.827
Stddev	9.617	503.80	6.720	44.502	6.790
%RSD	.2791600	1.169256	.2113144	1.115143	.1523899
#1	3455.177	42567.80	3179.546	3954.178	4461.324
#2	3436.078	43120.86	3173.943	3977.671	4448.237
#3	3443.657	43573.75	3187.325	4040.271	4457.921

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2264-04DUP Acquired: 6/17/2025 14:21:05 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.010771**	**.0037099**	**.0415114**	**-.002761**	**.0044137**	**.0253968**	**.0101252**
Stddev	.003567	.0009061	.0003465	.002672	.0024388	.0198498	.0006067
%RSD	33.12017	24.42325	.8348311	96.80700	55.25482	78.15844	5.992404
#1	-.009826	.0029892	.0412748	-.005483	.0026391	.0127787	.0099343
#2	-.007772	.0034134	.0413502	-.002658	.0071946	.0151349	.0096369
#3	-.014716	.0047271	.0419092	-.000141	.0034074	.0482770	.0108045

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000193**	**-.000002**	**28.82649**	**.0009982**	**.0098203**	**2.495915**	**1.386444**
Stddev	.000134	.000053	.03436	.0007392	.0000893	.031140	.017769
%RSD	69.22060	2831.844	.1191951	74.05211	.9094863	1.247650	1.281604
#1	-.000345	-.000061	28.83315	.0010229	.0098662	2.476617	1.406296
#2	-.000094	.000012	28.78928	.0017248	.0097174	2.479289	1.381009
#3	-.000139	.000043	28.85703	.0002470	.0098774	2.531840	1.372028

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0590966**	**4.669864**	**.0027820**	**.0003001**	**107.4279**	**.0058620**	**.4719637**
Stddev	.0013883	.072976	.0006418	.0003170	.8271	.0049311	.0007267
%RSD	2.349258	1.562702	23.06952	105.6257	.7698734	84.12068	.1539661
#1	.0586699	4.621697	.0035149	.0005428	106.4906	.0002044	.4722116
#2	.0579717	4.634069	.0023202	-.000059	107.7382	.0092476	.4725341
#3	.0606482	4.753826	.0025110	.000416	108.0550	.0081340	.4711456

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.61623**	**1.653234**	**.0293439**	**-.004016**	**4.422956**	**3.698081**	**.0040802**
Stddev	.17168	.005527	.0003642	.000282	.010444	.038744	.0012053
%RSD	1.617194	.3342972	1.241185	7.033307	.2361351	1.047667	29.53938
#1	10.44985	1.647477	.0296149	-.004222	4.411069	3.667346	.0052955
#2	10.60607	1.653726	.0294870	-.003694	4.427137	3.685295	.0028852
#3	10.79276	1.658498	.0289299	-.004132	4.430662	3.741601	.0040600

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2264-04DUP Acquired: 6/17/2025 14:21:05 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0082937	-.012978	.2023059
Stddev	.0009224	.006520	.0015692
%RSD	11.12121	50.23469	.7756467
#1	.0083069	-.010790	.2007890
#2	.0073649	-.007834	.2022061
#3	.0092094	-.020310	.2039226

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3445.069	43362.06	3204.135	4031.229	4478.130
Stddev	14.139	50.57	39.582	3.189	23.001
%RSD	.4103995	.1166332	1.235328	.0791000	.5136331
#1	3435.972	43392.98	3232.149	4034.411	4462.668
#2	3461.358	43389.50	3221.403	4031.244	4504.562
#3	3437.877	43303.70	3158.853	4028.033	4467.159

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2290-01 Acquired: 6/17/2025 14:25:41 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000658**	**.0025713**	**.0119141**	**-.000073**	**.0069071**	**1.182473**	**.0324821**
Stddev	.002683	.0027712	.0011719	.000435	.0001617	.034611	.0013891
%RSD	407.8508	107.7773	9.836251	598.5796	2.340256	2.926978	4.276605
#1	.001978	.0008988	.0132283	.000397	.0068991	1.182170	.0325544
#2	-.000565	.0010449	.0109778	-.000155	.0067497	1.148016	.0338337
#3	-.003386	.0057701	.0115361	-.000461	.0070726	1.217235	.0310582

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000018**	**-.000056**	**23.19775**	**.0028952**	**.0097964**	**.0241745**	**2.328783**
Stddev	.000094	.000056	.03096	.0003570	.0002058	.0001963	.029965
%RSD	529.5762	99.01891	.1334819	12.33233	2.101142	.8121234	1.286737
#1	-.000010	-.000094	23.20364	.0025034	.0095587	.0239479	2.295831
#2	-.000115	-.000083	23.22535	.0032022	.0099114	.0242826	2.354400
#3	.000072	.000008	23.16427	.0029798	.0099190	.0242929	2.336118

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0793283**	**6.178553**	**.0045454**	**.0003780**	**120.7743**	**.0114382**	**.0413161**
Stddev	.0007037	.022689	.0005601	.0003799	.2522	.0047304	.0000785
%RSD	.8870073	.3672205	12.32261	100.5129	.2088585	41.35652	.1900194
#1	.0798015	6.199133	.0047748	.0003297	120.4831	.0062193	.0412260
#2	.0796637	6.182302	.0049543	.0000245	120.9171	.0126513	.0413701
#3	.0785197	6.154222	.0039070	.0007797	120.9228	.0154439	.0413521

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.533922**	**.3269443**	**.0507263**	**.0100772**	**6.811363**	**2.171521**	**-.000640**
Stddev	.067109	.0024956	.0009320	.0002578	.013899	.007475	.000687
%RSD	1.027080	.7633029	1.837387	2.558519	.2040616	.3442094	107.3973
#1	6.540119	.3262428	.0516673	.0098219	6.800486	2.162919	-.001424
#2	6.597717	.3297155	.0507082	.0100722	6.827023	2.175203	-.000145
#3	6.463930	.3248745	.0498035	.0103375	6.806582	2.176439	-.000350

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2290-01 Acquired: 6/17/2025 14:25:41 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0640596	-.016283	.0835486
Stddev	.0038274	.001041	.0002731
%RSD	5.974701	6.394955	.3269096
#1	.0661924	-.017478	.0834020
#2	.0663454	-.015805	.0833800
#3	.0596410	-.015567	.0838637

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3424.409	42682.70	3191.907	3971.575	4441.578
Stddev	9.022	137.72	7.053	7.550	12.035
%RSD	.2634547	.3226684	.2209539	.1900957	.2709566
#1	3432.955	42830.43	3199.797	3964.107	4455.194
#2	3425.295	42659.83	3189.709	3979.204	4437.173
#3	3414.977	42557.85	3186.215	3971.413	4432.365

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2290-02 Acquired: 6/17/2025 14:30:20 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.006348**	**.0030520**	**.0059519**	**-.004960**	**.0051658**	**1.267873**	**.0296303**
Stddev	.002760	.0005545	.0017450	.002016	.0031366	.022935	.0009650
%RSD	43.47769	18.16711	29.31920	40.64077	60.71793	1.808956	3.256728
#1	-.008274	.0036520	.0079590	-.002839	.0015440	1.273402	.0305556
#2	-.007585	.0029455	.0047943	-.006851	.0069818	1.287538	.0286300
#3	-.003186	.0025585	.0051023	-.005189	.0069717	1.242679	.0297054

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000160**	**-.000077**	**24.80636**	**.0017983**	**.0106284**	**.0213710**	**2.847053**
Stddev	.000094	.000051	.16207	.0002059	.0003328	.0009426	.041987
%RSD	59.06266	66.32872	.6533219	11.45257	3.131241	4.410654	1.474758
#1	-.000056	-.000041	24.87958	.0018120	.0104820	.0205838	2.837549
#2	-.000182	-.000136	24.91891	.0019971	.0103940	.0224155	2.892977
#3	-.000242	-.000055	24.62061	.0015858	.0110094	.0211137	2.810632

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1553424**	**7.444382**	**.0045538**	**.0000624**	**234.1220**	**.0125338**	**.0296772**
Stddev	.0015252	.080040	.0006737	.0005341	2.1738	.0011098	.0003302
%RSD	.9818167	1.075176	14.79310	855.9384	.9284806	8.854753	1.112686
#1	.1560518	7.454777	.0038564	.0002800	235.7590	.0129917	.0295298
#2	.1563837	7.518716	.0046042	.0004533	231.6556	.0112682	.0300554
#3	.1535917	7.359652	.0052009	-.000546	234.9513	.0133414	.0294463

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.420051**	**.2444596**	**.0580531**	**.0265347**	**9.388288**	**2.701726**	**.0001550**
Stddev	.061786	.0015665	.0017637	.0006543	.008756	.012395	.0005393
%RSD	.8326963	.6407975	3.038048	2.465896	.0932606	.4587941	348.0174
#1	7.478445	.2461068	.0561086	.0260910	9.387535	2.691360	.0007509
#2	7.355355	.2429888	.0585011	.0272862	9.379934	2.698362	-.000300
#3	7.426354	.2442832	.0595496	.0262270	9.397396	2.715456	.000014

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2290-02 Acquired: 6/17/2025 14:30:20 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0706807	-.017054	.0980953
Stddev	.0016733	.006528	.0010805
%RSD	2.367379	38.27991	1.101434
#1	.0699449	-.018278	.0989923
#2	.0725958	-.022883	.0983978
#3	.0695014	-.010000	.0968959

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3392.756	41684.70	3150.425	3934.217	4311.631
Stddev	11.025	525.37	26.480	46.389	15.136
%RSD	.3249613	1.260343	.8405120	1.179123	.3510480
#1	3385.662	41080.88	3120.155	3880.712	4310.338
#2	3405.458	41935.95	3169.294	3958.758	4327.372
#3	3387.148	42037.26	3161.827	3963.181	4297.183

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2291-01 Acquired: 6/17/2025 14:34:57 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000172	.0023554	.0703188	-.003503	.0070164	9.555027
Stddev	.0013283	.0013392	.0017593	.002391	.0007942	.055139
%RSD	7701.120	56.85809	2.501882	68.26012	11.31854	.5770627
#1	-.000288	.0038673	.0685751	-.005475	.0071043	9.604865
#2	-.001132	.0018809	.0702879	-.000843	.0077630	9.564420
#3	.001471	.0013181	.0720933	-.004191	.0061820	9.495795

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1160362	.0003273	.0018642	26.85665	.0349938	.0158078
Stddev	.0008377	.0001134	.0000624	.18376	.0006142	.0000803
%RSD	.7219485	34.64952	3.346073	.6842360	1.755034	.5077137
#1	.1169195	.0002496	.0018554	26.96267	.0356973	.0158072
#2	.1159361	.0004574	.0018067	26.96281	.0345646	.0158883
#3	.1152530	.0002748	.0019306	26.64445	.0347195	.0157278

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0854300	15.88919	.2834753	15.50329	.0152267	.0012261
Stddev	.0013372	.17365	.0036599	.07883	.0004611	.0008107
%RSD	1.565240	1.092900	1.291097	.5084454	3.028258	66.12492
#1	.0852177	15.99616	.2876693	15.58374	.0152817	.0020642
#2	.0868606	15.98258	.2818293	15.49994	.0156579	.0004458
#3	.0842116	15.68883	.2809274	15.42619	.0147406	.0011682

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	32.80360	.0398128	.6881759	9.892415	.7638041	.0279023
Stddev	.49838	.0090655	.0115086	.155013	.0028565	.0006334
%RSD	1.519271	22.77025	1.672339	1.566991	.3739854	2.270067
#1	32.69007	.0479141	.7012665	9.980897	.7605688	.0283926
#2	33.34895	.0300211	.6836122	9.982923	.7648655	.0271871
#3	32.37178	.0415030	.6796491	9.713425	.7659780	.0281271

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2291-01 Acquired: 6/17/2025 14:34:57 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007020	3.646373	F 15.92834	.0041093	.5445273	-.006107
Stddev	.0004129	.003428	.29611	.0009234	.0052338	.003421
%RSD	58.82525	.0940107	1.859016	22.47065	.9611594	56.01209
#1	.0002855	3.644519	15.84336	.0032402	.5430585	-.003160
#2	.0007093	3.650329	16.25764	.0040090	.5503385	-.009859
#3	.0011113	3.644271	15.68400	.0050788	.5401848	-.005304

Elem	Sr4077
Units	ppm
Avg	.0628184
Stddev	.0006376
%RSD	1.015013
#1	.0634112
#2	.0629002
#3	.0621438

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3516.979	43875.61	3247.271	4074.857	4609.728
Stddev	13.591	899.76	40.614	80.951	14.681
%RSD	.3864530	2.050702	1.250716	1.986587	.3184879
#1	3507.900	42858.51	3238.867	3982.089	4597.452
#2	3532.605	44567.71	3211.517	4131.171	4625.992
#3	3510.432	44200.61	3291.430	4111.311	4605.741

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2292-01 Acquired: 6/17/2025 14:39:23 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017197	-.000821	.0037913	-.000368	.0021702	2.378128	.0446226
Stddev	.0004955	.000826	.0014118	.003247	.0032343	.042819	.0000689
%RSD	28.81274	100.6587	37.23711	882.6629	149.0297	1.800523	.1542961
#1	.0021750	.000109	.0053914	.000583	.0048026	2.333010	.0446737
#2	.0011920	-.001472	.0032612	.002298	.0031482	2.383175	.0446498
#3	.0017922	-.001099	.0027213	-.003984	-.001440	2.418200	.0445443

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000019	-.000061	3.107928	.0062300	.0029457	.0248858	3.778545
Stddev	.000091	.000109	.016840	.0004550	.0005029	.0003599	.017422
%RSD	468.1872	180.2026	.5418433	7.303495	17.07084	1.446119	.4610668
#1	-.000100	-.000048	3.099720	.0057050	.0035062	.0251415	3.773922
#2	.000080	.000042	3.127298	.0065094	.0025340	.0244742	3.763901
#3	-.000038	-.000176	3.096765	.0064757	.0027970	.0250415	3.797811

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0633744	1.581200	.0024382	-.000253	9.099543	.0114810	.1010084
Stddev	.0012400	.023114	.0004511	.000290	.033526	.0079788	.0000419
%RSD	1.956550	1.461824	18.50018	114.3200	.3684340	69.49513	.0414503
#1	.0632052	1.554929	.0029246	-.000401	9.124370	.0197403	.1010161
#2	.0622278	1.598417	.0023564	-.000440	9.061406	.0038160	.1009632
#3	.0646903	1.590254	.0020337	.000080	9.112852	.0108868	.1010459

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.541771	.3092004	.0156023	.0062033	.8515590	4.829354	-.000141
Stddev	.021819	.0025187	.0006061	.0003508	.0041493	.003034	.000274
%RSD	.6160481	.8145720	3.884626	5.655947	.4872574	.0628233	194.6177
#1	3.548645	.3063067	.0160992	.0065898	.8491633	4.831928	.000078
#2	3.517342	.3103947	.0157807	.0061150	.8563502	4.826009	-.000052
#3	3.559325	.3108997	.0149271	.0059050	.8491635	4.830125	-.000448

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2292-01 Acquired: 6/17/2025 14:39:23 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.1714870	-.016088	.0116867
Stddev	.0040585	.006796	.0001112
%RSD	2.366670	42.24085	.9517438
#1	.1670459	-.013543	.0118089
#2	.1724117	-.010932	.0116598
#3	.1750034	-.023788	.0115914

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3600.971	46020.45	3239.500	4213.217	4934.935
Stddev	12.243	163.68	19.589	24.507	15.816
%RSD	.3399912	.3556610	.6047034	.5816711	.3205003
#1	3592.088	45894.02	3227.682	4216.869	4925.778
#2	3614.937	46205.33	3262.112	4235.693	4953.199
#3	3595.889	45962.00	3228.706	4187.089	4925.829

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCV02 Acquired: 6/17/2025 14:43:44 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin 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	**4.882624**	**5.025646**	**4.898173**	**4.926788**	**4.997803**	**9.907404**	**10.05331**
Stddev	.014491	.006444	.008232	.009468	.009769	.028078	.07742
%RSD	.2967838	.1282235	.1680708	.1921716	.1954673	.2834053	.7700710
#1	4.865898	5.018205	4.888991	4.915916	4.986528	9.876959	10.03596
#2	4.891368	5.029295	4.900636	4.933220	5.003747	9.932280	9.98604
#3	4.890607	5.029438	4.904893	4.931228	5.003134	9.912973	10.13793

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2526186**	**2.463995**	**25.19014**	**1.003987**	**2.448833**	**1.263066**	**4.990494**
Stddev	.0019522	.006553	.11244	.002214	.006870	.009649	.016760
%RSD	.7727770	.2659399	.4463551	.2205650	.2805427	.7639495	.3358483
#1	.2504757	2.457133	25.06986	1.001873	2.441375	1.255276	4.978684
#2	.2530844	2.464665	25.20797	1.006290	2.450220	1.260063	4.983122
#3	.2542958	2.470187	25.29261	1.003797	2.454903	1.273860	5.009677

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.485188**	**24.83812**	**2.459566**	**1.268283**	**25.13663**	**2.502691**	**2.505056**
Stddev	.013822	.18878	.005901	.004637	.03231	.024033	.015792
%RSD	.5561817	.7600342	.2399130	.3656475	.1285406	.9602968	.6303898
#1	2.480532	24.72529	2.453741	1.264431	25.11389	2.481099	2.486828
#2	2.474296	24.73302	2.459418	1.266988	25.12238	2.498389	2.514586
#3	2.500737	25.05606	2.465540	1.273430	25.17361	2.528585	2.513754

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.00457**	**5.012659**	**5.042835**	**5.021581**	**4.900059**	**4.990224**	**4.966810**
Stddev	.06110	.014632	.036416	.008486	.009896	.049356	.014653
%RSD	.2349731	.2918910	.7221409	.1690002	.2019481	.9890529	.2950119
#1	25.93951	5.005891	5.004801	5.012456	4.889826	4.944021	4.951841
#2	26.06074	5.002636	5.046319	5.023049	4.909579	4.984430	4.967465
#3	26.01347	5.029449	5.077383	5.029238	4.900771	5.042221	4.981125

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCV02 Acquired: 6/17/2025 14:43:44 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.986949**	**5.015032**	**5.004213**
Stddev	.030522	.029740	.031803
%RSD	.6120312	.5930197	.6355257
#1	4.980356	4.980934	4.992026
#2	4.960262	5.035616	4.980306
#3	5.020228	5.028545	5.040307

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3376.875**	**42051.60**	**3118.953**	**3931.681**	**4349.396**
Stddev	1.691	222.36	7.770	13.442	4.299
%RSD	.0500816	.5287694	.2491167	.3418934	.0988467
#1	3378.825	41801.65	3111.800	3917.249	4353.991
#2	3375.995	42125.74	3127.220	3933.950	4348.726
#3	3375.806	42227.41	3117.840	3943.845	4345.471

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCB02 Acquired: 6/17/2025 14:50:04 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin 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	.0009431	.0019307	.0014700	.0002251	.0005451	-.025852	-.000049
Stddev	.0035824	.0019982	.0004156	.0024443	.0012139	.009717	.001143
%RSD	379.8629	103.4973	28.26877	1086.048	222.7060	37.58617	2353.361
#1	.0047050	-.000260	.0019497	-.002552	.0002893	-.024042	-.001138
#2	-.002428	.002399	.0012414	.001179	-.000521	-.036346	-.000149
#3	.000552	.003653	.0012190	.002049	.001866	-.017167	.001141

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000003	.0000230	.0283393	-.000115	.0002339	-.000443	.0156345
Stddev	.000062	.0000631	.0088738	.000537	.0002371	.000334	.0139809
%RSD	1916.311	274.5144	31.31262	466.5869	101.3668	75.58124	89.42339
#1	-.000031	-.000044	.0314106	-.000711	-.000016	-.000394	.0146693
#2	.000068	.000032	.0352694	.000331	.000456	-.000798	.0300729
#3	-.000047	.000081	.0183379	.000034	.000262	-.000135	.0021612

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012176	.0528759	.0003355	.0003194	-.016289	.0046019	.0003656
Stddev	.0020211	.0450955	.0002586	.0004583	.009472	.0043166	.0000807
%RSD	165.9933	85.28544	77.07721	143.4579	58.15179	93.80106	22.06537
#1	.0003522	.0021829	.0003814	.0004877	-.020429	-.000148	.0003683
#2	.0035273	.0885309	.0005679	.0006698	-.022985	.008285	.0004449
#3	-.000227	.0679141	.0000570	-.000199	-.005451	.005669	.0002836

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0191753	.0019119	.0061249	.0006967	.0018389	.0074708	.0026175
Stddev	.0006213	.0008462	.0020263	.0005075	.0018264	.0013426	.0004793
%RSD	3.240070	44.25783	33.08384	72.84247	99.32072	17.97138	18.31180
#1	.0185119	.0028099	.0037859	.0001832	.0021114	.0076076	.0031652
#2	.0192705	.0017965	.0072411	.0011980	.0035138	.0087398	.0022750
#3	.0197436	.0011294	.0073477	.0007088	-.000108	.0060650	.0024122

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCB02 Acquired: 6/17/2025 14:50:04 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0046634	.0010023	.0001441
Stddev	.0004352	.0028247	.0001048
%RSD	9.332530	281.8311	72.70092
#1	.0043663	-.002173	.0002054
#2	.0051629	.001944	.0002038
#3	.0044608	.003235	.0000231

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3513.610	44123.36	3195.654	4097.633	4931.773
Stddev	11.520	221.35	51.530	38.174	14.836
%RSD	.3278772	.5016613	1.612515	.9316079	.3008302
#1	3510.753	44346.47	3251.303	4141.711	4931.877
#2	3503.788	44119.79	3149.588	4075.844	4916.885
#3	3526.290	43903.82	3186.070	4075.344	4946.557

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2292-02 Acquired: 6/17/2025 14:54:29 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.009177**	**.0032843**	**.0038331**	**-.007105**	**.0040396**	**.3528635**	**.0402335**
Stddev	.002787	.0017717	.0007710	.000543	.0019017	.0299470	.0015920
%RSD	30.36921	53.94301	20.11442	7.638076	47.07533	8.486852	3.956955
#1	-.012150	.0021005	.0042335	-.006657	.0025331	.3615505	.0403568
#2	-.008756	.0024313	.0029442	-.007708	.0061764	.3195334	.0417603
#3	-.006624	.0053211	.0043214	-.006949	.0034093	.3775067	.0385834

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000032**	**.0002299**	**27.70997**	**.0029332**	**.0105772**	**.0203369**	**.5760633**
Stddev	.000089	.0001340	.03236	.0014367	.0002677	.0000990	.0242519
%RSD	283.4243	58.29395	.1167812	48.98113	2.531244	.4866935	4.209934
#1	-.000090	.0003671	27.68063	.0013994	.0108863	.0204174	.5845656
#2	-.000077	.0000993	27.70461	.0031525	.0104255	.0202264	.5949192
#3	.000071	.0002234	27.74468	.0042476	.0104197	.0203669	.5487051

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0509589**	**3.406062**	**.0023232**	**.0015185**	**592.7135**	**.0106187**	**.1222576**
Stddev	.0005784	.034325	.0003424	.0005146	2.3867	.0074143	.0001322
%RSD	1.134987	1.007759	14.73998	33.88824	.4026706	69.82329	.1081660
#1	.0504667	3.421743	.0020131	.0010386	593.1381	.0190875	.1221557
#2	.0508142	3.366697	.0026907	.0014550	594.8594	.0074710	.1222100
#3	.0515959	3.429746	.0022659	.0020619	590.1430	.0052975	.1224070

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.767872**	**.2238676**	**.0880144**	**-.000926**	**21.48550**	**1.985507**	**.0003321**
Stddev	.065851	.0020549	.0003576	.000034	.02376	.006827	.0003058
%RSD	.8477403	.9179014	.4063125	3.685037	.1105918	.3438242	92.07971
#1	7.695145	.2216982	.0876028	-.000888	21.50987	1.979719	.0000384
#2	7.823458	.2257847	.0882491	-.000937	21.46240	1.983766	.0003092
#3	7.785011	.2241199	.0881913	-.000954	21.48424	1.993035	.0006486

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2292-02 Acquired: 6/17/2025 14:54:29 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0215035	-.015415	.1146070
Stddev	.0034009	.005829	.0006045
%RSD	15.81557	37.81735	.5274829
#1	.0241743	-.017681	.1139699
#2	.0226615	-.019771	.1146787
#3	.0176749	-.008793	.1151725

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3230.552	38792.23	3121.322	3740.981	3984.055
Stddev	8.360	202.54	11.702	11.881	10.299
%RSD	.2587795	.5221271	.3748992	.3175815	.2585037
#1	3238.742	38685.56	3132.285	3739.350	3995.645
#2	3222.032	38665.33	3109.000	3730.000	3980.568
#3	3230.882	39025.82	3122.682	3753.593	3975.953

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2293-01 Acquired: 6/17/2025 14:59:08 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.002973**	**-.000682**	**.0046061**	**-.000212**	**.0011461**	**.8136138**	**.0060608**
Stddev	.001078	.000615	.0015435	.000703	.0027575	.0118037	.0017023
%RSD	36.26979	90.24892	33.50991	331.3104	240.6048	1.450773	28.08705
#1	-.003192	-.000774	.0035533	-.000610	-.000537	.8270851	.0065813
#2	-.003924	-.001245	.0038870	-.000626	.004328	.8050837	.0074421
#3	-.001802	-.000025	.0063779	.000600	-.000353	.8086724	.0041590

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000202**	**-.000059**	**2.880510**	**-.000208**	**.0022003**	**.0152388**	**1.567477**
Stddev	.000081	.000056	.008396	.000755	.0002094	.0010209	.047179
%RSD	40.23993	94.50795	.2914877	363.5277	9.516824	6.699635	3.009885
#1	-.000133	-.000108	2.883147	.000653	.0020105	.0152689	1.542999
#2	-.000292	-.000071	2.887271	-.000515	.0024249	.0162444	1.537567
#3	-.000182	.000002	2.871111	-.000761	.0021654	.0142031	1.621865

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1296371**	**.5810186**	**.0013794**	**-.000150**	**8.817267**	**.0102630**	**.0681083**
Stddev	.0005786	.0066126	.0004094	.000364	.068649	.0050235	.0005607
%RSD	.4463091	1.138104	29.67467	242.2490	.7785764	48.94806	.8233085
#1	.1298474	.5817220	.0014520	-.000252	8.784318	.0158959	.0685680
#2	.1289828	.5740825	.0017477	-.000452	8.896179	.0086457	.0674836
#3	.1300811	.5872514	.0009387	.000254	8.771303	.0062473	.0682735

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.232846**	**.3399120**	**.0343561**	**.0007478**	**.7557854**	**2.566713**	**-.000787**
Stddev	.034054	.0013017	.0012563	.0003531	.0016940	.021416	.000709
%RSD	.8045080	.3829464	3.656572	47.21126	.2241389	.8343898	90.17028
#1	4.211275	.3385740	.0357223	.0010877	.7538383	2.569995	-.000336
#2	4.272103	.3411740	.0340953	.0007729	.7565972	2.586298	-.000419
#3	4.215159	.3399879	.0332508	.0003829	.7569208	2.543844	-.001605

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2293-01 Acquired: 6/17/2025 14:59:08 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0314169	-.016336	.0208595
Stddev	.0032909	.002826	.0002058
%RSD	10.47491	17.29844	.9866458
#1	.0293474	-.017533	.0207886
#2	.0296915	-.018366	.0206986
#3	.0352117	-.013109	.0210914

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3626.954	45961.33	3251.430	4229.507	4981.238
Stddev	1.678	142.68	29.863	14.464	7.354
%RSD	.0462711	.3104453	.9184612	.3419709	.1476255
#1	3627.947	46118.81	3276.536	4236.648	4988.119
#2	3625.017	45924.53	3218.406	4239.011	4982.106
#3	3627.900	45840.65	3259.349	4212.861	4973.489

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2312-01 Acquired: 6/17/2025 15:03:29 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0277887**	**-.002214**	**.2005242**	**.0295592**	**.0128570**	**110.8769**	**.9751470**
Stddev	.0025818	.003245	.0009968	.0015052	.0029165	.1625	.0014731
%RSD	9.290862	146.5313	.4971036	5.092240	22.68385	.1465591	.1510618
#1	.0277422	-.003149	.2013116	.0309972	.0097055	111.0610	.9763565
#2	.0252304	-.004890	.2008577	.0296856	.0134049	110.7534	.9735065
#3	.0303934	.001395	.1994034	.0279948	.0154607	110.8162	.9755781

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0074067**	**-.002646**	**16.05039**	**.1364712**	**.0920341**	**.2275087**	**200.4965**
Stddev	.0001564	.000018	.04779	.0004928	.0004699	.0021942	.6440
%RSD	2.111389	.6682667	.2977629	.3610753	.5106125	.9644364	.3212007
#1	.0075635	-.002650	16.10430	.1369760	.0925764	.2295701	201.2286
#2	.0072507	-.002626	16.01322	.1359915	.0917791	.2252023	200.2436
#3	.0074060	-.002661	16.03366	.1364463	.0917467	.2277537	200.0174

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.419005**	**30.08982**	**.1792673**	**.0097497**	**23.17736**	**.2486828**	**.4104591**
Stddev	.028968	.01900	.0003756	.0002220	.29027	.0042194	.0011711
%RSD	.3904561	.0631580	.2095207	2.277080	1.252403	1.696711	.2853211
#1	7.448504	30.08415	.1790435	.0095725	23.40012	.2442268	.4114129
#2	7.390599	30.07430	.1797009	.0096778	22.84909	.2492045	.4091520
#3	7.417911	30.11102	.1790574	.0099987	23.28286	.2526171	.4108125

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**12.51862**	**9.933715**	**.1006162**	**.0021285**	**.7051400**	**8.649231**	**.0213032**
Stddev	.21719	.011363	.0021521	.0004398	.0034268	.137421	.0003452
%RSD	1.734918	.1143856	2.138917	20.66455	.4859729	1.588822	1.620206
#1	12.64874	9.933866	.0991427	.0017633	.7086258	8.782148	.0211388
#2	12.26790	9.922277	.1030859	.0020054	.7017754	8.507710	.0216998
#3	12.63924	9.945001	.0996200	.0026168	.7050188	8.657836	.0210709

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2312-01 Acquired: 6/17/2025 15:03:29 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**2.100545**	**.1475102**	**.1851742**
Stddev	.010598	.0025042	.0002785
%RSD	.5045579	1.697624	.1503693
#1	2.112782	.1479199	.1852293
#2	2.094570	.1448265	.1848722
#3	2.094284	.1497843	.1854209

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4214.325**	**51303.62**	**3914.578**	**4843.690**	**4351.274**
Stddev	14.969	295.11	21.423	25.921	21.647
%RSD	.3552046	.5752207	.5472717	.5351574	.4974882
#1	4209.818	51504.17	3894.439	4858.950	4340.302
#2	4231.030	50964.76	3937.088	4813.761	4376.210
#3	4202.126	51441.93	3912.208	4858.360	4337.310

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2319-01 Acquired: 6/17/2025 15:07:53 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0227747	.0008404	.2187121	.0471943	.0219153	154.2451	1.380689
Stddev	.0013243	.0022867	.0022624	.0036949	.0011004	.0584	.005162
%RSD	5.814954	272.0850	1.034412	7.829072	5.021183	.0378408	.3738386
#1	.0241622	.0033303	.2213237	.0513232	.0217973	154.1947	1.375348
#2	.0215242	-.001166	.2174614	.0460605	.0230699	154.3090	1.385650
#3	.0226378	.000357	.2173513	.0441991	.0208786	154.2314	1.381070

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0106554	-.004577	18.59945	.2298432	.1698592	.1990977	324.4444
Stddev	.0001366	.000147	.01993	.0006019	.0005257	.0006863	.6068
%RSD	1.282059	3.202444	.1071600	.2618938	.3094795	.3447015	.1870349
#1	.0106125	-.004552	18.61440	.2291502	.1693713	.1988798	325.0566
#2	.0108083	-.004734	18.57682	.2301436	.1704159	.1985468	324.4335
#3	.0105454	-.004444	18.60713	.2302358	.1697904	.1998665	323.8431

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.21485	66.98842	.3337077	.0146519	6.773833	.3447427	.7015681
Stddev	.05024	.24611	.0007228	.0004136	.023194	.0035385	.0050479
%RSD	.4112962	.3673851	.2165980	2.822514	.3424058	1.026412	.7195244
#1	12.16925	66.78344	.3341118	.0151085	6.780790	.3430577	.7058611
#2	12.20659	66.92045	.3341381	.0145449	6.747956	.3423616	.6960070
#3	12.26870	67.26136	.3328732	.0143024	6.792752	.3488088	.7028363

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.73393	4.928840	.1896096	.0029020	.6627391	4.147406	.0191749
Stddev	.08479	.005507	.0021710	.0003922	.0024855	.019574	.0008633
%RSD	.3295049	.1117342	1.144986	13.51345	.3750277	.4719553	4.502167
#1	25.82918	4.922491	.1900866	.0024582	.6599300	4.139594	.0194286
#2	25.66667	4.932320	.1915024	.0030459	.6646530	4.132944	.0182133
#3	25.70593	4.931710	.1872398	.0032019	.6636342	4.169680	.0198830

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2319-01 Acquired: 6/17/2025 15:07:53 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	3.556710	.3663253	.1233858
Stddev	.008500	.0010153	.0002489
%RSD	.2389954	.2771694	.2017595
#1	3.549761	.3662963	.1231130
#2	3.554182	.3673548	.1234437
#3	3.566188	.3653247	.1236006

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4067.606	50045.11	3814.663	4740.002	4288.678
Stddev	10.198	149.37	4.109	14.116	12.206
%RSD	.2507192	.2984786	.1077233	.2978141	.2846093
#1	4067.941	49897.18	3819.338	4724.586	4293.963
#2	4077.632	50042.26	3813.033	4752.297	4297.350
#3	4057.244	50195.89	3811.619	4743.123	4274.720

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2322-01 Acquired: 6/17/2025 15:12:15 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0577202	-.003883	.8764269	.0170677	.0217408	84.05214	.6793974
Stddev	.0031538	.000181	.0018045	.0018436	.0005095	.49253	.0044595
%RSD	5.463980	4.668770	.2058889	10.80177	2.343339	.5859799	.6563890
#1	.0543981	-.003683	.8749791	.0158051	.0218529	83.87848	.6789094
#2	.0580893	-.004036	.8758531	.0191834	.0221849	84.60798	.6840808
#3	.0606733	-.003930	.8784485	.0162147	.0211846	83.66997	.6752019

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0050055	-.001268	389.5439	.1985497	.1242249	1.028466	194.6209
Stddev	.0000828	.000007	2.3929	.0005300	.0004918	.006942	1.2763
%RSD	1.653843	.5573094	.6142931	.2669363	.3958884	.6749441	.6557945
#1	.0050067	-.001261	389.2559	.1991351	.1241270	1.025221	194.5736
#2	.0050878	-.001275	392.0677	.1981025	.1237894	1.036436	195.9202
#3	.0049222	-.001267	387.3079	.1984115	.1247583	1.023741	193.3689

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.172391	198.1569	.2244428	.0085781	4.700916	.3496483	.9262334
Stddev	.024286	1.3762	.0012032	.0003078	.013292	.0088332	.0032830
%RSD	.7655539	.6944789	.5361015	3.588407	.2827592	2.526319	.3544462
#1	3.166887	198.1233	.2253641	.0082252	4.696398	.3488981	.9231094
#2	3.198956	199.5495	.2230815	.0087182	4.715878	.3588327	.9259357
#3	3.151328	196.7978	.2248828	.0087910	4.690471	.3412140	.9296551

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.13991	6.957242	.4545495	-.002067	5.912691	6.149641	.0891977
Stddev	.18873	.009437	.0022310	.000180	.010376	.080532	.0010202
%RSD	1.436298	.1356415	.4908116	8.703627	.1754926	1.309533	1.143707
#1	13.35622	6.948725	.4536764	-.002016	5.901060	6.105736	.0898861
#2	13.05474	6.955614	.4570850	-.001919	5.916015	6.242584	.0896812
#3	13.00878	6.967387	.4528872	-.002267	5.920999	6.100603	.0880256

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2322-01 Acquired: 6/17/2025 15:12:15 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.158638**	**.1605002**	**.4962251**
Stddev	.037150	.0041644	.0034317
%RSD	.8933298	2.594648	.6915635
#1	4.149905	.1564101	.4957885
#2	4.199377	.1647352	.4998542
#3	4.126632	.1603554	.4930326

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3846.281**	**47251.18**	**3760.047**	**4460.087**	**3951.540**
Stddev	1.590	328.58	20.434	21.976	.336
%RSD	.0413317	.6953979	.5434589	.4927326	.0085120
#1	3845.718	46971.75	3741.231	4436.865	3951.406
#2	3845.050	47613.17	3757.125	4480.558	3951.923
#3	3848.076	47168.62	3781.785	4462.837	3951.292

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2323-01 Acquired: 6/17/2025 15:16:35 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0283193	-.016983	.3220483	.0379356	.0288619	119.1371	1.013481
Stddev	.0007403	.002644	.0010467	.0024838	.0011760	.1780	.009121
%RSD	2.613997	15.57077	.3250002	6.547379	4.074488	.1494108	.8999680
#1	.0274659	-.019859	.3232568	.0375075	.0284276	118.9318	1.004712
#2	.0287874	-.016432	.3214556	.0356937	.0301932	119.2309	1.012816
#3	.0287048	-.014657	.3214325	.0406056	.0279648	119.2485	1.022917

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0065448	-.003014	75.32847	.2777154	.2028652	.5346930	288.1523
Stddev	.0000544	.000086	.22778	.0012519	.0002227	.0088898	.9414
%RSD	.8306141	2.853057	.3023861	.4507913	.1097866	1.662592	.3267094
#1	.0065502	-.002926	75.12910	.2776824	.2028735	.5293731	287.0737
#2	.0064880	-.003098	75.27958	.2789836	.2030836	.5297502	288.5741
#3	.0065964	-.003017	75.57672	.2764804	.2026384	.5449557	288.8091

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.616351	58.14854	.2883909	.0126702	5.535662	.5699458	.6719122
Stddev	.046466	.44668	.0014322	.0010592	.093926	.0051232	.0048732
%RSD	.4831951	.7681718	.4966046	8.359489	1.696744	.8988910	.7252790
#1	9.579799	57.77183	.2900392	.0117215	5.468030	.5654068	.6685091
#2	9.600611	58.03178	.2874512	.0138130	5.496052	.5689298	.6697327
#3	9.668642	58.64200	.2876822	.0124762	5.642905	.5755009	.6774948

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.268690	6.419596	.4646241	-.002095	4.066727	4.540597	.0583019
Stddev	.084798	.005365	.0042048	.000761	.004740	.102870	.0002814
%RSD	.9148834	.0835688	.9049985	36.32940	.1165486	2.265550	.4826921
#1	9.194821	6.414554	.4607667	-.001969	4.063292	4.473506	.0583165
#2	9.249962	6.419001	.4639991	-.001404	4.072134	4.489254	.0585758
#3	9.361285	6.425234	.4691064	-.002910	4.064753	4.659032	.0580135

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2323-01 Acquired: 6/17/2025 15:16:35 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	6.450672	.1449848	.2167539
Stddev	.031282	.0014552	.0015152
%RSD	.4849445	1.003702	.6990478
#1	6.426215	.1466598	.2155921
#2	6.439879	.1442635	.2162019
#3	6.485921	.1440311	.2184677

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4058.978	49837.96	3846.504	4722.671	4235.874
Stddev	13.445	161.41	58.314	18.656	13.458
%RSD	.3312331	.3238601	1.516039	.3950298	.3177225
#1	4065.164	49931.78	3884.923	4728.469	4238.655
#2	4043.553	49651.58	3875.186	4737.739	4221.242
#3	4068.216	49930.51	3779.403	4701.804	4247.724

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2324-01 Acquired: 6/17/2025 15:20:57 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0243563	-.029693	.1984491	.0432408	.0217324	120.5139	.7837721
Stddev	.0053781	.002367	.0008991	.0019423	.0003856	.2171	.0047558
%RSD	22.08087	7.972376	.4530522	4.491904	1.774105	.1801515	.6067828
#1	.0246172	-.029549	.1976929	.0454782	.0212872	120.4358	.7862111
#2	.0188525	-.032130	.1982113	.0422571	.0219546	120.7593	.7868136
#3	.0295992	-.027402	.1994432	.0419871	.0219554	120.3468	.7782916

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0092095	-.004271	27.78358	.1886055	.1487566	.3600564	296.6211
Stddev	.0000930	.000066	.02503	.0011627	.0004286	.0035889	.3318
%RSD	1.009472	1.555406	.0900815	.6164745	.2881314	.9967623	.1118470
#1	.0091101	-.004194	27.76396	.1899206	.1492514	.3604656	296.5189
#2	.0092944	-.004312	27.81177	.1877139	.1485174	.3634232	296.9920
#3	.0092241	-.004307	27.77501	.1881819	.1485009	.3562804	296.3525

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.279386	43.49086	.1460282	.0134016	7.035524	.4214774	.4429041
Stddev	.010239	.24009	.0005017	.0005709	.059588	.0042641	.0012463
%RSD	.4492092	.5520455	.3435620	4.260279	.8469654	1.011704	.2814003
#1	2.281193	43.42894	.1465026	.0127469	7.041866	.4202628	.4441550
#2	2.288602	43.75584	.1455031	.0137955	7.091688	.4179524	.4428949
#3	2.268364	43.28780	.1460788	.0136627	6.973018	.4262170	.4416624

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.08516	6.048155	.1435666	.0048963	1.406582	4.476611	.0214728
Stddev	.16959	.009380	.0045521	.0004448	.007310	.044272	.0005922
%RSD	.9377521	.1550955	3.170748	9.084205	.5196843	.9889554	2.757737
#1	18.16096	6.052944	.1436453	.0045326	1.399388	4.455975	.0218077
#2	18.20364	6.037347	.1389756	.0053922	1.406355	4.527433	.0218216
#3	17.89089	6.054175	.1480789	.0047640	1.414002	4.446424	.0207890

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2324-01 Acquired: 6/17/2025 15:20:57 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	7.139879	.0697172	.2491103
Stddev	.023015	.0039228	.0010378
%RSD	.3223375	5.626709	.4165894
#1	7.131052	.0686273	.2498866
#2	7.166000	.0740696	.2495127
#3	7.122585	.0664546	.2479316

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4351.799	53919.78	4038.023	5086.108	4333.671
Stddev	9.859	336.43	26.385	35.405	8.819
%RSD	.2265501	.6239364	.6534260	.6961110	.2035102
#1	4352.953	53661.37	4030.140	5059.621	4337.769
#2	4361.030	54300.19	4016.477	5126.321	4339.696
#3	4341.414	53797.80	4067.451	5072.383	4323.548

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2325-01 Acquired: 6/17/2025 15:25:18 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0661471	.0053346	2.132882	.0328373	.0175461	120.5467	1.715606
Stddev	.0037285	.0018277	.003164	.0032754	.0028824	.2455	.002331
%RSD	5.636658	34.26083	.1483642	9.974626	16.42760	.2036793	.1358856
#1	.0657356	.0059541	2.136477	.0343712	.0195971	120.3463	1.712987
#2	.0700643	.0032777	2.131652	.0350643	.0187906	120.8206	1.717456
#3	.0626415	.0067720	2.130517	.0290765	.0142505	120.4733	1.716373

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0091668	-.002415	60.80478	.1526729	.1295290	.5576831	224.5596
Stddev	.0000404	.000066	.05404	.0004250	.0004297	.0082753	.5237
%RSD	.4405933	2.716175	.0888735	.2783600	.3317320	1.483879	.2332290
#1	.0091628	-.002396	60.79229	.1525826	.1300172	.5560388	223.9870
#2	.0091285	-.002489	60.86397	.1523004	.1293612	.5666572	225.0144
#3	.0092090	-.002362	60.75808	.1531358	.1292084	.5503534	224.6772

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.280128	30.29572	.2089455	.0132101	13.78273	.2529124	.6121969
Stddev	.015800	.05859	.0004284	.0009037	.15860	.0059451	.0033516
%RSD	.1702543	.1933924	.2050146	6.840869	1.150714	2.350652	.5474771
#1	9.288168	30.34200	.2094070	.0131759	13.74810	.2513543	.6152621
#2	9.290290	30.31531	.2088690	.0123240	13.95578	.2594813	.6086181
#3	9.261925	30.22985	.2085606	.0141304	13.64430	.2479014	.6127103

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.964590	13.32907	.1049616	-.002363	4.130557	8.821787	.1292275
Stddev	.083586	.02111	.0021538	.000355	.011601	.145479	.0009263
%RSD	1.049465	.1583642	2.052019	15.01700	.2808572	1.649092	.7168030
#1	7.889638	13.35219	.1031862	-.002100	4.143904	8.836356	.1282323
#2	8.054727	13.31081	.1043410	-.002766	4.124869	8.959434	.1293859
#3	7.949407	13.32422	.1073576	-.002221	4.122897	8.669571	.1300645

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2325-01 Acquired: 6/17/2025 15:25:18 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	2.472151	.1300096	.3399271
Stddev	.002725	.0057100	.0008184
%RSD	.1102220	4.391972	.2407574
#1	2.469691	.1360977	.3392825
#2	2.471683	.1247735	.3408479
#3	2.475080	.1291577	.3396509

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4431.901	53516.64	4125.727	5088.152	4289.613
Stddev	16.341	375.55	35.792	51.957	14.659
%RSD	.3687198	.7017397	.8675205	1.021130	.3417372
#1	4439.859	53426.28	4121.663	5050.170	4292.025
#2	4442.740	53929.12	4092.142	5147.362	4302.916
#3	4413.106	53194.52	4163.378	5066.926	4273.897

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2325-01DUP Acquired: 6/17/2025 15:29:40 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0605468	.0035860	2.023617	.0248527	.0145347	114.3448	1.439594
Stddev	.0018725	.0034671	.005814	.0074186	.0007217	6.8375	.085206
%RSD	3.092708	96.68543	.2873024	29.85014	4.965297	5.979696	5.918728
#1	.0592170	-.000147	2.022896	.0330351	.0137986	121.0555	1.524258
#2	.0626883	.004199	2.018197	.0185657	.0152410	107.3873	1.353857
#3	.0597352	.006706	2.029757	.0229574	.0145645	114.5917	1.440669

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0090011	-.001871	60.22974	.1395288	.1153407	.4320054	200.6863
Stddev	.0004041	.000542	3.60833	.0011313	.0005251	.0207032	11.8215
%RSD	4.489692	28.98687	5.990943	.8107936	.4552141	4.792337	5.890520
#1	.0093843	-.002472	63.80518	.1385451	.1149639	.4530606	212.2723
#2	.0085789	-.001416	56.58940	.1407650	.1159405	.4116732	188.6427
#3	.0090401	-.001726	60.29463	.1392762	.1151178	.4312824	201.1439

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.340576	27.77979	.1990884	.0121060	13.05238	.2313385	.5775648
Stddev	.381399	1.67307	.0009368	.0013427	.57016	.0155621	.0018997
%RSD	6.015209	6.022605	.4705561	11.09104	4.368246	6.726974	.3289186
#1	6.721698	29.46220	.1982240	.0134946	13.62369	.2430965	.5773266
#2	5.958901	26.11623	.1989574	.0108145	12.48337	.2136913	.5757954
#3	6.341128	27.76095	.2000839	.0120090	13.05007	.2372277	.5795723

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.113826	12.13344	.0898032	-.002646	3.743627	4.468276	.1736413
Stddev	.318401	.02792	.0087579	.000392	.006501	.188144	.0007800
%RSD	4.475803	.2300932	9.752343	14.82756	.1736613	4.210651	.4491917
#1	7.430506	12.10348	.0962695	-.002469	3.738875	4.660426	.1745194
#2	6.793732	12.13812	.0798364	-.002373	3.740970	4.284413	.1730291
#3	7.117239	12.15872	.0933036	-.003096	3.751036	4.459988	.1733752

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2325-01DUP Acquired: 6/17/2025 15:29:40 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.959467	.1247493	.3264079
Stddev	.116466	.0048390	.0187111
%RSD	5.943751	3.879009	5.732438
#1	2.072903	.1282266	.3450887
#2	1.840191	.1267985	.3076665
#3	1.965308	.1192228	.3264686

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4505.898	55211.69	4205.686	5268.646	4400.594
Stddev	10.419	112.49	178.185	14.996	5.107
%RSD	.2312400	.2037451	4.236763	.2846335	.1160482
#1	4506.517	55335.20	4035.002	5275.485	4404.676
#2	4495.182	55115.12	4390.527	5279.004	4394.867
#3	4515.994	55184.74	4191.530	5251.449	4402.238

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2325-01LX5 Acquired: 6/17/2025 15:34:01 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0138234	.0031863	.4443402	.0057409	.0057178	31.21356	.4372079
Stddev	.0016499	.0010096	.0014650	.0013373	.0016001	.04305	.0014376
%RSD	11.93542	31.68602	.3297017	23.29345	27.98378	.1379325	.3288085
#1	.0157225	.0043456	.4429079	.0072648	.0061751	31.26206	.4364751
#2	.0130053	.0024999	.4442770	.0047628	.0039388	31.19876	.4388642
#3	.0127425	.0027136	.4458358	.0051952	.0070393	31.17985	.4362844

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025060	-.001093	15.84539	.0384096	.0298689	.1522586	58.53511
Stddev	.0000851	.000063	.04370	.0007174	.0001457	.0010901	.18838
%RSD	3.394777	5.811360	.2757761	1.867704	.4876560	.7159728	.3218229
#1	.0024435	-.001073	15.89558	.0382160	.0299468	.1510416	58.64460
#2	.0026028	-.001041	15.81574	.0392040	.0299591	.1525889	58.64313
#3	.0024716	-.001164	15.82487	.0378090	.0297009	.1531454	58.31759

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.438366	8.043400	.0423471	.0034499	3.566280	.0688591	.1585811
Stddev	.002245	.069659	.0008947	.0007319	.024788	.0005570	.0001632
%RSD	.0920524	.8660447	2.112774	21.21574	.6950541	.8089413	.1029278
#1	2.436195	8.019642	.0432447	.0037832	3.538217	.0687525	.1584542
#2	2.438226	8.121830	.0414553	.0039558	3.575433	.0694617	.1587652
#3	2.440678	7.988726	.0423413	.0026106	3.585188	.0683630	.1585238

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.737301	2.678909	.0264627	-.001976	.8174688	2.444973	.0257774
Stddev	.009607	.004866	.0013716	.000429	.0022629	.037336	.0013763
%RSD	.5529900	.1816390	5.183135	21.69031	.2768131	1.527033	5.339150
#1	1.726492	2.684445	.0280465	-.001789	.8176358	2.403671	.0248926
#2	1.744868	2.676971	.0256765	-.001672	.8196435	2.454923	.0273631
#3	1.740543	2.675310	.0256652	-.002466	.8151270	2.476326	.0250765

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2325-01LX5 Acquired: 6/17/2025 15:34:01 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.6312103	.0264116	.0879327
Stddev	.0064712	.0038167	.0001285
%RSD	1.025212	14.45077	.1460881
#1	.6250723	.0303178	.0880775
#2	.6305886	.0262257	.0878882
#3	.6379699	.0226913	.0878324

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3725.925	46194.89	3392.156	4340.838	4670.761
Stddev	11.759	231.26	24.867	15.243	6.479
%RSD	.3156114	.5006213	.7330762	.3511610	.1387241
#1	3727.079	46346.78	3420.802	4353.547	4672.798
#2	3737.064	45928.74	3379.536	4323.937	4675.977
#3	3713.631	46309.16	3376.129	4345.031	4663.508

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCV03 Acquired: 6/17/2025 15:38:18 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin 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	**4.740394**	**4.890484**	**4.741339**	**4.773239**	**4.855672**	**9.898098**	**9.713265**
Stddev	.015405	.008047	.010417	.014792	.003427	.076158	.106789
%RSD	.3249823	.1645371	.2197026	.3098900	.0705831	.7694219	1.099413
#1	4.758005	4.898883	4.745104	4.772224	4.853831	9.892708	9.719616
#2	4.729414	4.882844	4.729564	4.758982	4.853559	9.824779	9.603443
#3	4.733763	4.889723	4.749350	4.788513	4.859627	9.976808	9.816737

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2469835**	**2.396754**	**24.42838**	**.9812190**	**2.368361**	**1.232873**	**4.868518**
Stddev	.0020919	.004186	.09251	.0053282	.003367	.009057	.030626
%RSD	.8469936	.1746528	.3786817	.5430160	.1421697	.7346311	.6290687
#1	.2464991	2.401105	24.38464	.9783262	2.371172	1.233853	4.861120
#2	.2451762	2.396403	24.36585	.9873679	2.364629	1.223366	4.842268
#3	.2492751	2.392755	24.53464	.9779629	2.369282	1.241400	4.902165

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.397339**	**23.79463**	**2.387913**	**1.234543**	**24.38918**	**2.389203**	**2.424259**
Stddev	.016408	.12928	.006624	.002133	.26654	.034532	.009309
%RSD	.6844170	.5433015	.2773907	.1727772	1.092868	1.445319	.3839913
#1	2.395676	23.83607	2.395138	1.236625	24.36026	2.400838	2.429816
#2	2.381827	23.64971	2.382126	1.234641	24.13827	2.350357	2.429449
#3	2.414516	23.89810	2.386475	1.232362	24.66900	2.416414	2.413512

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.11109**	**4.910746**	**4.925637**	**4.886258**	**4.756801**	**4.868191**	**4.841747**
Stddev	.38401	.008586	.029127	.006327	.002664	.039878	.007866
%RSD	1.529264	.1748323	.5913277	.1294818	.0560138	.8191528	.1624593
#1	25.27827	4.920547	4.916626	4.890396	4.758416	4.851016	4.850153
#2	24.67182	4.904555	4.902081	4.889403	4.753726	4.839778	4.834565
#3	25.38317	4.907135	4.958205	4.878975	4.758262	4.913778	4.840522

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCV03 Acquired: 6/17/2025 15:38:18 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.826913**	**4.820232**	**4.836632**
Stddev	.039382	.018140	.037964
%RSD	.8158929	.3763250	.7849367
#1	4.840305	4.826470	4.837432
#2	4.782581	4.799796	4.798273
#3	4.857853	4.834430	4.874190

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3387.738**	**42328.66**	**3135.352**	**3979.831**	**4363.695**
Stddev	16.948	304.19	43.718	37.619	22.234
%RSD	.5002661	.7186288	1.394355	.9452510	.5095153
#1	3386.911	42031.70	3120.012	3945.325	4356.378
#2	3371.219	42639.59	3184.673	4019.936	4346.042
#3	3405.084	42314.70	3101.373	3974.233	4388.666

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCB03 Acquired: 6/17/2025 15:42:33 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin 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	**.0034259**	**.0033284**	**.0000612**	**-.002271**	**.0000126**	**-.030534**	**-.000742**
Stddev	.0012533	.0008886	.0002426	.000821	.0008961	.021139	.000983
%RSD	36.58337	26.69765	396.0961	36.13613	7104.842	69.23179	132.4544
#1	.0045952	.0043169	.0000109	-.002215	-.000938	-.007304	-.000383
#2	.0021028	.0025959	-.000152	-.003118	.000135	-.048640	.000011
#3	.0035798	.0030725	.000325	-.001480	.000841	-.035658	-.001854

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000173**	**-.000042**	**.0093914**	**-.000880**	**-.000039**	**.0003326**	**.0275489**
Stddev	.0000636	.000032	.0064778	.000064	.000228	.0008796	.0263764
%RSD	366.6838	76.62995	68.97567	7.231429	576.6446	264.4436	95.74409
#1	.0000750	-.000016	.0054061	-.000816	.000097	-.000492	.0325260
#2	.0000278	-.000077	.0059022	-.000880	-.000302	.000231	-.000962
#3	-.000051	-.000032	.0168658	-.000943	.000086	.001259	.051082

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001504**	**-.014299**	**.0004988**	**.0006049**	**-.018885**	**.0075602**	**.0000067**
Stddev	.0015771	.033545	.0004782	.0008267	.011602	.0082736	.0003628
%RSD	1048.386	234.5968	95.87557	136.6622	61.43439	109.4359	5381.850
#1	-.000179	.010306	.0010082	.0004008	-.008276	.0069845	-.000407
#2	.001866	-.000693	.0000595	-.000101	-.017106	-.000410	.000268
#3	-.001236	-.052509	.0004288	.001515	-.031274	.016107	.000159

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0032100**	**.0006149**	**.0095085**	**.0002875**	**-.002446**	**.0055513**	**.0006018**
Stddev	.0011301	.0019588	.0011527	.0004173	.002988	.0011186	.0003501
%RSD	35.20648	318.5858	12.12329	145.1463	122.1613	20.14972	58.16912
#1	.0043665	.0004907	.0107799	-.000191	.000399	.0045226	.0001993
#2	.0021082	-.001279	.0092140	.000575	-.002177	.0053893	.0007711
#3	.0031555	.002633	.0085316	.000478	-.005559	.0067421	.0008351

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCB03 Acquired: 6/17/2025 15:42:33 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0007689	-.008823	-.000126
Stddev	.0007253	.006091	.000400
%RSD	94.32887	69.03111	316.0600
#1	.0000135	-.007210	.000326
#2	.0008334	-.015559	-.000275
#3	.0014597	-.003702	-.000430

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3595.040	44988.43	3244.133	4184.451	5068.826
Stddev	26.695	42.42	45.931	9.964	38.714
%RSD	.7425577	.0942848	1.415819	.2381094	.7637677
#1	3567.493	44979.73	3191.097	4191.805	5027.932
#2	3620.793	45034.52	3270.515	4173.111	5104.910
#3	3596.834	44951.03	3270.788	4188.436	5073.635

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2325-01MS Acquired: 6/17/2025 15:46:58 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8401980	1.977347	2.869815	1.450205	.2594601	126.7809
Stddev	.0018473	.002582	.003498	.003658	.0027735	.3302
%RSD	.2198634	.1305949	.1218850	.2522111	1.068953	.2604517
#1	.8418495	1.977952	2.872130	1.448307	.2564221	126.5444
#2	.8382031	1.974516	2.865792	1.447887	.2618567	126.6401
#3	.8405413	1.979574	2.871525	1.454422	.2601016	127.1581

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.696339	.1695454	.1982830	73.92634	.4589685	.3200299
Stddev	.014074	.0015968	.0003759	.29355	.0019883	.0012401
%RSD	.8296461	.9418358	.1895871	.3970904	.4332144	.3874932
#1	1.692887	.1677031	.1984328	73.73646	.4569842	.3186014
#2	1.684312	.1705315	.1985608	73.77811	.4589606	.3208302
#3	1.711817	.1704017	.1978552	74.26446	.4609608	.3206581

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6872608	201.3760	7.010660	31.05386	.7185032	.0709615
Stddev	.0055446	.3131	.036697	.24569	.0008889	.0004649
%RSD	.8067642	.1554622	.5234423	.7911796	.1237110	.6550786
#1	.6808822	201.1252	7.003737	30.90684	.7175029	.0712960
#2	.6899731	201.2760	6.977918	30.91724	.7192024	.0704307
#3	.6909271	201.7269	7.050326	31.33749	.7188042	.0711577

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.94256	.4726031	.7962087	16.04018	F 25.54447	.2713154
Stddev	.10583	.0045086	.0032759	.24253	.01659	.0017744
%RSD	.7082221	.9539817	.4114385	1.512007	.0649346	.6540191
#1	14.82118	.4685666	.7979538	15.76709	25.52604	.2692890
#2	14.99108	.4774687	.7982427	16.23045	25.54916	.2720662
#3	15.01544	.4717740	.7924297	16.12299	25.55821	.2725910

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2325-01MS Acquired: 6/17/2025 15:46:58 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3037655	3.593015	11.09532	.8216526	2.064383	.2987718
Stddev	.0005043	.013660	.16002	.0012162	.007415	.0040533
%RSD	.1660332	.3801943	1.442200	.1480222	.3592081	1.356652
#1	.3042233	3.606359	10.91734	.8207091	2.060266	.3010210
#2	.3032249	3.593627	11.22730	.8230252	2.059939	.3012017
#3	.3038483	3.579059	11.14133	.8212234	2.072943	.2940926

Elem	Sr4077
Units	ppm
Avg	.5492972
Stddev	.0031609
%RSD	.5754456
#1	.5477255
#2	.5472303
#3	.5529359

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4413.672	53988.80	4094.605	5134.702	4326.014
Stddev	8.216	271.02	22.386	29.604	5.689
%RSD	.1861503	.5020021	.5467160	.5765440	.1315175
#1	4404.841	53762.08	4119.651	5100.578	4320.235
#2	4421.089	54288.99	4087.620	5150.020	4331.610
#3	4415.086	53915.33	4076.545	5153.509	4326.197

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2325-01MSD Acquired: 6/17/2025 15:51:14 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8400456	1.957584	3.096017	1.449847	.2758834	136.3939	1.690417
Stddev	.0060415	.006907	.009418	.001549	.0015986	.4881	.006528
%RSD	.7191812	.3528294	.3041878	.1068707	.5794415	.3578325	.3861506
#1	.8330840	1.951247	3.086544	1.448918	.2741941	136.9573	1.694695
#2	.8439153	1.964946	3.105379	1.448987	.2773724	136.1234	1.693651
#3	.8431374	1.956560	3.096127	1.451635	.2760836	136.1009	1.682903

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1700812	.1973721	54.72984	.4749918	.3262936	.7292061	209.5010
Stddev	.0012799	.0003051	.19715	.0018800	.0010453	.0069130	.6086
%RSD	.7525034	.1546029	.3602156	.3957956	.3203606	.9480170	.2905050
#1	.1705065	.1970514	54.95498	.4769886	.3257223	.7340156	210.0116
#2	.1710943	.1974062	54.58811	.4747312	.3256585	.7323186	209.6641
#3	.1686429	.1976588	54.64643	.4732558	.3275001	.7212840	208.8275

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.529413	34.51982	.7277843	.0712141	15.88059	.4961870	.7899872
Stddev	.030363	.21681	.0017795	.0004203	.19993	.0032928	.0007615
%RSD	.5491118	.6280635	.2445090	.5902407	1.258966	.6636139	.0963967
#1	5.564015	34.73219	.7259137	.0715391	16.08322	.4987599	.7908531
#2	5.517002	34.52842	.7279833	.0713636	15.87509	.4924762	.7894216
#3	5.507222	34.29884	.7294559	.0707394	15.68347	.4973248	.7896870

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.40564	17.20179	.2750739	.3035445	3.640525	9.886137	.8269998
Stddev	.19234	.00809	.0015511	.0003551	.006569	.036752	.0012372
%RSD	1.105035	.0470297	.5638906	.1169770	.1804533	.3717493	.1496023
#1	17.58709	17.19925	.2755349	.3035286	3.646547	9.918840	.8266538
#2	17.20400	17.21085	.2763423	.3031976	3.633519	9.893206	.8259724
#3	17.42583	17.19528	.2733445	.3039072	3.641510	9.846364	.8283732

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2325-01MSD Acquired: 6/17/2025 15:51:14 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**2.188002**	**.3101903**	**.4779440**
Stddev	.008028	.0045639	.0025722
%RSD	.3669002	1.471313	.5381888
#1	2.196867	.3140400	.4805056
#2	2.185916	.3113820	.4779652
#3	2.181223	.3051488	.4753613

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4335.156**	**52660.06**	**4015.023**	**5023.828**	**4279.079**
Stddev	8.465	486.52	46.425	34.570	6.894
%RSD	.1952657	.9238972	1.156274	.6881196	.1611148
#1	4344.027	52104.08	3966.470	4989.982	4285.628
#2	4334.275	53007.82	4019.624	5059.079	4279.724
#3	4327.166	52868.28	4058.976	5022.423	4271.885

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2325-01A Acquired: 6/17/2025 15:55:31 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8265946**	**1.918126**	**2.968264**	**1.456358**	**.6035588**	**113.8604**
Stddev	.0015074	.004156	.008954	.005667	.0020038	3.6261
%RSD	.1823647	.2166693	.3016617	.3891140	.3319945	3.184669
#1	.8254193	1.920912	2.960745	1.450890	.6031044	109.6739
#2	.8260704	1.913349	2.965876	1.455979	.6018212	116.0149
#3	.8282941	1.920117	2.978170	1.462205	.6057507	115.8923

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.728687**	**.1577228**	**.1904212**	**57.30002**	**.4521106**	**.3173167**
Stddev	.049220	.0032908	.0003611	1.72501	.0026041	.0006780
%RSD	2.847268	2.086451	.1896271	3.010493	.5759961	.2136758
#1	1.671870	.1539254	.1905864	55.31049	.4493479	.3173478
#2	1.758329	.1595022	.1900070	58.21118	.4524640	.3166237
#3	1.755862	.1597409	.1906701	58.37840	.4545201	.3179787

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7521521**	**211.6608**	**8.737569**	**29.23617**	**.6862578**	**.0676424**
Stddev	.0160105	6.6021	.256462	.92768	.0015081	.0020097
%RSD	2.128625	3.119178	2.935164	3.173066	.2197603	2.971146
#1	.7338733	204.0374	8.441441	28.16501	.6879953	.0654237
#2	.7588938	215.4735	8.883584	29.76469	.6854912	.0681624
#3	.7636893	215.4716	8.887680	29.77882	.6852870	.0693410

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**15.15882**	**.4529686**	**.7379436**	**15.70994**	F **18.57636**	**.3052899**
Stddev	.33220	.0137217	.0060120	.43011	.01924	.0072247
%RSD	2.191492	3.029284	.8146943	2.737791	.1035716	2.366488
#1	14.77785	.4374691	.7445886	15.21498	18.57911	.2969643
#2	15.31049	.4578705	.7328814	15.92203	18.55589	.3099101
#3	15.38811	.4635661	.7363609	15.99281	18.59408	.3089952

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2325-01A Acquired: 6/17/2025 15:55:31 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2965909	3.961235	9.094429	.7951950	2.431310	.2717149
Stddev	.0004347	.004764	.165487	.0019538	.067407	.0053970
%RSD	.1465495	.1202634	1.819651	.2456968	2.772461	1.986276
#1	.2961160	3.956096	8.907442	.7941771	2.353489	.2665636
#2	.2969690	3.962105	9.153823	.7974475	2.468932	.2773280
#3	.2966877	3.965504	9.222022	.7939603	2.471508	.2712531

Elem	Sr4077
Units	ppm
Avg	.4586174
Stddev	.0129181
%RSD	2.816740
#1	.4437072
#2	.4664472
#3	.4656978

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4492.497	55894.89	4334.201	5294.909	4381.911
Stddev	8.835	521.00	111.980	16.249	11.968
%RSD	.1966535	.9321127	2.583633	.3068765	.2731141
#1	4483.827	56494.97	4463.504	5304.600	4371.189
#2	4501.488	55631.80	4269.481	5303.977	4394.822
#3	4492.176	55557.89	4269.617	5276.150	4379.722

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2307-01 Acquired: 6/17/2025 15:59:47 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0753255	-.005859	.1922312	.0393990	.0242493	78.03403	.8281562
Stddev	.0013490	.003179	.0008398	.0025078	.0010855	.27106	.0027331
%RSD	1.790829	54.25946	.4368758	6.365204	4.476301	.3473636	.3300174
#1	.0768552	-.002939	.1929963	.0421851	.0233118	78.21739	.8299432
#2	.0748150	-.009246	.1923648	.0373224	.0239975	77.72267	.8250100
#3	.0743063	-.005392	.1913327	.0386894	.0254385	78.16202	.8295154

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0097407	-.005133	53.34948	.2275758	.1545598	.1379786	301.4424
Stddev	.0001106	.000072	.15663	.0011461	.0002360	.0008221	.6784
%RSD	1.135906	1.411707	.2935848	.5035932	.1527066	.5958257	.2250355
#1	.0098346	-.005094	53.47822	.2263078	.1543680	.1387078	302.0236
#2	.0096187	-.005088	53.17510	.2278816	.1544879	.1381405	300.6970
#3	.0097686	-.005217	53.39511	.2285379	.1548234	.1370876	301.6065

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.919930	63.90786	.3303174	.0140879	17.33971	.2754158	.6571510
Stddev	.020927	.25731	.0009501	.0011332	.06394	.0000854	.0031784
%RSD	.5338682	.4026247	.2876488	8.044159	.3687437	.0310236	.4836597
#1	3.926191	64.00444	.3296969	.0128021	17.27045	.2754949	.6538298
#2	3.896587	63.61623	.3298439	.0145203	17.35220	.2753252	.6601640
#3	3.937012	64.10290	.3314112	.0149413	17.39648	.2754273	.6574593

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.33027	6.635695	.1746952	.0054141	13.06515	3.902134	.0226292
Stddev	.17662	.003107	.0027321	.0003017	.01447	.008959	.0014381
%RSD	.7259228	.0468223	1.563932	5.572620	.1107399	.2295978	6.355077
#1	24.51231	6.638993	.1775481	.0055384	13.05147	3.893151	.0238173
#2	24.15963	6.632823	.1744350	.0050701	13.06368	3.911069	.0210304
#3	24.31886	6.635270	.1721025	.0056339	13.08029	3.902182	.0230400

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2307-01 Acquired: 6/17/2025 15:59:47 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	3.769878	.2824940	.2352118
Stddev	.010947	.0065329	.0008916
%RSD	.2903804	2.312575	.3790599
#1	3.777755	.2884535	.2356052
#2	3.757378	.2755090	.2341912
#3	3.774502	.2835196	.2358391

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3903.206	48042.15	3655.089	4532.707	4352.250
Stddev	4.445	146.62	7.196	13.724	1.061
%RSD	.1138933	.3051840	.1968881	.3027838	.0243688
#1	3899.241	48110.27	3656.052	4547.315	4353.461
#2	3908.012	48142.32	3661.756	4530.725	4351.802
#3	3902.367	47873.87	3647.460	4520.082	4351.487

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2310-01 Acquired: 6/17/2025 16:04:08 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0625740	-.011994	.2875185	.0324925	.0188361	104.3313	.8195937
Stddev	.0014004	.001816	.0015697	.0024729	.0014246	6.3585	.0529622
%RSD	2.237966	15.14521	.5459587	7.610631	7.563031	6.094551	6.462010
#1	.0633989	-.010159	.2858034	.0306034	.0194998	97.7567	.7665347
#2	.0609570	-.012031	.2888838	.0315826	.0172008	104.7881	.8197878
#3	.0633659	-.013792	.2878682	.0352914	.0198077	110.4491	.8724587

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0107116	-.001088	36.04382	.2122420	.1556051	.7312772	235.2058
Stddev	.0007936	.000504	2.13154	.0050069	.0003036	.0458563	14.6250
%RSD	7.408510	46.30824	5.913733	2.359042	.1951441	6.270709	6.217977
#1	.0100061	-.000555	33.86945	.2064606	.1558789	.6846269	220.2201
#2	.0105579	-.001153	36.13225	.2151158	.1556579	.7329088	235.9559
#3	.0115707	-.001556	38.12977	.2151496	.1552785	.7762959	249.4413

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.620003	57.33862	.2835408	.0101141	14.07133	.3176578	.6721356
Stddev	.459868	3.53129	.0011421	.0016759	.81381	.0157864	.0231055
%RSD	6.035015	6.158651	.4028140	16.57020	5.783472	4.969631	3.437621
#1	7.157639	53.85188	.2837307	.0084493	13.23384	.3019623	.6454916
#2	7.625035	57.25115	.2823156	.0100921	14.12097	.3174775	.6842592
#3	8.077334	60.91283	.2845760	.0118009	14.85919	.3335336	.6866559

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.27443	9.096199	.1030391	-.002712	.8761665	3.504971	.0350675
Stddev	1.03982	.003796	.0057917	.000109	.0049105	.214130	.0012516
%RSD	5.394800	.0417285	5.620845	4.010411	.5604590	6.109325	3.569186
#1	18.17182	9.100229	.0975521	-.002718	.8806881	3.283913	.0336246
#2	19.41413	9.092692	.1024716	-.002601	.8709426	3.519576	.0358595
#3	20.23733	9.095676	.1090936	-.002818	.8768687	3.711426	.0357185

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2310-01 Acquired: 6/17/2025 16:04:08 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.111265	.1964625	.1635027
Stddev	.307815	.0081494	.0101892
%RSD	6.022296	4.148083	6.231813
#1	4.798251	.1879332	.1534519
#2	5.121939	.1972845	.1632313
#3	5.413604	.2041698	.1738249

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4722.760	58835.17	4404.078	5577.405	4328.963
Stddev	7.164	1039.07	234.298	124.065	6.392
%RSD	.1516997	1.766061	5.320033	2.224421	.1476676
#1	4715.555	59987.67	4650.134	5718.831	4322.200
#2	4722.841	57970.03	4378.459	5486.916	4329.784
#3	4729.883	58547.80	4183.642	5526.468	4334.905

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2310-01DUP Acquired: 6/17/2025 16:08:30 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0691806	-.012251	.3256774	.0338689	.0195570	104.7495	.8815677
Stddev	.0017067	.002163	.0022489	.0004160	.0009403	.3751	.0093948
%RSD	2.466963	17.65622	.6905168	1.228199	4.807750	.3580863	1.065687
#1	.0710453	-.011645	.3233458	.0337450	.0188827	104.3204	.8727694
#2	.0676960	-.014653	.3258534	.0335290	.0206311	105.0149	.8804712
#3	.0688007	-.010456	.3278331	.0343328	.0191573	104.9133	.8914626

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0123199	-.001568	42.34926	.2202764	.1733722	.7357902	243.4415
Stddev	.0000970	.000186	.11103	.0007685	.0002596	.0148239	1.2403
%RSD	.7872266	11.88262	.2621776	.3488602	.1497548	2.014691	.5094717
#1	.0122097	-.001707	42.23913	.2211256	.1735614	.7194306	242.0947
#2	.0123921	-.001356	42.34747	.2200745	.1730762	.7483313	243.6931
#3	.0123580	-.001641	42.46117	.2196290	.1734790	.7396087	244.5367

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.097758	61.69915	.2958096	.0104026	14.05087	.3373756	.7001102
Stddev	.046658	.47179	.0004331	.0002982	.25397	.0015590	.0019188
%RSD	.6573601	.7646583	.1464183	2.866990	1.807491	.4620839	.2740655
#1	7.060699	61.25377	.2963092	.0101129	13.79275	.3356222	.7012231
#2	7.082420	61.65015	.2955798	.0107087	14.30048	.3386051	.7012129
#3	7.150154	62.19353	.2955397	.0103860	14.05939	.3378997	.6978946

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.73367	9.943945	.1070334	-.002784	.8793422	3.302476	.0266136
Stddev	.43160	.014954	.0022862	.000406	.0037953	.066512	.0006728
%RSD	1.898493	.1503788	2.135997	14.56610	.4316087	2.013990	2.528006
#1	22.33565	9.930298	.1096733	-.002697	.8756454	3.232102	.0264729
#2	23.19241	9.959930	.1057201	-.003227	.8791524	3.364298	.0260223
#3	22.67294	9.941606	.1057067	-.002430	.8832289	3.311029	.0273456

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2310-01DUP Acquired: 6/17/2025 16:08:30 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.490788	.1976482	.1527320
Stddev	.049243	.0054544	.0010003
%RSD	.8968241	2.759637	.6549077
#1	5.445099	.1984675	.1517614
#2	5.484318	.2026465	.1526750
#3	5.542945	.1918305	.1537595

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4561.663	55573.11	4265.429	5261.702	4248.589
Stddev	16.801	561.20	55.282	34.524	12.934
%RSD	.3683076	1.009846	1.296042	.6561443	.3044313
#1	4578.070	54925.21	4324.489	5222.328	4261.621
#2	4562.425	55885.99	4214.923	5275.990	4248.389
#3	4544.494	55908.12	4256.875	5286.790	4235.756

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2310-01LX5 Acquired: 6/17/2025 16:12:52 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0149471	-.000348	.0599145	.0077001	.0034624	27.42053	.2141694
Stddev	.0021943	.000348	.0010532	.0007820	.0016750	.04586	.0006867
%RSD	14.68077	100.0159	1.757850	10.15592	48.37779	.1672498	.3206538
#1	.0124301	.000054	.0592129	.0076359	.0016910	27.46711	.2144580
#2	.0164577	-.000539	.0594050	.0085122	.0036754	27.41907	.2133854
#3	.0159535	-.000557	.0611255	.0069521	.0050207	27.37542	.2146647

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0028602	-.000817	9.320897	.0550542	.0323364	.2001876	61.71696
Stddev	.0000085	.000025	.032374	.0002035	.0005688	.0026502	.12957
%RSD	.2972823	3.057307	.3473245	.3696332	1.759068	1.323832	.2099398
#1	.0028644	-.000827	9.288172	.0550451	.0329709	.2030768	61.85178
#2	.0028658	-.000835	9.321612	.0548554	.0321663	.1978697	61.59338
#3	.0028504	-.000788	9.352908	.0552621	.0318721	.1996163	61.70572

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.051179	15.23675	.0562180	.0032386	3.686818	.0867399	.1781294
Stddev	.013337	.05064	.0007319	.0004939	.051163	.0060244	.0014751
%RSD	.6502030	.3323402	1.301874	15.24914	1.387738	6.945398	.8280763
#1	2.054728	15.19263	.0570584	.0037445	3.745891	.0907454	.1779467
#2	2.036427	15.29204	.0558748	.0032135	3.656625	.0896626	.1796874
#3	2.062383	15.22558	.0557208	.0027577	3.657937	.0798116	.1767543

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.146076	1.753980	.0267264	-.001480	.1655256	.9741576	.0074946
Stddev	.043559	.007642	.0012446	.000346	.0030373	.0126643	.0003420
%RSD	1.050614	.4357172	4.656907	23.37629	1.834963	1.300022	4.563574
#1	4.196374	1.759973	.0265218	-.001486	.1677032	.9863332	.0076100
#2	4.120877	1.745374	.0255968	-.001823	.1620559	.9610555	.0071098
#3	4.120978	1.756592	.0280607	-.001131	.1668177	.9750839	.0077640

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2310-01LX5 Acquired: 6/17/2025 16:12:52 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.318587	.0560401	.0433999
Stddev	.006046	.0039581	.0003150
%RSD	.4584973	7.062887	.7258973
#1	1.320227	.0588070	.0433690
#2	1.311890	.0515064	.0431015
#3	1.323643	.0578070	.0437293

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3733.788	46412.48	3383.287	4348.129	4616.972
Stddev	13.428	151.73	33.634	19.248	16.407
%RSD	.3596480	.3269097	.9941076	.4426843	.3553713
#1	3721.509	46447.69	3344.452	4351.669	4598.827
#2	3731.726	46246.24	3402.990	4327.356	4621.327
#3	3748.128	46543.50	3402.419	4365.362	4630.764

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2310-01MS Acquired: 6/17/2025 16:17:08 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8647105	2.021021	1.282843	1.402366	.3300638	113.7692	1.014198
Stddev	.0029085	.003522	.003737	.002538	.0014209	.0465	.006405
%RSD	.3363528	.1742498	.2912755	.1809771	.4304825	.0408663	.6314901
#1	.8631062	2.017141	1.280650	1.405108	.3297032	113.8202	1.010226
#2	.8680679	2.024015	1.287157	1.401889	.3288580	113.7291	1.021586
#3	.8629576	2.021908	1.280722	1.400100	.3316302	113.7582	1.010781

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1667559	.2048847	42.93836	.5170744	.3675712	1.153276	235.2012
Stddev	.0028997	.0003681	.02423	.0012074	.0003996	.019160	.1685
%RSD	1.738894	.1796812	.0564216	.2335143	.1087284	1.661373	.0716340
#1	.1635966	.2048494	42.94437	.5181774	.3674020	1.131594	235.2308
#2	.1692960	.2052692	42.95902	.5157844	.3680276	1.167931	235.3530
#3	.1673751	.2045355	42.91170	.5172616	.3672840	1.160301	235.0199

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.832516	62.13583	.8121235	.0668472	15.80718	.5436906	.8619222
Stddev	.015272	.11875	.0008244	.0011205	.24466	.0012173	.0016440
%RSD	.1949794	.1911143	.1015137	1.676166	1.547792	.2238873	.1907325
#1	7.816988	61.99909	.8123912	.0674507	15.52611	.5424484	.8637639
#2	7.847518	62.21311	.8127808	.0655543	15.97244	.5437421	.8606029
#3	7.833042	62.19528	.8111985	.0675365	15.92298	.5448813	.8613997

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.81964	15.67013	.3007403	.2986423	.8219164	4.621176	.7504515
Stddev	.54363	.02882	.0006597	.0006596	.0048212	.081714	.0012824
%RSD	1.954130	.1839415	.2193536	.2208794	.5865814	1.768253	.1708874
#1	27.25872	15.66202	.3000055	.2985821	.8239557	4.529146	.7518699
#2	28.34415	15.70214	.3012815	.2993300	.8164107	4.685220	.7493738
#3	27.85605	15.64622	.3009339	.2980149	.8253829	4.649162	.7501107

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2310-01MS Acquired: 6/17/2025 16:17:08 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**5.844992**	**.3723549**	**.3114728**
Stddev	.019809	.0065682	.0008870
%RSD	.3388993	1.763972	.2847780
#1	5.822131	.3684159	.3104782
#2	5.855787	.3799373	.3121821
#3	5.857059	.3687114	.3117580

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4461.058**	**55173.58**	**4174.882**	**5198.784**	**4168.517**
Stddev	23.590	371.27	49.150	38.461	18.072
%RSD	.5288038	.6729207	1.177288	.7398166	.4335297
#1	4481.365	54769.87	4229.109	5154.614	4182.772
#2	4435.181	55500.36	4133.266	5224.880	4148.192
#3	4466.629	55250.51	4162.270	5216.856	4174.588

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2310-01MSD Acquired: 6/17/2025 16:21:25 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8419134	1.969658	1.232934	1.356092	.3204204	108.3366	.9666234
Stddev	.0014121	.001855	.001579	.003890	.0018081	.1681	.0044657
%RSD	.1677261	.0941929	.1280659	.2868271	.5642878	.1551968	.4619882
#1	.8422007	1.971533	1.232090	1.358708	.3183327	108.1572	.9717439
#2	.8431597	1.967823	1.231956	1.357946	.3214798	108.4906	.9645899
#3	.8403797	1.969618	1.234755	1.351622	.3214488	108.3621	.9635364

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1617868	.1988555	43.58816	.5005979	.3542796	1.029932	226.9204
Stddev	.0011038	.0004063	.03565	.0002868	.0008701	.006562	.2454
%RSD	.6822314	.2043034	.0817918	.0572988	.2455861	.6371239	.1081394
#1	.1623745	.1989367	43.62929	.5004162	.3548919	1.031806	226.7043
#2	.1605135	.1984148	43.56604	.5009286	.3532837	1.022636	227.1872
#3	.1624723	.1992151	43.56915	.5004489	.3546633	1.035352	226.8696

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.893220	57.59802	.7843888	.0658982	15.39271	.5285542	.8124918
Stddev	.009501	.09144	.0003757	.0002790	.08197	.0009308	.0024138
%RSD	.1378308	.1587469	.0478915	.4234081	.5325497	.1761128	.2970928
#1	6.903377	57.68913	.7848043	.0655808	15.39992	.5292823	.8097555
#2	6.891732	57.59867	.7842889	.0660093	15.30736	.5288750	.8143194
#3	6.884551	57.50626	.7840732	.0661046	15.47083	.5275054	.8134005

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.47374	15.19646	.2875603	.2877511	.7179273	5.941687	.7442948
Stddev	.22554	.02722	.0011654	.0011514	.0049394	.037388	.0015995
%RSD	.8519395	.1791521	.4052717	.4001231	.6880082	.6292557	.2149000
#1	26.71092	15.19425	.2862168	.2864444	.7195988	5.954796	.7428765
#2	26.26199	15.17041	.2881657	.2881921	.7218140	5.899510	.7460285
#3	26.44831	15.22473	.2882984	.2886168	.7123690	5.970756	.7439794

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2310-01MSD Acquired: 6/17/2025 16:21:25 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.259210	.3447899	.3060752
Stddev	.020111	.0033252	.0009804
%RSD	.3823922	.9644059	.3203181
#1	5.280691	.3473118	.3071551
#2	5.240830	.3460362	.3052409
#3	5.256110	.3410216	.3058298

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4575.052	55923.90	4236.020	5299.442	4259.023
Stddev	5.128	172.94	16.601	11.008	10.682
%RSD	.1120824	.3092341	.3919012	.2077197	.2508044
#1	4578.447	56057.08	4223.934	5305.971	4263.719
#2	4577.554	55728.45	4254.948	5286.733	4266.552
#3	4569.153	55986.17	4229.177	5305.622	4246.798

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2310-01A Acquired: 6/17/2025 16:25:43 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8060726**	**1.856653**	**1.186702**	**1.333293**	**.5701419**	**104.8706**	**.9448188**
Stddev	.0031013	.006672	.003483	.004240	.0034840	.3915	.0063569
%RSD	.3847423	.3593339	.2934727	.3180449	.6110797	.3733144	.6728128
#1	.8094497	1.863730	1.190034	1.329666	.5741017	105.3225	.9483246
#2	.8033524	1.850479	1.183086	1.337955	.5687774	104.6536	.9374810
#3	.8054157	1.855749	1.186988	1.332257	.5675467	104.6356	.9486509

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1497939**	**.1877180**	**35.61160**	**.4938309**	**.3389535**	**.9278408**	**233.3018**
Stddev	.0016564	.0005504	.16766	.0010699	.0008563	.0117602	.5479
%RSD	1.105765	.2932279	.4708063	.2166545	.2526288	1.267476	.2348635
#1	.1512435	.1881972	35.79329	.4945153	.3392724	.9386713	233.9322
#2	.1479886	.1871168	35.57866	.4943795	.3379836	.9153314	232.9397
#3	.1501495	.1878401	35.46285	.4925980	.3396046	.9295196	233.0335

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.744994**	**57.50812**	**.7526136**	**.0613695**	**15.94873**	**.5170765**	**.8114000**
Stddev	.032462	.32365	.0014591	.0009553	.19204	.0042066	.0051628
%RSD	.4191332	.5627835	.1938681	1.556678	1.204083	.8135424	.6362863
#1	7.782326	57.82765	.7539682	.0603381	16.09235	.5188057	.8172531
#2	7.723414	57.18051	.7510687	.0615466	15.73061	.5122809	.8074931
#3	7.729240	57.51619	.7528038	.0622239	16.02324	.5201430	.8094539

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.10232**	**14.60253**	**.2933727**	**.2794452**	**.8682407**	**4.329037**	**.7092017**
Stddev	.52216	.04159	.0006574	.0009568	.0038736	.047621	.0015580
%RSD	2.000440	.2848049	.2240999	.3423893	.4461403	1.100047	.2196853
#1	26.51906	14.64554	.2930198	.2804954	.8686843	4.371192	.7106819
#2	25.51659	14.56252	.2929670	.2792171	.8641644	4.277381	.7075761
#3	26.27131	14.59953	.2941312	.2786230	.8718733	4.338539	.7093473

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2310-01A Acquired: 6/17/2025 16:25:43 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.157773	.3362925	.2998015
Stddev	.020417	.0022279	.0012607
%RSD	.3958551	.6624866	.4205198
#1	5.179645	.3375172	.3005629
#2	5.139216	.3376394	.2983462
#3	5.154459	.3337209	.3004952

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4682.890	57402.23	4368.132	5431.454	4292.794
Stddev	6.844	18.95	48.945	21.116	5.941
%RSD	.1461403	.0330040	1.120493	.3887753	.1383971
#1	4679.959	57422.89	4322.188	5408.633	4285.942
#2	4678.001	57398.15	4419.607	5450.300	4295.925
#3	4690.711	57385.66	4362.601	5435.429	4296.514

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCV04 Acquired: 6/17/2025 16:30:01 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.841701**	**5.015694**	**4.854937**	**4.881242**	**4.983966**	**10.00004**	**10.06144**
Stddev	.010521	.014428	.010156	.007343	.005291	.02679	.05168
%RSD	.2172900	.2876633	.2091986	.1504359	.1061553	.2679150	.5136633
#1	4.834953	4.999576	4.843213	4.889437	4.978168	9.97611	10.08458
#2	4.836327	5.020101	4.860554	4.879032	4.985198	10.02898	10.09751
#3	4.853823	5.027404	4.861046	4.875258	4.988532	9.99504	10.00223

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2595564**	**2.459890**	**25.35550**	**1.012385**	**2.430568**	**1.290435**	**4.984529**
Stddev	.0039207	.005326	.07321	.000794	.001285	.016752	.037641
%RSD	1.510525	.2165289	.2887227	.0783924	.0528745	1.298178	.7551490
#1	.2615193	2.453806	25.33607	1.012010	2.430298	1.298582	5.026030
#2	.2621080	2.462152	25.43646	1.013297	2.429439	1.301556	4.952594
#3	.2550420	2.463712	25.29396	1.011849	2.431966	1.271168	4.974964

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.467395**	**24.47323**	**2.456909**	**1.276387**	**25.44596**	**2.462314**	**2.494105**
Stddev	.008295	.19182	.003179	.001785	.24668	.011244	.007384
%RSD	.3361983	.7838112	.1293838	.1398476	.9694371	.4566511	.2960381
#1	2.464995	24.60517	2.453430	1.277796	25.56498	2.469147	2.485679
#2	2.476626	24.56133	2.457634	1.274380	25.61057	2.468459	2.497189
#3	2.460565	24.25318	2.459662	1.276986	25.16233	2.449337	2.499446

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.35875**	**5.044673**	**5.156052**	**5.019685**	**4.859631**	**5.131015**	**4.957077**
Stddev	.04498	.010637	.080018	.008789	.025014	.070605	.013564
%RSD	.1706430	.2108541	1.551932	.1750858	.5147371	1.376053	.2736248
#1	26.38741	5.033067	5.188802	5.010466	4.830750	5.156116	4.946262
#2	26.38194	5.046997	5.214500	5.027969	4.874443	5.185639	4.952673
#3	26.30691	5.053957	5.064854	5.020620	4.873701	5.051288	4.972296

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCV04 Acquired: 6/17/2025 16:30:01 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.978842**	**5.017287**	**4.998264**
Stddev	.008933	.022786	.015699
%RSD	.1794100	.4541430	.3140844
#1	4.971042	5.004706	5.003880
#2	4.988587	5.043590	5.010383
#3	4.976898	5.003567	4.980530

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3355.991**	**41842.30**	**3056.732**	**3938.291**	**4333.713**
Stddev	10.610	254.94	24.605	27.362	8.366
%RSD	.3161583	.6092880	.8049558	.6947679	.1930376
#1	3349.983	41956.12	3043.402	3953.206	4332.290
#2	3349.747	42020.51	3041.668	3954.954	4326.151
#3	3368.242	41550.28	3085.127	3906.712	4342.699

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCB04 Acquired: 6/17/2025 16:34:16 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014127**	**.0028377**	**.0002386**	**-.000994**	**.0007767**	**-.015026**	**-.000970**
Stddev	.0036885	.0014662	.0008658	.001057	.0024798	.033941	.001648
%RSD	261.1021	51.66728	362.8869	106.3584	319.2650	225.8813	169.8722
#1	.0056098	.0042044	.0010281	-.001110	-.001771	.010215	-.001136
#2	-.001313	.0030196	.0003750	.000116	.000918	-.001682	.000754
#3	-.000059	.0012890	-.000687	-.001989	.003183	-.053611	-.002528

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000013**	**.0001256**	**-.002831**	**-.000707**	**.0002033**	**-.000251**	**.0168841**
Stddev	.000049	.0001277	.019014	.000222	.0001882	.000065	.0161203
%RSD	382.7625	101.7018	671.7376	31.39095	92.57951	25.73286	95.47582
#1	-.000002	.0002731	-.017837	-.000646	.0004079	-.000264	.0283992
#2	-.000067	.0000542	.018552	-.000523	.0001640	-.000308	.0237922
#3	.000030	.0000495	-.009207	-.000954	.0000378	-.000181	-.001539

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001754**	**.0346423**	**.0005695**	**.0007504**	**-.025505**	**.0050299**	**-.000074**
Stddev	.0006654	.0346808	.0002347	.0009295	.003639	.0040976	.000271
%RSD	379.3133	100.1112	41.21559	123.8677	14.26625	81.46552	365.9363
#1	.0003197	-.000906	.0004877	-.000288	-.028648	.0097431	.000168
#2	-.000550	.068385	.0008342	.001504	-.021519	.0030333	-.000023
#3	.000757	.036449	.0003866	.001035	-.026349	.0023133	-.000368

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0069593**	**.0010263**	**.0103245**	**.0003955**	**-.003164**	**.0086986**	**.0011379**
Stddev	.0008274	.0013690	.0009752	.0004183	.001967	.0007291	.0000609
%RSD	11.88966	133.3852	9.445735	105.7585	62.14680	8.381514	5.354169
#1	.0070405	.0019314	.0109704	.0008615	-.000964	.0085377	.0011075
#2	.0077430	.0016963	.0108004	.0002726	-.003779	.0080634	.0010982
#3	.0060942	-.000549	.0092027	.0000524	-.004751	.0094947	.0012081

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCB04 Acquired: 6/17/2025 16:34:16 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0051914	-.005764	.0003357
Stddev	.0050298	.001990	.0000979
%RSD	96.88640	34.52105	29.15315
#1	.0108503	-.008058	.0002266
#2	.0012300	-.004499	.0004156
#3	.0034939	-.004735	.0003649

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3539.341	44630.57	3194.342	4143.856	5010.345
Stddev	16.250	347.83	18.084	20.479	18.230
%RSD	.4591361	.7793552	.5661166	.4941963	.3638431
#1	3542.270	44481.25	3213.424	4126.921	5017.721
#2	3521.825	44382.34	3192.146	4138.031	4989.583
#3	3553.927	45028.13	3177.458	4166.617	5023.731

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: PB168444BL Acquired: 6/17/2025 16:40:19 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0027834	.0009486	.0015734	.0007698	.0006144	-.030240	-.001764
Stddev	.0004155	.0024035	.0007497	.0030022	.0015024	.007048	.001062
%RSD	14.92760	253.3747	47.65000	389.9970	244.5438	23.30580	60.18432
#1	.0026361	.0034289	.0009079	-.001299	-.000046	-.034760	-.002663
#2	.0032525	-.001370	.0014265	-.000605	.002334	-.033839	-.000593
#3	.0024617	.000787	.0023856	.004213	-.000444	-.022119	-.002038

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000022	.0000169	.0303922	-.000860	-.000146	.0000145	.0217271
Stddev	.0001328	.0000658	.0111560	.000570	.000048	.0007752	.0227856
%RSD	6157.790	389.0086	36.70682	66.29018	32.61710	5357.051	104.8717
#1	.0001525	-.000023	.0400865	-.000210	-.000167	-.000259	-.004279
#2	-.000099	-.000019	.0328917	-.001277	-.000092	.000889	.031273
#3	-.000047	.000093	.0181985	-.001094	-.000181	-.000587	.038187

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000562	.0021368	.0003620	.0003808	-.033009	-.000074	.0000143
Stddev	.000821	.0268046	.0000370	.0004657	.008722	.007222	.0004296
%RSD	146.0506	1254.401	10.21596	122.2888	26.42183	9698.948	3010.166
#1	-.000596	.0093737	.0004042	.0003773	-.029193	-.001577	-.000013
#2	-.001365	.0245800	.0003350	.0008482	-.026846	-.006427	-.000401
#3	.000275	-.027543	.0003470	-.000083	-.042989	.007780	.000457

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0060474	.0010675	.0051850	.0002954	-.000486	.0043563	-.000256
Stddev	.0004441	.0024451	.0005434	.0002236	.002001	.0017575	.000418
%RSD	7.343525	229.0447	10.47954	75.69835	411.9436	40.34372	163.0680
#1	.0059281	-.001724	.0047199	.0002444	.000186	.0057116	-.000235
#2	.0056751	.002832	.0050530	.0005400	.001093	.0023705	.000151
#3	.0065390	.002094	.0057823	.0001017	-.002736	.0049869	-.000685

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: PB168444BL Acquired: 6/17/2025 16:40:19 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0044545	-.009401	.0001087
Stddev	.0026858	.006070	.0002581
%RSD	60.29456	64.56066	237.5909
#1	.0013977	-.011427	-.000135
#2	.0055298	-.002578	.000380
#3	.0064362	-.014199	.000081

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3507.351	44092.08	3151.256	4109.411	4976.747
Stddev	8.572	102.80	21.137	18.654	8.530
%RSD	.2444053	.2331394	.6707494	.4539229	.1713994
#1	3500.519	44206.24	3165.942	4102.859	4975.183
#2	3504.564	44006.85	3160.794	4094.917	4969.108
#3	3516.970	44063.15	3127.030	4130.456	4985.952

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: PB168444BS Acquired: 6/17/2025 16:49:00 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .7179165	F 2.036162	F .9417636	F 1.952161	F .8134987	F 2.049177
Stddev	.0045663	.005710	.0018058	.006323	.0034035	.042090
%RSD	.6360471	.2804115	.1917415	.3239228	.4183808	2.053977
#1	.7152030	2.033322	.9422094	1.948394	.8095727	2.074906
#2	.7153582	2.042735	.9433046	1.959462	.8156175	2.000605
#3	.7231885	2.032430	.9397766	1.948628	.8153058	2.072021

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .2035294	F .2168662	F .1902692	F 1.052879	F .4102236	F .1922879
Stddev	.0035216	.0036083	.0003427	.003612	.0009284	.0000936
%RSD	1.730252	1.663820	.1801200	.3430854	.2263254	.0486973
#1	.1994642	.2129760	.1899947	1.048917	.4112524	.1922760
#2	.2056445	.2201033	.1906533	1.055989	.4099702	.1922008
#3	.2054796	.2175194	.1901595	1.053731	.4094481	.1923869

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .3365039	F 3.224460	F .2040511	F 2.047246	F .4873386	F .0771327
Stddev	.0045878	.022546	.0031265	.031980	.0004618	.0008204
%RSD	1.363380	.6992226	1.532209	1.562089	.0947582	1.063647
#1	.3322280	3.231272	.2004577	2.015965	.4871851	.0764813
#2	.3413503	3.242815	.2055470	2.045893	.4878576	.0768626
#3	.3359334	3.199293	.2061487	2.079881	.4869731	.0780541

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 2.949505	F .2980968	F .2077921	9.379732	F 5.676030	F .3128847
Stddev	.041134	.0080798	.0009865	.131124	.001677	.0033674
%RSD	1.394592	2.710465	.4747606	1.397956	.0295437	1.076229
#1	2.907587	.2890274	.2088865	9.236213	5.674776	.3106744
#2	2.989807	.3045269	.2069711	9.493268	5.677935	.3167603
#3	2.951121	.3007360	.2075187	9.409716	5.675379	.3112195

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: PB168444BS Acquired: 6/17/2025 16:49:00 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .4023931	F -.001922	F .9528087	F .6721064	.1993595	F .2172216
Stddev	.0008256	.001993	.0126407	.0005907	.0022652	.0030628
%RSD	.2051675	103.7057	1.326676	.0878873	1.136262	1.410001
#1	.4026092	.000077	.9390501	.6722492	.2009640	.2203804
#2	.4030891	-.003909	.9639085	.6726125	.2003462	.2170198
#3	.4014810	-.001934	.9554676	.6714573	.1967682	.2142647

Elem	Sr4077
Units	ppm
Avg	.2022364
Stddev	.0021924
%RSD	1.084087
#1	.1997606
#2	.2039321
#3	.2030165

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3509.005	43690.78	3133.021	4101.532	4818.858
Stddev	5.427	524.55	24.128	41.115	7.805
%RSD	.1546618	1.200597	.7701287	1.002418	.1619679
#1	3514.580	43093.50	3146.506	4054.437	4826.997
#2	3503.738	43902.25	3105.164	4119.892	4818.142
#3	3508.697	44076.58	3147.391	4130.268	4811.436

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: PB168489BL Acquired: 6/17/2025 17:00:24 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007038	.0010193	.0006601	-.000948	-.000498	-.012956
Stddev	.0024317	.0010617	.0007064	.003686	.002071	.008953
%RSD	345.4957	104.1606	107.0079	388.7095	415.7612	69.09965
#1	.0028618	-.000043	.0012316	-.004336	-.002820	-.002796
#2	.0011807	.001020	-.000130	-.001484	.001160	-.016383
#3	-.001931	.002081	.000878	.002976	.000166	-.019690

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001684	-.000085	-.000065	.0278111	.0000646	.0000886
Stddev	.001788	.000111	.000047	.0192261	.0004851	.0003490
%RSD	106.1847	131.4369	71.78117	69.13121	751.3428	394.0420
#1	-.001004	-.000211	-.000061	.0057140	.0001172	.0003992
#2	-.003711	-.000002	-.000021	.0370063	.0005212	-.000289
#3	-.000335	-.000041	-.000114	.0407129	-.000445	.000156

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000263	.0104957	-.000926	.0138862	-.000379	-.000392
Stddev	.000470	.0209278	.001648	.0186651	.000017	.000119
%RSD	178.3367	199.3937	177.9464	134.4142	4.446951	30.27029
#1	.000214	.0016121	.000078	.0300718	-.000377	-.000470
#2	-.000278	.0343998	-.000029	.0181185	-.000363	-.000451
#3	-.000725	-.004525	-.002828	-.006532	-.000396	-.000256

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.011005	.0032955	.0000194	.0052927	.0031019	.0002000
Stddev	.005614	.0069859	.0002123	.0023344	.0008183	.0014101
%RSD	51.01680	211.9868	1094.345	44.10616	26.37962	705.1246
#1	-.016354	.0010741	-.000193	.0079716	.0039674	.0011577
#2	-.005158	.0111220	.000232	.0036935	.0029974	-.001419
#3	-.011502	-.002310	.000020	.0042132	.0023409	.000861

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: PB168489BL Acquired: 6/17/2025 17:00:24 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001070	-.003596	.0022907	.0002875	.0022562	F -.010003
Stddev	.0006208	.003290	.0019337	.0008422	.0029679	.005578
%RSD	580.1888	91.50907	84.41348	292.9541	131.5422	55.76477
#1	-.000356	-.001966	.0021924	-.000638	-.000241	-.005389
#2	.000812	-.001438	.0042716	.000492	.005537	-.008417
#3	-.000135	-.007383	.0004081	.001009	.001473	-.016201

Elem	Sr4077
Units	ppm
Avg	.0000557
Stddev	.0000707
%RSD	127.0387
#1	.0000316
#2	.0000001
#3	.0001354

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3517.326	43489.51	3146.803	4075.144	4983.190
Stddev	18.193	273.17	36.412	28.913	15.938
%RSD	.5172280	.6281256	1.157097	.7094882	.3198451
#1	3527.382	43513.14	3126.139	4091.835	4994.112
#2	3496.325	43205.30	3125.424	4041.758	4964.901
#3	3528.271	43750.10	3188.845	4091.838	4990.557

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: PB168489BS Acquired: 6/17/2025 17:05:27 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .7101119	F 2.014780	F .9268957	F 1.925086	F .7911284	F 2.011282
Stddev	.0014044	.001652	.0016535	.011511	.0018483	.012210
%RSD	.1977767	.0820089	.1783854	.5979633	.2336289	.6070984
#1	.7085308	2.015332	.9282099	1.919827	.7896399	2.022867
#2	.7112148	2.012923	.9250392	1.917144	.7905482	1.998530
#3	.7105901	2.016086	.9274381	1.938287	.7931973	2.012450

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .1988881	F .2131339	F .1879861	F 1.039213	F .4036510	F .1892562
Stddev	.0008021	.0025343	.0002312	.018057	.0020751	.0003607
%RSD	.4033109	1.189066	.1229613	1.737579	.5140797	.1905688
#1	.1983723	.2149707	.1877295	1.018891	.4028553	.1888400
#2	.1998122	.2141885	.1880511	1.045332	.4020915	.1894521
#3	.1984797	.2102426	.1881779	1.053415	.4060062	.1894766

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .3301787	F 3.187753	F .2009303	F 1.998379	F .4804088	F .0761764
Stddev	.0033731	.015624	.0011099	.006204	.0007725	.0009407
%RSD	1.021589	.4901184	.5523805	.3104579	.1608005	1.234865
#1	.3327821	3.186579	.1997181	2.005391	.4795320	.0756253
#2	.3313857	3.203930	.2018968	1.993602	.4807050	.0756413
#3	.3263681	3.172749	.2011760	1.996144	.4809894	.0772625

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 2.918195	F .2934807	F .2032655	9.271303	F 5.604138	F .3078720
Stddev	.016155	.0038870	.0015216	.155044	.010065	.0045491
%RSD	.5535884	1.324456	.7485648	1.672295	.1795912	1.477589
#1	2.921258	.2956635	.2015905	9.339044	5.593821	.3118036
#2	2.932599	.2957856	.2045622	9.380950	5.604664	.3089229
#3	2.900728	.2889929	.2036439	9.093917	5.613929	.3028894

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: PB168489BS Acquired: 6/17/2025 17:05:27 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .3916820	F .0009885	F .9241341	F .6571414	.1918604	F .1998218
Stddev	.0008474	.0026835	.0095745	.0019035	.0043062	.0069633
%RSD	.2163529	271.4691	1.036049	.2896658	2.244437	3.484767
#1	.3908503	-.002110	.9299202	.6552602	.1886974	.1985868
#2	.3916514	.002518	.9293997	.6570974	.1967645	.1935586
#3	.3925443	.002557	.9130826	.6590665	.1901192	.2073200

Elem	Sr4077
Units	ppm
Avg	.2003482
Stddev	.0009816
%RSD	.4899615
#1	.1998933
#2	.2014747
#3	.1996765

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3510.252	43764.13	3127.844	4106.193	4809.036
Stddev	10.307	275.00	24.867	18.592	13.123
%RSD	.2936157	.6283799	.7950299	.4527707	.2728725
#1	3520.967	43762.40	3106.021	4110.381	4818.944
#2	3500.410	44039.99	3122.594	4122.333	4794.154
#3	3509.379	43489.99	3154.918	4085.864	4814.012

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: PB168475BL Acquired: 6/17/2025 17:10:21 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010024**	**.0000335**	**-.000696**	**-.000770**	**-.001384**	**-.036123**
Stddev	.0012937	.0016942	.000580	.003105	.003474	.028707
%RSD	129.0647	5053.254	83.27144	403.0988	251.0679	79.46977
#1	.0023838	.0009563	-.001366	-.004285	.001799	-.068249
#2	.0008040	.0010660	-.000382	.000374	-.000860	-.012984
#3	-.000181	-.001922	-.000342	.001600	-.005090	-.027137

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001077**	**.0000157**	**.0000599**	**.0148759**	**-.000882**	**.0000133**
Stddev	.000797	.0000328	.0000191	.0018801	.000566	.0003268
%RSD	73.98662	208.4471	31.91459	12.63848	64.11527	2455.266
#1	-.001730	-.000021	.0000659	.0140354	-.001346	.0003339
#2	-.001312	.000024	.0000753	.0135627	-.001049	.0000254
#3	-.000189	.000043	.0000385	.0170296	-.000252	-.000319

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008877**	**-.010587**	**-.001141**	**.0223287**	**-.000061**	**.0002985**
Stddev	.0003868	.006996	.000638	.0297025	.000119	.0008622
%RSD	43.57568	66.08159	55.93413	133.0240	193.8177	288.8759
#1	.0004701	-.002574	-.001877	.0205090	.000062	.0012709
#2	.0012337	-.013708	-.000791	.0528991	-.000174	-.000003
#3	.0009593	-.015480	-.000754	-.006422	-.000072	-.000373

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.019451**	**.0027350**	**-.000032**	**.0049939**	**.0017330**	**.0001098**
Stddev	.010326	.0039583	.000486	.0008048	.0018007	.0006632
%RSD	53.08713	144.7250	1516.513	16.11450	103.9057	604.2631
#1	-.008264	.0054366	.000027	.0055785	.0037904	.0008666
#2	-.021473	.0045770	.000422	.0040761	.0004440	-.000369
#3	-.028616	-.001809	-.000545	.0053273	.0009645	-.000168

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: PB168475BL Acquired: 6/17/2025 17:10:21 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000111	-.001944	.0029831	.0002390	.0034268	F -.010415
Stddev	.000168	.002222	.0009606	.0006733	.0017034	.004301
%RSD	150.9424	114.2896	32.20257	281.7008	49.70831	41.29809
#1	-.000144	-.001882	.0019429	.0010148	.0017397	-.011324
#2	-.000260	.000246	.0038368	-.000105	.0051460	-.014190
#3	.000071	-.004196	.0031696	-.000193	.0033947	-.005732

Elem	Sr4077
Units	ppm
Avg	-.000063
Stddev	.000372
%RSD	594.5419
#1	.000048
#2	-.000477
#3	.000241

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3532.102	44166.04	3141.069	4129.881	5008.837
Stddev	9.599	169.82	12.528	7.768	10.857
%RSD	.2717678	.3845108	.3988442	.1880996	.2167627
#1	3522.095	44108.59	3155.488	4136.904	4999.502
#2	3541.234	44032.39	3134.867	4131.204	5020.752
#3	3532.976	44357.13	3132.852	4121.537	5006.257

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: PB168475BS Acquired: 6/17/2025 17:14:46 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .7021365	F 1.993415	F .9206095	F 1.902249	F .7926224	F 1.975026
Stddev	.0021140	.001862	.0016549	.006189	.0041432	.008515
%RSD	.3010860	.0933933	.1797592	.3253633	.5227221	.4311481
#1	.6997006	1.993797	.9201874	1.900036	.7880008	1.965334
#2	.7032161	1.995056	.9192065	1.909240	.7960040	1.981308
#3	.7034927	1.991391	.9224345	1.897470	.7938625	1.978435

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .1986057	F .2097952	F .1868815	F 1.019332	F .4011676	F .1879616
Stddev	.0013026	.0006610	.0001806	.009484	.0007495	.0003010
%RSD	.6558496	.3150500	.0966449	.9303738	.1868316	.1601396
#1	.1999682	.2103402	.1869410	1.016961	.4006872	.1876838
#2	.1973728	.2090600	.1866787	1.011259	.4020313	.1879196
#3	.1984760	.2099855	.1870248	1.029776	.4007844	.1882814

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .3257954	F 3.156659	F .1990639	F 1.981767	F .4768373	F .0754666
Stddev	.0027939	.014738	.0007717	.053616	.0010212	.0005988
%RSD	.8575602	.4668801	.3876534	2.705476	.2141549	.7934177
#1	.3289716	3.170673	.1998913	2.043220	.4757257	.0757462
#2	.3246966	3.158012	.1989366	1.957546	.4777338	.0747792
#3	.3237179	3.141291	.1983638	1.944534	.4770522	.0758744

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 2.889761	F .2923708	F .2012071	9.142427	F 5.564039	F .3038633
Stddev	.019989	.0074444	.0024702	.060673	.003471	.0020709
%RSD	.6917220	2.546231	1.227672	.6636430	.0623762	.6815376
#1	2.899822	.2973851	.2037780	9.083786	5.561902	.3060509
#2	2.902721	.2959103	.2009916	9.138549	5.568043	.3019330
#3	2.866741	.2838170	.1988518	9.204946	5.562172	.3036060

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: PB168475BS Acquired: 6/17/2025 17:14:46 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .3922820	F -.004349	F .9196011	F .6591501	.1939038	F .2027560
Stddev	.0009189	.003096	.0068525	.0006578	.0058665	.0034347
%RSD	.2342344	71.18468	.7451616	.0997887	3.025469	1.693984
#1	.3912225	-.002419	.9265283	.6583919	.1951271	.2022643
#2	.3928599	-.007919	.9194491	.6595684	.1990621	.1995937
#3	.3927637	-.002708	.9128258	.6594900	.1875220	.2064100

Elem	Sr4077
Units	ppm
Avg	.1992800
Stddev	.0004223
%RSD	.2119324
#1	.1994520
#2	.1995892
#3	.1987988

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3530.384	43996.19	3162.117	4135.724	4830.357
Stddev	20.299	221.31	21.317	37.610	27.206
%RSD	.5749918	.5030274	.6741370	.9094012	.5632320
#1	3529.605	43948.89	3142.851	4100.628	4827.295
#2	3551.062	43802.35	3158.483	4131.119	4858.965
#3	3510.486	44237.33	3185.017	4175.425	4804.811

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: PB168490BL Acquired: 6/17/2025 17:19:09 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018308	.0015382	.0005650	-.001154	-.001160	-.022816	-.000809
Stddev	.0021825	.0018232	.0006331	.003438	.003729	.019912	.000939
%RSD	119.2102	118.5343	112.0390	298.0245	321.3810	87.27411	116.0775
#1	-.000144	.0029081	-.000017	-.000139	-.003079	-.038975	-.000918
#2	.004174	.0022377	.001239	.001663	-.003540	-.028902	-.001688
#3	.001462	-.000531	.000474	-.004984	.003138	-.000571	.000180

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000008	-.000055	-.000056	-.000982	-.000233	.0000471	.0162866
Stddev	.000192	.000066	.010818	.000912	.000072	.0007227	.0085188
%RSD	2328.457	119.6660	19390.59	92.87982	30.78957	1535.085	52.30579
#1	.000047	-.000125	-.010132	.000071	-.000238	.0004558	.0260972
#2	-.000222	-.000047	.011376	-.001519	-.000159	-.000787	.0107610
#3	.000149	.000007	-.001411	-.001497	-.000302	.000473	.0120016

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000110	.0414898	.0002897	-.000014	-.008497	.0066398	.0001684
Stddev	.000872	.0081959	.0004864	.000319	.013316	.0047875	.0000212
%RSD	791.4164	19.75400	167.9040	2300.076	156.7252	72.10362	12.56271
#1	-.001045	.0323891	.0005636	-.000274	-.022128	.0033595	.0001613
#2	.000681	.0482887	.0005774	-.000110	.004481	.0121335	.0001922
#3	.000033	.0437917	-.000272	.000343	-.007842	.0044263	.0001517

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0050851	.0017477	.0008560	.0004012	-.003081	.0035332	-.000529
Stddev	.0010015	.0015254	.0008007	.0004965	.005771	.0011230	.000820
%RSD	19.69397	87.27795	93.53710	123.7475	187.3126	31.78310	155.0162
#1	.0054394	.0034220	.0007870	.0006157	-.008414	.0044981	-.000610
#2	.0039546	.0004369	.0000921	-.000166	.003046	.0038010	-.001305
#3	.0058612	.0013843	.0016890	.000754	-.003875	.0023006	.000328

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: PB168490BL Acquired: 6/17/2025 17:19:09 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.000646	-.009733	-.000094
Stddev	.002396	.001534	.000443
%RSD	371.1188	15.76092	473.0981
#1	.000204	-.009506	-.000519
#2	-.003351	-.011368	.000365
#3	.001210	-.008325	-.000126

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3539.510	44137.73	3142.990	4120.160	5009.585
Stddev	18.948	258.71	26.544	21.115	27.327
%RSD	.5353329	.5861441	.8445323	.5124799	.5454892
#1	3551.329	43839.19	3137.215	4097.325	5032.507
#2	3549.547	44277.61	3171.946	4138.978	5016.903
#3	3517.655	44296.38	3119.809	4124.178	4979.344

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: PB168490BS Acquired: 6/17/2025 17:23:34 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .7168484	F 2.031336	F .9386454	F 1.948863	F .8063951	F 2.042466
Stddev	.0006094	.000656	.0011416	.012062	.0040903	.025656
%RSD	.0850070	.0323067	.1216243	.6189033	.5072306	1.256150
#1	.7165377	2.031136	.9397253	1.955859	.8017244	2.048722
#2	.7164571	2.030802	.9387602	1.955794	.8081233	2.014260
#3	.7175505	2.032068	.9374507	1.934935	.8093376	2.064416

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .2030776	F .2158123	F .1903655	F 1.030040	F .4106763	F .1915042
Stddev	.0030729	.0029951	.0001383	.005880	.0009262	.0002451
%RSD	1.513174	1.387845	.0726500	.5708428	.2255238	.1279822
#1	.1996228	.2128929	.1905045	1.035705	.4104593	.1914398
#2	.2055059	.2188779	.1902279	1.030449	.4116917	.1917750
#3	.2041040	.2156660	.1903641	1.023966	.4098779	.1912977

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .3341594	F 3.241934	F .2029596	F 2.051944	F .4869576	F .0768521
Stddev	.0050364	.013480	.0021510	.032481	.0011614	.0006833
%RSD	1.507192	.4157980	1.059810	1.582926	.2384947	.8891707
#1	.3286878	3.226832	.2005013	2.017534	.4882670	.0764042
#2	.3386015	3.252748	.2044956	2.056228	.4865534	.0776387
#3	.3351888	3.246223	.2038820	2.082070	.4860523	.0765135

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 2.949949	F .3065257	F .2067183	9.391414	F 5.681730	F .3115552
Stddev	.025369	.0024931	.0012905	.132177	.010365	.0053181
%RSD	.8599975	.8133236	.6242975	1.407426	.1824202	1.706947
#1	2.923424	.3036565	.2080718	9.249957	5.687182	.3054873
#2	2.973979	.3077572	.2055016	9.511773	5.669777	.3154064
#3	2.952444	.3081634	.2065817	9.412513	5.688231	.3137717

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: PB168490BS Acquired: 6/17/2025 17:23:34 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .4001312	F -.004676	F .9443942	F .6713144	.1990013	F .2113936
Stddev	.0007889	.001660	.0145557	.0026850	.0047261	.0022194
%RSD	.1971593	35.50826	1.541275	.3999584	2.374913	1.049870
#1	.3992398	-.006557	.9288421	.6741321	.1962577	.2129373
#2	.4007394	-.003415	.9576901	.6687855	.1962877	.2088502
#3	.4004143	-.004056	.9466505	.6710257	.2044585	.2123933

Elem	Sr4077
Units	ppm
Avg	.2035114
Stddev	.0011475
%RSD	.5638285
#1	.2021937
#2	.2042905
#3	.2040500

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3534.917	43838.05	3143.133	4112.299	4842.668
Stddev	3.230	148.39	37.080	32.275	6.025
%RSD	.0913692	.3384962	1.179721	.7848443	.1244060
#1	3538.379	43787.98	3182.948	4082.018	4845.404
#2	3534.390	44005.00	3109.586	4146.254	4846.840
#3	3531.984	43721.18	3136.866	4108.624	4835.761

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2311-08 Acquired: 6/17/2025 17:27:54 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.013473**	**.0136499**	**.0065137**	**-.016182**	**.0127384**	**.2076971**	**.1301281**
Stddev	.001990	.0028512	.0008539	.003354	.0023132	.0162551	.0006503
%RSD	14.76738	20.88839	13.10934	20.72853	18.15957	7.826364	.4997314
#1	-.011447	.0120089	.0061147	-.012668	.0138782	.1947891	.1296038
#2	-.013550	.0119985	.0059324	-.016529	.0100764	.2023501	.1308557
#3	-.015424	.0169422	.0074941	-.019350	.0142605	.2259523	.1299246

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000057**	**.0000596**	**200.5674**	**.0039405**	**.0209493**	**.0031562**	**.2740586**
Stddev	.000100	.0001510	.9205	.0010457	.0001413	.0001560	.0172580
%RSD	174.5028	253.5782	.4589625	26.53601	.6743641	4.944065	6.297179
#1	-.000172	.0002105	201.0518	.0030966	.0211050	.0029947	.2939774
#2	.000013	.0000598	199.5058	.0051103	.0208294	.0033062	.2646179
#3	-.000014	-.000092	201.1445	.0036147	.0209133	.0031675	.2635805

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2090464**	**3.947752**	**.0012438**	**-.000163**	**281.4839**	**.0058521**	**.0200531**
Stddev	.0003697	.051369	.0005994	.002024	2.3597	.0023286	.0004470
%RSD	.1768426	1.301211	48.18984	1244.314	.8383209	39.79051	2.228988
#1	.2094053	3.989571	.0019192	.001067	279.4199	.0033675	.0204912
#2	.2090671	3.890413	.0010368	.000944	280.9753	.0062043	.0200703
#3	.2086668	3.963273	.0007753	-.002499	284.0564	.0079846	.0195977

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.968362**	**.0358784**	**.0491560**	**-.009281**	**4.813147**	**5.384930**	**.0027789**
Stddev	.027804	.0026040	.0015251	.000419	.001054	.038760	.0008978
%RSD	.7006508	7.257883	3.102587	4.517497	.0218936	.7197841	32.30596
#1	3.995004	.0334542	.0491807	-.009728	4.812703	5.426343	.0037966
#2	3.939525	.0386310	.0506687	-.008897	4.812389	5.349525	.0024411
#3	3.970557	.0355500	.0476187	-.009218	4.814350	5.378920	.0020991

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2311-08 Acquired: 6/17/2025 17:27:54 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0092931	-.004729	1.004045
Stddev	.0037068	.003159	.005728
%RSD	39.88728	66.81184	.5705067
#1	.0113182	-.001745	1.007843
#2	.0050149	-.008039	.997457
#3	.0115462	-.004403	1.006836

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3325.166	40155.15	3097.173	3824.260	4164.571
Stddev	11.732	268.67	7.056	17.990	9.810
%RSD	.3528374	.6690868	.2278052	.4704140	.2355663
#1	3311.733	40371.44	3089.048	3827.689	4153.443
#2	3333.408	39854.40	3100.708	3804.803	4171.968
#3	3330.356	40239.62	3101.762	3840.289	4168.303

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2311-04 Acquired: 6/17/2025 17:32:25 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.015097**	**.0144169**	**.0225212**	**-.014084**	**.0125797**	**.2032655**	**.3269424**
Stddev	.004902	.0021729	.0006669	.002038	.0001315	.0244092	.0027972
%RSD	32.46964	15.07165	2.961396	14.47373	1.045130	12.00855	.8555782
#1	-.011612	.0151385	.0217593	-.014289	.0126603	.1854146	.3262920
#2	-.020703	.0119750	.0229996	-.011950	.0124280	.2310807	.3245276
#3	-.012977	.0161372	.0228047	-.016012	.0126508	.1933012	.3300075

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000083**	**.0005263**	**180.7889**	**.0015692**	**.0214733**	**.0063588**	**.2832936**
Stddev	.000125	.0000256	.2181	.0015619	.0000829	.0009235	.0129257
%RSD	149.7383	4.866933	.1206514	99.53574	.3862807	14.52324	4.562647
#1	-.000217	.0005547	181.0050	.0030723	.0214410	.0060734	.2981313
#2	.000030	.0005191	180.7928	-.000045	.0215675	.0073913	.2744768
#3	-.000063	.0005050	180.5689	.001681	.0214113	.0056117	.2772725

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5690057**	**4.339595**	**.0029162**	**.0007913**	**346.4834**	**.0116316**	**.1156219**
Stddev	.0028558	.027927	.0008272	.0005525	1.6515	.0079712	.0010639
%RSD	.5018964	.6435408	28.36487	69.82257	.4766580	68.53020	.9201740
#1	.5722778	4.371644	.0033676	.0013976	345.6696	.0153477	.1168498
#2	.5670150	4.320479	.0034196	.0006598	345.3966	.0024809	.1149735
#3	.5677243	4.326662	.0019615	.0003164	348.3839	.0170663	.1150424

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.443960**	**.0488535**	**.0577546**	**-.008806**	**2.659725**	**8.574511**	**.0032707**
Stddev	.089031	.0010794	.0009915	.000295	.009654	.051244	.0013025
%RSD	.9427281	2.209526	1.716705	3.345939	.3629695	.5976337	39.82302
#1	9.539887	.0498392	.0588818	-.009116	2.653905	8.621590	.0019170
#2	9.428010	.0477000	.0573644	-.008529	2.654402	8.582014	.0033800
#3	9.363982	.0490215	.0570175	-.008774	2.670869	8.519929	.0045151

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2311-04 Acquired: 6/17/2025 17:32:25 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0313450	-.010124	1.853160
Stddev	.0035210	.003150	.006088
%RSD	11.23305	31.11482	.3285043
#1	.0290323	-.012365	1.855581
#2	.0296055	-.011484	1.846234
#3	.0353972	-.006522	1.857665

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3329.222	40103.14	3114.100	3827.297	4138.213
Stddev	9.308	122.87	16.133	25.211	15.450
%RSD	.2795715	.3063813	.5180744	.6587103	.3733589
#1	3318.862	39963.14	3096.520	3800.490	4120.456
#2	3331.928	40153.22	3117.553	3850.530	4148.585
#3	3336.877	40193.05	3128.228	3830.872	4145.597

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCV05 Acquired: 6/17/2025 17:37:04 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.821859**	**5.011920**	**4.845698**	**4.884926**	**4.951012**	**10.00090**	**10.02455**
Stddev	.004925	.006255	.009434	.004774	.006125	.03998	.07394
%RSD	.1021307	.1248118	.1946883	.0977260	.1237128	.3997236	.7376291
#1	4.827527	5.019114	4.855176	4.883769	4.957585	10.04088	10.10880
#2	4.818628	5.008885	4.845609	4.880838	4.945465	10.00090	9.99448
#3	4.819421	5.007760	4.836308	4.890172	4.949985	9.96093	9.97039

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2570148**	**2.462307**	**25.01563**	**1.010615**	**2.424506**	**1.276851**	**4.895714**
Stddev	.0042898	.002293	.06408	.001711	.001557	.020572	.011100
%RSD	1.669107	.0931122	.2561411	.1692795	.0642389	1.611124	.2267387
#1	.2619403	2.464875	25.08861	1.009967	2.424978	1.300551	4.883535
#2	.2550069	2.460464	24.96862	1.012555	2.425774	1.266395	4.905263
#3	.2540971	2.461583	24.98964	1.009323	2.422768	1.263608	4.898346

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.439940**	**24.26036**	**2.449880**	**1.271773**	**25.17308**	**2.429354**	**2.481659**
Stddev	.016213	.19551	.002552	.001190	.32117	.012871	.007773
%RSD	.6644848	.8058621	.1041864	.0935481	1.275842	.5298006	.3132031
#1	2.457665	24.39119	2.452815	1.270486	25.54133	2.443406	2.476561
#2	2.436296	24.35428	2.448645	1.272834	25.02700	2.418137	2.477811
#3	2.425859	24.03562	2.448179	1.271998	24.95092	2.426520	2.490605

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.90358**	**5.057016**	**5.140106**	**4.987044**	**4.880304**	**5.077568**	**4.943861**
Stddev	.35309	.003985	.081906	.004343	.001760	.072270	.001958
%RSD	1.363100	.0787968	1.593463	.0870948	.0360618	1.423327	.0395974
#1	26.17208	5.059816	5.233787	4.992002	4.879579	5.159971	4.945607
#2	26.03504	5.052454	5.104511	4.985220	4.879022	5.047786	4.941744
#3	25.50361	5.058778	5.082021	4.983910	4.882310	5.024948	4.944231

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCV05 Acquired: 6/17/2025 17:37:04 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	4.963302	5.027091	5.010155
Stddev	.030310	.009584	.029925
%RSD	.6106880	.1906453	.5972774
#1	4.997533	5.038136	5.043001
#2	4.952503	5.020959	5.003024
#3	4.939870	5.022179	4.984440

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3426.731	42227.93	3104.586	3989.346	4415.883
Stddev	10.939	304.42	33.090	23.432	16.467
%RSD	.3192306	.7208888	1.065833	.5873757	.3728954
#1	3414.584	42578.49	3066.493	4014.155	4397.408
#2	3429.803	42075.01	3121.064	3986.294	4421.231
#3	3435.806	42030.28	3126.202	3967.589	4429.011

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCB05 Acquired: 6/17/2025 17:41:40 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin 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	**.0030479**	**.0026869**	**.0029404**	**.0016014**	**.0005223**	**.0192515**	**.0039267**
Stddev	.0018041	.0001688	.0003911	.0021836	.0006262	.0257428	.0010178
%RSD	59.19271	6.282950	13.30085	136.3573	119.8881	133.7190	25.92078
#1	.0009938	.0025249	.0024896	.0022984	.0009502	.0226574	.0048112
#2	.0043754	.0026741	.0031426	.0033513	-.000196	-.008025	.0028142
#3	.0037744	.0028618	.0031891	-.000846	.000813	.043122	.0041548

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000263**	**.0010576**	**.0028794**	**-.000499**	**.0012123**	**.0009809**	**-.008120**
Stddev	.0000929	.0000194	.0071780	.000417	.0001952	.0009907	.020475
%RSD	353.5018	1.835797	249.2883	83.58755	16.10398	101.0010	252.1482
#1	.0001049	.0010561	-.004729	-.000018	.0014360	.0010916	-.031687
#2	.0000501	.0010777	.003836	-.000728	.0011244	-.000061	.005307
#3	-.000076	.0010390	.009531	-.000752	.0010764	.001912	.002019

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009610**	**-.030321**	**.0010048**	**.0008429**	**-.004448**	**.0032430**	**.0017893**
Stddev	.0006883	.016966	.0009902	.0003305	.018937	.0069074	.0003130
%RSD	71.62732	55.95483	98.55325	39.21377	425.7611	212.9927	17.49188
#1	.0003686	-.047892	.0020919	.0011406	-.018057	.0105834	.0016930
#2	.0017161	-.029038	.0007681	.0004872	.017179	-.003129	.0021391
#3	.0007982	-.014032	.0001543	.0009009	-.012465	.002275	.0015357

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0128831**	**.0018221**	**.0101898**	**.0027493**	**.0040466**	**.0096857**	**.0026272**
Stddev	.0010259	.0016167	.0014101	.0007648	.0001787	.0011657	.0003294
%RSD	7.963261	88.72808	13.83855	27.81821	4.416478	12.03474	12.53825
#1	.0118106	.0005707	.0102573	.0026847	.0038768	.0090495	.0029602
#2	.0138550	.0012481	.0087472	.0035443	.0042331	.0089766	.0026201
#3	.0129839	.0036476	.0115650	.0020188	.0040299	.0110310	.0023015

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCB05 Acquired: 6/17/2025 17:41:40 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0059914	.0049751	.0028197
Stddev	.0067807	.0037529	.0000836
%RSD	113.1739	75.43269	2.965200
#1	.0099935	.0048578	.0027412
#2	.0098182	.0087853	.0029076
#3	-.001838	.0012823	.0028104

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3572.756	44388.58	3190.821	4135.598	5035.814
Stddev	16.479	48.08	9.847	8.359	16.279
%RSD	.4612329	.1083154	.3085968	.2021138	.3232558
#1	3588.222	44334.09	3195.512	4139.022	5052.195
#2	3555.423	44406.61	3197.446	4141.702	5019.640
#3	3574.624	44425.04	3179.506	4126.071	5035.607

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2334-01 Acquired: 6/17/2025 17:50:37 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.009590**	**.0106243**	**.0108003**	**-.005492**	**.0077029**	**5.569421**
Stddev	.001895	.0016117	.0008200	.002140	.0020795	.026120
%RSD	19.76529	15.17024	7.592037	38.96012	26.99675	.4689825
#1	-.009424	.0119804	.0116954	-.006743	.0055059	5.579310
#2	-.011562	.0110502	.0100855	-.006711	.0079622	5.539800
#3	-.007782	.0088424	.0106199	-.003021	.0096406	5.589152

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0561085**	**.0000082**	**-.000102**	**80.60137**	**.0091207**	**.0171404**
Stddev	.0002369	.0000794	.000073	.18795	.0007462	.0002286
%RSD	.4221627	966.7321	71.56991	.2331826	8.181500	1.333623
#1	.0561913	-.000083	-.000163	80.68456	.0091782	.0169434
#2	.0558413	.000044	-.000021	80.38618	.0098364	.0170867
#3	.0562928	.000063	-.000121	80.73337	.0083473	.0173910

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0670244**	**4.865107**	**1.059748**	**10.19189**	**.0033564**	**.0006611**
Stddev	.0009448	.011983	.001433	.08264	.0003058	.0005204
%RSD	1.409676	.2463085	.1352498	.8108700	9.112348	78.70794
#1	.0669786	4.878090	1.060821	10.24136	.0037042	.0010323
#2	.0661033	4.854471	1.058120	10.09648	.0031296	.0008848
#3	.0679913	4.862761	1.060302	10.23782	.0032353	.0000663

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.53300**	**.0231094**	**.0527941**	**1.971921**	**.2545997**	**.1363080**
Stddev	.27058	.0069083	.0004999	.031207	.0010520	.0020496
%RSD	1.385250	29.89379	.9468159	1.582545	.4131802	1.503628
#1	19.78306	.0297311	.0533265	1.997172	.2545406	.1386058
#2	19.24574	.0236507	.0523348	1.937033	.2556800	.1346682
#3	19.57019	.0159464	.0527210	1.981558	.2535786	.1356500

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2334-01 Acquired: 6/17/2025 17:50:37 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.006037**	**2.970470**	F **19.65868**	**.0023370**	**.1131547**	**-.015913**
Stddev	.000393	.004242	.31545	.0008479	.0028659	.003075
%RSD	6.514020	.1428142	1.604614	36.28272	2.532686	19.32140
#1	-.006431	2.966936	19.93736	.0026436	.1162413	-.014572
#2	-.006036	2.969301	19.31622	.0013784	.1105780	-.013737
#3	-.005644	2.975175	19.72247	.0029890	.1126448	-.019431

Elem	Sr4077
Units	ppm
Avg	**.3722302**
Stddev	.0010319
%RSD	.2772235
#1	.3730322
#2	.3710660
#3	.3725924

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3528.627**	**43297.83**	**3176.845**	**4079.670**	**4671.033**
Stddev	9.517	94.40	47.596	3.895	7.684
%RSD	.2697013	.2180287	1.498219	.0954687	.1644998
#1	3523.225	43370.03	3138.302	4077.326	4664.970
#2	3523.040	43191.00	3230.046	4084.166	4668.455
#3	3539.615	43332.45	3162.186	4077.517	4679.675

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2334-01DUP Acquired: 6/17/2025 17:54:56 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.010250**	**.0115725**	**.0108601**	**-.007182**	**.0076095**	**5.622031**
Stddev	.000396	.0002232	.0014927	.002239	.0012175	.033092
%RSD	3.858646	1.928598	13.74448	31.17696	16.00017	.5886183
#1	-.010001	.0117263	.0091956	-.009735	.0062511	5.608560
#2	-.010044	.0116748	.0113047	-.005548	.0086025	5.597798
#3	-.010706	.0113166	.0120799	-.006265	.0079748	5.659734

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0565016**	**.0000665**	**-.000058**	**78.39451**	**.0089736**	**.0166656**
Stddev	.0004974	.0000539	.000032	.11475	.0004360	.0002315
%RSD	.8804130	81.14742	55.18524	.1463791	4.858164	1.389407
#1	.0562249	.0001287	-.000052	78.28700	.0089995	.0164214
#2	.0570758	.0000374	-.000030	78.51534	.0085253	.0166933
#3	.0562040	.0000333	-.000093	78.38118	.0093961	.0168820

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0649693**	**4.810233**	**1.039390**	**9.989851**	**.0037313**	**.0005408**
Stddev	.0005561	.035072	.001626	.072493	.0003825	.0005397
%RSD	.8559490	.7291079	.1564731	.7256697	10.24982	99.79533
#1	.0650558	4.804981	1.037611	9.941195	.0033648	-.000030
#2	.0643750	4.778084	1.040800	9.955191	.0037011	.000611
#3	.0654770	4.847635	1.039758	10.07317	.0041279	.001042

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.41826**	**.0217356**	**.0519283**	**1.964375**	**.2544420**	**.1309313**
Stddev	.05925	.0042216	.0003677	.012627	.0032478	.0010849
%RSD	.3051308	19.42250	.7081530	.6427879	1.276433	.8285792
#1	19.43137	.0240905	.0523529	1.965343	.2564624	.1297175
#2	19.35355	.0242544	.0517140	1.951293	.2506957	.1312696
#3	19.46985	.0168618	.0517180	1.976491	.2561680	.1318066

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2334-01DUP Acquired: 6/17/2025 17:54:56 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.006445**	**2.901224**	F **19.62389**	**.0008581**	**.1132798**	**-.010341**
Stddev	.000489	.009786	.11507	.0012567	.0025041	.004918
%RSD	7.592149	.3372956	.5863802	146.4477	2.210567	47.55840
#1	-.006615	2.909554	19.54682	.0019075	.1125516	-.005067
#2	-.005893	2.903672	19.56870	-.000535	.1160673	-.011155
#3	-.006826	2.890447	19.75616	.001201	.1112205	-.014801

Elem	Sr4077
Units	ppm
Avg	**.3648721**
Stddev	.0007610
%RSD	.2085588
#1	.3641417
#2	.3656604
#3	.3648143

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3500.371**	**43100.02**	**3149.535**	**4060.158**	**4641.629**
Stddev	1.502	32.62	14.042	23.286	1.498
%RSD	.0429206	.0756766	.4458343	.5735320	.0322825
#1	3500.550	43062.38	3150.311	4042.133	4640.894
#2	3501.776	43117.79	3163.173	4086.450	4640.641
#3	3498.788	43119.89	3135.122	4051.892	4643.353

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2334-01LX5 Acquired: 6/17/2025 17:59:17 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.002170**	**.0061587**	**.0028086**	**-.002708**	**.0045336**	**1.939575**	**.0135342**
Stddev	.002050	.0014494	.0011004	.002328	.0004156	.016873	.0012867
%RSD	94.46503	23.53505	39.17872	85.99500	9.166301	.8699499	9.507407
#1	-.001878	.0069200	.0040627	-.002111	.0041416	1.949727	.0124203
#2	-.004349	.0044872	.0023587	-.000735	.0044900	1.948901	.0149427
#3	-.000281	.0070689	.0020045	-.005276	.0049693	1.920097	.0132395

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000016**	**-.000041**	**17.04528**	**.0020097**	**.0070652**	**.0135103**	**1.219808**
Stddev	.000074	.000015	.06223	.0001706	.0002319	.0005443	.029412
%RSD	479.5305	35.61990	.3650923	8.486585	3.282887	4.028577	2.411162
#1	-.000013	-.000052	17.00276	.0022033	.0073204	.0129484	1.253072
#2	.000058	-.000047	17.11671	.0019444	.0068673	.0140351	1.197246
#3	-.000091	-.000024	17.01638	.0018815	.0070079	.0135476	1.209106

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2249346**	**2.257027**	**.0007571**	**-.000095**	**4.043687**	**.0086260**	**.0112115**
Stddev	.0004969	.036043	.0003900	.000099	.011048	.0040787	.0001569
%RSD	.2209275	1.596926	51.51700	103.7039	.2732170	47.28347	1.399942
#1	.2243610	2.216548	.0009128	-.000031	4.035782	.0129848	.0112579
#2	.2252353	2.285646	.0003133	-.000209	4.038968	.0049018	.0113400
#3	.2252074	2.268886	.0010452	-.000046	4.056311	.0079915	.0110366

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4216050**	**.0556171**	**.0319729**	**-.002654**	**.6107702**	**6.197387**	**.0006829**
Stddev	.0035419	.0006016	.0008451	.000401	.0041959	.032316	.0001716
%RSD	.8401005	1.081608	2.643287	15.09632	.6869839	.5214439	25.12405
#1	.4175790	.0559404	.0310781	-.003085	.6155959	6.162321	.0005966
#2	.4229946	.0549230	.0320830	-.002583	.6087314	6.225970	.0005717
#3	.4242415	.0559879	.0327576	-.002293	.6079834	6.203870	.0008805

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2334-01LX5 Acquired: 6/17/2025 17:59:17 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0526383	-.005739	.0790758
Stddev	.0038699	.006594	.0007206
%RSD	7.351906	114.9089	.9113047
#1	.0539117	-.012903	.0782469
#2	.0557110	.000078	.0794272
#3	.0482921	-.004391	.0795533

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3633.628	45207.62	3249.833	4245.544	4960.043
Stddev	12.918	213.44	16.862	19.099	19.909
%RSD	.3555150	.4721278	.5188630	.4498648	.4013821
#1	3619.694	44981.13	3263.918	4223.545	4937.889
#2	3635.984	45405.02	3254.433	4255.195	4965.804
#3	3645.205	45236.71	3231.149	4257.892	4976.436

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2334-01MS Acquired: 6/17/2025 18:03:39 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7235646**	**1.957358**	**.9387662**	**1.833207**	**.7428134**	**9.099668**
Stddev	.0038525	.003873	.0005668	.007339	.0022853	.042089
%RSD	.5324330	.1978672	.0603791	.4003566	.3076620	.4625291
#1	.7192023	1.954764	.9384787	1.826925	.7409567	9.141568
#2	.7249910	1.955500	.9394192	1.841274	.7421177	9.057393
#3	.7265005	1.961810	.9384007	1.831423	.7453657	9.100041

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2544125**	**.2078918**	**.1919040**	**79.59115**	**.4175524**	**.2079241**
Stddev	.0030053	.0012730	.0000290	.23784	.0007268	.0008571
%RSD	1.181275	.6123198	.0151112	.2988240	.1740555	.4121999
#1	.2578297	.2093514	.1919251	79.86538	.4181333	.2083718
#2	.2532274	.2070120	.1919160	79.46692	.4177864	.2069359
#3	.2521805	.2073119	.1918710	79.44115	.4167374	.2084646

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3858208**	**8.228605**	**1.322297**	**11.96530**	**.4880787**	**.0719914**
Stddev	.0015220	.019505	.006924	.06958	.0010102	.0008933
%RSD	.3944758	.2370331	.5236549	.5815051	.2069840	1.240901
#1	.3875474	8.251027	1.325871	11.97424	.4889925	.0715607
#2	.3846736	8.219231	1.326705	12.02998	.4869939	.0730184
#3	.3852413	8.215558	1.314317	11.89169	.4882498	.0713949

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.24262**	**.3241836**	**.2493012**	**12.95257**	**6.059386**	**.4093354**
Stddev	.15782	.0020496	.0015328	.03609	.013741	.0030848
%RSD	.7095275	.6322437	.6148554	.2786705	.2267706	.7536072
#1	22.41379	.3227122	.2485495	12.98425	6.075031	.4121499
#2	22.21120	.3265247	.2510648	12.96018	6.053852	.4098188
#3	22.10288	.3233139	.2482894	12.91327	6.049275	.4060374

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2334-01MS Acquired: 6/17/2025 18:03:39 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3969452	3.704595	F 23.21122	.5283101	.3190347	.1884799
Stddev	.0008300	.004777	.12367	.0012278	.0046958	.0016989
%RSD	.2090907	.1289604	.5327988	.2323942	1.471869	.9013623
#1	.3969835	3.708685	23.35055	.5289525	.3238830	.1891629
#2	.3960967	3.699344	23.16868	.5268944	.3187132	.1865458
#3	.3977554	3.705755	23.11444	.5290833	.3145080	.1897310

Elem	Sr4077
Units	ppm
Avg	.5599298
Stddev	.0034531
%RSD	.6167049
#1	.5636119
#2	.5594137
#3	.5567637

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3500.616	43728.95	3152.287	4110.103	4610.202
Stddev	10.314	239.80	24.807	28.477	6.750
%RSD	.2946334	.5483848	.7869634	.6928579	.1464183
#1	3512.477	43624.67	3127.175	4114.862	4616.676
#2	3495.620	43558.95	3152.910	4079.546	4610.724
#3	3493.752	44003.24	3176.778	4135.900	4603.206

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2334-01MSD Acquired: 6/17/2025 18:07:58 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7424069**	**1.997590**	**.9563672**	**1.867882**	**.7614679**	**9.231623**
Stddev	.0036425	.003610	.0004796	.004215	.0019659	.025244
%RSD	.4906272	.1807219	.0501445	.2256472	.2581723	.2734466
#1	.7460248	1.996871	.9567651	1.872323	.7633248	9.206662
#2	.7387404	1.994394	.9565017	1.863938	.7594087	9.257140
#3	.7424556	2.001506	.9558347	1.867385	.7616703	9.231067

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2572496**	**.2107631**	**.1959534**	**81.05881**	**.4252337**	**.2128158**
Stddev	.0019039	.0013515	.0003065	.08335	.0019842	.0007234
%RSD	.7400925	.6412330	.1564368	.1028316	.4666261	.3399070
#1	.2570148	.2122128	.1956058	80.96714	.4231408	.2126153
#2	.2554740	.2105384	.1960691	81.07925	.4270876	.2122138
#3	.2592600	.2095380	.1961852	81.13005	.4254728	.2136183

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3932593**	**8.428941**	**1.248154**	**12.17471**	**.4987338**	**.0734059**
Stddev	.0012004	.037821	.006770	.04633	.0008482	.0008609
%RSD	.3052540	.4487075	.5423957	.3805509	.1700756	1.172761
#1	.3922279	8.424459	1.248320	12.15852	.4979908	.0729980
#2	.3945770	8.468804	1.241303	12.13864	.4996580	.0728247
#3	.3929729	8.393561	1.254840	12.22696	.4985526	.0743949

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.35835**	**.3202714**	**.2539011**	**12.97135**	**6.197122**	**.4138619**
Stddev	.01565	.0045455	.0002471	.08001	.011993	.0009068
%RSD	.0699981	1.419282	.0973172	.6168062	.1935331	.2190994
#1	22.35227	.3223933	.2539591	12.94194	6.183448	.4148355
#2	22.34665	.3233681	.2536301	12.91021	6.202059	.4137090
#3	22.37612	.3150529	.2541139	13.06190	6.205859	.4130414

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2334-01MSD Acquired: 6/17/2025 18:07:58 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4081154	3.015020	F 23.29754	.5383096	.3204063	.1943076
Stddev	.0006974	.005745	.06022	.0004189	.0014793	.0023555
%RSD	.1708864	.1905355	.2584832	.0778237	.4616797	1.212253
#1	.4080038	3.014641	23.36626	.5378300	.3206243	.1935405
#2	.4074805	3.020945	23.27240	.5384947	.3217645	.1924312
#3	.4088619	3.009475	23.25397	.5386041	.3188302	.1969510

Elem	Sr4077
Units	ppm
Avg	.5676574
Stddev	.0022189
%RSD	.3908903
#1	.5678167
#2	.5653631
#3	.5697923

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3502.471	43974.93	3174.592	4120.407	4609.109
Stddev	5.539	252.47	4.520	23.921	3.619
%RSD	.1581393	.5741137	.1423777	.5805523	.0785229
#1	3502.045	44265.64	3173.796	4145.825	4607.935
#2	3508.211	43810.71	3170.523	4117.060	4613.170
#3	3497.158	43848.44	3179.457	4098.335	4606.223

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2334-02 Acquired: 6/17/2025 18:16:27 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000838**	**.0076525**	**.0323333**	**-.001173**	**.0118972**	**23.57143**
Stddev	.002444	.0003887	.0005941	.002051	.0029964	.04582
%RSD	291.8304	5.080092	1.837532	174.8223	25.18602	.1943686
#1	-.002169	.0080065	.0328425	-.003345	.0092582	23.60906
#2	-.002327	.0072365	.0316805	-.000906	.0151545	23.52041
#3	.001983	.0077145	.0324768	.000731	.0112788	23.58483

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1773268**	**.0013134**	**.0000843**	**56.87944**	**.0257350**	**.0205829**
Stddev	.0007967	.0001011	.0000139	.20067	.0006453	.0004417
%RSD	.4492681	7.696290	16.49035	.3528066	2.507490	2.146127
#1	.1772340	.0011968	.0000877	56.95180	.0251253	.0202765
#2	.1765806	.0013758	.0000962	56.65263	.0256688	.0203831
#3	.1781658	.0013677	.0000690	57.03391	.0264108	.0210893

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1393646**	**13.40171**	**.8528589**	**7.786842**	**.0165512**	**.0008541**
Stddev	.0012677	.05055	.0074138	.026816	.0002518	.0006045
%RSD	.9096317	.3771596	.8692914	.3443802	1.521206	70.77738
#1	.1401642	13.45745	.8552172	7.762952	.0163525	.0014298
#2	.1379029	13.35884	.8445528	7.781725	.0168343	.0002245
#3	.1400266	13.38885	.8588067	7.815848	.0164666	.0009079

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**43.21942**	**.0307873**	**.1837766**	**14.58465**	**.7323384**	**.1698598**
Stddev	.53786	.0042282	.0003430	.23377	.0037292	.0014651
%RSD	1.244483	13.73347	.1866403	1.602857	.5092159	.8625193
#1	43.44729	.0284759	.1836049	14.69868	.7364569	.1714639
#2	42.60514	.0356673	.1835534	14.31575	.7313678	.1685923
#3	43.60584	.0282187	.1841715	14.73953	.7291905	.1695232

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2334-02 Acquired: 6/17/2025 18:16:27 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003136**	**9.215554**	F **45.95026**	**.0017926**	**.2255734**	**.0047302**
Stddev	.000272	.007238	.46524	.0007473	.0040443	.0043084
%RSD	8.677617	.0785402	1.012493	41.69033	1.792909	91.08197
#1	-.003449	9.216013	46.18300	.0010491	.2291720	.0001730
#2	-.002960	9.208097	45.41458	.0025437	.2211965	.0052809
#3	-.002998	9.222551	46.25320	.0017849	.2263517	.0087368

Elem	Sr4077
Units	ppm
Avg	**.5469203**
Stddev	.0036454
%RSD	.6665292
#1	.5465748
#2	.5434599
#3	.5507260

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3566.218**	**44245.27**	**3245.781**	**4174.171**	**4575.954**
Stddev	14.824	288.88	44.380	27.800	22.575
%RSD	.4156801	.6529109	1.367308	.6659971	.4933418
#1	3552.549	44186.78	3230.025	4178.678	4551.524
#2	3581.975	44558.92	3295.889	4199.441	4596.043
#3	3564.130	43990.11	3211.429	4144.392	4580.294

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2334-01A Acquired: 6/17/2025 18:20:53 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7347383**	**1.965607**	**.9444552**	**1.851526**	**.7481154**	**9.161531**
Stddev	.0019123	.003076	.0008347	.001634	.0015583	.036308
%RSD	.2602736	.1565126	.0883836	.0882283	.2082946	.3963069
#1	.7359699	1.964341	.9434998	1.849740	.7466560	9.201663
#2	.7357097	1.969114	.9448229	1.852945	.7497566	9.151968
#3	.7325352	1.963365	.9450430	1.851893	.7479335	9.130961

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2582569**	**.2078090**	**.1934061**	**80.59010**	**.4187806**	**.2098168**
Stddev	.0016919	.0014238	.0001319	.36899	.0007689	.0002910
%RSD	.6551081	.6851397	.0682180	.4578581	.1835979	.1387012
#1	.2579521	.2080836	.1933413	80.75755	.4184722	.2094887
#2	.2567381	.2062679	.1933191	80.16708	.4196559	.2099178
#3	.2600804	.2090754	.1935579	80.84568	.4182139	.2100439

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3873100**	**8.352934**	**1.289274**	**12.07343**	**.4914878**	**.0723154**
Stddev	.0026942	.046774	.004096	.05871	.0006883	.0009655
%RSD	.6956214	.5599712	.3177151	.4862438	.1400393	1.335143
#1	.3873510	8.309767	1.289573	12.04636	.4922786	.0717242
#2	.3845955	8.346405	1.285036	12.03314	.4910246	.0734295
#3	.3899835	8.402629	1.293213	12.14079	.4911601	.0717924

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.23169**	**.3154746**	**.2499790**	**12.88135**	**6.100728**	**.4087865**
Stddev	.11769	.0039792	.0006069	.04160	.005138	.0005381
%RSD	.5293573	1.261343	.2427994	.3229535	.0842217	.1316328
#1	22.29333	.3109274	.2493013	12.92069	6.106503	.4087279
#2	22.09598	.3171773	.2504725	12.83781	6.099020	.4082801
#3	22.30574	.3183192	.2501630	12.88554	6.096661	.4093515

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2334-01A Acquired: 6/17/2025 18:20:53 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4003885	3.391904	F 23.10003	.5311446	.3153976	.1872065
Stddev	.0005798	.004771	.11235	.0016330	.0026077	.0013877
%RSD	.1448058	.1406498	.4863600	.3074536	.8267905	.7412785
#1	.3997948	3.386416	23.12319	.5294095	.3150224	.1875034
#2	.4004175	3.395060	22.97790	.5326515	.3181725	.1884217
#3	.4009533	3.394235	23.19899	.5313729	.3129978	.1856944

Elem	Sr4077
Units	ppm
Avg	.5653164
Stddev	.0011727
%RSD	.2074339
#1	.5648369
#2	.5644595
#3	.5666528

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3518.713	43918.25	3164.964	4125.351	4624.321
Stddev	5.408	177.46	18.375	4.021	6.641
%RSD	.1536932	.4040617	.5805751	.0974731	.1436210
#1	3524.207	43858.23	3160.955	4123.006	4625.825
#2	3513.396	43778.60	3185.013	4123.052	4617.056
#3	3518.535	44117.94	3148.925	4129.994	4630.081

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2334-03DLX5 Acquired: 6/17/2025 18:25:12 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0108277**	**.0030408**	**.1543561**	**.0187392**	**.0108880**	**143.6332**
Stddev	.0017218	.0009648	.0003297	.0014512	.0008826	.5759
%RSD	15.90179	31.72952	.2135912	7.744005	8.106043	.4009631
#1	.0116137	.0039367	.1543429	.0203304	.0118701	144.0159
#2	.0088532	.0020193	.1546922	.0174887	.0101613	143.9129
#3	.0120163	.0031665	.1540333	.0183985	.0106324	142.9709

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8230464**	**.0068724**	**-.002300**	**23.43919**	**.1312997**	**.0834700**
Stddev	.0030893	.0001041	.000110	.08404	.0013603	.0007357
%RSD	.3753429	1.514776	4.761823	.3585547	1.036008	.8813663
#1	.8242424	.0067780	-.002381	23.42624	.1309809	.0842406
#2	.8253588	.0069841	-.002175	23.52895	.1327910	.0827751
#3	.8195380	.0068550	-.002343	23.36237	.1301271	.0833944

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3338743**	**126.5531**	**4.497723**	**32.42308**	**.1762321**	**.0055314**
Stddev	.0029114	.7242	.013883	.14000	.0006697	.0013353
%RSD	.8720015	.5722109	.3086765	.4317845	.3800024	24.14105
#1	.3367014	127.1915	4.498024	32.32350	.1769506	.0068862
#2	.3308854	126.7015	4.511454	32.58315	.1761204	.0042165
#3	.3340362	125.7662	4.483692	32.36259	.1756252	.0054914

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.780796**	**.1354841**	**.5738103**	**16.55065**	**3.039181**	**.1075658**
Stddev	.110112	.0073522	.0040692	.16273	.018356	.0012052
%RSD	1.125797	5.426617	.7091521	.9832079	.6039683	1.120439
#1	9.832054	.1270286	.5781161	16.48298	3.059396	.1065844
#2	9.654399	.1390536	.5732865	16.43268	3.023556	.1089110
#3	9.855934	.1403702	.5700285	16.73629	3.034591	.1072020

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2334-03DLX5 Acquired: 6/17/2025 18:25:12 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005613	3.366911	F 29.72224	.0019540	1.060850	.1482906
Stddev	.0004257	.021547	.20445	.0008836	.012258	.0019532
%RSD	75.83328	.6399643	.6878669	45.21998	1.155515	1.317160
#1	.0008814	3.389043	29.93674	.0018611	1.066429	.1479280
#2	.0007243	3.346000	29.52959	.0011206	1.069326	.1503997
#3	.0000782	3.365690	29.70039	.0028805	1.046794	.1465440

Elem	Sr4077
Units	ppm
Avg	.2210257
Stddev	.0008125
%RSD	.3676255
#1	.2216892
#2	.2212686
#3	.2201194

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3667.083	44870.32	3310.822	4294.811	4495.313
Stddev	6.069	118.84	25.141	25.994	11.382
%RSD	.1654937	.2648582	.7593673	.6052379	.2531873
#1	3660.260	44786.32	3298.308	4266.324	4483.460
#2	3671.879	44818.36	3339.765	4300.867	4506.155
#3	3669.110	45006.30	3294.394	4317.242	4496.325

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-13 Acquired: 6/17/2025 18:29:34 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0568071	-.017967	.2438490	.0364673	.0158313	180.7807	.7175163
Stddev	.0009410	.001372	.0013771	.0016128	.0016842	.5697	.0052056
%RSD	1.656428	7.638794	.5647313	4.422536	10.63818	.3151436	.7255067
#1	.0575617	-.018047	.2439901	.0348372	.0149610	181.0499	.7169884
#2	.0571068	-.019297	.2451501	.0380622	.0177725	180.1263	.7125948
#3	.0557528	-.016556	.2424068	.0365025	.0147603	181.1659	.7229658

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0073849	-.001861	13.24299	.2099753	.1169754	.1947629	232.5008
Stddev	.0000576	.000142	.03286	.0008462	.0002781	.0013135	.7231
%RSD	.7798972	7.605228	.2481033	.4029771	.2377644	.6744309	.3110140
#1	.0073601	-.001975	13.25604	.2091831	.1172621	.1962792	232.9934
#2	.0073437	-.001703	13.20561	.2108666	.1167067	.1939733	231.6706
#3	.0074507	-.001907	13.26731	.2098761	.1169575	.1940362	232.8383

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.911662	32.59583	.2030544	.0102746	3.839860	.3556725	.6645064
Stddev	.015844	.15323	.0007916	.0004739	.019220	.0092494	.0019009
%RSD	.5441614	.4700986	.3898266	4.612480	.5005478	2.600552	.2860616
#1	2.909710	32.52862	.2036298	.0106316	3.852399	.3594747	.6666847
#2	2.896884	32.48768	.2033818	.0104551	3.817731	.3451279	.6631833
#3	2.928391	32.77118	.2021517	.0097369	3.849449	.3624148	.6636513

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.754019	4.437759	.0834956	.0030547	.6780572	5.192428	.0133238
Stddev	.056930	.005245	.0006304	.0003122	.0040476	.363682	.0005809
%RSD	.8429101	.1181988	.7549580	10.21973	.5969470	7.004090	4.360121
#1	6.750141	4.440228	.0828705	.0026975	.6817239	4.838946	.0130959
#2	6.699126	4.441314	.0841311	.0031912	.6787339	5.172820	.0139841
#3	6.812789	4.431735	.0834852	.0032754	.6737139	5.565518	.0128914

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-13 Acquired: 6/17/2025 18:29:34 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	2.553725	.1856142	.1364945
Stddev	.014059	.0036842	.0004687
%RSD	.5505121	1.984879	.3434034
#1	2.547792	.1876820	.1365648
#2	2.543605	.1813606	.1359946
#3	2.569777	.1878000	.1369241

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4583.526	55900.01	4220.922	5356.850	4547.674
Stddev	10.280	516.38	23.636	37.292	7.238
%RSD	.2242912	.9237562	.5599826	.6961612	.1591655
#1	4593.770	56436.57	4236.769	5392.893	4553.712
#2	4573.210	55856.95	4232.244	5359.235	4539.650
#3	4583.597	55406.51	4193.755	5318.423	4549.659

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-17 Acquired: 6/17/2025 18:33:56 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0202485	-.006368	.2325469	.0366001	.0171424	121.2637	.6310672
Stddev	.0011144	.001689	.0015356	.0009335	.0008559	.1539	.0031764
%RSD	5.503507	26.52955	.6603238	2.550660	4.993178	.1269123	.5033318
#1	.0197732	-.006259	.2320650	.0358956	.0166188	121.0943	.6291873
#2	.0215217	-.004735	.2313101	.0376589	.0181302	121.3948	.6292797
#3	.0194505	-.008109	.2342656	.0362458	.0166782	121.3020	.6347345

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0082443	-.003993	13.71560	.1633701	.1127636	.4727690	240.3067
Stddev	.0000285	.000090	.05869	.0009316	.0002574	.0038215	.7476
%RSD	.3450473	2.254258	.4279115	.5702296	.2282540	.8083301	.3111040
#1	.0082276	-.003895	13.65125	.1635490	.1124788	.4692316	239.4441
#2	.0082282	-.004013	13.72935	.1623621	.1129795	.4722531	240.7679
#3	.0082772	-.004071	13.76619	.1641993	.1128325	.4768223	240.7081

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.267920	37.75001	.2069132	.0107688	3.758216	.2320663	.4496445
Stddev	.018113	.15978	.0003457	.0009561	.033807	.0016782	.0014794
%RSD	.3438385	.4232538	.1670917	8.878456	.8995417	.7231500	.3290117
#1	5.247863	37.57761	.2067428	.0097774	3.727852	.2339732	.4513286
#2	5.272813	37.77930	.2066857	.0108437	3.752153	.2308147	.4490505
#3	5.283083	37.89311	.2073110	.0116852	3.794645	.2314109	.4485545

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.35286	3.094803	.1171123	.0007260	.2759598	13.31370	.0067913
Stddev	.02361	.003059	.0007059	.0000397	.0011219	.07158	.0004270
%RSD	.1768302	.0988543	.6027848	5.464351	.4065290	.5376238	6.288080
#1	13.32570	3.093625	.1169964	.0007714	.2769236	13.26336	.0063913
#2	13.36854	3.098277	.1178691	.0006983	.2762275	13.28209	.0072411
#3	13.36433	3.092509	.1164716	.0007081	.2747283	13.39564	.0067415

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-17 Acquired: 6/17/2025 18:33:56 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	2.579446	.2115262	.1105032
Stddev	.004443	.0024674	.0003054
%RSD	.1722486	1.166474	.2763973
#1	2.574316	.2103127	.1102783
#2	2.581961	.2143654	.1103804
#3	2.582062	.2099005	.1108509

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4177.006	51810.92	3836.977	4903.320	4574.108
Stddev	23.737	193.68	22.636	17.690	25.448
%RSD	.5682842	.3738154	.5899347	.3607710	.5563522
#1	4189.301	51737.32	3855.731	4883.665	4586.145
#2	4192.075	52030.61	3843.368	4908.330	4591.305
#3	4149.644	51664.84	3811.833	4917.964	4544.875

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCV06 Acquired: 6/17/2025 18:38:19 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.801469**	**4.982893**	**4.821806**	**4.885008**	**4.917234**	**9.898373**	**9.843696**
Stddev	.008549	.006965	.005779	.001630	.004796	.030142	.054314
%RSD	.1780457	.1397784	.1198489	.0333607	.0975297	.3045162	.5517606
#1	4.793101	4.990888	4.825546	4.883657	4.921372	9.878821	9.820124
#2	4.801116	4.979658	4.815150	4.886818	4.918353	9.883211	9.805151
#3	4.810188	4.978134	4.824721	4.884550	4.911978	9.933085	9.905814

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2562043**	**2.442845**	**24.75819**	**.9867140**	**2.418448**	**1.268317**	**4.896153**
Stddev	.0023570	.001925	.07848	.0050435	.003429	.011662	.010183
%RSD	.9199512	.0788054	.3169923	.5111432	.1417721	.9194694	.2079817
#1	.2547143	2.441180	24.68006	.9816525	2.414687	1.259339	4.903205
#2	.2589216	2.444953	24.75750	.9917393	2.419259	1.281498	4.884478
#3	.2549769	2.442403	24.83702	.9867502	2.421399	1.264114	4.900775

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.401516**	**23.88318**	**2.434349**	**1.248188**	**25.06522**	**2.403329**	**2.421693**
Stddev	.009334	.08113	.000187	.005226	.18353	.009891	.010437
%RSD	.3886825	.3396940	.0076706	.4186644	.7322192	.4115375	.4309849
#1	2.393517	23.80990	2.434440	1.244804	24.94553	2.403447	2.426497
#2	2.399261	23.86928	2.434473	1.254206	25.27652	2.393381	2.428864
#3	2.411772	23.97036	2.434134	1.245553	24.97361	2.413161	2.409719

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.76769**	**5.038032**	**5.083754**	**4.940260**	**4.846227**	**5.105818**	**4.907411**
Stddev	.20637	.005638	.050823	.003949	.016607	.049331	.002665
%RSD	.8009031	.1119181	.9997113	.0799419	.3426873	.9661779	.0543121
#1	25.53074	5.031590	5.059620	4.943849	4.827680	5.076829	4.905379
#2	25.86420	5.042070	5.142148	4.940903	4.851281	5.162778	4.910429
#3	25.90812	5.040436	5.049495	4.936029	4.859720	5.077848	4.906426

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCV06 Acquired: 6/17/2025 18:38:19 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.864268**	**4.971443**	**4.939636**
Stddev	.026014	.016014	.022898
%RSD	.5348040	.3221119	.4635491
#1	4.864187	4.957477	4.929987
#2	4.838295	4.967932	4.923143
#3	4.890323	4.988921	4.965779

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3429.938**	**43506.72**	**3138.837**	**4081.003**	**4417.043**
Stddev	1.698	125.20	10.999	14.924	3.755
%RSD	.0495038	.2877691	.3504294	.3656884	.0850213
#1	3429.658	43521.44	3151.527	4075.060	4421.152
#2	3428.398	43623.91	3132.033	4097.982	4413.789
#3	3431.759	43374.81	3132.951	4069.966	4416.187

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCB06 Acquired: 6/17/2025 18:42:34 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin 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	.0012540	.0022981	-.000824	.0002918	-.001883	-.031357	-.000823
Stddev	.0010913	.0005292	.001021	.0007748	.001907	.002341	.000073
%RSD	87.02235	23.03003	123.8686	265.5687	101.2851	7.467181	8.922846
#1	.0000338	.0028603	-.000023	-.000575	.000282	-.033216	-.000907
#2	.0015920	.0022246	-.000476	.000917	-.003315	-.032128	-.000776
#3	.0021364	.0018095	-.001974	.000534	-.002617	-.028727	-.000784

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000050	.0000011	.0021838	-.000796	.0003120	.0002465	.0187136
Stddev	.000058	.0000257	.0207133	.000767	.0000851	.0005630	.0192762
%RSD	116.4933	2377.477	948.4942	96.36205	27.26896	228.4361	103.0063
#1	-.000076	.0000291	.0257815	-.000091	.0002185	-.000138	.0120199
#2	-.000089	-.000004	-.012992	-.001612	.0003848	-.000015	.0036766
#3	.000017	-.000022	-.006239	-.000683	.0003328	.000893	.0404444

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006410	.0266493	.0004913	.0006610	.0048603	.0125709	.0031978
Stddev	.0003167	.0240782	.0002138	.0011094	.0141922	.0063189	.0003516
%RSD	49.39882	90.35183	43.52644	167.8424	291.9992	50.26666	10.99401
#1	.0008637	.0524662	.0003032	.0014112	.0056094	.0057504	.0033054
#2	.0007809	.0048037	.0007239	-.000613	-.009692	.0182261	.0028050
#3	.0002785	.0226780	.0004468	.001185	.018663	.0137360	.0034831

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0095768	.0022246	.0116381	.0006160	.0019517	.0113371	.0007435
Stddev	.0005660	.0016225	.0007419	.0000230	.0019329	.0017150	.0011999
%RSD	5.909950	72.93366	6.374508	3.733192	99.03166	15.12776	161.3854
#1	.0101309	.0040920	.0124659	.0006251	.0038401	.0131887	.0021141
#2	.0095998	.0011602	.0114149	.0006330	.0020378	.0098030	.0002345
#3	.0089997	.0014217	.0110334	.0005898	-.000023	.0110195	-.000118

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCB06 Acquired: 6/17/2025 18:42:34 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0033672	-.008224	.0000823
Stddev	.0015451	.006286	.0001252
%RSD	45.88707	76.42990	152.1573
#1	.0028300	-.010589	.0002261
#2	.0021624	-.012984	.0000239
#3	.0051093	-.001099	-.000003

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3571.659	45327.18	3222.927	4198.589	5025.697
Stddev	13.752	331.93	11.077	38.628	15.213
%RSD	.3850292	.7322869	.3437068	.9200143	.3027115
#1	3556.198	45658.63	3235.703	4235.077	5008.131
#2	3576.254	44994.78	3217.082	4158.129	5034.648
#3	3582.526	45328.14	3215.997	4202.561	5034.311

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2311-01 Acquired: 6/17/2025 18:47:00 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1774054	-.006325	1.782199	.0566522	.0344094	123.1948	1.337290
Stddev	.0038646	.000464	.003450	.0005766	.0022932	.4453	.007486
%RSD	2.178408	7.331585	.1935893	1.017837	6.664364	.3614352	.5598020
#1	.1730006	-.006017	1.783941	.0571065	.0327807	122.7615	1.329568
#2	.1789884	-.006858	1.784431	.0568466	.0334158	123.1718	1.337786
#3	.1802271	-.006099	1.778225	.0560035	.0370318	123.6512	1.344516

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0093902	-.006211	239.1728	.3353661	.1711187	.7657406	449.6233
Stddev	.0001295	.000086	.9085	.0011213	.0002393	.0078807	2.1057
%RSD	1.378551	1.382304	.3798692	.3343428	.1398697	1.029160	.4683199
#1	.0092453	-.006147	238.3172	.3342557	.1708908	.7569286	447.3468
#2	.0094309	-.006177	239.0748	.3353448	.1713680	.7681801	450.0218
#3	.0094944	-.006308	240.1263	.3364979	.1710972	.7721130	451.5012

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.692803	66.58499	.2439186	.0216559	5.120692	.4879361	1.214487
Stddev	.026289	.37171	.0012966	.0004139	.067913	.0035440	.006231
%RSD	.5601994	.5582469	.5315592	1.911224	1.326249	.7263215	.5130260
#1	4.670098	66.27672	.2426420	.0211865	5.042679	.4840665	1.218568
#2	4.686706	66.48048	.2452342	.0218130	5.166604	.4887177	1.207315
#3	4.721605	66.99776	.2438795	.0219683	5.152794	.4910240	1.217578

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.47990	11.12888	1.905708	.0047106	3.301311	13.28677	.0814488
Stddev	.10015	.01258	.019435	.0001728	.003484	.15087	.0006315
%RSD	.6077174	.1130120	1.019850	3.668613	.1055446	1.135526	.7753462
#1	16.57373	11.11503	1.883987	.0047384	3.304102	13.12327	.0808483
#2	16.37444	11.13205	1.911681	.0045256	3.302426	13.31640	.0821073
#3	16.49152	11.13958	1.921456	.0048679	3.297406	13.42062	.0813907

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2311-01 Acquired: 6/17/2025 18:47:00 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.048004**	**.1778952**	**2.566085**
Stddev	.025646	.0022285	.013651
%RSD	.6335507	1.252708	.5319968
#1	4.018390	.1759426	2.552674
#2	4.062779	.1774202	2.565615
#3	4.062843	.1803230	2.579965

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3728.095**	**45862.50**	**3513.832**	**4314.319**	**4248.722**
Stddev	16.225	120.52	29.174	19.695	15.296
%RSD	.4352160	.2627761	.8302629	.4565020	.3600190
#1	3724.973	45724.94	3547.517	4292.707	4244.888
#2	3713.657	45949.51	3496.627	4318.993	4235.708
#3	3745.654	45913.04	3497.353	4331.256	4265.571

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2311-05 Acquired: 6/17/2025 18:51:19 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1007535	-.009310	.3734160	.0404016	.0303396	87.57254
Stddev	.0017258	.004004	.0016421	.0038055	.0019380	.21579
%RSD	1.712894	43.00698	.4397583	9.419168	6.387669	.2464181
#1	.1024527	-.006285	.3738617	.0374183	.0288098	87.32345
#2	.1008054	-.007795	.3715970	.0446873	.0296901	87.69134
#3	.0990023	-.013850	.3747892	.0390992	.0325190	87.70283

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5213138	.0079467	-.006321	152.9557	.2951205	.1480939
Stddev	.0019065	.0000210	.000248	.3245	.0016666	.0004056
%RSD	.3657029	.2645691	3.918319	.2121672	.5647272	.2738541
#1	.5203622	.0079669	-.006035	152.6010	.2941051	.1481272
#2	.5200704	.0079483	-.006473	153.2376	.2970439	.1476727
#3	.5235087	.0079249	-.006454	153.0286	.2942124	.1484818

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2603312	361.5979	3.400721	40.64235	.1543782	.0139963
Stddev	.0006273	1.4509	.012399	.18371	.0003981	.0000545
%RSD	.2409563	.4012362	.3646046	.4520273	.2578773	.3891435
#1	.2608995	359.9704	3.386594	40.44625	.1542462	.0139364
#2	.2596582	362.0678	3.405769	40.67032	.1540628	.0140098
#3	.2604360	362.7557	3.409799	40.81047	.1548255	.0140428

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.659214	.4824241	.5449905	11.48223	4.983707	.7855585
Stddev	.022138	.0129527	.0027044	.07761	.007027	.0024809
%RSD	.8324839	2.684922	.4962211	.6759502	.1409953	.3158088
#1	2.681432	.4678277	.5440770	11.53495	4.984104	.7875157
#2	2.637158	.4925474	.5480333	11.39311	4.976490	.7827684
#3	2.659052	.4868973	.5428612	11.51864	4.990527	.7863915

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2311-05 Acquired: 6/17/2025 18:51:19 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004668	3.332417	F 13.82586	.0285703	2.904645	.1180850
Stddev	.000145	.006109	.09949	.0010160	.006119	.0063651
%RSD	3.102386	.1833178	.7195602	3.556219	.2106704	5.390269
#1	-.004662	3.328604	13.88562	.0281178	2.898795	.1217384
#2	-.004526	3.329184	13.71101	.0297340	2.904138	.1107352
#3	-.004815	3.339463	13.88094	.0278592	2.911002	.1217813

Elem	Sr4077
Units	ppm
Avg	.8600874
Stddev	.0022918
%RSD	.2664603
#1	.8583816
#2	.8591881
#3	.8626924

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3714.384	46353.64	3489.459	4357.730	4358.188
Stddev	6.939	286.22	25.888	22.948	5.551
%RSD	.1868098	.6174655	.7418837	.5266078	.1273614
#1	3712.052	46682.35	3485.694	4383.889	4361.860
#2	3708.912	46219.03	3517.023	4340.991	4351.803
#3	3722.189	46159.55	3465.660	4348.311	4360.902

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-01 Acquired: 6/17/2025 18:55:40 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0854928**	**-.013221**	**2.153361**	**.0387680**	**.0212832**	**187.1675**
Stddev	.0035415	.001699	.002890	.0027617	.0039156	.5043
%RSD	4.142431	12.85100	.1342174	7.123758	18.39750	.2694535
#1	.0890824	-.014611	2.154621	.0419003	.0239133	187.2846
#2	.0853946	-.013724	2.150055	.0377206	.0231530	186.6149
#3	.0820015	-.011327	2.155408	.0366832	.0167832	187.6030

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.608444**	**.0110984**	**.0005007**	**38.72341**	**.2271294**	**.1466372**
Stddev	.010214	.0001195	.0000591	.17156	.0052022	.0004985
%RSD	.6349986	1.076563	11.80381	.4430316	2.290415	.3399822
#1	1.603816	.0111494	.0004768	38.67606	.2240445	.1471950
#2	1.601363	.0109619	.0005680	38.58050	.2242081	.1462350
#3	1.620152	.0111839	.0004573	38.91367	.2331357	.1464815

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4411307**	**276.8051**	**6.274843**	**43.61432**	**.3051849**	**.0128657**
Stddev	.0060072	.7935	.033639	.27661	.0014143	.0003977
%RSD	1.361786	.2866787	.5360929	.6342285	.4634269	3.090917
#1	.4424796	276.3490	6.259904	43.49271	.3063877	.0129691
#2	.4345637	276.3449	6.251262	43.41935	.3036268	.0132014
#3	.4463489	277.7214	6.313365	43.93091	.3055403	.0124265

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.803530**	**.3990031**	**1.350957**	**11.97959**	**11.20182**	**.1335392**
Stddev	.023725	.0086320	.027189	.15622	.01965	.0041587
%RSD	.8462599	2.163390	2.012590	1.304077	.1753847	3.114234
#1	2.800166	.3923374	1.340775	12.03427	11.21992	.1308380
#2	2.781667	.3959183	1.330329	11.80338	11.18093	.1383282
#3	2.828758	.4087537	1.381768	12.10113	11.20462	.1314514

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-01 Acquired: 6/17/2025 18:55:40 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0028125	2.607687	F 17.70512	.0412085	3.128735	.2163263
Stddev	.0001037	.007391	.47588	.0014785	.022560	.0057181
%RSD	3.686135	.2834391	2.687810	3.587727	.7210483	2.643278
#1	.0028248	2.612785	17.75488	.0402226	3.110013	.2204910
#2	.0027033	2.611067	17.20631	.0404944	3.122411	.2098068
#3	.0029095	2.599211	18.15416	.0429084	3.153782	.2186810

Elem	Sr4077
Units	ppm
Avg	.2541279
Stddev	.0012553
%RSD	.4939717
#1	.2531367
#2	.2537075
#3	.2555394

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4773.540	57823.25	4399.643	5493.121	4351.243
Stddev	7.472	702.87	34.268	60.749	2.138
%RSD	.1565272	1.215553	.7788809	1.105916	.0491398
#1	4781.580	58338.42	4378.854	5530.851	4353.629
#2	4766.809	58108.78	4439.195	5525.468	4350.601
#3	4772.232	57022.54	4380.879	5423.042	4349.499

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-01DUP Acquired: 6/17/2025 19:00:00 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0788727**	**-.011220**	**1.873097**	**.0378916**	**.0214674**	**188.2669**
Stddev	.0029817	.001938	.001868	.0007014	.0021874	.4199
%RSD	3.780362	17.27735	.0997250	1.850965	10.18942	.2230222
#1	.0822061	-.009046	1.872293	.0374559	.0224280	187.8786
#2	.0779523	-.011844	1.875233	.0387007	.0230102	188.7124
#3	.0764598	-.012769	1.871767	.0375182	.0189641	188.2097

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.552861**	**.0100501**	**.0004231**	**32.76402**	**.2260288**	**.1341728**
Stddev	.004022	.0000838	.0000174	.10291	.0011715	.0001524
%RSD	.2590322	.8335025	4.118897	.3140925	.5182854	.1136055
#1	1.548665	.0100869	.0004364	32.74301	.2248669	.1343450
#2	1.556684	.0101092	.0004034	32.87581	.2260099	.1341184
#3	1.553233	.0099543	.0004296	32.67323	.2272096	.1340551

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4175819**	**259.0752**	**6.164615**	**40.14420**	**.2799709**	**.0120240**
Stddev	.0023191	.5849	.017522	.04817	.0005631	.0008874
%RSD	.5553528	.2257700	.2842354	.1199830	.2011247	7.380176
#1	.4184381	258.4002	6.152004	40.11599	.2793380	.0113631
#2	.4193511	259.4322	6.184623	40.19982	.2801585	.0130326
#3	.4149565	259.3933	6.157220	40.11680	.2804162	.0116762

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.599100**	**.3966920**	**1.360698**	**11.54325**	**8.805755**	**.1223909**
Stddev	.012729	.0070950	.003128	.05775	.011612	.0008130
%RSD	.4897580	1.788549	.2298625	.5003103	.1318632	.6642361
#1	2.595058	.4023384	1.358795	11.48878	8.793087	.1231638
#2	2.613359	.3887280	1.364308	11.60381	8.815894	.1215431
#3	2.588882	.3990096	1.358992	11.53717	8.808283	.1224659

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-01DUP Acquired: 6/17/2025 19:00:00 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025638	2.154796	F 16.67300	.0349368	2.984113	.2136999
Stddev	.0009394	.000765	.07892	.0007951	.001862	.0032017
%RSD	36.64023	.0355149	.4733424	2.275872	.0623956	1.498242
#1	.0016230	2.155074	16.59287	.0355613	2.985733	.2100096
#2	.0035018	2.155383	16.75066	.0352074	2.984528	.2153527
#3	.0025668	2.153930	16.67547	.0340417	2.982079	.2157375

Elem	Sr4077
Units	ppm
Avg	.2522837
Stddev	.0009334
%RSD	.3699791
#1	.2512354
#2	.2530245
#3	.2525914

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4641.717	57569.10	4276.739	5470.364	4430.168
Stddev	26.511	392.88	18.735	26.616	23.694
%RSD	.5711528	.6824430	.4380598	.4865556	.5348266
#1	4652.946	57979.00	4289.811	5498.801	4445.295
#2	4611.440	57532.48	4255.275	5466.240	4402.862
#3	4660.766	57195.81	4285.130	5446.050	4442.347

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-01LX5 Acquired: 6/17/2025 19:04:21 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0160467	-.000868	.4515551	.0084493	.0069766	50.40692	.4294012
Stddev	.0046564	.000647	.0018441	.0032323	.0017523	.21969	.0022559
%RSD	29.01786	74.57769	.4083867	38.25510	25.11624	.4358368	.5253660
#1	.0121878	-.001597	.4499868	.0095694	.0050591	50.20387	.4282103
#2	.0147336	-.000360	.4510919	.0109725	.0084947	50.64014	.4320031
#3	.0212186	-.000648	.4535867	.0048059	.0073760	50.37675	.4279903

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0030124	-.000710	10.50879	.0595629	.0323423	.1261868	75.06766
Stddev	.0000766	.000020	.06596	.0005646	.0002735	.0017161	.31484
%RSD	2.542149	2.765686	.6277001	.9479499	.8455594	1.359936	.4194042
#1	.0030847	-.000688	10.43300	.0600304	.0326458	.1260830	74.96142
#2	.0029322	-.000717	10.55327	.0589356	.0321150	.1279523	75.42187
#3	.0030205	-.000725	10.54009	.0597227	.0322662	.1245249	74.81968

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.718365	12.16760	.0632005	.0034627	.7826417	.1142600	.3658732
Stddev	.013406	.04991	.0005313	.0006447	.0095421	.0022792	.0004481
%RSD	.7801384	.4101653	.8407060	18.61785	1.219213	1.994730	.1224733
#1	1.703973	12.11206	.0636706	.0027348	.7849692	.1137133	.3653572
#2	1.730497	12.18206	.0626240	.0036917	.7908047	.1167628	.3661643
#3	1.720626	12.20869	.0633070	.0039616	.7721512	.1123038	.3660981

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.708291	2.240795	.0353422	-.000380	.5146566	5.928616	.0093870
Stddev	.024152	.008056	.0009477	.000107	.0032703	.055726	.0004909
%RSD	.8917647	.3595029	2.681375	28.23165	.6354416	.9399517	5.229775
#1	2.697129	2.241792	.0353763	-.000494	.5174078	5.928233	.0088217
#2	2.736005	2.232286	.0362724	-.000364	.5110408	5.984532	.0096338
#3	2.691740	2.248305	.0343780	-.000282	.5155210	5.873082	.0097056

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-01LX5 Acquired: 6/17/2025 19:04:21 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.8710487	.0560051	.0686722
Stddev	.0095925	.0025339	.0003422
%RSD	1.101260	4.524408	.4983474
#1	.8604711	.0584046	.0684200
#2	.8734912	.0533553	.0690618
#3	.8791839	.0562556	.0685349

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3808.698	47575.22	3425.926	4456.340	4679.544
Stddev	14.263	240.73	28.854	32.136	26.022
%RSD	.3744945	.5060066	.8422386	.7211207	.5560828
#1	3822.830	47710.43	3451.149	4491.184	4703.380
#2	3808.957	47717.96	3394.462	4449.970	4683.471
#3	3794.306	47297.28	3432.168	4427.866	4651.782

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-01MS Acquired: 6/17/2025 19:08:37 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8755171	1.965173	3.088814	1.413175	.2807723	202.4356	1.756188
Stddev	.0023946	.004902	.002947	.005086	.0019293	.5160	.004481
%RSD	.2735117	.2494221	.0954120	.3599303	.6871508	.2548850	.2551744
#1	.8728405	1.967932	3.090797	1.415645	.2811837	202.6584	1.755908
#2	.8774563	1.959513	3.085427	1.416555	.2824626	202.8027	1.751853
#3	.8762546	1.968073	3.090217	1.407325	.2786704	201.8456	1.760802

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1640992	.2042803	35.70289	.5531540	.3543703	.7706293	270.0909
Stddev	.0020084	.0005164	.02542	.0025309	.0004845	.0082206	.7351
%RSD	1.223885	.2527991	.0711903	.4575331	.1367137	1.066736	.2721830
#1	.1624439	.2047109	35.72835	.5550184	.3541549	.7633193	270.6895
#2	.1663335	.2037077	35.70280	.5502729	.3549251	.7795285	270.3128
#3	.1635201	.2044222	35.67752	.5541708	.3540309	.7690402	269.2703

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.879841	42.38616	.8256636	.0683538	4.641471	.6363554	1.790872
Stddev	.013783	.16253	.0007605	.0003345	.029969	.0058823	.009864
%RSD	.2003342	.3834531	.0921088	.4894321	.6456871	.9243750	.5507996
#1	6.867634	42.25235	.8264047	.0687061	4.624995	.6403217	1.802250
#2	6.877101	42.33910	.8248851	.0683151	4.676064	.6295970	1.785633
#3	6.894788	42.56702	.8257009	.0680403	4.623355	.6391475	1.784733

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.43328	16.12023	.2631252	.2969119	2.418996	3.858702	.7120322
Stddev	.35456	.01377	.0019777	.0007133	.008363	.034274	.0010458
%RSD	1.824515	.0854457	.7516045	.2402510	.3457260	.8882211	.1468727
#1	19.39485	16.13611	.2645923	.2962533	2.414147	3.839006	.7126816
#2	19.80549	16.11150	.2608761	.2968129	2.414189	3.898278	.7108258
#3	19.09949	16.11310	.2639071	.2976696	2.428653	3.838821	.7125891

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-01MS Acquired: 6/17/2025 19:08:37 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	2.621152	.3801399	.4272255
Stddev	.005208	.0014633	.0006446
%RSD	.1986882	.3849487	.1508829
#1	2.615471	.3784531	.4270577
#2	2.622285	.3810689	.4266813
#3	2.625700	.3808978	.4279373

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4681.741	57661.78	4365.764	5466.590	4349.360
Stddev	15.523	488.11	22.651	40.943	16.960
%RSD	.3315649	.8465018	.5188361	.7489638	.3899538
#1	4688.406	57201.68	4382.869	5421.145	4354.972
#2	4692.819	58173.75	4340.075	5500.598	4362.802
#3	4663.999	57609.90	4374.348	5478.026	4330.304

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-01MSD Acquired: 6/17/2025 19:12:53 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8453150**	**1.924022**	**2.191053**	**1.414265**	**.2608464**	**209.0907**	**1.728839**
Stddev	.0047626	.000957	.004558	.006279	.0016052	.2235	.004627
%RSD	.5634101	.0497606	.2080419	.4440079	.6153903	.1068801	.2676171
#1	.8485665	1.923361	2.191596	1.421334	.2625820	208.9457	1.729043
#2	.8398483	1.923584	2.186247	1.409333	.2605419	209.3481	1.724113
#3	.8475303	1.925120	2.195315	1.412127	.2594152	208.9783	1.733359

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1670459**	**.1985475**	**28.06379**	**.5417847**	**.3322675**	**.7464053**	**251.8030**
Stddev	.0027901	.0001012	.05789	.0024526	.0007880	.0119484	.2085
%RSD	1.670266	.0509871	.2062697	.4526840	.2371564	1.600788	.0827947
#1	.1639400	.1984595	28.12837	.5425733	.3324722	.7327128	251.6755
#2	.1678573	.1985249	28.01658	.5437460	.3313973	.7517850	252.0436
#3	.1693404	.1986582	28.04642	.5390349	.3329329	.7547180	251.6899

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.490939**	**38.00354**	**.7981322**	**.0669368**	**4.379850**	**.6204208**	**1.874352**
Stddev	.017551	.07332	.0003522	.0000959	.053707	.0024796	.002255
%RSD	.3196403	.1929336	.0441298	.1432925	1.226240	.3996565	.1203054
#1	5.489546	37.92398	.7977589	.0669638	4.317870	.6183753	1.876166
#2	5.474126	38.06839	.7984587	.0668302	4.408988	.6197084	1.875063
#3	5.509146	38.01824	.7981789	.0670163	4.412691	.6231785	1.871827

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**18.94218**	**14.75345**	**.2677905**	**.2936333**	**1.897046**	**9.922499**	**.7437481**
Stddev	.11277	.00526	.0005727	.0006639	.001482	.166924	.0008470
%RSD	.5953382	.0356306	.2138607	.2260983	.0781205	1.682279	.1138875
#1	18.81196	14.75915	.2675698	.2929232	1.897106	9.731085	.7435699
#2	19.00680	14.74880	.2673609	.2937383	1.898497	9.998607	.7430044
#3	19.00777	14.75241	.2684407	.2942385	1.895535	10.03780	.7446701

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-01MSD Acquired: 6/17/2025 19:12:53 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	2.602498	.3685331	.3841652
Stddev	.009874	.0017187	.0007723
%RSD	.3794175	.4663490	.2010209
#1	2.603696	.3704494	.3838623
#2	2.592079	.3680221	.3835902
#3	2.611718	.3671280	.3850429

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4573.663	56328.65	4167.295	5330.813	4345.176
Stddev	10.446	531.97	31.734	46.515	5.528
%RSD	.2284024	.9443996	.7614903	.8725693	.1272245
#1	4563.633	55750.61	4202.851	5277.412	4341.592
#2	4584.481	56437.71	4157.188	5352.522	4351.543
#3	4572.876	56797.64	4141.846	5362.505	4342.394

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-01A Acquired: 6/17/2025 19:17:10 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6663551**	**1.439241**	**2.768422**	**1.076066**	**.4613703**	**181.9549**
Stddev	.1203795	.299267	.194791	.202567	.0896450	3.6076
%RSD	18.06537	20.79338	7.036171	18.82475	19.43017	1.982711
#1	.5465565	1.139320	2.559950	.873569	.3719485	177.9626
#2	.6652016	1.440554	2.799527	1.075926	.4609254	184.9813
#3	.7873072	1.737849	2.945788	1.278702	.5512370	182.9208

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.595300**	**.0743049**	**.1480748**	**37.71212**	**.3407885**	**.2902950**
Stddev	.036210	.0131387	.0305063	.82791	.0422104	.0336323
%RSD	2.269811	17.68217	20.60192	2.195336	12.38609	11.58556
#1	1.553715	.0612923	.1174856	36.78276	.3082832	.2554652
#2	1.612320	.0740561	.1482415	38.37083	.3255885	.2928338
#3	1.619863	.0875662	.1784974	37.98278	.3884937	.3225859

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5204578**	**269.0375**	**6.093070**	**43.15272**	**.6671378**	**.0350721**
Stddev	.0271658	5.0547	.124767	.78254	.0838226	.0035824
%RSD	5.219605	1.878817	2.047687	1.813421	12.56451	10.21428
#1	.4931285	263.4959	5.949103	42.24954	.5803903	.0313860
#2	.5207877	273.3952	6.169727	43.62821	.6733309	.0352895
#3	.5474572	270.2213	6.160381	43.58040	.7476920	.0385409

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.636147**	**.4356494**	**1.358473**	**15.09263**	**15.05617**	**.2224416**
Stddev	.191021	.0118173	.081962	.66883	1.15819	.0190411
%RSD	5.253392	2.712568	6.033395	4.431477	7.692444	8.560022
#1	3.451550	.4229661	1.306858	14.37841	13.83174	.2014784
#2	3.623890	.4376322	1.315582	15.19527	15.20257	.2271813
#3	3.833002	.4463499	1.452981	15.70420	16.13419	.2386652

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-01A Acquired: 6/17/2025 19:17:10 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2274661	2.478521	F 20.29690	.5718989	3.206374	.2438765
Stddev	.0446344	.074335	.43136	.1072784	.071741	.0169653
%RSD	19.62242	2.999157	2.125241	18.75829	2.237461	6.956495
#1	.1825367	2.392701	19.85723	.4625606	3.123915	.2244520
#2	.2280621	2.522752	20.31405	.5761448	3.254474	.2513896
#3	.2717995	2.520111	20.71943	.6769913	3.240734	.2557878

Elem	Sr4077
Units	ppm
Avg	.2814195
Stddev	.0106208
%RSD	3.774011
#1	.2697178
#2	.2840916
#3	.2904491

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4748.150	59689.25	4435.367	5630.129	4386.444
Stddev	98.737	2356.80	40.848	218.436	116.912
%RSD	2.079486	3.948452	.9209540	3.879763	2.665301
#1	4859.891	60594.57	4482.387	5725.020	4520.914
#2	4672.672	61459.15	4408.634	5785.072	4308.873
#3	4711.888	57014.02	4415.081	5380.296	4329.546

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-09 Acquired: 6/17/2025 19:21:26 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0620260	-.015233	.2327784	.0419537	.0193081	186.9835	.6606451
Stddev	.0005591	.001432	.0016334	.0003546	.0022057	.8740	.0036732
%RSD	.9013356	9.397870	.7016887	.8451652	11.42386	.4674394	.5560003
#1	.0614150	-.015354	.2336449	.0423586	.0176587	186.8798	.6577660
#2	.0621512	-.016600	.2337960	.0418037	.0184520	187.9047	.6647820
#3	.0625119	-.013744	.2308944	.0416988	.0218135	186.1659	.6593874

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0072108	-.004643	12.33854	.1985078	.1205558	.3889841	287.4322
Stddev	.0001528	.000128	.04633	.0004433	.0004049	.0034758	.7913
%RSD	2.118312	2.759642	.3754623	.2233378	.3358454	.8935585	.2752941
#1	.0070404	-.004497	12.33284	.1989585	.1205577	.3854546	287.6966
#2	.0073354	-.004737	12.38745	.1984926	.1201499	.3924036	288.0574
#3	.0072566	-.004696	12.29532	.1980722	.1209596	.3890940	286.5426

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.380787	33.63928	.2228110	.0103408	2.929368	.3651310	.5706918
Stddev	.015276	.13662	.0004203	.0009704	.035289	.0057163	.0028304
%RSD	.4518475	.4061262	.1886339	9.384105	1.204677	1.565534	.4959594
#1	3.381737	33.55286	.2232413	.0093501	2.898145	.3608611	.5730518
#2	3.395565	33.79678	.2224014	.0112895	2.967655	.3629068	.5714699
#3	3.365058	33.56819	.2227904	.0103827	2.922303	.3716250	.5675538

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.710798	4.323818	.1197375	.0051466	.6238614	9.927812	.0102559
Stddev	.177879	.005756	.0017988	.0001440	.0059394	.085540	.0017812
%RSD	2.306884	.1331220	1.502242	2.798003	.9520427	.8616194	17.36767
#1	7.673292	4.330319	.1217461	.0052327	.6306881	9.858478	.0089502
#2	7.904440	4.319370	.1182753	.0052268	.6198788	10.02340	.0122850
#3	7.554663	4.321764	.1191912	.0049804	.6210173	9.90156	.0095324

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-09 Acquired: 6/17/2025 19:21:26 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**2.910533**	**.1707085**	**.1068542**
Stddev	.015442	.0065121	.0008255
%RSD	.5305423	3.814745	.7725774
#1	2.906677	.1696954	.1063794
#2	2.927537	.1776677	.1078075
#3	2.897385	.1647623	.1063758

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4102.530**	**50640.05**	**3729.169**	**4789.271**	**4400.145**
Stddev	8.105	122.28	46.309	17.242	6.455
%RSD	.1975619	.2414624	1.241798	.3600088	.1467070
#1	4103.121	50624.10	3767.703	4788.174	4394.538
#2	4110.323	50526.54	3677.795	4772.605	4407.202
#3	4094.145	50769.53	3742.008	4807.036	4398.694

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCV07 Acquired: 6/17/2025 19:25:49 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCV07 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.862876**	**4.988057**	**4.871744**	**4.940791**	**4.961308**	**9.893006**	**10.05472**
Stddev	.011632	.006154	.003883	.003395	.003469	.025087	.03531
%RSD	.2392009	.1233754	.0796975	.0687150	.0699169	.2535870	.3511557
#1	4.850280	4.981087	4.867605	4.941350	4.961145	9.864740	10.02409
#2	4.873212	4.992743	4.872321	4.937151	4.957924	9.912631	10.09334
#3	4.865137	4.990340	4.875306	4.943872	4.964856	9.901647	10.04674

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2585374**	**2.446730**	**24.79956**	**.9855375**	**2.444648**	**1.295876**	**4.896459**
Stddev	.0024920	.003631	.01644	.0035202	.004881	.012573	.048247
%RSD	.9638857	.1483830	.0662733	.3571872	.1996498	.9702058	.9853383
#1	.2606422	2.442808	24.80771	.9878729	2.439530	1.304891	4.840973
#2	.2591843	2.449973	24.78065	.9814886	2.445162	1.301223	4.928527
#3	.2557857	2.447409	24.81033	.9872510	2.449251	1.281513	4.919877

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.429438**	**24.18637**	**2.444155**	**1.240658**	**25.98675**	**2.446908**	**2.467936**
Stddev	.006971	.02939	.001732	.002041	.20766	.000253	.017116
%RSD	.2869416	.1215324	.0708770	.1645128	.7990823	.0103224	.6935287
#1	2.426932	24.15357	2.442279	1.240076	26.12362	2.447134	2.457235
#2	2.437316	24.21034	2.444494	1.238971	26.08882	2.446954	2.487676
#3	2.424067	24.19519	2.445694	1.242927	25.74782	2.446635	2.458897

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.21155**	**5.035827**	**5.176117**	**4.961063**	**4.866335**	**5.281317**	**4.921662**
Stddev	.14826	.006901	.046755	.005632	.011213	.045146	.011195
%RSD	.5656295	.1370433	.9032821	.1135301	.2304282	.8548249	.2274734
#1	26.34433	5.028762	5.208920	4.954611	4.854588	5.312980	4.910018
#2	26.23875	5.036169	5.196850	4.963587	4.876925	5.301350	4.932348
#3	26.05157	5.042552	5.122580	4.964993	4.867492	5.229622	4.922619

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCV07 Acquired: 6/17/2025 19:25:49 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCV07 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.926378**	**4.947020**	**5.027059**
Stddev	.015315	.015211	.013801
%RSD	.3108860	.3074780	.2745298
#1	4.924003	4.950627	5.025311
#2	4.942742	4.960104	5.041650
#3	4.912389	4.930330	5.014215

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3387.510**	**43306.54**	**3055.300**	**4008.663**	**4349.348**
Stddev	7.036	42.49	34.359	14.782	12.475
%RSD	.2077148	.0981045	1.124586	.3687440	.2868147
#1	3392.978	43287.03	3028.909	4014.488	4362.578
#2	3389.981	43355.28	3042.839	3991.856	4347.665
#3	3379.572	43277.31	3094.151	4019.645	4337.800

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCB07 Acquired: 6/17/2025 19:30:03 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCB07 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000001**	**.0024087**	**-.000876**	**-.000568**	**-.000568**	**.0047280**	**-.000758**
Stddev	.001737	.0005130	.000662	.006053	.002731	.0212249	.000782
%RSD	242156.4	21.29632	75.56592	1065.564	480.9253	448.9187	103.1298
#1	-.001998	.0029341	-.000977	.000551	.002352	-.015291	.000034
#2	.000838	.0023830	-.001482	-.007103	-.000996	.026982	-.000780
#3	.001158	.0019091	-.000169	.004847	-.003059	.002493	-.001528

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000040**	**-.000007**	**.0187461**	**-.000911**	**-.000325**	**-.000052**	**.0277930**
Stddev	.000040	.000043	.0113940	.000727	.000178	.000728	.0198768
%RSD	100.4794	627.7919	60.78077	79.76889	54.83909	1391.948	71.51731
#1	.000005	-.000020	.0220486	-.001474	-.000528	-.000099	.0488733
#2	-.000054	-.000042	.0060656	-.001168	-.000196	.000698	.0251143
#3	-.000071	.000042	.0281241	-.000091	-.000250	-.000756	.0093914

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000151**	**.0518379**	**.0002056**	**.0001779**	**.0074699**	**.0097001**	**.0000349**
Stddev	.001074	.0343350	.0000648	.0007721	.0032530	.0022148	.0006013
%RSD	710.3157	66.23534	31.50237	434.1279	43.54749	22.83308	1724.242
#1	-.001310	.0184297	.0002781	-.000400	.0098166	.0116453	-.000361
#2	.000044	.0870301	.0001534	.001055	.0088365	.0072896	-.000261
#3	.000812	.0500537	.0001854	-.000122	.0037566	.0101656	.000727

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0041069**	**.0010631**	**.0090328**	**.0009339**	**.0012526**	**.0082042**	**.0007795**
Stddev	.0010002	.0007261	.0006386	.0002335	.0024902	.0022928	.0004177
%RSD	24.35424	68.29459	7.069378	25.00450	198.8021	27.94617	53.58855
#1	.0031610	.0007276	.0097649	.0011472	.0000086	.0099772	.0002978
#2	.0051538	.0005655	.0085907	.0006844	.0041197	.0056150	.0009987
#3	.0040060	.0018962	.0087428	.0009700	-.000371	.0090205	.0010419

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCB07 Acquired: 6/17/2025 19:30:03 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCB07 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0064258	-.002878	-.000048
Stddev	.0008534	.005785	.000209
%RSD	13.28160	200.9926	432.1483
#1	.0064401	-.008623	.000190
#2	.0072721	.002946	-.000134
#3	.0055653	-.002958	-.000201

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3520.329	45216.36	3123.668	4149.648	4956.940
Stddev	8.168	150.97	11.663	28.675	13.203
%RSD	.2320206	.3338939	.3733620	.6910262	.2663448
#1	3528.639	45158.68	3113.949	4159.544	4972.157
#2	3512.311	45387.68	3136.600	4172.065	4950.136
#3	3520.037	45102.74	3120.454	4117.336	4948.528

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-21 Acquired: 6/17/2025 19:34:28 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0561760	-.009488	9.604479	.0372055	.0243608	123.2277	.9708341
Stddev	.0032376	.000641	.002828	.0011936	.0013916	.2552	.0047723
%RSD	5.763325	6.760876	.0294415	3.208011	5.712289	.2070639	.4915674
#1	.0526703	-.010220	9.605573	.0372537	.0230624	123.1330	.9702560
#2	.0590534	-.009025	9.601268	.0383742	.0241901	123.5166	.9758690
#3	.0568044	-.009218	9.606597	.0359885	.0258298	123.0334	.9663771

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0076156	.0003431	22.74659	.2270277	.1219463	.5689663	264.0062
Stddev	.0001495	.0000921	.01519	.0003177	.0001791	.0089827	.6522
%RSD	1.962495	26.85437	.0667817	.1399370	.1468359	1.578775	.2470359
#1	.0075747	.0004488	22.74956	.2268167	.1220090	.5714882	264.1879
#2	.0077812	.0002804	22.73014	.2268733	.1217443	.5764185	264.5483
#3	.0074908	.0002999	22.76009	.2273931	.1220856	.5589922	263.2824

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.737029	38.61674	.2680751	.0137656	2.927648	.3363732	3.075928
Stddev	.023564	.17970	.0008010	.0002738	.038812	.0061052	.015030
%RSD	.4107374	.4653369	.2988099	1.988940	1.325697	1.815001	.4886338
#1	5.715588	38.45003	.2689771	.0137166	2.936669	.3368305	3.059715
#2	5.762258	38.80709	.2678013	.0140606	2.961155	.3300522	3.078674
#3	5.733242	38.59310	.2674468	.0135196	2.885120	.3422368	3.089396

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.71774	7.690881	.1525538	.0099661	2.169123	11.14206	.1052961
Stddev	.09239	.005696	.0012575	.0002416	.004814	.11204	.0008436
%RSD	.7884983	.0740593	.8243116	2.424006	.2219377	1.005555	.8011453
#1	11.76484	7.691091	.1538558	.0102146	2.167446	11.05658	.1061445
#2	11.77709	7.685083	.1524596	.0099516	2.174551	11.26890	.1052864
#3	11.61128	7.696468	.1513461	.0097321	2.165371	11.10071	.1044574

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2296-21 Acquired: 6/17/2025 19:34:28 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	3.188399	.2114205	.2442665
Stddev	.007496	.0033271	.0004794
%RSD	.2350936	1.573707	.1962470
#1	3.181437	.2084486	.2448197
#2	3.187426	.2107978	.2440081
#3	3.196334	.2150149	.2439719

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4208.825	52656.82	3850.064	4935.588	4481.853
Stddev	12.081	384.70	34.652	34.270	10.627
%RSD	.2870365	.7305788	.9000426	.6943456	.2371215
#1	4222.617	52746.03	3850.148	4969.056	4493.791
#2	4203.746	52989.07	3815.369	4937.138	4478.347
#3	4200.113	52235.35	3884.674	4900.569	4473.422

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2297-01 Acquired: 6/17/2025 19:38:50 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1582884**	**.0067056**	**2.280841**	**.0271504**	**.0261199**	**71.48062**
Stddev	.0012191	.0012718	.001987	.0005037	.0006561	.10638
%RSD	.7701705	18.96657	.0871195	1.855406	2.511791	.1488257
#1	.1569039	.0054326	2.278547	.0268389	.0261841	71.40830
#2	.1592012	.0067079	2.281943	.0268808	.0254341	71.60277
#3	.1587601	.0079763	2.282032	.0277316	.0267415	71.43079

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8913168**	**.0070405**	**.0015036**	**52.61758**	**.1911763**	**.0832037**
Stddev	.0013726	.0000896	.0000583	.09666	.0016069	.0004948
%RSD	.1539946	1.272370	3.875369	.1837039	.8405372	.5946956
#1	.8916776	.0070705	.0015627	52.52672	.1893293	.0829508
#2	.8924729	.0069398	.0014462	52.71914	.1922537	.0828865
#3	.8897998	.0071113	.0015019	52.60686	.1919458	.0837738

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8862183**	**193.1654**	**9.000692**	**34.12320**	**.2459578**	**.0082728**
Stddev	.0058734	.5280	.007096	.13868	.0010325	.0001629
%RSD	.6627439	.2733399	.0788399	.4064105	.4197990	1.969185
#1	.8877671	192.7046	8.997873	34.26781	.2465826	.0083045
#2	.8797258	193.7415	8.995437	33.99133	.2465247	.0084175
#3	.8911621	193.0500	9.008764	34.11048	.2447660	.0080963

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**12.07066**	**.2862179**	**7.268147**	**9.204542**	**5.422995**	**.1974433**
Stddev	.03572	.0032886	.020754	.023420	.003078	.0012873
%RSD	.2959382	1.148978	.2855520	.2544413	.0567498	.6519846
#1	12.09585	.2888382	7.263015	9.217046	5.423467	.1959677
#2	12.02977	.2825276	7.250440	9.219057	5.425810	.1980259
#3	12.08634	.2872879	7.290986	9.177524	5.419709	.1983363

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2297-01 Acquired: 6/17/2025 19:38:50 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018798	3.164798	F 15.00766	.1466219	2.312588	.1179879
Stddev	.0004406	.002558	.07725	.0014027	.008676	.0022712
%RSD	23.43812	.0808163	.5147525	.9566699	.3751492	1.924964
#1	.0023568	3.166424	15.01689	.1461461	2.302737	.1188399
#2	.0017947	3.161849	14.92620	.1482006	2.315936	.1197099
#3	.0014880	3.166120	15.07988	.1455191	2.319090	.1154139

Elem	Sr4077
Units	ppm
Avg	.2953275
Stddev	.0003275
%RSD	.1108932
#1	.2952141
#2	.2950717
#3	.2956966

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3947.349	49664.28	3591.714	4627.482	4420.678
Stddev	3.561	350.92	22.796	23.955	7.947
%RSD	.0902209	.7065907	.6346938	.5176743	.1797720
#1	3949.813	49468.88	3566.705	4600.090	4427.413
#2	3943.266	49454.54	3611.332	4637.842	4411.913
#3	3948.967	50069.40	3597.105	4644.513	4422.709

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2307-03DLX5 Acquired: 6/17/2025 19:43:12 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0150930**	**.0015886**	**.0355816**	**.0015144**	**.0047488**	**21.23976**
Stddev	.0009218	.0027416	.0004928	.0004617	.0036489	.09660
%RSD	6.107418	172.5845	1.384937	30.48751	76.83843	.4548007
#1	.0160980	-.001562	.0354018	.0018905	.0007260	21.18431
#2	.0148940	.003435	.0361391	.0009991	.0056753	21.35130
#3	.0142869	.002892	.0352041	.0016535	.0078452	21.18366

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4065144**	**.0019012**	**-.000506**	**16.17190**	**.0584063**	**.0276565**
Stddev	.0035846	.0001336	.000076	.05585	.0003763	.0001518
%RSD	.8817924	7.025879	14.92408	.3453686	.6442070	.5489959
#1	.4044285	.0020006	-.000581	16.11364	.0586830	.0278263
#2	.4106535	.0019538	-.000508	16.22498	.0585582	.0275338
#3	.4044612	.0017494	-.000430	16.17708	.0579779	.0276094

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1854635**	**31.74864**	**.7059646**	**12.79292**	**.0533206**	**.0009024**
Stddev	.0011692	.15150	.0031981	.09032	.0004465	.0006208
%RSD	.6304064	.4771890	.4530039	.7060032	.8373222	68.78808
#1	.1864914	31.69272	.7049405	12.69891	.0534264	.0006047
#2	.1857077	31.92016	.7095493	12.87903	.0537047	.0016160
#3	.1841916	31.63305	.7034041	12.80081	.0528307	.0004866

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.184891**	**.0440282**	**.1443937**	**5.341073**	**1.000012**	**.0361723**
Stddev	.036266	.0038675	.0009164	.029875	.001226	.0025304
%RSD	.6994552	8.784179	.6346373	.5593497	.1226005	6.995426
#1	5.199886	.0418089	.1433608	5.325715	1.001426	.0345256
#2	5.211255	.0484940	.1447110	5.375503	.999255	.0349053
#3	5.143532	.0417817	.1451092	5.321999	.999354	.0390859

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2307-03DLX5 Acquired: 6/17/2025 19:43:12 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000198**	**3.312490**	F **17.92555**	**.0011753**	**.3614258**	**.0473560**
Stddev	.000302	.007153	.15469	.0005091	.0061408	.0027121
%RSD	152.2440	.2159368	.8629547	43.32012	1.699061	5.727054
#1	-.000405	3.305490	17.99996	.0017225	.3571826	.0503947
#2	-.000338	3.319786	18.02898	.0010876	.3684674	.0451806
#3	.000148	3.312195	17.74772	.0007156	.3586274	.0464927

Elem	Sr4077
Units	ppm
Avg	**.0609794**
Stddev	.0005175
%RSD	.8487296
#1	.0608195
#2	.0615581
#3	.0605607

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3588.021**	**45645.95**	**3177.822**	**4192.654**	**4653.355**
Stddev	8.209	337.59	24.567	19.993	9.471
%RSD	.2287965	.7395913	.7730843	.4768538	.2035375
#1	3596.444	46035.42	3191.833	4214.685	4664.174
#2	3587.574	45436.83	3149.455	4175.665	4649.326
#3	3580.044	45465.61	3192.178	4187.613	4646.564

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2316-01 Acquired: 6/17/2025 19:47:28 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000448**	**.0013116**	**.0050187**	**-.000531**	**.0012519**	**.0575587**	**.0015450**
Stddev	.001991	.0005710	.0004061	.001339	.0014683	.0202581	.0018082
%RSD	443.9923	43.53695	8.091375	252.2423	117.2933	35.19558	117.0318
#1	.001459	.0019706	.0047887	-.000863	.0029383	.0579592	.0020655
#2	-.000291	.0009644	.0047799	.000943	.0005597	.0371034	-.000466
#3	-.002513	.0009996	.0054876	-.001673	.0002575	.0776137	.003036

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000094**	**-.000044**	**3.975445**	**.0003813**	**.0077120**	**.0110417**	**1.905401**
Stddev	.000049	.000121	.022234	.0005951	.0000659	.0001255	.016685
%RSD	52.31248	275.7597	.5592783	156.0941	.8540119	1.136794	.8756749
#1	-.000094	-.000034	3.956442	-.000071	.0077518	.0111464	1.886363
#2	-.000143	.000072	3.999897	.001056	.0077483	.0110761	1.917480
#3	-.000045	-.000169	3.969997	.000159	.0076360	.0109025	1.912360

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0190083**	**1.618367**	**.0149986**	**-.000622**	**13.95121**	**.0091064**	**.0297525**
Stddev	.0010235	.048802	.0004577	.000650	.00811	.0077225	.0002498
%RSD	5.384432	3.015527	3.051799	104.5064	.0581458	84.80324	.8395187
#1	.0201525	1.570215	.0147230	-.000124	13.95837	.0021109	.0298827
#2	.0186923	1.667795	.0147458	-.000385	13.94240	.0078151	.0299103
#3	.0181800	1.617091	.0155270	-.001357	13.95286	.0173932	.0294645

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.130872**	**.0125506**	**.0103906**	**-.000528**	**4.354748**	**6.276638**	**-.000613**
Stddev	.005422	.0003871	.0015163	.000317	.008744	.035314	.000780
%RSD	.4794237	3.084048	14.59244	59.99984	.2007897	.5626321	127.1745
#1	1.128272	.0122399	.0096652	-.000708	4.347626	6.304208	.000255
#2	1.127239	.0124278	.0093734	-.000162	4.352111	6.236833	-.000839
#3	1.137104	.0129842	.0121333	-.000714	4.364507	6.288873	-.001255

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2316-01 Acquired: 6/17/2025 19:47:28 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0024993	-.016765	.0220794
Stddev	.0014512	.005144	.0001344
%RSD	58.06583	30.68241	.6087265
#1	.0016834	-.015992	.0222345
#2	.0016397	-.012051	.0220065
#3	.0041749	-.022252	.0219972

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3573.866	46264.28	3155.346	4210.260	4936.228
Stddev	6.828	316.73	6.446	31.396	6.374
%RSD	.1910475	.6846189	.2042921	.7457050	.1291211
#1	3567.181	46478.00	3159.900	4231.330	4931.704
#2	3573.588	45900.39	3147.970	4174.176	4933.462
#3	3580.828	46414.44	3158.167	4225.274	4943.518

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2316-02 Acquired: 6/17/2025 19:51:48 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.002762**	**.0021656**	**.0040416**	**-.001691**	**.0020682**	**-.011128**	**.0040951**
Stddev	.001730	.0003374	.0008967	.002304	.0015071	.021606	.0011984
%RSD	62.62067	15.57910	22.18593	136.2519	72.86676	194.1488	29.26351
#1	-.000766	.0024919	.0032690	.000530	.0003753	.012628	.0027400
#2	-.003700	.0021867	.0038311	-.001533	.0032636	-.016410	.0045302
#3	-.003819	.0018181	.0050249	-.004070	.0025659	-.029604	.0050152

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000101**	**-.000042**	**4.536672**	**.0002667**	**.0079084**	**.0079483**	**.0866743**
Stddev	.000019	.000025	.029510	.0007335	.0002995	.0006802	.0230703
%RSD	18.91843	59.94890	.6504663	275.0064	3.787559	8.557511	26.61719
#1	-.000095	-.000070	4.531763	-.000389	.0082236	.0071649	.0697049
#2	-.000122	-.000022	4.509924	.001059	.0078742	.0082911	.1129430
#3	-.000086	-.000034	4.568328	.000131	.0076275	.0083888	.0773752

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0237743**	**1.699435**	**.0058662**	**.0004893**	**14.32695**	**.0076524**	**.0221411**
Stddev	.0013378	.067213	.0002890	.0005939	.13883	.0027523	.0002350
%RSD	5.627278	3.954994	4.925880	121.3813	.9690371	35.96624	1.061201
#1	.0229244	1.633798	.0061783	-.000013	14.23573	.0103338	.0218984
#2	.0230819	1.696387	.0058123	.001145	14.25839	.0077893	.0223675
#3	.0253164	1.768119	.0056079	.000337	14.48672	.0048343	.0221576

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.204227**	**.0318356**	**.0126194**	**-.000354**	**.9743842**	**6.406519**	**.0001215**
Stddev	.010817	.0019218	.0005899	.000389	.0019153	.043804	.0005836
%RSD	.8982855	6.036626	4.674365	109.8199	.1965690	.6837452	480.3081
#1	1.200736	.0339037	.0127977	-.000769	.9765302	6.390494	.0000142
#2	1.195586	.0314983	.0119609	.000001	.9728482	6.372985	.0007513
#3	1.216359	.0301047	.0130995	-.000294	.9737742	6.456080	-.000401

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2316-02 Acquired: 6/17/2025 19:51:48 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0032664	-.018040	.0286742
Stddev	.0020311	.008333	.0002568
%RSD	62.18270	46.18941	.8956831
#1	.0045413	-.027661	.0287391
#2	.0009241	-.013132	.0283911
#3	.0043339	-.013328	.0288923

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3568.066	46207.05	3164.044	4198.837	4920.820
Stddev	11.171	117.93	20.144	11.178	14.330
%RSD	.3130957	.2552176	.6366669	.2662260	.2912042
#1	3580.396	46225.19	3174.561	4199.083	4937.351
#2	3558.619	46081.10	3176.755	4187.537	4913.164
#3	3565.182	46314.86	3140.818	4209.890	4911.945

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2316-02DUP Acquired: 6/17/2025 19:56:11 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001350**	**-.000293**	**.0034804**	**-.001808**	**-.000017**	**.0665135**	**.0045034**
Stddev	.001039	.002493	.0003852	.000242	.000645	.0342389	.0004267
%RSD	76.99448	850.3556	11.06722	13.37481	3703.216	51.47661	9.475874
#1	-.000597	.000346	.0038019	-.001735	-.000278	.0306837	.0040110
#2	-.002535	.001818	.0035858	-.001612	-.000491	.0989016	.0047656
#3	-.000916	-.003044	.0030535	-.002078	.000717	.0699552	.0047337

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000108**	**-.000012**	**4.469239**	**-.000099**	**.0076697**	**.0103121**	**.0958715**
Stddev	.000091	.000021	.018499	.000214	.0002454	.0008470	.0106979
%RSD	84.16265	178.2768	.4139284	216.3458	3.199774	8.213953	11.15863
#1	-.000005	-.000031	4.450053	-.000230	.0079315	.0106810	.1069660
#2	-.000176	.000011	4.486965	-.000216	.0076328	.0093432	.0856200
#3	-.000142	-.000015	4.470700	.000148	.0074449	.0109123	.0950286

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0222883**	**1.687935**	**.0054431**	**-.000013**	**14.27321**	**.0011470**	**.0227526**
Stddev	.0011178	.049114	.0001127	.000128	.20704	.0061764	.0003549
%RSD	5.015310	2.909695	2.070345	981.0640	1.450535	538.5096	1.559696
#1	.0224963	1.632970	.0053164	.000129	14.09837	.0024153	.0223544
#2	.0210811	1.703319	.0055319	-.000117	14.21942	.0065907	.0230356
#3	.0232876	1.727515	.0054812	-.000051	14.50183	-.005565	.0228676

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.209653**	**.0316574**	**.0123874**	**-.000408**	**.9709953**	**6.355067**	**-.000547**
Stddev	.019948	.0009463	.0019050	.000199	.0043967	.112169	.000346
%RSD	1.649045	2.989276	15.37851	48.85874	.4528028	1.765035	63.28268
#1	1.198458	.0316208	.0118096	-.000561	.9718016	6.253795	-.000934
#2	1.197818	.0326215	.0108382	-.000480	.9749331	6.335776	-.000269
#3	1.232684	.0307300	.0145144	-.000182	.9662513	6.475631	-.000437

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2316-02DUP Acquired: 6/17/2025 19:56:11 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0034815	-.023320	.0282036
Stddev	.0016299	.005492	.0002318
%RSD	46.81454	23.55219	.8218138
#1	.0053026	-.017170	.0280667
#2	.0029820	-.025056	.0284712
#3	.0021599	-.027735	.0280728

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3554.086	45916.08	3133.386	4170.318	4891.734
Stddev	9.160	153.78	51.543	22.210	13.324
%RSD	.2577255	.3349103	1.644946	.5325659	.2723878
#1	3564.588	45758.57	3165.900	4157.298	4907.098
#2	3547.752	46065.83	3160.300	4195.962	4883.343
#3	3549.917	45923.83	3073.958	4157.692	4884.760

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2316-02LX5 Acquired: 6/17/2025 20:00:34 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001079**	**-.000055**	**.0010213**	**-.001353**	**-.000472**	**-.016959**	**-.000138**
Stddev	.001100	.001810	.0006300	.000733	.002347	.017379	.000267
%RSD	101.9405	3290.092	61.68744	54.16101	497.2313	102.4807	193.9357
#1	-.000390	-.001001	.0016900	-.000531	-.003162	-.016454	-.000175
#2	-.000500	.002032	.0009350	-.001590	.001157	.000163	.000146
#3	-.002349	-.001196	.0004389	-.001937	.000589	-.034585	-.000384

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000023**	**-.000030**	**.9065599**	**-.000124**	**.0014020**	**.0022142**	**.0235838**
Stddev	.000031	.000058	.0104173	.000785	.0002468	.0004040	.0113872
%RSD	133.0056	195.5068	1.149104	631.0640	17.60515	18.24708	48.28414
#1	.000012	-.000069	.8952275	.000016	.0016857	.0026389	.0107690
#2	-.000040	.000037	.9087326	-.000970	.0012833	.0021691	.0325417
#3	-.000042	-.000056	.9157195	.000581	.0012369	.0018346	.0274406

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0038056**	**.3308560**	**.0011064**	**.0007757**	**2.634572**	**.0074227**	**.0044484**
Stddev	.0002938	.0336579	.0001809	.0002626	.021242	.0079827	.0003502
%RSD	7.721299	10.17297	16.34824	33.85023	.8062721	107.5449	7.873753
#1	.0035331	.3096765	.0010581	.0010019	2.651735	.0071096	.0043948
#2	.0041169	.3132246	.0013065	.0008375	2.610815	.0155574	.0041280
#3	.0037667	.3696667	.0009545	.0004878	2.641166	-.000399	.0048223

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1904271**	**.0086861**	**.0028764**	**.0000799**	**.1952165**	**1.306912**	**-.000107**
Stddev	.0017565	.0023507	.0011528	.0003381	.0016862	.006380	.001280
%RSD	.9223952	27.06281	40.07879	423.3818	.8637314	.4881632	1201.097
#1	.1888050	.0111765	.0033005	-.000301	.1940515	1.311798	.000726
#2	.1901836	.0083758	.0037570	.000344	.1971500	1.299694	-.001580
#3	.1922926	.0065059	.0015716	.000197	.1944480	1.309244	.000534

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2316-02LX5 Acquired: 6/17/2025 20:00:34 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0081696	-.012306	.0056331
Stddev	.0044410	.000683	.0003473
%RSD	54.36036	5.551153	6.166105
#1	.0132212	-.012953	.0056608
#2	.0064076	-.011592	.0052728
#3	.0048799	-.012374	.0059658

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3568.771	45857.21	3137.005	4183.806	4967.201
Stddev	7.900	155.64	11.466	17.315	12.095
%RSD	.2213528	.3394069	.3655067	.4138643	.2435004
#1	3568.854	45685.04	3129.351	4199.123	4961.342
#2	3560.831	45898.64	3150.188	4165.018	4959.151
#3	3576.630	45987.94	3131.476	4187.276	4981.110

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2316-02MS Acquired: 6/17/2025 20:04:58 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7050307	1.924890	.9321000	1.844765	.7826698	1.998553	.2062760
Stddev	.0038089	.003376	.0035270	.003469	.0045128	.029252	.0009969
%RSD	.5402505	.1753796	.3783939	.1880635	.5765938	1.463658	.4832834
#1	.7059643	1.927300	.9280534	1.844756	.7780278	2.012182	.2065230
#2	.7008417	1.926338	.9345212	1.841300	.7870412	1.964973	.2051788
#3	.7082860	1.921032	.9337254	1.848238	.7829405	2.018504	.2071262

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1991973	.1856156	5.399909	.3952023	.1989023	.3386748	3.234235
Stddev	.0029271	.0002615	.039480	.0012644	.0004618	.0041053	.034324
%RSD	1.469457	.1408779	.7311239	.3199402	.2322013	1.212167	1.061256
#1	.2002257	.1853169	5.372465	.3938306	.1983725	.3415220	3.226499
#2	.1958948	.1857266	5.382107	.3963212	.1992201	.3339689	3.204439
#3	.2014714	.1858032	5.445156	.3954550	.1991143	.3405336	3.271766

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2306728	3.671819	.4803479	.0696869	16.94139	.2989092	.2161265
Stddev	.0006391	.072491	.0008547	.0002432	.21395	.0042671	.0012511
%RSD	.2770736	1.974261	.1779411	.3490128	1.262881	1.427546	.5788798
#1	.2313441	3.589935	.4793671	.0696280	17.09371	.3022654	.2154004
#2	.2300716	3.697721	.4807424	.0694786	16.69679	.3003552	.2175712
#3	.2306028	3.727801	.4809341	.0699542	17.03367	.2941071	.2154080

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.81104	5.479587	.2873553	.4024484	.9441624	7.046141	.6662255
Stddev	.20450	.008219	.0038482	.0010393	.0017269	.092862	.0007871
%RSD	1.731392	.1499839	1.339172	.2582511	.1828994	1.317916	.1181472
#1	11.97608	5.471320	.2900069	.4015309	.9422363	7.091394	.6656597
#2	11.58227	5.487756	.2829416	.4022373	.9446785	6.939327	.6671244
#3	11.87478	5.479686	.2891173	.4035771	.9455723	7.107701	.6658923

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2316-02MS Acquired: 6/17/2025 20:04:58 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.1998690	.1846774	.2289972
Stddev	.0035434	.0088028	.0015704
%RSD	1.772864	4.766569	.6857699
#1	.1976078	.1833745	.2287860
#2	.1980465	.1940590	.2275430
#3	.2039527	.1765987	.2306624

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3458.871	44578.87	3065.960	4068.771	4679.833
Stddev	2.739	116.65	37.002	19.782	10.016
%RSD	.0791935	.2616716	1.206869	.4861797	.2140165
#1	3462.030	44555.17	3041.453	4056.913	4689.772
#2	3457.440	44475.89	3108.524	4057.792	4669.742
#3	3457.144	44705.55	3047.904	4091.607	4679.986

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2316-02MSD Acquired: 6/17/2025 20:09:17 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6927612	1.888210	.9143340	1.803772	.7657110	1.936684	.1987076
Stddev	.0002806	.005906	.0024056	.002450	.0040232	.016179	.0011112
%RSD	.0405013	.3127574	.2630960	.1358248	.5254247	.8354039	.5592090
#1	.6924387	1.892942	.9166667	1.806364	.7694759	1.918219	.1999588
#2	.6929488	1.881592	.9144739	1.801495	.7614715	1.943455	.1978359
#3	.6928962	1.890096	.9118616	1.803457	.7661856	1.948377	.1983279

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1941375	.1818147	5.306689	.3870192	.1946599	.3283282	3.147542
Stddev	.0009593	.0001377	.037037	.0005664	.0006089	.0012925	.025571
%RSD	.4941090	.0757304	.6979362	.1463476	.3127830	.3936507	.8124144
#1	.1934375	.1819680	5.297250	.3868966	.1940550	.3276229	3.118674
#2	.1952309	.1817744	5.347533	.3876368	.1946521	.3298199	3.167348
#3	.1937442	.1817016	5.275285	.3865241	.1952726	.3275419	3.156603

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2140221	3.529873	.4710686	.0684219	16.66160	.2897739	.2127693
Stddev	.0007736	.059293	.0004220	.0004983	.08758	.0042352	.0020290
%RSD	.3614591	1.679755	.0895866	.7283047	.5256169	1.461553	.9535948
#1	.2147939	3.595630	.4713667	.0683522	16.57899	.2935531	.2125013
#2	.2140257	3.480480	.4705857	.0679621	16.75342	.2905722	.2108876
#3	.2132467	3.513510	.4712535	.0689514	16.65241	.2851963	.2149189

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.53076	5.370001	.2813311	.3936362	.9372227	6.942820	.6522949
Stddev	.07162	.003746	.0001173	.0005524	.0049753	.013144	.0010679
%RSD	.6211462	.0697662	.0417101	.1403388	.5308558	.1893132	.1637172
#1	11.45591	5.373585	.2814598	.3940375	.9414639	6.932300	.6515610
#2	11.59865	5.370305	.2813035	.3930061	.9384581	6.957553	.6518036
#3	11.53772	5.366111	.2812300	.3938649	.9317461	6.938605	.6535201

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2316-02MSD Acquired: 6/17/2025 20:09:17 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.1917744	.1744551	.2216733
Stddev	.0019198	.0026212	.0010307
%RSD	1.001070	1.502478	.4649830
#1	.1934677	.1745410	.2224782
#2	.1921668	.1717921	.2220303
#3	.1896887	.1770323	.2205116

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3513.800	45289.02	3131.234	4131.610	4748.206
Stddev	8.179	162.36	17.504	30.541	10.480
%RSD	.2327694	.3584879	.5590055	.7391927	.2207151
#1	3506.985	45472.55	3150.579	4154.778	4741.722
#2	3511.545	45230.34	3116.491	4143.050	4742.599
#3	3522.870	45164.15	3126.632	4097.001	4760.296

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2316-02A Acquired: 6/17/2025 20:13:38 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8453544	2.287007	1.114895	2.202557	.9272894	2.332796	.2433099
Stddev	.0027288	.007573	.003375	.002573	.0007733	.058761	.0051440
%RSD	.3228012	.3311095	.3027399	.1168036	.0833888	2.518904	2.114154
#1	.8458075	2.278712	1.111417	2.199687	.9281472	2.338536	.2469502
#2	.8424274	2.288759	1.115111	2.204657	.9266460	2.388476	.2455544
#3	.8478283	2.293550	1.118157	2.203327	.9270749	2.271376	.2374251

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2375161	.2222295	5.586011	.4728593	.2366733	.4002147	3.813838
Stddev	.0049392	.0004370	.129883	.0003755	.0002977	.0074513	.114265
%RSD	2.079515	.1966412	2.325150	.0794050	.1257830	1.861818	2.996063
#1	.2375366	.2218009	5.650567	.4730747	.2369845	.4010273	3.887034
#2	.2424449	.2222131	5.670968	.4730775	.2366441	.4072264	3.872309
#3	.2325666	.2226744	5.436498	.4724258	.2363912	.3923904	3.682170

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2566704	3.939325	.5745141	.0430509	17.85842	.3547578	.2565152
Stddev	.0052485	.080672	.0013035	.0008353	.28578	.0120058	.0015358
%RSD	2.044830	2.047853	.2268871	1.940342	1.600273	3.384231	.5987224
#1	.2584019	3.989255	.5739015	.0421190	17.93659	.3676899	.2572365
#2	.2608345	3.982464	.5736297	.0433012	18.09698	.3526175	.2547515
#3	.2507750	3.846256	.5760110	.0437324	17.54168	.3439661	.2575575

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.73736	6.559095	.3426360	.4776840	.9772331	7.377402	.7908981
Stddev	.10012	.006225	.0067483	.0011337	.0015498	.131417	.0027588
%RSD	.7288117	.0949022	1.969515	.2373322	.1585888	1.781349	.3488203
#1	13.82377	6.552431	.3421544	.4768642	.9768610	7.385494	.7885286
#2	13.76066	6.560094	.3496122	.4772101	.9759032	7.504586	.7902388
#3	13.62764	6.564760	.3361415	.4789778	.9789350	7.242126	.7939268

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: Q2316-02A Acquired: 6/17/2025 20:13:38 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2305190	.2071438	.2639357
Stddev	.0031689	.0060104	.0057378
%RSD	1.374677	2.901535	2.173926
#1	.2315986	.2120605	.2669620
#2	.2330070	.2089274	.2675267
#3	.2269514	.2004435	.2573183

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3489.648	45139.76	3112.459	4121.178	4711.547
Stddev	7.200	313.63	46.501	42.809	12.702
%RSD	.2063279	.6947904	1.494028	1.038745	.2695862
#1	3497.961	44932.62	3098.378	4096.307	4724.382
#2	3485.613	45500.58	3074.626	4170.609	4711.274
#3	3485.370	44986.06	3164.373	4096.618	4698.983

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCV08 Acquired: 6/17/2025 20:17:58 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCV08 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.852232**	**4.965262**	**4.872680**	**4.935115**	**4.930687**	**9.824346**	**9.913385**
Stddev	.007462	.005358	.006242	.010629	.018082	.047541	.090149
%RSD	.1537934	.1079021	.1281089	.2153650	.3667321	.4839091	.9093686
#1	4.844235	4.961029	4.876748	4.946685	4.951431	9.782715	9.811628
#2	4.859010	4.971285	4.875799	4.932877	4.922374	9.814173	9.945265
#3	4.853450	4.963472	4.865493	4.925784	4.918256	9.876150	9.983263

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2512258**	**2.437130**	**24.50196**	**.9684613**	**2.444304**	**1.265287**	**4.766118**
Stddev	.0040960	.001382	.15211	.0016668	.000871	.023620	.016360
%RSD	1.630407	.0566903	.6208182	.1721042	.0356504	1.866798	.3432584
#1	.2467959	2.437291	24.33214	.9688559	2.443408	1.241694	4.774638
#2	.2520060	2.435675	24.54805	.9698954	2.444357	1.265233	4.747256
#3	.2548757	2.438424	24.62571	.9666327	2.445149	1.288935	4.776458

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.392618**	**24.05649**	**2.435121**	**1.226173**	**25.68192**	**2.413489**	**2.437616**
Stddev	.018320	.06162	.000529	.001958	.40960	.013969	.020386
%RSD	.7656785	.2561650	.0217378	.1596433	1.594909	.5787866	.8363248
#1	2.371500	23.99894	2.434946	1.224131	25.29149	2.399570	2.450439
#2	2.402122	24.04904	2.435716	1.228034	25.64594	2.427507	2.414108
#3	2.404233	24.12151	2.434702	1.226355	26.10832	2.413390	2.448300

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.97037**	**4.998695**	**5.030078**	**4.919838**	**4.856249**	**5.118265**	**4.893109**
Stddev	.30186	.005506	.091553	.005494	.002957	.101303	.002798
%RSD	1.162332	.1101580	1.820105	.1116731	.0608988	1.979251	.0571747
#1	25.75975	4.995449	4.935555	4.926136	4.855491	5.017444	4.894390
#2	25.83516	4.995582	5.036338	4.917350	4.859511	5.117308	4.889900
#3	26.31620	5.005053	5.118339	4.916029	4.853744	5.220044	4.895036

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCV08 Acquired: 6/17/2025 20:17:58 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCV08 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	4.854172	4.888935	4.971561
Stddev	.034693	.027443	.035250
%RSD	.7147135	.5613340	.7090317
#1	4.817681	4.860908	4.932140
#2	4.858103	4.890142	4.982495
#3	4.886733	4.915755	5.000048

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3386.464	43192.32	3070.341	3974.000	4335.167
Stddev	.475	283.57	32.810	42.346	3.314
%RSD	.0140128	.6565376	1.068627	1.065583	.0764453
#1	3386.404	42868.28	3094.632	3929.027	4338.148
#2	3386.966	43313.61	3083.376	4013.108	4335.753
#3	3386.023	43395.08	3033.017	3979.866	4331.598

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCB08 Acquired: 6/17/2025 20:22:13 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCB08 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0047052**	**.0062481**	**.0045300**	**.0040052**	**.0037778**	**.0310464**
Stddev	.0032612	.0031723	.0008725	.0016372	.0017063	.0231167
%RSD	69.31044	50.77201	19.26029	40.87746	45.16751	74.45870
#1	.0075674	.0092778	.0055373	.0058955	.0057218	.0574541
#2	.0053932	.0065162	.0040119	.0030332	.0030843	.0212132
#3	.0011549	.0029502	.0040407	.0030870	.0025275	.0144720

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0375625**	**.0005378**	**.0022419**	**.0883025**	**.0015881**	**.0022175**
Stddev	.0074903	.0001446	.0004781	.0106587	.0004777	.0006681
%RSD	19.94077	26.88557	21.32699	12.07070	30.07950	30.12899
#1	.0455608	.0006429	.0027833	.0892536	.0020228	.0029882
#2	.0364136	.0005977	.0020649	.0984538	.0016649	.0018612
#3	.0307131	.0003729	.0018775	.0772001	.0010767	.0018030

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0028367**	**.0417494**	**.0094224**	**.0843463**	**.0028941**	**.0026876**
Stddev	.0009907	.0207505	.0027317	.0922820	.0005932	.0002912
%RSD	34.92432	49.70251	28.99196	109.4085	20.49626	10.83357
#1	.0039684	.0261669	.0116157	.0912625	.0033839	.0029385
#2	.0024160	.0337776	.0102892	.1729757	.0030637	.0027560
#3	.0021258	.0653036	.0063625	-.011199	.0022345	.0023683

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0427482**	**.0059623**	**.0046974**	**.0358746**	**.0056787**	**.0200809**
Stddev	.0118722	.0019332	.0013669	.0068222	.0020957	.0036400
%RSD	27.77247	32.42396	29.09976	19.01682	36.90466	18.12646
#1	.0563934	.0072638	.0060623	.0431763	.0077656	.0242393
#2	.0370681	.0037409	.0047013	.0347842	.0056962	.0185310
#3	.0347830	.0068823	.0033285	.0296632	.0035743	.0174724

Reviewed By:MOHAN
On:6/19/2025 12:50:23 PM
Inst Id :P5
LB :LB136187

Sample Name: CCB08 Acquired: 6/17/2025 20:22:13 Type: Unk
Method: METHOD 6010D, 200.7(v6) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: CCB08 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0056396	-.000281	.0216694	.0053078	F .0220484	F .0177273
Stddev	.0006586	.002072	.0027771	.0007166	.0058419	.0030623
%RSD	11.67832	737.3710	12.81600	13.50115	26.49587	17.27447
#1	.0063997	.002069	.0246975	.0050958	.0285262	.0177334
#2	.0052790	-.001071	.0210692	.0061064	.0204397	.0207866
#3	.0052400	-.001841	.0192414	.0047210	.0171795	.0146620

Elem	Sr4077
Units	ppm
Avg	.0196797
Stddev	.0039225
%RSD	19.93171
#1	.0237297
#2	.0194111
#3	.0158985

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3495.762	45209.98	3102.297	4116.687	4895.723
Stddev	.449	146.40	28.039	16.718	7.190
%RSD	.0128446	.3238243	.9038124	.4061105	.1468608
#1	3496.227	45379.00	3106.555	4124.326	4895.764
#2	3495.331	45122.96	3127.964	4128.221	4888.512
#3	3495.728	45127.97	3072.373	4097.514	4902.892

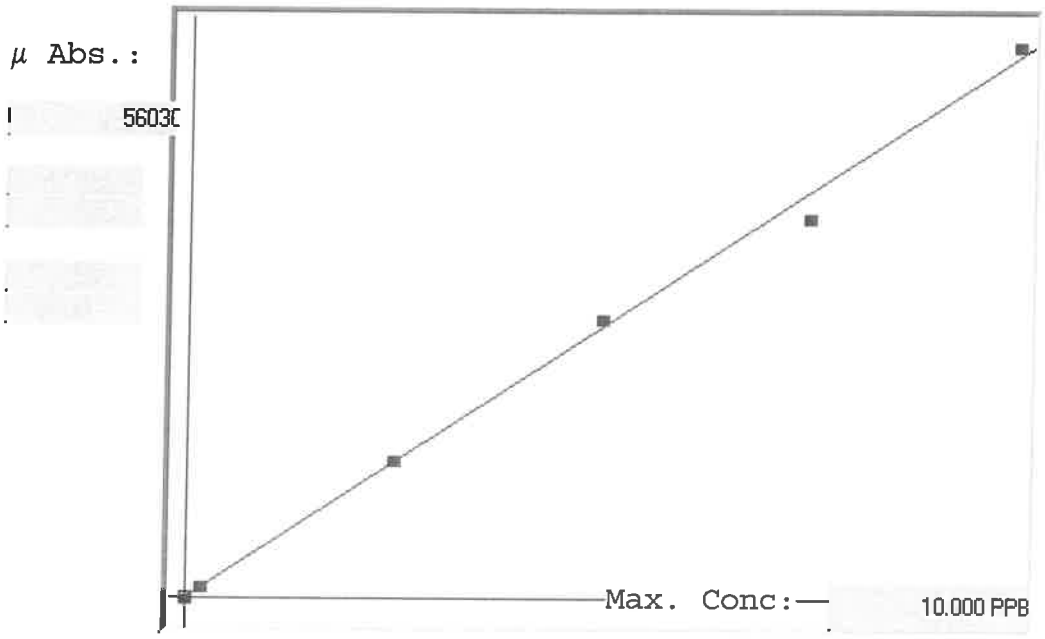
Reviewed By:jaswal
On:6/16/2025 5:53:17 PM
Inst Id :CV1
LB :LB136159

LB136159

7471B

INSTRUMENT ID: CV1

Linear



A= 0.0000e+000

B= 1.8232e-004

C= -4.8492e-003

Rho= 0.9983008

Accept=Accepted

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	%D
0.0	0.000	0.001	0.001	34	0.000	34					—
0.2	0.200	0.220	0.020	1233	0.0 %	1233					10
2.5	2.500	2.543	0.043	13976	0.0 %	13976					2
5.0	5.000	5.173	0.173	28398	0.0 %	28398					3
7.5	7.500	7.052	-0.448	38704	0.0 %	38704					-6
10.0	10.000	10.211	0.211	56030	0.0 %	56030					2

Reviewed By:jaswal
On:6/16/2025 5:53:17 PM
Inst Id :CV1
LB :LB136159

LB136159 INSTRUMENT ID : CV1

Method: 7471B Operator: Admin Date of Analysis: 16 Jun 2025 12:16:45

Sample ID	Extended ID	µ Abs.	Conc.	Stnd Conc	Method	Units	Date	Type	Type
0.0 - 1	50	34	-	0.00000	7471B	PPB	16 Jun 2025 12:25:04	S	Std
0.2 - 1	50.2	1233	-	0.20000	7471B	PPB	16 Jun 2025 12:27:22	S	Std
2.5 - 1	52.5	13976	-	2.50000	7471B	PPB	16 Jun 2025 12:29:39	S	Std
5.0 - 1	55	28398	-	5.00000	7471B	PPB	16 Jun 2025 12:31:55	S	Std
7.5 - 1	57.5	38704	-	7.50000	7471B	PPB	16 Jun 2025 12:34:14	S	Std
10.0 - 1	510	56030	-	10.00000	7471B	PPB	16 Jun 2025 12:44:42	S	Std
ICV39 - 1	ICV39	21726	3.9563		-7471B	PPB	16 Jun 2025 12:52:01	U	SMPL
ICB39 - 1	ICB39	-183	-0.0382		-7471B	PPB	16 Jun 2025 12:54:16	U	SMPL
CCV45 - 1	CCV45	28523	5.1956		-7471B	PPB	16 Jun 2025 12:56:33	U	SMPL
CCB45 - 1	CCB45	-303	-0.0601		-7471B	PPB	16 Jun 2025 12:58:49	U	SMPL
CRA - 1	CRA	1182	0.2107		-7471B	PPB	16 Jun 2025 13:01:08	U	SMPL
HighStd - 1	HighStd	55950	10.1962		-7471B	PPB	16 Jun 2025 13:03:23	U	SMPL
ChkStd - 1	ChkStd	36499	6.6498		-7471B	PPB	16 Jun 2025 13:05:39	U	SMPL
PB168482BL - 1	PBS	-243	-0.0492		-7471B	PPB	16 Jun 2025 13:08:05	U	SMPL
PB168482BS - 1	LCSS	22235	4.0491		-7471B	PPB	16 Jun 2025 13:13:14	U	SMPL
Q2303-01 - 1	B-165-SB01	16301	2.9672		-7471B	PPB	16 Jun 2025 13:15:30	U	SMPL
Q2303-02 - 1	B-170-SB03	72054	13.1323		-7471B	PPB	16 Jun 2025 13:17:52	U	SMPL
Q2303-02DUP - 1	B-170-SB03DUP	81827	14.9142		-7471B	PPB	16 Jun 2025 13:20:12	U	SMPL
Q2303-02MS - 1	B-170-SB03MS	96969	17.6749		-7471B	PPB	16 Jun 2025 13:22:47	U	SMPL
Q2303-02MSD - 1	B-170-SB03MSD	91271	16.6361		-7471B	PPB	16 Jun 2025 13:28:41	U	SMPL
CCV46 - 1	CCV46	27236	4.9609		-7471B	PPB	16 Jun 2025 13:30:59	U	SMPL
CCB46 - 1	CCB46	-392	-0.0763		-7471B	PPB	16 Jun 2025 13:33:32	U	SMPL
Q2311-01 - 1	TP03-MH2MH3-WC	20620	3.7547		-7471B	PPB	16 Jun 2025 13:35:51	U	SMPL
Q2311-05 - 1	TP04-MH2MH3-WC	3113	0.5627		-7471B	PPB	16 Jun 2025 13:38:07	U	SMPL
Q2319-01 - 1	MH-B	433	0.0741		-7471B	PPB	16 Jun 2025 13:40:25	U	SMPL
Q2328-01 - 1	CHRT25653	6681	1.2133		-7471B	PPB	16 Jun 2025 13:42:42	U	SMPL
Q2303-02LX5 - 1		11956	2.1750		-7471B	PPB	16 Jun 2025 13:44:58	U	SMPL
Q2303-02A - 1		94529	17.2301		-7471B	PPB	16 Jun 2025 13:47:17	U	SMPL
CCV47 - 1	CCV47	27451	5.0001		-7471B	PPB	16 Jun 2025 13:49:36	U	SMPL
CCB47 - 1	CCB47	-402	-0.0781		-7471B	PPB	16 Jun 2025 13:52:14	U	SMPL
Q2303-02DLX2 - 1		37443	6.8219		-7471B	PPB	16 Jun 2025 13:54:35	U	SMPL
Q2303-02DUPDLX2 - 1		41034	7.4766		-7471B	PPB	16 Jun 2025 13:56:51	U	SMPL
Q2303-02MSDLX2 - 1		44672	8.1399		-7471B	PPB	16 Jun 2025 13:59:20	U	SMPL
Q2303-02MSDDLX2 - 1		45852	8.3551		-7471B	PPB	16 Jun 2025 14:04:57	U	SMPL
~~Q2303-02DLX2~~ - 1 Q2303-02LDLX10		6606	1.1996		-7471B	PPB	16 Jun 2025 14:07:14	U	SMPL
~~Q2303-02DLX2~~ - 1 Q2303-02SDLX2		45330	8.2599		-7471B	PPB	16 Jun 2025 14:09:39	U	SMPL
CCV48 - 1	CCV48	27664	5.0390		-7471B	PPB	16 Jun 2025 14:11:57	U	SMPL
CCB48 - 1	CCB48	-347	-0.0681		-7471B	PPB	16 Jun 2025 14:14:20	U	SMPL

MB
6/16/25

Alliance TECHNICAL GROUP

Soil/Sludge Metals Preparation Sheet

PB168472

SOP ID : M3050B-Digestion-20

SDG No : N/A

Matrix : SOIL

Pippete ID: ICP A

Balance ID : M SC-2

Filter paper ID : N/A

pH Strip ID : N/A

Hood ID : #3

Block ID: 1. HOT BLOCK #2 2. N/A

Start Digest Date: 06/13/2025 **Time :** 11:15 **Temp :** 96 °C

End Digest Date: 06/13/2025 **Time :** 13:20 **Temp :** 96 °C

Digestion tube ID: M6054

Block thermometer ID: MET-DIG. #2

Dig Technician Signature: SJS.

Supervisor Signature:

Temp : 1. 96°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
LFS-1	1.00	M6007
LFS-2	1.00	M6016
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	5.00	M6158
1:1 HNO3	10.00	MP84041
30% H2O2	3.00	M6162
Conc. HCL	10.00	M6151
PTFE Boiling Stones	N/A	M5581
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#2 CELL#35 96 C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
06/13/25 14:20	SJS metals	Metals Lab
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Soil/Sludge Metals Preparation Sheet

PB168472

Lab Sample ID	Client Sample ID	pH	Initial Weight (g)	Final Vol (ml)	Color Before	Color After	Texture	Artifact	Comment	Prep Pos
PB168472BL	PBS472	N/A	2.00	100	Colorless	Colorless	Fine	N/A	N/A	1
PB168472BS	LCS472	N/A	2.00	100	Colorless	Colorless	Fine	N/A	M6007,M6016	2
Q2298-01	AU-05-061125	N/A	2.22	100	Brown	Yellow	Medium	N/A	N/A	3
Q2303-01	B-165-SB01	N/A	2.30	100	Brown	Yellow	Medium	N/A	N/A	4
Q2303-02	B-170-SB03	N/A	2.21	100	Brown	Yellow	Medium	N/A	N/A	5
Q2305-01	TR-04-06122025	N/A	2.14	100	Brown	Yellow	Medium	N/A	N/A	6
Q2307-01	LINDEN-SAA	N/A	2.18	100	Brown	Yellow	Medium	N/A	N/A	7
Q2308-01	EO-02-06122025	N/A	2.24	100	Brown	Yellow	Medium	N/A	N/A	8
Q2310-01	TP-7	N/A	2.27	100	Brown	Yellow	Medium	N/A	N/A	9
Q2310-01MS	TP-7MS	N/A	2.25	100	Brown	Yellow	Medium	N/A	M6007,M6016	11
Q2310-01MSD	TP-7MSD	N/A	2.35	100	Brown	Yellow	Medium	N/A	M6007,M6016	12
Q2310-01DUP	TP-7DUP	N/A	2.44	100	Brown	Yellow	Medium	N/A	N/A	10
Q2311-01	TP03-MH2MH3-WC	N/A	2.28	100	Brown	Yellow	Medium	N/A	N/A	13
Q2311-05	TP04-MH2MH3-WC	N/A	2.22	100	Brown	Yellow	Medium	N/A	N/A	14

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB168472 **WorkList ID :** 190181 **Department :** Digestion **Date :** 06-13-2025 09:39:31

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2298-01	AU-05-061125	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG05	D41	06/11/2025	6010D
Q2303-01	B-165-SB01	Solid	Metals ICP-TAL	Cool 4 deg C	PORT06	D41	06/11/2025	6010D
Q2303-02	B-170-SB03	Solid	Metals ICP-TAL	Cool 4 deg C	PORT06	D41	06/11/2025	6010D
Q2305-01	TR-04-06122025	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG05	D41	06/12/2025	6010D
Q2307-01	LINDEN-SAA	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG03	D51	06/12/2025	6010D
Q2308-01	EO-02-06122025	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG05	D51	06/12/2025	6010D
Q2310-01	TP-7	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG03	D41	06/12/2025	6010D
Q2311-01	TP03-MH2MH3-WC	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG03	D41	06/11/2025	6010D
Q2311-05	TP04-MH2MH3-WC	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG03	D41	06/11/2025	6010D

Date/Time 06/13/25 9:50

Raw Sample Received by: SLS.metdio

Raw Sample Relinquished by: [signature]

Date/Time 06/13/25 10:50

Raw Sample Received by: [signature]

Raw Sample Relinquished by: SLS.met.dio

Alliance TECHNICAL GROUP

Soil/Sludge Mercury Preparation Sheet

PB168482

SOP ID : M7471B-Mercury-18

SDG No : NA

Start Digest Date: 06/13/2025 **Time :** 16:00 **Temp :** 94 °C

Matrix : SOIL

End Digest Date: 06/13/2025 **Time :** 16:30 **Temp :** 94 °C

Pippete ID: HG A

Digestion tube ID: M5595

Balance ID : M SC-3

Block thermometer ID: HG-DIG#3

Filter paper ID : NA

Dig Technician Signature:

pH Strip ID : NA

Supervisor Signature:

Hood ID : #1

Temp : **1.** 94°C **2.** N/A

Block ID: **1.** HG HOT BLOCK#3 **2.** N/A

Standared Name	MLS USED	STD REF. # FROM LOG
ICV	30mL	MP85977
CCV	30mL	MP85979
CRA	30mL	MP85981
Blank Spike	0.48mL	MP85970
Matrix Spike	0.48mL	MP85970

Chemical Used	ML/SAMPLE USED	Lot Number
AQUA REGIA	1.5mL	MP85983
KMnO4 (5%)	4.5mL	MP85893
Hydroxylamine HCL (12%)	2.0mL	MP85895
PTFE Boiling Stones	----------	M5582
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
0.0 ppb	S0	30mL	MP85971
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	30mL	MP85972
2.5 ppb	S2.5	30mL	MP85973
5.0 ppb	S5.0	30mL	MP85974
7.5 ppb	S7.5	30mL	MP85975
10.0 ppb	S10.0	30mL	MP85976
ICV	ICV	30mL	MP85977
ICB	ICB	30mL	MP85978
CCV	CCV	30mL	MP85979
CCB	CCB	30mL	MP85980
CRI	CRI	30mL	MP85981
CHK STD	CHK STD	30mL	MP85982

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
6/13/25 @ 17:16	Dig Lab	Metals Lab
	Preparation Group	**Analysis Group**

Alliance TECHNICAL GROUP

Soil/Sludge Mercury Preparation Sheet

PB168482

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Comment	Prep Pos
PB168482BL	PBS482	0.52	35	NA	N/A	3-1
PB168482BS	LCS482	0.54	35	NA	MP85970	2
Q2303-01	B-165-SB01	0.53	35	NA	N/A	3
Q2303-02	B-170-SB03	0.57	35	NA	N/A	4
Q2303-02DUP	B-170-SB03DUP	0.55	35	NA	N/A	5
Q2303-02MS	B-170-SB03MS	0.53	35	NA	MP85970	6
Q2303-02MSD	B-170-SB03MSD	0.54	35	NA	MP85970	7
Q2311-01	TP03-MH2MH3-WC	0.52	35	NA	N/A	8
Q2311-05	TP04-MH2MH3-WC	0.51	35	NA	N/A	9
Q2319-01	MH-B	0.50	35	NA	N/A	10
Q2328-01	CHRT25653	0.54	35	NA	N/A	11

WORKLIST(Hardcopy Internal Chain)

WorkList Name : 061325_7471B **WorkList ID :** 190188 **Department :** Digestion **Date :** 06-13-2025 11:46:50

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2303-01	B-165-SB01	Solid	Mercury	Cool 4 deg C	PORT06	D41	06/11/2025	7471B
Q2303-02	B-170-SB03	Solid	Mercury	Cool 4 deg C	PORT06	D41	06/11/2025	7471B
Q2311-01	TP03-MH2MH3-WC	Solid	Mercury	Cool 4 deg C	PSEG03	D41	06/11/2025	7471B
Q2311-05	TP04-MH2MH3-WC	Solid	Mercury	Cool 4 deg C	PSEG03	D41	06/11/2025	7471B
Q2319-01	MH-B	Solid	Mercury	Cool 4 deg C	PSEG03	D41	06/13/2025	7471B

Q2328-01 Mercury

Date/Time 6/13/25 @ 15:40

Raw Sample Received by: [illegible]

Raw Sample Relinquished by: [illegible]

Date/Time 6/13/25 @ 16:20

Raw Sample Received by: [illegible]

Raw Sample Relinquished by: [illegible]

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 6/13/2025

OVENTEMP IN Celsius(°C): 108
Time IN: 17:15
In Date: 06/12/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:22
Out Date: 06/13/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB136126

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q2287-01	CONCRETE-SLAB	1	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
Q2296-01	WC-1	2	1.18	10.56	11.74	9.74	81.1	
Q2296-02	WC-1-EPH	3	1.18	10.23	11.41	9.55	81.8	
Q2296-03	WC-1-VOC	4	1.19	10.57	11.76	9.63	79.8	
Q2296-05	WC-2	5	1.19	10.58	11.77	10.52	88.2	
Q2296-06	WC-2-EPH	6	1.19	10.30	11.49	10.5	90.4	
Q2296-07	WC-2-VOC	7	1.19	10.21	11.4	10.62	92.4	
Q2296-09	WC-3	8	1.15	10.78	11.93	10.33	85.2	
Q2296-10	WC-3-EPH	9	1.19	10.60	11.79	10.1	84.1	
Q2296-11	WC-3-VOC	10	1.18	10.81	11.99	10.36	84.9	
Q2296-13	WC-4	11	1.15	10.77	11.92	9.95	81.7	
Q2296-14	WC-4-EPH	12	1.13	10.48	11.61	9.88	83.5	
Q2296-15	WC-4-VOC	13	1.14	10.72	11.86	9.71	79.9	
Q2296-17	WC-5	14	1.17	10.49	11.66	10.63	90.2	
Q2296-18	WC-5-EPH	15	1.17	10.50	11.67	10.32	87.1	
Q2296-19	WC-5-VOC	16	1.15	10.83	11.98	10.97	90.7	
Q2296-21	WC-6	19	1.13	10.37	11.5	10.2	87.5	
Q2296-22	WC-6-EPH	17	1.14	10.44	11.58	10.65	91.1	
Q2296-23	WC-6-VOC	18	1.17	10.82	11.99	10.36	84.9	
Q2297-01	TP-3	20	1.15	10.96	12.11	10.2	82.6	
Q2297-02	TP-3-EPH	21	1.14	10.85	11.99	11.04	91.2	
Q2297-03	TP-3-VOC	22	1.12	10.16	11.28	10.3	90.4	
Q2298-01	AU-05-061125	23	1.15	11.63	12.78	11.7	90.7	
Q2298-02	AU-05-061125	24	1.15	11.63	12.78	11.7	90.7	
Q2301-02	WC-URBAN-FILL-C	25	1.16	10.37	11.53	9.77	83.0	
Q2303-01	B-165-SB01	26	1.14	10.74	11.88	10.12	83.6	
Q2303-02	B-170-SB03	27	1.13	10.37	11.5	10.74	92.7	
Q2304-01	RBR200057-1	28	1.00	1.00	2.00	2.00	100.0	wipe sample

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 6/13/2025

OVENTEMP IN Celsius(°C): 108
Time IN: 17:15
In Date: 06/12/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:22
Out Date: 06/13/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB136126

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q2304-02	RBR200057-2	29	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2304-03	VNJ239-3	30	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2304-04	VNJ239-4	31	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2304-05	VNJ239-5	32	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2305-01	TR-04-06122025	33	1.18	10.17	11.35	11.17	98.2	
Q2305-02	TR-04-06122025-E2	34	1.13	10.69	11.82	11.24	94.6	
Q2307-01	LINDEN-SAA	35	1.14	10.54	11.68	8.87	73.3	
Q2307-02	LINDEN-SAA	36	1.13	10.70	11.83	8.87	72.3	
Q2308-01	EO-02-06122025	37	1.12	10.24	11.36	10.38	90.4	
Q2308-02	EO-02-06122025-E2	38	1.19	10.75	11.94	10.98	91.1	
Q2310-01	TP-7	39	1.18	10.42	11.6	10.42	88.7	
Q2310-02	TP-7-EPH	40	1.15	11.29	12.44	11.08	88.0	
Q2310-03	TP-7-VOC	41	1.12	10.91	12.03	10.99	90.5	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

B 136126

WorkList Name : %1-061225 **WorkList ID :** 190126 **Department :** Wet-Chemistry **Date :** 06-12-2025 08:16:58

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2287-01	CONCRETE-SLAB	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	06/11/2025	Chemtech -SO
Q2296-01	WC-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-02	WC-1-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-03	WC-1-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-05	WC-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-06	WC-2-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-07	WC-2-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-09	WC-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-10	WC-3-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-11	WC-3-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-13	WC-4	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-14	WC-4-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-15	WC-4-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-17	WC-5	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-18	WC-5-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-19	WC-5-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-21	WC-6	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-22	WC-6-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2296-23	WC-6-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	N22	06/11/2025	Chemtech -SO
Q2297-01	TP-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	N11	06/11/2025	Chemtech -SO
Q2297-02	TP-3-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	N11	06/11/2025	Chemtech -SO

Date/Time 06.12.25 15:20

Raw Sample Received by: [signature]

Raw Sample Relinquished by: [signature]

Date/Time 06.12.25 17:30

Raw Sample Received by: [signature]

Raw Sample Relinquished by: [signature]

WORKLIST(Hardcopy Internal Chain)

VN136126

WorkList Name : %1-061225 **WorkList ID :** 190126 **Department :** Wet-Chemistry **Date :** 06-12-2025 08:16:58

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2297-03	TP-3-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	N11	06/11/2025	Chemtech -SO
Q2298-01	AU-05-061125	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	06/11/2025	Chemtech -SO
Q2298-02	AU-05-061125	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	06/11/2025	Chemtech -SO
Q2301-02	WC-URBAN-FILL-C	Solid	Percent Solids	Cool 4 deg C	ENTA05	D41	06/11/2025	Chemtech -SO
Q2303-01	B-165-SB01	Solid	Percent Solids	Cool 4 deg C	PORT06	D41	06/11/2025	Chemtech -SO
Q2303-02	B-170-SB03	Solid	Percent Solids	Cool 4 deg C	PORT06	D41	06/11/2025	Chemtech -SO
Q2304-01	RBR200057-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	06/12/2025	Chemtech -SO
Q2304-02	RBR200057-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	06/12/2025	Chemtech -SO
Q2304-03	VNJ239-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	06/12/2025	Chemtech -SO
Q2304-04	VNJ239-4	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	06/12/2025	Chemtech -SO
Q2304-05	VNJ239-5	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	06/12/2025	Chemtech -SO
Q2305-01	TR-04-06122025	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	06/12/2025	Chemtech -SO
Q2305-02	TR-04-06122025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	06/12/2025	Chemtech -SO
Q2307-01	LINDEN-SAA	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	06/12/2025	Chemtech -SO
Q2307-02	LINDEN-SAA	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	06/12/2025	Chemtech -SO
Q2308-01	EO-02-06122025	Solid	Percent Solids	Cool 4 deg C	PSEG05	D51	06/12/2025	Chemtech -SO
Q2308-02	EO-02-06122025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D51	06/12/2025	Chemtech -SO
Q2310-01	TP-7	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	06/12/2025	Chemtech -SO
Q2310-02	TP-7-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	06/12/2025	Chemtech -SO
Q2310-03	TP-7-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	06/12/2025	Chemtech -SO

Date/Time 06.12.25 1520

Raw Sample Received by:

Raw Sample Relinquished by:

Date/Time 06.12.25 17:30

Raw Sample Received by:

Raw Sample Relinquished by:

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

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB136159

Review By	MOHAN	Review On	6/16/2025 4:38:10 PM
Supervise By	jaswal	Supervise On	6/16/2025 5:53:17 PM

STD. NAME	STD REF.#
ICAL Standard	MP85971,MP85972,MP85973,MP85974,MP85975,MP85976
ICV Standard	MP85977
CCV Standard	MP85979
ICSA Standard	
CRI Standard	MP85981
LCS Standard	
Chk Standard	MP85978,MP85980,MP85982,MP85986

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	06/16/25 12:25		MOHAN	OK
2	S0.2	S0.2	CAL2	06/16/25 12:27		MOHAN	OK
3	S2.5	S2.5	CAL3	06/16/25 12:29		MOHAN	OK
4	S5	S5	CAL4	06/16/25 12:31		MOHAN	OK
5	S7.5	S7.5	CAL5	06/16/25 12:34		MOHAN	OK
6	S10	S10	CAL6	06/16/25 12:44		MOHAN	OK
7	ICV39	ICV39	ICV	06/16/25 12:52		MOHAN	OK
8	ICB39	ICB39	ICB	06/16/25 12:54		MOHAN	OK
9	CCV45	CCV45	CCV	06/16/25 12:56		MOHAN	OK
10	CCB45	CCB45	CCB	06/16/25 12:58		MOHAN	OK
11	CRA	CRA	CRDL	06/16/25 13:01		MOHAN	OK
12	HighStd	HighStd	HIGH STD	06/16/25 13:03		MOHAN	OK
13	ChkStd	ChkStd	SAM	06/16/25 13:05		MOHAN	OK
14	PB168482BL	PB168482BL	MB	06/16/25 13:08		MOHAN	OK
15	PB168482BS	PB168482BS	LCS	06/16/25 13:13		MOHAN	OK
16	Q2303-01	B-165-SB01	SAM	06/16/25 13:15		MOHAN	OK
17	Q2303-02	B-170-SB03	SAM	06/16/25 13:17	Hg High	MOHAN	Dilution
18	Q2303-02DUP	B-170-SB03DUP	DUP	06/16/25 13:20	Hg High	MOHAN	Dilution

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Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB136159

Review By	MOHAN	Review On	6/16/2025 4:38:10 PM
Supervise By	jaswal	Supervise On	6/16/2025 5:53:17 PM

STD. NAME	STD REF.#
ICAL Standard	MP85971,MP85972,MP85973,MP85974,MP85975,MP85976
ICV Standard	MP85977
CCV Standard	MP85979
ICSA Standard	
CRI Standard	MP85981
LCS Standard	
Chk Standard	MP85978,MP85980,MP85982,MP85986

19	Q2303-02MS	B-170-SB03MS	MS	06/16/25 13:22	Hg High	MOHAN	Dilution
20	Q2303-02MSD	B-170-SB03MSD	MSD	06/16/25 13:28	Hg High	MOHAN	Dilution
21	CCV46	CCV46	CCV	06/16/25 13:30		MOHAN	OK
22	CCB46	CCB46	CCB	06/16/25 13:33		MOHAN	OK
23	Q2311-01	TP03-MH2MH3-WC	SAM	06/16/25 13:35		MOHAN	OK
24	Q2311-05	TP04-MH4-WC	SAM	06/16/25 13:38		MOHAN	OK
25	Q2319-01	MH-B	SAM	06/16/25 13:40		MOHAN	OK
26	Q2328-01	CHRT25653	SAM	06/16/25 13:42		MOHAN	OK
27	Q2303-02L	B-170-SB03L	SD	06/16/25 13:44		MOHAN	OK
28	Q2303-02A	B-170-SB03A	PS	06/16/25 13:47	Hg High	MOHAN	Dilution
29	CCV47	CCV47	CCV	06/16/25 13:49		MOHAN	OK
30	CCB47	CCB47	CCB	06/16/25 13:52		MOHAN	OK
31	Q2303-02DL	B-170-SB03DL	SAM	06/16/25 13:54	2X For Hg	MOHAN	Confirms
32	Q2303-02DUPDL	B-170-SB03DUPDL	DUP	06/16/25 13:56	2X For Hg	MOHAN	Confirms
33	Q2303-02MSDL	B-170-SB03MSDL	MS	06/16/25 13:59	2X For Hg	MOHAN	Confirms
34	Q2303-02MSDDL	B-170-SB03MSDDL	MSD	06/16/25 14:04	2X For Hg	MOHAN	Confirms
35	Q2303-02LDL	B-170-SB03LDL	SD	06/16/25 14:07	Not Required	MOHAN	Not Ok
36	Q2303-02ADL	B-170-SB03ADL	PS	06/16/25 14:09	2X For Hg	MOHAN	Confirms
37	CCV48	CCV48	CCV	06/16/25 14:11		MOHAN	OK
38	CCB48	CCB48	CCB	06/16/25 14:14		MOHAN	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB136164

Review By	Janvi	Review On	6/18/2025 2:48:50 PM
Supervise By	MOHAN	Supervise On	6/19/2025 12:49:54 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85934
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	06/16/25 12:52		Jaswal	OK
2	S1	S1	CAL2	06/16/25 12:56		Jaswal	OK
3	S2	S2	CAL3	06/16/25 13:01		Jaswal	OK
4	S3	S3	CAL4	06/16/25 13:05		Jaswal	OK
5	S4	S4	CAL5	06/16/25 13:09		Jaswal	OK
6	S5	S5	CAL6	06/16/25 13:13		Jaswal	OK
7	ICV01	ICV01	ICV	06/16/25 14:03		Jaswal	OK
8	LLICV01	LLICV01	LLICV	06/16/25 14:42		Jaswal	OK
9	ICB01	ICB01	ICB	06/16/25 14:49		Jaswal	OK
10	CRI01	CRI01	CRDL	06/16/25 14:53		Jaswal	OK
11	ICSA01	ICSA01	ICSA	06/16/25 14:59		Jaswal	OK
12	ICSAB01	ICSAB01	ICSAB	06/16/25 15:06		Jaswal	OK
13	ICSADL	ICSADL	ICSA	06/16/25 15:12		Jaswal	OK
14	ICSABDL	ICSABDL	ICSAB	06/16/25 15:20		Jaswal	OK
15	CCV01	CCV01	CCV	06/16/25 15:26		Jaswal	OK
16	CCB01	CCB01	CCB	06/16/25 15:30		Jaswal	OK
17	Q2287-02	CONCRETE-SLAB	SAM	06/16/25 15:35		Jaswal	OK
18	Q2295-04	TP01-MH1-WC	SAM	06/16/25 15:40		Jaswal	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB136164

Review By	Janvi	Review On	6/18/2025 2:48:50 PM
Supervise By	MOHAN	Supervise On	6/19/2025 12:49:54 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85934
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

19	Q2295-08	TP02-MH5-WC	SAM	06/16/25 15:44		Jaswal	OK
20	Q2303-01	B-165-SB01	SAM	06/16/25 15:49		Jaswal	OK
21	Q2303-02	B-170-SB03	SAM	06/16/25 15:53		Jaswal	OK
22	Q2308-01	EO-02-06122025	SAM	06/16/25 15:58		Jaswal	OK
23	Q2328-01	CHRT25653	SAM	06/16/25 16:02		Jaswal	OK
24	PB168428TB	PB168428TB	MB	06/16/25 16:06		Jaswal	OK
25	PB168477BL	PB168477BL	MB	06/16/25 16:15		Jaswal	OK
26	PB168477BS	PB168477BS	LCS	06/16/25 16:19		Jaswal	OK
27	CCV02	CCV02	CCV	06/16/25 16:29		Jaswal	OK
28	CCB02	CCB02	CCB	06/16/25 16:34		Jaswal	OK
29	PB168472BL	PB168472BL	MB	06/16/25 16:44		Jaswal	OK
30	PB168472BS	PB168472BS	LCS	06/16/25 16:48		Jaswal	OK
31	Q2296-04	WC-1	SAM	06/16/25 16:54		Jaswal	OK
32	Q2296-08	WC-2	SAM	06/16/25 16:59		Jaswal	OK
33	Q2296-12	WC-3	SAM	06/16/25 17:03		Jaswal	OK
34	Q2296-16	WC-4	SAM	06/16/25 17:08		Jaswal	OK
35	Q2296-20	WC-5	SAM	06/16/25 17:12		Jaswal	OK
36	Q2296-24	WC-6	SAM	06/16/25 17:17		Jaswal	OK
37	Q2297-04	TP-3	SAM	06/16/25 17:21		Jaswal	OK
38	Q2301-03	WC-URBAN-FILL-C	SAM	06/16/25 17:26		Jaswal	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB136164

Review By	Janvi	Review On	6/18/2025 2:48:50 PM
Supervise By	MOHAN	Supervise On	6/19/2025 12:49:54 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85934
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

39	CCV03	CCV03	CCV	06/16/25 17:31		Jaswal	OK
40	CCB03	CCB03	CCB	06/16/25 17:49		Jaswal	OK
41	Q2310-04	TP-7	SAM	06/16/25 17:54		Jaswal	OK
42	Q2310-04DUP	TP-7DUP	DUP	06/16/25 17:58		Jaswal	OK
43	Q2310-04L	TP-7L	SD	06/16/25 18:03		Jaswal	OK
44	Q2310-04MS	TP-7MS	MS	06/16/25 18:07		Jaswal	OK
45	Q2310-04MSD	TP-7MSD	MSD	06/16/25 18:11		Jaswal	OK
46	Q2310-04A	TP-7A	PS	06/16/25 18:16		Jaswal	OK
47	Q2298-01	AU-05-061125	SAM	06/16/25 18:20		Jaswal	OK
48	Q2305-01	TR-04-06122025	SAM	06/16/25 18:25		Jaswal	OK
49	CCV04	CCV04	CCV	06/16/25 18:29		Jaswal	OK
50	CCB04	CCB04	CCB	06/16/25 18:33		Jaswal	OK
51	Q2307-01	LINDEN-SAA	SAM	06/16/25 18:38	CCB5 fail for Cd	Jaswal	Not Ok
52	Q2310-01	TP-7	SAM	06/16/25 18:42	CCB5 fail for Cd	Jaswal	Not Ok
53	Q2310-01DUP	TP-7DUP	DUP	06/16/25 18:46	CCB5 fail for Cd	Jaswal	Not Ok
54	Q2310-01L	TP-7L	SD	06/16/25 18:51	CCB5 fail for Cd	Jaswal	Not Ok
55	Q2310-01MS	TP-7MS	MS	06/16/25 18:55	CCB5 fail for Cd	Jaswal	Not Ok
56	Q2310-01MSD	TP-7MSD	MSD	06/16/25 18:59	CCB5 fail for Cd	Jaswal	Not Ok
57	Q2310-01A	TP-7A	PS	06/16/25 19:04	CCB5 fail for Cd	Jaswal	Not Ok
58	Q2311-01	TP03-MH2MH3-WC	SAM	06/16/25 19:08	CCB5 fail for Cd	Jaswal	Not Ok

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB136164

Review By	Janvi	Review On	6/18/2025 2:48:50 PM
Supervise By	MOHAN	Supervise On	6/19/2025 12:49:54 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85934
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

59	Q2311-05	TP04-MH4-WC	SAM	06/16/25 19:12	CCB5 fail for Cd	Jaswal	Not Ok
60	CCV05	CCV05	CCV	06/16/25 19:17		Jaswal	OK
61	CCB05	CCB05	CCB	06/16/25 19:21	Fail for Cd	Jaswal	OK
62	Q2296-01	WC-1	SAM	06/16/25 19:25	CCB5 fail for Cd	Jaswal	Not Ok
63	Q2296-01DUP	WC-1DUP	DUP	06/16/25 19:30	CCB5 fail for Cd	Jaswal	Not Ok
64	Q2296-01L	WC-1L	SD	06/16/25 19:34	CCB5 fail for Cd	Jaswal	Not Ok
65	Q2296-01MS	WC-1MS	MS	06/16/25 19:38	CCB5 fail for Cd	Jaswal	Not Ok
66	Q2296-01MSD	WC-1MSD	MSD	06/16/25 19:42	CCB5 fail for Cd	Jaswal	Not Ok
67	Q2296-01A	WC-1A	PS	06/16/25 19:47	CCB5 fail for Cd	Jaswal	Not Ok
68	Q2296-09	WC-3	SAM	06/16/25 19:51	CCB5 fail for Cd	Jaswal	Not Ok
69	Q2296-13	WC-4	SAM	06/16/25 19:55	CCB5 fail for Cd	Jaswal	Not Ok
70	Q2296-17	WC-5	SAM	06/16/25 20:00	CCB5 fail for Cd	Jaswal	Not Ok
71	CCV06	CCV06	CCV	06/16/25 20:04		Jaswal	OK
72	CCB06	CCB06	CCB	06/16/25 20:08		Jaswal	OK
73	Q2296-21	WC-6	SAM	06/16/25 20:13		Jaswal	Not Ok
74	Q2297-01	TP-3	SAM	06/16/25 20:17		Jaswal	OK
75	Q2307-03DL	LINDEN-SAA-WATER	SAM	06/16/25 20:22	Report straight 5X	Jaswal	Not Ok
76	Q2316-01	RW8-SP100-2025061	SAM	06/16/25 20:26		Jaswal	OK
77	Q2316-02	RW8-SP303-2025061	SAM	06/16/25 20:30		Jaswal	OK
78	Q2316-02DUP	RW8-SP303-2025061	DUP	06/16/25 20:35		Jaswal	OK

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

Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB136164

Review By	Janvi	Review On	6/18/2025 2:48:50 PM
Supervise By	MOHAN	Supervise On	6/19/2025 12:49:54 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85934
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

79	Q2316-02L	RW8-SP303-2025061	SD	06/16/25 20:39		Jaswal	OK
80	Q2316-02MS	RW8-SP303-2025061	MS	06/16/25 20:43		Jaswal	OK
81	Q2316-02MSD	RW8-SP303-2025061	MSD	06/16/25 20:48		Jaswal	OK
82	CCV07	CCV07	CCV	06/16/25 20:52		Jaswal	OK
83	CCB07	CCB07	CCB	06/16/25 20:56		Jaswal	OK
84	Q2316-02A	RW8-SP303-2025061	PS	06/16/25 21:01		Jaswal	OK
85	CCV08	CCV08	CCV	06/16/25 21:14		Jaswal	OK
86	CCB08	CCB08	CCB	06/16/25 21:18		Jaswal	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB136187

Review By	jaswal	Review On	6/19/2025 12:06:04 PM
Supervise By	MOHAN	Supervise On	6/19/2025 12:50:23 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85872,MP85897
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	06/17/25 11:58		Jaswal	OK
2	S1	S1	CAL2	06/17/25 12:03		Jaswal	OK
3	S2	S2	CAL3	06/17/25 12:07		Jaswal	OK
4	S3	S3	CAL4	06/17/25 12:11		Jaswal	OK
5	S4	S4	CAL5	06/17/25 12:16		Jaswal	OK
6	S5	S5	CAL6	06/17/25 12:20		Jaswal	OK
7	ICV01	ICV01	ICV	06/17/25 12:25		Jaswal	OK
8	LLICV01	LLICV01	LLICV	06/17/25 12:41		Jaswal	OK
9	ICB01	ICB01	ICB	06/17/25 12:46		Jaswal	OK
10	CRI01	CRI01	CRDL	06/17/25 12:50		Jaswal	OK
11	ICSA01	ICSA01	ICSA	06/17/25 13:11		Jaswal	OK
12	ICSAB01	ICSAB01	ICSAB	06/17/25 13:22		Jaswal	OK
13	ICSADL	ICSADL	ICSA	06/17/25 13:28		Jaswal	OK
14	ICSABDL	ICSABDL	ICSAB	06/17/25 13:35		Jaswal	OK
15	CCV01	CCV01	CCV	06/17/25 13:40		Jaswal	OK
16	CCB01	CCB01	CCB	06/17/25 13:48		Jaswal	OK
17	Q2264-04	EF-WW	SAM	06/17/25 13:53		Jaswal	OK
18	Q2264-04L	EF-WWL	SD	06/17/25 14:02		Jaswal	OK

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Fax : 908 789 8922

Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB136187

Review By	jaswal	Review On	6/19/2025 12:06:04 PM
Supervise By	MOHAN	Supervise On	6/19/2025 12:50:23 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85872,MP85897
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

19	Q2264-04MS	EF-WWMS	MS	06/17/25 14:06		Jaswal	OK
20	Q2264-04MSD	EF-WWMSD	MSD	06/17/25 14:11		Jaswal	OK
21	Q2264-04A	EF-WWA	PS	06/17/25 14:15	0.1ML M6004,M6013-10ML SAMPLE	Jaswal	OK
22	Q2264-04DUP	EF-WWDUP	DUP	06/17/25 14:21		Jaswal	OK
23	Q2290-01	Outfall 1	SAM	06/17/25 14:25		Jaswal	OK
24	Q2290-02	Outfall 2	SAM	06/17/25 14:30		Jaswal	OK
25	Q2291-01	Outfall 001	SAM	06/17/25 14:34		Jaswal	OK
26	Q2292-01	SW-1	SAM	06/17/25 14:39		Jaswal	OK
27	CCV02	CCV02	CCV	06/17/25 14:43		Jaswal	OK
28	CCB02	CCB02	CCB	06/17/25 14:50		Jaswal	OK
29	Q2292-02	SW-2	SAM	06/17/25 14:54		Jaswal	OK
30	Q2293-01	SW-3	SAM	06/17/25 14:59		Jaswal	OK
31	Q2312-01	TP-1	SAM	06/17/25 15:03		Jaswal	OK
32	Q2319-01	MH-B	SAM	06/17/25 15:07		Jaswal	OK
33	Q2322-01	CL-01-061325	SAM	06/17/25 15:12		Jaswal	OK
34	Q2323-01	PL-01-06132025	SAM	06/17/25 15:16		Jaswal	OK
35	Q2324-01	HD-01-6132025	SAM	06/17/25 15:20		Jaswal	OK
36	Q2325-01	TP-8	SAM	06/17/25 15:25		Jaswal	OK
37	Q2325-01DUP	TP-8DUP	DUP	06/17/25 15:29		Jaswal	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB136187

Review By	jaswal	Review On	6/19/2025 12:06:04 PM
Supervise By	MOHAN	Supervise On	6/19/2025 12:50:23 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85872,MP85897
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

38	Q2325-01L	TP-8L	SD	06/17/25 15:34		Jaswal	OK
39	CCV03	CCV03	CCV	06/17/25 15:38		Jaswal	OK
40	CCB03	CCB03	CCB	06/17/25 15:42		Jaswal	OK
41	Q2325-01MS	TP-8MS	MS	06/17/25 15:46		Jaswal	OK
42	Q2325-01MSD	TP-8MSD	MSD	06/17/25 15:51		Jaswal	OK
43	Q2325-01A	TP-8A	PS	06/17/25 15:55	0.1ML M6004,M6013-10ML SAMPLE	Jaswal	OK
44	Q2307-01	LINDEN-SAA	SAM	06/17/25 15:59		Jaswal	OK
45	Q2310-01	TP-7	SAM	06/17/25 16:04		Jaswal	OK
46	Q2310-01DUP	TP-7DUP	DUP	06/17/25 16:08		Jaswal	OK
47	Q2310-01L	TP-7L	SD	06/17/25 16:12		Jaswal	OK
48	Q2310-01MS	TP-7MS	MS	06/17/25 16:17		Jaswal	OK
49	Q2310-01MSD	TP-7MSD	MSD	06/17/25 16:21		Jaswal	OK
50	Q2310-01A	TP-7A	PS	06/17/25 16:25	0.1ML M6004,M6013-10ML SAMPLE	Jaswal	OK
51	CCV04	CCV04	CCV	06/17/25 16:30		Jaswal	OK
52	CCB04	CCB04	CCB	06/17/25 16:34		Jaswal	OK
53	PB168444BL	PB168444BL	MB	06/17/25 16:40		Jaswal	OK
54	PB168444BS	PB168444BS	LCS	06/17/25 16:49		Jaswal	OK
55	PB168489BL	PB168489BL	MB	06/17/25 17:00		Jaswal	OK
56	PB168489BS	PB168489BS	LCS	06/17/25 17:05		Jaswal	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB136187

Review By	jaswal	Review On	6/19/2025 12:06:04 PM
Supervise By	MOHAN	Supervise On	6/19/2025 12:50:23 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85872,MP85897
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

57	PB168475BL	PB168475BL	MB	06/17/25 17:10		Jaswal	OK
58	PB168475BS	PB168475BS	LCS	06/17/25 17:14		Jaswal	OK
59	PB168490BL	PB168490BL	MB	06/17/25 17:19		Jaswal	OK
60	PB168490BS	PB168490BS	LCS	06/17/25 17:23		Jaswal	OK
61	Q2311-08	TP04-MH4-WC	SAM	06/17/25 17:27		Jaswal	OK
62	Q2311-04	TP03-MH2MH3-WC	SAM	06/17/25 17:32		Jaswal	OK
63	CCV05	CCV05	CCV	06/17/25 17:37		Jaswal	OK
64	CCB05	CCB05	CCB	06/17/25 17:41		Jaswal	OK
65	Q2334-01	MW3	SAM	06/17/25 17:50		Jaswal	OK
66	Q2334-01DUP	MW3DUP	DUP	06/17/25 17:54		Jaswal	OK
67	Q2334-01L	MW3L	SD	06/17/25 17:59		Jaswal	OK
68	Q2334-01MS	MW3MS	MS	06/17/25 18:03		Jaswal	OK
69	Q2334-01MSD	MW3MSD	MSD	06/17/25 18:07		Jaswal	OK
70	Q2334-02	MW4	SAM	06/17/25 18:16		Jaswal	OK
71	Q2334-01A	MW3A	PS	06/17/25 18:20	0.1ML M6004,M6013-10ML SAMPLE	Jaswal	OK
72	Q2334-03DL	GBTW1DL	SAM	06/17/25 18:25		Jaswal	OK
73	Q2296-13	WC-4	SAM	06/17/25 18:29		Jaswal	OK
74	Q2296-17	WC-5	SAM	06/17/25 18:33		Jaswal	OK
75	CCV06	CCV06	CCV	06/17/25 18:38		Jaswal	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB136187

Review By	jaswal	Review On	6/19/2025 12:06:04 PM
Supervise By	MOHAN	Supervise On	6/19/2025 12:50:23 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85872,MP85897
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

76	CCB06	CCB06	CCB	06/17/25 18:42		Jaswal	OK
77	Q2311-01	TP03-MH2MH3-WC	SAM	06/17/25 18:47		Jaswal	OK
78	Q2311-05	TP04-MH4-WC	SAM	06/17/25 18:51		Jaswal	OK
79	Q2296-01	WC-1	SAM	06/17/25 18:55		Jaswal	OK
80	Q2296-01DUP	WC-1DUP	DUP	06/17/25 19:00		Jaswal	OK
81	Q2296-01L	WC-1L	SD	06/17/25 19:04		Jaswal	OK
82	Q2296-01MS	WC-1MS	MS	06/17/25 19:08		Jaswal	OK
83	Q2296-01MSD	WC-1MSD	MSD	06/17/25 19:12		Jaswal	OK
84	Q2296-01A	WC-1A	PS	06/17/25 19:17	0.1ML M6004,M6013-10ML SAMPLE	Jaswal	OK
85	Q2296-09	WC-3	SAM	06/17/25 19:21		Jaswal	OK
86	CCV07	CCV07	CCV	06/17/25 19:25		Jaswal	OK
87	CCB07	CCB07	CCB	06/17/25 19:30		Jaswal	OK
88	Q2296-21	WC-6	SAM	06/17/25 19:34		Jaswal	OK
89	Q2297-01	TP-3	SAM	06/17/25 19:38		Jaswal	OK
90	Q2307-03DL	LINDEN-SAA-WATER	SAM	06/17/25 19:43		Jaswal	OK
91	Q2316-01	RW8-SP100-2025061	SAM	06/17/25 19:47		Jaswal	OK
92	Q2316-02	RW8-SP303-2025061	SAM	06/17/25 19:51		Jaswal	OK
93	Q2316-02DUP	RW8-SP303-2025061	DUP	06/17/25 19:56		Jaswal	OK
94	Q2316-02L	RW8-SP303-2025061	SD	06/17/25 20:00		Jaswal	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB136187

Review By	jaswal	Review On	6/19/2025 12:06:04 PM
Supervise By	MOHAN	Supervise On	6/19/2025 12:50:23 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85872,MP85897
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

95	Q2316-02MS	RW8-SP303-2025061	MS	06/17/25 20:04		Jaswal	OK
96	Q2316-02MSD	RW8-SP303-2025061	MSD	06/17/25 20:09		Jaswal	OK
97	Q2316-02A	RW8-SP303-2025061	PS	06/17/25 20:13	0.1ML M6004,M6013-10ML SAMPLE	Jaswal	OK
98	CCV08	CCV08	CCV	06/17/25 20:17		Jaswal	OK
99	CCB08	CCB08	CCB	06/17/25 20:22		Jaswal	OK

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Prep Standard - Chemical Standard Summary

Order ID : Q2303

Test : Mercury,Metals ICP-TAL

Prepbatch ID : PB168472,PB168482,

Sequence ID/Qc Batch ID: LB136159,LB136164,LB136187,

Standard ID :

MP84041,MP85867,MP85868,MP85869,MP85870,MP85871,MP85872,MP85873,MP85874,MP85875,MP85876,MP85877,MP85893,MP85895,MP85896,MP85897,MP85934,MP85970,MP85971,MP85972,MP85973,MP85974,MP85975,MP85976,MP85977,MP85978,MP85979,MP85980,MP85981,MP85982,MP85983,MP85986,

Chemical ID :

M4371,M4916,M5062,M5466,M5467,M5471,M5581,M5582,M5658,M5697,M5747,M5748,M5798,M5799,M5800,M5801,M5811,M5814,M5820,M5882,M5884,M5942,M5962,M5969,M5970,M5984,M5985,M5996,M5997,M6007,M6016,M6021,M6023,M6028,M6030,M6032,M6077,M6126,M6127,M6128,M6137,M6138,M6142,M6144,M6145,M6146,M6150,M6151,M6152,M6155,M6158,M6159,M6161,M6162,M6163,M6164,M6165,W3112,

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
169	1:1HNO3	MP84041	01/14/2025	07/14/2025	Eman Mughal	None	None	Sarabjit Jaswal 01/16/2025

FROM 1250.00000ml of M6126 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
902	ICP AES CAL BLK (SO/ICB/CCB)	MP85867	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 125.00000ml of M6151 + 2350.00000ml of W3112 + 25.00000ml of M6162 = Final Quantity: 2500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
907	ICP AES STD S (S5)	MP85868	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 5.00000ml of M5467 + 5.00000ml of M5471 + 5.00000ml of M5820 + 5.00000ml of M5969 + 5.00000ml of M5970 + 5.00000ml of M5996 + 5.00000ml of M5997 + 5.00000ml of M6077 + 5.00000ml of M6146 + 455.00000ml of MP85867 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
910	ICP AES STD S4	MP85869	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 50.00000ml of MP85867 + 50.00000ml of MP85868 = 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
909	ICP AES STD S3	MP85870	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 25.00000ml of MP85868 + 75.00000ml of MP85867 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
908	ICP AES S2/CRI MINERALS ONLY STD	MP85871	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 8.00000ml of MP85868 + 92.00000ml of MP85867 = 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
912	ICP AES ICV SOLN	MP85872	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 10.00000ml of M6150 + 90.00000ml of MP85867 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
904	ICP AES ICSA SOLN	MP85873	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 25.00000ml of M6152 + 225.00000ml of MP85867 = 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
3494	ICP AES ICSAB SOLN-1	MP85874	06/02/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 10.00000ml of M6152 + 10.00000ml of M6155 + 80.00000ml of MP85867 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
911	ICP AES CCV SOLN	MP85875	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 50.00000ml of MP85867 + 50.00000ml of MP85868 = 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
919	ICP AES INTERNAL STD	MP85876	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 1.00000ml of M5984 + 10.00000ml of M5985 + 1969.00000ml of W3112 + 20.00000ml of M6162 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
903	ICP AES RINSE SOLN	MP85877	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 200.00000ml of M6162 + 9800.00000ml of W3112 = Final Quantity: 10000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
65	POTASSIUM PERMANGANATE SOLUTION 5 %	MP85893	06/05/2025	12/05/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 06/14/2025

FROM 100.00000gram of M4916 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
67	SODIUM CHLORIDE - HYDROXYL- CHLORIDE SOLUTION	MP85895	06/05/2025	06/25/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 06/14/2025

FROM 2000.00000ml of W3112 + 240.00000gram of M4371 + 240.00000gram of M5884 = 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
2950	ICP AES S1/CRI STOCK STD	MP85896	06/02/2025	06/13/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 0.03000ml of M5798 + 0.03000ml of M6028 + 0.05000ml of M5658 + 0.05000ml of M5811 + 0.05000ml of M6030 + 0.05000ml of M6159 + 0.06000ml of M5747 + 0.10000ml of M5471 + 0.10000ml of M5697 + 0.10000ml of M5801 + 0.10000ml of M5820 + 0.10000ml of M5962 + 0.10000ml of M5969 + 0.10000ml of M5970 + 0.10000ml of M6128 + 0.15000ml of M5800 + 0.20000ml of M5748 + 0.20000ml of M5799 + 0.20000ml of M5942 + 0.20000ml of M6021 + 0.20000ml of M6023 + 0.20000ml of M6145 + 0.25000ml of M5466 + 0.25000ml of M6146 + 0.50000ml of M5814 + 0.50000ml of M6032 + 1.00000ml of M6127 + 1.00000ml of M6138 + 1.00000ml of M6142 + 1.00000ml of M6144 + 2.00000ml of M6137 + 90.03000ml of MP85867 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2951	ICP AES S1/CRI WORK STD	MP85897	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 2.00000ml of MP85896 + 90.03000ml of MP85867 = 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
4163	NEW ICV-060925	MP85934	06/10/2025	06/23/2025	Sarabjit Jaswal	METALS_SCALE_1 (M SC-1)	METALS_PIPETTE_3 (A)	Mohan Bera 06/16/2025

FROM 0.20000ml of M6163 + 0.20000ml of M6164 + 0.20000ml of M6165 + 49.40000ml of MP85867 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP85970	06/13/2025	06/14/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 06/14/2025

FROM 1.00000ml of M6162 + 2.50000ml of M5062 + 96.50000ml of W3112 = 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
1340	Hg 0.00 PPB STD	MP85971	06/13/2025	06/14/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 06/14/2025

FROM 2.50000ml of M6162 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1341	Hg 0.2 PPB STD	MP85972	06/13/2025	06/14/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 06/14/2025

FROM 2.50000ml of M6162 + 247.30000ml of W3112 + 0.20000ml of MP85970 = 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
1342	Hg 2.5 PPB STD	MP85973	06/13/2025	06/14/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 06/14/2025

FROM 2.50000ml of M6162 + 245.00000ml of W3112 + 2.50000ml of MP85970 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1343	Hg 5.0 PPB STD	MP85974	06/13/2025	06/14/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 06/14/2025

FROM 2.50000ml of M6162 + 242.50000ml of W3112 + 5.00000ml of MP85970 = 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
1344	Hg 7.5 PPB STD	MP85975	06/13/2025	06/14/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 06/14/2025

FROM 2.50000ml of M6162 + 240.00000ml of W3112 + 7.50000ml of MP85970 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1345	Hg 10.0 PPB STD	MP85976	06/13/2025	06/14/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 06/14/2025

FROM 237.50000ml of W3112 + 5.00000ml of M6162 + 10.00000ml of MP85970 = 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
1346	Hg ICV SOLUTION	MP85977	06/13/2025	06/14/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 06/14/2025

FROM 2.50000ml of M6161 + 2.50000ml of M6162 + 245.00000ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1351	ICB (Hg 0.00 PPB SOLUTION)	MP85978	06/13/2025	06/14/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 06/14/2025

FROM 2.50000ml of M6162 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1358	CCV (Hg 5.0 PPB SOLUTION)	MP85979	06/13/2025	06/14/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 06/14/2025

FROM 485.00000ml of W3112 + 5.00000ml of M6162 + 10.00000ml of MP85970 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1352	CCB (Hg 0.00 PPB SOLUTION)	MP85980	06/13/2025	06/14/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 06/14/2025

FROM 495.00000ml of W3112 + 5.00000ml of M6162 = 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
1349	CRA/CRI (Hg 0.2 PPB SOLUTION)	MP85981	06/13/2025	06/14/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 06/14/2025

FROM 2.50000ml of M6162 + 247.30000ml of W3112 + 0.20000ml of MP85970 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1350	CHK STD (Hg 7.0 PPB SOLUTION)	MP85982	06/13/2025	06/14/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 06/14/2025

FROM 2.50000ml of M6162 + 240.50000ml of W3112 + 7.00000ml of MP85970 = 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
887	AQUA REGIA FOR HG ON 7471A	MP85983	06/13/2025	06/14/2025	Mohan Bera	None	None	Sarabjit Jaswal 06/14/2025

FROM 150.00000ml of M6151 + 50.00000ml of M6162 = Final Quantity: 200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
68	STANNOUS CHLORIDE SOLUTION	MP85986	06/16/2025	06/17/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 06/19/2025

FROM 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6151 = Final Quantity: 500.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-2196-01 / Hydroxylamine Hydrochloride, Crystal (cs/4x500g)	0000215387	06/25/2025	07/01/2019 / RICHARD	06/07/2019 / RICHARD	M4371

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3227-05 / Potassium Permanganate (2.5kg)	210800	03/31/2026	11/30/2022 / mohan	07/28/2021 / mohan	M4916

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	MSHG-10PPM / MERCURY HCl 125mL 10ug/mL	S2-HG709270	09/22/2026	05/28/2022 / mohan	01/27/2022 / mohan	M5062

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57058 / Cerium, 1000PPM, 100ML	061322	06/13/2025	03/06/2023 / bin	03/01/2023 / bin	M5466

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.	57038 / Sr, 1000 PPM, 125 ml	082922	08/29/2025	04/14/2025 / jaswal	03/16/2023 / jaswal	M5471

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	26397-103 / PTFE BOILING STONES	W126678	03/20/2026	03/20/2025 /	06/12/2023 / jaswal	M5581

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	26397-103 / PTFE BOILING STONES	W126678	12/31/2025	06/17/2023 / Al-Terek	06/12/2023 / jaswal	M5582

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58024 / Chromium, Cr, 500 ml, 1000 PPM	060523	06/05/2026	08/28/2023 / jaswal	08/25/2023 / jaswal	M5658

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	102523	10/25/2026	04/03/2024 / jaswal	10/27/2023 / jaswal	M5697

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ Lead (Pb) 1000PPM	100923	10/09/2026	05/20/2024 / Jaswal	12/20/2023 / jaswal	M5747

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57004 / Be, 1000 PPM, 125 ml	102523	10/25/2026	02/09/2024 / bin	02/09/2024 / bin	M5798

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57050 / Sn, 1000 PPM, 125 ml	071123	07/11/2026	02/09/2024 / bin	02/09/2024 / bin	M5799

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57027 / CO, 1000 PPM, 125 ml	091923	09/19/2026	05/31/2024 / bin	02/09/2024 / bin	M5800

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57033 / As, 1000 PPM, 125 ml	111323	11/13/2026	02/09/2024 / bin	02/09/2024 / bin	M5801

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58126 / Fe, 10000 PPM, 500 ml	051523	05/15/2026	02/06/2025 / kareem	01/03/2024 / jaswal	M5811

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57005 / B, 1000 PPM, 125 ml	071123	07/11/2026	03/26/2024 / Sohil	01/03/2024 / jaswal	M5814

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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 #
Seidler Chemical	BA-3980-01 / Stannous Chloride (cs/4x500g)	232820	08/31/2028	04/30/2024 / mohan	04/25/2024 / mohan	M5882

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000281938	07/06/2026	04/30/2024 / mohan	04/25/2024 / mohan	M5884

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGTI1-1 / TITANIUM 125mL 1000ug/mL	T2-TI719972	06/17/2027	06/18/2024 / Jaswal	02/22/2024 / Jaswal	M5942

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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CHEMICAL RECEIPT LOG BOOK

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	07/01/2024 / Jaswal	07/01/2024 / Jaswal	M5970

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	02/20/2029	08/05/2024 / kareem	06/14/2024 / Jaswal	M5984

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-1 / CLP CAL SOLUTION #1, 125mL	T2-MEB714417	01/27/2027	05/07/2024 / JANVI	02/22/2024 / kareem	M5996

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	12/21/2027	02/03/2025 / JANVI	02/22/2024 / kareem	M5997

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	WW-LFS-1 / Laboratory Fortified Stock Solution 1, 125 ml	T2-MEB723367	05/27/2026	05/27/2025 / Janvi	05/14/2024 / Jaswal	M6007

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	WW-LFS-2 / Laboratory Fortified Stock Solution 2, 125 ml	U2-MEB731108	10/30/2025	04/30/2025 / mohan	05/14/2024 / Jaswal	M6016

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57023 / V, 1000 PPM, 125 ml	062424	06/24/2027	09/28/2024 / jaswal	08/05/2024 / Jaswal	M6021

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57081 / Tl, 1000 PPM, 125 ml	0624724	06/27/2027	08/05/2024 / kareem	08/05/2024 / Jaswal	M6023

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	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 #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	06/03/2025	12/03/2024 / Janvi	11/12/2024 / Janvi	M6126

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	112124	11/21/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6127

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58025 / Mn, 1000 PPM, 500 ml	101124	10/11/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6128

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGSI1-1 / SILICON 125mL 1000ug/mL	V2-SI744713	07/10/2029	01/14/2025 / Jaswal	10/03/2024 / Jaswal	M6137

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	121824	12/18/2027	04/17/2025 / Janvi	01/13/2025 / Jaswal	M6138

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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.	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 /	01/13/2025 / Jaswal	M6145

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57051 / Sb, 1000 PPM, 125 ml	071724	07/17/2027	01/31/2025 / kareem	10/18/2024 / kareem	M6146

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-1 / ICV (ICP/ICPMS) STOCK SOLN	ICV1-1014	07/07/2025	02/07/2025 / JANVI	04/20/2021 / JANVI	M6150

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	08/18/2025	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART A / ICSA (ICP) STOCK SOLN	ICSA-1211	08/24/2025	02/24/2025 / kareem	04/20/2021 / kareem	M6152

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	06/20/2025	02/10/2025 / kareem	02/09/2024 / kareem	M6155

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	03/25/2029	03/10/2025 / Eman	02/02/2025 / Sagar	M6158

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / Al, 10000 PPM, 500 ml	011325	03/18/2026	03/18/2025 / kareem	02/09/2025 / kareem	M6159

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-5 / ICV (HG) STOCK SOLN	ICV 5 0415	07/31/2025	05/01/2025 / mohan	03/30/2024 / mohan	M6161

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24H0162012	11/27/2025	05/27/2025 / Sagar	04/27/2025 / Sagar	M6162

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	QCP-CICV-1-125ML / EPA CLP ICP Verification Standard1	V2-MEB744107	05/22/2029	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	06/01/2028	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	01/02/2030	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 #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

Certificate of Analysis

ThermoFisher SCIENTIFIC

M5882 M3

Certificate of Analysis

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Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	T142	Quality Test / Release Date	08/17/2023
Lot Number	232820		
Description	STANNOUS CHLORIDE, DIHYDRATE CERTIFIED ACS (Suitable for Mercury Determination)		
Country of Origin	United States	Suggested Retest Date	Aug/2028
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear crystals
ASSAY	%	Inclusive Between 98 - 103	100.65
CALCIUM	%	<= 0.005	0.0017
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IRON (Fe)	%	<= 0.003	0.0011
LEAD (Pb)	%	<= 0.01	0.0006
MERCURY (Hg)	ppm	<= 0.05	<0.05
POTASSIUM (K)	%	<= 0.005	0.0001
SODIUM (Na)	%	<= 0.01	<0.01
SOLUBILITY IN HCL	PASS/FAIL	= PASS TEST	PASS TEST
SULFATE (SO4)	PASS/FAIL	= P.T. (ABOUT 0.003%)	P.T. (ABOUT 0.003%)

Harout Sahagian - Quality Control Supervisor - Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

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M6032

R: 8/5/24

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AR-1539 Certificate Number
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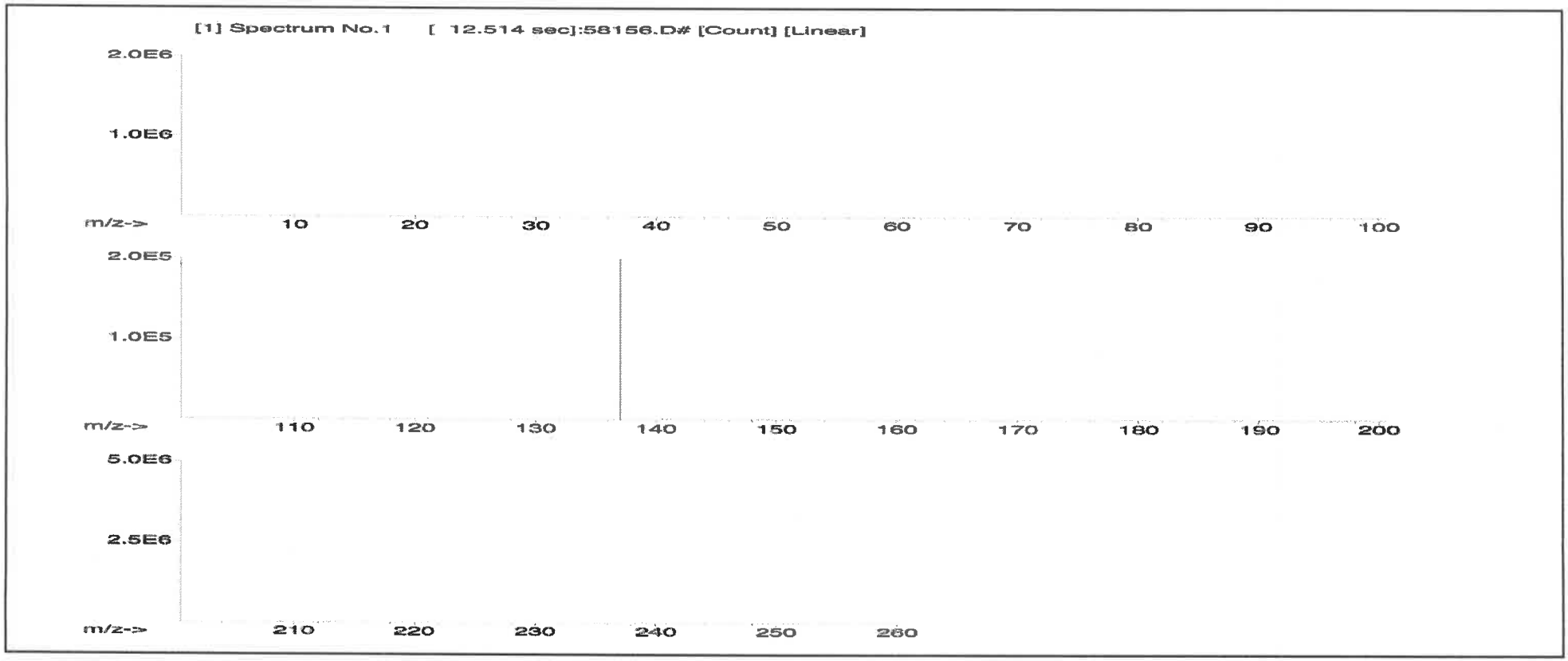
CERTIFIED WEIGHT REPORT:

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
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



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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R 8/5/24

M6028

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

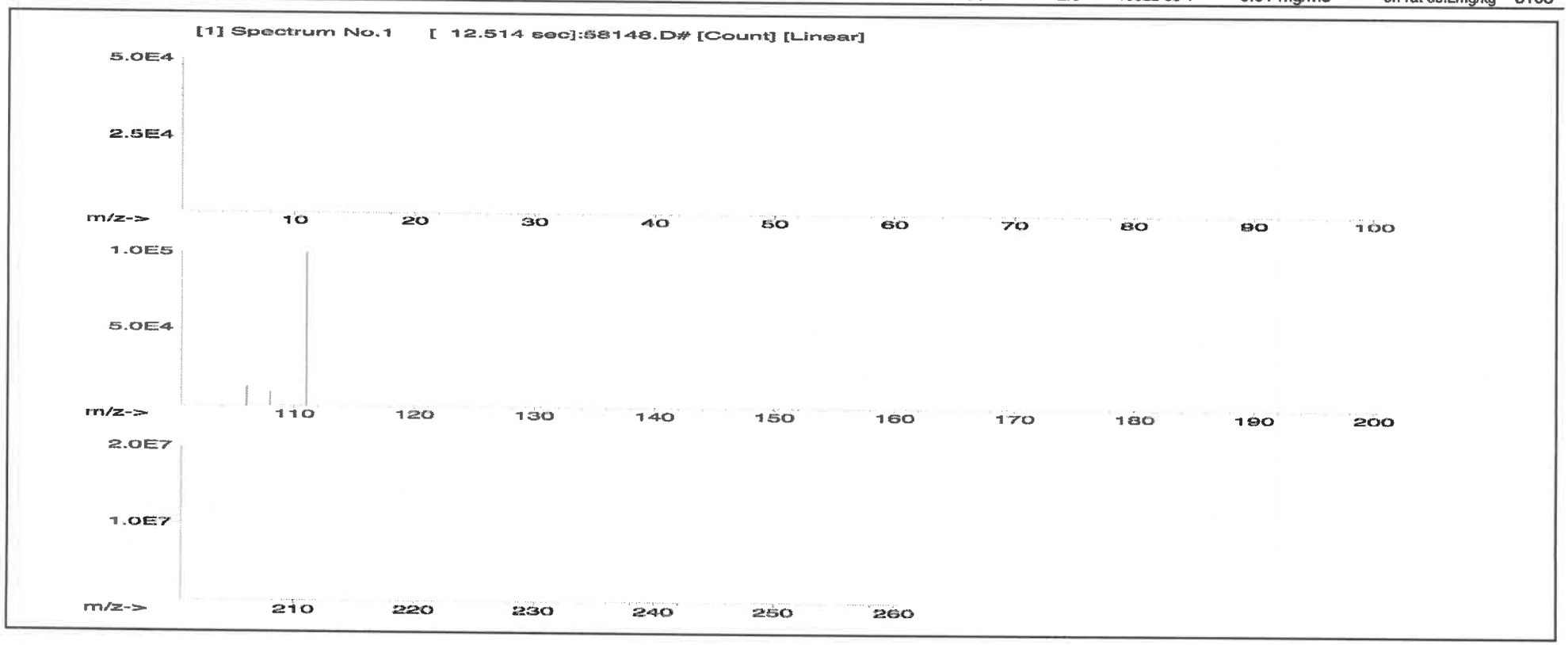
CERTIFIED WEIGHT REPORT:

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
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



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.
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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

R : 01/03/24. M5810, M5811

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58126
Lot Number: 051523
Description: Iron (Fe)

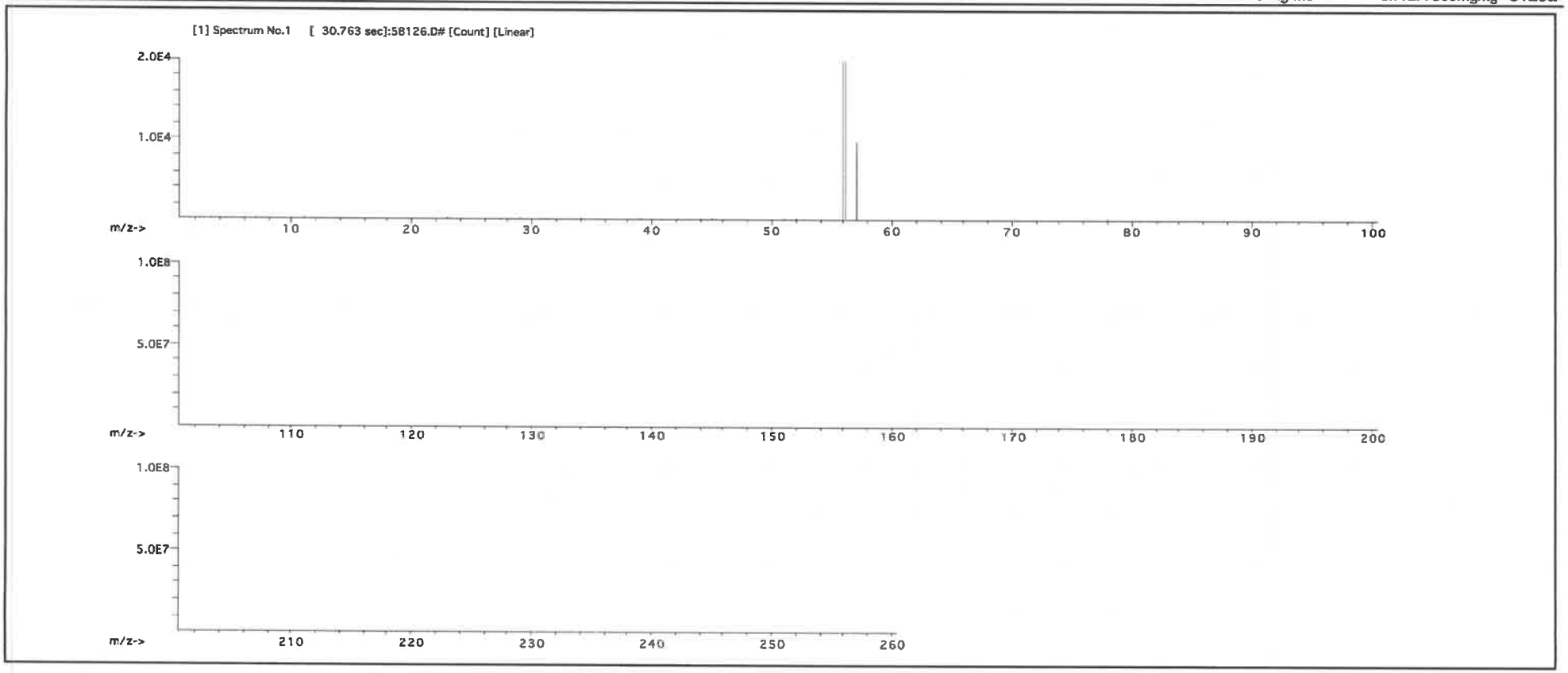
Expiration Date: 051526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 5000.1 ± 0.12 Flask Uncertainty

		Lot #	
Solvent:	21110221	Nitric Acid	
	5.0%	250.0 (mL)	Nitric Acid
	5E-05	Balance Uncertainty	

Giovanni Esposito

Formulated By:	Giovanni Esposito	051523
Reviewed By:	Pedro L. Rentas	051523

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Iron (Fe)	IN346	2302010-500	10000	99.995	0.10	100.0	50.0034	50.0111	**10001.5**	**20.0**	7439-89-6	5 mg/m3	orl-rat 7500mg/kg	3126a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.10	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.10	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.05	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.10	Ge	<0.10	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.10
B	<0.02	Cu	<0.10	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



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RD:05/14/2024

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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:	WW-LFS-1
Lot Number:	T2-MEB723367
Matrix:	5% (v/v) HNO3

Value / Analyte(s):	1 000 µg/mL ea: Potassium,	
	600 µg/mL ea: Phosphorus,	
	300 µg/mL ea: Sodium,	Iron,
	200 µg/mL ea: Magnesium, Cerium, Thallium,	Aluminum, Selenium,
	100 µg/mL ea: Lead,	Calcium,
	80 µg/mL ea: Arsenic,	
	70 µg/mL ea: Mercury,	
	50 µg/mL ea: Nickel,	
	40 µg/mL ea: Chromium,	
	30 µg/mL ea: Copper, Vanadium,	Boron,
	20 µg/mL ea: Zinc, Barium, Cadmium, Manganese,	Strontium, Beryllium, Cobalt, Lithium,
	7.5 µg/mL ea: Silver	

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	200.0 ± 0.7 µg/mL	Arsenic, As	80.0 ± 0.7 µg/mL
Barium, Ba	20.00 ± 0.09 µg/mL	Beryllium, Be	20.00 ± 0.13 µg/mL
Boron, B	30.00 ± 0.18 µg/mL	Cadmium, Cd	20.00 ± 0.09 µg/mL
Calcium, Ca	100.0 ± 0.4 µg/mL	Cerium, Ce	200.0 ± 0.8 µg/mL
Chromium, Cr	40.00 ± 0.30 µg/mL	Cobalt, Co	20.00 ± 0.10 µg/mL
Copper, Cu	30.00 ± 0.13 µg/mL	Iron, Fe	300.0 ± 1.3 µg/mL
Lead, Pb	100.0 ± 0.4 µg/mL	Lithium, Li	20.00 ± 0.08 µg/mL
Magnesium, Mg	200.0 ± 0.8 µg/mL	Manganese, Mn	20.00 ± 0.08 µg/mL
Mercury, Hg	70.0 ± 0.3 µg/mL	Nickel, Ni	50.00 ± 0.22 µg/mL
Phosphorus, P	600.0 ± 2.7 µg/mL	Potassium, K	1 000 ± 4 µg/mL
Selenium, Se	200.0 ± 1.3 µg/mL	Silver, Ag	7.50 ± 0.03 µg/mL
Sodium, Na	300.0 ± 1.4 µg/mL	Strontium, Sr	20.01 ± 0.08 µg/mL
Thallium, Tl	200.0 ± 1.4 µg/mL	Vanadium, V	30.00 ± 0.13 µg/mL
Zinc, Zn	20.00 ± 0.09 µg/mL		

Density: 1.034 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
B	ICP Assay	3107	190605
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Ce	ICP Assay	3110	090504
Ce	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	Traceable to 3152A	S2-NA700842
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Tl	ICP Assay	3158	151215
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 30, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 30, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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RD:05/14/2024

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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 863.01 ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-2
Lot Number:	U2-MEB731108
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	200 µg/mL ea: Silica, 80 µg/mL ea: Antimony, 70 µg/mL ea: Tin, 40 µg/mL ea: Molybdenum, 20 µg/mL ea: Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	80.1 ± 0.6 µg/mL	Molybdenum, Mo	40.03 ± 0.18 µg/mL
Silica, SiO2	200.2 ± 1.3 µg/mL	Tin, Sn	70.0 ± 0.4 µg/mL
Titanium, Ti	20.01 ± 0.13 µg/mL		

Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
SiO2	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925
Ti	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 17, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- March 17, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



M4371

Hydroxylamine Hydrochloride, Crystal
BAKER ANALYZED® A.C.S. Reagent
Suitable for Mercury Determination
(hydroxylammonium chloride)

Rec – 06.07.19

J.T.Baker® | avantor™

Material No.: 2196-01
Batch No.: 0000215387
Manufactured Date: 2018/06/27
Retest Date: 2025/06/25
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay ($NH_2OH \cdot HCl$) (by $KMnO_4$ titrn)	>= 96.0 %	99.1
Clarity of Alcohol Solution	Passes Test	PT
Residue after Ignition	<= 0.050 %	0.017
Titrable Free Acid (meq/g)	<= 0.25	0.19
Ammonium (NH_4)	Passes Test	PT
Sulfur Compounds (as SO_4)	<= 0.005 %	< 0.003
Trace Impurities - ACS - Heavy Metals (as Pb)	<= 5 ppm	4
Trace Impurities - Iron (Fe)	<= 5 ppm	< 3
Trace Impurities - Mercury (Hg)	<= 0.050 ppm	< 0.005

For Laboratory, Research or Manufacturing Use

Country of Origin: CN
Packaging Site: Paris Mfg Ctr & DC

ISO
Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

ThermoFisher SCIENTIFIC

M4913-16

MB

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	P279	Quality Test / Release Date	01/12/2021
Lot Number	210306		
Description	POTASSIUM PERMANGANATE, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Jan/2026

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Dark purple to purple green crystals
ASSAY	%	>= 99	99.3
CHLORIDE & CHLORATE	%	<= 0.005	<0.005
IDENTIFICATION	PASS/FAIL	= PASS TEST	pass test
INSOLUBLE MATTER	%	<= 0.2	<0.2
MERCURY (Hg)	ppm	<= 0.05	<0.004
SULFATE (SO4)	%	<= 0.02	<0.02

Julian Burton

Julian Burton - Quality Control Manager – Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

M5062
M5063
M3

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Mass Spec Solution
Catalog Number:	MSHG-10PPM
Lot Number:	S2-HG709270
Matrix:	10% (v/v) HCl
Value / Analyte(s):	10 µg/mL ea: Mercury
Starting Material:	Hg metal
Starting Material Lot#:	1959
Starting Material Purity:	99.9994%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10.001 ± 0.053 µg/mL

Density: 1.020 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
Hg	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance.

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag		0.000011	M	Eu	<	0.000201	O	Na		0.000004	M	Se	<	0.015915	O	Zn	<	0.001510
O	Al		0.000001	O	Fe		0.000001	M	Nb	<	0.000201	O	Si		0.000005	M	Zr	<	0.000201
M	As	<	0.000402	M	Ga	<	0.000201	M	Nd	<	0.000201	M	Sm	<	0.000201				
M	Au	<	0.003631	M	Gd	<	0.000201	M	Ni	<	0.000402	M	Sn	<	0.001007				
M	B	<	0.001208	M	Ge	<	0.000201	M	Os	<	0.000605	M	Sr	<	0.000201				
M	Ba	<	0.000201	M	Hf	<	0.000201	O	P	<	0.032370	M	Ta	<	0.000201				
M	Be	<	0.000201	s	Hg	<		M	Pb	<	0.000201	M	Tb	<	0.000201				
M	Bi	<	0.000201	M	Ho	<	0.000201	M	Pd	<	0.000403	M	Te	<	0.002216				
O	Ca		0.000007	M	In	<	0.000201	M	Pr	<	0.000201	M	Th	<	0.000201				
M	Cd	<	0.000201	M	Ir	<	0.000201	M	Pt	<	0.000402	M	Ti	<	0.000402				
M	Ce	<	0.000201	O	K		0.000020	M	Rb	<	0.000201	O	Tl	<	0.016508				
M	Co	<	0.000201	M	La	<	0.000201	M	Re	<	0.000201	M	Tm	<	0.000201				
O	Cr	<	0.003021	O	Li	<	0.000107	M	Rh	<	0.000201	M	U	<	0.008058				
M	Cs	<	0.001208	M	Lu	<	0.000201	M	Ru	<	0.000201	M	V	<	0.000201				
M	Cu	<	0.000402	O	Mg		0.000001	O	S	<	0.053950	M	W	<	0.000604				
M	Dy	<	0.000201	M	Mn	<	0.000604	M	Sb	<	0.001208	M	Y	<	0.000201				
M	Er	<	0.000201	M	Mo		0.000009	M	Sc	<	0.000201	M	Yb	<	0.000201				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+

Chemical Compatibility - Stable in HNO_3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.

Stability - 2-100 ppb levels not stable in 1% HNO_3 / LDPE container, stable in 10% HNO_3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO_3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO_3 / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxide (Soluble in HNO_3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- September 22, 2026

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

IN 5466
R: 03/01/23 BH

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

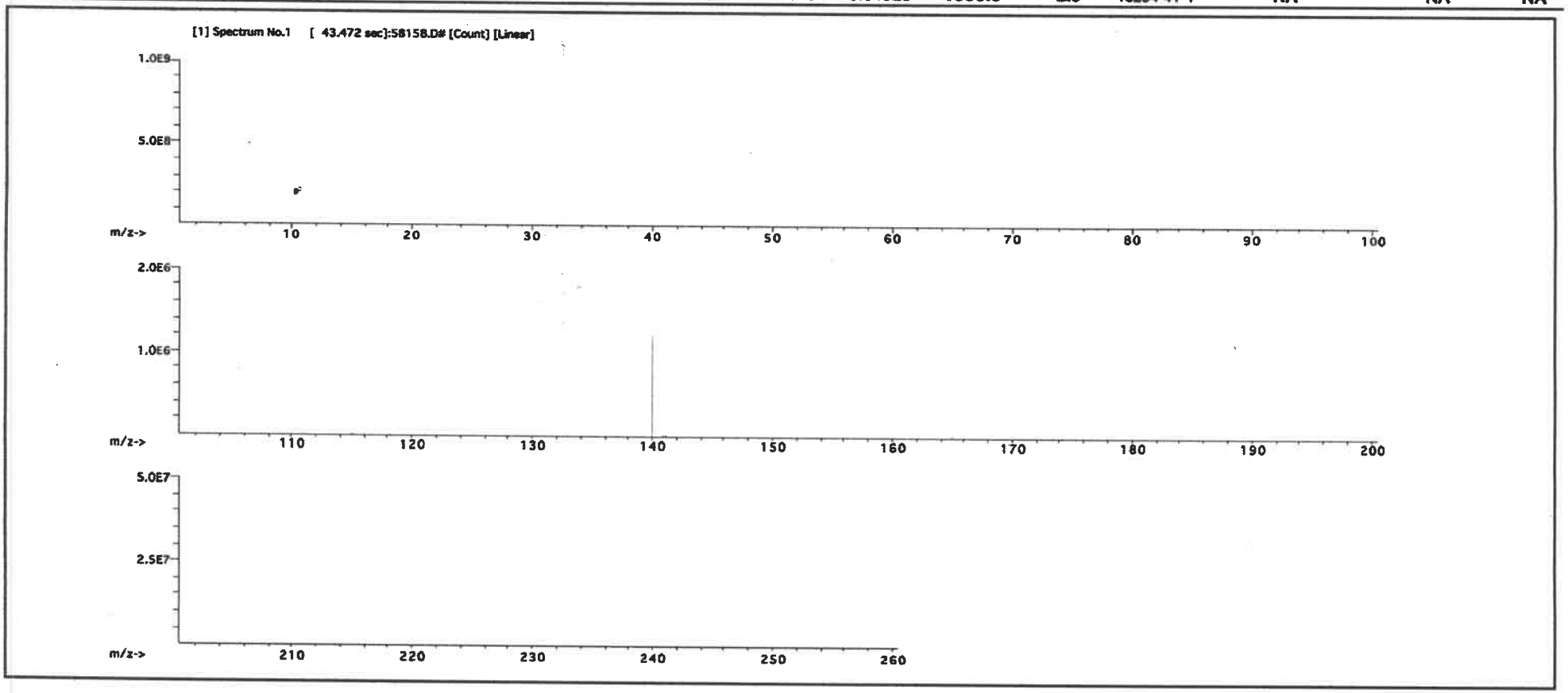
Part Number: 57058
Lot Number: 061322
Description: Cerium (Ce)

Expiration Date: 061325
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12 5E-05 Balance Uncertainty 0.058 Flask Uncertainty

	Lot #	
Solvent:	20510011	Nitric Acid
2%	20.0 (mL)	Nitric Acid

Formulated By:	Lawrence Barry	061322
Reviewed By:	Pedro L. Rentas	061322

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	3.04923	1000.0	2.0	10294-41-4	NA	NA	NA



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.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5467 R: 03/01/23 (LA)

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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

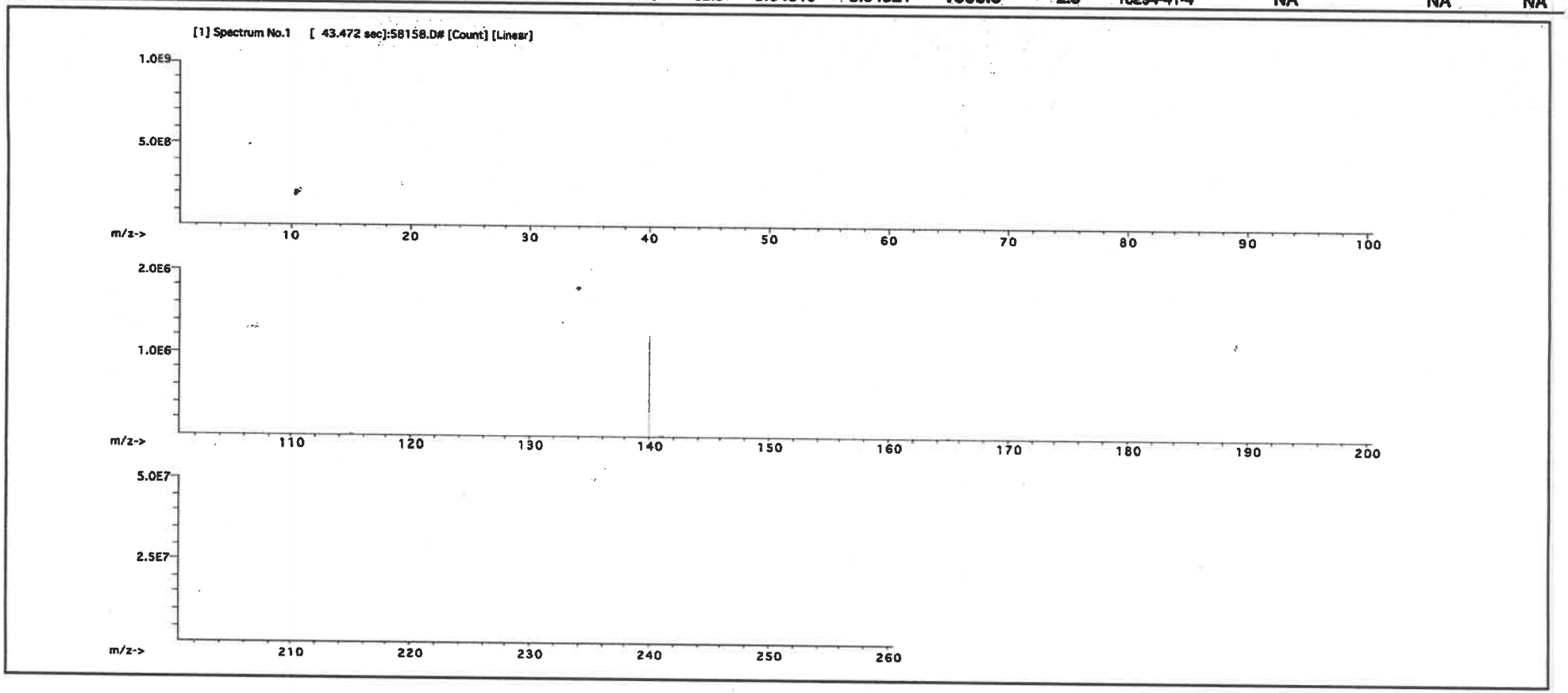
Weight shown below was diluted to (mL): 1000.12 0.058 Flask Uncertainty

		Lot #	
Solvent:	21110221	Nitric Acid	
2%	20.0 (mL)	Nitric Acid	

5E-05 Balance 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



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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* 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).

RD: 06/12/2023, M5581, M5582, M5583, M5584, M5585

JENSEN INERT PRODUCTS

MATERIAL CERTIFICATE OF COMPLIANCE

DATE: JUNE 12, 2023

CUSTOMER:	PCI SCIENTIFIC SUPPLY, INC
PURCHASE ORDER NO.	6054931
CATALOG NO.	BOI5021-450L
PRODUCT DESCRIPTION:	BOILING STONES, TFE, 454GMS
QUANTITY:	10 EACH
LOT NO.	W126678
SPECIFICATION (S):	Made from Virgin PTFE Resin

We certify that we have complied with the terms and conditions of the above Purchase Order and the Part Specifications in the manufacturing of the above product.

Laura Valencia

Laura Valencia
Quality Assurance Inspector

F:U:J:CF:PCISCI:COC-68118-BOI5021-061223

3773 NW 126th Avenue • Coral Springs, Florida 33065 • Fax (954) 344-2008 • 1-800 446-3781
Email: jensen@jenseninert.com Visit our Web Site at www.jenseninert.com

RD: 06/12/2023, M5581, M5582, M5583, M5584, M5585

JENSEN INERT PRODUCTS

MATERIAL CERTIFICATE OF COMPLIANCE

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Quality Assurance Inspector

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M5658 R ! 8/25/23

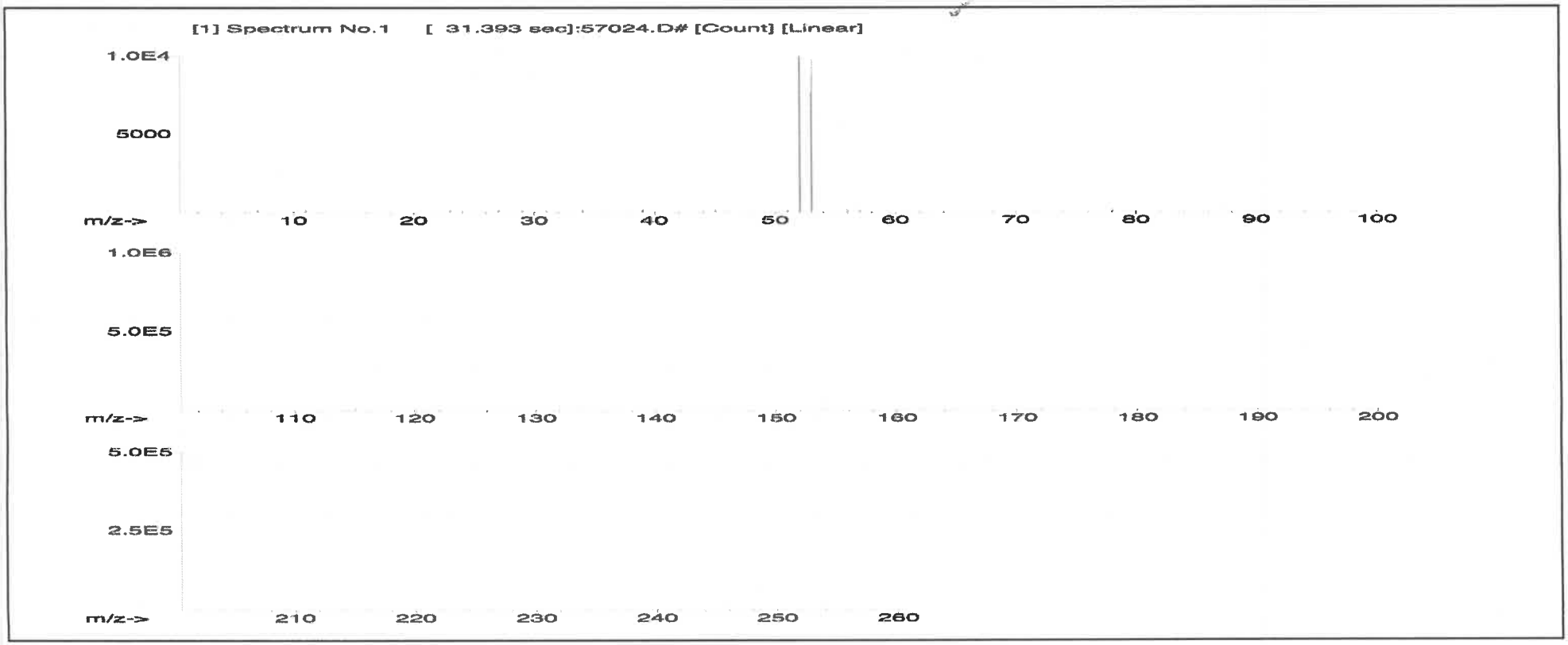
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CERTIFIED WEIGHT REPORT:

		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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	T	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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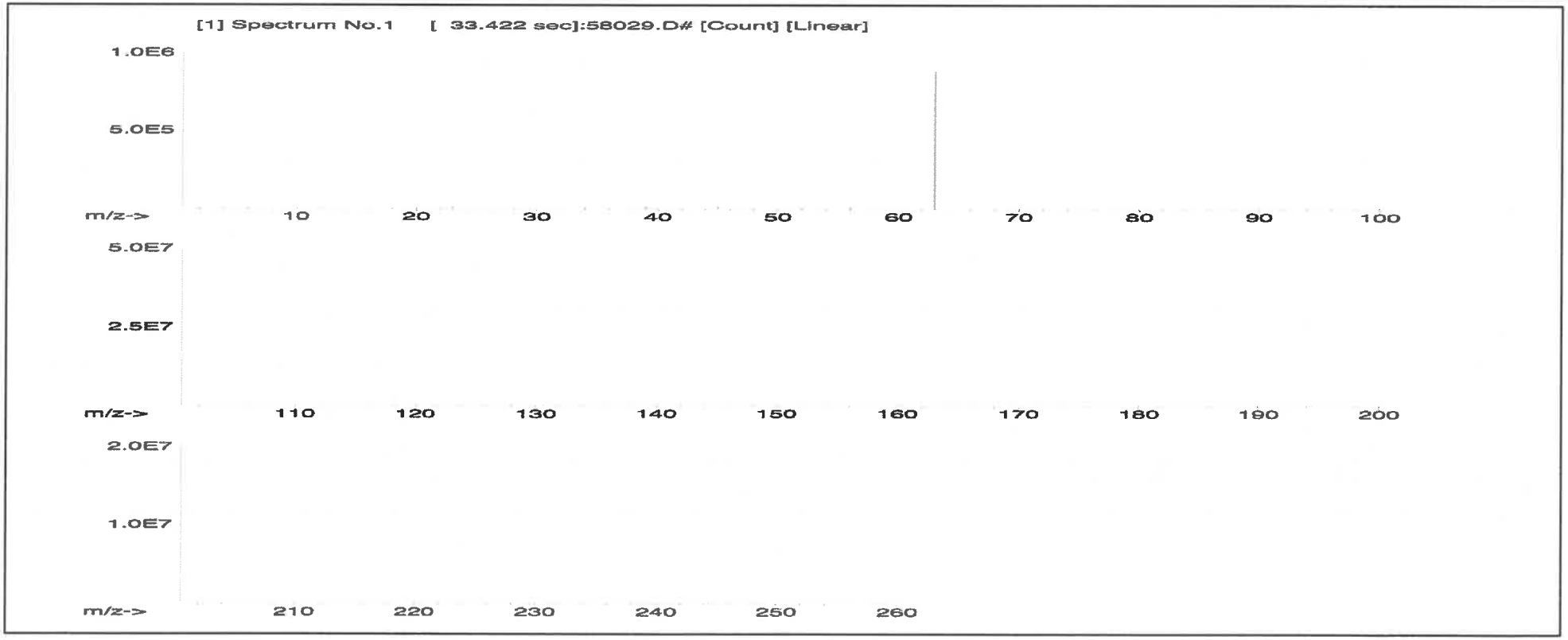
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58029**	24002546	Nitric Acid	
Lot Number:	**102523**			
Description:	**Copper (Cu)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	102526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Copper(II) nitrate trihydrate (Cu)	58129	100223	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	10031-43-3	1 mg/m3	orl-rat 794 mg/kg	3114



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
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R: 12/20/23 M5747

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CERTIFIED WEIGHT REPORT:

Part Number: 57082
Lot Number: 100923
Description: Lead (Pb)

Expiration Date: 100926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

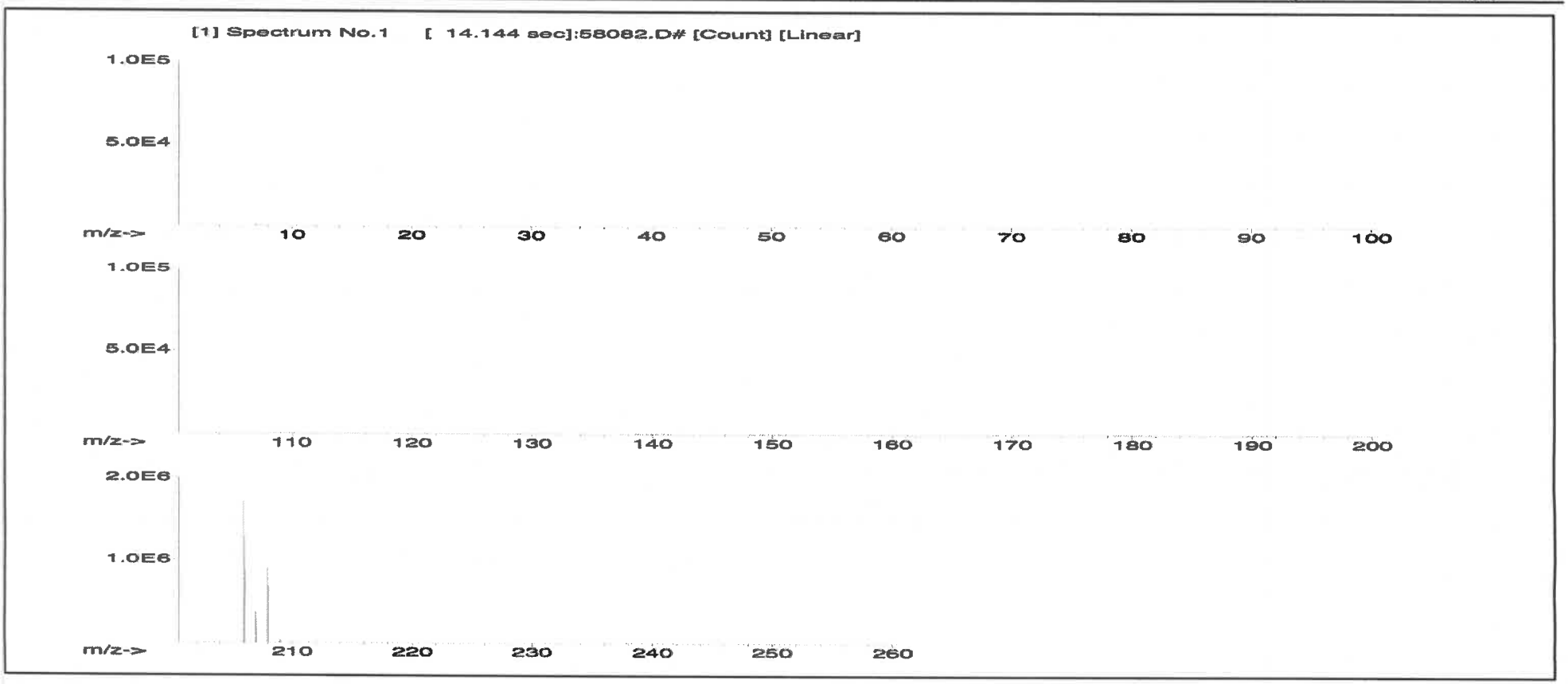
Weight shown below was diluted to (mL): 3000.41 0.06 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Lawrence Barry	100923
Reviewed By:	Pedro L. Rentas	100923

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	4.80071	4.80077	**1000.0**	**2.0**	10099-74-8	0.05 mg/m3	intrvns-rat 93 mg/kg	3128



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	T	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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R: 12/20/23 M5748

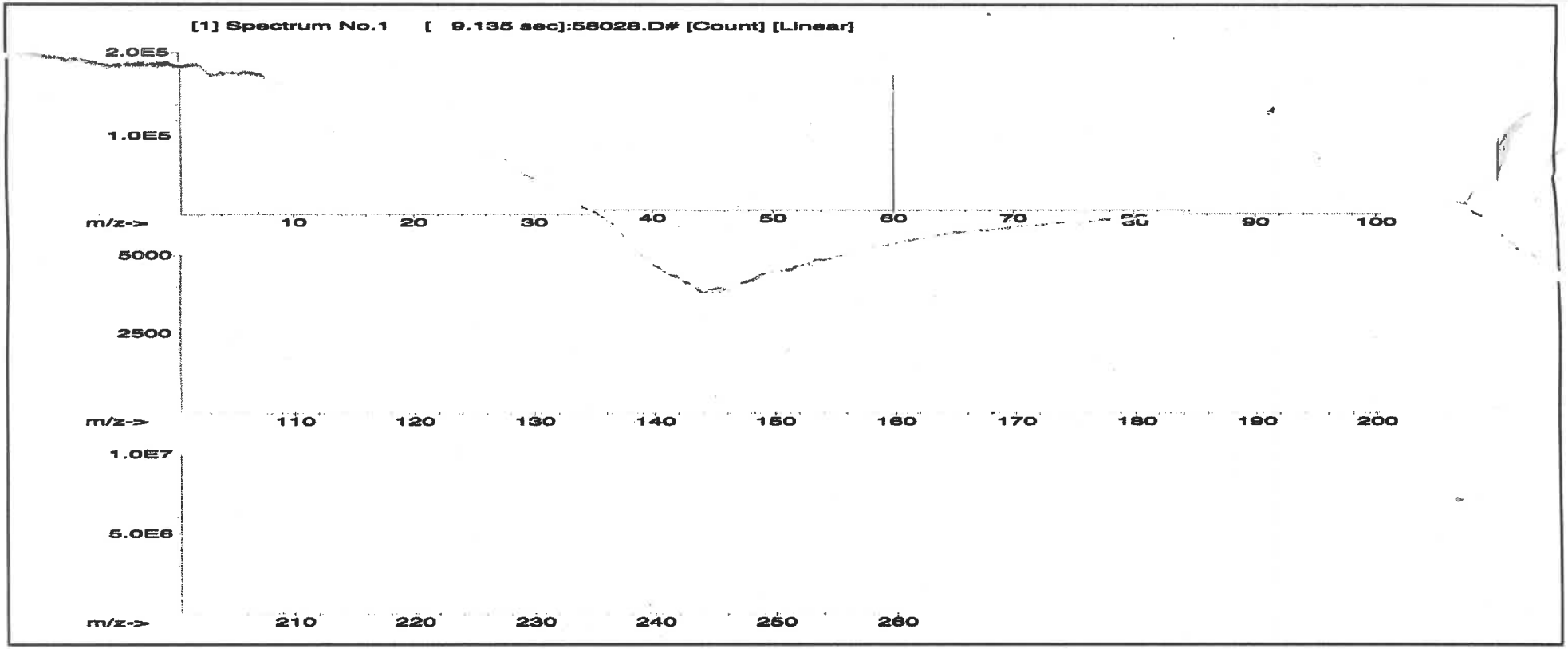
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CERTIFIED WEIGHT REPORT:

		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



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:

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R: 02/09/24 M5798

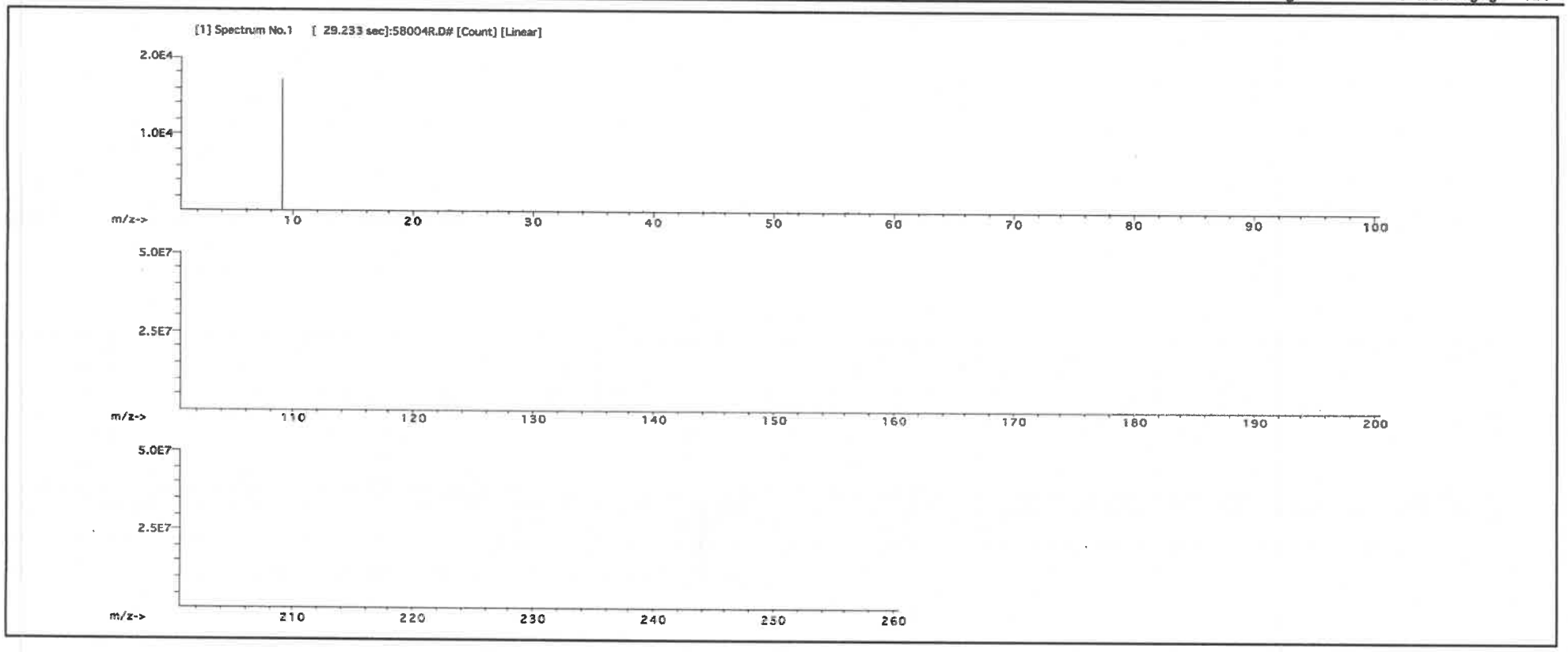
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AR-1539 Certificate Number
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57004**	24002546	Nitric Acid	
Lot Number:	**102523**			
Description:	**Beryllium (Be)**	2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	102526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Beryllium nitrate (Be)	58104	091423	0.1000	200.0	0.084	1000	10001.5	**1000.0**	**2.2**	13597-99-4	0.2ug/m3	intrvns-rat 3.16mg/kg	NA



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	T	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

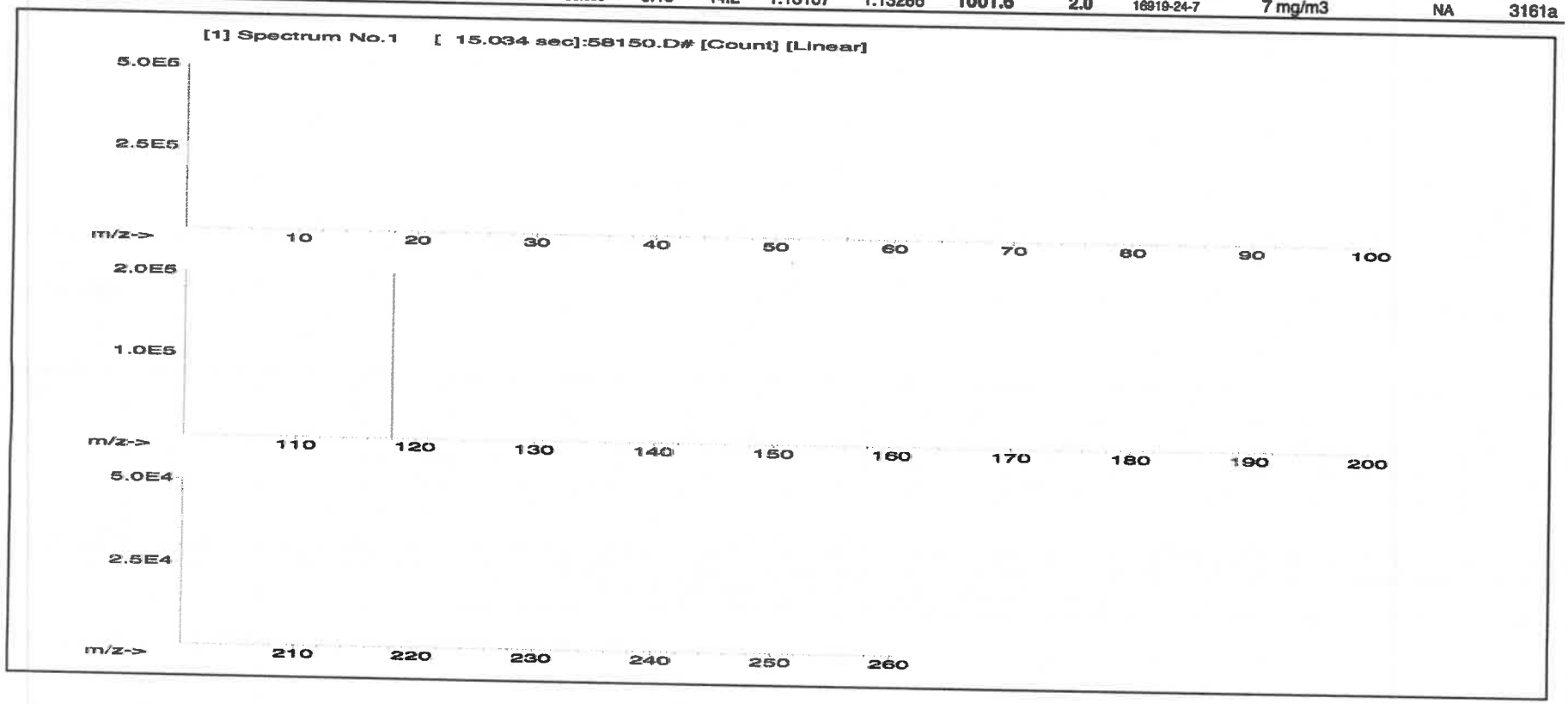
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	Lot #	
Solvents:	21110221	Nitric Acid
	22D0562008	Hydrochloric acid
2%	10.0	Nitric Acid
6%	30.0	Hydrochloric acid
	(mL)	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Benson Chan	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium hexafluorostannate(IV) (Sn)	IN010	SND042023A1	1000	99.999	0.10	44.2	1.13107	1.13286	**1001.6**	**2.0**	16919-24-7	7 mg/m3	NA	3161a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<500	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	T	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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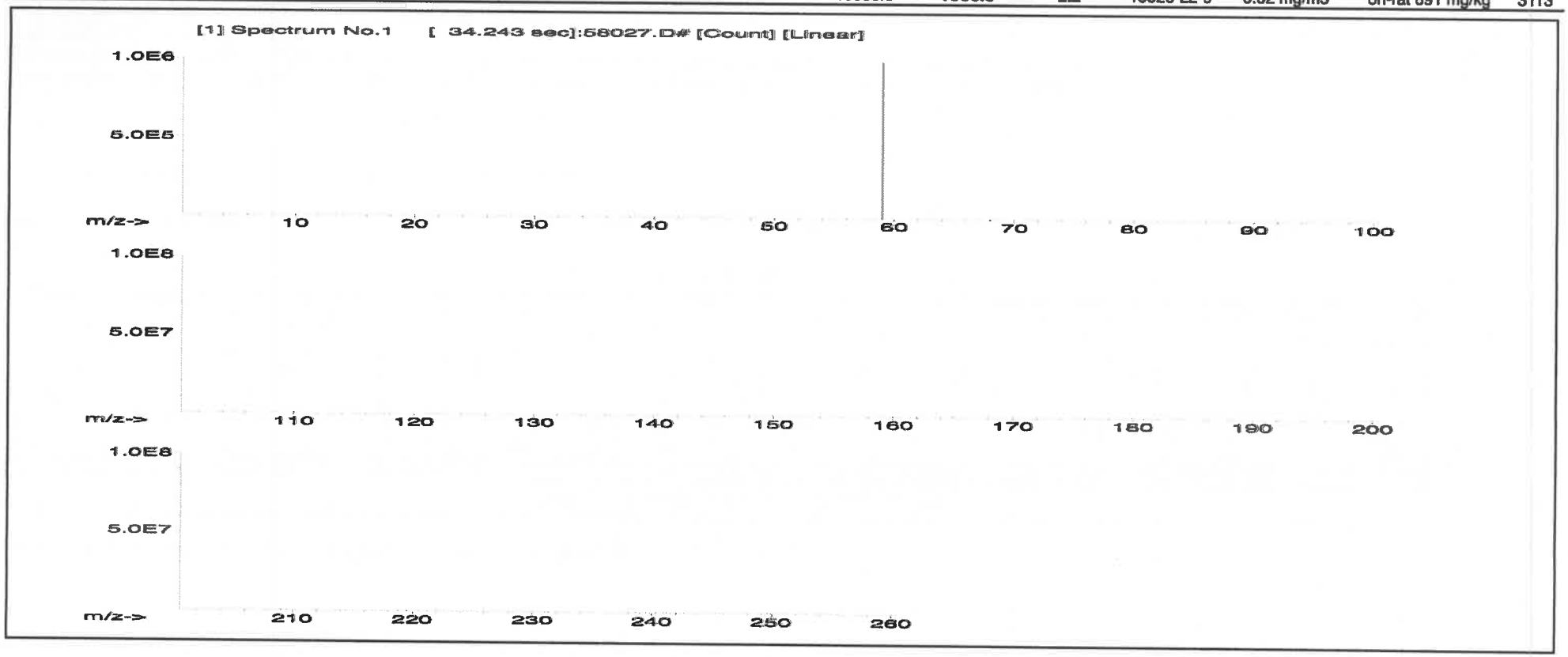
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57027**	24002546	Nitric Acid		
Lot Number:	**091923**				
Description:	**Cobalt (Co)**	2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	091926				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	091923
Reviewed By:	Pedro L. Rentas	091923

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cobalt(II) nitrate hexahydrate (Co)	58127	050923	0.1000	200.0	0.084	1000	10000.0	**1000.0**	**2.2**	10026-22-9	0.02 mg/m3	orl-rat 691 mg/kg	3113



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:

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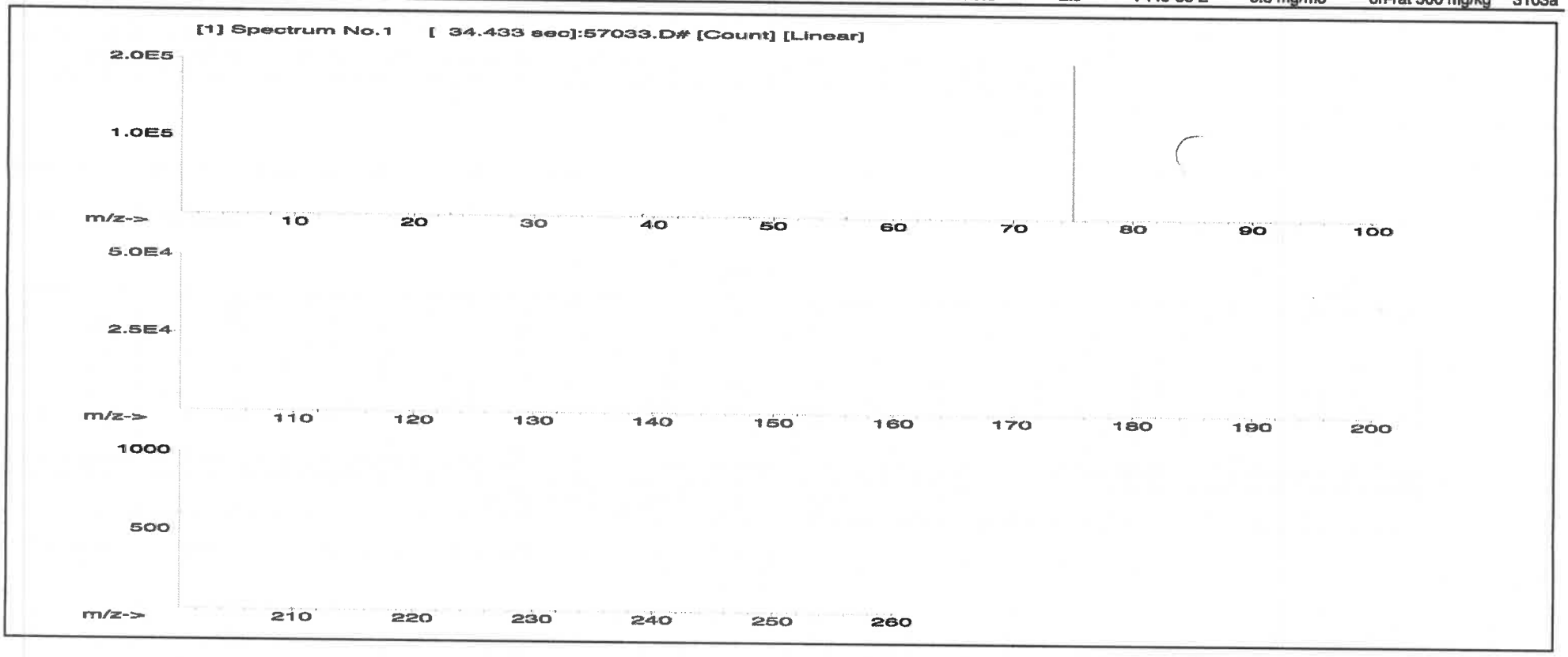
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CERTIFIED **WEIGHT** REPORT:

		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



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:

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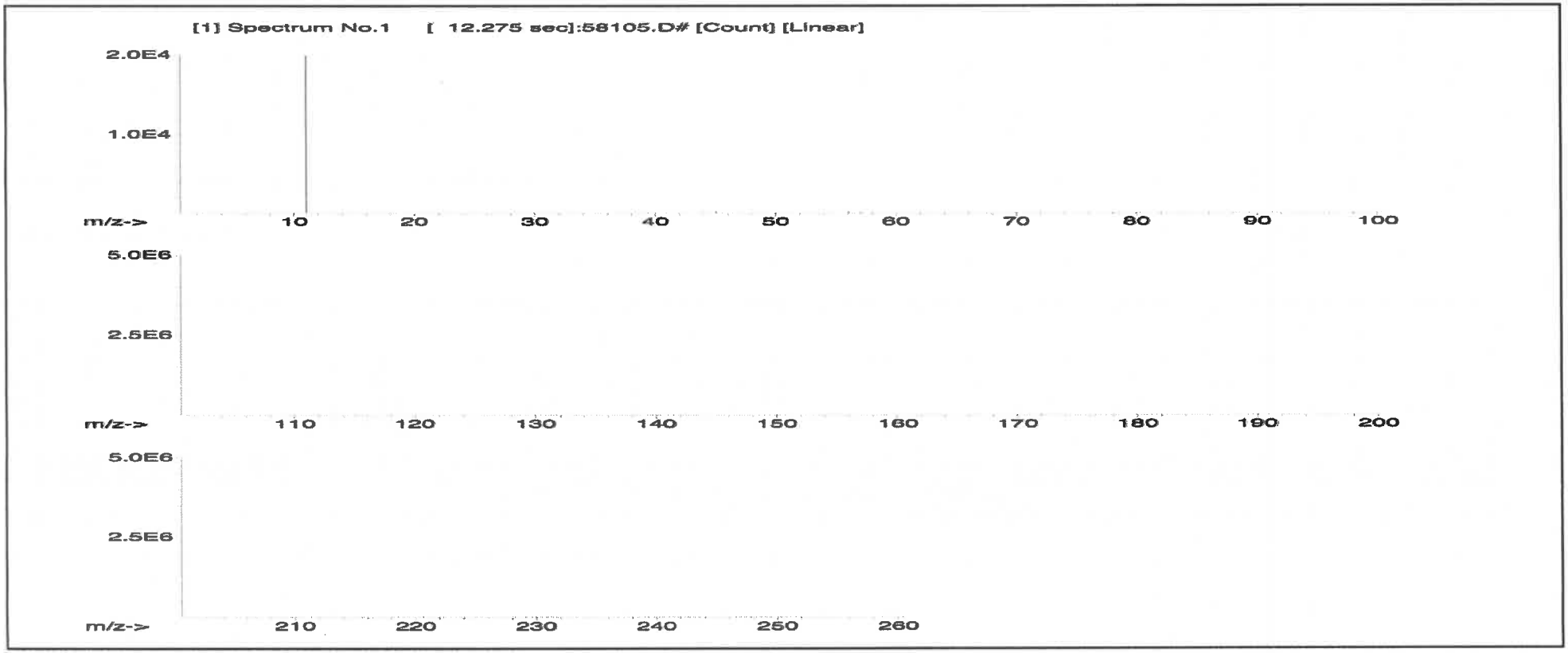
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CERTIFIED WEIGHT REPORT:

Part Number:	**57005**		**Solvent:**	MKBQ8597V	Ammonium hydroxide
Lot Number:	**071123**				
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



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:

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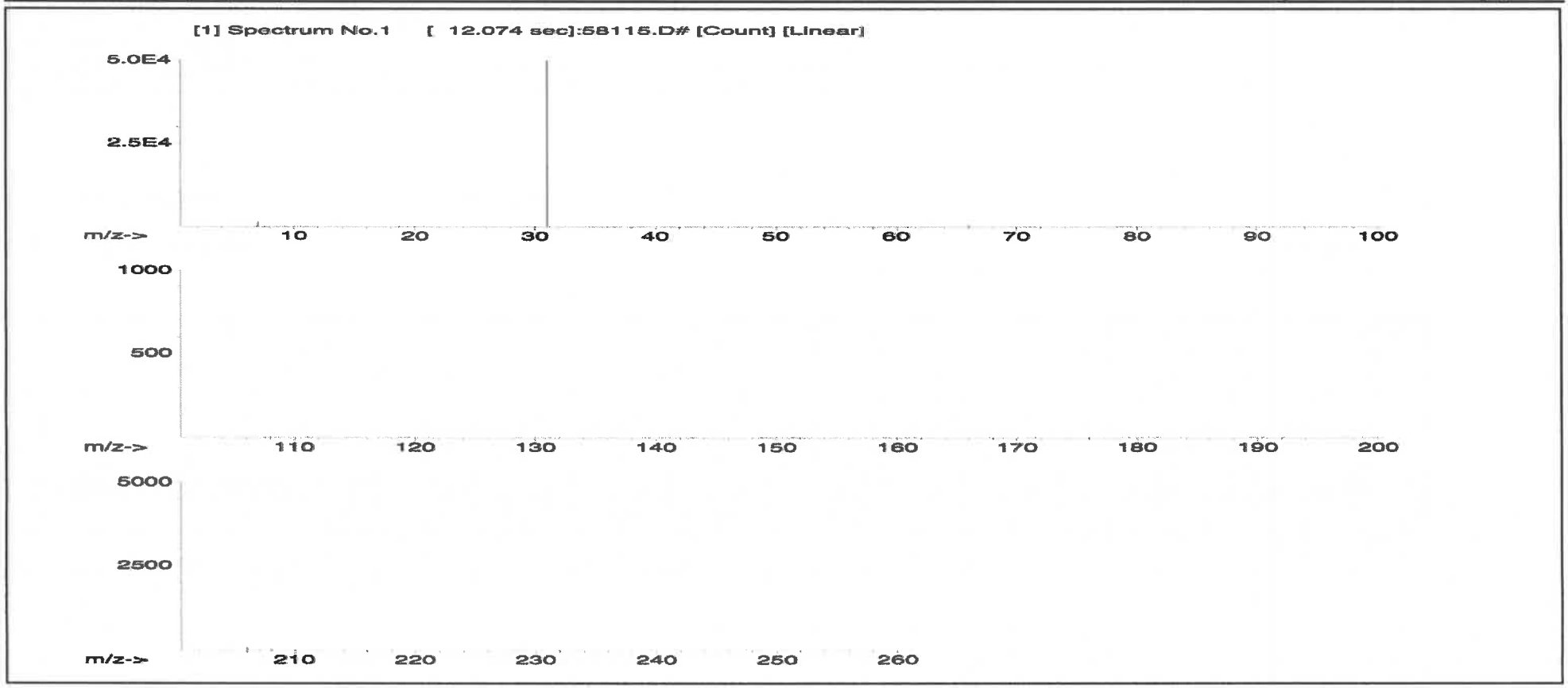
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CERTIFIED WEIGHT REPORT:

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



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
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Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	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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Material No.: 3624-01
Batch No.: 0000281938
Manufactured Date: 2021-06-07
Retest Date: 2026-06-07
Revision No.: 1

Certificate of Analysis

Test	Specification	Result
Assay (NaCl) (by Ag titrn)	≥ 99.0 %	100.0 %
pH of 5% Solution at 25°C	5.0 - 9.0	6.3
Insoluble Matter	≤ 0.005 %	0.003 %
Iodide (I)	≤ 0.002 %	< 0.002 %
Bromide (Br)	≤ 0.01 %	< 0.01 %
Chlorate and Nitrate (as NO_3)	≤ 0.003 %	< 0.001 %
ACS - Phosphate (PO_4)	≤ 5 ppm	< 5 ppm
Sulfate (SO_4)	≤ 0.004 %	< 0.004 %
Barium (Ba)	Passes Test	Passes Test
ACS - Heavy Metals (as Pb)	≤ 5 ppm	< 5 ppm
Iron (Fe)	≤ 2 ppm	< 1 ppm
Calcium (Ca)	≤ 0.002 %	< 0.001 %
Magnesium (Mg)	≤ 0.001 %	< 0.001 %
Potassium (K)	≤ 0.005 %	0.001 %

For Laboratory,Research,or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs
Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
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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:	Single Analyte Custom Grade Solution
Catalog Number:	CGTI1
Lot Number:	T2-TI719972
Matrix:	2% (v/v) HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Titanium
Starting Material:	Ti Metal
Starting Material Lot#:	2094
Starting Material Purity:	99.9975%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 5 µg/mL

Density: 1.012 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **1002 ± 4 µg/mL**
ICP Assay NIST SRM 3162a Lot Number: 130925

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000536	M	Eu	<	0.000268	O	Na	<	0.032670	M	Se		0.001204	O	Zn	<	0.003267
O	Al		0.000872	O	Fe		0.003225	O	Nb	<	0.043560	O	Si		0.004735	O	Zr	<	0.043560
M	As	<	0.008586	M	Ga	<	0.000268	M	Nd	<	0.000268	M	Sm	<	0.000268				
M	Au	<	0.004577	M	Gd	<	0.000268	O	Ni	<	0.010890	M	Sn		0.000096				
O	B	<	0.008929	M	Ge	<	0.002146	M	Os	<	0.000269	O	Sr		0.000096				
M	Ba	<	0.002683	M	Hf		0.002161	O	P	<	0.054450	M	Ta		0.010560				
M	Be	<	0.005366	M	Hg	<	0.003231	M	Pb	<	0.001073	M	Tb	<	0.000268				
M	Bi	<	0.001609	M	Ho	<	0.000268	M	Pd	<	0.000268	M	Te	<	0.001341				
O	Ca		0.000676	M	In	<	0.002683	M	Pr	<	0.000268	M	Th	<	0.053663				
M	Cd	<	0.000268	M	Ir	<	0.000269	M	Pt	<	0.000536	s	Ti	<					
M	Ce	<	0.000268	M	K		0.001172	M	Rb	<	0.000268	M	Tl	<	0.000268				
M	Co	<	0.004293	M	La	<	0.000268	M	Re	<	0.000268	M	Tm	<	0.000268				
M	Cr		0.000752	O	Li	<	0.027225	M	Rh	<	0.000268	M	U	<	0.000268				
M	Cs	<	0.000268	M	Lu	<	0.000268	M	Ru	<	0.000269	M	V	<	0.019855				
O	Cu	<	0.010890	O	Mg	<	0.005445	i	S	<		M	W		0.000473				
M	Dy	<	0.000268	O	Mn	<	0.003267	M	Sb	<	0.006976	M	Y	<	0.002146				
M	Er	<	0.000268	M	Mo		0.000774	O	Sc	<	0.004900	M	Yb	<	0.000536				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 47.87 +4 6 Ti(F)6-2

Chemical Compatibility - Soluble in concentrated HCl, HF, H3PO4 H2SO4 and HNO3. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths or high levels of transition elements unless they are fluorinated). Stable with most inorganic anions with a tendency to hydrolyze forming the hydrated oxide in all dilute acids except HF.

Stability - 2-100 ppb levels stable (Alone or mixed with all other metals) as the Ti(F)6-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the Ti(F)6-2 chemically stable for years in 2-5% HNO3 / trace HF in an LDPE container.

Ti Containing Samples (Preparation and Solution) - Metal (Soluble in H2O / HF caution -powder reacts violently); Oxide - low temperature history anatase or rutile (Dissolved by heating in 1:1:1 H2O / HF / H2SO4); Oxide - high temperature history (~800EC) brookite (fuse in Pt0 with K2S2O7); Ores (fuse in Pt0 with KF + K2S2O7 - no KF if silica not present); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve by heating with 1:1:1 H2O / HF / H2SO4 or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite crystalline form).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 48 amu	14 ppt	N/A	32S16O, 32S14N, 14N16O18O, 14N17N2, 36Ar12C, 48Ca, [96X=2 (where X = Zr, Mo, Ru)]
ICP-OES 323.452 nm	0.0054 / 0.00092 µg/mL	1	Ce, Ar, Ni
ICP-OES 334.941 nm	0.0038 / 0.000028 µg/mL	1	Nb, Ta, Cr, U
ICP-OES 336.121 nm	0.0053 / 0.000034 µg/mL	1	W, Mo, Co

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 17, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5962 R! 06/14/24.

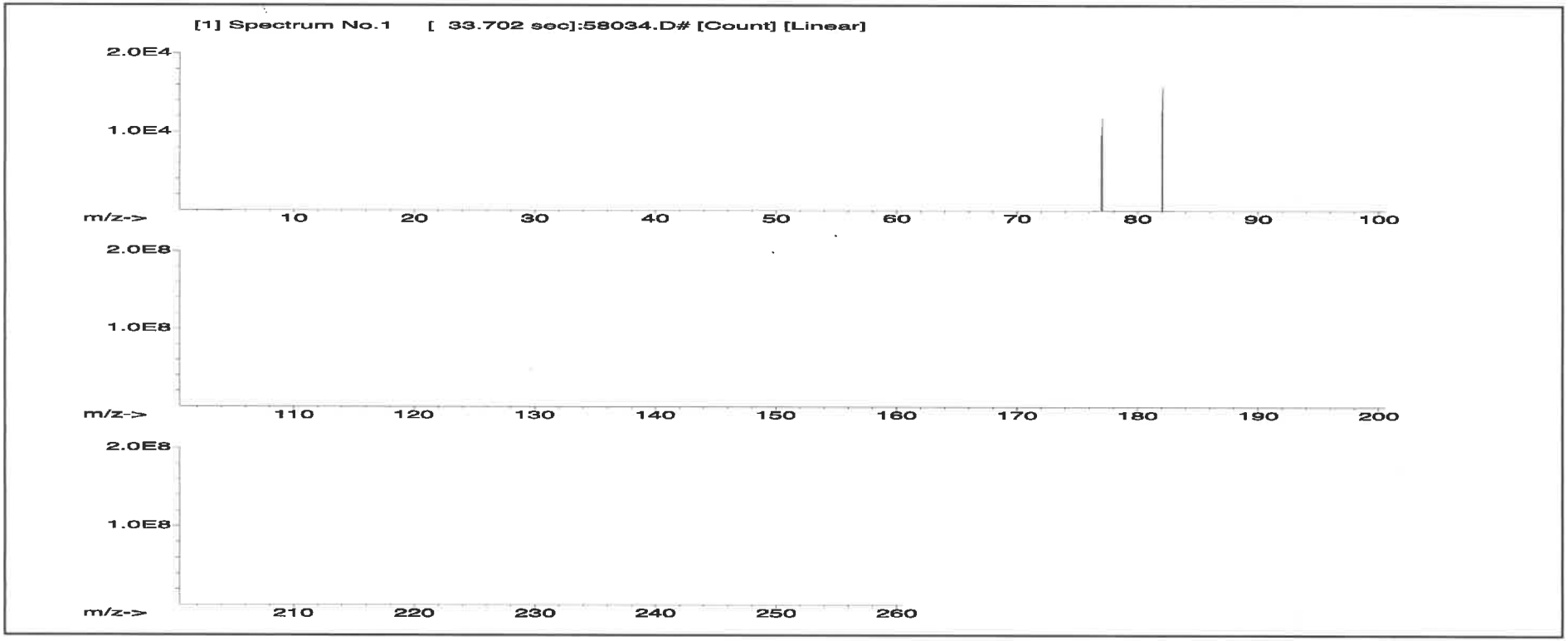
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57034**	24002546	Nitric Acid	
Lot Number:	**060624**			
Description:	**Selenium (Se)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060627			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty	

Formulated By:	Benson Chan	060624
Reviewed By:	Pedro L. Rentas	060624

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Selenium (Se)	58134	071223	0.1000	200.0	0.084	1000	10002.5	**1000.0**	**2.2**	7782-49-2	0.2 mg/m3	orl-rat 6700 mg/kg	3149



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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5969 R: 06/11/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

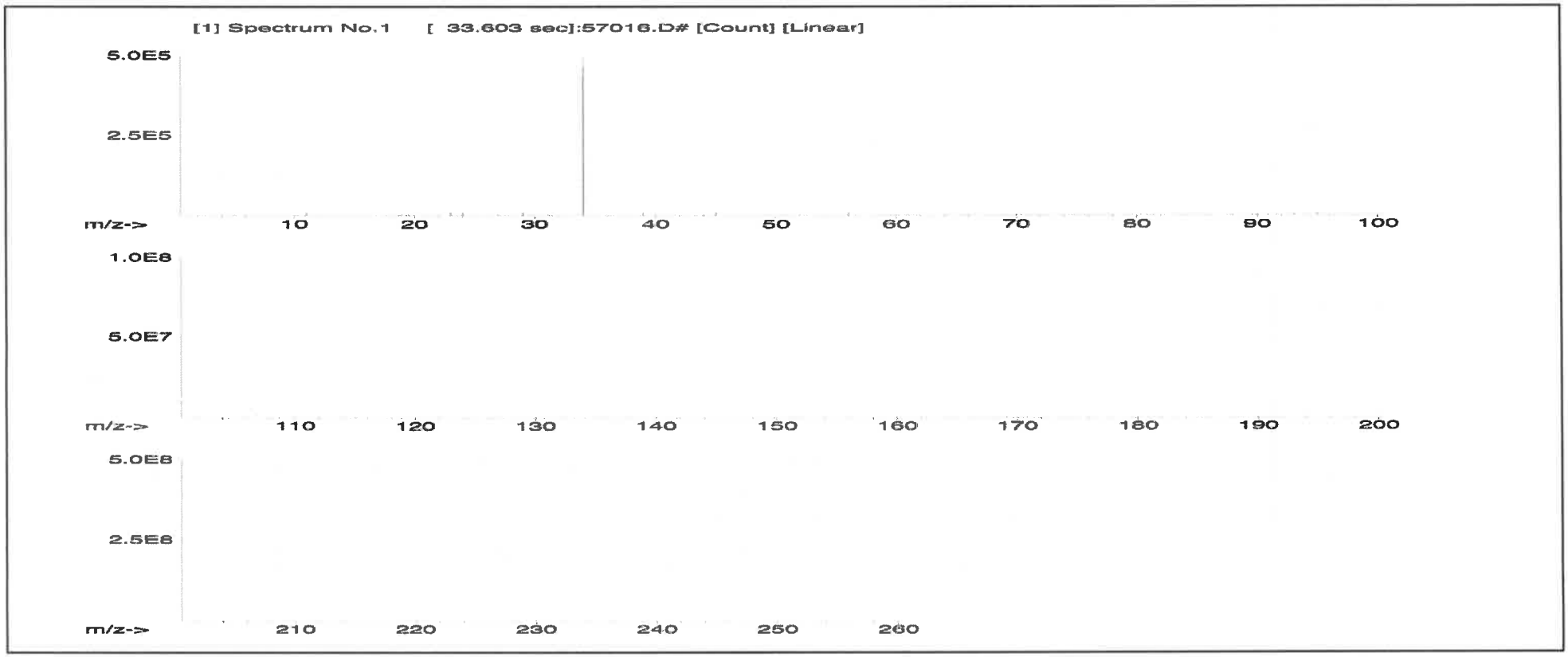
CERTIFIED WEIGHT REPORT:

Part Number:	**57016**	**Solvent:**	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	

Lot #

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



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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

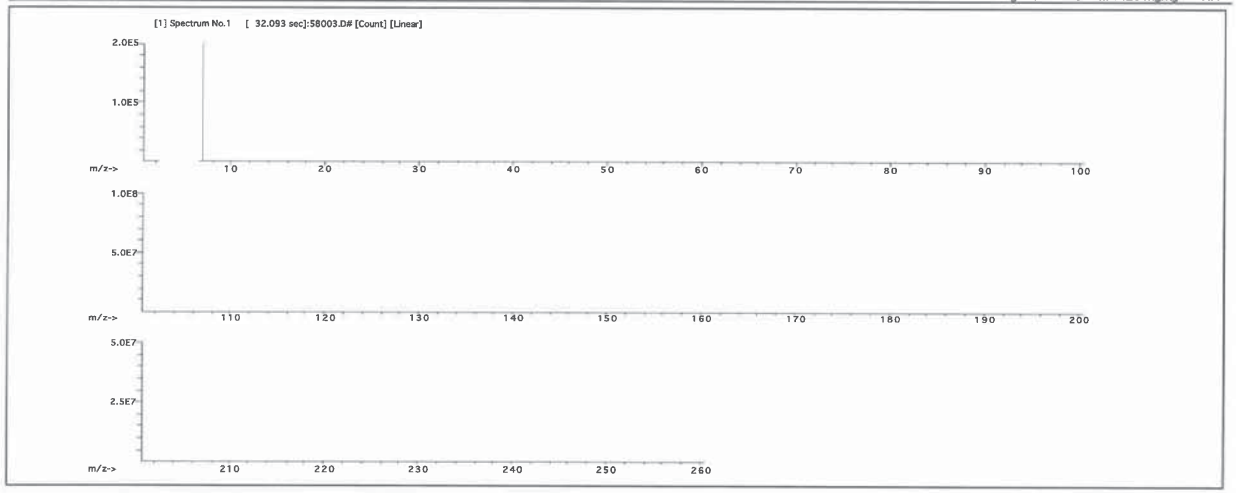
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:
Part Number:	**57003**	24002546	Nitric Acid
Lot Number:	**062124**		
Description:	**Lithium (Li)**		
		2.0%	5.0 (mL) Nitric Acid
Expiration Date:	062127		
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):	250.11	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



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).

INORGANIC VENTURES™
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Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
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MS984
R:6/14/24

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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:	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

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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



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MS985
R: 6/14/24

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 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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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:	T2-MEB714417
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	50.00 ± 0.26 µg/mL	Calcium, Ca	5 000 ± 22 µg/mL
Chromium, Cr	200.0 ± 1.0 µg/mL	Cobalt, Co	500.0 ± 2.4 µg/mL
Copper, Cu	250.0 ± 1.0 µg/mL	Iron, Fe	1 000 ± 4 µg/mL
Magnesium, Mg	5 000 ± 20 µg/mL	Manganese, Mn	500.0 ± 2.0 µg/mL
Nickel, Ni	500.0 ± 2.2 µg/mL	Potassium, K	5 000 ± 19 µg/mL
Silver, Ag	250.0 ± 1.1 µg/mL	Sodium, Na	5 000 ± 18 µg/mL
Vanadium, V	499.7 ± 2.2 µg/mL	Zinc, Zn	500.0 ± 2.2 µg/mL

Density: 1.118 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
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
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
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	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

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

- 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**

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

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 27, 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

- January 27, 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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Certificate of Analysis

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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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M6074
M6075
M6076
M6077

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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

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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.

- 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



Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

R -> 11/12/24

M6126

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

R -> 1/13/25

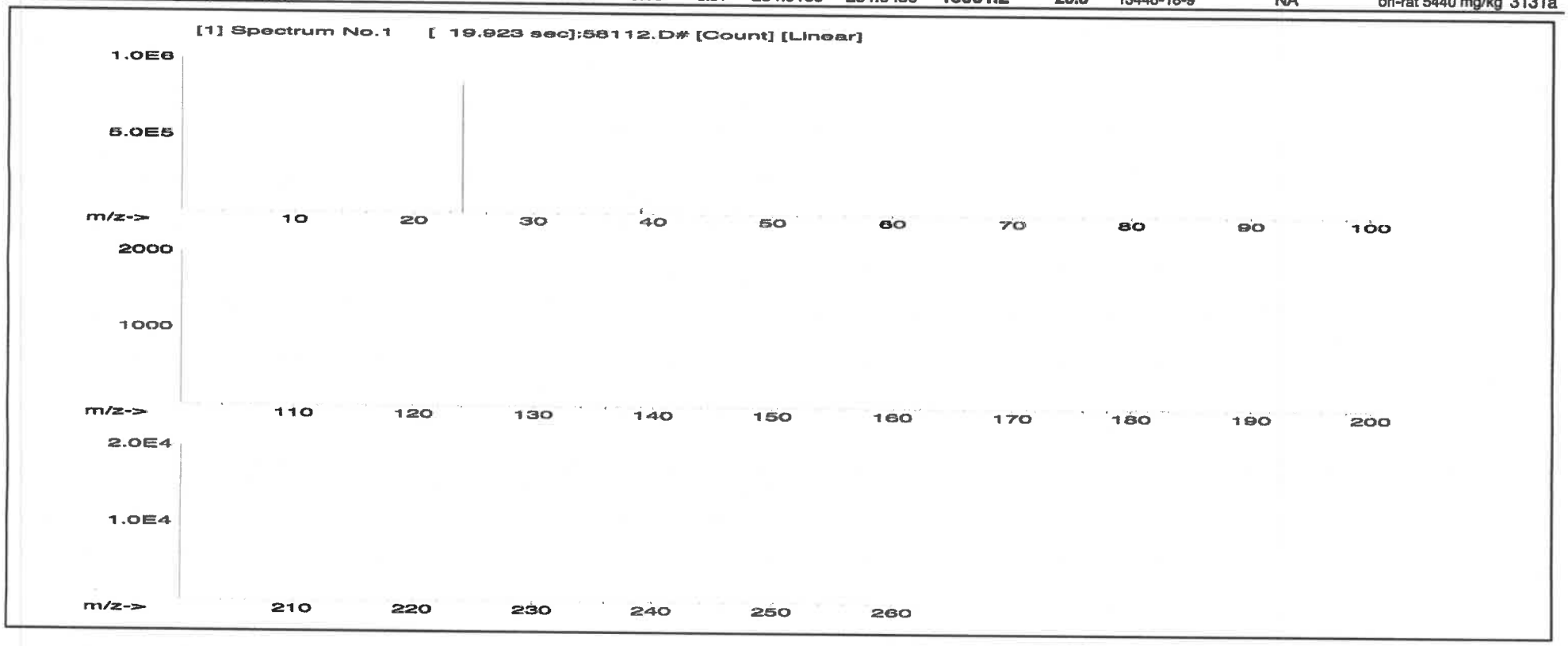
M 6127

			Lot #	
Part Number:	**58112**	**Solvent:**	24012496	Nitric Acid
Lot Number:	**112124**			
Description:	**Magnesium (Mg)**	2%	40.0 (mL)	Nitric Acid
Expiration Date:	112127			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**10000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty	

Giovanni Esposito

Formulated By:	Giovanni Esposito	112124
Reviewed By:	Pedro L. Rentas	112124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Magnesium nitrate hexahydrate (Mg)	IN030	MGD052023A1	10000	99.999	0.10	8.51	234.9183	234.9459	**10001.2**	**20.0**	13446-18-9	NA	orl-rat 5440 mg/kg	3131a



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).

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->1/13/28

M6128

Part Number:	**58025**	**Solvent:**	**Lot #** 24002546	Nitric Acid
Lot Number:	**101124**			
Description:	**Manganese (Mn)**	2%	80.0 (mL)	Nitric Acid
Expiration Date:	101127			
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):	4000.2	0.10	Flask Uncertainty	

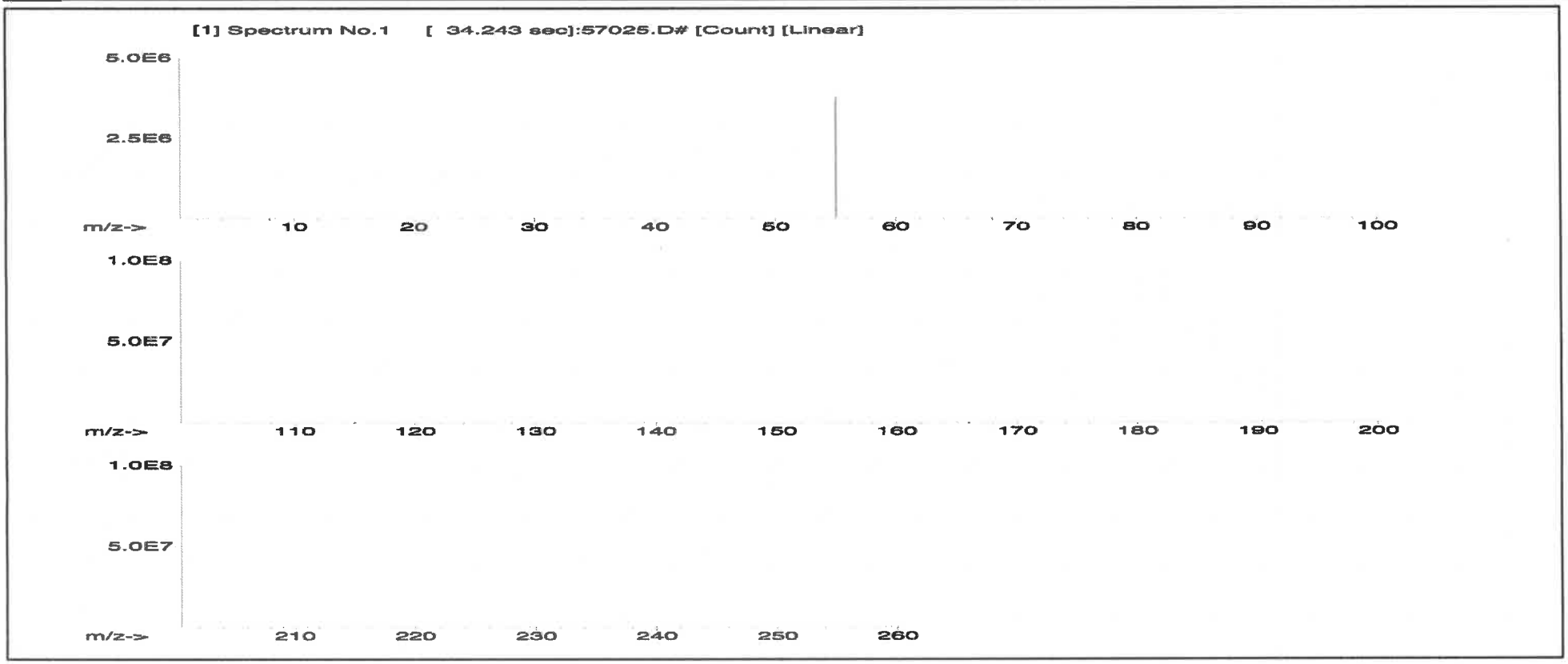
Giovanni Esposito

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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	T	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* 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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Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

M6137 R→10/3/24

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSI1
Lot Number:	V2-SI744713
Matrix:	tr. HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Silicon
Starting Material:	Silica
Starting Material Lot#:	1771
Starting Material Purity:	99.9981%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 6 µg/mL

Density: 1.003 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**999 ± 5 µg/mL** ICP Assay NIST SRM Traceable to 3150 Lot Number: S2-SI702546
Assay Method #2	**1000 ± 7 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2 (u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000310	M	Eu	<	0.000310	O	Na		0.001656	M	Se	<	0.022000	M	Zn	<	0.002500
M	Al		0.010787	M	Fe	<	0.027000	M	Nb	<	0.001300	s	Si	<		O	Zr	<	0.001900
M	As	<	0.001900	M	Ga	<	0.001300	M	Nd	<	0.000310	M	Sm	<	0.000310				
M	Au	<	0.000910	M	Gd	<	0.000310	M	Ni	<	0.005500	M	Sn		0.000096				
M	B		0.016180	M	Ge	<	0.001900	M	Os	<	0.000610	O	Sr		0.000092				
M	Ba		0.000096	M	Hf		0.000423	i	P	<		M	Ta		0.002542				
O	Be	<	0.000570	M	Hg	<	0.000610	M	Pb	<	0.000310	M	Tb	<	0.000310				
M	Bi	<	0.000310	M	Ho	<	0.000610	M	Pd	<	0.000610	M	Te	<	0.000910				
O	Ca		0.011557	M	In	<	0.000310	M	Pr	<	0.000310	M	Th	<	0.001900				
M	Cd	<	0.000310	M	Ir	<	0.000310	M	Pt	<	0.000310	M	Ti		0.001078				
M	Ce	<	0.000610	O	K		0.000577	M	Rb	<	0.009100	M	Tl	<	0.000310				
M	Co	<	0.001600	M	La	<	0.000310	M	Re	<	0.000310	M	Tm	<	0.000310				
M	Cr	<	0.010000	O	Li	<	0.000460	M	Rh	<	0.000310	M	U	<	0.000310				
M	Cs	<	0.000310	M	Lu	<	0.000310	M	Ru	<	0.000310	O	V	<	0.001300				
M	Cu	<	0.002500	O	Mg		0.001348	O	S	<	0.570000	M	W	<	0.001900				
M	Dy	<	0.000310	M	Mn	<	0.002500	M	Sb	<	0.000310	M	Y	<	0.000310				
M	Er	<	0.000310	M	Mo	<	0.000310	O	Sc	<	0.000590	M	Yb	<	0.000310				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 28.09 +4 6 Si(OH)x(F)y2-

Chemical Compatibility -Soluble in HCl, HF, H3PO4 H2SO4 and HNO3 as the Si(OH)x(F)y2-. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths, or high levels of transition elements unless they are fluorinated. Stable with most inorganic anions with a tendency to hydrolyze forming silicic acid (silicic acid is soluble up to ∼100 ppm in water) in all dilute acids except HF.

Stability - 2-100 ppb levels - stability unknown - (alone or mixed with all other metals) as the Si(OH)x(F)y2-. 1-10,000 ppm single element solutions as the Si(OH)x(F)y2- chemically stable for years in 2-5 % HNO3 / trace HF in a LDPE container.

Si Containing Samples (Preparation and Solution) -Metal (Soluble in 1:1:1 H2O / HF / HNO3); Oxide - SiO2, amorphic (dissolve by heating in 1:1:1 H2O / HF / HNO3); Oxide - quartz (fuse in Pt0 with Na2CO3); Geological Samples(fuse in Pt0with Na2CO3 followed by HCl solution of the fuseate); Organic Matrices containing silicates and non volatile silicon compounds (dry ash at 4500C in Pt0 and dissolve by gently warming with 1:1:1 H2O / HF / H2SO4 or fuse / ash with Na2CO3 and dissolve fuseate with HCl / H2O); Silicone Oils - dimethyl silicones depolymerize to form volatile monomer units when heated (Measure directly in alcoholic KOH / xylene mixture where sample is treated first with the KOH at 60-1000C to "unzip" the Si- O-Si polymeric structure or digest with conc. H2SO4 / H2O2 followed by cooling and dissolution of the dehydrated silica with HF.) Note that the direct analysis of silicone oils in an organic solvent will result in false high results due to high vapor pressure of volatile monomer units like hexamethylcyclotrisiloxane. The KOH forms the K2+Si(CH3)2O= salt which is not volatile at room temperature.

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 28 amu	4000 - 8000 ppt	N/A	N2, 12C16O
ICP-OES 212.412 nm	0.02/0.01 µg/mL	1	Hf, Os, Mo, Ta
ICP-OES 251.611 nm	0.012/0.003 µg/mL	1	Ta, U, Zn, Th
ICP-OES 288.158 nm	0.03/0.004 µg/mL	1	Ta, Ce, Cr, Cd, Th

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 10, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 10, 2029**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor



Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

M6138
R->1/13/25

CERTIFIED WEIGHT REPORT:

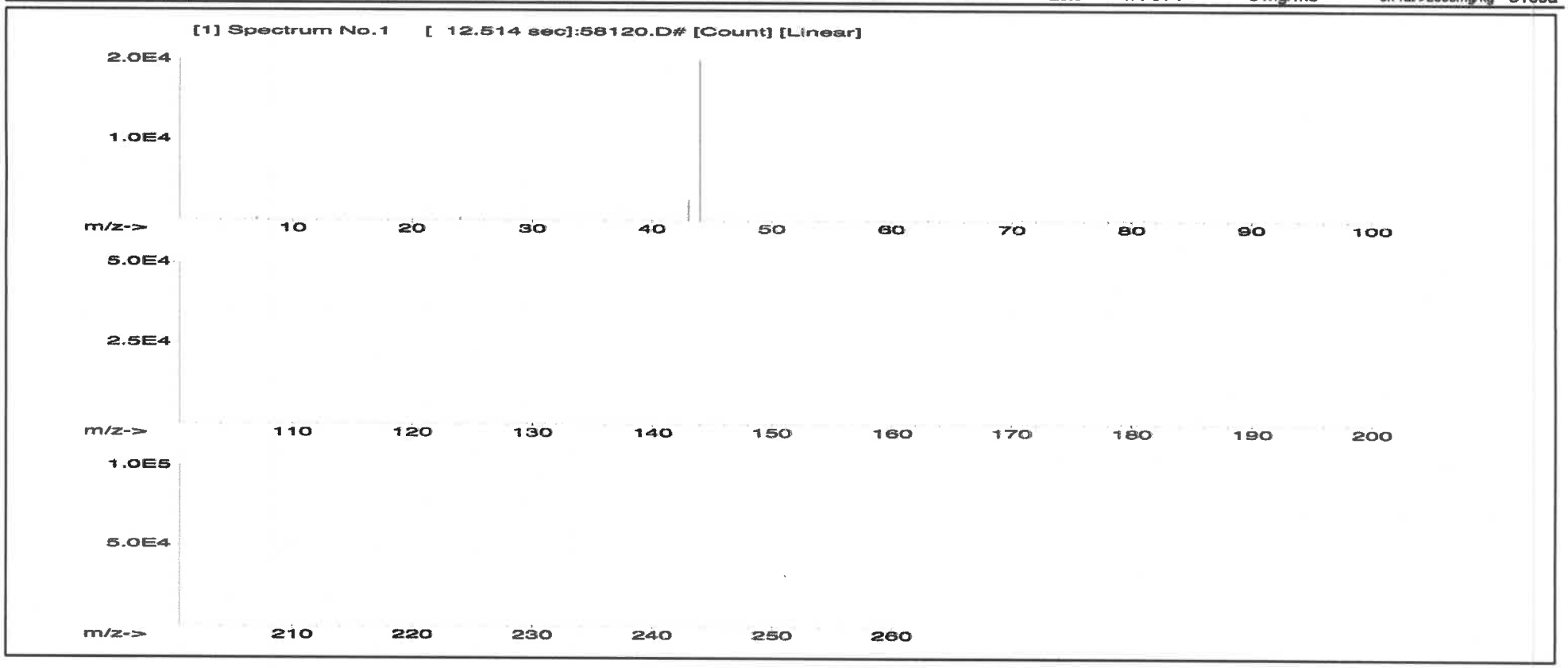
Part Number: 58120
Lot Number: 121824
Description: Calcium (Ca)
Expiration Date: 121827
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 4000.1

	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
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



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.
* 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

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

R-> 1/13/25

Part Number: 57119
Lot Number: 103024
Description: Potassium (K)

M6141
M6142
M6143

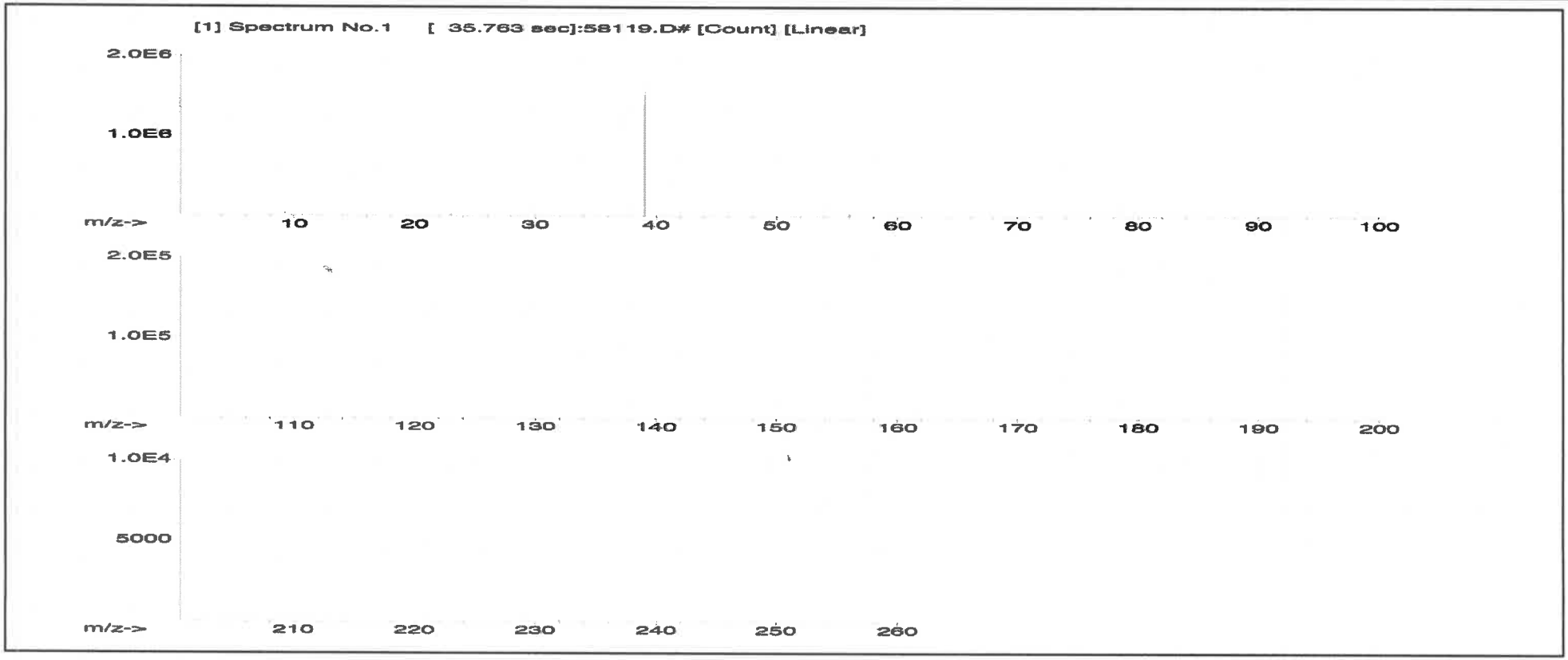
Expiration Date: 103027
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

	Lot #		
Solvent:	24002546	Nitric Acid	
	2%	80.0 (mL)	Nitric Acid
	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	4000.1	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



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.
* 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

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

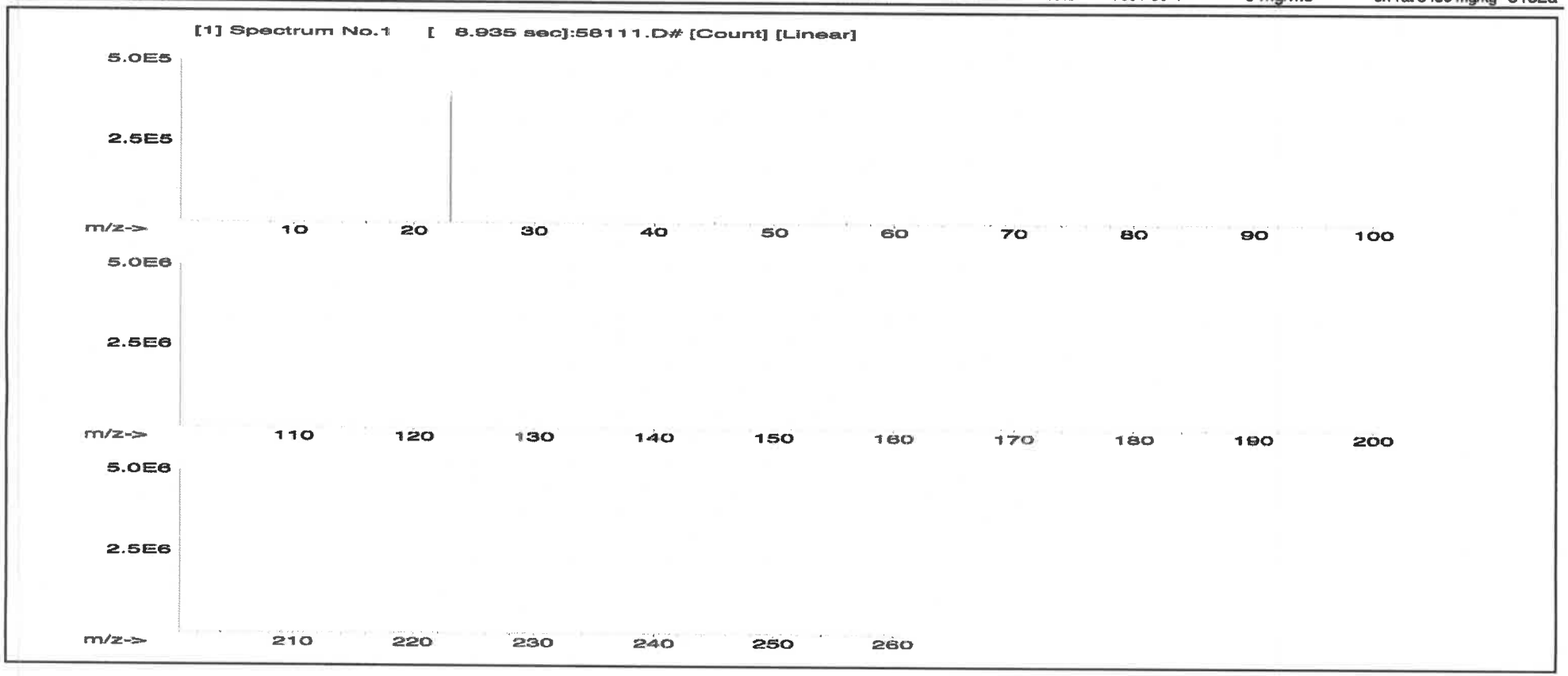
CERTIFIED WEIGHT REPORT:

R->1/13/25

Part Number:	**58111**		**Lot #**		
Lot Number:	**072424**	**Solvent:**	24002546	Nitric Acid	
Description:	**Sodium (Na)**				
		MG144 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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	T	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

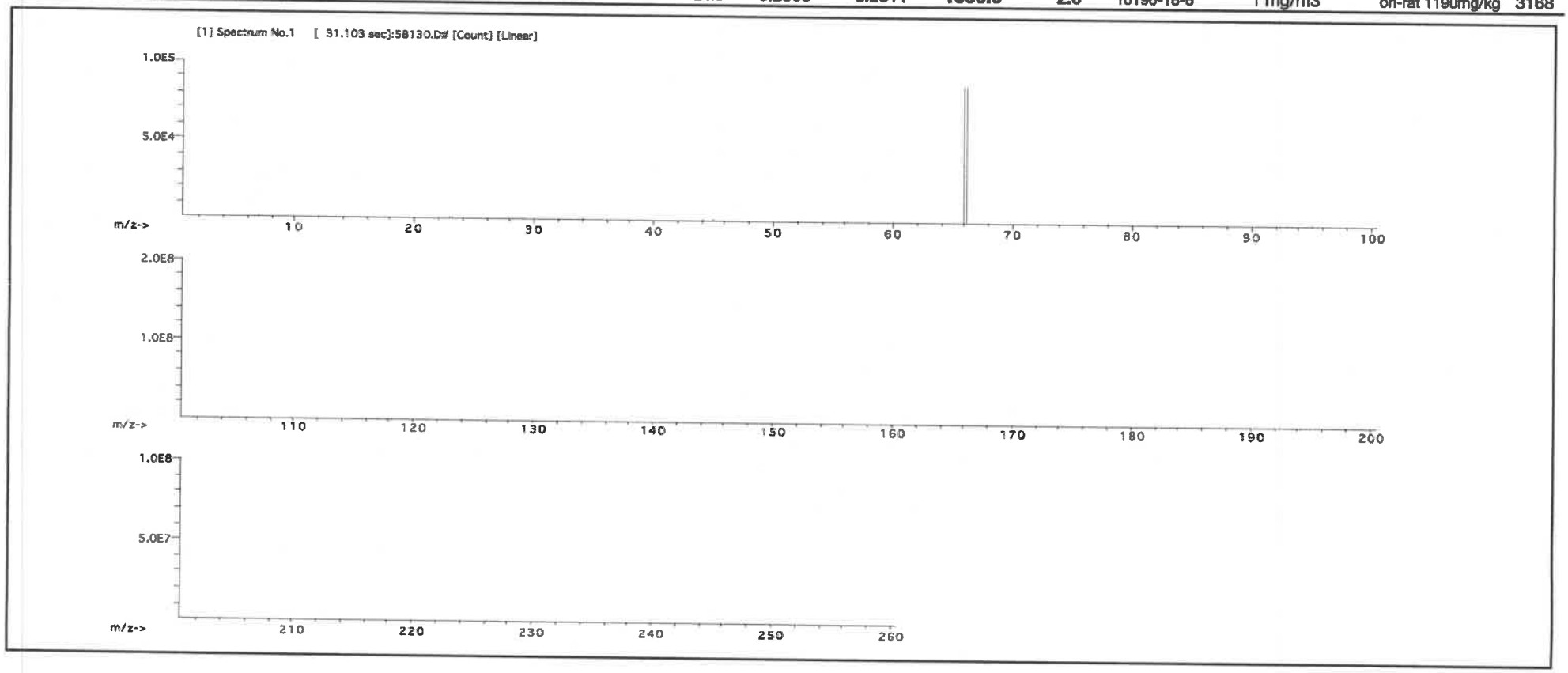
CERTIFIED WEIGHT REPORT:

Part Number:	**58030**	R → 1/13/25	**Solvent:**	**Lot #** 24012496	Nitric Acid
Lot Number:	**121724**				
Description:	**Zinc (Zn)**	M6145	2%	40.0 (mL)	Nitric Acid
Expiration Date:	121727				
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	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	orl-rat 1190mg/kg	3168



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	T
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

R : 4/20/21

QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

M6150

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	**CN^-**	99

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

M6151

R-> 1/15/25

Material No.: 9530-33
Batch No.: 22G2862015
Manufactured Date: 2022-06-15
Retest Date: 2027-06-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl_2)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO_4)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO_3)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH_4)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
Trace Impurities - Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities - Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Magnesium (Mg)	≤ 10.0 ppb	2.9 ppb
Trace Impurities - Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities - Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities - Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities - Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities - Niobium (Nb)	≤ 1.0 ppb	0.8 ppb
Trace Impurities - Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities - Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities - Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities - Silver (Ag)	≤ 1.0 ppb	0.5 ppb
Trace Impurities - Sodium (Na)	≤ 100.0 ppb	2.3 ppb
Trace Impurities - Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Tantalum (Ta)	≤ 1.0 ppb	1.6 ppb
Trace Impurities - Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Tin (Sn)	≤ 5.0 ppb	4.0 ppb
Trace Impurities - Titanium (Ti)	≤ 1.0 ppb	1.5 ppb
Trace Impurities - Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities - Zirconium (Zr)	≤ 1.0 ppb	0.3 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result

For Laboratory,Research,or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

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

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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

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Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

m-5162

R. Date :- 04/27/2025

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

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24H0162012

Test	Specification	Result
Trace Impurities - Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities - Potassium (K)	≤ 50 ppb	< 1 ppb
Trace Impurities - Silicon (Si)	≤ 50 ppb	1 ppb
Trace Impurities - Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Sodium (Na)	≤ 150.0 ppb	< 1.0 ppb
Trace Impurities - Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Tantalum (Ta)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Thallium (Tl)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Tin (Sn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count - 0.5 µm and greater	≤ 60 par/ml	13 par/ml
Particle Count - 1.0 µm and greater	≤ 10 par/ml	5 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

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

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:	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

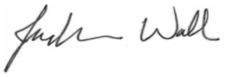
Certificate Prepared By:

Justin Dirico
Stock Processing Supervisor



Certificate Approved By:

Jodie Wall
Stock VSM Coordinator



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Certificate of Analysis

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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:	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

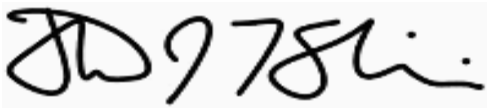
- Sealed TCT Bag Open Date: _____

- 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



Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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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-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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

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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"

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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

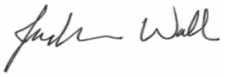
Certificate Prepared By:

Justin Dirico
Stock Processing Supervisor



Certificate Approved By:

Jodie Wall
Stock VSM Coordinator



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6030

R: 8/5/24

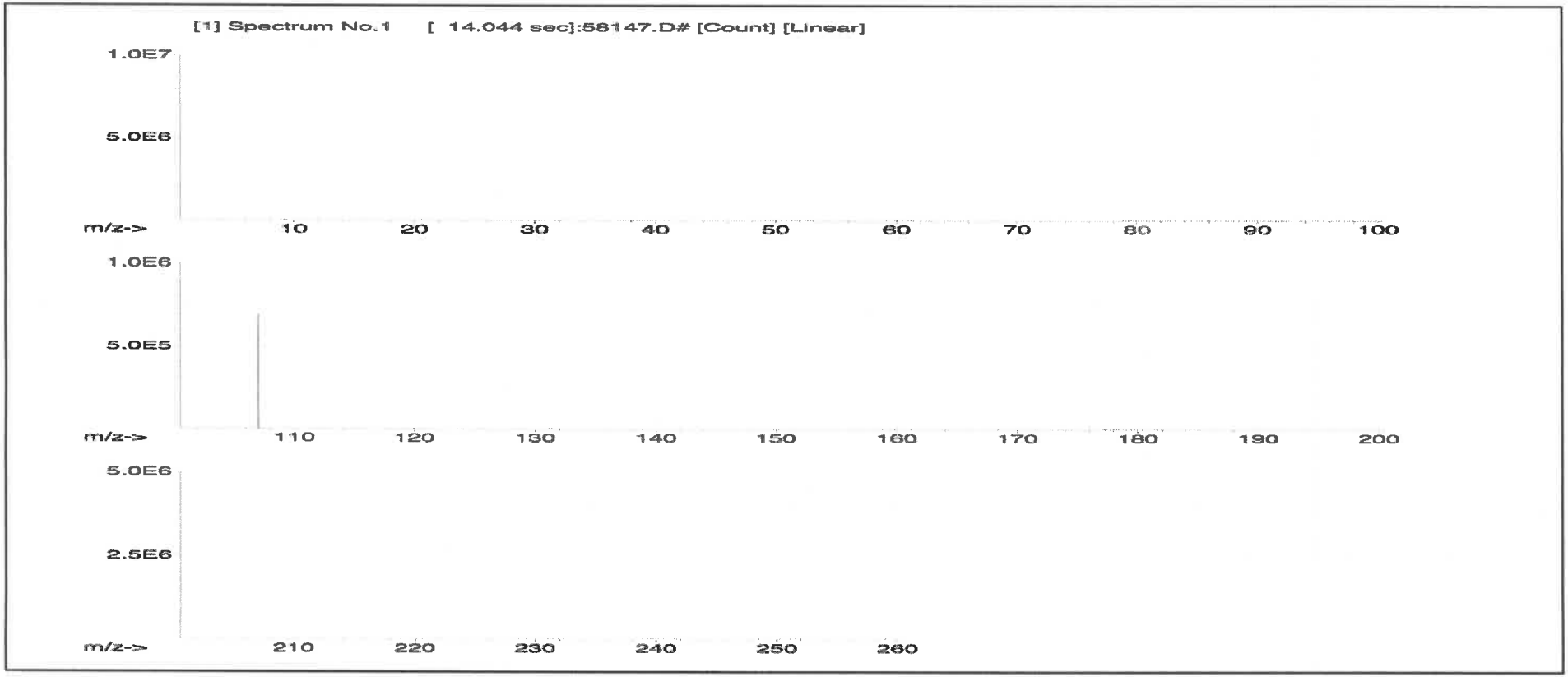
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57047**		**Lot #**		
Lot Number:	**122823**	**Solvent:**	24002546	Nitric Acid	
Description:	**Silver (Ag)**	2%	80.0 (mL)	Nitric Acid	
Expiration Date:	122826				
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):	4000.30	0.058	Flask 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



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:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 10/18/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

MG146

		Lot #	Solvent:	
Part Number:	**57051**	24002546	Nitric Acid	
Lot Number:	**071724**			
Description:	**Antimony (Sb)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	071727			
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):	2000.26	0.058	Flask Uncertainty	

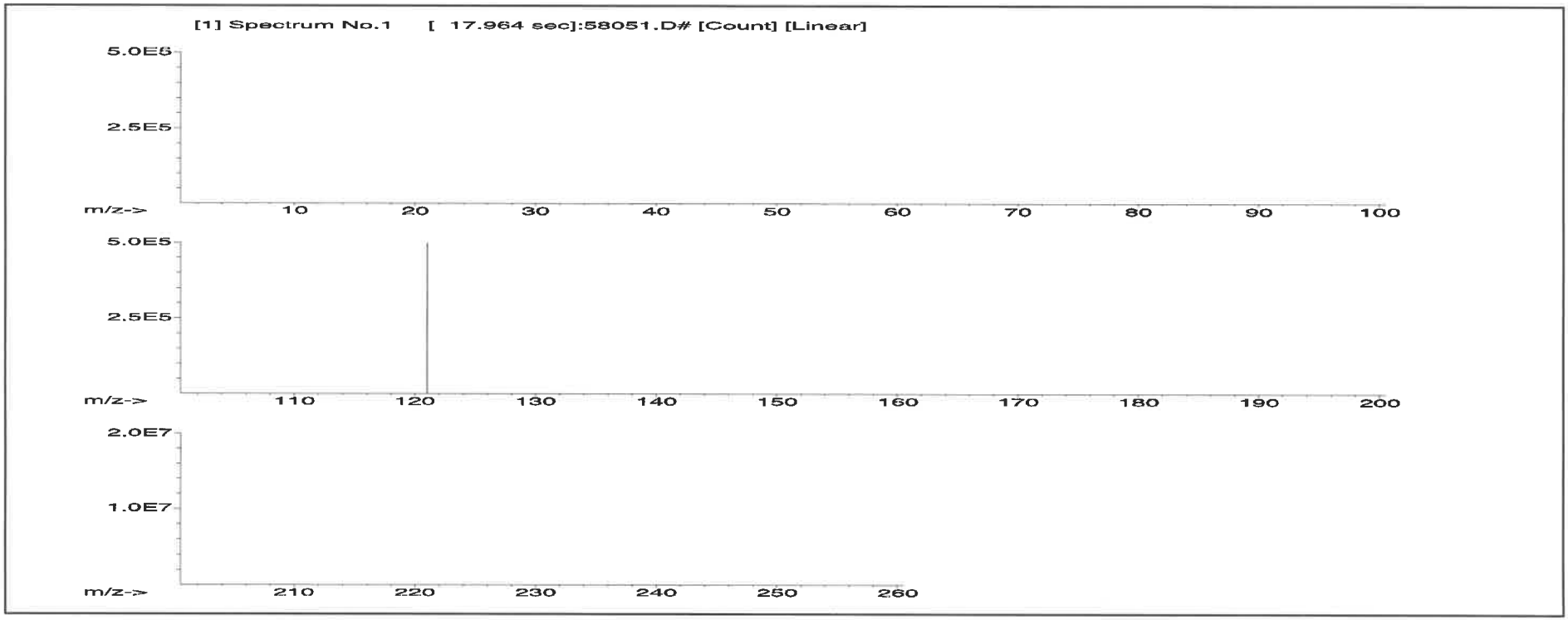
Giovanni Esposito

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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	T	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

APTIM

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: *ICP-AES ICS*

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.

M6152

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,

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

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.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
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APTIM

Instructions for QATS Reference Material: *ICP-AES ICS*

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.

M6155

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,

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

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.

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

R: 8/5/24 M6019

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 888.01
ACCREDITED Reference Material Producer Certificate 888.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSR1
Lot Number:	U2-SR730227
Matrix:	0.1% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Strontium
Starting Material:	SrCO3
Starting Material Lot#:	M2-2192
Starting Material Purity:	99.9993%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1001 ± 3 µg/mL

Density: 1.000 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **998 ± 4 µg/mL**
ICP Assay NIST SRM Traceable to 3153a Lot Number: K2-SR650985

Assay Method #2 **1001 ± 3 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **1001 ± 2 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001980	M	Eu	<	0.000495	O	Na		0.000200	M	Se	<	0.013862	O	Zn		0.000143
O	Al		0.000370	O	Fe		0.000410	M	Nb	<	0.000495	i	Si	<		M	Zr	<	0.000495
M	As	<	0.000495	M	Ga	<	0.000495	M	Nd	<	0.000495	M	Sm	<	0.000495				
M	Au	<	0.000989	M	Gd	<	0.000495	O	Ni	<	0.007631	M	Sn	<	0.000990				
M	B	<	0.039606	M	Ge	<	0.000495	M	Os	<	0.000494	s	Sr	<					
M	Ba		0.006486	M	Hf	<	0.000495	i	P	<		M	Ta	<	0.000495				
M	Be	<	0.000990	M	Hg	<	0.000989	M	Pb	<	0.002970	M	Tb	<	0.000495				
M	Bi	<	0.000495	M	Ho	<	0.000495	M	Pd	<	0.003957	M	Te	<	0.027724				
O	Ca		0.004255	M	In	<	0.000495	M	Pr	<	0.000495	M	Th	<	0.000990				
M	Cd		0.001339	M	Ir	<	0.000494	M	Pt	<	0.002970	M	Ti	<	0.005940				
M	Ce	<	0.004950	O	K	<	0.008184	M	Rb	<	0.002970	M	Tl	<	0.000495				
M	Co	<	0.000495	M	La	<	0.000495	M	Re	<	0.000495	M	Tm	<	0.000495				
O	Cr	<	0.003207	O	Li	<	0.000884	O	Rh	<	0.012829	M	U	<	0.001485				
M	Cs	<	0.000990	M	Lu	<	0.002970	M	Ru	<	0.000989	M	V	<	0.001980				
M	Cu		0.000099	O	Mg		0.000064	i	S	<		M	W	<	0.003960				
M	Dy	<	0.000495	O	Mn		0.000066	M	Sb	<	0.014852	O	Y	<	0.000995				
M	Er	<	0.000495	M	Mo	<	0.001980	M	Sc	<	0.001980	M	Yb	<	0.000495				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 87.62 +2 6 $Sr(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1 - 3.5% HNO_3 / LDPE container.

Sr Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO_3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 88 amu	1200 ppt	N/A	72Ge16O, 176Yb+2, 176Lu+2 , 176Hf+2
ICP-OES 407.771 nm	0.0004 / 0.00006 µg/mL	1	U, Ce
ICP-OES 421.552 nm	0.0008 / 0.00004 µg/mL	1	Rb
ICP-OES 460.733 nm	0.07 / 0.003 µg/mL	1	Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 03, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 03, 2028**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R ! 8/5/24

M6023

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

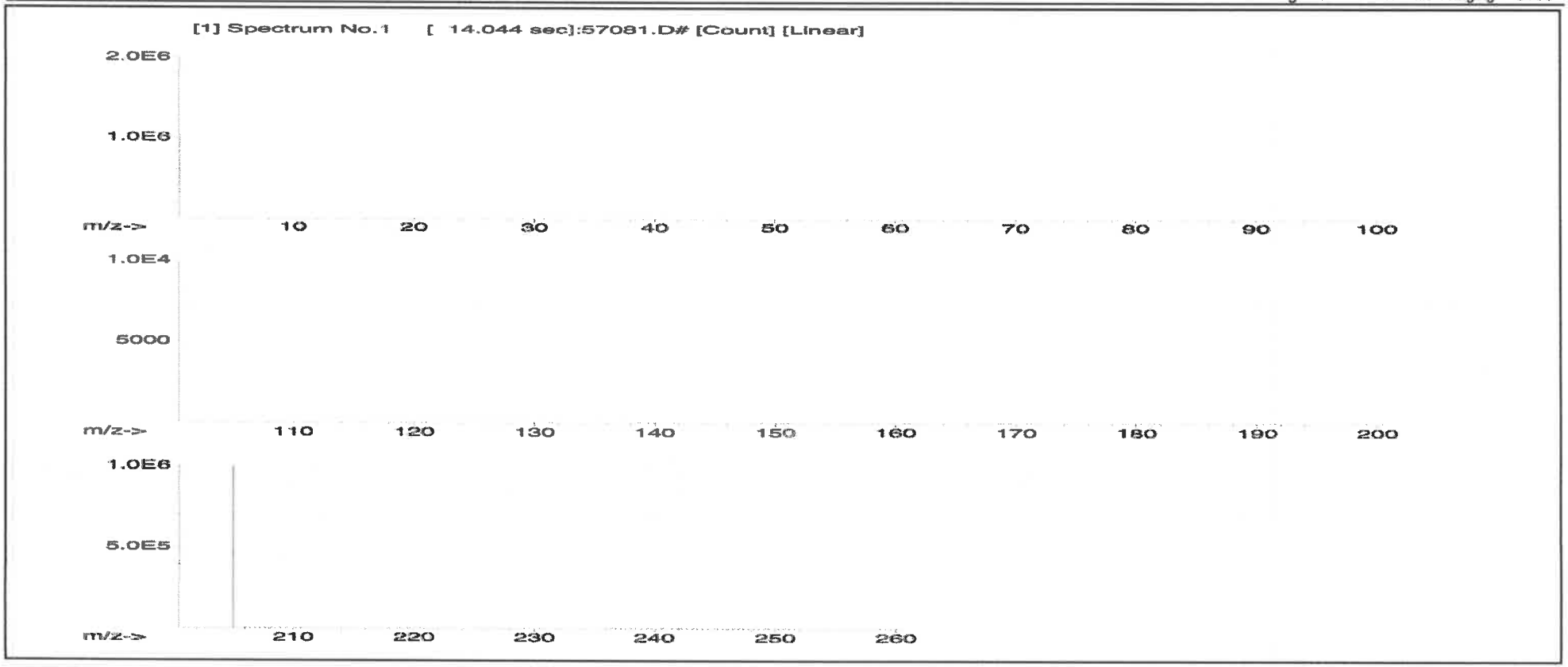
CERTIFIED WEIGHT REPORT:

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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	T	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6021

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Bc. 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	

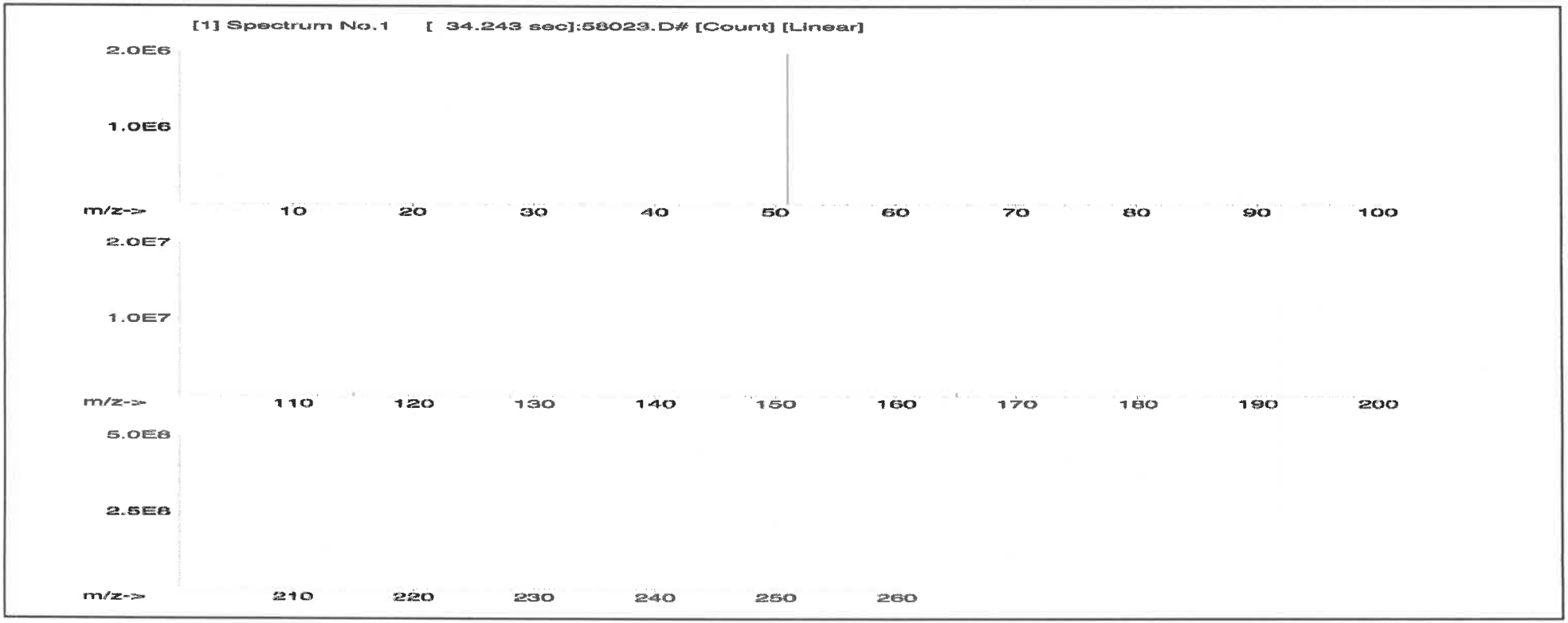
Aleah O'Brady

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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	T
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
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* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO.
QUOTE NO. Q2303
COC Number 2046552

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Gannett Fleming
ADDRESS: 1010 Adams Ave
CITY Audobon STATE: PA ZIP: 19405
ATTENTION: Joe Krupansky
PHONE: 610-301-8342 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Amtrak Replacement of SB
PROJECT NO.: 9500000818 LOCATION: Kearny, NJ
PROJECT MANAGER: Joe Krupansky
e-mail: QAQC@BEMSYS.com
PHONE: 610-301-8342 FAX:

CLIENT BILLING INFORMATION

BILL TO: Alliance PO#:
ADDRESS: 284 Sheffield St
CITY Mountainside STATE: NJ ZIP: 07092
ATTENTION: Samaula Beasly PHONE: 908-788-3148

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): 10 DAYS*
EDD: 10 DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only)
- ☐ Level 2 (Results + QC)
- ☐ Level 3 (Results + QC + Raw Data)
- ☐ Level 4 (QC + Full Raw Data)
- ☒ NJ Reduced
- ☐ US EPA CLP
- ☐ NYS ASP A
- ☐ NYS ASP B
- ☐ Other _____
- ☐ EDD FORMAT BEM EDD

ANALYSIS

1: PCBs
2: TAL Metals
3: Cr(VI) Cr(III)
4
5
6
7
8
9

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1.	B-165-SB01	S		X	6/11/25	11:10	1	X	X	X							
2.	B-170-SB03	S		X	6/11/25	11:15	1	X	X	X							
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. Jessy Martinez	6/11/25 13:07	1.
2.		2.
3.		3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 2.7 °C
Comments: B-165-SB01 & B-170-SB03 have limited volume

Page 1 of 1

CLIENT: ☑ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

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WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY

284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

QA Control Code: A2070148