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Cover Page

Order ID : Q2376

Project ID : Waste Water 2025

Client : LEO Ingwer, Inc.

Lab Sample Number	Client Sample Number
Q2376-01	EFFLUENT
Q2376-02	EFFLUENT-METALS

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: 7/2/2025

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 #: Q2376

	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: KETAN PATEL **Date:** 07/02/2025

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LAB CHRONICLE

OrderID:	Q2376	**OrderDate:**	6/20/2025 11:20:00 AM
Client:	LEO Ingwer, Inc.	**Project:**	Waste Water 2025
Contact:	Matt Selig	**Location:**	D51

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2376-02	**EFFLUENT-METALS**	**Water**			**06/19/25**			**06/20/25**
			Mercury	245.1		06/27/25	06/27/25	
			Metals ICP-Group1	200.7		06/25/25	06/26/25	

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Hit Summary Sheet
SW-846

SDG No.: Q2376 **Order ID:** Q2376

Client: LEO Ingwer, Inc. **Project ID:** Waste Water 2025

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : EFFLUENT-METALS								
Q2376-02	EFFLUENT-METALS	Water	Cadmium	0.32	J	0.31	3.00	ug/L
Q2376-02	EFFLUENT-METALS	Water	Chromium	343		0.53	5.00	ug/L
Q2376-02	EFFLUENT-METALS	Water	Copper	1460		1.89	10.0	ug/L
Q2376-02	EFFLUENT-METALS	Water	Lead	6.78		1.21	6.00	ug/L
Q2376-02	EFFLUENT-METALS	Water	Mercury	0.17	J	0.027	0.20	ug/L
Q2376-02	EFFLUENT-METALS	Water	Nickel	220		1.90	20.0	ug/L
Q2376-02	EFFLUENT-METALS	Water	Silver	41.6		0.81	5.00	ug/L
Q2376-02	EFFLUENT-METALS	Water	Zinc	259		1.60	20.0	ug/L

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TECHNICAL GROUP

SAMPLE DATA

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Report of Analysis

Client:	LEO Ingwer, Inc.	Date Collected:	06/19/25
Project:	Waste Water 2025	Date Received:	06/20/25
Client Sample ID:	EFFLUENT-METALS	SDG No.:	Q2376
Lab Sample ID:	Q2376-02	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-43-9	Cadmium	0.32	J	1	0.31	3.00	ug/L	06/25/25 14:50	06/26/25 19:18	EPA 200.7	E200.7
7440-47-3	Chromium	343		1	0.53	5.00	ug/L	06/25/25 14:50	06/26/25 19:18	EPA 200.7	E200.7
7440-50-8	Copper	1460		1	1.89	10.0	ug/L	06/25/25 14:50	06/26/25 19:18	EPA 200.7	E200.7
7439-92-1	Lead	6.78		1	1.21	6.00	ug/L	06/25/25 14:50	06/26/25 19:18	EPA 200.7	E200.7
7439-97-6	Mercury	0.17	J	1	0.027	0.20	ug/L	06/27/25 10:10	06/27/25 13:43	E245.1	
7439-98-7	Molybdenum	8.80	U	1	8.80	100	ug/L	06/25/25 14:50	06/26/25 19:18	EPA 200.7	E200.7
7440-02-0	Nickel	220		1	1.90	20.0	ug/L	06/25/25 14:50	06/26/25 19:18	EPA 200.7	E200.7
7440-22-4	Silver	41.6		1	0.81	5.00	ug/L	06/25/25 14:50	06/26/25 19:18	EPA 200.7	E200.7
7440-66-6	Zinc	259		1	1.60	20.0	ug/L	06/25/25 14:50	06/26/25 19:18	EPA 200.7	E200.7

Color Before:	Colorless	Clarity Before:	Cloudy	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group1				

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: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

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
ICV09	Mercury	4.19	4.0	105	95 - 105	CV	06/27/2025	12:54	LB136313

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

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
CCV27	Mercury	5.15	5.0	103	90 - 110	CV	06/27/2025	12:59	LB136313
CCV28	Mercury	4.97	5.0	99	90 - 110	CV	06/27/2025	13:49	LB136313
CCV29	Mercury	4.88	5.0	98	90 - 110	CV	06/27/2025	14:01	LB136313

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

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	Cadmium	1960	2000	98	95 - 105	P	06/26/2025	17:07	LB136305
	Chromium	783	800	98	95 - 105	P	06/26/2025	17:07	LB136305
	Copper	1020	1000	102	95 - 105	P	06/26/2025	17:07	LB136305
	Lead	3870	4000	97	95 - 105	P	06/26/2025	17:07	LB136305
	Molybdenum	4010	4000	100	95 - 105	P	06/26/2025	17:07	LB136305
	Nickel	1940	2000	97	95 - 105	P	06/26/2025	17:07	LB136305
	Silver	997	1000	100	95 - 105	P	06/26/2025	17:07	LB136305
	Zinc	1950	2000	97	95 - 105	P	06/26/2025	17:07	LB136305

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

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	Cadmium	5.76	6.0	96	80 - 120	P	06/26/2025	17:19	LB136305
	Chromium	11.5	10.0	115	80 - 120	P	06/26/2025	17:19	LB136305
	Copper	22.6	20.0	113	80 - 120	P	06/26/2025	17:19	LB136305
	Lead	13.5	12.0	112	80 - 120	P	06/26/2025	17:19	LB136305
	Molybdenum	201	200	101	80 - 120	P	06/26/2025	17:19	LB136305
	Nickel	39.5	40.0	99	80 - 120	P	06/26/2025	17:19	LB136305
	Silver	10.2	10.0	102	80 - 120	P	06/26/2025	17:19	LB136305
	Zinc	41.5	40.0	104	80 - 120	P	06/26/2025	17:19	LB136305

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Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

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	Cadmium	2480	2500	99	90 - 110	P	06/26/2025	17:55	LB136305
	Chromium	1010	1000	101	90 - 110	P	06/26/2025	17:55	LB136305
	Copper	1260	1250	101	90 - 110	P	06/26/2025	17:55	LB136305
	Lead	4910	5000	98	90 - 110	P	06/26/2025	17:55	LB136305
	Molybdenum	4960	5000	99	90 - 110	P	06/26/2025	17:55	LB136305
	Nickel	2460	2500	99	90 - 110	P	06/26/2025	17:55	LB136305
	Silver	1250	1250	100	90 - 110	P	06/26/2025	17:55	LB136305
	Zinc	2550	2500	102	90 - 110	P	06/26/2025	17:55	LB136305
CCV02	Cadmium	2470	2500	99	90 - 110	P	06/26/2025	18:48	LB136305
	Chromium	1040	1000	104	90 - 110	P	06/26/2025	18:48	LB136305
	Copper	1240	1250	99	90 - 110	P	06/26/2025	18:48	LB136305
	Lead	4900	5000	98	90 - 110	P	06/26/2025	18:48	LB136305
	Molybdenum	4950	5000	99	90 - 110	P	06/26/2025	18:48	LB136305
	Nickel	2470	2500	99	90 - 110	P	06/26/2025	18:48	LB136305
	Silver	1240	1250	100	90 - 110	P	06/26/2025	18:48	LB136305
	Zinc	2590	2500	104	90 - 110	P	06/26/2025	18:48	LB136305
CCV03	Cadmium	2440	2500	98	90 - 110	P	06/26/2025	19:27	LB136305
	Chromium	1060	1000	106	90 - 110	P	06/26/2025	19:27	LB136305
	Copper	1230	1250	99	90 - 110	P	06/26/2025	19:27	LB136305
	Lead	4840	5000	97	90 - 110	P	06/26/2025	19:27	LB136305
	Molybdenum	4910	5000	98	90 - 110	P	06/26/2025	19:27	LB136305
	Nickel	2450	2500	98	90 - 110	P	06/26/2025	19:27	LB136305
	Silver	1240	1250	99	90 - 110	P	06/26/2025	19:27	LB136305
	Zinc	2590	2500	103	90 - 110	P	06/26/2025	19:27	LB136305
CCV04	Cadmium	2480	2500	99	90 - 110	P	06/26/2025	20:02	LB136305
	Chromium	1050	1000	105	90 - 110	P	06/26/2025	20:02	LB136305
	Copper	1220	1250	98	90 - 110	P	06/26/2025	20:02	LB136305
	Lead	4900	5000	98	90 - 110	P	06/26/2025	20:02	LB136305
	Molybdenum	4960	5000	99	90 - 110	P	06/26/2025	20:02	LB136305
	Nickel	2470	2500	99	90 - 110	P	06/26/2025	20:02	LB136305
	Silver	1240	1250	99	90 - 110	P	06/26/2025	20:02	LB136305
	Zinc	2600	2500	104	90 - 110	P	06/26/2025	20:02	LB136305
CCV05	Cadmium	2500	2500	100	90 - 110	P	06/26/2025	20:46	LB136305
	Chromium	1050	1000	105	90 - 110	P	06/26/2025	20:46	LB136305

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

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	Copper	1270	1250	102	90 - 110	P	06/26/2025	20:46	LB136305
	Lead	4950	5000	99	90 - 110	P	06/26/2025	20:46	LB136305
	Molybdenum	4950	5000	99	90 - 110	P	06/26/2025	20:46	LB136305
	Nickel	2480	2500	99	90 - 110	P	06/26/2025	20:46	LB136305
	Silver	1240	1250	100	90 - 110	P	06/26/2025	20:46	LB136305
	Zinc	2640	2500	106	90 - 110	P	06/26/2025	20:46	LB136305

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

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	Cadmium	1930	2000	97	95 - 105	P	07/03/2025	14:50	LB136377
	Chromium	782	800	98	95 - 105	P	07/03/2025	14:50	LB136377
	Copper	969	1000	97	95 - 105	P	07/03/2025	14:50	LB136377
	Lead	3960	4000	99	95 - 105	P	07/03/2025	14:50	LB136377
	Molybdenum	3940	4000	98	95 - 105	P	07/03/2025	14:50	LB136377
	Nickel	1970	2000	99	95 - 105	P	07/03/2025	14:50	LB136377
	Silver	972	1000	97	95 - 105	P	07/03/2025	14:50	LB136377
	Zinc	1960	2000	98	95 - 105	P	07/03/2025	14:50	LB136377

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

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	Cadmium	5.18	6.0	86	80 - 120	P	07/03/2025	14:55	LB136377
	Chromium	10.7	10.0	107	80 - 120	P	07/03/2025	14:55	LB136377
	Copper	20.2	20.0	101	80 - 120	P	07/03/2025	14:55	LB136377
	Lead	10.9	12.0	91	80 - 120	P	07/03/2025	14:55	LB136377
	Molybdenum	202	200	101	80 - 120	P	07/03/2025	14:55	LB136377
	Nickel	37.6	40.0	94	80 - 120	P	07/03/2025	14:55	LB136377
	Silver	10.8	10.0	108	80 - 120	P	07/03/2025	14:55	LB136377
	Zinc	40.4	40.0	101	80 - 120	P	07/03/2025	14:55	LB136377

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Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

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	Cadmium	2330	2500	93	90 - 110	P	07/03/2025	16:06	LB136377
	Chromium	958	1000	96	90 - 110	P	07/03/2025	16:06	LB136377
	Copper	1180	1250	94	90 - 110	P	07/03/2025	16:06	LB136377
	Lead	4690	5000	94	90 - 110	P	07/03/2025	16:06	LB136377
	Molybdenum	4830	5000	97	90 - 110	P	07/03/2025	16:06	LB136377
	Nickel	2320	2500	93	90 - 110	P	07/03/2025	16:06	LB136377
	Silver	1250	1250	100	90 - 110	P	07/03/2025	16:06	LB136377
	Zinc	2430	2500	97	90 - 110	P	07/03/2025	16:06	LB136377
CCV02	Cadmium	2350	2500	94	90 - 110	P	07/03/2025	16:53	LB136377
	Chromium	969	1000	97	90 - 110	P	07/03/2025	16:53	LB136377
	Copper	1260	1250	101	90 - 110	P	07/03/2025	16:53	LB136377
	Lead	4740	5000	95	90 - 110	P	07/03/2025	16:53	LB136377
	Molybdenum	4860	5000	97	90 - 110	P	07/03/2025	16:53	LB136377
	Nickel	2340	2500	94	90 - 110	P	07/03/2025	16:53	LB136377
	Silver	1270	1250	102	90 - 110	P	07/03/2025	16:53	LB136377
	Zinc	2480	2500	99	90 - 110	P	07/03/2025	16:53	LB136377
CCV03	Cadmium	2340	2500	94	90 - 110	P	07/03/2025	17:28	LB136377
	Chromium	973	1000	97	90 - 110	P	07/03/2025	17:28	LB136377
	Copper	1200	1250	96	90 - 110	P	07/03/2025	17:28	LB136377
	Lead	4720	5000	94	90 - 110	P	07/03/2025	17:28	LB136377
	Molybdenum	4880	5000	98	90 - 110	P	07/03/2025	17:28	LB136377
	Nickel	2330	2500	93	90 - 110	P	07/03/2025	17:28	LB136377
	Silver	1270	1250	102	90 - 110	P	07/03/2025	17:28	LB136377
	Zinc	2490	2500	100	90 - 110	P	07/03/2025	17:28	LB136377

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Fax : 908 789 8922

Metals

- 2b -
CRDL STANDARD FOR AA & ICP

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

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	Cadmium	5.73	6.0	96	65 - 135	P	06/26/2025	17:28	LB136305
	Chromium	11.3	10.0	113	65 - 135	P	06/26/2025	17:28	LB136305
	Copper	22.8	20.0	114	65 - 135	P	06/26/2025	17:28	LB136305
	Lead	11.9	12.0	99	65 - 135	P	06/26/2025	17:28	LB136305
	Molybdenum	201	200	100	65 - 135	P	06/26/2025	17:28	LB136305
	Nickel	39.3	40.0	98	65 - 135	P	06/26/2025	17:28	LB136305
	Silver	8.68	10.0	87	65 - 135	P	06/26/2025	17:28	LB136305
	Zinc	40.9	40.0	102	65 - 135	P	06/26/2025	17:28	LB136305
CRA	Mercury	0.047	0.05	93	60 - 140	CV	06/27/2025	13:06	LB136313
CRI01	Cadmium	4.81	6.0	80	65 - 135	P	07/03/2025	15:37	LB136377
	Chromium	7.71	10.0	77	65 - 135	P	07/03/2025	15:37	LB136377
	Copper	25.5	20.0	128	65 - 135	P	07/03/2025	15:37	LB136377
	Lead	11.1	12.0	92	65 - 135	P	07/03/2025	15:37	LB136377
	Molybdenum	194	200	97	65 - 135	P	07/03/2025	15:37	LB136377
	Nickel	35.2	40.0	88	65 - 135	P	07/03/2025	15:37	LB136377
	Silver	10.2	10.0	102	65 - 135	P	07/03/2025	15:37	LB136377
	Zinc	38.4	40.0	96	65 - 135	P	07/03/2025	15:37	LB136377

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB09	Mercury	0.027	+/-0.2	U	0.20	CV	06/27/2025	12:57	LB136313

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB27	Mercury	0.027	+/-0.2	U	0.20	CV	06/27/2025	13:01	LB136313
CCB28	Mercury	0.027	+/-0.2	U	0.20	CV	06/27/2025	13:52	LB136313
CCB29	Mercury	0.027	+/-0.2	U	0.20	CV	06/27/2025	14:03	LB136313

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Cadmium	0.50	+/-3	U	6.00	P	06/26/2025	17:23	LB136305
	Chromium	2.12	+/-5	U	10.0	P	06/26/2025	17:23	LB136305
	Copper	4.60	+/-10	U	20.0	P	06/26/2025	17:23	LB136305
	Lead	2.30	+/-6	U	12.0	P	06/26/2025	17:23	LB136305
	Molybdenum	18.7	+/-100	U	200	P	06/26/2025	17:23	LB136305
	Nickel	3.06	+/-20	U	40.0	P	06/26/2025	17:23	LB136305
	Silver	1.62	+/-5	U	10.0	P	06/26/2025	17:23	LB136305
	Zinc	3.50	+/-20	U	40.0	P	06/26/2025	17:23	LB136305

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Cadmium	0.50	+/-3	U	6.00	P	06/26/2025	17:59	LB136305
	Chromium	2.12	+/-5	U	10.0	P	06/26/2025	17:59	LB136305
	Copper	4.60	+/-10	U	20.0	P	06/26/2025	17:59	LB136305
	Lead	2.30	+/-6	U	12.0	P	06/26/2025	17:59	LB136305
	Molybdenum	18.7	+/-100	U	200	P	06/26/2025	17:59	LB136305
	Nickel	3.06	+/-20	U	40.0	P	06/26/2025	17:59	LB136305
	Silver	1.62	+/-5	U	10.0	P	06/26/2025	17:59	LB136305
	Zinc	3.50	+/-20	U	40.0	P	06/26/2025	17:59	LB136305
CCB02	Cadmium	0.50	+/-3	U	6.00	P	06/26/2025	18:52	LB136305
	Chromium	2.12	+/-5	U	10.0	P	06/26/2025	18:52	LB136305
	Copper	4.60	+/-10	U	20.0	P	06/26/2025	18:52	LB136305
	Lead	2.30	+/-6	U	12.0	P	06/26/2025	18:52	LB136305
	Molybdenum	18.7	+/-100	U	200	P	06/26/2025	18:52	LB136305
	Nickel	3.06	+/-20	U	40.0	P	06/26/2025	18:52	LB136305
	Silver	1.62	+/-5	U	10.0	P	06/26/2025	18:52	LB136305
	Zinc	3.50	+/-20	U	40.0	P	06/26/2025	18:52	LB136305
CCB03	Cadmium	0.50	+/-3	U	6.00	P	06/26/2025	19:31	LB136305
	Chromium	2.12	+/-5	U	10.0	P	06/26/2025	19:31	LB136305
	Copper	4.60	+/-10	U	20.0	P	06/26/2025	19:31	LB136305
	Lead	2.30	+/-6	U	12.0	P	06/26/2025	19:31	LB136305
	Molybdenum	18.7	+/-100	U	200	P	06/26/2025	19:31	LB136305
	Nickel	3.06	+/-20	U	40.0	P	06/26/2025	19:31	LB136305
	Silver	1.62	+/-5	U	10.0	P	06/26/2025	19:31	LB136305
	Zinc	3.50	+/-20	U	40.0	P	06/26/2025	19:31	LB136305
CCB04	Cadmium	0.50	+/-3	U	6.00	P	06/26/2025	20:07	LB136305
	Chromium	2.12	+/-5	U	10.0	P	06/26/2025	20:07	LB136305
	Copper	4.60	+/-10	U	20.0	P	06/26/2025	20:07	LB136305
	Lead	2.30	+/-6	U	12.0	P	06/26/2025	20:07	LB136305
	Molybdenum	18.7	+/-100	U	200	P	06/26/2025	20:07	LB136305
	Nickel	3.06	+/-20	U	40.0	P	06/26/2025	20:07	LB136305
	Silver	1.62	+/-5	U	10.0	P	06/26/2025	20:07	LB136305
	Zinc	16.4	+/-20	J	40.0	P	06/26/2025	20:07	LB136305
CCB05	Cadmium	0.50	+/-3	U	6.00	P	06/26/2025	20:51	LB136305
	Chromium	2.12	+/-5	U	10.0	P	06/26/2025	20:51	LB136305
	Copper	4.60	+/-10	U	20.0	P	06/26/2025	20:51	LB136305
	Lead	2.30	+/-6	U	12.0	P	06/26/2025	20:51	LB136305
	Molybdenum	18.7	+/-100	U	200	P	06/26/2025	20:51	LB136305
	Nickel	3.06	+/-20	U	40.0	P	06/26/2025	20:51	LB136305
	Silver	1.62	+/-5	U	10.0	P	06/26/2025	20:51	LB136305

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB05	Zinc	3.50	+/-20	U	40.0	P	06/26/2025	20:51	LB136305

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Cadmium	0.50	+/-3	U	6.00	P	07/03/2025	15:32	LB136377
	Chromium	2.12	+/-5	U	10.0	P	07/03/2025	15:32	LB136377
	Copper	4.60	+/-10	U	20.0	P	07/03/2025	15:32	LB136377
	Lead	2.30	+/-6	U	12.0	P	07/03/2025	15:32	LB136377
	Molybdenum	18.7	+/-100	U	200	P	07/03/2025	15:32	LB136377
	Nickel	3.06	+/-20	U	40.0	P	07/03/2025	15:32	LB136377
	Silver	1.62	+/-5	U	10.0	P	07/03/2025	15:32	LB136377
	Zinc	3.50	+/-20	U	40.0	P	07/03/2025	15:32	LB136377

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Cadmium	0.50	+/-3	U	6.00	P	07/03/2025	16:10	LB136377
	Chromium	2.12	+/-5	U	10.0	P	07/03/2025	16:10	LB136377
	Copper	4.60	+/-10	U	20.0	P	07/03/2025	16:10	LB136377
	Lead	2.30	+/-6	U	12.0	P	07/03/2025	16:10	LB136377
	Molybdenum	18.7	+/-100	U	200	P	07/03/2025	16:10	LB136377
	Nickel	3.06	+/-20	U	40.0	P	07/03/2025	16:10	LB136377
	Silver	1.62	+/-5	U	10.0	P	07/03/2025	16:10	LB136377
	Zinc	3.50	+/-20	U	40.0	P	07/03/2025	16:10	LB136377
CCB02	Cadmium	0.50	+/-3	U	6.00	P	07/03/2025	16:57	LB136377
	Chromium	2.12	+/-5	U	10.0	P	07/03/2025	16:57	LB136377
	Copper	4.60	+/-10	U	20.0	P	07/03/2025	16:57	LB136377
	Lead	2.30	+/-6	U	12.0	P	07/03/2025	16:57	LB136377
	Molybdenum	18.7	+/-100	U	200	P	07/03/2025	16:57	LB136377
	Nickel	3.06	+/-20	U	40.0	P	07/03/2025	16:57	LB136377
	Silver	1.62	+/-5	U	10.0	P	07/03/2025	16:57	LB136377
	Zinc	3.50	+/-20	U	40.0	P	07/03/2025	16:57	LB136377
CCB03	Cadmium	0.50	+/-3	U	6.00	P	07/03/2025	17:37	LB136377
	Chromium	2.12	+/-5	U	10.0	P	07/03/2025	17:37	LB136377
	Copper	4.60	+/-10	U	20.0	P	07/03/2025	17:37	LB136377
	Lead	2.30	+/-6	U	12.0	P	07/03/2025	17:37	LB136377
	Molybdenum	18.7	+/-100	U	200	P	07/03/2025	17:37	LB136377
	Nickel	3.06	+/-20	U	40.0	P	07/03/2025	17:37	LB136377
	Silver	1.62	+/-5	U	10.0	P	07/03/2025	17:37	LB136377
	Zinc	3.50	+/-20	U	40.0	P	07/03/2025	17:37	LB136377

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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Instrument: CV1

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB168650BL		**WATER**		**Batch Number:**	**PB168650**		**Prep Date:**	**06/27/2025**	
	Mercury	0.027	<0.2	U	0.20	CV	06/27/2025	13:16	LB136313

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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Instrument: P5

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB168611BL		**WATER**		**Batch Number:**	**PB168611**		**Prep Date:**	**06/25/2025**	
	Cadmium	0.31	<1.5	U	3.00	P	06/26/2025	20:11	LB136305
	Chromium	0.53	<2.5	U	5.00	P	06/26/2025	20:11	LB136305
	Copper	1.89	<5	U	10.0	P	06/26/2025	20:11	LB136305
	Lead	1.21	<3	U	6.00	P	06/26/2025	20:11	LB136305
	Molybdenum	8.80	<50	U	100	P	06/26/2025	20:11	LB136305
	Nickel	1.90	<10	U	20.0	P	06/26/2025	20:11	LB136305
	Silver	0.81	<2.5	U	5.00	P	06/26/2025	20:11	LB136305
	Zinc	1.60	<10	U	20.0	P	06/26/2025	20:11	LB136305

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Metals
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INTERFERENCE CHECK SAMPLE

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

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	Cadmium	-1.09	1.0	109	-5	7	06/26/2025	17:37	LB136305
	Chromium	50.8	52.0	98	42	62	06/26/2025	17:37	LB136305
	Copper	-5.23	2.0	262	-18	22	06/26/2025	17:37	LB136305
	Lead	2.20			-12	12	06/26/2025	17:37	LB136305
	Molybdenum	-10.4			0	0	06/26/2025	17:37	LB136305
	Nickel	3.31	2.0	166	-38	42	06/26/2025	17:37	LB136305
	Silver	2.97			-10	10	06/26/2025	17:37	LB136305
	Zinc	12.0			-40	40	06/26/2025	17:37	LB136305
ICSAB01	Cadmium	970	970	100	826	1120	06/26/2025	17:42	LB136305
	Chromium	541	540	100	460	624	06/26/2025	17:42	LB136305
	Copper	468	510	92	434	588	06/26/2025	17:42	LB136305
	Lead	49.4	49.0	101	37	61	06/26/2025	17:42	LB136305
	Molybdenum	933			0	0	06/26/2025	17:42	LB136305
	Nickel	947	950	100	810	1100	06/26/2025	17:42	LB136305
	Silver	211	200	106	170	232	06/26/2025	17:42	LB136305
	Zinc	1010	950	106	809	1095	06/26/2025	17:42	LB136305
ICSA	Cadmium	2.45	1.0	245	-5	7	06/26/2025	17:46	LB136305
	Chromium	37.4	52.0	72	42	62	06/26/2025	17:46	LB136305
	Copper	-13.9	2.0	695	-18	22	06/26/2025	17:46	LB136305
	Lead	35.9			-12	12	06/26/2025	17:46	LB136305
	Molybdenum	-56.7			0	0	06/26/2025	17:46	LB136305
	Nickel	-1.58	2.0	79	-38	42	06/26/2025	17:46	LB136305
	Silver	18.8			-10	10	06/26/2025	17:46	LB136305
	Zinc	16.0			-40	40	06/26/2025	17:46	LB136305
ICSAB	Cadmium	871	970	90	826	1120	06/26/2025	17:50	LB136305
	Chromium	530	540	98	460	624	06/26/2025	17:50	LB136305
	Copper	479	510	94	434	588	06/26/2025	17:50	LB136305
	Lead	70.9	49.0	145	37	61	06/26/2025	17:50	LB136305
	Molybdenum	840			0	0	06/26/2025	17:50	LB136305
	Nickel	864	950	91	810	1100	06/26/2025	17:50	LB136305
	Silver	185	200	92	170	232	06/26/2025	17:50	LB136305
	Zinc	959	950	101	809	1095	06/26/2025	17:50	LB136305
ICSA01	Cadmium	-0.62	1.0	62	-5	7	07/03/2025	15:41	LB136377
	Chromium	53.3	52.0	102	42	62	07/03/2025	15:41	LB136377
	Copper	14.6	2.0	730	-18	22	07/03/2025	15:41	LB136377
	Lead	1.07			-12	12	07/03/2025	15:41	LB136377
	Molybdenum	-6.48			0	0	07/03/2025	15:41	LB136377
	Nickel	13.6	2.0	680	-38	42	07/03/2025	15:41	LB136377
	Silver	4.00			-10	10	07/03/2025	15:41	LB136377
	Zinc	12.6			-40	40	07/03/2025	15:41	LB136377
ICSAB01	Cadmium	946	970	98	826	1120	07/03/2025	15:45	LB136377

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Metals
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INTERFERENCE CHECK SAMPLE

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

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	Chromium	536	540	99	460	624	07/03/2025	15:45	LB136377
	Copper	465	510	91	434	588	07/03/2025	15:45	LB136377
	Lead	44.5	49.0	91	37	61	07/03/2025	15:45	LB136377
	Molybdenum	1030			0	0	07/03/2025	15:45	LB136377
	Nickel	940	950	99	810	1100	07/03/2025	15:45	LB136377
	Silver	230	200	115	170	232	07/03/2025	15:45	LB136377
	Zinc	1010	950	106	809	1095	07/03/2025	15:45	LB136377
ICSA	Cadmium	-7.06	1.0	706	-5	7	07/03/2025	15:50	LB136377
	Chromium	56.8	52.0	109	42	62	07/03/2025	15:50	LB136377
	Copper	130	2.0	6500	-18	22	07/03/2025	15:50	LB136377
	Lead	53.6			-12	12	07/03/2025	15:50	LB136377
	Molybdenum	-40.7			0	0	07/03/2025	15:50	LB136377
	Nickel	11.6	2.0	580	-38	42	07/03/2025	15:50	LB136377
	Silver	-0.40			-10	10	07/03/2025	15:50	LB136377
	Zinc	228			-40	40	07/03/2025	15:50	LB136377
ICSAB	Cadmium	882	970	91	826	1120	07/03/2025	15:54	LB136377
	Chromium	539	540	100	460	624	07/03/2025	15:54	LB136377
	Copper	574	510	112	434	588	07/03/2025	15:54	LB136377
	Lead	87.4	49.0	178	37	61	07/03/2025	15:54	LB136377
	Molybdenum	991			0	0	07/03/2025	15:54	LB136377
	Nickel	897	950	94	810	1100	07/03/2025	15:54	LB136377
	Silver	223	200	112	170	232	07/03/2025	15:54	LB136377
	Zinc	974	950	102	809	1095	07/03/2025	15:54	LB136377

METAL QC DATA

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metals
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MATRIX SPIKE SUMMARY

client: LEO Ingwer, Inc. **level:** low **sdg no.:** Q2376

contract: LEOI01 **lab code:** CHEM **case no.:** Q2376 **sas no.:** Q2376

matrix: Water **sample id:** Q2376-02 **client id:** EFFLUENT-METALSMS

Percent Solids for Sample: NA **Spiked ID:** Q2376-02MS **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75 - 125	3.89		0.17	J	4.0	93		CV

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metals
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MATRIX SPIKE DUPLICATE SUMMARY

client: LEO Ingwer, Inc. **level:** low **sdg no.:** Q2376

contract: LEOI01 **lab code:** CHEM **case no.:** Q2376 **sas no.:** Q2376

matrix: Water **sample id:** Q2376-02 **client id:** EFFLUENT-METALSMSD

Percent Solids for Sample: NA **Spiked ID:** Q2376-02MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75 - 125	3.77		0.17	J	4.0	90		CV

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metals
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MATRIX SPIKE SUMMARY

client: LEO Ingwer, Inc. **level:** low **sdg no.:** Q2376

contract: LEOI01 **lab code:** CHEM **case no.:** Q2376 **sas no.:** Q2376

matrix: Water **sample id:** Q2404-12 **client id:** 1ST-FL-CHILD-CARE-SINK-2MS

Percent Solids for Sample: NA **Spiked ID:** Q2404-12MS **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cadmium	ug/L	75 - 125	91.8		3.00	U	100	92		P
Chromium	ug/L	75 - 125	205		1.02	J	200	102		P
Copper	ug/L	75 - 125	233		71.5		150	107		P
Lead	ug/L	75 - 125	464		2.58	J	500	92		P
Molybdenum	ug/L	75 - 125	209		100	U	200	104		P
Nickel	ug/L	75 - 125	236		20.0	U	250	94		P
Silver	ug/L	75 - 125	30.0		5.00	U	37.5	80		P
Zinc	ug/L	75 - 125	159		55.9		100	103		P

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metals
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MATRIX SPIKE DUPLICATE SUMMARY

client: LEO Ingwer, Inc. **level:** low **sdg no.:** Q2376

contract: LEOI01 **lab code:** CHEM **case no.:** Q2376 **sas no.:** Q2376

matrix: Water **sample id:** Q2404-12 **client id:** 1ST-FL-CHILD-CARE-SINK-2MSD

Percent Solids for Sample: NA **Spiked ID:** Q2404-12MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cadmium	ug/L	75 - 125	91.0		3.00	U	100	91		P
Chromium	ug/L	75 - 125	203		1.02	J	200	101		P
Copper	ug/L	75 - 125	234		71.5		150	109		P
Lead	ug/L	75 - 125	460		2.58	J	500	91		P
Molybdenum	ug/L	75 - 125	208		100	U	200	104		P
Nickel	ug/L	75 - 125	234		20.0	U	250	94		P
Silver	ug/L	75 - 125	30.2		5.00	U	37.5	80		P
Zinc	ug/L	75 - 125	159		55.9		100	103		P

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Metals
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Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

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

Sample ID: **Spiked ID:**

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

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: LEO Ingwer, Inc. **Level:** LOW **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

Matrix: Water **Sample ID:** Q2376-02 **Client ID:** EFFLUENT-METALSDUP

Percent Solids for Sample: NA **Duplicate ID** Q2376-02DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L	20	0.17	J	0.11	J	44		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: LEO Ingwer, Inc. **Level:** LOW **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

Matrix: Water **Sample ID:** Q2376-02MS **Client ID:** EFFLUENT-METALSMSD

Percent Solids for Sample: NA **Duplicate ID** Q2376-02MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L	20	3.89		3.77		3		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: LEO Ingwer, Inc. **Level:** LOW **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

Matrix: Water **Sample ID:** Q2404-12 **Client ID:** 1ST-FL-CHILD-CARE-SINK-2DUP

Percent Solids for Sample: NA **Duplicate ID** Q2404-12DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cadmium	ug/L	20	3.00	U	3.00	U			P
Chromium	ug/L	20	1.02	J	1.33	J	26		P
Copper	ug/L	20	71.5		71.9		1		P
Lead	ug/L	20	2.58	J	2.95	J	13		P
Molybdenum	ug/L	20	100	U	100	U			P
Nickel	ug/L	20	20.0	U	20.0	U			P
Silver	ug/L	20	5.00	U	5.00	U			P
Zinc	ug/L	20	55.9		56.1		0		P

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

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: LEO Ingwer, Inc. **Level:** LOW **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

Matrix: Water **Sample ID:** Q2404-12MS **Client ID:** 1ST-FL-CHILD-CARE-SINK-2MSD

Percent Solids for Sample: NA **Duplicate ID** Q2404-12MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cadmium	ug/L	20	91.8		91.0		1		P
Chromium	ug/L	20	205		203		1		P
Copper	ug/L	20	233		234		0		P
Lead	ug/L	20	464		460		1		P
Molybdenum	ug/L	20	209		208		0		P
Nickel	ug/L	20	236		234		1		P
Silver	ug/L	20	30.0		30.2		1		P
Zinc	ug/L	20	159		159		0		P

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

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LABORATORY CONTROL SAMPLE SUMMARY

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB168611BS							
Cadmium	ug/L	100	91.5		92	85 - 115	P
Chromium	ug/L	200	198		99	85 - 115	P
Copper	ug/L	150	154		103	85 - 115	P
Lead	ug/L	500	456		91	85 - 115	P
Molybdenum	ug/L	200	191		96	85 - 115	P
Nickel	ug/L	250	233		93	85 - 115	P
Silver	ug/L	37.5	34.5		92	85 - 115	P
Zinc	ug/L	100	104		104	85 - 115	P

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LABORATORY CONTROL SAMPLE SUMMARY

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB168650BS							
Mercury	ug/L	4.0	3.89		97	85 - 115	CV

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Metals

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ICP SERIAL DILUTIONS

SAMPLE NO.

EFFLUENT-METALSL

Lab Name: Chemtech Consulting Group **Contract:** LEOI01

Lab Code: CHEM **Lb No.:** lb136313 **Lab Sample ID :** Q2376-02L **SDG No.:** Q2376

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

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Mercury	0.17	J	1.00	U	100.0		CV

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Metals

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ICP SERIAL DILUTIONS

SAMPLE NO.

1ST-FL-CHILD-CARE-SINK-2L

Lab Name: Chemtech Consulting Group **Contract:** LEOI01

Lab Code: CHEM **Lb No.:** lb136377 **Lab Sample ID :** Q2404-12L **SDG No.:** Q2376

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

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Cadmium	3.00	U	15.0	U			P
Chromium	1.02	J	25.0	U	100.0		P
Copper	71.5		77.0		8		P
Lead	2.58	J	30.0	U	100.0		P
Molybdenum	100	U	500	U			P
Nickel	20.0	U	100	U			P
Silver	5.00	U	25.0	U			P
Zinc	55.9		51.8	J	7		P

METAL PREPARATION & INSTRUMENT DATA

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

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
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

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
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

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
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

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
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Case No.:** Q2376 **SAS No.:** Q2376

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
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

METAL PREPARATION & ANALYICAL SUMMARY

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SAMPLE PREPARATION SUMMARY

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Method:**

Case No.: Q2376 **SAS No.:** Q2376

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB168611**						
PB168611BL	PB168611BL	MB	WATER	06/25/2025	50.0	25.0	
PB168611BS	PB168611BS	LCS	WATER	06/25/2025	50.0	25.0	
Q2376-02	EFFLUENT-METALS	SAM	WATER	06/25/2025	50.0	25.0	
Q2404-12DUP	1ST-FL-CHILD-CARE-SINK-2DUP	DUP	WATER	06/25/2025	50.0	25.0	
Q2404-12MS	1ST-FL-CHILD-CARE-SINK-2MS	MS	WATER	06/25/2025	50.0	25.0	
Q2404-12MSD	1ST-FL-CHILD-CARE-SINK-2MSD	MSD	WATER	06/25/2025	50.0	25.0	

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SAMPLE PREPARATION SUMMARY

Client: LEO Ingwer, Inc. **SDG No.:** Q2376

Contract: LEOI01 **Lab Code:** CHEM **Method:**

Case No.: Q2376 **SAS No.:** Q2376

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB168650**						
PB168650BL	PB168650BL	MB	WATER	06/27/2025	30.0	30.0	
PB168650BS	PB168650BS	LCS	WATER	06/27/2025	30.0	30.0	
Q2376-02	EFFLUENT-METALS	SAM	WATER	06/27/2025	30.0	30.0	
Q2376-02DUP	EFFLUENT-METALSDUP	DUP	WATER	06/27/2025	30.0	30.0	
Q2376-02MS	EFFLUENT-METALSMS	MS	WATER	06/27/2025	30.0	30.0	
Q2376-02MSD	EFFLUENT-METALSMSD	MSD	WATER	06/27/2025	30.0	30.0	

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ANALYSIS RUN LOG

Client: LEO Ingwer, Inc. **Contract:** LEOI01

Lab code: CHEM **Case no.:** Q2376 **Sas no.:** Q2376 **Sdg no.:** Q2376

Instrument id number: **Method:** **Run number:** LB136305

Start date: 06/26/2025 **End date:** 06/26/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1641	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
S1	S1	1	1645	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
S2	S2	1	1650	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
S3	S3	1	1654	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
S4	S4	1	1658	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
S5	S5	1	1703	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
ICV01	ICV01	1	1707	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
LLICV01	LLICV01	1	1719	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
ICB01	ICB01	1	1723	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
CRI01	CRI01	1	1728	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
ICSA01	ICSA01	1	1737	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
ICSAB01	ICSAB01	1	1742	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
ICSA	ICSA	20	1746	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
ICSAB	ICSAB	20	1750	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
CCV01	CCV01	1	1755	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
CCB01	CCB01	1	1759	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
CCV02	CCV02	1	1848	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
CCB02	CCB02	1	1852	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
Q2376-02	EFFLUENT-METALS	1	1918	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
CCV03	CCV03	1	1927	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
CCB03	CCB03	1	1931	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
CCV04	CCV04	1	2002	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
CCB04	CCB04	1	2007	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
PB168611BL	PB168611BL	1	2011	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
PB168611BS	PB168611BS	1	2015	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
CCV05	CCV05	1	2046	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
CCB05	CCB05	1	2051	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn

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ANALYSIS RUN LOG

Client: LEO Ingwer, Inc. **Contract:** LEOI01

Lab code: CHEM **Case no.:** Q2376 **Sas no.:** Q2376 **Sdg no.:** Q2376

Instrument id number: **Method:** **Run number:** LB136313

Start date: 06/27/2025 **End date:** 06/27/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1223	HG
S0.05	S0.05	1	1225	HG
S0.2	S0.2	1	1227	HG
S2.5	S2.5	1	1230	HG
S5	S5	1	1232	HG
S7.5	S7.5	1	1234	HG
S10	S10	1	1248	HG
ICV09	ICV09	1	1254	HG
ICB09	ICB09	1	1257	HG
CCV27	CCV27	1	1259	HG
CCB27	CCB27	1	1301	HG
CRA	CRA	1	1306	HG
PB168650BL	PB168650BL	1	1316	HG
PB168650BS	PB168650BS	1	1322	HG
Q2376-02	EFFLUENT-METALS	1	1343	HG
Q2376-02DUP	EFFLUENT-METALSDUP	1	1345	HG
Q2376-02MS	EFFLUENT-METALSMS	1	1347	HG
CCV28	CCV28	1	1349	HG
CCB28	CCB28	1	1352	HG
Q2376-02MSD	EFFLUENT-METALSMSD	1	1354	HG
Q2376-02L	EFFLUENT-METALSL	5	1356	HG
CCV29	CCV29	1	1401	HG
CCB29	CCB29	1	1403	HG

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ANALYSIS RUN LOG

Client: LEO Ingwer, Inc. **Contract:** LEOI01

Lab code: CHEM **Case no.:** Q2376 **Sas no.:** Q2376 **Sdg no.:** Q2376

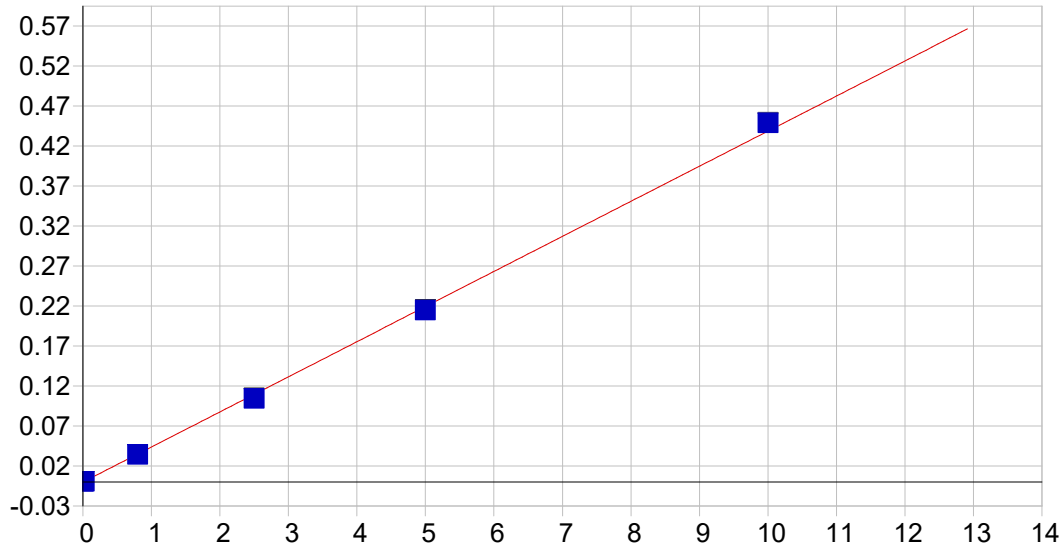
Instrument id number: **Method:** **Run number:** LB136377

Start date: 07/03/2025 **End date:** 07/03/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1330	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
S1	S1	1	1334	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
S2	S2	1	1339	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
S3	S3	1	1343	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
S4	S4	1	1347	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
S5	S5	1	1351	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
ICV01	ICV01	1	1450	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
LLICV01	LLICV01	1	1455	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
ICB01	ICB01	1	1532	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
CRI01	CRI01	1	1537	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
ICSA01	ICSA01	1	1541	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
ICSAB01	ICSAB01	1	1545	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
ICSA	ICSA	20	1550	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
ICSAB	ICSAB	20	1554	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
CCV01	CCV01	1	1606	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
CCB01	CCB01	1	1610	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
Q2404-12DUP	1ST-FL-CHILD-CARE-SINK-2I	1	1619	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
Q2404-12L	1ST-FL-CHILD-CARE-SINK-2I	5	1624	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
Q2404-12MS	1ST-FL-CHILD-CARE-SINK-2I	1	1628	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
Q2404-12MSD	1ST-FL-CHILD-CARE-SINK-2I	1	1632	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
CCV02	CCV02	1	1653	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
CCB02	CCB02	1	1657	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
CCV03	CCV03	1	1728	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn
CCB03	CCB03	1	1737	Ag,Cd,Cr,Cu,Mo,Ni,Pb,Zn

METAL
RAW DATA

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



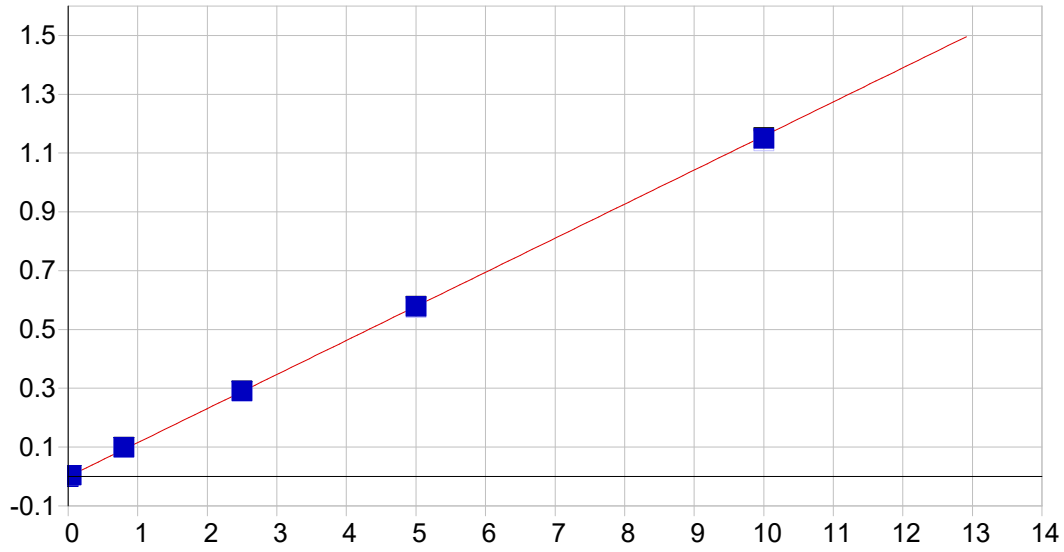
As 189.042 {479}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000099	Re-Slope:	1.000000
A1 (Gain):	0.043885	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999642	Status:	OK.
Std Error of Est:	0.000028		
Predicted MDL:	0.002841		
Predicted MQL:	0.009471		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00010	.000	1
S1	.02000	.01847	-.002	-7.66	.00071	.000	1
S2	.80000	.78477	-.015	-1.90	.03434	.000	1
S3	2.5000	2.3831	-.117	-4.68	.10447	.000	1
S4	5.0000	4.9023	-.098	-1.95	.21500	.000	1
S5	10.000	10.231	.231	2.31	.44884	.001	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



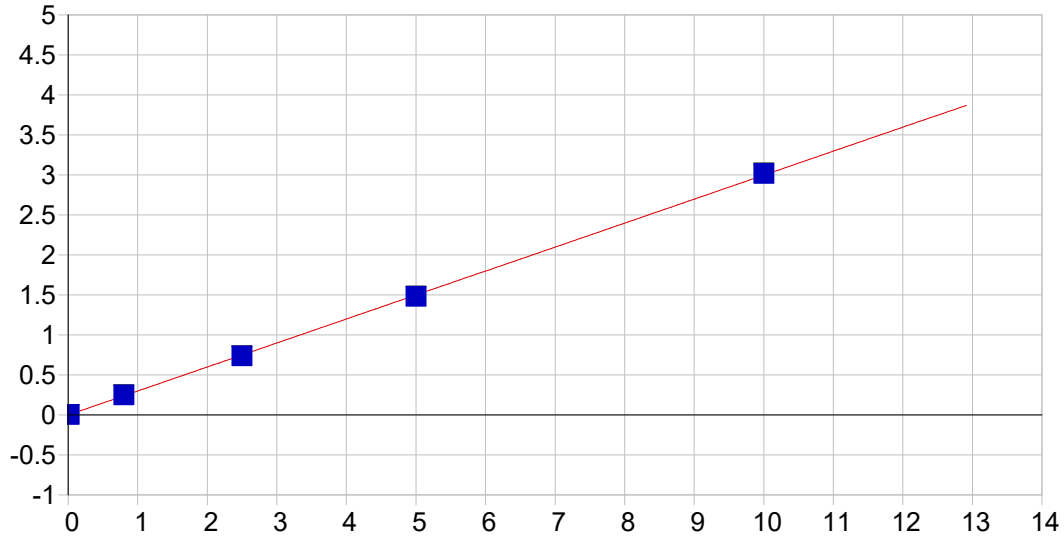
Tl 190.856 {477}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000747	Re-Slope:	1.000000
A1 (Gain):	0.115887	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999853	Status:	OK.
Std Error of Est:	0.000065		
Predicted MDL:	0.001761		
Predicted MQL:	0.005870		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00075	.000	1
S1	.04000	.04136	.001	3.40	.00394	.000	1
S2	.80000	.86124	.061	7.65	.09834	.000	1
S3	2.5000	2.5125	.012	.498	.28815	.000	1
S4	5.0000	4.9956	-.004	-.089	.57365	.001	1
S5	10.000	9.9294	-.071	-.706	1.1409	.002	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



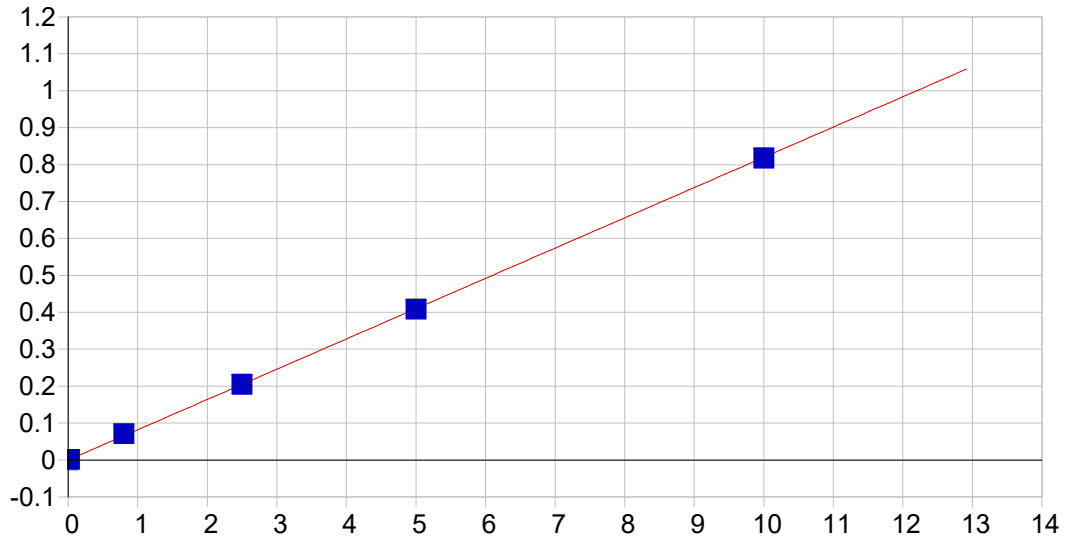
Pb 220.353 {453}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000160	Re-Slope:	1.000000
A1 (Gain):	0.299693	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999909	Status:	OK.
Std Error of Est:	0.000073		
Predicted MDL:	0.001408		
Predicted MQL:	0.004694		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00016	.000	1
S1	.01200	.01303	.001	8.60	.00367	.000	1
S2	.80000	.83249	.032	4.06	.24912	.001	1
S3	2.5000	2.4589	-.041	-1.65	.73607	.003	1
S4	5.0000	4.9380	-.062	-1.24	1.4784	.005	1
S5	10.000	10.070	.070	.696	3.0149	.006	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



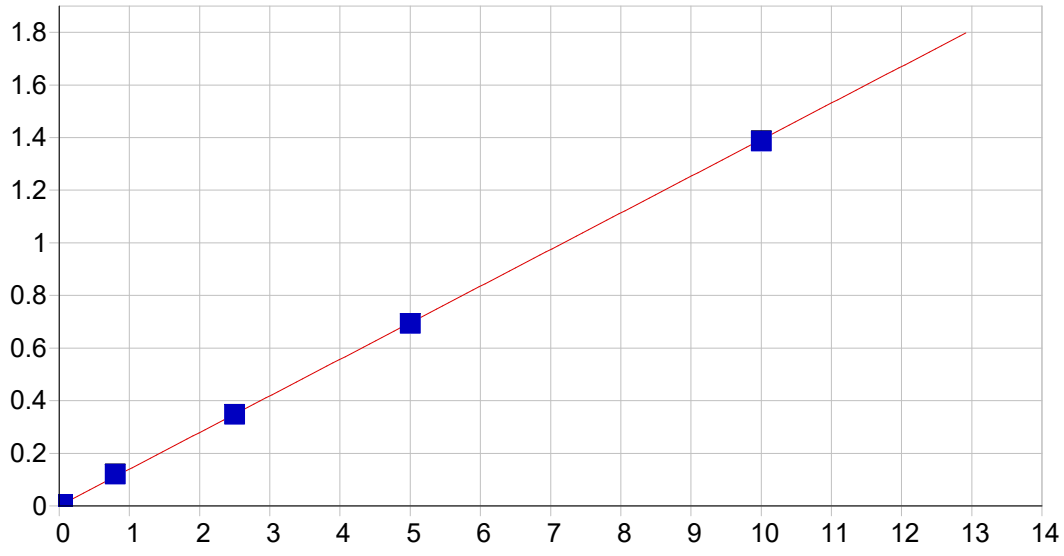
Se 196.090 {472}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000057	Re-Slope:	1.000000
A1 (Gain):	0.081976	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999865	Status:	OK.
Std Error of Est:	0.000032		
Predicted MDL:	0.003292		
Predicted MQL:	0.010974		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00006	.000	1
S1	.02000	.02150	.002	7.51	.00170	.000	1
S2	.80000	.86053	.061	7.57	.07045	.000	1
S3	2.5000	2.4968	-.003	-.128	.20450	.000	1
S4	5.0000	4.9764	-.024	-.471	.40765	.000	1
S5	10.000	9.9647	-.035	-.353	.81634	.001	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



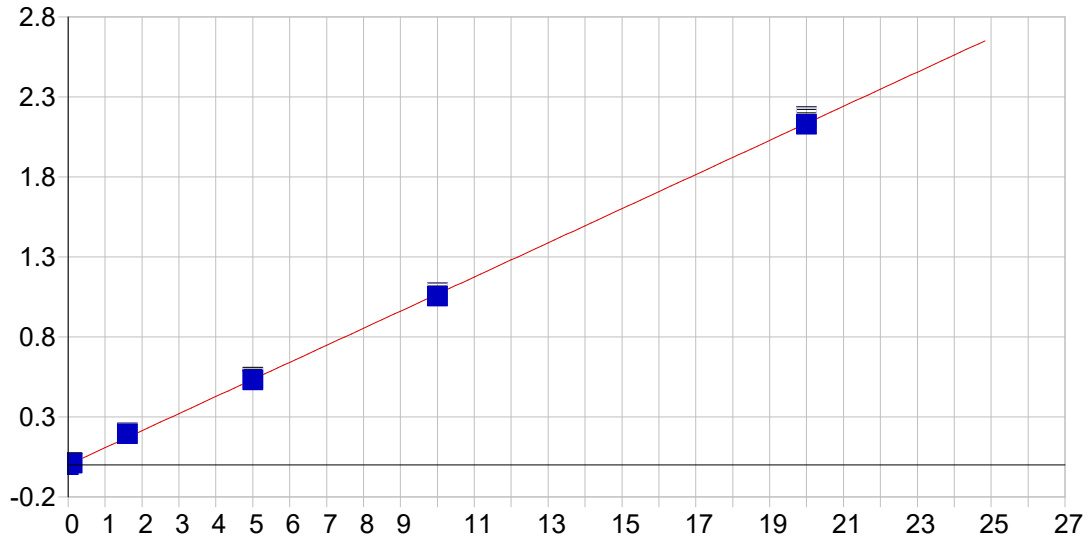
Sb 206.833 {463}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000579	Re-Slope:	1.000000
A1 (Gain):	0.139143	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999866	Status:	OK.
Std Error of Est:	0.000084		
Predicted MDL:	0.002536		
Predicted MQL:	0.008455		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00058	.000	1
S1	.05000	.05170	.002	3.40	.00770	.000	1
S2	.80000	.86088	.061	7.61	.12020	.000	1
S3	2.5000	2.4943	-.006	-.229	.34711	.001	1
S4	5.0000	4.9797	-.020	-.406	.69242	.000	1
S5	10.000	9.9634	-.037	-.366	1.3848	.001	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



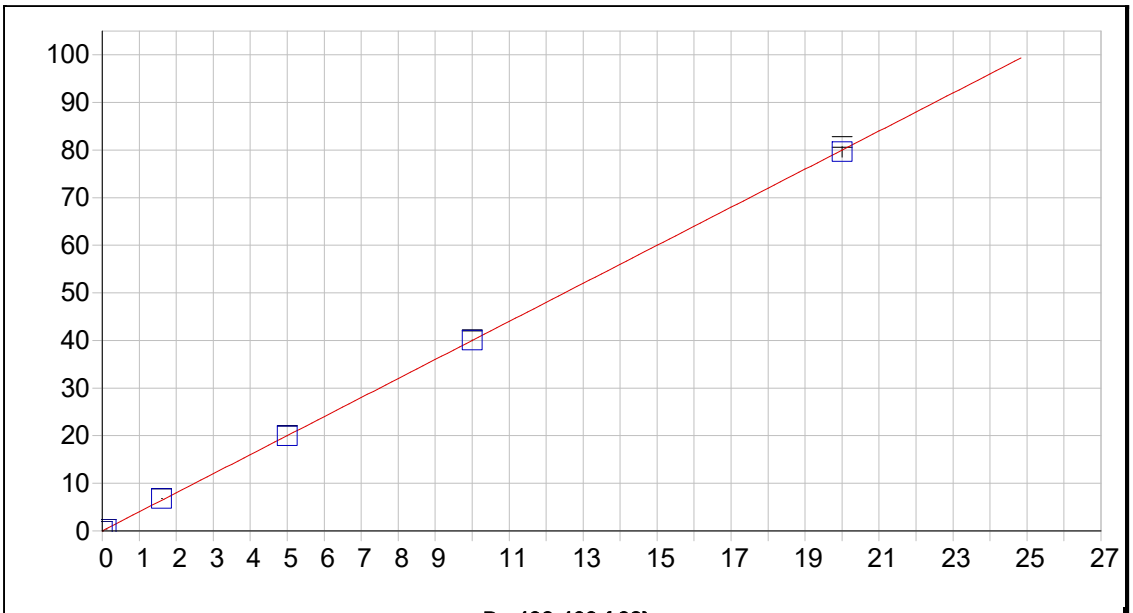
Al 396.152 { 85}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000577	Re-Slope:	1.000000
A1 (Gain):	0.106712	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999569	Status:	OK.
Std Error of Est:	0.000237		
Predicted MDL:	0.023565		
Predicted MQL:	0.078549		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00058	.002	1
S1	.10000	.09266	-.007	-7.34	.01126	.002	1
S2	1.6000	1.8205	.220	13.8	.19802	.001	1
S3	5.0000	4.9695	-.031	-.611	.54081	.006	1
S4	10.000	9.8736	-.126	-1.26	1.0741	.002	1
S5	20.000	19.944	-.056	-.279	2.1686	.008	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



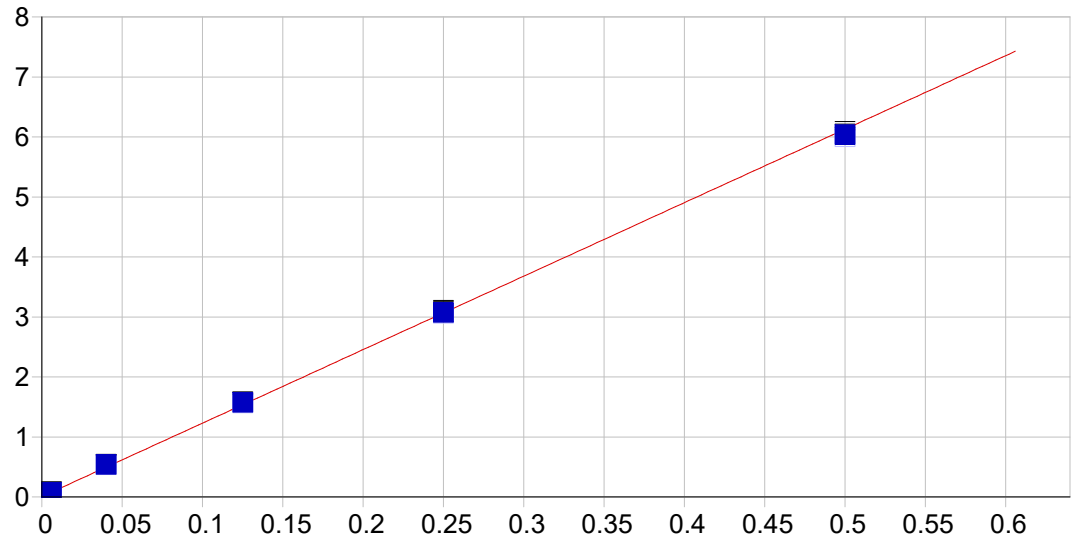
Ba 493.409 { 68}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.014121	Re-Slope:	1.000000
A1 (Gain):	3.999067	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999918	Status:	OK.
Std Error of Est:	0.003798		
Predicted MDL:	0.000990		
Predicted MQL:	0.003299		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.01410	.002	1
S1	.10000	.09864	-.001	-1.36	.40860	.006	1
S2	1.6000	1.6943	.094	5.90	6.7899	.026	1
S3	5.0000	4.9923	-.008	-.155	19.979	.037	1
S4	10.000	10.007	.007	.066	40.031	.095	1
S5	20.000	19.908	-.092	-.459	79.628	1.11	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



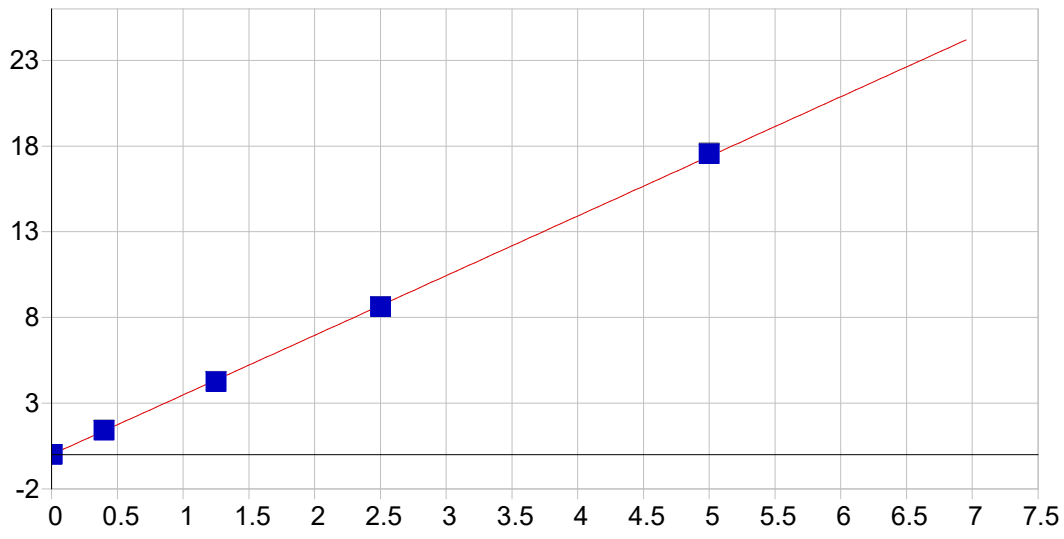
Be 234.861 {144}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.004579	Re-Slope:	1.000000
A1 (Gain):	12.249570	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999724	Status:	OK.
Std Error of Est:	0.000823		
Predicted MDL:	0.000126		
Predicted MQL:	0.000419		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00457	.000	1
S1	.00600	.00626	.000	4.32	.08047	.001	1
S2	.04000	.04355	.004	8.89	.53484	.005	1
S3	.12500	.12787	.003	2.30	1.5608	.013	1
S4	.25000	.25063	.001	.250	3.0542	.033	1
S5	.50000	.49269	-.007	-1.46	5.9990	.050	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



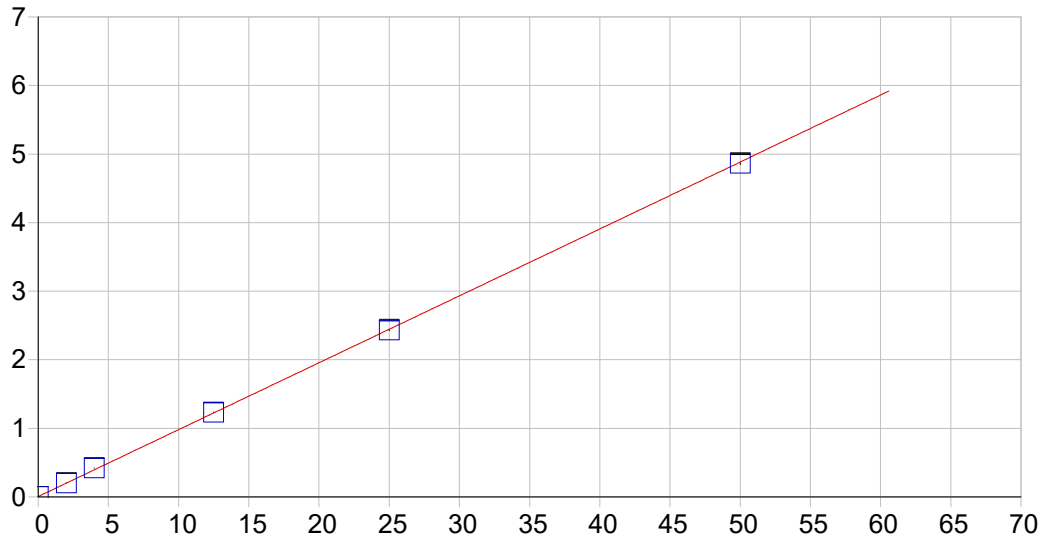
Cd 214.438 {457}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000240	Re-Slope:	1.000000
A1 (Gain):	3.479855	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999933	Status:	OK.
Std Error of Est:	0.000364		
Predicted MDL:	0.000076		
Predicted MQL:	0.000254		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00024	.000	1
S1	.00600	.00568	-.000	-5.30	.01955	.000	1
S2	.40000	.40756	.008	1.89	1.4181	.003	1
S3	1.2500	1.2236	-.026	-2.11	4.2581	.016	1
S4	2.5000	2.4789	-.021	-.845	8.6266	.022	1
S5	5.0000	5.0403	.040	.806	17.541	.036	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



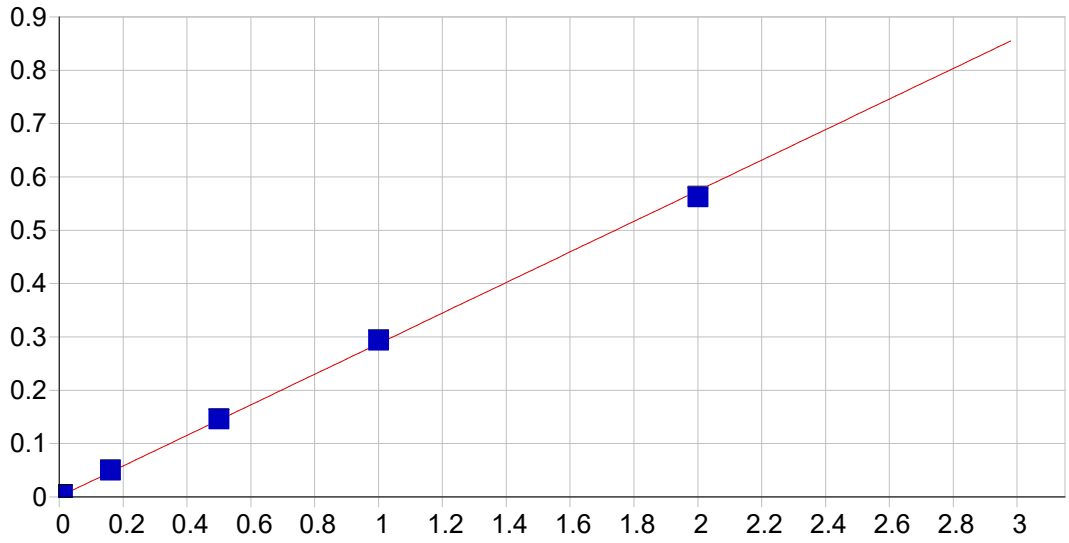
Ca 373.690 { 90}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.005476	Re-Slope:	1.000000
A1 (Gain):	0.097571	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999894	Status:	OK.
Std Error of Est:	0.000751		
Predicted MDL:	0.021040		
Predicted MQL:	0.070134		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00013	-.000	.000	.00546	.002	1
S1	2.0000	2.0046	.005	.230	.20107	.002	1
S2	4.0000	4.2672	.267	6.68	.42183	.002	1
S3	12.500	12.568	.068	.546	1.2318	.005	1
S4	25.000	24.884	-.116	-.464	2.4334	.012	1
S5	50.000	49.776	-.224	-.448	4.8622	.011	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



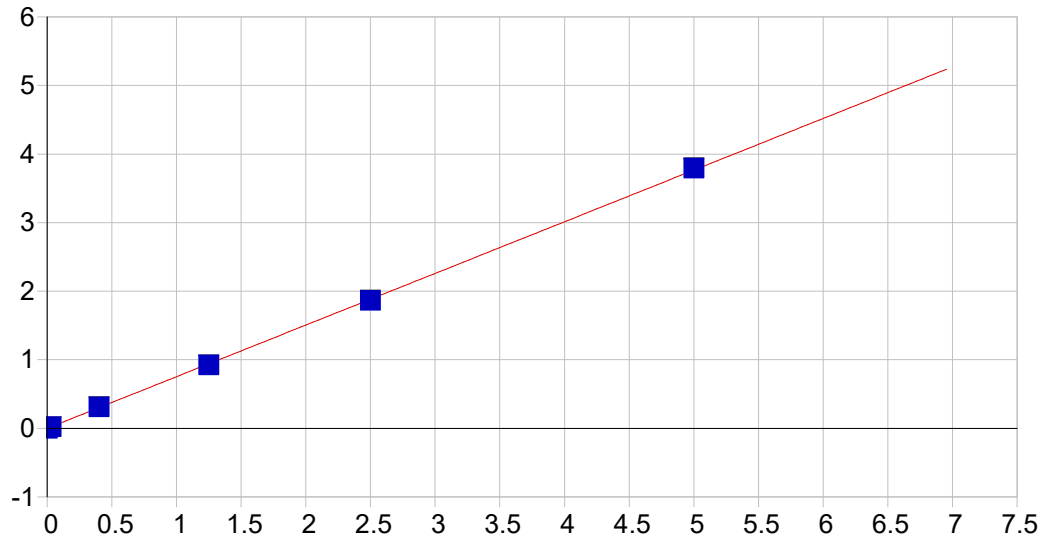
Cr 267.716 {126}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000592	Re-Slope:	1.000000
A1 (Gain):	0.286700	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999654	Status:	OK.
Std Error of Est:	0.000056		
Predicted MDL:	0.000843		
Predicted MQL:	0.002809		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00059	.000	1
S1	.01000	.01147	.001	14.7	.00389	.000	1
S2	.16000	.17184	.012	7.40	.04990	.000	1
S3	.50000	.50696	.007	1.39	.14607	.000	1
S4	1.0000	1.0218	.022	2.18	.29379	.001	1
S5	2.0000	1.9579	-.042	-2.10	.56245	.002	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



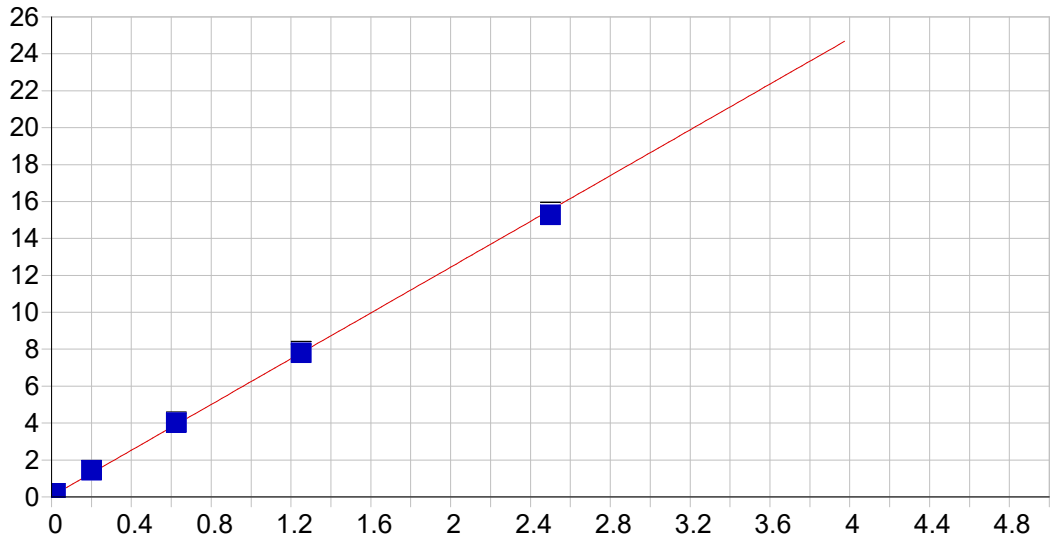
Co 228.616 {448}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000122	Re-Slope:	1.000000
A1 (Gain):	0.753072	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999921	Status:	OK.
Std Error of Est:	0.000192		
Predicted MDL:	0.000352		
Predicted MQL:	0.001175		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00012	.000	1
S1	.03000	.03028	.000	.938	.02280	.000	1
S2	.40000	.41482	.015	3.70	.31288	.000	1
S3	1.2500	1.2272	-.023	-1.83	.92542	.001	1
S4	2.5000	2.4745	-.025	-1.02	1.8659	.004	1
S5	5.0000	5.0332	.033	.664	3.7951	.007	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



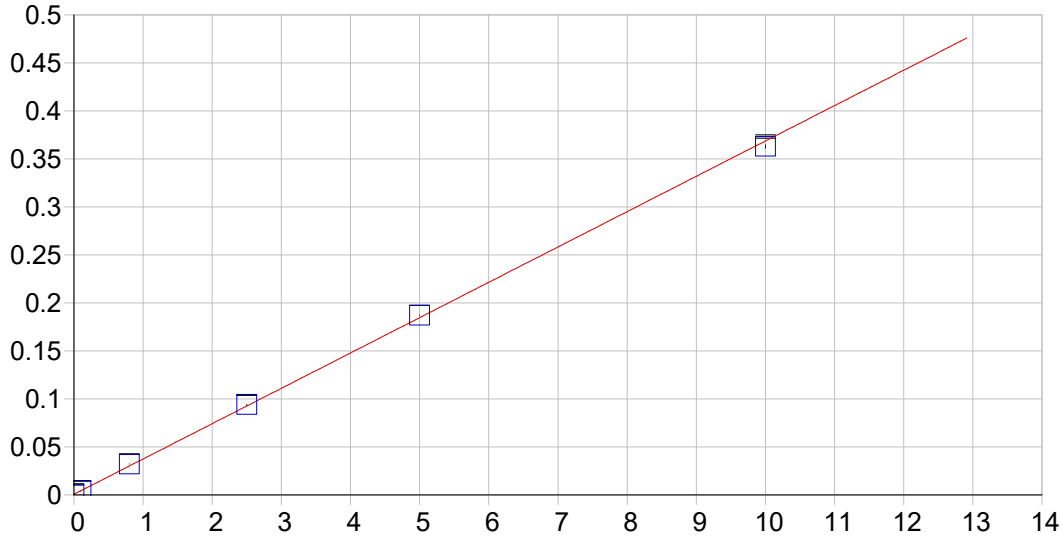
Cu 324.754 {104}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.048715	Re-Slope:	1.000000
A1 (Gain):	6.197896	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999551	Status:	OK.
Std Error of Est:	0.002182		
Predicted MDL:	0.000592		
Predicted MQL:	0.001973		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.04869	.002	1
S1	.02000	.02199	.002	9.93	.18504	.003	1
S2	.20000	.22348	.023	11.7	1.4345	.007	1
S3	.62500	.64179	.017	2.69	4.0283	.034	1
S4	1.2500	1.2504	.000	.031	7.8023	.089	1
S5	2.5000	2.4574	-.043	-1.71	15.287	.134	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



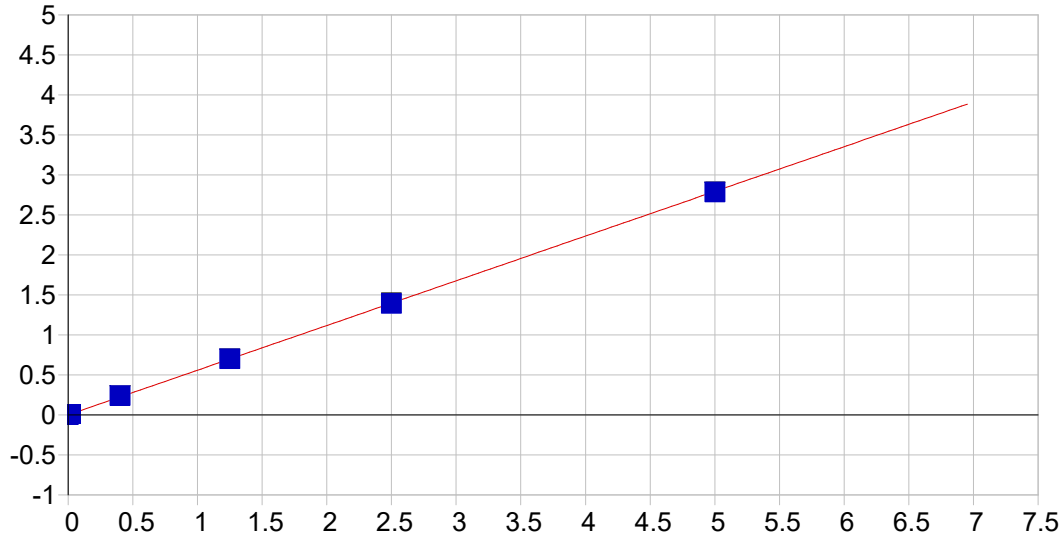
Fe 259.837 {130}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000651	Re-Slope:	1.000000
A1 (Gain):	0.036805	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999798	Status:	OK.
Std Error of Est:	0.000039		
Predicted MDL:	0.018013		
Predicted MQL:	0.060044		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00065	.001	1
S1	.10000	.10076	.001	.759	.00436	.000	1
S2	.80000	.85471	.055	6.84	.03211	.000	1
S3	2.5000	2.5327	.033	1.31	.09387	.001	1
S4	5.0000	5.0662	.066	1.32	.18711	.000	1
S5	10.000	9.8457	-.154	-1.54	.36302	.002	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



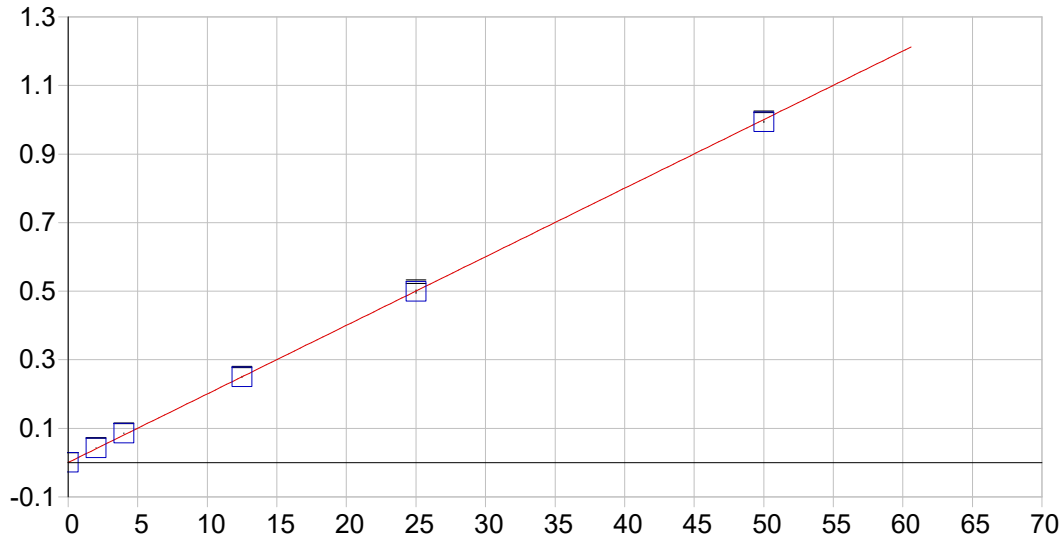
Mn 257.610 {131}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000369	Re-Slope:	1.000000
A1 (Gain):	0.558720	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999875	Status:	OK.
Std Error of Est:	0.000146		
Predicted MDL:	0.001166		
Predicted MQL:	0.003888		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00037	.001	1
S1	.02000	.02159	.002	7.96	.01245	.001	1
S2	.40000	.42855	.029	7.14	.24001	.001	1
S3	1.2500	1.2501	.000	.009	.69946	.002	1
S4	2.5000	2.4882	-.012	-.473	1.3918	.007	1
S5	5.0000	4.9816	-.018	-.369	2.7862	.003	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



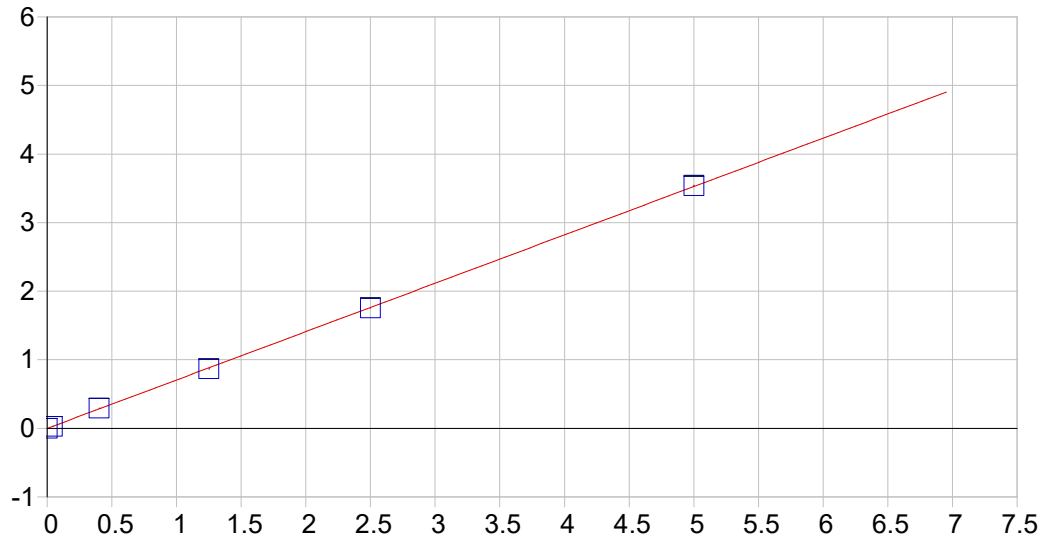
Mg 279.079 {121}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000466	Re-Slope:	1.000000
A1 (Gain):	0.019999	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999856	Status:	OK.
Std Error of Est:	0.000179		
Predicted MDL:	0.044148		
Predicted MQL:	0.147160		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00024	-.000	.000	.00046	.001	1
S1	2.0000	2.1250	.125	6.25	.04296	.000	1
S2	4.0000	4.2601	.260	6.50	.08566	.001	1
S3	12.500	12.489	-.011	-.087	.25023	.002	1
S4	25.000	24.934	-.066	-.265	.49911	.005	1
S5	50.000	49.692	-.308	-.616	.99424	.002	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



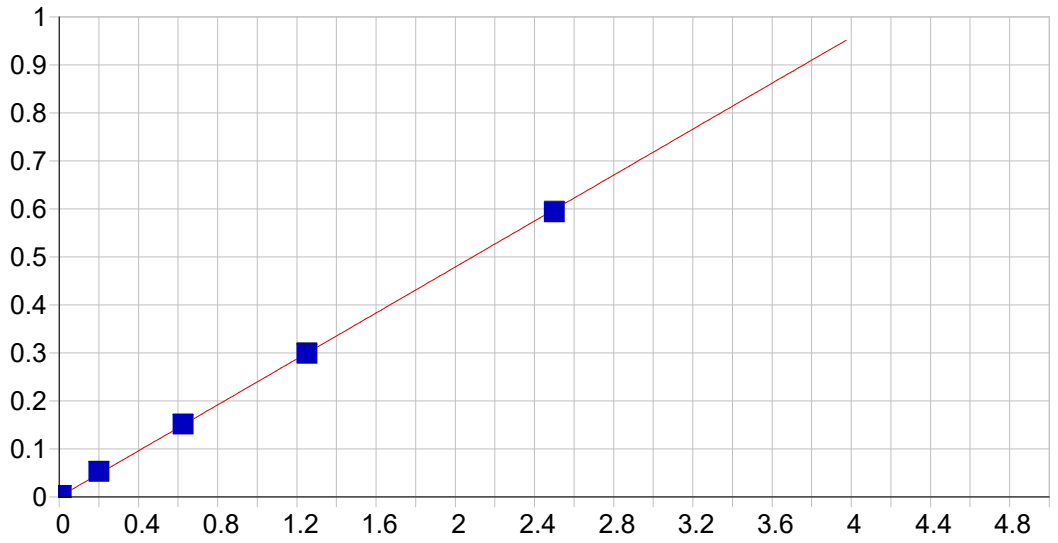
Ni 231.604 {446}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000172	Re-Slope:	1.000000
A1 (Gain):	0.705293	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999945	Status:	OK.
Std Error of Est:	0.000174		
Predicted MDL:	0.000441		
Predicted MQL:	0.001471		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00017	.000	1
S1	.04000	.03977	-.000	-.573	.02788	.000	1
S2	.40000	.41504	.015	3.76	.29256	.000	1
S3	1.2500	1.2291	-.021	-1.67	.86670	.002	1
S4	2.5000	2.4894	-.011	-.423	1.7556	.002	1
S5	5.0000	5.0167	.017	.333	3.5380	.007	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



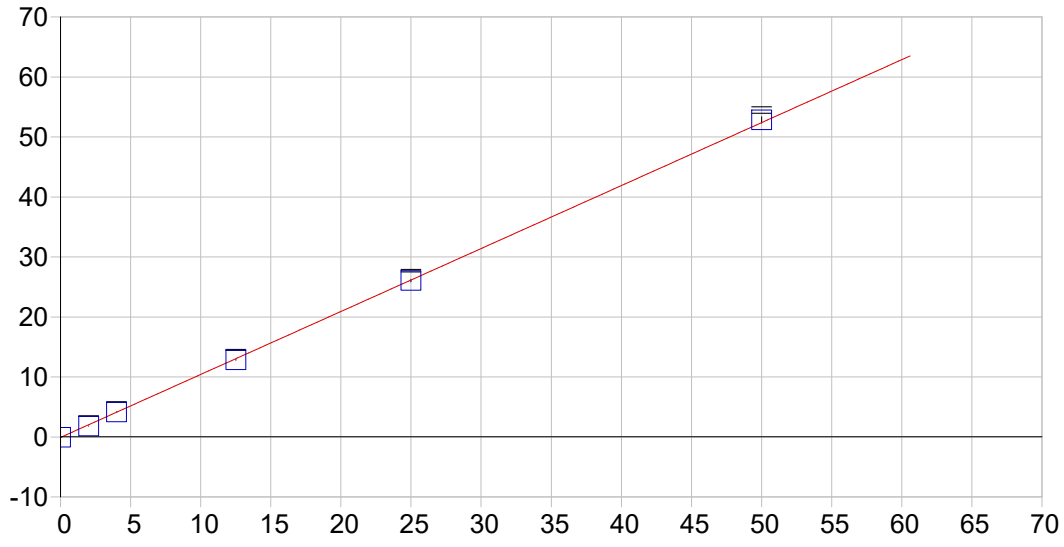
Ag 328.068 {103}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000281	Re-Slope:	1.000000
A1 (Gain):	0.239362	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999766	Status:	OK.
Std Error of Est:	0.000043		
Predicted MDL:	0.001181		
Predicted MQL:	0.003938		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00028	.000	1
S1	.01000	.01017	.000	1.65	.00271	.000	1
S2	.20000	.21946	.019	9.73	.05277	.000	1
S3	.62500	.63053	.006	.884	.15108	.000	1
S4	1.2500	1.2465	-.004	-.283	.29839	.001	1
S5	2.5000	2.4784	-.022	-.865	.59301	.002	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



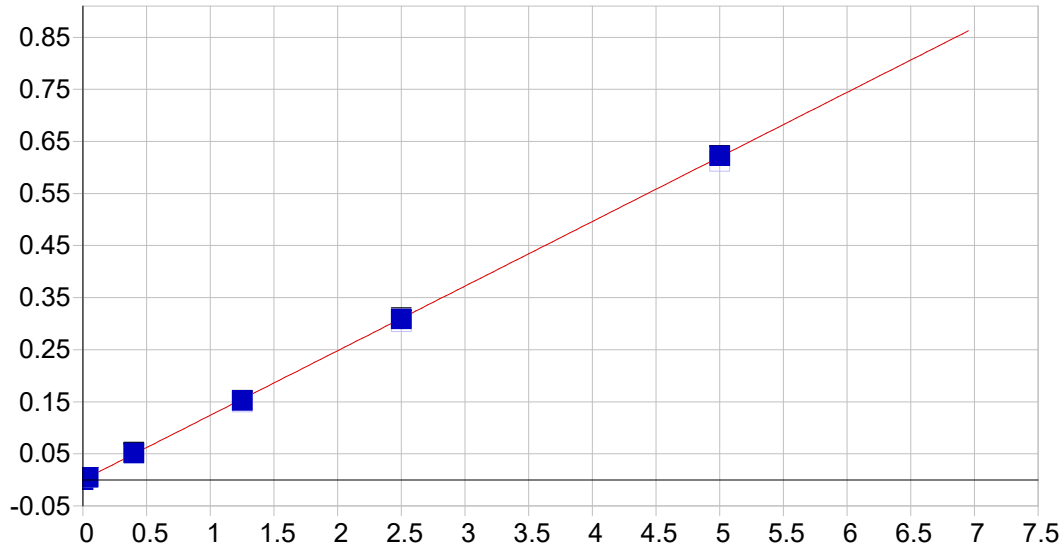
Na 818.326 { 41}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.096014	Re-Slope:	1.000000
A1 (Gain):	1.049782	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999863	Status:	OK.
Std Error of Est:	0.009201		
Predicted MDL:	0.011243		
Predicted MQL:	0.037476		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00018	.000	.000	-.09582	.009	1
S1	2.0000	1.8086	-.191	-9.57	1.8026	.012	1
S2	4.0000	4.0533	.053	1.33	4.1590	.017	1
S3	12.500	12.323	-.177	-1.41	12.841	.084	1
S4	25.000	24.890	-.110	-.442	26.033	.214	1
S5	50.000	50.425	.425	.851	52.840	.532	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



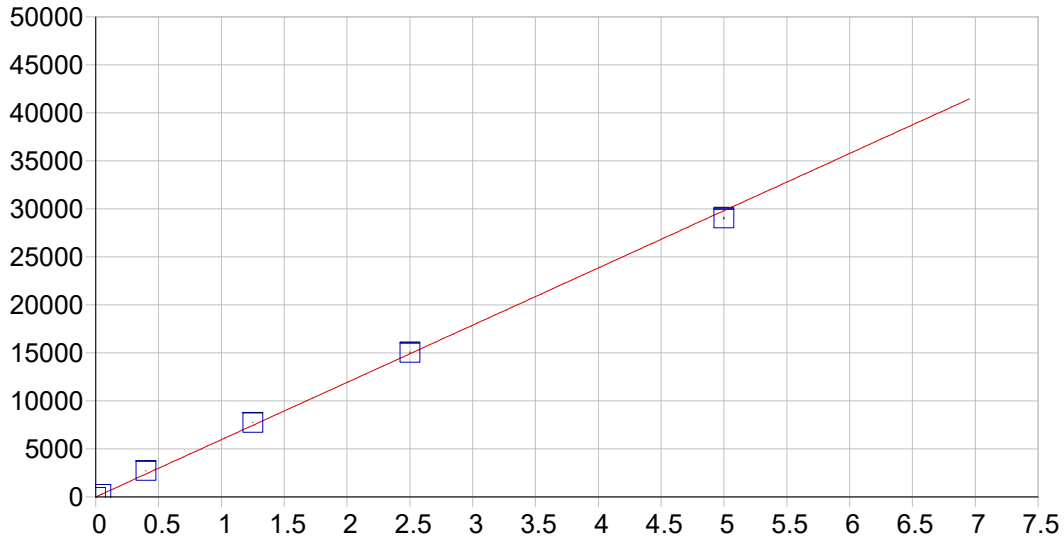
V 292.402 {115}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000005	Re-Slope:	1.000000
A1 (Gain):	0.124052	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999933	Status:	OK.
Std Error of Est:	0.000033		
Predicted MDL:	0.007618		
Predicted MQL:	0.025394		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00001	.000	1
S1	.04000	.04032	.000	.812	.00478	.000	1
S2	.40000	.41629	.016	4.07	.05075	.001	1
S3	1.2500	1.2269	-.023	-1.85	.14943	.001	1
S4	2.5000	2.4904	-.010	-.386	.30339	.003	1
S5	5.0000	5.0161	.016	.322	.61118	.001	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



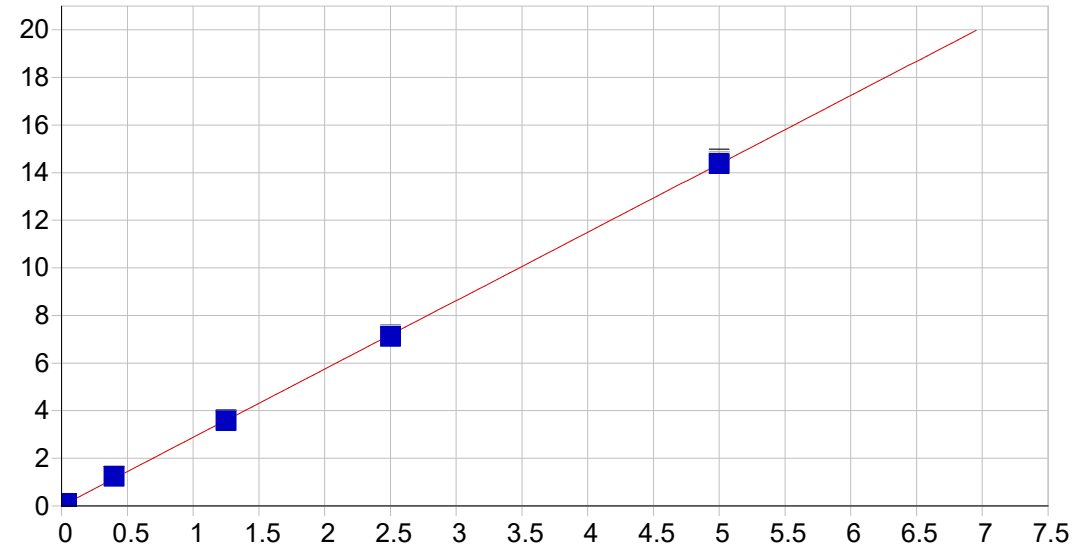
Zn 206.200 {464}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	3.353371	Re-Slope:	1.000000
A1 (Gain):	5962.217992	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999271	Status:	OK.
Std Error of Est:	5.345440		
Predicted MDL:	0.000221		
Predicted MQL:	0.000738		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	3.2953	.334	1
S1	.04000	.04332	.003	8.31	261.66	1.95	1
S2	.40000	.45553	.056	13.9	2719.3	7.28	1
S3	1.2500	1.2981	.048	3.85	7742.9	24.2	1
S4	2.5000	2.5228	.023	.912	15045.	48.2	1
S5	5.0000	4.8703	-.130	-2.59	29041.	99.2	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



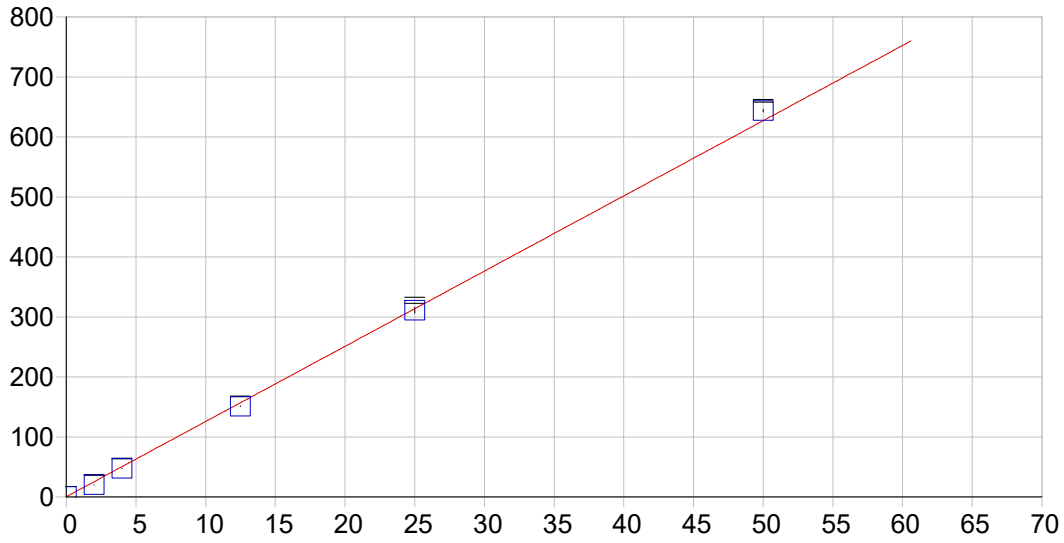
Zn 213.856 {158}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002848	Re-Slope:	1.000000
A1 (Gain):	2.873219	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999885	Status:	OK.
Std Error of Est:	0.001030		
Predicted MDL:	0.000408		
Predicted MQL:	0.001360		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00284	.001	1
S1	.04000	.04004	.000	.109	.11874	.001	1
S2	.40000	.42740	.027	6.85	1.2392	.005	1
S3	1.2500	1.2459	-.004	-.332	3.6086	.010	1
S4	2.5000	2.4749	-.025	-1.00	7.1661	.007	1
S5	5.0000	5.0018	.002	.036	14.479	.097	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



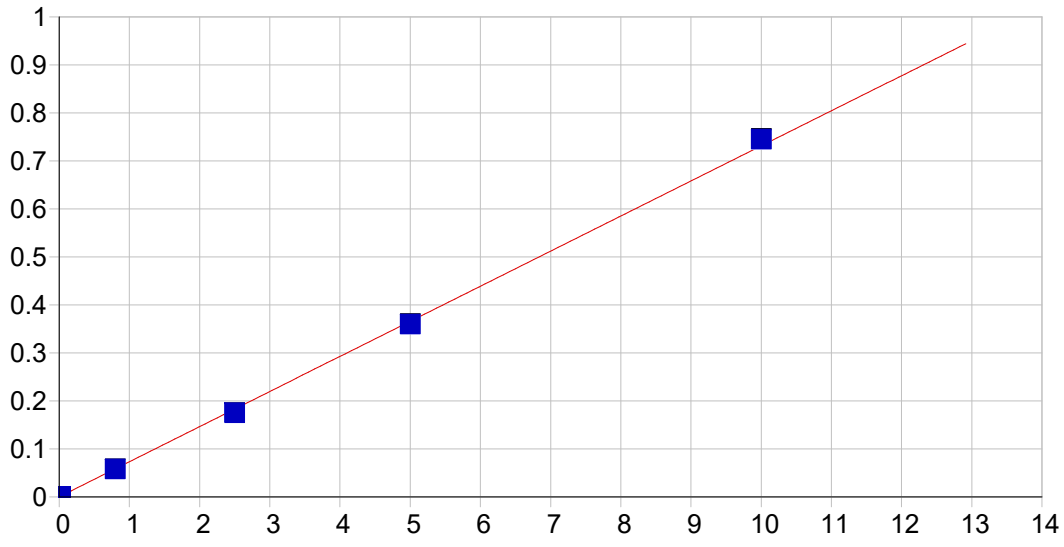
K 769.896 { 44}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.320799	Re-Slope:	1.000000
A1 (Gain):	12.534645	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999151	Status:	OK.
Std Error of Est:	0.273490		
Predicted MDL:	0.000886		
Predicted MQL:	0.002953		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00058	.001	.000	.32806	.007	1
S1	2.0000	1.5832	-.417	-20.8	20.166	.207	1
S2	4.0000	3.7537	-.246	-6.16	47.372	.395	1
S3	12.500	12.016	-.484	-3.87	150.93	.515	1
S4	25.000	24.798	-.202	-.806	311.16	5.17	1
S5	50.000	51.349	1.35	2.70	643.96	2.17	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



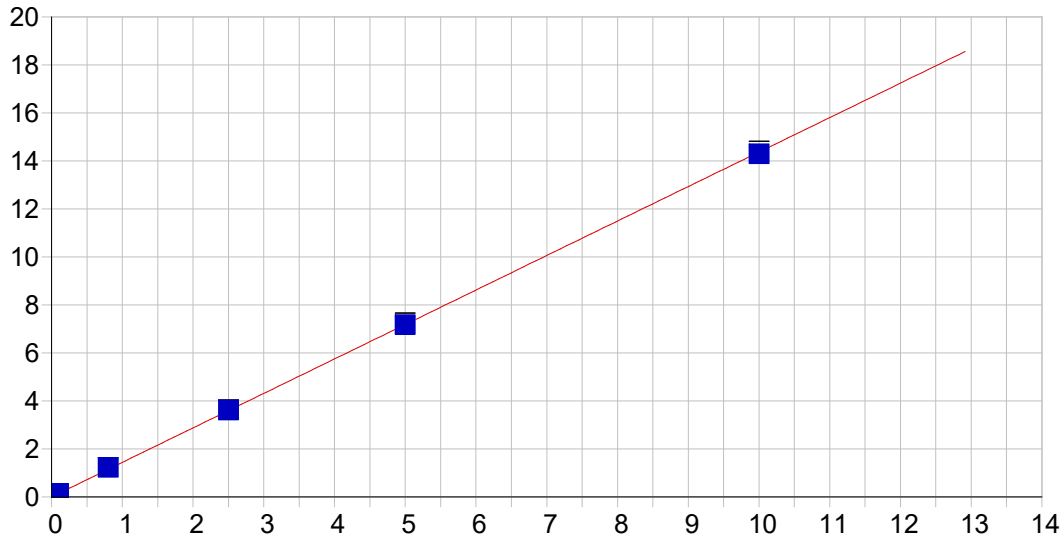
P 177.495 {490}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000257	Re-Slope:	1.000000
A1 (Gain):	0.073099	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999730	Status:	OK.
Std Error of Est:	0.000040		
Predicted MDL:	0.001929		
Predicted MQL:	0.006429		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00026	.000	1
S1	.02000	.01830	-.002	-8.48	.00158	.000	1
S2	.80000	.78880	-.011	-1.40	.05778	.000	1
S3	2.5000	2.3944	-.106	-4.22	.17486	.000	1
S4	5.0000	4.9220	-.078	-1.56	.35920	.000	1
S5	10.000	10.196	.196	1.96	.74392	.001	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



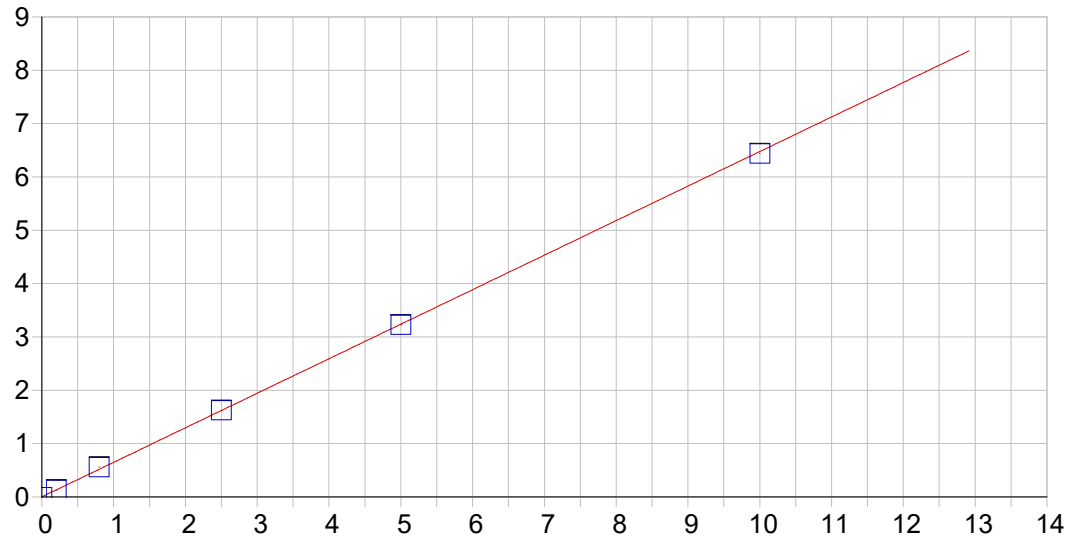
B 249.678 {135}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001318	Re-Slope:	1.000000
A1 (Gain):	1.436705	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999908	Status:	OK.
Std Error of Est:	0.001024		
Predicted MDL:	0.001353		
Predicted MQL:	0.004511		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00131	.001	1
S1	.10000	.09918	-.001	-.823	.14364	.003	1
S2	.80000	.84903	.049	6.13	1.2203	.009	1
S3	2.5000	2.5120	.012	.478	3.6075	.034	1
S4	5.0000	4.9961	-.004	-.077	7.1738	.068	1
S5	10.000	9.9437	-.056	-.563	14.277	.122	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



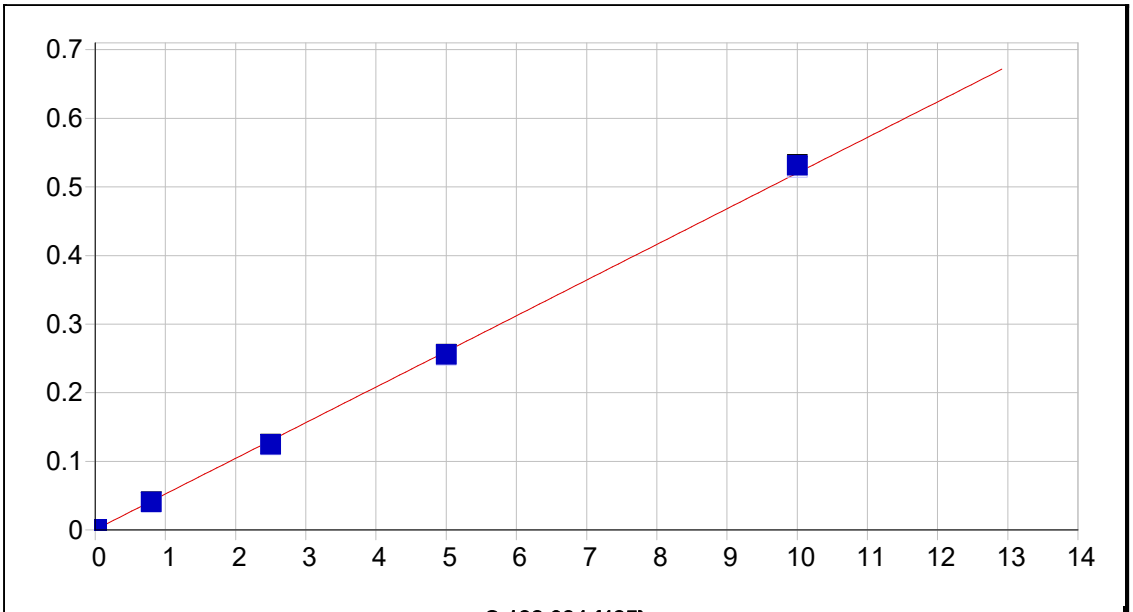
Mo 202.030 {467}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000943	Re-Slope:	1.000000
A1 (Gain):	0.647500	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999851	Status:	OK.
Std Error of Est:	0.000831		
Predicted MDL:	0.000451		
Predicted MQL:	0.001504		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	.00093	.000	1
S1	.20000	.20187	.002	.934	.13165	.001	1
S2	.80000	.86389	.064	7.99	.56031	.001	1
S3	2.5000	2.5064	.006	.256	1.6238	.001	1
S4	5.0000	4.9842	-.016	-.316	3.2282	.002	1
S5	10.000	9.9437	-.056	-.563	6.4395	.004	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



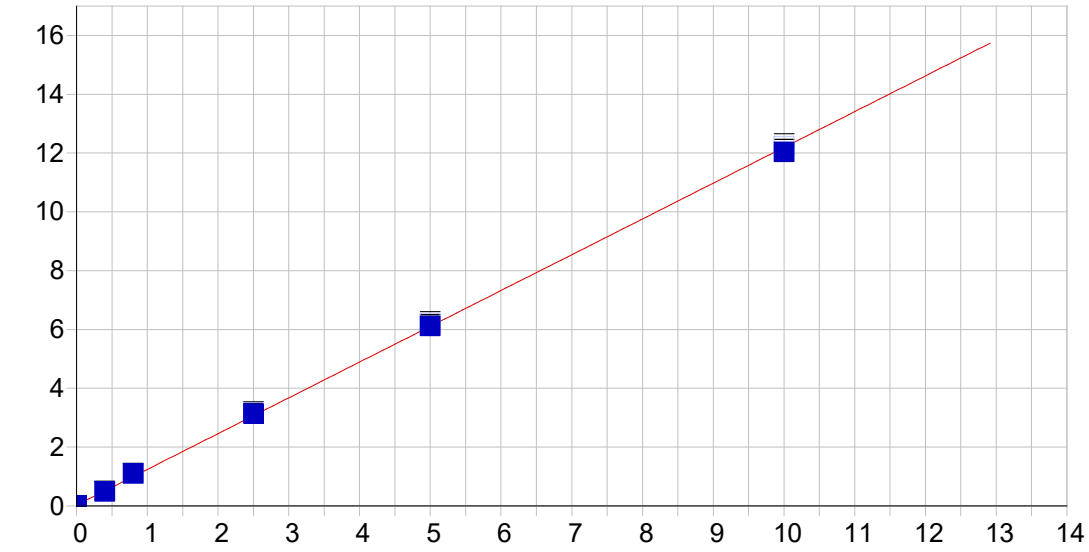
S 182.034 {485}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000320	Re-Slope:	1.000000
A1 (Gain):	0.051981	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999674	Status:	OK.
Std Error of Est:	0.000031		
Predicted MDL:	0.002824		
Predicted MQL:	0.009415		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00032	.000	1
S1	.02000	.01958	-.000	-2.09	.00126	.000	1
S2	.80000	.77750	-.022	-2.81	.04046	.000	1
S3	2.5000	2.3897	-.110	-4.41	.12367	.000	1
S4	5.0000	4.9139	-.086	-1.72	.25402	.000	1
S5	10.000	10.219	.219	2.19	.52807	.001	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



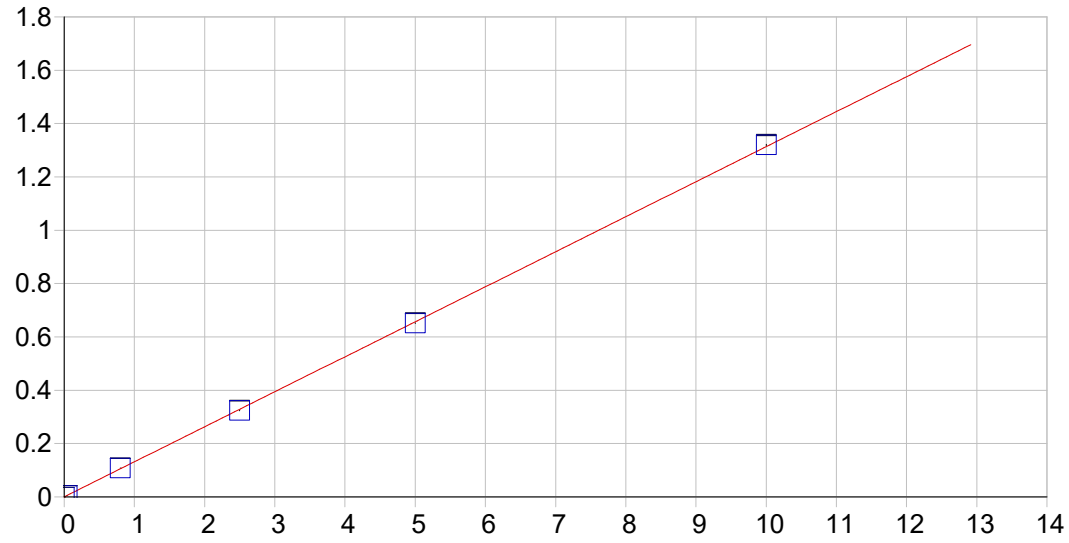
Si 251.611 {134}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.023948	Re-Slope:	1.000000
A1 (Gain):	1.216889	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999696	Status:	OK.
Std Error of Est:	0.003228		
Predicted MDL:	0.001453		
Predicted MQL:	0.004844		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00003	-.000	.000	.02391	.004	1
S1	.40000	.38483	-.015	-3.79	.49508	.004	1
S2	.80000	.88014	.080	10.0	1.1107	.004	1
S3	2.5000	2.5587	.059	2.35	3.1868	.026	1
S4	5.0000	5.0086	.009	.171	6.2172	.057	1
S5	10.000	9.8676	-.132	-1.32	12.229	.090	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



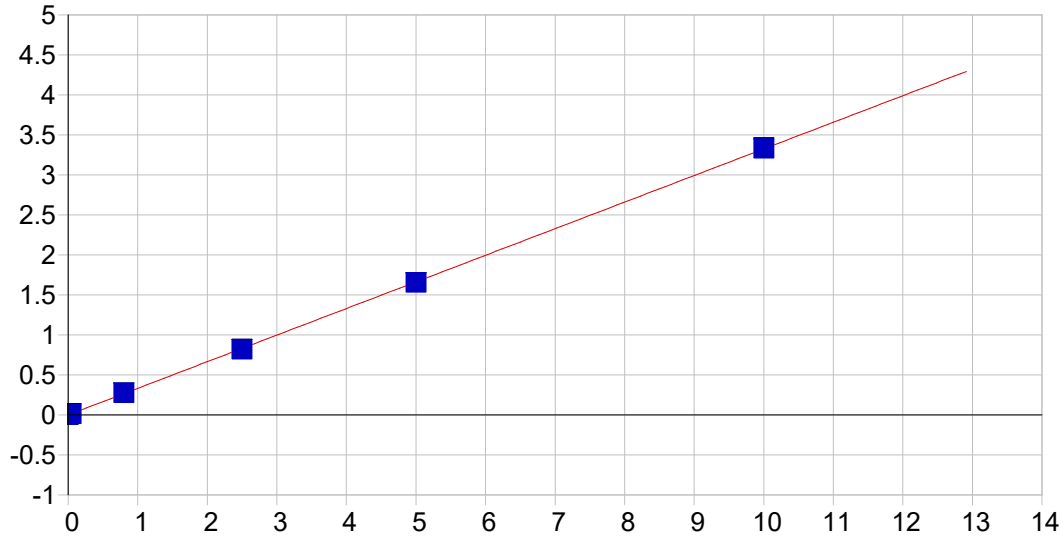
Sn 189.989 {478}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000302	Re-Slope:	1.000000
A1 (Gain):	0.131294	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999948	Status:	OK.
Std Error of Est:	0.000044		
Predicted MDL:	0.000972		
Predicted MQL:	0.003240		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00030	.000	1
S1	.04000	.03853	-.001	-3.67	.00536	.000	1
S2	.80000	.82398	.024	3.00	.10849	.000	1
S3	2.5000	2.4624	-.038	-1.50	.32360	.001	1
S4	5.0000	4.9624	-.038	-.752	.65183	.001	1
S5	10.000	10.053	.053	.527	1.3202	.002	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



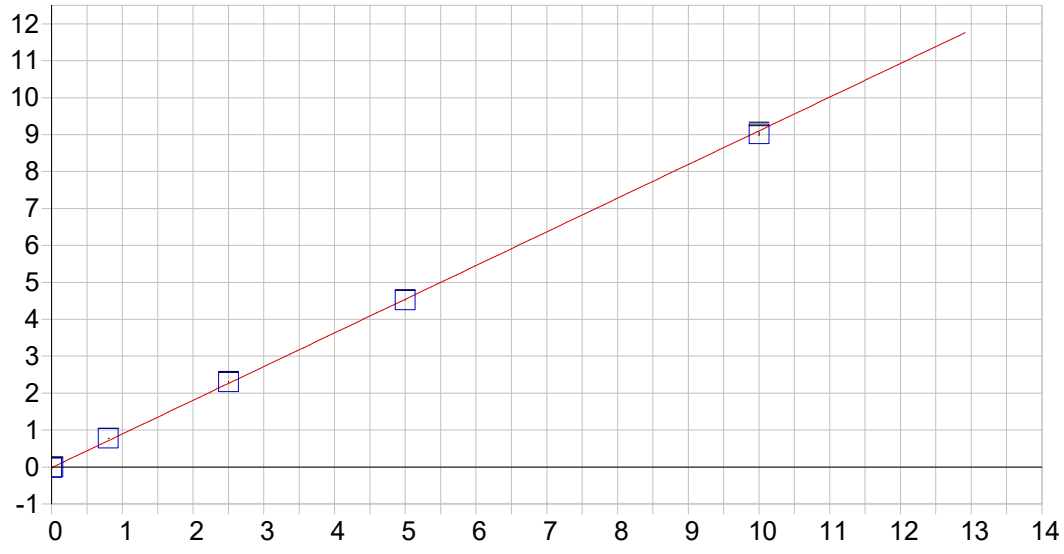
Ti 336.121 {100}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000055	Re-Slope:	1.000000
A1 (Gain):	0.332497	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999949	Status:	OK.
Std Error of Est:	0.000111		
Predicted MDL:	0.003944		
Predicted MQL:	0.013147		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00005	.001	1
S1	.04000	.03940	-.001	-1.49	.01314	.002	1
S2	.80000	.83199	.032	4.00	.27656	.002	1
S3	2.5000	2.4690	-.031	-1.24	.82057	.001	1
S4	5.0000	4.9749	-.025	-.501	1.6534	.002	1
S5	10.000	10.025	.025	.247	3.3316	.008	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



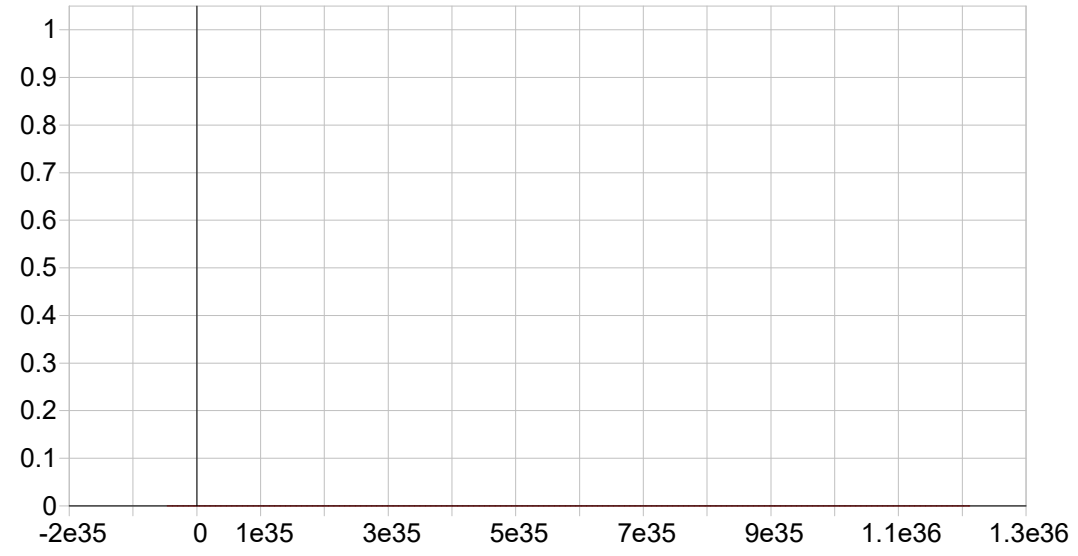
Li 670.784 { 50}

Date of Fit:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.018657	Re-Slope:	1.000000
A1 (Gain):	0.912084	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999784	Status:	OK.
Std Error of Est:	0.000444		
Predicted MDL:	0.006358		
Predicted MQL:	0.021193		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.01866	.004	1
S5	10.000	9.9080	-.092	-.920	9.0182	.047	1
S4	5.0000	4.9762	-.024	-.476	4.5201	.010	1
S3	2.5000	2.5470	.047	1.88	2.3045	.013	1
S2	.80000	.86949	.069	8.69	.77439	.002	1
S1	.02000	.01930	-.001	-3.51	-.00106	.003	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

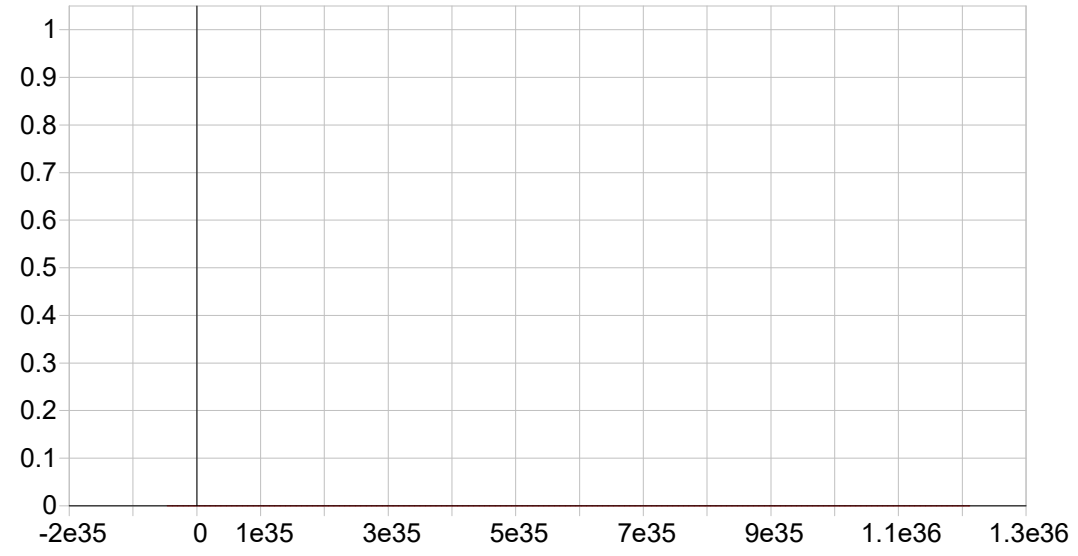


Y 224.306 {450}*

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}*

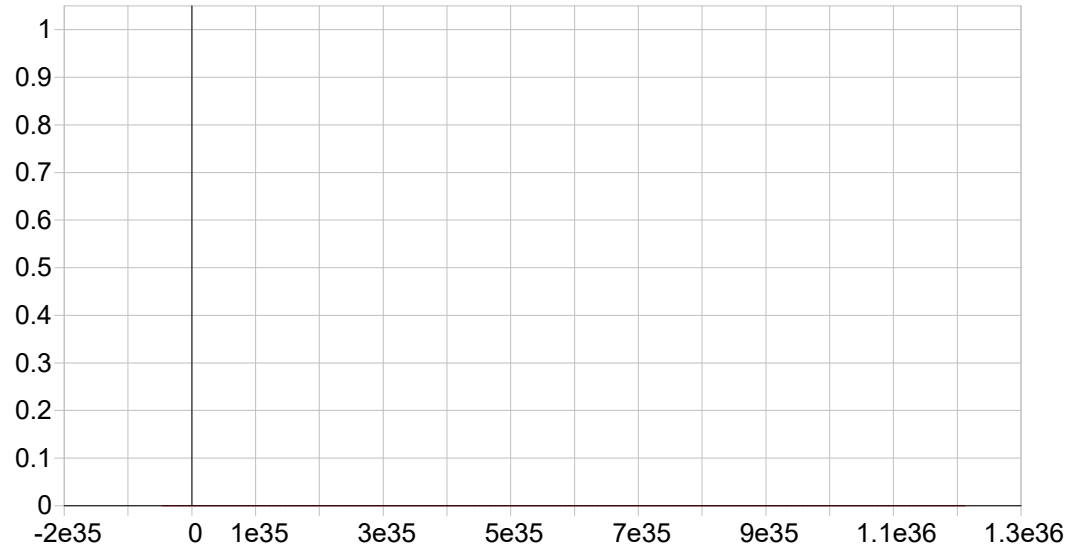
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

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



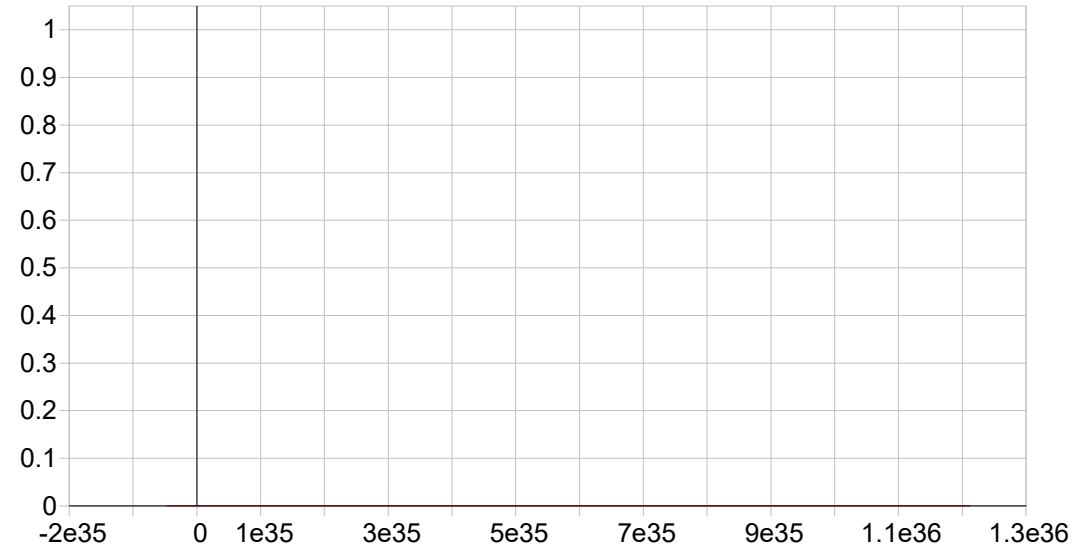
Y 371.030 { 91}*

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

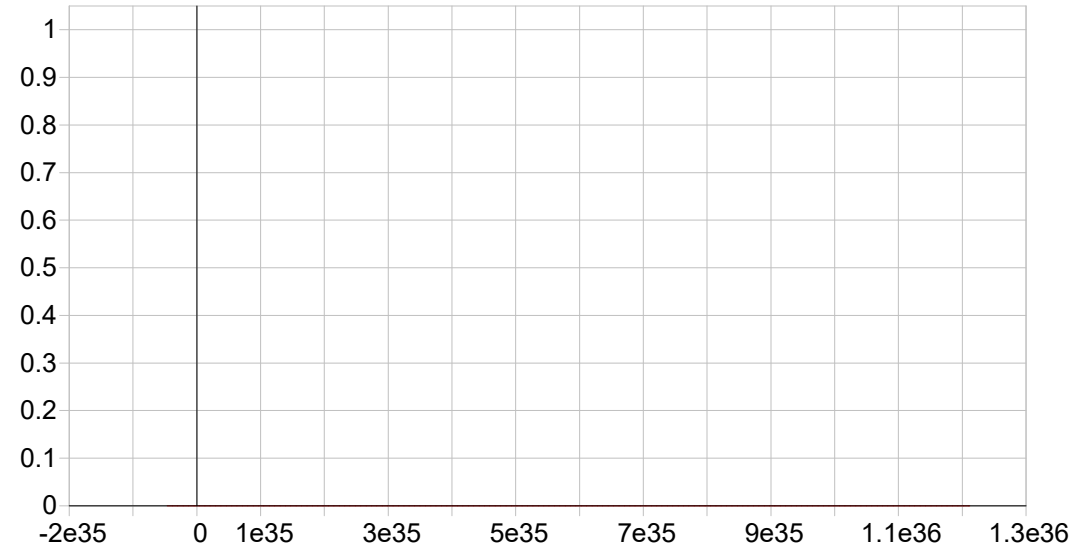
Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305



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



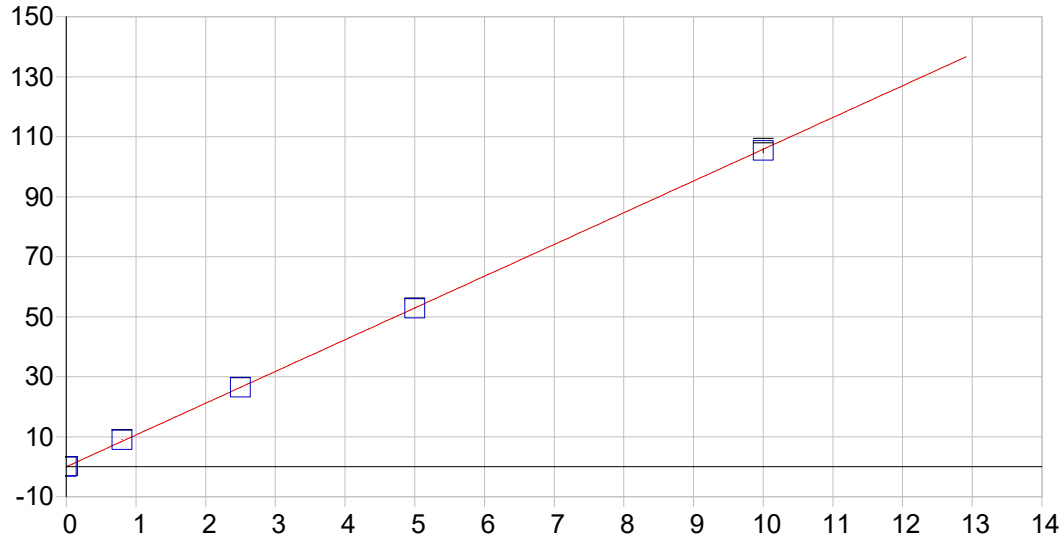
In 230.606 {446}*

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:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

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:	6/26/2025 17:05:36	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000143	Re-Slope:	1.000000
A1 (Gain):	10.583791	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999904	Status:	OK.
Std Error of Est:	0.003440		
Predicted MDL:	0.000216		
Predicted MQL:	0.000719		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00015	.002	1
S1	.02000	.01974	-.000	-1.32	.20874	.001	1
S2	.80000	.85154	.052	6.44	9.0124	.032	1
S3	2.5000	2.4996	-.000	-.018	26.455	.074	1
S4	5.0000	4.9928	-.007	-.143	52.843	.113	1
S5	10.000	9.9563	-.044	-.437	105.38	.742	1

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: S0 Acquired: 6/26/2025 16:41:20 Type: Cal
Method: METHOD 6010D, 200.7 M(v6) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	**-.00010**	**-.00075**	**-.00016**	**-.00006**	**.00058**	**.00058**	**.01410**	**.00457**
Stddev	.00009	.00003	.00037	.00016	.00009	.00215	.00174	.00042
%RSD	95.247	3.4630	229.55	282.05	15.229	372.69	12.310	9.1613
#1	-.00004	-.00073	-.00058	-.00001	.00064	.00197	.01315	.00409
#2	-.00005	-.00078	.00011	-.00024	.00062	.00166	.01611	.00475
#3	-.00021	-.00074	-.00001	.00007	.00048	-.00190	.01305	.00486

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	**-.00024**	**.00546**	**.00059**	**.00012**	**.04869**	**.00065**	**.00037**	**.00046**
Stddev	.00019	.00174	.00014	.00016	.00201	.00057	.00109	.00053
%RSD	78.498	31.919	24.017	129.68	4.1201	87.650	297.68	114.18
#1	-.00006	.00495	.00043	.00011	.05050	.00076	.00062	.00047
#2	-.00043	.00740	.00066	-.00003	.04903	.00003	.00131	-.00007
#3	-.00023	.00403	.00069	.00028	.04653	.00116	-.00083	.00099

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	**-.00017**	**.00028**	**-.09582**	**-.00001**	**.00284**	**.32806**	**.00026**	**.00131**
Stddev	.00012	.00028	.00949	.00034	.00055	.00683	.00014	.00064
%RSD	69.502	98.275	9.9007	6727.9	19.182	2.0807	53.044	48.949
#1	-.00004	.00058	-.09386	-.00034	.00337	.32603	.00018	.00197
#2	-.00020	.00003	-.08747	.00035	.00228	.33568	.00017	.00069
#3	-.00028	.00024	-.10613	-.00002	.00288	.32249	.00041	.00127

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	**.00093**	**.00032**	**.02391**	**.00030**	**.00005**	**-.01866**	**-.00015**
Stddev	.00026	.00008	.00414	.00011	.00055	.00433	.00217
%RSD	27.853	24.239	17.332	34.909	1003.1	23.188	1419.6
#1	.00110	.00024	.02868	.00042	-.00057	-.01993	-.00019
#2	.00106	.00039	.02186	.00028	.00027	-.01384	.00203
#3	.00063	.00034	.02120	.00021	.00046	-.02220	-.00230

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: S0 Acquired: 6/26/2025 16:41:20 Type: Cal
Method: METHOD 6010D, 200.7 M(v6) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	4030.9	40366.	2915.1	2535.3	6024.3
Stddev	15.9	61.	35.4	7.1	15.3
%RSD	.39543	.15112	1.2153	.27890	.25358
#1	4049.2	40302.	2897.9	2543.3	6041.9
#2	4022.2	40373.	2955.9	2529.7	6015.0
#3	4021.1	40423.	2891.5	2533.0	6015.9

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: S1 Acquired: 6/26/2025 16:45:55 Type: Cal
Method: METHOD 6010D, 200.7 M(v6) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	**.00071**	**.00394**	**.00367**	**.00170**	**.00770**	**.01126**	**.40860**	**.08047**
Stddev	.00008	.00019	.00019	.00006	.00006	.00190	.00648	.00120
%RSD	11.243	4.9138	5.1150	3.2690	.77797	16.849	1.5867	1.4881
#1	.00077	.00381	.00387	.00175	.00765	.01031	.40416	.07910
#2	.00062	.00385	.00349	.00164	.00777	.01002	.41604	.08134
#3	.00075	.00416	.00365	.00171	.00768	.01344	.40560	.08095

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	**.01955**	**.20107**	**.00389**	**.02280**	**.18504**	**.00436**	**.01245**	**.04296**
Stddev	.00012	.00237	.00010	.00017	.00295	.00039	.00053	.00035
%RSD	.61205	1.1764	2.6983	.76569	1.5936	9.0329	4.2502	.81125
#1	.01962	.19840	.00376	.02271	.18212	.00446	.01302	.04256
#2	.01941	.20189	.00394	.02300	.18802	.00392	.01197	.04320
#3	.01961	.20291	.00395	.02269	.18499	.00469	.01237	.04312

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	**.02788**	**.00271**	**1.8026**	**.00478**	**.11874**	**20.166**	**.00158**	**.14364**
Stddev	.00010	.00010	.0116	.00034	.00076	.207	.00017	.00298
%RSD	.37333	3.8333	.64540	7.1154	.63917	1.0283	10.726	2.0771
#1	.02795	.00266	1.7922	.00512	.11916	19.952	.00145	.14024
#2	.02776	.00283	1.8152	.00479	.11786	20.179	.00153	.14581
#3	.02792	.00264	1.8004	.00444	.11919	20.366	.00177	.14487

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	**.13165**	**.00126**	**.49508**	**.00536**	**.01314**	**-.00106**	**.20874**
Stddev	.00063	.00010	.00373	.00012	.00166	.00308	.00129
%RSD	.48188	7.5602	.75390	2.2265	12.647	291.37	.61895
#1	.13093	.00137	.49080	.00549	.01489	-.00460	.20844
#2	.13190	.00122	.49680	.00527	.01297	.00057	.20763
#3	.13213	.00119	.49766	.00532	.01158	.00087	.21016

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: S1 Acquired: 6/26/2025 16:45:55 Type: Cal
Method: METHOD 6010D, 200.7 M(v6) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	4045.4	40462.	2955.0	2538.4	5938.0
Stddev	7.7	135.	13.5	16.4	6.1
%RSD	.18924	.33411	.45817	.64647	.10308
#1	4054.0	40343.	2969.7	2521.7	5943.2
#2	4039.3	40433.	2943.1	2554.5	5939.5
#3	4042.9	40609.	2952.0	2539.1	5931.2

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: S2 Acquired: 6/26/2025 16:50:22 Type: Cal
Method: METHOD 6010D, 200.7 M(v6) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	**.03434**	**.09834**	**.24912**	**.07045**	**.12020**	**.19802**	**6.7899**	**.53484**
Stddev	.00009	.00040	.00075	.00028	.00035	.00133	.0259	.00492
%RSD	.27567	.40423	.30120	.39422	.29142	.66946	.38127	.91929
#1	.03444	.09867	.24916	.07076	.12031	.19748	6.7907	.53704
#2	.03427	.09790	.24985	.07025	.12047	.19705	6.7637	.53827
#3	.03429	.09844	.24835	.07034	.11980	.19953	6.8154	.52921

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	**1.4181**	**.42183**	**.04990**	**.31288**	**1.4345**	**.03211**	**.24001**	**.08566**
Stddev	.0028	.00163	.00026	.00015	.0072	.00008	.00117	.00101
%RSD	.19525	.38538	.52965	.04903	.50277	.24552	.48588	1.1837
#1	1.4213	.42053	.04961	.31295	1.4425	.03219	.24065	.08568
#2	1.4164	.42132	.04995	.31270	1.4323	.03203	.23866	.08464
#3	1.4167	.42366	.05014	.31298	1.4286	.03210	.24071	.08667

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	**.29256**	**.05277**	**4.1590**	**.05075**	**1.2392**	**47.372**	**.05778**	**1.2203**
Stddev	.00027	.00030	.0167	.00135	.0049	.395	.00013	.0088
%RSD	.09284	.56511	.40026	2.6517	.39481	.83356	.22281	.72060
#1	.29253	.05277	4.1681	.05058	1.2374	47.094	.05779	1.2289
#2	.29230	.05247	4.1398	.04950	1.2448	47.198	.05791	1.2206
#3	.29284	.05307	4.1692	.05218	1.2355	47.824	.05765	1.2113

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	**.56031**	**.04046**	**1.1107**	**.10849**	**.27656**	**.77439**	**9.0124**
Stddev	.00098	.00020	.0037	.00006	.00218	.00221	.0317
%RSD	.17427	.49704	.33524	.05184	.78724	.28571	.35161
#1	.55935	.04067	1.1150	.10855	.27468	.77292	9.0087
#2	.56028	.04028	1.1091	.10847	.27605	.77332	8.9827
#3	.56130	.04043	1.1081	.10844	.27894	.77694	9.0457

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: S2 Acquired: 6/26/2025 16:50:22 Type: Cal
Method: METHOD 6010D, 200.7 M(v6) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	4030.8	40062.	2948.0	2522.5	5747.7
Stddev	9.2	105.	9.8	3.5	12.6
%RSD	.22824	.26174	.33257	.13956	.21857
#1	4036.0	40055.	2938.2	2518.4	5755.6
#2	4036.2	40171.	2957.8	2524.4	5754.2
#3	4020.2	39961.	2947.9	2524.7	5733.2

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: S3 Acquired: 6/26/2025 16:54:37 Type: Cal
Method: METHOD 6010D, 200.7 M(v6) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	.10447	.28815	.73607	.20450	.34711	.54081	19.979	1.5608
Stddev	.00041	.00036	.00303	.00016	.00065	.00644	.037	.0135
%RSD	.38847	.12639	.41212	.07648	.18863	1.1900	.18354	.86399
#1	.10401	.28788	.73342	.20453	.34704	.54423	19.959	1.5662
#2	.10478	.28801	.73938	.20464	.34650	.54482	20.021	1.5706
#3	.10461	.28857	.73542	.20433	.34780	.53339	19.956	1.5454

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	4.2581	1.2318	.14607	.92542	4.0283	.09387	.69946	.25023
Stddev	.0156	.0050	.00016	.00123	.0335	.00057	.00150	.00190
%RSD	.36675	.40514	.10737	.13285	.83168	.60255	.21460	.75979
#1	4.2450	1.2366	.14591	.92424	4.0330	.09409	.69784	.24813
#2	4.2754	1.2320	.14607	.92669	4.0592	.09428	.70081	.25072
#3	4.2538	1.2267	.14622	.92532	3.9927	.09322	.69971	.25184

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	.86670	.15108	12.841	.14943	3.6086	150.93	.17486	3.6075
Stddev	.00157	.00019	.084	.00053	.0104	.51	.00034	.0336
%RSD	.18107	.12477	.65092	.35135	.28860	.34090	.19422	.93204
#1	.86513	.15090	12.788	.14930	3.5979	150.82	.17455	3.6046
#2	.86827	.15106	12.937	.14898	3.6092	151.50	.17523	3.6425
#3	.86669	.15128	12.797	.15001	3.6187	150.49	.17481	3.5754

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	1.6238	.12367	3.1868	.32360	.82057	2.3045	26.455
Stddev	.0012	.00050	.0261	.00124	.00065	.0131	.074
%RSD	.07054	.40313	.81936	.38165	.07934	.56904	.28045
#1	1.6251	.12342	3.1914	.32272	.82099	2.3116	26.463
#2	1.6230	.12425	3.2103	.32501	.81982	2.3125	26.524
#3	1.6234	.12335	3.1587	.32307	.82090	2.2893	26.376

Reviewed By:jaswal
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Inst Id :P5
LB :LB136305

Sample Name: S3 Acquired: 6/26/2025 16:54:37 Type: Cal
Method: METHOD 6010D, 200.7 M(v6) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	**3970.9**	**39148.**	**2889.9**	**2481.0**	**5474.0**
Stddev	5.4	235.	15.8	17.5	5.2
%RSD	.13574	.60148	.54841	.70585	.09417
#1	3964.7	39365.	2894.6	2493.3	5474.8
#2	3974.3	39181.	2872.3	2488.8	5468.5
#3	3973.6	38897.	2902.9	2461.0	5478.7

Reviewed By:jaswal
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Inst Id :P5
LB :LB136305

Sample Name: S4 Acquired: 6/26/2025 16:58:54 Type: Cal
Method: METHOD 6010D, 200.7 M(v6) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	**.21500**	**.57365**	**1.4784**	**.40765**	**.69242**	**1.0741**	**40.031**	**3.0542**
Stddev	.00049	.00145	.0052	.00046	.00040	.0022	.095	.0334
%RSD	.22736	.25358	.35168	.11399	.05785	.20729	.23853	1.0932
#1	.21481	.57312	1.4754	.40713	.69196	1.0715	40.032	3.0603
#2	.21464	.57253	1.4753	.40801	.69261	1.0752	40.126	3.0841
#3	.21556	.57529	1.4844	.40783	.69268	1.0756	39.935	3.0182

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	**8.6266**	**2.4334**	**.29379**	**1.8659**	**7.8023**	**.18711**	**1.3918**	**.49911**
Stddev	.0222	.0117	.00083	.0035	.0894	.00017	.0065	.00508
%RSD	.25780	.48077	.28104	.18982	1.1463	.08884	.46941	1.0187
#1	8.6145	2.4419	.29440	1.8649	7.8438	.18730	1.3954	.50004
#2	8.6131	2.4383	.29285	1.8630	7.8635	.18702	1.3958	.50366
#3	8.6523	2.4201	.29412	1.8699	7.6996	.18701	1.3843	.49362

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	**1.7556**	**.29839**	**26.033**	**.30339**	**7.1661**	**311.16**	**.35920**	**7.1738**
Stddev	.0022	.00112	.214	.00251	.0066	5.17	.00049	.0678
%RSD	.12803	.37644	.82027	.82811	.09262	1.6618	.13764	.94584
#1	1.7548	.29943	26.252	.30543	7.1650	317.07	.35932	7.2166
#2	1.7539	.29720	26.021	.30417	7.1733	307.47	.35866	7.2093
#3	1.7581	.29853	25.825	.30059	7.1602	308.94	.35963	7.0956

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	**3.2282**	**.25402**	**6.2172**	**.65183**	**1.6534**	**4.5201**	**52.843**
Stddev	.0023	.00031	.0569	.00115	.0015	.0095	.113
%RSD	.07247	.12086	.91497	.17581	.09150	.21023	.21402
#1	3.2257	.25367	6.2493	.65176	1.6523	4.5310	52.890
#2	3.2304	.25414	6.2507	.65073	1.6551	4.5147	52.925
#3	3.2285	.25424	6.1515	.65301	1.6527	4.5145	52.714

Reviewed By:jaswal
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Inst Id :P5
LB :LB136305

Sample Name: S4 Acquired: 6/26/2025 16:58:54 Type: Cal
Method: METHOD 6010D, 200.7 M(v6) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	3917.7	38657.	2874.4	2442.8	5261.2
Stddev	3.5	339.	22.8	11.2	3.9
%RSD	.08881	.87665	.79224	.45709	.07346
#1	3916.4	38465.	2851.1	2443.6	5257.1
#2	3915.1	39048.	2875.6	2453.6	5264.7
#3	3921.7	38457.	2896.6	2431.3	5261.8

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: S5 Acquired: 6/26/2025 17:03:11 Type: Cal
Method: METHOD 6010D, 200.7 M(v6) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	.44884	1.1409	3.0149	.81634	1.3848	2.1686	79.628	5.9990
Stddev	.00068	.0022	.0057	.00118	.0012	.0081	1.107	.0496
%RSD	.15063	.19384	.18894	.14481	.08584	.37532	1.3908	.82673
#1	.44877	1.1412	3.0158	.81731	1.3837	2.1633	79.882	6.0359
#2	.44820	1.1386	3.0089	.81502	1.3847	2.1645	80.587	6.0184
#3	.44954	1.1430	3.0202	.81668	1.3860	2.1780	78.416	5.9426

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	17.541	4.8622	.56245	3.7951	15.287	.36302	2.7862	.99424
Stddev	.036	.0115	.00164	.0071	.134	.00169	.0029	.00244
%RSD	.20498	.23626	.29091	.18724	.87779	.46566	.10379	.24510
#1	17.543	4.8493	.56175	3.7975	15.358	.36368	2.7854	.99409
#2	17.503	4.8713	.56432	3.7871	15.370	.36110	2.7894	.99675
#3	17.575	4.8660	.56129	3.8006	15.132	.36428	2.7837	.99188

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	3.5380	.59301	52.840	.61118	14.479	643.96	.74392	14.277
Stddev	.0066	.00177	.532	.00066	.097	2.17	.00125	.122
%RSD	.18511	.29891	1.0068	.10859	.66734	.33639	.16856	.85284
#1	3.5382	.59210	52.949	.61101	14.375	643.00	.74511	14.328
#2	3.5314	.59505	53.309	.61192	14.567	646.44	.74261	14.364
#3	3.5445	.59187	52.261	.61062	14.494	642.44	.74404	14.137

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	6.4395	.52807	12.229	1.3202	3.3316	9.0182	105.38
Stddev	.0039	.00110	.090	.0024	.0081	.0474	.74
%RSD	.06004	.20894	.73778	.17979	.24204	.52584	.70450
#1	6.4433	.52821	12.237	1.3205	3.3223	8.9722	104.76
#2	6.4356	.52691	12.314	1.3176	3.3369	9.0156	105.16
#3	6.4395	.52910	12.135	1.3223	3.3356	9.0669	106.20

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: S5 Acquired: 6/26/2025 17:03:11 Type: Cal
Method: METHOD 6010D, 200.7 M(v6) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	3791.7	37609.	2811.4	2349.2	4947.4
Stddev	9.0	201.	17.6	15.7	11.0
%RSD	.23752	.53532	.62683	.66722	.22287
#1	3783.8	37813.	2808.8	2367.3	4934.9
#2	3789.9	37411.	2795.3	2339.9	4951.7
#3	3801.5	37605.	2830.2	2340.4	4955.7

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: ICV01 Acquired: 6/26/2025 17:07:45 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.860709**	**3.874885**	**3.871686**	**3.977339**	**4.120297**	**7.682310**
Stddev	.026562	.019087	.012900	.014668	.014209	.019087
%RSD	.6880006	.4925763	.3331972	.3687775	.3448527	.2484566
#1	3.836837	3.867167	3.862961	3.963681	4.109517	7.700956
#2	3.855968	3.860865	3.865592	3.975493	4.114974	7.662810
#3	3.889322	3.896622	3.886504	3.992842	4.136398	7.683163

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.770352**	**.2021606**	**1.956368**	**19.19811**	**.7827574**	**1.949740**
Stddev	.023708	.0016109	.007324	.05530	.0021067	.006946
%RSD	.3051093	.7968326	.3743893	.2880539	.2691374	.3562482
#1	7.758677	.2039922	1.951969	19.22568	.7836934	1.945613
#2	7.797633	.2015257	1.952312	19.23421	.7842339	1.945848
#3	7.754745	.2009639	1.964823	19.13445	.7803449	1.957759

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.022385**	**3.814740**	**1.928531**	**19.39037**	**1.938886**	**.9972993**
Stddev	.008197	.053725	.002351	.10054	.007778	.0036021
%RSD	.8017326	1.408342	.1219059	.5184845	.4011443	.3611895
#1	1.031815	3.847760	1.929344	19.37298	1.935652	.9931437
#2	1.016971	3.843712	1.930369	19.49847	1.933246	.9992221
#3	1.018367	3.752748	1.925882	19.29966	1.947759	.9995319

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**20.10217**	**1.941413**	**1.945993**	**19.93250**	F **.0184597**	**4.016257**
Stddev	.21922	.014309	.002392	.27469	.0024358	.033487
%RSD	1.090512	.7370569	.1229034	1.378085	13.19508	.8337943
#1	20.35454	1.955313	1.943707	20.21278	.0199199	4.054798
#2	19.99297	1.942199	1.945794	19.92097	.0156478	3.994277
#3	19.95900	1.926727	1.948478	19.66376	.0198114	3.999697

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: ICV01 Acquired: 6/26/2025 17:07:45 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.007094	F .0466308	3.837031	3.967060	3.954805	F .0265334
Stddev	.011895	.0014142	.032620	.014508	.023982	.0019851
%RSD	.2968485	3.032671	.8501293	.3657114	.6064093	7.481666
#1	4.001502	.0477080	3.873756	3.959294	3.967021	.0247095
#2	3.999025	.0450294	3.811423	3.958088	3.970220	.0262430
#3	4.020754	.0471549	3.825913	3.983798	3.927174	.0286478

Elem	Sr4077
Units	ppm
Avg	F .0015727
Stddev	.0001482
%RSD	9.422882
#1	.0017160
#2	.0015821
#3	.0014200

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3976.058	39197.84	2877.492	2479.624	5426.059
Stddev	5.986	213.19	10.975	12.801	13.514
%RSD	.1505482	.5438696	.3813970	.5162401	.2490630
#1	3982.773	39425.61	2866.211	2494.032	5440.508
#2	3974.119	39003.10	2878.134	2469.562	5423.939
#3	3971.282	39164.81	2888.132	2475.280	5413.729

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: LLICV01 Acquired: 6/26/2025 17:19:17 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0166262**	**.0417051**	**.0134931**	**.0211893**	**.0522467**	**.0804410**	**.0994084**
Stddev	.0024829	.0014872	.0008909	.0025466	.0017473	.0193334	.0013355
%RSD	14.93360	3.565901	6.602430	12.01844	3.344243	24.03431	1.343455
#1	.0164486	.0408092	.0137216	.0227539	.0527433	.0785285	.1009455
#2	.0142368	.0434217	.0125102	.0225633	.0536919	.0621349	.0985322
#3	.0191931	.0408842	.0142474	.0182508	.0503049	.1006596	.0987474

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0063227**	**.0057634**	**2.005034**	**.0115160**	**.0300799**	**.0226105**	**.1119980**
Stddev	.0000485	.0000173	.030812	.0003411	.0002831	.0003767	.0024286
%RSD	.7669580	.2995669	1.536756	2.961748	.9412224	1.665947	2.168440
#1	.0063719	.0057450	2.040613	.0119097	.0298794	.0230199	.1091948
#2	.0063211	.0057661	1.987257	.0113289	.0304038	.0222786	.1134682
#3	.0062750	.0057792	1.987232	.0113095	.0299565	.0225330	.1133310

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0210805**	**2.126252**	**.0395195**	**.0102352**	**1.855235**	**.0376077**	**.0415424**
Stddev	.0012011	.039065	.0004680	.0006616	.017342	.0044469	.0005408
%RSD	5.697619	1.837266	1.184149	6.464460	.9347781	11.82444	1.301677
#1	.0218146	2.171280	.0399012	.0109141	1.865622	.0373023	.0413702
#2	.0217325	2.106058	.0389974	.0101994	1.864868	.0333213	.0411087
#3	.0196944	2.101417	.0396599	.0095922	1.835215	.0421994	.0421482

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.627450**	**.0179008**	**.1131265**	**.2012897**	**.0191716**	**.3919546**	**.0373626**
Stddev	.014514	.0011952	.0004295	.0005405	.0026342	.0038524	.0001125
%RSD	.8918074	6.676966	.3796651	.2684912	13.74003	.9828770	.3009817
#1	1.642488	.0165486	.1129137	.2016329	.0193590	.3917994	.0373061
#2	1.626339	.0183377	.1128448	.2015696	.0164488	.3958823	.0372896
#3	1.613524	.0188162	.1136208	.2006668	.0217072	.3881821	.0374921

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: LLICV01 Acquired: 6/26/2025 17:19:17 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0405929	.0326143	.0200943
Stddev	.0016700	.0028272	.0002782
%RSD	4.113951	8.668453	1.384649
#1	.0388847	.0356698	.0204033
#2	.0422218	.0320818	.0200161
#3	.0406723	.0300912	.0198636

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4045.763	40162.51	2912.154	2518.478	5929.427
Stddev	12.893	25.23	11.298	12.008	18.560
%RSD	.3186770	.0628161	.3879706	.4767895	.3130152
#1	4038.829	40133.67	2901.658	2507.197	5924.039
#2	4060.639	40173.37	2910.694	2531.100	5950.085
#3	4037.821	40180.49	2924.112	2517.136	5914.157

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: ICB01 Acquired: 6/26/2025 17:23:51 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi 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	.0008955	.0013485	.0002397	.0030897	-.000772	-.007297	-.000283
Stddev	.0018355	.0016093	.0004981	.0029506	.000098	.009466	.001006
%RSD	204.9731	119.3420	207.7983	95.49928	12.72909	129.7243	354.9319
#1	.0000574	.0031127	.0006399	.0051098	-.000804	.001650	.000820
#2	-.000371	.0009717	.0003974	.0044557	-.000850	-.006333	-.001149
#3	.003000	-.000039	-.000318	-.000296	-.000662	-.017209	-.000520

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000211	.0001073	.0153395	.0005031	.0001736	.0004782	-.008965
Stddev	.0000617	.0000641	.0098581	.0009228	.0000709	.0004793	.022470
%RSD	291.8094	59.74277	64.26588	183.4333	40.81444	100.2353	250.6299
#1	.0000832	.0000532	.0173991	.0011795	.0001274	.0010003	.011781
#2	-.000040	.0000906	.0240050	-.000548	.0001382	.0000583	-.005844
#3	.000020	.0001781	.0046143	.000878	.0002552	.0003759	-.032833

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005137	-.045004	.0002072	-.000122	.0193359	.0012778	.0012939
Stddev	.0014659	.033631	.0005199	.001241	.0010815	.0113201	.0002869
%RSD	285.3921	74.72795	250.9495	1014.096	5.593387	885.9153	22.17056
#1	-.000745	-.042237	.0007211	.001183	.0195408	.0006731	.0014050
#2	.002123	-.012843	-.000318	-.000262	.0203003	.0128881	.0015087
#3	.000162	-.079933	.000219	-.001288	.0181666	-.009728	.0009681

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0397068	.0005156	.0092458	-.000564	.0015043	.0005548	-.000546
Stddev	.0007430	.0022867	.0009386	.000493	.0028564	.0012688	.000549
%RSD	1.871180	443.5391	10.15168	87.34786	189.8750	228.7197	100.4990
#1	.0398295	.0001743	.0081778	-.000022	-.001448	.0013145	-.000669
#2	.0403809	.0029538	.0096200	-.000985	.004254	-.000910	-.001024
#3	.0389102	-.001581	.0099396	-.000686	.001707	.001260	.000054

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: ICB01 Acquired: 6/26/2025 17:23:51 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.000007	-.000877	-.000018
Stddev	.001765	.005998	.000103
%RSD	26235.49	684.0055	580.5332
#1	.001906	.002036	.000029
#2	-.001571	-.007775	-.000136
#3	-.000355	.003109	.000053

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4040.502	40035.22	2881.040	2524.845	6022.277
Stddev	8.797	221.24	20.541	22.380	5.453
%RSD	.2177311	.5526207	.7129790	.8864055	.0905408
#1	4035.822	40285.38	2904.755	2550.000	6016.782
#2	4050.650	39865.27	2868.770	2517.397	6027.687
#3	4035.033	39955.02	2869.597	2507.139	6022.361

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CRI01 Acquired: 6/26/2025 17:28:21 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0182026	.0404972	.0118971	.0204749	.0529512	.0799537	.1001278
Stddev	.0013947	.0013521	.0005340	.0024657	.0010792	.0099463	.0012517
%RSD	7.661891	3.338617	4.488556	12.04259	2.038039	12.44007	1.250106
#1	.0197908	.0389610	.0121593	.0232711	.0540441	.0719687	.1012253
#2	.0176394	.0415064	.0112827	.0186123	.0529232	.0767973	.0987646
#3	.0171777	.0410242	.0122494	.0195414	.0518863	.0910953	.1003936

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0063885	.0057275	1.988917	.0113081	.0298177	.0228318	.1047534
Stddev	.0000665	.0000478	.054094	.0002488	.0002308	.0009793	.0023040
%RSD	1.040481	.8341702	2.719749	2.199979	.7740866	4.289365	2.199420
#1	.0063170	.0056797	1.995180	.0110727	.0295542	.0217644	.1036594
#2	.0064484	.0057274	1.931964	.0112832	.0299843	.0230420	.1032002
#3	.0064000	.0057753	2.039606	.0115683	.0299145	.0236890	.1074005

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0215857	2.143991	.0392884	.0086777	1.899817	.0330517	.0408822
Stddev	.0014358	.022959	.0001042	.0013969	.003237	.0083614	.0004627
%RSD	6.651608	1.070869	.2651434	16.09739	.1704099	25.29795	1.131826
#1	.0229974	2.163114	.0393902	.0072661	1.900608	.0261662	.0413728
#2	.0216326	2.150331	.0392931	.0087077	1.902585	.0423558	.0408201
#3	.0201270	2.118528	.0391820	.0100594	1.896257	.0306329	.0404537

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.663604	.0173115	.1104839	.2005511	.0185604	.3980392	.0372963
Stddev	.006047	.0007702	.0018077	.0006971	.0026220	.0023340	.0002853
%RSD	.3634656	4.449234	1.636193	.3475905	14.12667	.5863785	.7649710
#1	1.656627	.0175241	.1084816	.2008887	.0210425	.3960687	.0369686
#2	1.667317	.0164573	.1109743	.1997494	.0158180	.4006168	.0374892
#3	1.666870	.0179530	.1119958	.2010151	.0188207	.3974322	.0374311

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CRI01 Acquired: 6/26/2025 17:28:21 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0393390	.0207304	.0202749
Stddev	.0016194	.0020678	.0002862
%RSD	4.116548	9.974541	1.411639
#1	.0405269	.0211509	.0201848
#2	.0399957	.0225555	.0200446
#3	.0374944	.0184847	.0205953

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4036.287	40051.07	2877.697	2520.179	5920.525
Stddev	14.121	278.45	18.449	5.723	19.802
%RSD	.3498586	.6952391	.6411185	.2270827	.3344665
#1	4050.380	39878.84	2888.482	2514.964	5942.668
#2	4022.137	40372.31	2888.215	2526.301	5904.514
#3	4036.344	39902.04	2856.394	2519.271	5914.394

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: ICSA01 Acquired: 6/26/2025 17:37:50 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000864**	**.0160482**	**.0021998**	**.0065554**	**.0177128**	**245.0719**
Stddev	.003628	.0005993	.0022368	.0004145	.0056955	1.1252
%RSD	419.7583	3.734609	101.6833	6.323161	32.15487	.4591219
#1	.002877	.0166671	.0005854	.0064151	.0169203	245.3502
#2	-.004368	.0154706	.0047530	.0070218	.0237631	246.0318
#3	-.001103	.0160070	.0012610	.0062293	.0124551	243.8337

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0055604**	**.0010289**	**-.001085**	**229.8383**	**.0507674**	**.0278206**
Stddev	.0004771	.0001493	.000053	.4984	.0008702	.0006053
%RSD	8.580562	14.50752	4.887388	.2168455	1.714147	2.175691
#1	.0050985	.0011987	-.001129	230.0483	.0497972	.0272290
#2	.0060514	.0009185	-.001098	230.1974	.0514790	.0284387
#3	.0055313	.0009694	-.001026	229.2693	.0510261	.0277940

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.005232**	**95.61341**	**.0051845**	**239.1628**	**.0033097**	**.0029737**
Stddev	.001094	.36845	.0017540	.5716	.0005620	.0008895
%RSD	20.91943	.3853567	33.83084	.2390135	16.98113	29.91049
#1	-.006491	95.51197	.0040247	239.5173	.0039568	.0024693
#2	-.004514	96.02196	.0072024	238.5034	.0030285	.0040007
#3	-.004690	95.30631	.0043266	239.4678	.0029438	.0024512

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1570005**	**.0039405**	**.0119829**	**.0045822**	**.0091648**	**.0341789**
Stddev	.0063588	.0022313	.0003721	.0007792	.0034212	.0029365
%RSD	4.050207	56.62361	3.105626	17.00396	37.33022	8.591534
#1	.1602606	.0035253	.0116402	.0047847	.0053407	.0323947
#2	.1496727	.0063503	.0119297	.0052401	.0102186	.0375681
#3	.1610681	.0019461	.0123788	.0037218	.0119353	.0325738

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: ICSA01 Acquired: 6/26/2025 17:37:50 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.010358**	**.0196663**	**-.008226**	**.0050280**	**-.001575**	**.0059398**
Stddev	.000233	.0009870	.002460	.0013331	.002926	.0032326
%RSD	2.250193	5.018527	29.90813	26.51363	185.7477	54.42244
#1	-.010461	.0189117	-.006114	.0061356	-.003078	.0084212
#2	-.010091	.0207832	-.007638	.0054001	-.003444	.0071139
#3	-.010522	.0193040	-.010927	.0035484	.001797	.0022842

Elem	Sr4077
Units	ppm
Avg	F **.0976420**
Stddev	.0004037
%RSD	.4134201
#1	.0974527
#2	.0981055
#3	.0973677

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3682.160**	**34842.85**	**2773.782**	**2252.486**	**4735.651**
Stddev	8.958	125.62	5.408	4.699	10.188
%RSD	.2432942	.3605474	.1949712	.2085971	.2151267
#1	3678.719	34799.90	2767.765	2257.909	4737.451
#2	3692.328	34984.31	2778.238	2249.925	4744.819
#3	3675.431	34744.33	2775.343	2249.625	4724.684

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: ICSAB01 Acquired: 6/26/2025 17:42:10 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0925573**	**.0952213**	**.0494140**	**.0522667**	**.6077638**	**247.7417**
Stddev	.0026899	.0015764	.0013309	.0029338	.0020073	.3152
%RSD	2.906155	1.655511	2.693276	5.613090	.3302772	.1272479
#1	.0953194	.0958069	.0481692	.0556216	.6078854	247.8316
#2	.0924067	.0934359	.0508168	.0501825	.6097075	248.0022
#3	.0899460	.0964211	.0492560	.0509960	.6056984	247.3912

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4989743**	**.4943342**	**.9695737**	**231.7610**	**.5411881**	**.5025190**
Stddev	.0021279	.0016894	.0009057	.5494	.0012050	.0002879
%RSD	.4264577	.3417566	.0934146	.2370667	.2226643	.0572869
#1	.4987947	.4926836	.9688404	232.1252	.5404647	.5022694
#2	.4969419	.4942589	.9692946	231.1290	.5425792	.5024536
#3	.5011863	.4960600	.9705862	232.0287	.5405204	.5028339

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4681867**	**96.33971**	**.4844901**	**240.3681**	**.9469896**	**.2109845**
Stddev	.0014147	.21581	.0021135	.7710	.0003618	.0011913
%RSD	.3021707	.2240045	.4362323	.3207454	.0382107	.5646497
#1	.4665925	96.22745	.4847665	240.8751	.9467435	.2096968
#2	.4692927	96.58850	.4822520	239.4809	.9468201	.2120474
#3	.4686747	96.20317	.4864519	240.7482	.9474050	.2112093

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1633573**	**.4698480**	**1.006493**	**.0048637**	F **.0189481**	**.9419260**
Stddev	.0062876	.0090549	.001969	.0007115	.0017901	.0042485
%RSD	3.849010	1.927199	.1955932	14.62809	9.447582	.4510448
#1	.1703822	.4636817	1.008760	.0056743	.0202697	.9370253
#2	.1614330	.4656185	1.005510	.0045744	.0169109	.9441845
#3	.1582567	.4802437	1.005211	.0043425	.0196639	.9445683

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: ICSAB01 Acquired: 6/26/2025 17:42:10 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9329201	F .0234675	.8588989	.9572783	.9373202	F .0032011
Stddev	.0017337	.0066870	.0026769	.0036246	.0090406	.0071803
%RSD	.1858388	28.49463	.3116669	.3786321	.9645173	224.3049
#1	.9312648	.0236655	.8562634	.9553805	.9477286	.0111901
#2	.9327727	.0300533	.8588181	.9549967	.9328105	-.002714
#3	.9347229	.0166837	.8616153	.9614578	.9314216	.001127

Elem	Sr4077
Units	ppm
Avg	F .0984025
Stddev	.0003034
%RSD	.3083045
#1	.0987308
#2	.0981326
#3	.0983439

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3669.837	34962.92	2779.043	2266.018	4722.566
Stddev	1.648	56.26	9.152	5.733	5.166
%RSD	.0449074	.1609020	.3293071	.2529792	.1093886
#1	3668.094	34964.36	2789.475	2259.946	4716.792
#2	3671.370	34905.96	2775.290	2266.772	4726.751
#3	3670.048	35018.44	2772.365	2271.337	4724.155

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: ICSADLX20 Acquired: 6/26/2025 17:46:23 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi 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	**-.002620**	**.0044985**	**.0017929**	**-.001916**	**.0027475**	**13.22275**	**-.000830**
Stddev	.003499	.0006080	.0009779	.003034	.0003574	.05422	.000600
%RSD	133.5343	13.51638	54.54367	158.3734	13.00691	.4100614	72.31159
#1	-.001645	.0051652	.0014149	.001068	.0023594	13.21984	-.000574
#2	.000288	.0039746	.0029035	-.001817	.0030629	13.27837	-.001516
#3	-.006503	.0043555	.0010604	-.004999	.0028203	13.17005	-.000400

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001910**	**.0001227**	**12.53215**	**.0018713**	**.0076485**	**-.000693**	**5.251448**
Stddev	.0000959	.0001160	.05578	.0007384	.0003561	.000289	.035440
%RSD	50.21627	94.52992	.4450787	39.46219	4.655900	41.68049	.6748572
#1	.0001740	.0001905	12.48672	.0022676	.0074385	-.000486	5.212465
#2	.0001047	.0001889	12.59441	.0010193	.0074474	-.001023	5.281720
#3	.0002943	-.000011	12.51533	.0023269	.0080597	-.000569	5.260159

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0046246**	**13.14922**	**-.000079**	**.0009415**	**.0070056**	**-.001280**	**.0007992**
Stddev	.0013641	.15103	.000482	.0009629	.0066840	.007308	.0002408
%RSD	29.49671	1.148620	612.2044	102.2741	95.40978	571.0038	30.13188
#1	.0061198	12.98132	-.000029	.0004530	.0119825	-.009140	.0010453
#2	.0034480	13.27401	-.000584	.0003207	-.000592	-.000008	.0005641
#3	.0043059	13.19233	.000377	.0020506	.009626	.005309	.0007882

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011220**	**.0016533**	**.0066565**	**-.002837**	**.0003633**	**.0078700**	**-.000904**
Stddev	.0007265	.0009839	.0018292	.000398	.0019085	.0015461	.001597
%RSD	64.75137	59.50772	27.48054	14.02045	525.3938	19.64488	176.7017
#1	.0007916	.0010814	.0087592	-.002415	-.000958	.0082282	.000116
#2	.0006195	.0027894	.0057788	-.002891	-.000504	.0061763	-.002744
#3	.0019551	.0010893	.0054315	-.003205	.002551	.0092055	-.000083

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: ICSADLX20 Acquired: 6/26/2025 17:46:23 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0013254	-.003823	.0051604
Stddev	.0015304	.009679	.0001598
%RSD	115.4671	253.1724	3.096943
#1	.0000640	.001807	.0053381
#2	.0030279	.001724	.0051147
#3	.0008843	-.015000	.0050285

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3991.939	38816.02	2897.209	2466.454	5661.352
Stddev	16.817	171.35	28.027	5.027	19.480
%RSD	.4212825	.4414476	.9673652	.2037959	.3440822
#1	4010.615	38762.95	2923.964	2461.452	5680.798
#2	3987.204	38677.49	2868.064	2466.404	5661.421
#3	3977.996	39007.63	2899.600	2471.505	5641.839

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: ICSABDLX20 Acquired: 6/26/2025 17:50:48 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi 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	**-.000038**	**.0081380**	**.0035426**	**-.001389**	**.0305842**	**11.90240**	**.0227930**
Stddev	.002552	.0009484	.0007262	.002234	.0002637	.08768	.0002692
%RSD	6760.807	11.65454	20.49854	160.8097	.8621517	.7366543	1.181140
#1	.000210	.0070495	.0039787	.001154	.0307854	11.81537	.0230867
#2	-.002704	.0087870	.0039448	-.003038	.0302857	11.90111	.0227345
#3	.002381	.0085774	.0027043	-.002284	.0306815	11.99071	.0225579

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0237311**	**.0435477**	**11.27290**	**.0265241**	**.0284725**	**.0239284**	**4.740511**
Stddev	.0002473	.0000861	.06786	.0007989	.0001827	.0000995	.023420
%RSD	1.042247	.1977553	.6020101	3.011983	.6415181	.4156787	.4940322
#1	.0234467	.0435922	11.20140	.0272581	.0284951	.0239123	4.717461
#2	.0238961	.0434484	11.28089	.0256732	.0282795	.0240350	4.739789
#3	.0238505	.0436024	11.33642	.0266409	.0286427	.0238381	4.764283

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0235241**	**11.74578**	**.0431988**	**.0092603**	**.0192868**	**.0222509**	**.0479337**
Stddev	.0002608	.08835	.0001804	.0012157	.0103195	.0049883	.0003068
%RSD	1.108702	.7522150	.4175508	13.12815	53.50549	22.41856	.6399719
#1	.0237554	11.66285	.0431171	.0078680	.0109018	.0234455	.0482316
#2	.0232414	11.83870	.0430738	.0098016	.0308115	.0265334	.0476188
#3	.0235755	11.73578	.0434056	.0101114	.0161471	.0167737	.0479506

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000427**	**.0001554**	**.0499831**	**.0420058**	**.0023933**	**.0430925**	**.0419849**
Stddev	.001926	.0017655	.0008051	.0003949	.0019397	.0046183	.0006849
%RSD	451.5509	1136.094	1.610746	.9401595	81.04719	10.71726	1.631367
#1	-.001921	-.001026	.0509071	.0416876	.0045823	.0387990	.0425007
#2	.001748	-.000693	.0496099	.0424478	.0017093	.0479785	.0412078
#3	-.001107	.002185	.0494323	.0418818	.0008883	.0425001	.0422462

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: ICSABDLX20 Acquired: 6/26/2025 17:50:48 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0421213	-.015101	.0048171
Stddev	.0009831	.008914	.0001672
%RSD	2.333995	59.02971	3.470428
#1	.0428627	-.016225	.0048543
#2	.0410061	-.023400	.0046345
#3	.0424951	-.005678	.0049626

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3987.996	38971.49	2885.049	2461.517	5670.613
Stddev	9.685	105.26	25.436	10.933	12.509
%RSD	.2428453	.2700849	.8816603	.4441708	.2206004
#1	3993.559	38981.42	2914.327	2449.427	5679.998
#2	3976.813	39071.43	2868.382	2470.712	5656.412
#3	3993.616	38861.63	2872.439	2464.410	5675.431

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCV01 Acquired: 6/26/2025 17:55:10 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.001560**	**4.983566**	**4.911014**	**4.943528**	**5.037024**	**10.16502**	**10.11739**
Stddev	.008179	.009187	.015721	.007290	.004672	.05508	.05076
%RSD	.1635245	.1843425	.3201263	.1474687	.0927505	.5418723	.5017176
#1	4.993645	4.972958	4.896692	4.945364	5.037445	10.11465	10.13054
#2	5.001056	4.988993	4.908515	4.935496	5.032155	10.22384	10.16028
#3	5.009979	4.988745	4.927836	4.949725	5.041470	10.15655	10.06134

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2511012**	**2.479265**	**24.82328**	**1.012312**	**2.474764**	**1.259218**	**4.785203**
Stddev	.0037071	.004887	.15868	.002294	.004223	.016055	.050694
%RSD	1.476340	.1971100	.6392294	.2266576	.1706386	1.274959	1.059401
#1	.2513467	2.473904	24.96456	1.014958	2.469891	1.263226	4.843407
#2	.2546795	2.480420	24.85369	1.011104	2.477048	1.272889	4.761498
#3	.2472775	2.483471	24.65160	1.010874	2.477352	1.241539	4.750704

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.492810**	**24.70541**	**2.464436**	**1.246932**	**25.55434**	**2.536794**	**2.548313**
Stddev	.004908	.17236	.002842	.002656	.34620	.027278	.009443
%RSD	.1968746	.6976711	.1153008	.2130058	1.354762	1.075312	.3705761
#1	2.494746	24.71214	2.461706	1.249219	25.77411	2.556732	2.551067
#2	2.496455	24.87431	2.464224	1.247559	25.73364	2.547942	2.537798
#3	2.487230	24.52979	2.467377	1.244019	25.15526	2.505707	2.556073

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.76977**	**4.920797**	**5.057085**	**4.963409**	**4.840423**	**5.089940**	**4.943862**
Stddev	.44548	.016709	.068329	.002540	.006936	.067220	.006518
%RSD	1.728711	.3395521	1.351157	.0511664	.1432903	1.320648	.1318380
#1	26.13855	4.901522	5.087137	4.963685	4.839500	5.117258	4.936856
#2	25.89594	4.931173	5.105238	4.965799	4.833995	5.139200	4.944983
#3	25.27480	4.929695	4.978881	4.960743	4.847774	5.013361	4.949746

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCV01 Acquired: 6/26/2025 17:55:10 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.975371**	**4.926638**	**5.033740**
Stddev	.030342	.031873	.026471
%RSD	.6098384	.6469559	.5258776
#1	4.979833	4.952684	5.050379
#2	5.003234	4.936134	5.047626
#3	4.943045	4.891096	5.003215

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3873.215**	**37583.20**	**2798.904**	**2374.392**	**5174.056**
Stddev	17.427	178.87	18.526	20.210	20.953
%RSD	.4499454	.4759413	.6619031	.8511498	.4049679
#1	3866.192	37536.56	2797.737	2380.244	5174.398
#2	3860.395	37780.77	2780.988	2391.031	5152.934
#3	3893.058	37432.26	2817.985	2351.903	5194.837

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCB01 Acquired: 6/26/2025 17:59:26 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000177**	**-.000198**	**.0007994**	**.0012408**	**.0002014**	**-.009802**
Stddev	.001711	.000741	.0007064	.0023907	.0012796	.004032
%RSD	964.5277	375.0639	88.37789	192.6792	635.4096	41.13851
#1	-.000347	-.000408	.0001049	.0021055	.0016702	-.013004
#2	-.001797	.000626	.0007760	-.001462	-.000671	-.011128
#3	.001612	-.000811	.0015172	.003079	-.000395	-.005274

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010141**	**.0001527**	**.0002995**	**-.014681**	**-.000055**	**.0002694**
Stddev	.0010530	.0001173	.0000485	.014631	.000522	.0001327
%RSD	103.8345	76.77851	16.19643	99.66303	957.0439	49.26149
#1	-.000037	.0000185	.0002440	-.014519	.000441	.0003378
#2	.001011	.0002046	.0003341	-.000131	-.000006	.0003539
#3	.002069	.0002351	.0003202	-.029392	-.000599	.0001164

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005371**	**-.001847**	**.0002314**	**-.061169**	**.0000133**	**-.000456**
Stddev	.0005370	.015920	.0020513	.014485	.0002769	.001301
%RSD	99.98338	862.1500	886.5428	23.68047	2084.561	285.3672
#1	.0000616	-.005285	-.001922	-.077710	.0003078	-.001956
#2	.0004302	-.015766	.002162	-.055050	-.000026	.000378
#3	.0011195	.015512	.000454	-.050748	-.000242	.000209

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.007942**	**-.004229**	**-.000117**	**.0020049**	**-.000677**	F **.0138745**
Stddev	.003647	.004060	.000118	.0003551	.002156	.0007407
%RSD	45.92383	96.00132	100.7168	17.71262	318.3471	5.338319
#1	-.010844	-.001282	-.000009	.0022604	-.002694	.0137732
#2	-.009134	-.002545	-.000099	.0021548	.001596	.0146607
#3	-.003848	-.008860	-.000242	.0015994	-.000934	.0131898

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCB01 Acquired: 6/26/2025 17:59:26 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000328	-.003012	-.000965	.0003837	.0020653	.0049011
Stddev	.000322	.003519	.001356	.0008994	.0032678	.0020377
%RSD	98.19653	116.8275	140.4294	234.4059	158.2232	41.57621
#1	-.000268	-.000806	.000377	.0003205	-.001420	.0037147
#2	-.000040	-.001160	-.000940	-.000482	.002555	.0037346
#3	-.000677	-.007071	-.002333	.001313	.005061	.0072540

Elem	Sr4077
Units	ppm
Avg	.0005338
Stddev	.0000115
%RSD	2.159098
#1	.0005328
#2	.0005227
#3	.0005457

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4002.946	39063.11	2835.895	2463.237	5930.874
Stddev	10.846	64.96	12.616	1.349	10.847
%RSD	.2709574	.1662939	.4448748	.0547779	.1828872
#1	4015.409	39047.94	2848.982	2464.791	5942.228
#2	3995.645	39007.08	2834.894	2462.560	5920.617
#3	3997.784	39134.32	2823.809	2462.361	5929.777

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2389-04 Acquired: 6/26/2025 18:03:55 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003313**	**-.000054**	**.0025397**	**-.000035**	**.0023384**	**.1830433**	**.2897017**
Stddev	.003045	.002355	.0008855	.000979	.0031042	.0171698	.0013733
%RSD	91.90833	4343.553	34.86682	2786.783	132.7489	9.380184	.4740297
#1	-.000764	.002245	.0027035	.000963	.0001316	.1898580	.2884303
#2	-.002490	-.002462	.0015838	-.000075	.0009957	.1957597	.2911581
#3	-.006685	.000055	.0033320	-.000994	.0058880	.1635123	.2895166

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004464**	**.0002652**	**7.800139**	**.0004357**	**.0058223**	**.0121069**	**.0165382**
Stddev	.0000205	.0000396	.026697	.0004285	.0004395	.0003474	.0050106
%RSD	4.590975	14.93999	.3422680	98.34690	7.548446	2.869553	30.29713
#1	.0004656	.0002908	7.771772	.0002165	.0061775	.0124886	.0222550
#2	.0004248	.0002851	7.803870	.0009295	.0053308	.0118091	.0144506
#3	.0004489	.0002195	7.824775	.0001611	.0059585	.0120230	.0129089

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2100312**	**3.328030**	**.0030833**	**-.001317**	**322.8077**	**-.004797**	**.0881137**
Stddev	.0012528	.033093	.0002617	.001239	.9168	.004365	.0003672
%RSD	.5964712	.9943769	8.487414	94.10522	.2840117	90.99656	.4167572
#1	.2112264	3.290311	.0030085	-.000477	323.8546	-.009709	.0877343
#2	.2101393	3.341583	.0033742	-.000734	322.1481	-.001366	.0881393
#3	.2087278	3.352194	.0028671	-.002741	322.4205	-.003314	.0884674

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.086657**	**.0106045**	**.0352992**	**-.001860**	**.9082652**	**1.164937**	**-.001006**
Stddev	.005244	.0016390	.0019098	.000362	.0024706	.008418	.000455
%RSD	.2513147	15.45615	5.410201	19.46409	.2720093	.7226434	45.24874
#1	2.081663	.0115748	.0373472	-.001999	.9065589	1.165320	-.000516
#2	2.092120	.0115265	.0335670	-.002132	.9071385	1.173157	-.001087
#3	2.086189	.0087121	.0349834	-.001449	.9110983	1.156333	-.001416

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2389-04 Acquired: 6/26/2025 18:03:55 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0012008	-.025262	.0502616
Stddev	.0012784	.011629	.0002863
%RSD	106.4656	46.03521	.5695851
#1	.0021146	-.031155	.0503607
#2	.0017480	-.032766	.0499389
#3	-.000260	-.011866	.0504851

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3916.044	37205.16	2913.086	2397.522	5133.178
Stddev	11.303	233.34	20.090	9.097	7.704
%RSD	.2886401	.6271732	.6896518	.3794207	.1500892
#1	3923.279	37093.75	2891.297	2387.043	5136.676
#2	3903.019	37473.33	2917.085	2403.389	5124.346
#3	3921.834	37048.41	2930.876	2402.134	5138.513

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2394-04 Acquired: 6/26/2025 18:08:28 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001383**	**-.000519**	**.0025564**	**.0002892**	**.0023103**	**.2841645**	**.3150791**
Stddev	.004572	.000536	.0007281	.0038979	.0015087	.0098337	.0012461
%RSD	330.5319	103.3403	28.48008	1348.022	65.30419	3.460554	.3955026
#1	-.006400	-.000147	.0033913	-.002756	.0005682	.2729224	.3164716
#2	-.000298	-.001134	.0022243	-.001058	.0031775	.2911690	.3146969
#3	.002549	-.000276	.0020535	.004682	.0031852	.2884019	.3140688

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003842**	**.0002823**	**5.405367**	**.0007829**	**.0143440**	**.0100405**	**.1474847**
Stddev	.0000349	.0000571	.026954	.0007443	.0002797	.0004344	.0143897
%RSD	9.094688	20.21069	.4986473	95.07959	1.949969	4.326075	9.756739
#1	.0003859	.0002934	5.434336	.0002678	.0144581	.0105242	.1418075
#2	.0004183	.0002205	5.381028	.0016363	.0145485	.0099133	.1367996
#3	.0003484	.0003330	5.400737	.0004445	.0140252	.0096839	.1638470

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5122940**	**3.874190**	**.0054739**	**-.000525**	**314.0931**	**.0028712**	**.1059365**
Stddev	.0012463	.060362	.0004568	.000498	.3674	.0055875	.0007806
%RSD	.2432786	1.558058	8.344525	94.93961	.1169810	194.6032	.7368322
#1	.5135174	3.943566	.0059948	-.000992	313.6817	.0049264	.1059014
#2	.5123385	3.845321	.0052845	-.000001	314.3888	-.003453	.1067340
#3	.5110260	3.833685	.0051422	-.000581	314.2086	.007140	.1051740

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5778775**	**.0093641**	**.0441517**	**-.001436**	**.5078250**	**.5389224**	**-.000277**
Stddev	.0057211	.0011651	.0003472	.000710	.0043402	.0033820	.000562
%RSD	.9900213	12.44253	.7863903	49.47867	.8546596	.6275526	202.7197
#1	.5762960	.0103649	.0437541	-.001741	.5124775	.5350315	-.000223
#2	.5731135	.0080850	.0443949	-.000624	.5038855	.5411572	.000256
#3	.5842230	.0096424	.0443061	-.001943	.5071120	.5405786	-.000863

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2394-04 Acquired: 6/26/2025 18:08:28 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0037352	-.029546	.0475098
Stddev	.0025830	.002261	.0003168
%RSD	69.15259	7.653576	.6668647
#1	.0007826	-.030918	.0477890
#2	.0055770	-.030784	.0471655
#3	.0048460	-.026936	.0475750

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3901.717	36924.32	2905.997	2367.872	5128.283
Stddev	18.529	150.56	8.612	9.840	22.883
%RSD	.4748828	.4077542	.2963601	.4155678	.4462118
#1	3899.167	36909.29	2896.054	2362.128	5109.041
#2	3884.596	36781.84	2910.791	2362.253	5122.221
#3	3921.389	37081.83	2911.146	2379.234	5153.587

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: PB168551BL Acquired: 6/26/2025 18:13:02 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0018406**	**.0010639**	**.0006788**	**-.001930**	**.0001275**	**-.025300**
Stddev	.0042919	.0011667	.0013161	.003655	.0028680	.011413
%RSD	233.1806	109.6691	193.8759	189.3729	2249.814	45.11300
#1	.0058554	.0007870	-.000114	-.000440	-.000263	-.038419
#2	.0023496	.0000605	-.000048	.000745	-.002525	-.019824
#3	-.002683	.0023441	.002198	-.006095	.003171	-.017656

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000026**	**.0000335**	**.0000748**	**-.025497**	**-.000064**	**.0001440**
Stddev	.001361	.0000924	.0000327	.032793	.000635	.0002717
%RSD	5320.978	276.0158	43.73076	128.6188	984.8245	188.7229
#1	-.000319	-.000016	.0001069	-.005883	-.000636	.0004503
#2	.001458	.000140	.0000415	-.063355	-.000177	.0000498
#3	-.001216	-.000023	.0000761	-.007252	.000619	-.000068

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000456**	**-.011853**	**-.001167**	**-.044891**	**.0002572**	**-.000501**
Stddev	.0004731	.015084	.001683	.024225	.0001413	.000488
%RSD	1038.448	127.2645	144.1787	53.96366	54.95119	97.35123
#1	.0005276	-.024244	.000382	-.068148	.0003938	-.000201
#2	.0000271	-.016257	-.000926	-.019802	.0002664	-.000238
#3	-.000418	.004944	-.002958	-.046724	.0001115	-.001063

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0469398**	**-.007818**	**-.000224**	**.0010272**	**-.000792**	**.0038942**
Stddev	.0148895	.006385	.000287	.0007322	.000829	.0010989
%RSD	31.72037	81.66269	128.1923	71.27998	104.7102	28.21802
#1	.0640946	-.000449	-.000002	.0002476	.000021	.0027248
#2	.0373714	-.011327	-.000122	.0017004	-.001636	.0049053
#3	.0393534	-.011680	-.000548	.0011336	-.000760	.0040525

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: PB168551BL Acquired: 6/26/2025 18:13:02 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000874	-.000962	-.001023	-.000265	-.002550	F .0857696
Stddev	.000070	.002217	.000367	.000627	.002646	.0103176
%RSD	8.023577	230.5511	35.91804	236.7889	103.7657	12.02942
#1	-.000829	-.000622	-.001410	-.000349	-.005477	.0952514
#2	-.000954	-.003329	-.000679	.000400	-.000330	.0872755
#3	-.000838	.001066	-.000981	-.000845	-.001842	.0747818

Elem	Sr4077
Units	ppm
Avg	.0002359
Stddev	.0000612
%RSD	25.93313
#1	.0002813
#2	.0002600
#3	.0001663

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4010.015	39205.35	2879.703	2458.715	5934.128
Stddev	9.192	246.83	20.418	21.373	6.757
%RSD	.2292338	.6295738	.7090356	.8692567	.1138641
#1	4020.610	39422.25	2898.930	2470.958	5941.623
#2	4005.279	39257.03	2858.273	2471.150	5932.257
#3	4004.157	38936.78	2881.906	2434.036	5928.503

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: PB168551BS Acquired: 6/26/2025 18:17:30 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7212602	1.972669	.9299680	1.924093	.8004047	2.018718
Stddev	.0018828	.003051	.0003477	.005077	.0019911	.028206
%RSD	.2610507	.1546709	.0373838	.2638491	.2487672	1.397210
#1	.7224834	1.976136	.9303593	1.929916	.8016311	2.006379
#2	.7222053	1.971475	.9296947	1.921766	.7981073	2.050991
#3	.7190920	1.970395	.9298499	1.920597	.8014758	1.998785

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1997042	.1996304	.1863026	.9936453	.3985114	.1906174
Stddev	.0022072	.0021860	.0001565	.0353052	.0007750	.0004971
%RSD	1.105235	1.095023	.0839862	3.553101	.1944792	.2607992
#1	.1987762	.1991548	.1864735	.9644929	.3991819	.1909977
#2	.2022239	.2020151	.1861664	1.032901	.3976629	.1907995
#3	.1981124	.1977214	.1862679	.983542	.3986896	.1900549

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3105344	2.996619	.2062392	1.956523	.4762752	.0693825
Stddev	.0043490	.017964	.0018640	.043925	.0002728	.0010741
%RSD	1.400476	.5994651	.9038038	2.245032	.0572741	1.548124
#1	.3105401	2.998528	.2051085	1.995384	.4759613	.0686063
#2	.3148805	2.977777	.2083906	1.965321	.4764104	.0689328
#3	.3061826	3.013552	.2052185	1.908866	.4764541	.0706084

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.859124	.2917798	.2068069	8.681857	5.341559	.2945569
Stddev	.041224	.0053054	.0010515	.151346	.002244	.0056445
%RSD	1.441851	1.818279	.5084627	1.743239	.0420191	1.916258
#1	2.859042	.2973200	.2070117	8.756339	5.340868	.2920237
#2	2.900389	.2912740	.2056680	8.781528	5.339741	.3010242
#3	2.817941	.2867455	.2077409	8.507704	5.344068	.2906228

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: PB168551BS Acquired: 6/26/2025 18:17:30 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3904981	F -.000777	.9300585	.6579565	.1908537	.2164066
Stddev	.0007817	.001847	.0114656	.0010932	.0016525	.0039147
%RSD	.2001752	237.8502	1.232781	.1661516	.8658530	1.808960
#1	.3913942	-.000919	.9269265	.6586857	.1889456	.2119306
#2	.3901433	.001138	.9427646	.6566996	.1917906	.2191913
#3	.3899567	-.002548	.9204843	.6584842	.1918248	.2180979

Elem	Sr4077
Units	ppm
Avg	.1994378
Stddev	.0015087
%RSD	.7564504
#1	.1983972
#2	.2011680
#3	.1987483

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4036.998	39216.68	2904.427	2466.703	5776.553
Stddev	7.201	118.44	29.491	14.884	9.145
%RSD	.1783673	.3020057	1.015369	.6033927	.1583058
#1	4044.232	39080.87	2895.642	2450.329	5785.397
#2	4029.831	39298.53	2880.327	2479.412	5767.135
#3	4036.932	39270.63	2937.312	2470.368	5777.127

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: PB168613BL Acquired: 6/26/2025 18:21:52 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011614**	**.0026556**	**.0008883**	**.0014347**	**-.000937**	**-.024307**	**-.000254**
Stddev	.0014731	.0014934	.0018126	.0015145	.002588	.019428	.000712
%RSD	126.8352	56.23699	204.0550	105.5679	276.3318	79.92752	280.8377
#1	.0026265	.0021124	.0029813	-.000303	-.003731	-.030103	-.000599
#2	.0011773	.0015098	-.000166	.002135	-.000458	-.040178	.000565
#3	-.000320	.0043445	-.000150	.002473	.001379	-.002641	-.000726

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000828**	**.0000987**	**-.011273**	**.0000569**	**.0003311**	**.0001125**	**-.013785**
Stddev	.0000244	.0000151	.011399	.0004463	.0002558	.0001807	.005918
%RSD	29.47982	15.28877	101.1157	783.7559	77.23608	160.6281	42.93398
#1	.0000814	.0000837	-.020529	.0001629	.0002429	.0000211	-.013067
#2	.0001079	.0000985	-.014749	.0004408	.0006193	-.000004	-.008258
#3	.0000591	.0001139	.001459	-.000433	.0001312	.000321	-.020030

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003325**	**-.025075**	**-.000023**	**.0005777**	**.0141751**	**.0003023**	**.0000860**
Stddev	.0008178	.023567	.000206	.0011144	.0096534	.0037311	.0004417
%RSD	245.9669	93.98636	882.9198	192.8975	68.10109	1234.318	513.8649
#1	-.000288	-.021602	.000012	-.000635	.0126278	-.003274	.0005441
#2	.001259	-.050186	-.000244	.000812	.0245087	.000010	.0000510
#3	.000026	-.003437	.000162	.001556	.0053888	.004171	-.000337

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007436**	**-.000139**	**.0018025**	**-.000408**	**-.002020**	**-.001873**	**.0000578**
Stddev	.0004990	.000966	.0018997	.000185	.003074	.001362	.0001950
%RSD	67.11084	694.9045	105.3887	45.35128	152.1904	72.71649	337.2229
#1	.0001683	.000784	-.000331	-.000276	-.005347	-.002064	-.000143
#2	.0010593	-.000058	.002427	-.000619	.000715	-.000425	.000246
#3	.0010032	-.001144	.003312	-.000329	-.001428	-.003129	.000071

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: PB168613BL Acquired: 6/26/2025 18:21:52 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0007080	.0005879	-.000006
Stddev	.0032635	.0032020	.000231
%RSD	460.9734	544.7019	3986.001
#1	.0019348	-.000410	.000056
#2	.0031802	-.001996	.000188
#3	-.002991	.004170	-.000261

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4057.459	39247.47	2906.805	2462.571	6005.131
Stddev	10.556	290.90	31.615	14.984	7.737
%RSD	.2601667	.7411943	1.087606	.6084722	.1288381
#1	4066.388	39571.63	2942.630	2479.432	6009.287
#2	4045.808	39161.63	2882.818	2457.503	5996.205
#3	4060.179	39009.15	2894.967	2450.779	6009.902

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: PB168613BS Acquired: 6/26/2025 18:26:21 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6979669	1.910049	.8976067	1.864897	.7951444	1.957805
Stddev	.0041135	.005138	.0017474	.000252	.0060885	.021036
%RSD	.5893476	.2690068	.1946726	.0134980	.7657158	1.074454
#1	.6932636	1.905526	.8956553	1.865177	.8006077	1.981575
#2	.7008926	1.908986	.8981384	1.864689	.7885807	1.941590
#3	.6997447	1.915636	.8990265	1.864825	.7962449	1.950251

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1959988	.1970121	.1801397	.9804652	.3897239	.1843244
Stddev	.0005913	.0012111	.0004103	.0167126	.0010646	.0004052
%RSD	.3016820	.6147186	.2277748	1.704557	.2731539	.2198066
#1	.1957635	.1973565	.1797074	.9939121	.3902967	.1844486
#2	.1955613	.1980137	.1801878	.9857291	.3903795	.1838716
#3	.1966715	.1956662	.1805238	.9617544	.3884956	.1846529

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3061514	2.898613	.1980285	1.893527	.4597524	.0682838
Stddev	.0018499	.013214	.0019969	.010088	.0012232	.0005203
%RSD	.6042397	.4558742	1.008401	.5327369	.2660681	.7619078
#1	.3066643	2.912461	.1991227	1.899857	.4586506	.0685907
#2	.3076907	2.886141	.1992392	1.881894	.4595379	.0685777
#3	.3040992	2.897236	.1957237	1.898831	.4610687	.0676831

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.819389	.2863599	.2038285	8.612729	5.144353	.2909431
Stddev	.013741	.0050931	.0007431	.081386	.009170	.0022840
%RSD	.4873675	1.778569	.3645766	.9449511	.1782529	.7850318
#1	2.833723	.2884406	.2030286	8.653055	5.134583	.2931433
#2	2.818113	.2805558	.2044974	8.519053	5.152773	.2911023
#3	2.806330	.2900831	.2039594	8.666078	5.145704	.2885837

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: PB168613BS Acquired: 6/26/2025 18:26:21 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3853798	F -.003222	.9331220	.6492746	.1945084	.1969940
Stddev	.0006853	.002635	.0078643	.0012854	.0035328	.0043906
%RSD	.1778253	81.77017	.8427917	.1979731	1.816278	2.228792
#1	.3854730	-.005302	.9361759	.6481162	.1955113	.1999663
#2	.3846527	-.000259	.9390014	.6490501	.1974313	.1919510
#3	.3860138	-.004106	.9241889	.6506574	.1905825	.1990647

Elem	Sr4077
Units	ppm
Avg	.1954346
Stddev	.0001867
%RSD	.0955162
#1	.1955311
#2	.1952194
#3	.1955532

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4018.371	39049.78	2864.761	2463.886	5766.974
Stddev	12.361	193.80	11.201	10.275	11.207
%RSD	.3076184	.4962782	.3909924	.4170240	.1943223
#1	4004.564	38936.35	2852.270	2463.670	5756.023
#2	4022.139	39273.55	2873.912	2474.267	5766.479
#3	4028.409	38939.44	2868.100	2453.720	5778.420

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2381-01DL2X10 Acquired: 6/26/2025 18:30:42 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0157493	-.003046	.0801918	.0173195	.0042945	27.04945	.1353264
Stddev	.0023966	.001322	.0005346	.0049622	.0029158	.04058	.0005999
%RSD	15.21719	43.38531	.6666275	28.65110	67.89713	.1500339	.4432769
#1	.0170571	-.002824	.0807542	.0136701	.0026057	27.09619	.1347724
#2	.0172075	-.001850	.0801308	.0229697	.0076614	27.02313	.1359635
#3	.0129833	-.004465	.0796903	.0153185	.0026164	27.02904	.1352433

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018508	-.000363	7.469265	.0389100	.0329928	.0760510	53.10195
Stddev	.0000556	.000020	.036815	.0012500	.0002420	.0005319	.10274
%RSD	3.004082	5.586665	.4928926	3.212507	.7335917	.6994235	.1934701
#1	.0019104	-.000341	7.479460	.0375264	.0327452	.0755367	53.21778
#2	.0018003	-.000380	7.428426	.0392458	.0332288	.0760175	53.02184
#3	.0018416	-.000369	7.499908	.0399578	.0330045	.0765989	53.06624

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.270823	7.514355	.0332990	-.001025	.3200940	.1381021	.1516957
Stddev	.004588	.079916	.0002654	.001035	.0127639	.0065260	.0003583
%RSD	.3610607	1.063516	.7969850	101.0176	3.987541	4.725499	.2361807
#1	1.274975	7.605713	.0329960	-.002210	.3348180	.1315290	.1519049
#2	1.265896	7.457408	.0334107	-.000572	.3121677	.1445800	.1519001
#3	1.271597	7.479945	.0334903	-.000294	.3132963	.1381971	.1512820

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.188121	1.125890	.0384979	-.001528	.6050802	1.642826	.0029286
Stddev	.002154	.003380	.0010729	.000151	.0041958	.016787	.0003269
%RSD	.1812604	.3001818	2.786837	9.852885	.6934275	1.021836	11.16211
#1	1.190579	1.123720	.0390663	-.001365	.6002648	1.626136	.0030158
#2	1.187223	1.129784	.0372605	-.001554	.6070254	1.659708	.0025670
#3	1.186562	1.124165	.0391670	-.001663	.6079503	1.642635	.0032031

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2381-01DL2X10 Acquired: 6/26/2025 18:30:42 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.9000003	.0109150	.0278483
Stddev	.0061962	.0014688	.0002946
%RSD	.6884645	13.45639	1.057802
#1	.9025184	.0123453	.0281791
#2	.8929415	.0109890	.0276142
#3	.9045409	.0094106	.0277516

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4167.447	39774.93	2971.094	2535.148	5658.834
Stddev	3.581	293.36	13.416	22.200	6.463
%RSD	.0859198	.7375438	.4515346	.8757012	.1142033
#1	4168.082	39574.25	2980.058	2528.376	5661.851
#2	4163.592	40111.61	2977.553	2559.945	5651.414
#3	4170.668	39638.94	2955.671	2517.122	5663.236

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2381-01DUPDL2X10 Acquired: 6/26/2025 18:35:00 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0156580	-.003209	.0791987	.0158086	.0077753	27.45079	.1378424
Stddev	.0028416	.000955	.0006672	.0011870	.0022614	.16975	.0000664
%RSD	18.14805	29.77641	.8424434	7.508699	29.08497	.6183836	.0482033
#1	.0179349	-.002156	.0792032	.0144987	.0103337	27.62638	.1378913
#2	.0124734	-.003449	.0798637	.0161139	.0069493	27.43845	.1377667
#3	.0165657	-.004021	.0785293	.0168131	.0060431	27.28755	.1378691

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019107	-.000465	7.529744	.0380951	.0321369	.0763313	53.72449
Stddev	.0001664	.000030	.058078	.0012885	.0006935	.0008093	.17785
%RSD	8.708922	6.422220	.7713140	3.382393	2.158020	1.060197	.3310489
#1	.0020999	-.000484	7.596799	.0388816	.0329193	.0758963	53.92225
#2	.0017871	-.000430	7.497048	.0387956	.0315979	.0758325	53.67357
#3	.0018451	-.000480	7.495384	.0366080	.0318937	.0772650	53.57765

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.294067	7.656743	.0323668	-.000407	.3300796	.1346282	.1530649
Stddev	.003736	.032221	.0006655	.000696	.0035195	.0107464	.0002832
%RSD	.2886964	.4208146	2.056052	171.1926	1.066250	7.982266	.1850376
#1	1.297096	7.693902	.0329598	-.000594	.3269779	.1448011	.1529810
#2	1.289893	7.639765	.0324935	.000364	.3293564	.1356956	.1533807
#3	1.295212	7.636562	.0316471	-.000990	.3339045	.1233880	.1528332

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.179803	1.122351	.0399448	-.001226	.5997622	1.637717	.0028656
Stddev	.004092	.003387	.0011310	.000402	.0018510	.005457	.0006040
%RSD	.3468244	.3018091	2.831503	32.77021	.3086193	.3332291	21.07701
#1	1.178725	1.122137	.0387342	-.001644	.5976981	1.637580	.0034915
#2	1.176358	1.125841	.0409744	-.001192	.6003138	1.632330	.0022863
#3	1.184326	1.119076	.0401259	-.000843	.6012747	1.643242	.0028188

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2381-01DUPDL2X10 Acquired: 6/26/2025 18:35:00 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.9085022	.0083966	.0282016
Stddev	.0038342	.0043020	.0006103
%RSD	.4220318	51.23476	2.164193
#1	.9040758	.0034862	.0285135
#2	.9106362	.0102010	.0285930
#3	.9107946	.0115024	.0274983

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4185.267	39940.25	2997.940	2539.678	5676.642
Stddev	8.816	171.44	14.875	14.173	6.153
%RSD	.2106318	.4292403	.4961629	.5580709	.1084001
#1	4176.113	40104.42	3013.861	2554.439	5670.381
#2	4193.700	39762.36	2995.559	2526.177	5682.682
#3	4185.988	39953.96	2984.399	2538.419	5676.861

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2381-01LDL2X50 Acquired: 6/26/2025 18:39:18 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0052963**	**-.000359**	**.0166219**	**.0038185**	**.0011629**	**5.474202**	**.0267457**
Stddev	.0031987	.000545	.0004760	.0001991	.0009567	.025313	.0005516
%RSD	60.39504	151.7407	2.863843	5.213070	82.26579	.4624037	2.062532
#1	.0073479	-.000028	.0161958	.0040483	.0001364	5.498467	.0261243
#2	.0069305	-.000989	.0165342	.0037008	.0013227	5.447957	.0271778
#3	.0016106	-.000062	.0171357	.0037064	.0020297	5.476181	.0269349

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003607**	**-.000028**	**1.493310**	**.0078264**	**.0066146**	**.0152679**	**10.73713**
Stddev	.0001719	.000039	.015165	.0003439	.0001862	.0003429	.04051
%RSD	47.66149	140.4045	1.015538	4.393812	2.814955	2.245923	.3773322
#1	.0005321	-.000024	1.477162	.0074295	.0064314	.0150845	10.78095
#2	.0001883	.000009	1.507251	.0080340	.0068036	.0150558	10.72938
#3	.0003615	-.000069	1.495518	.0080158	.0066087	.0156635	10.70104

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2587410**	**1.508682**	**.0063805**	**-.000722**	**.0609177**	**.0309039**	**.0308778**
Stddev	.0030227	.014980	.0003569	.001590	.0031651	.0048662	.0000762
%RSD	1.168229	.9929240	5.593970	220.1404	5.195671	15.74631	.2469209
#1	.2617571	1.524792	.0061520	.001045	.0644599	.0364868	.0309602
#2	.2557117	1.506082	.0067918	-.002036	.0599260	.0286630	.0308098
#3	.2587542	1.495172	.0061977	-.001175	.0583673	.0275618	.0308634

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2035050**	**.2132205**	**.0073781**	**-.000892**	**.1101063**	**.3285312**	**.0001163**
Stddev	.0023014	.0017572	.0019656	.000562	.0009970	.0020333	.0005209
%RSD	1.130874	.8241274	26.64130	62.99746	.9055271	.6189057	447.6835
#1	.2060250	.2117641	.0071437	-.000257	.1108613	.3299118	-.000316
#2	.2015146	.2127252	.0055402	-.001325	.1089761	.3294856	-.000030
#3	.2029755	.2151722	.0094505	-.001093	.1104815	.3261963	.000695

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2381-01LDL2X50 Acquired: 6/26/2025 18:39:18 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.1831255	-.004425	.0057049
Stddev	.0044405	.007944	.0001886
%RSD	2.424813	179.5214	3.305409
#1	.1838450	-.007025	.0059063
#2	.1871622	-.010743	.0056759
#3	.1783692	.004493	.0055325

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4103.311	39229.85	2915.331	2488.765	5892.591
Stddev	7.651	87.92	13.278	8.247	4.085
%RSD	.1864509	.2241111	.4554494	.3313717	.0693185
#1	4111.841	39294.58	2900.536	2481.008	5894.897
#2	4097.056	39265.20	2926.212	2487.860	5887.874
#3	4101.036	39129.75	2919.246	2497.427	5895.000

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2381-01MSDL2X10 Acquired: 6/26/2025 18:43:44 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0882504**	**.1883878**	**.1717443**	**.1920725**	**.0290276**	**29.92049**	**.1616664**
Stddev	.0033835	.0027592	.0007846	.0044622	.0001564	.01591	.0008126
%RSD	3.833918	1.464617	.4568309	2.323181	.5388936	.0531802	.5026403
#1	.0913097	.1865561	.1710566	.1942866	.0288900	29.93601	.1626036
#2	.0846164	.1870460	.1725989	.1869362	.0291977	29.90421	.1611586
#3	.0888249	.1915612	.1715774	.1949946	.0289951	29.92124	.1612370

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0212686**	**.0178743**	**7.015463**	**.0776702**	**.0524823**	**.1063111**	**57.26508**
Stddev	.0002231	.0001292	.019825	.0004050	.0003211	.0010841	.25128
%RSD	1.048885	.7228521	.2825845	.5214659	.6118319	1.019751	.4388060
#1	.0215249	.0177255	7.037011	.0775876	.0521116	.1065772	57.54725
#2	.0211632	.0179387	6.997997	.0781102	.0526659	.1072374	57.06544
#3	.0211178	.0179586	7.011381	.0773129	.0526696	.1051187	57.18256

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.290805**	**7.758348**	**.0818059**	**.0070485**	**.6834869**	**.1699846**	**.1750958**
Stddev	.003124	.074498	.0003044	.0010166	.0140419	.0061769	.0007853
%RSD	.2420239	.9602356	.3720864	14.42271	2.054453	3.633808	.4485270
#1	1.294265	7.746703	.0818151	.0082210	.6786879	.1767401	.1746665
#2	1.289959	7.690357	.0814970	.0065105	.6992992	.1646252	.1746186
#3	1.288190	7.837983	.0821056	.0064139	.6724737	.1685884	.1760022

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.117230**	**1.661079**	**.0694288**	**.0323845**	**.5733730**	**1.503306**	**.0623910**
Stddev	.009383	.004379	.0007835	.0004256	.0031571	.007005	.0010248
%RSD	.4431684	.2636120	1.128512	1.314151	.5506143	.4659504	1.642630
#1	2.125106	1.663660	.0689195	.0327834	.5767781	1.509572	.0635638
#2	2.119737	1.656023	.0690359	.0324336	.5705431	1.504603	.0619413
#3	2.106849	1.663553	.0703311	.0319365	.5727978	1.495744	.0616678

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2381-01MSDL2X10 Acquired: 6/26/2025 18:43:44 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.9615049	.0259104	.0490306
Stddev	.0028433	.0064338	.0001723
%RSD	.2957173	24.83104	.3513044
#1	.9626608	.0226627	.0490585
#2	.9582657	.0217478	.0488461
#3	.9635883	.0333208	.0491873

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4170.387	39754.24	2969.412	2531.829	5636.449
Stddev	10.394	138.83	12.131	4.655	12.973
%RSD	.2492216	.3492280	.4085345	.1838650	.2301624
#1	4176.190	39773.05	2957.870	2534.735	5641.490
#2	4176.582	39882.71	2968.309	2534.293	5646.144
#3	4158.387	39606.96	2982.057	2526.460	5621.712

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCV02 Acquired: 6/26/2025 18:48:01 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi 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	**5.026636**	**4.954864**	**4.897339**	**4.894633**	**5.034178**	**10.12521**	**10.14260**
Stddev	.002504	.008391	.005196	.000994	.010378	.04300	.03086
%RSD	.0498188	.1693420	.1060939	.0203072	.2061590	.4246507	.3042201
#1	5.026103	4.947650	4.892843	4.895690	5.028729	10.10222	10.13608
#2	5.024441	4.952870	4.903028	4.893718	5.027660	10.09860	10.11552
#3	5.029364	4.964072	4.896146	4.894489	5.046146	10.17482	10.17619

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2465732**	**2.471569**	**24.54434**	**1.044205**	**2.466243**	**1.239463**	**4.844129**
Stddev	.0003130	.003029	.03110	.005218	.001627	.001380	.006327
%RSD	.1269433	.1225429	.1267285	.4997515	.0659585	.1113351	.1306182
#1	.2462764	2.469064	24.51135	1.047117	2.466275	1.239119	4.851026
#2	.2465430	2.474935	24.54855	1.047318	2.464601	1.238287	4.842767
#3	.2469002	2.470709	24.57313	1.038181	2.467853	1.240982	4.838593

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.503014**	**24.47221**	**2.469165**	**1.243491**	**25.45405**	**2.549990**	**2.591198**
Stddev	.007474	.19422	.001528	.004913	.18284	.014156	.011114
%RSD	.2986111	.7936403	.0618940	.3951157	.7183199	.5551400	.4288980
#1	2.502759	24.32690	2.467425	1.243852	25.64254	2.550806	2.595109
#2	2.495671	24.39693	2.470287	1.248214	25.44217	2.535443	2.599827
#3	2.510613	24.69280	2.469785	1.238408	25.27744	2.563719	2.578657

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.48314**	**4.903983**	**4.994316**	**4.948656**	**4.805449**	**5.043466**	**4.940892**
Stddev	.55587	.003500	.008934	.006567	.015883	.005453	.003585
%RSD	2.181330	.0713622	.1788753	.1327089	.3305167	.1081104	.0725487
#1	25.98683	4.904019	4.993357	4.942083	4.818551	5.037502	4.938979
#2	25.57586	4.900465	5.003690	4.948668	4.787784	5.048195	4.945027
#3	24.88674	4.907464	4.985900	4.955218	4.810013	5.044701	4.938669

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCV02 Acquired: 6/26/2025 18:48:01 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.971821**	**4.821144**	**5.055301**
Stddev	.020069	.011969	.013199
%RSD	.4036513	.2482598	.2610879
#1	4.969179	4.809031	5.050161
#2	4.953204	4.821438	5.045445
#3	4.993080	4.832963	5.070296

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3869.534**	**37219.84**	**2814.432**	**2341.906**	**5155.221**
Stddev	10.309	120.74	7.950	5.580	12.099
%RSD	.2664265	.3243985	.2824842	.2382661	.2346981
#1	3878.184	37139.17	2808.666	2335.501	5161.117
#2	3858.126	37161.70	2823.502	2345.719	5141.304
#3	3872.291	37358.65	2811.128	2344.498	5163.241

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCB02 Acquired: 6/26/2025 18:52:17 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000507**	**.0004707**	**.0016168**	**.0015333**	**-.001167**	**-.006928**
Stddev	.001738	.0007863	.0005701	.0026853	.002610	.016646
%RSD	342.8217	167.0338	35.26109	175.1355	223.6491	240.2646
#1	.001142	-.000253	.0018533	.0042126	-.001645	.009894
#2	-.000340	.001308	.0009665	.0015453	.001649	-.007286
#3	-.002323	.000357	.0020305	-.001158	-.003505	-.023393

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005230**	**.0001193**	**.0002505**	**-.026254**	**.0002951**	**.0002622**
Stddev	.0011905	.0000813	.0000173	.017997	.0002482	.0002896
%RSD	227.6108	68.13808	6.891567	68.54962	84.08142	110.4476
#1	.0015723	.0001116	.0002665	-.042981	.0005163	.0000188
#2	.0007674	.0000421	.0002528	-.028571	.0000267	.0005824
#3	-.000771	.0002041	.0002322	-.007211	.0003425	.0001853

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000160**	**-.026467**	**-.001140**	**-.048537**	**.0003269**	**.0004096**
Stddev	.0004482	.010086	.001439	.043220	.0003308	.0001239
%RSD	2794.919	38.10688	126.1905	89.04515	101.2084	30.24973
#1	.0004110	-.036406	-.001473	-.080730	.0006811	.0004522
#2	.0001081	-.026752	-.002383	-.065466	.0002735	.0005065
#3	-.000471	-.016241	.000436	.000585	.0000260	.0002700

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002384**	**-.003336**	**.0002466**	**.0010434**	**.0000858**	F **.0115800**
Stddev	.0054746	.001352	.0004575	.0004552	.0015733	.0007710
%RSD	2296.559	40.51581	185.4840	43.62487	1834.551	6.657820
#1	-.005949	-.002412	.0007288	.0012379	.0018774	.0117059
#2	.004454	-.004887	.0001924	.0013690	-.000549	.0122802
#3	.002210	-.002709	-.000181	.0005233	-.001071	.0107538

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCB02 Acquired: 6/26/2025 18:52:17 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000143	-.001371	-.000904	.0000566	-.001947	-.011671
Stddev	.000037	.001810	.000487	.0006650	.002586	.005724
%RSD	25.57856	132.0334	53.82326	1173.944	132.8084	49.05028
#1	-.000128	.000619	-.000446	.0003384	-.004737	-.008836
#2	-.000116	-.001813	-.001415	-.000703	.000371	-.018259
#3	-.000185	-.002919	-.000851	.000534	-.001476	-.007916

Elem	Sr4077
Units	ppm
Avg	.0003631
Stddev	.0001040
%RSD	28.63434
#1	.0002527
#2	.0004592
#3	.0003775

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3997.417	38831.97	2834.036	2439.449	5921.187
Stddev	6.596	128.31	10.656	10.869	13.824
%RSD	.1649957	.3304176	.3760069	.4455621	.2334642
#1	4002.118	38980.08	2829.776	2449.252	5921.135
#2	3989.877	38761.14	2846.164	2427.760	5907.389
#3	4000.257	38754.69	2826.170	2441.336	5935.036

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2381-01MSDDL2X10 Acquired: 6/26/2025 18:56:45 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0866607	.1889360	.1706319	.1896111	.0293957	29.66126	.1594380
Stddev	.0033330	.0024062	.0004209	.0018462	.0022622	.05842	.0015370
%RSD	3.846003	1.273556	.2466506	.9736562	7.695769	.1969652	.9640117
#1	.0828121	.1906149	.1701822	.1880589	.0297154	29.67002	.1576852
#2	.0885736	.1900139	.1710162	.1916526	.0314810	29.71482	.1600731
#3	.0885963	.1861793	.1706972	.1891216	.0269906	29.59896	.1605557

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0208843	.0177274	6.929722	.0761720	.0516816	.1048728	56.57040
Stddev	.0004018	.0000363	.055802	.0013538	.0001321	.0009150	.18643
%RSD	1.923953	.2046210	.8052568	1.777300	.2556699	.8724911	.3295589
#1	.0205543	.0177489	6.865572	.0751351	.0518313	.1038744	56.35519
#2	.0213317	.0177478	6.967042	.0756773	.0515812	.1056714	56.67355
#3	.0207668	.0176856	6.956551	.0777036	.0516324	.1050725	56.68246

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.274234	7.595867	.0807790	.0062979	.6818835	.1755056	.1742369
Stddev	.011832	.100509	.0004119	.0007466	.0048616	.0102160	.0009801
%RSD	.9285755	1.323201	.5099295	11.85438	.7129641	5.820918	.5624864
#1	1.260977	7.534061	.0809409	.0065994	.6777140	.1787004	.1746394
#2	1.283726	7.711841	.0810854	.0068465	.6872235	.1837424	.1749517
#3	1.277998	7.541699	.0803108	.0054477	.6807129	.1640740	.1731197

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.097419	1.641571	.0739967	.0321150	.5633196	1.509859	.0621970
Stddev	.015617	.000928	.0013963	.0003301	.0033296	.017126	.0001623
%RSD	.7445659	.0565614	1.886977	1.027766	.5910688	1.134284	.2610203
#1	2.081170	1.640529	.0738677	.0320797	.5614111	1.492098	.0622759
#2	2.112315	1.641876	.0726693	.0318041	.5671643	1.526271	.0620103
#3	2.098771	1.642309	.0754530	.0324613	.5613835	1.511206	.0623048

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2381-01MSDDL2X10 Acquired: 6/26/2025 18:56:45 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.9489146	.0264709	.0485731
Stddev	.0118870	.0070766	.0007477
%RSD	1.252695	26.73362	1.539415
#1	.9363628	.0189622	.0478886
#2	.9600009	.0330169	.0493711
#3	.9503799	.0274336	.0484596

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4141.829	39299.98	2951.395	2506.189	5607.446
Stddev	10.563	146.46	11.290	9.900	7.176
%RSD	.2550344	.3726728	.3825367	.3950288	.1279720
#1	4141.160	39257.35	2956.887	2500.674	5604.774
#2	4152.711	39463.02	2938.409	2517.618	5615.575
#3	4131.617	39179.56	2958.888	2500.274	5601.990

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2412-01 Acquired: 6/26/2025 19:05:21 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0736459	-.000485	.4767082	.0281234	.0233694	98.93378	.5276276
Stddev	.0027924	.002957	.0045420	.0012696	.0002228	.04427	.0028526
%RSD	3.791672	610.3643	.9527731	4.514401	.9534222	.0447478	.5406407
#1	.0768349	.001971	.4719670	.0272068	.0236205	98.98245	.5299867
#2	.0724641	.000342	.4771371	.0275910	.0232921	98.89591	.5244573
#3	.0716387	-.003767	.4810204	.0295726	.0231955	98.92297	.5284387

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0062198	-.001373	128.7338	.4168103	.0786127	.2028418	151.1051
Stddev	.0001364	.000088	.3714	.0027231	.0008240	.0016156	.1502
%RSD	2.193613	6.394935	.2884866	.6533277	1.048197	.7965081	.0994137
#1	.0061158	-.001354	129.1582	.4153525	.0783110	.2009788	151.2226
#2	.0063743	-.001295	128.5750	.4199520	.0779821	.2036895	151.1568
#3	.0061694	-.001468	128.4683	.4151264	.0795451	.2038573	150.9359

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.957123	39.55274	.2690792	-.000973	3.924145	.2779116	1.171892
Stddev	.011674	.10932	.0017244	.000701	.072993	.0006929	.005745
%RSD	.5964727	.2763854	.6408602	72.04776	1.860092	.2493159	.4902119
#1	1.970024	39.67833	.2675382	-.000645	3.869264	.2784157	1.177201
#2	1.947289	39.47900	.2687577	-.000496	4.006984	.2781976	1.172682
#3	1.954055	39.50089	.2709418	-.001778	3.896187	.2771215	1.165793

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.264729	6.553902	.1116489	.0016887	2.515598	4.807084	.0268932
Stddev	.120880	.174750	.0011890	.0004027	.074808	.044779	.0005616
%RSD	1.929538	2.666353	1.064964	23.84558	2.973780	.9315278	2.088361
#1	6.187715	6.363220	.1130036	.0014589	2.433131	4.756707	.0266278
#2	6.404051	6.592078	.1111648	.0014536	2.534570	4.842364	.0265135
#3	6.202422	6.706409	.1107783	.0021537	2.579094	4.822181	.0275384

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2412-01 Acquired: 6/26/2025 19:05:21 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.828487	.0401211	.5494106
Stddev	.010913	.0015197	.0026355
%RSD	.5968227	3.787808	.4796938
#1	1.834047	.0384261	.5522475
#2	1.815914	.0413619	.5470384
#3	1.835499	.0405753	.5489460

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4092.255	40304.62	3125.617	2587.362	5023.817
Stddev	137.571	134.23	19.108	14.616	169.156
%RSD	3.361736	.3330270	.6113471	.5649182	3.367079
#1	4249.218	40365.49	3147.375	2573.228	5218.213
#2	3992.613	40150.75	3111.566	2602.418	4910.146
#3	4034.935	40397.63	3117.909	2586.439	4943.092

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2423-01 Acquired: 6/26/2025 19:09:35 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1464599**	**-.004572**	**.9226329**	**.0446550**	**.0243161**	**108.3227**	**.7592899**
Stddev	.0053685	.003120	.0083694	.0143515	.0037227	19.4164	.1341251
%RSD	3.665474	68.25167	.9071257	32.13867	15.30970	17.92461	17.66454
#1	.1506970	-.005394	.9308720	.0468647	.0271647	109.6718	.7705107
#2	.1404227	-.007199	.9141389	.0293267	.0201038	88.2669	.6199069
#3	.1482600	-.001123	.9228878	.0577734	.0256798	127.0294	.8874521

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0095651**	**.0023635**	**62.80004**	**.3413226**	**.0980963**	**.3671075**	**181.1884**
Stddev	.0014769	.0013150	10.94796	.0038735	.0010135	.0585333	32.0356
%RSD	15.44045	55.63489	17.43304	1.134840	1.033202	15.94445	17.68081
#1	.0096089	.0022725	63.73745	.3407164	.0988635	.3724992	184.0680
#2	.0080667	.0037216	51.41353	.3454634	.0984780	.3060649	147.8103
#3	.0110195	.0010964	73.24916	.3377880	.0969473	.4227583	211.6870

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.710337**	**38.89579**	**.1815178**	**-.000150**	**8.336975**	**.3339790**	**1.671235**
Stddev	.480048	6.81692	.0001660	.006790	1.268210	.0568859	.002435
%RSD	17.71176	17.52611	.0914356	4529.369	15.21188	17.03279	.1457233
#1	2.750386	39.51075	.1814783	.001611	8.441183	.3343593	1.669816
#2	2.211518	31.79222	.1813751	-.007647	7.019875	.2769038	1.669841
#3	3.169106	45.38439	.1816999	.005587	9.549865	.3906738	1.674047

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.84129**	**9.566792**	**.1052509**	**.0014238**	**6.789551**	**8.353999**	**.0355592**
Stddev	1.80756	.218418	.0202412	.0002916	.186448	1.300891	.0017686
%RSD	15.26485	2.283083	19.23138	20.47699	2.746099	15.57207	4.973577
#1	11.90772	9.818574	.1073983	.0012361	7.004484	8.441743	.0348944
#2	10.00144	9.453569	.0840216	.0017597	6.692829	7.011457	.0375638
#3	13.61472	9.428231	.1243328	.0012757	6.671339	9.608796	.0342193

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2423-01 Acquired: 6/26/2025 19:09:35 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	2.063703	.0709574	.4056007
Stddev	.377193	.0094668	.0714715
%RSD	18.27746	13.34157	17.62116
#1	2.107500	.0661404	.4119471
#2	1.666524	.0648679	.3311676
#3	2.417085	.0818641	.4736874

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4428.570	42758.63	3406.053	2735.826	5108.062
Stddev	168.589	194.76	528.761	14.200	197.639
%RSD	3.806853	.4554757	15.52416	.5190282	3.869153
#1	4233.902	42959.55	3329.429	2749.352	4879.856
#2	4525.125	42570.69	3968.947	2721.037	5220.555
#3	4526.683	42745.64	2919.785	2737.089	5223.775

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2419-01 Acquired: 6/26/2025 19:13:58 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1021621**	**-.016464**	**1.862198**	**.0695109**	**.0263791**	**113.3351**	**.8957758**
Stddev	.0031820	.002662	.002194	.0023049	.0033225	.0796	.0012596
%RSD	3.114657	16.16598	.1178218	3.315891	12.59526	.0701945	.1406109
#1	.0994293	-.018977	1.862888	.0679222	.0261665	113.2433	.8954006
#2	.1014014	-.013675	1.863964	.0684560	.0298028	113.3838	.8971803
#3	.1056555	-.016739	1.859742	.0721545	.0231680	113.3782	.8947465

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0079257**	**.0022319**	**89.15394**	**.1834595**	**.2380209**	**.6013243**	**261.6814**
Stddev	.0016168	.0001768	.16931	.0024455	.0008170	.1013082	.5672
%RSD	20.39918	7.923245	.1899043	1.332998	.3432578	16.84751	.2167614
#1	.0074032	.0022012	89.32308	.1819634	.2379416	.5878276	261.0372
#2	.0066348	.0024221	88.98446	.1862816	.2388746	.5074410	261.9006
#3	.0097391	.0020725	89.15429	.1821334	.2372464	.7087042	262.1062

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.905919**	**41.47837**	**13.96971**	**-.001881**	**11.20018**	**.3798177**	**1.391503**
Stddev	.007167	.13998	.02043	.001467	1.47493	.0050797	.039842
%RSD	.1835002	.3374842	.1462525	78.00732	13.16877	1.337414	2.863235
#1	3.903979	41.39013	13.96962	-.001377	10.72194	.3739968	1.367069
#2	3.899920	41.40521	13.99019	-.003534	10.02371	.3833537	1.437479
#3	3.913856	41.63978	13.94932	-.000732	12.85488	.3821026	1.369963

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.209117**	**7.435085**	**.1956650**	**.0035409**	**8.895290**	**8.092257**	**.1276903**
Stddev	1.006431	.070802	.0182555	.0006364	.076032	1.273141	.0018184
%RSD	10.92864	.9522649	9.329964	17.97386	.8547437	15.73283	1.424087
#1	8.460384	7.384079	.1984587	.0039057	8.829601	7.844218	.1273406
#2	8.813773	7.515920	.2123627	.0028060	8.978578	6.961389	.1260722
#3	10.35319	7.405255	.1761738	.0039111	8.877690	9.471166	.1296582

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2419-01 Acquired: 6/26/2025 19:13:58 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.338728**	**.1115974**	**.5457092**
Stddev	.003409	.0098116	.0003345
%RSD	.0785733	8.791916	.0612867
#1	4.334830	.1114869	.5459354
#2	4.341152	.1214638	.5453250
#3	4.340203	.1018416	.5458672

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5201.226**	**49694.17**	**3891.866**	**3206.731**	**4724.179**
Stddev	32.311	4807.68	426.806	260.706	26.742
%RSD	.6212213	9.674527	10.96663	8.129953	.5660756
#1	5222.826	52623.45	4140.511	3375.623	4740.952
#2	5164.081	44145.63	4136.049	2906.475	4693.340
#3	5216.772	52313.42	3399.039	3338.096	4738.246

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2376-02 Acquired: 6/26/2025 19:18:21 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003747**	**-.006735**	**.0135549**	**-.002714**	**.0187850**	**.2313945**
Stddev	.004382	.000615	.0030397	.002539	.0025360	.0235813
%RSD	116.9377	9.126201	22.42500	93.54556	13.49990	10.19096
#1	-.007061	-.007272	.0115130	-.005353	.0216278	.2554459
#2	-.005401	-.006065	.0121034	-.000289	.0179721	.2083133
#3	.001221	-.006870	.0170482	-.002500	.0167553	.2304244

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0166198**	**.0001606**	**.0006372**	**15.34842**	**.6860121**	**.0190438**
Stddev	.0011970	.0003553	.0000461	.21601	.0074990	.0008310
%RSD	7.202317	221.3225	7.228743	1.407390	1.093124	4.363460
#1	.0172970	-.000160	.0006142	15.41554	.6775036	.0192499
#2	.0173248	.000542	.0006903	15.10682	.6888738	.0181292
#3	.0152377	.000100	.0006073	15.52291	.6916588	.0197524

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.929186**	**4.066005**	**.0788959**	**3.281137**	**.4390939**	**.0832495**
Stddev	.433204	.025563	.0020565	.082303	.0025892	.0015646
%RSD	14.78923	.6287019	2.606562	2.508358	.5896605	1.879463
#1	2.978918	4.095443	.0778351	3.372597	.4417360	.0814528
#2	3.335379	4.053163	.0775864	3.213047	.4365611	.0839832
#3	2.473263	4.049410	.0812662	3.257766	.4389845	.0843125

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**140.2331**	**-.013728**	**.5174254**	**^ *****	**F 24.60580**	**.3971405**
Stddev	13.2383	.004051	.0106507	-----	.65837	.0599150
%RSD	9.440175	29.51235	2.058402	-----	2.675653	15.08659
#1	136.6339	-.009286	.5051397	5.836018	25.29409	.4007189
#2	154.8988	-.014675	.5240518	^ -----	23.98213	.4551862
#3	129.1667	-.017221	.5230847	6.204358	24.54118	.3355166

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2376-02 Acquired: 6/26/2025 19:18:21 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0058720	4.011143	11.63257	.0059080	.0110483	-.032342
Stddev	.0008451	.111875	1.69770	.0003584	.0013692	.009854
%RSD	14.39250	2.789103	14.59437	6.066158	12.39270	30.46768
#1	.0066837	4.117905	11.68576	.0055098	.0103989	-.028579
#2	.0049970	3.894775	13.30304	.0062048	.0101247	-.043523
#3	.0059354	4.020749	9.90889	.0060094	.0126214	-.024925

Elem	Sr4077
Units	ppm
Avg	.0502128
Stddev	.0003543
%RSD	.7054887
#1	.0504164
#2	.0498037
#3	.0504182

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3243.346	33525.31	2451.253	2168.271	4396.323
Stddev	155.737	3109.05	400.208	177.404	211.251
%RSD	4.801730	9.273729	16.32668	8.181798	4.805172
#1	3087.641	37073.52	2593.742	2369.392	4188.883
#2	3399.114	31278.10	1999.300	2034.023	4611.189
#3	3243.283	32224.32	2760.718	2101.399	4388.895

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2381-01ADL2X10 Acquired: 6/26/2025 19:22:46 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0869701	.1879495	.1693078	.1855446	.0278893	29.68378	.1608915
Stddev	.0013127	.0014203	.0012938	.0021089	.0018886	.08848	.0015756
%RSD	1.509360	.7556592	.7641772	1.136595	6.771813	.2980778	.9792760
#1	.0873939	.1894017	.1706297	.1873193	.0278864	29.78585	.1590850
#2	.0880186	.1878834	.1692497	.1861014	.0297793	29.63676	.1619810
#3	.0854979	.1865635	.1680441	.1832132	.0260021	29.62875	.1616086

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0208675	.0176252	6.923641	.0766008	.0519213	.1058500	56.31400
Stddev	.0000618	.0000361	.048322	.0005291	.0003464	.0007170	.28554
%RSD	.2961140	.2047800	.6979233	.6906873	.6670916	.6773478	.5070451
#1	.0208065	.0175946	6.944240	.0761335	.0517762	.1060970	56.51840
#2	.0209301	.0176159	6.868433	.0764937	.0523167	.1064108	55.98775
#3	.0208660	.0176650	6.958249	.0771753	.0516712	.1050422	56.43585

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.276210	7.642629	.0811866	.0062369	.6974145	.1728212	.1742500
Stddev	.001849	.061069	.0003384	.0003866	.0044365	.0081649	.0002072
%RSD	.1448694	.7990551	.4168353	6.199245	.6361393	4.724474	.1188854
#1	1.278034	7.708826	.0811316	.0066054	.6927069	.1755216	.1743762
#2	1.274337	7.630574	.0815491	.0062708	.6980186	.1636481	.1740109
#3	1.276260	7.588487	.0808790	.0058344	.7015181	.1792938	.1743628

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.117913	1.636684	.0710398	.0322434	.5750418	1.516831	.0613873
Stddev	.008190	.003389	.0008282	.0001838	.0038945	.004364	.0012557
%RSD	.3866873	.2070497	1.165787	.5700401	.6772557	.2876913	2.045570
#1	2.118790	1.639601	.0719815	.0320492	.5768158	1.519624	.0626127
#2	2.125628	1.637484	.0707131	.0322665	.5777335	1.519065	.0614459
#3	2.109320	1.632967	.0704249	.0324146	.5705761	1.511802	.0601034

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2381-01ADL2X10 Acquired: 6/26/2025 19:22:46 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.9441211	.0419486	.0483957
Stddev	.0009844	.0010669	.0002542
%RSD	.1042682	2.543385	.5252475
#1	.9450665	.0428426	.0482246
#2	.9431018	.0407676	.0486878
#3	.9441949	.0422357	.0482746

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4119.824	39153.49	2929.785	2489.928	5584.297
Stddev	14.373	13.70	17.670	.523	15.824
%RSD	.3488644	.0349968	.6031202	.0210083	.2833643
#1	4136.397	39137.85	2921.238	2490.030	5596.819
#2	4110.778	39163.39	2918.015	2490.392	5566.512
#3	4112.298	39159.22	2950.104	2489.361	5589.560

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCV03 Acquired: 6/26/2025 19:27:03 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.976144**	**4.907526**	**4.841031**	**4.830109**	**4.993476**	**10.09571**	**10.07975**
Stddev	.006632	.005216	.006812	.011386	.000109	.06567	.05306
%RSD	.1332740	.1062909	.1407188	.2357205	.0021874	.6504253	.5263894
#1	4.973919	4.906024	4.834205	4.833620	4.993351	10.02311	10.02308
#2	4.970911	4.903226	4.841056	4.817381	4.993553	10.11309	10.08794
#3	4.983602	4.913328	4.847830	4.839325	4.993525	10.15094	10.12824

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2435622**	**2.444525**	**24.18801**	**1.057622**	**2.443484**	**1.234723**	**4.862134**
Stddev	.0014430	.004208	.09619	.002139	.002698	.011043	.013613
%RSD	.5924380	.1721330	.3976714	.2022667	.1104124	.8943805	.2799701
#1	.2421606	2.440493	24.07870	1.055568	2.441758	1.226118	4.849204
#2	.2434828	2.444194	24.25973	1.059837	2.442101	1.230876	4.876339
#3	.2450432	2.448889	24.22559	1.057460	2.446593	1.247175	4.860860

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.480697**	**24.16714**	**2.453810**	**1.240081**	**25.47536**	**2.531439**	**2.585912**
Stddev	.016092	.20222	.002577	.001161	.28894	.006519	.006353
%RSD	.6486852	.8367670	.1050282	.0936402	1.134181	.2575210	.2456883
#1	2.464395	23.96046	2.451882	1.239913	25.18453	2.524756	2.591226
#2	2.481126	24.17638	2.452810	1.239013	25.47916	2.531780	2.587635
#3	2.496570	24.36459	2.456737	1.241317	25.76237	2.537781	2.578875

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.70629**	**4.857865**	**4.952071**	**4.912282**	**4.723600**	**5.025186**	**4.885677**
Stddev	.47895	.002840	.049669	.005234	.004293	.055101	.010175
%RSD	1.863174	.0584531	1.003003	.1065494	.0908829	1.096492	.2082716
#1	25.44559	4.854587	4.904138	4.912277	4.723003	4.969479	4.879891
#2	25.41423	4.859550	4.948763	4.907051	4.728160	5.026420	4.879714
#3	26.25904	4.859459	5.003311	4.917519	4.719636	5.079659	4.897426

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCV03 Acquired: 6/26/2025 19:27:03 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.930903**	**4.820037**	**5.019592**
Stddev	.020646	.025861	.028307
%RSD	.4186982	.5365393	.5639393
#1	4.907502	4.791692	4.991449
#2	4.938660	4.826071	5.019264
#3	4.946546	4.842348	5.048061

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3832.902**	**36673.45**	**2785.967**	**2315.938**	**5114.110**
Stddev	2.241	109.06	26.422	8.928	.892
%RSD	.0584756	.2973683	.9483852	.3855133	.0174385
#1	3831.118	36757.13	2809.978	2306.492	5114.862
#2	3835.418	36713.12	2790.261	2317.085	5113.124
#3	3832.170	36550.12	2757.661	2324.237	5114.343

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCB03 Acquired: 6/26/2025 19:31:18 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006781**	**.0004782**	**.0008678**	**.0024584**	**.0001841**	**-.015837**
Stddev	.0010023	.0016025	.0002792	.0015956	.0006419	.025066
%RSD	147.8062	335.0788	32.16705	64.90505	348.6432	158.2704
#1	.0001804	.0012751	.0011799	.0007977	.0006130	.007781
#2	.0018318	.0015261	.0006417	.0025976	.0004931	-.042135
#3	.0000221	-.001366	.0007820	.0039799	-.000554	-.013158

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000103**	**.0000527**	**.0001573**	**-.019384**	**-.000546**	**.0001756**
Stddev	.0003289	.0001042	.0000460	.008010	.000464	.0001590
%RSD	3194.720	197.5843	29.22198	41.32377	85.13019	90.54253
#1	-.000362	.0000051	.0001856	-.011025	-.000452	.0000387
#2	.000260	-.000019	.0001822	-.026992	-.000135	.0003501
#3	.000133	.000172	.0001043	-.020135	-.001050	.0001381

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002513**	**.0013970**	**-.000787**	**-.051121**	**.0000271**	**-.001176**
Stddev	.0006037	.0081823	.001704	.034930	.0005584	.000351
%RSD	240.2188	585.6869	216.5855	68.32802	2062.447	29.83620
#1	.0004460	.0091338	-.000601	-.070891	.0002925	-.000926
#2	-.000426	-.007168	.000817	-.071681	.0004033	-.001577
#3	.000734	.002225	-.002577	-.010790	-.000615	-.001025

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.015897**	**-.002962**	**-.000145**	**.0002130**	**-.000930**	F **.0103891**
Stddev	.006935	.005132	.000274	.0007192	.000516	.0004091
%RSD	43.62688	173.2556	188.4345	337.7035	55.49984	3.937535
#1	-.012117	-.008521	-.000070	-.000278	-.001491	.0103880
#2	-.023901	.001597	.000083	-.000122	-.000474	.0099806
#3	-.011673	-.001963	-.000449	.001039	-.000826	.0107987

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCB03 Acquired: 6/26/2025 19:31:18 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000679	.0007596	-.000700	-.000095	-.001114	.0026822
Stddev	.000550	.0010236	.000432	.000446	.004069	.0022295
%RSD	81.02675	134.7494	61.68825	468.7764	365.2092	83.12001
#1	-.000063	.0001262	-.000204	.000264	-.005637	.0028574
#2	-.000853	.0002121	-.000905	-.000594	.002250	.0003703
#3	-.001120	.0019405	-.000990	.000045	.000044	.0048189

Elem	Sr4077
Units	ppm
Avg	.0000240
Stddev	.0002839
%RSD	1184.403
#1	.0003304
#2	-.000230
#3	-.000029

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4016.192	39025.49	2825.621	2447.115	5945.527
Stddev	4.143	285.04	24.284	13.415	3.997
%RSD	.1031462	.7303981	.8594181	.5481921	.0672249
#1	4013.081	38886.56	2836.879	2436.728	5940.917
#2	4020.894	38836.56	2842.233	2442.358	5947.648
#3	4014.600	39353.36	2797.751	2462.261	5948.017

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2409-02 Acquired: 6/26/2025 19:35:48 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.007005**	**.0015473**	**.0310529**	**-.006680**	**.0137008**	**.4156561**	**.1529069**
Stddev	.001626	.0004993	.0009489	.001798	.0025723	.0215946	.0012467
%RSD	23.21538	32.27053	3.055734	26.90847	18.77499	5.195303	.8153404
#1	-.008725	.0012640	.0300070	-.004931	.0135491	.3974291	.1535278
#2	-.006798	.0021239	.0312932	-.006587	.0112077	.4395059	.1514716
#3	-.005492	.0012541	.0318586	-.008523	.0163456	.4100332	.1537212

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000052**	**.0131812**	**32.78869**	**.0023576**	**.0156703**	**.0170535**	**.1855319**
Stddev	.000073	.0000250	.12520	.0008840	.0003508	.0005252	.0233977
%RSD	139.5061	.1897764	.3818359	37.49694	2.238727	3.079654	12.61113
#1	-.000134	.0131532	32.65742	.0026922	.0154508	.0173408	.1881311
#2	-.000028	.0131892	32.80188	.0013551	.0160749	.0164473	.1609432
#3	.000005	.0132012	32.90677	.0030255	.0154851	.0173724	.2075215

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1012877**	**2.826446**	**.0016044**	**-.000221**	**391.2045**	**.0009372**	**.1160519**
Stddev	.0012813	.032547	.0005278	.001152	2.9512	.0029154	.0012163
%RSD	1.264965	1.151508	32.89768	521.5251	.7543841	311.0681	1.048054
#1	.1019078	2.858642	.0016216	.000617	392.0125	.0033085	.1172082
#2	.0998144	2.793560	.0021233	-.001535	387.9334	.0018208	.1161640
#3	.1021410	2.827135	.0010681	.000255	393.6675	-.002318	.1147834

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.252389**	**.1341899**	**.0270279**	**-.004851**	**1.456376**	**1.467640**	**.0003663**
Stddev	.012824	.0023245	.0004866	.000183	.004111	.005531	.0011182
%RSD	1.023930	1.732271	1.800318	3.765057	.2822650	.3768729	305.2444
#1	1.241622	.1368611	.0274785	-.004801	1.461088	1.463591	.0002814
#2	1.248969	.1326266	.0270933	-.004700	1.453524	1.465387	.0015246
#3	1.266576	.1330820	.0265119	-.005054	1.454516	1.473942	-.000707

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2409-02 Acquired: 6/26/2025 19:35:48 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0046663	-.032978	.2182662
Stddev	.0001083	.010066	.0010038
%RSD	2.321301	30.52206	.4599115
#1	.0046411	-.040833	.2174350
#2	.0045728	-.021632	.2179822
#3	.0047850	-.036470	.2193815

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3750.965	34875.82	2763.598	2243.570	4901.270
Stddev	17.223	211.58	6.053	25.631	22.570
%RSD	.4591690	.6066691	.2190347	1.142414	.4604982
#1	3731.317	34637.83	2765.679	2216.549	4875.896
#2	3758.124	34946.99	2768.336	2246.626	4908.803
#3	3763.454	35042.63	2756.779	2267.536	4919.110

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2409-02DUP Acquired: 6/26/2025 19:40:20 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.006139**	**.0034065**	**.0322402**	**-.005405**	**.0141624**	**.4450030**	**.1473424**
Stddev	.003600	.0012896	.0012287	.003210	.0027868	.0267642	.0011844
%RSD	58.63577	37.85658	3.810954	59.39774	19.67739	6.014388	.8038678
#1	-.002096	.0043002	.0312975	-.001698	.0110920	.4755097	.1470769
#2	-.008997	.0019281	.0336298	-.007227	.0148636	.4340303	.1486370
#3	-.007323	.0039911	.0317934	-.007290	.0165316	.4254688	.1463132

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000129**	**.0128077**	**31.72664**	**.0141749**	**.0153095**	**.0156777**	**.2176920**
Stddev	.0000354	.0000106	.06588	.0006745	.0003054	.0007741	.0132991
%RSD	274.6826	.0828842	.2076559	4.758482	1.994887	4.937437	6.109149
#1	.0000236	.0128009	31.71186	.0149206	.0156180	.0165636	.2078693
#2	-.000027	.0128024	31.79866	.0136073	.0150073	.0151316	.2328260
#3	.000042	.0128200	31.66941	.0139968	.0153033	.0153380	.2123806

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0985940**	**2.688442**	**.0097270**	**.0000403**	**377.0997**	**.0021646**	**.1113386**
Stddev	.0007254	.009581	.0002867	.0009201	3.6590	.0110552	.0008740
%RSD	.7357842	.3563660	2.947403	2282.862	.9702907	510.7166	.7849567
#1	.0989516	2.687218	.0099346	-.001009	380.4602	.0127862	.1105130
#2	.0977591	2.679532	.0098464	.000710	377.6370	-.009278	.1112488
#3	.0990711	2.698576	.0093998	.000420	373.2017	.002986	.1122540

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.220251**	**.1278363**	**.0232714**	**-.003344**	**1.404949**	**1.451812**	**.0005597**
Stddev	.007627	.0022351	.0006906	.000500	.001000	.006807	.0009594
%RSD	.6250511	1.748408	2.967407	14.96549	.0711745	.4688693	171.4193
#1	1.229054	.1273825	.0238008	-.002771	1.404887	1.459654	-.000504
#2	1.216089	.1302635	.0235230	-.003567	1.403982	1.447434	.001360
#3	1.215610	.1258629	.0224903	-.003695	1.405979	1.448347	.000823

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2409-02DUP Acquired: 6/26/2025 19:40:20 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0078571	-.027776	.2098538
Stddev	.0006575	.003692	.0002770
%RSD	8.368006	13.29252	.1320004
#1	.0073519	-.024162	.2098145
#2	.0086005	-.031542	.2101483
#3	.0076189	-.027623	.2095985

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3848.894	35976.50	2841.520	2313.522	5026.276
Stddev	5.277	109.73	10.628	7.116	4.185
%RSD	.1371074	.3050117	.3740210	.3075835	.0832547
#1	3852.906	36103.21	2830.827	2321.511	5024.949
#2	3850.859	35912.09	2841.651	2307.863	5030.963
#3	3842.916	35914.21	2852.082	2311.190	5022.915

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2409-02LX5 Acquired: 6/26/2025 19:44:52 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.002273**	**.0006317**	**.0060365**	**-.002963**	**.0001701**	**.0589318**	**.0281374**
Stddev	.001872	.0026621	.0010009	.003288	.0019431	.0257063	.0004073
%RSD	82.36475	421.4015	16.58113	110.9399	1142.137	43.62045	1.447596
#1	-.000156	-.000821	.0049127	-.004373	.0019745	.0876244	.0277767
#2	-.002953	-.000988	.0063645	-.005311	.0004228	.0379999	.0280564
#3	-.003708	.003704	.0068322	.000794	-.001887	.0511712	.0285791

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000139**	**.0024401**	**6.092091**	**.0013583**	**.0045497**	**.0026011**	**.0237732**
Stddev	.000013	.0000548	.021296	.0000964	.0003530	.0001889	.0277186
%RSD	9.346467	2.244554	.3495744	7.096095	7.759723	7.261455	116.5961
#1	-.000149	.0023819	6.109020	.0013392	.0047821	.0024966	.0513871
#2	-.000125	.0024905	6.099072	.0012729	.0041434	.0024876	-.004049
#3	-.000144	.0024480	6.068180	.0014628	.0047235	.0028192	.023981

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0232413**	**.5123098**	**.0008222**	**-.000310**	**82.35132**	**-.002237**	**.0207547**
Stddev	.0010259	.0198098	.0002637	.001085	.24267	.004824	.0001497
%RSD	4.413982	3.866767	32.07857	349.4735	.2946789	215.6249	.7212204
#1	.0234274	.5283966	.0008497	-.001298	82.27528	-.005887	.0207810
#2	.0241613	.5183497	.0005458	.000851	82.15578	.003232	.0205936
#3	.0221351	.4901830	.0010711	-.000483	82.62291	-.004057	.0208895

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1971955**	**.0243798**	**.0075277**	**-.001887**	**.2832632**	**.2799917**	**-.001841**
Stddev	.0012484	.0016524	.0005714	.000207	.0036623	.0000277	.000440
%RSD	.6330892	6.777697	7.590495	10.94775	1.292912	.0098952	23.89606
#1	.1962468	.0255984	.0080149	-.001804	.2832429	.2799603	-.001336
#2	.1967298	.0224990	.0068988	-.001735	.2869356	.2800022	-.002050
#3	.1986098	.0250421	.0076696	-.002123	.2796111	.2800127	-.002138

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2409-02LX5 Acquired: 6/26/2025 19:44:52 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0006239	.0551760	.0398189
Stddev	.0029539	.0063562	.0003898
%RSD	473.4795	11.51989	.9789994
#1	.0027176	.0609670	.0394640
#2	-.002755	.0561855	.0397565
#3	.001909	.0483754	.0402361

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4003.786	38130.76	2894.239	2409.166	5486.069
Stddev	6.287	791.20	6.726	39.259	9.799
%RSD	.1570185	2.074966	.2324013	1.629567	.1786099
#1	3997.278	37817.55	2891.270	2396.249	5475.707
#2	4009.825	39030.61	2889.509	2453.256	5487.315
#3	4004.256	37544.11	2901.939	2377.993	5495.185

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2409-02MS Acquired: 6/26/2025 19:49:18 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8366131**	**1.907646**	**1.007871**	**1.944502**	**.8326470**	**2.524128**	**.3480975**
Stddev	.0019691	.007246	.003769	.005921	.0021444	.003795	.0010322
%RSD	.2353685	.3798245	.3739630	.3044832	.2575433	.1503557	.2965281
#1	.8343469	1.899655	1.003976	1.937877	.8308829	2.527913	.3478699
#2	.8375856	1.909498	1.008136	1.946350	.8350339	2.524149	.3492245
#3	.8379068	1.913786	1.011500	1.949278	.8320243	2.520323	.3471980

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1964215**	**.2201664**	**31.90817**	**.4215261**	**.2182870**	**.3054243**	**3.172839**
Stddev	.0011484	.0005457	.01537	.0002878	.0008684	.0015405	.011573
%RSD	.5846502	.2478437	.0481762	.0682817	.3978500	.5043730	.3647485
#1	.1951653	.2197561	31.90417	.4214281	.2188084	.3039695	3.182242
#2	.1974173	.2199574	31.89519	.4218501	.2172844	.3070381	3.176361
#3	.1966821	.2207857	31.92515	.4213000	.2187681	.3052654	3.159915

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2949546**	**4.567516**	**.5108063**	**.0702425**	**358.8192**	**.3203761**	**.3205054**
Stddev	.0006063	.022493	.0010018	.0006569	1.2490	.0013726	.0024569
%RSD	.2055593	.4924655	.1961213	.9351878	.3480794	.4284476	.7665700
#1	.2943279	4.566302	.5106774	.0704368	357.8011	.3203715	.3188325
#2	.2955382	4.545654	.5098752	.0695104	360.2129	.3217510	.3233261
#3	.2949978	4.590592	.5118663	.0707804	358.4436	.3190057	.3193575

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**13.56451**	**6.365767**	**.2952048**	**.4098409**	**1.360677**	**2.349253**	**.7257602**
Stddev	.15483	.013740	.0020836	.0012632	.007440	.016825	.0010394
%RSD	1.141424	.2158375	.7058050	.3082041	.5468088	.7161824	.1432152
#1	13.68021	6.363125	.2934528	.4083844	1.352452	2.340447	.7256143
#2	13.62470	6.353541	.2975088	.4106352	1.366939	2.368653	.7268648
#3	13.38863	6.380636	.2946529	.4105032	1.362640	2.338658	.7248015

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2409-02MS Acquired: 6/26/2025 19:49:18 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2086401	.1571598	.4049011
Stddev	.0026121	.0042344	.0006034
%RSD	1.251976	2.694328	.1490180
#1	.2099110	.1557835	.4050230
#2	.2056358	.1619111	.4054342
#3	.2103737	.1537847	.4042461

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3848.078	36502.67	2878.960	2349.479	5011.266
Stddev	6.463	35.98	10.876	4.316	16.166
%RSD	.1679632	.0985740	.3777781	.1837102	.3225980
#1	3848.464	36510.56	2888.720	2348.273	5008.637
#2	3854.340	36463.39	2867.236	2345.895	5028.586
#3	3841.431	36534.04	2880.924	2354.271	4996.575

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2409-02MSD Acquired: 6/26/2025 19:53:48 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8500458	1.941595	1.022096	1.972824	.8504427	2.486974	.3466826
Stddev	.0049659	.002788	.000618	.003996	.0039013	.041880	.0021163
%RSD	.5841921	.1436153	.0604427	.2025464	.4587343	1.683986	.6104494
#1	.8546475	1.939222	1.022607	1.969386	.8459511	2.494607	.3451432
#2	.8507078	1.940897	1.022272	1.977208	.8529862	2.441802	.3458085
#3	.8447821	1.944666	1.021410	1.971879	.8523910	2.524513	.3490959

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1974836	.2227495	30.41247	.4297003	.2219106	.3081209	3.183665
Stddev	.0017921	.0000984	.05134	.0011125	.0006593	.0021707	.009239
%RSD	.9074477	.0441514	.1688170	.2589089	.2971243	.7045056	.2901942
#1	.1963560	.2226576	30.45905	.4287876	.2226329	.3072086	3.193583
#2	.1965447	.2228532	30.35742	.4309396	.2217579	.3065552	3.175302
#3	.1995500	.2227376	30.42094	.4293737	.2213410	.3105988	3.182109

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2941149	4.513373	.5201647	.0714723	344.1797	.3306835	.3230363
Stddev	.0012950	.004043	.0009288	.0014745	.7479	.0063117	.0013602
%RSD	.4403014	.0895865	.1785672	2.063094	.2173021	1.908672	.4210631
#1	.2955959	4.513280	.5191229	.0726409	344.6100	.3330234	.3229004
#2	.2935538	4.517462	.5204649	.0698156	343.3161	.3354910	.3244593
#3	.2931952	4.509376	.5209063	.0719603	344.6131	.3235360	.3217491

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.70671	6.442056	.2948091	.4161802	1.285770	2.242215	.7358985
Stddev	.21602	.005126	.0021813	.0013252	.003736	.029025	.0015380
%RSD	1.576028	.0795718	.7399005	.3184231	.2906030	1.294489	.2090022
#1	13.48049	6.436272	.2952739	.4149547	1.281459	2.220517	.7349284
#2	13.72881	6.446035	.2924328	.4175865	1.287758	2.230942	.7350951
#3	13.91084	6.443862	.2967204	.4159995	1.288091	2.275185	.7376718

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2409-02MSD Acquired: 6/26/2025 19:53:48 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2150411	.1521026	.3999213
Stddev	.0030362	.0038376	.0013311
%RSD	1.411930	2.523052	.3328460
#1	.2131812	.1477720	.3992674
#2	.2133973	.1550815	.3990437
#3	.2185448	.1534542	.4014529

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3835.124	36139.57	2882.996	2320.534	5005.392
Stddev	14.465	93.99	25.044	11.757	16.898
%RSD	.3771711	.2600645	.8686676	.5066426	.3376043
#1	3831.546	36075.73	2902.848	2317.828	4993.058
#2	3822.784	36095.48	2891.279	2310.366	4998.464
#3	3851.042	36247.49	2854.860	2333.408	5024.653

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2409-02A Acquired: 6/26/2025 19:58:16 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8190957**	**1.844872**	**.9776655**	**1.886033**	**.8008806**	**2.411802**	**.3490772**
Stddev	.0015432	.003478	.0012231	.002658	.0032109	.018986	.0026678
%RSD	.1884045	.1885314	.1251017	.1409162	.4009215	.7872116	.7642397
#1	.8197108	1.847118	.9775692	1.884212	.7972446	2.399079	.3520721
#2	.8173398	1.840865	.9764935	1.884805	.8033266	2.402701	.3482042
#3	.8202365	1.846632	.9789339	1.889083	.8020705	2.433625	.3469553

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1905605**	**.2147011**	**33.32102**	**.4147357**	**.2127577**	**.2969226**	**3.101595**
Stddev	.0009344	.0001260	.18588	.0015999	.0000908	.0019038	.022880
%RSD	.4903717	.0586808	.5578414	.3857639	.0426939	.6411646	.7376970
#1	.1915615	.2146051	33.53087	.4145293	.2126712	.2990753	3.092478
#2	.1897111	.2146544	33.25514	.4164287	.2128523	.2954606	3.127628
#3	.1904090	.2148438	33.17706	.4132490	.2127496	.2962319	3.084678

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2951223**	**4.622297**	**.4994353**	**.0676877**	**375.1420**	**.3097997**	**.3224993**
Stddev	.0023527	.064089	.0003554	.0003290	5.1581	.0069132	.0012787
%RSD	.7972031	1.386516	.0711543	.4860707	1.374980	2.231508	.3965101
#1	.2978206	4.646433	.4997581	.0676095	381.0924	.3116508	.3237099
#2	.2940461	4.670812	.4990545	.0674049	371.9424	.3021493	.3226260
#3	.2935001	4.549644	.4994934	.0680488	372.3911	.3155988	.3211619

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**13.42798**	**6.203361**	**.2856337**	**.3929947**	**1.419703**	**2.301800**	**.6970030**
Stddev	.19680	.003537	.0030941	.0003973	.000867	.015550	.0016126
%RSD	1.465591	.0570183	1.083251	.1010914	.0610868	.6755640	.2313644
#1	13.65052	6.206648	.2889503	.3925389	1.418876	2.319741	.6952892
#2	13.27690	6.203818	.2851258	.3932676	1.420606	2.292203	.6984905
#3	13.35651	6.199618	.2828249	.3931775	1.419628	2.293456	.6972293

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2409-02A Acquired: 6/26/2025 19:58:16 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2022468	.1508643	.4091968
Stddev	.0011544	.0031763	.0022196
%RSD	.5707981	2.105400	.5424273
#1	.2010107	.1512434	.4114150
#2	.2032969	.1538340	.4091997
#3	.2024328	.1475154	.4069758

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3836.837	36371.25	2878.983	2336.836	4994.631
Stddev	14.839	152.30	21.267	12.574	21.088
%RSD	.3867427	.4187307	.7386871	.5380978	.4222063
#1	3853.845	36339.74	2854.779	2324.203	5017.888
#2	3830.129	36237.17	2887.492	2336.952	4989.249
#3	3826.536	36536.83	2894.678	2349.351	4976.756

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCV04 Acquired: 6/26/2025 20:02:45 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi 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	**5.058765**	**4.942820**	**4.901803**	**4.878634**	**5.043695**	**10.18816**	**10.15612**
Stddev	.004861	.002727	.002087	.009559	.007051	.06449	.03353
%RSD	.0960891	.0551790	.0425825	.1959332	.1398080	.6329986	.3301166
#1	5.060954	4.945844	4.904120	4.884919	5.051355	10.11883	10.13216
#2	5.062147	4.940546	4.900070	4.883350	5.042254	10.19930	10.14175
#3	5.053195	4.942069	4.901220	4.867634	5.037475	10.24636	10.19443

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2424774**	**2.476706**	**24.37134**	**1.051065**	**2.475220**	**1.219903**	**4.781373**
Stddev	.0015902	.000444	.03484	.000546	.001769	.003937	.009036
%RSD	.6557948	.0179465	.1429712	.0519275	.0714576	.3227285	.1889906
#1	.2422960	2.477219	24.33711	1.051284	2.473180	1.219062	4.772272
#2	.2441504	2.476456	24.37015	1.050444	2.476145	1.224193	4.781503
#3	.2409857	2.476443	24.40677	1.051468	2.476334	1.216455	4.790343

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.490776**	**24.21413**	**2.471103**	**1.241337**	**25.04246**	**2.559539**	**2.597188**
Stddev	.005043	.07686	.001154	.000855	.05665	.004146	.009014
%RSD	.2024680	.3174317	.0466802	.0688457	.2262072	.1619751	.3470589
#1	2.490997	24.12554	2.472234	1.242138	25.05066	2.555781	2.604034
#2	2.485626	24.25377	2.471148	1.241436	25.09456	2.563987	2.586976
#3	2.495705	24.26309	2.469928	1.240437	24.98216	2.558850	2.600556

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.17760**	**4.909840**	**4.923907**	**4.959494**	**4.798244**	**4.985749**	**4.951173**
Stddev	.17263	.005886	.016291	.006612	.000953	.014886	.007490
%RSD	.6856637	.1198769	.3308489	.1333217	.0198641	.2985619	.1512867
#1	25.24668	4.903247	4.914489	4.966215	4.797647	4.979472	4.949969
#2	25.30500	4.914564	4.942718	4.959271	4.797742	5.002746	4.959192
#3	24.98113	4.911710	4.914513	4.952997	4.799343	4.975031	4.944357

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCV04 Acquired: 6/26/2025 20:02:45 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.970550**	**4.944577**	**5.058614**
Stddev	.009306	.009540	.016194
%RSD	.1872184	.1929453	.3201238
#1	4.959807	4.954975	5.044153
#2	4.975747	4.942532	5.055578
#3	4.976097	4.936225	5.076111

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3904.455**	**37557.63**	**2887.183**	**2379.397**	**5192.464**
Stddev	7.521	131.82	6.311	7.921	5.081
%RSD	.1926172	.3509854	.2185809	.3329050	.0978575
#1	3896.611	37554.00	2891.667	2380.200	5188.807
#2	3911.604	37691.23	2879.967	2386.886	5198.266
#3	3905.150	37427.66	2889.916	2371.105	5190.319

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCB04 Acquired: 6/26/2025 20:07:01 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008427**	**.0004380**	**.0013775**	**.0010646**	**-.001688**	**-.026055**
Stddev	.0037744	.0012866	.0011703	.0017548	.000200	.005025
%RSD	447.8652	293.7284	84.95463	164.8349	11.86480	19.28589
#1	.0027272	.0019236	.0017137	.0028979	-.001764	-.026378
#2	-.003503	-.000323	.0023429	-.000599	-.001839	-.020877
#3	.003304	-.000286	.0000760	.000895	-.001461	-.030911

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008911**	**.0000489**	**.0002992**	**-.015802**	**.0004768**	**.0002796**
Stddev	.0005009	.0001205	.0000428	.028742	.0004339	.0003591
%RSD	56.21838	246.5073	14.31744	181.8819	90.99202	128.4196
#1	.0003649	.0001131	.0002741	-.034050	.0000903	.0006760
#2	.0009461	-.000090	.0002749	.017329	.0003941	-.000024
#3	.0013622	.000124	.0003487	-.030686	.0009461	.000187

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000018**	**-.017841**	**-.000674**	**-.038776**	**-.000005**	**-.000916**
Stddev	.000557	.000711	.000968	.034132	.000325	.000807
%RSD	3089.388	3.985677	143.5716	88.02393	6330.478	88.10881
#1	-.000624	-.017222	-.001692	-.025846	.000089	-.001270
#2	.000097	-.017683	.000234	-.012998	-.000367	-.001486
#3	.000472	-.018618	-.000565	-.077484	.000263	.000008

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0327202**	**-.004322**	**.0163893**	**.0042808**	**.0004019**	F **.0129702**
Stddev	.0137293	.003232	.0011426	.0013145	.0010953	.0003065
%RSD	41.95956	74.78463	6.971834	30.70615	272.5678	2.363444
#1	.0184398	-.000590	.0151890	.0040171	-.000122	.0132418
#2	.0338983	-.006193	.0165151	.0031182	.001661	.0130309
#3	.0458224	-.006184	.0174639	.0057072	-.000333	.0126378

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCB04 Acquired: 6/26/2025 20:07:01 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000328	-.001280	-.001451	-.000148	.0001599	.0184185
Stddev	.000485	.002436	.000438	.000827	.0048215	.0049888
%RSD	148.0449	190.2828	30.15589	559.3669	3015.459	27.08592
#1	.000002	.001336	-.000947	.000512	.0025465	.0231586
#2	-.000101	-.001693	-.001733	.000120	.0033227	.0132135
#3	-.000885	-.003484	-.001672	-.001076	-.005389	.0188835

Elem	Sr4077
Units	ppm
Avg	.0004980
Stddev	.0001597
%RSD	32.07278
#1	.0006222
#2	.0003178
#3	.0005539

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4081.183	39539.10	2921.965	2484.209	6024.439
Stddev	11.566	72.81	21.745	3.644	12.932
%RSD	.2833889	.1841469	.7441958	.1466846	.2146552
#1	4069.382	39623.14	2946.909	2480.425	6010.286
#2	4081.669	39498.85	2911.979	2484.506	6027.390
#3	4092.498	39495.29	2907.006	2487.695	6035.640

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: PB168611BL Acquired: 6/26/2025 20:11:31 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031154**	**.0008948**	**.0006462**	**.0027386**	**-.000753**	**-.015269**	**-.000719**
Stddev	.0021298	.0014128	.0011174	.0015800	.001945	.009305	.000874
%RSD	68.36387	157.8834	172.9212	57.69600	258.2864	60.93914	121.6054
#1	.0025870	-.000098	.0008789	.0043819	.000793	-.024526	-.000294
#2	.0054596	.000270	-.000569	.0026033	-.000116	-.015362	-.000139
#3	.0012996	.002512	.001629	.0012305	-.002937	-.005918	-.001725

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001388**	**.0001980**	**-.009164**	**-.000618**	**.0002659**	**.0007241**	**-.008587**
Stddev	.0001916	.0000291	.009252	.000501	.0001690	.0006086	.006808
%RSD	138.0123	14.70678	100.9689	81.14029	63.55620	84.04961	79.28661
#1	-.000056	.0001644	-.018090	-.000412	.0001159	.0014079	-.008691
#2	.000327	.0002160	.000383	-.000252	.0002328	.0002419	-.001728
#3	.000145	.0002136	-.009784	-.001189	.0004490	.0005225	-.015343

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000301**	**-.008833**	**-.000563**	**-.000207**	**.0179636**	**-.001286**	**-.000194**
Stddev	.000690	.032808	.000170	.001093	.0169472	.005348	.000160
%RSD	229.4818	371.4171	30.13553	527.9093	94.34195	416.0357	82.58212
#1	.000489	.012412	-.000395	-.000902	.0374156	.004323	-.000027
#2	-.000787	-.046620	-.000734	-.000771	.0063873	-.001852	-.000346
#3	-.000605	.007707	-.000560	.001052	.0100879	-.006328	-.000210

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0019072**	**-.001338**	**.0054702**	**-.000367**	**-.001600**	**-.001879**	**.0001880**
Stddev	.0004027	.002376	.0016759	.000238	.003244	.000954	.0004735
%RSD	21.11398	177.5214	30.63585	64.90590	202.7612	50.76193	251.8919
#1	.0023693	-.003788	.0074031	-.000588	.000119	-.001024	.0006704
#2	.0016316	-.001184	.0045851	-.000115	-.005342	-.001704	.0001694
#3	.0017206	.000957	.0044226	-.000396	.000423	-.002908	-.000276

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: PB168611BL Acquired: 6/26/2025 20:11:31 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.000027	-.002238	.0000966
Stddev	.001876	.002484	.0001353
%RSD	7063.645	110.9832	140.0301
#1	-.000392	-.004297	-.000024
#2	-.001694	.000521	.000243
#3	.002006	-.002938	.000072

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4051.023	39433.05	2889.262	2467.906	5984.850
Stddev	11.817	195.33	16.897	8.197	6.129
%RSD	.2917042	.4953410	.5848183	.3321399	.1024071
#1	4052.662	39530.32	2870.279	2475.872	5980.352
#2	4061.935	39560.64	2894.849	2468.351	5991.831
#3	4038.472	39208.18	2902.658	2459.496	5982.368

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: PB168611BS Acquired: 6/26/2025 20:15:59 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7154878	1.925913	.9117304	1.875294	.7857159	1.973001
Stddev	.0067489	.001965	.0034826	.002419	.0019190	.025320
%RSD	.9432590	.1020178	.3819719	.1289702	.2442366	1.283315
#1	.7091131	1.927594	.9090772	1.875943	.7861835	1.946601
#2	.7147930	1.923753	.9104400	1.872616	.7836063	1.975320
#3	.7225572	1.926392	.9156739	1.877321	.7873579	1.997081

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1978275	.1971303	.1829684	.9239753	.3958936	.1875576
Stddev	.0004803	.0010795	.0001207	.0153978	.0014443	.0004191
%RSD	.2428119	.5476215	.0659909	1.666479	.3648169	.2234429
#1	.1983749	.1983693	.1829082	.9087971	.3942425	.1879364
#2	.1974763	.1966297	.1831074	.9395838	.3969225	.1871074
#3	.1976314	.1963920	.1828895	.9235448	.3965158	.1876290

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3076631	2.884822	.1983438	1.907210	.4655333	.0690054
Stddev	.0022421	.016069	.0009854	.037724	.0001686	.0014016
%RSD	.7287487	.5570268	.4968109	1.977991	.0362168	2.031074
#1	.3100506	2.888820	.1972183	1.863828	.4654058	.0705789
#2	.3073363	2.867131	.1987618	1.925489	.4654697	.0685463
#3	.3056023	2.898515	.1990512	1.932312	.4657245	.0678909

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.865191	.2927333	.2088453	8.652813	5.224103	.2951316
Stddev	.023714	.0030638	.0009686	.049932	.006178	.0020072
%RSD	.8276586	1.046614	.4638086	.5770621	.1182521	.6800946
#1	2.886959	.2894713	.2077714	8.703315	5.218121	.2962781
#2	2.839921	.2931786	.2096530	8.651654	5.223728	.2963029
#3	2.868694	.2955501	.2091116	8.603471	5.230459	.2928140

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: PB168611BS Acquired: 6/26/2025 20:15:59 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3816973**	F **-.000635**	**.9153166**	**.6411157**	**.1879586**	**.1908909**
Stddev	.0005296	.000878	.0075305	.0009618	.0014689	.0031157
%RSD	.1387387	138.3610	.8227216	.1500236	.7815110	1.632175
#1	.3810905	-.001092	.9213246	.6413032	.1868804	.1881473
#2	.3819350	-.001191	.9177565	.6419699	.1896316	.1902472
#3	.3820664	.000378	.9068686	.6400739	.1873638	.1942781

Elem	Sr4077
Units	ppm
Avg	**.1984072**
Stddev	.0004434
%RSD	.2234856
#1	.1980994
#2	.1989154
#3	.1982068

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4038.620**	**38888.45**	**2878.815**	**2446.680**	**5773.718**
Stddev	7.731	31.80	11.398	15.289	12.490
%RSD	.1914202	.0817732	.3959164	.6248945	.2163268
#1	4043.541	38904.20	2865.655	2461.176	5784.945
#2	4029.709	38909.30	2885.315	2448.160	5760.264
#3	4042.608	38851.85	2885.476	2430.705	5775.944

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: PB168612BL Acquired: 6/26/2025 20:20:20 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001898**	**.0008681**	**.0007526**	**.0002275**	**-.001314**	**-.032684**	**.0001459**
Stddev	.001948	.0019200	.0006806	.0028443	.001325	.020611	.0015877
%RSD	102.6309	221.1730	90.43659	1250.041	100.8576	63.06247	1088.206
#1	-.004142	-.001338	.0014052	-.001696	-.002738	-.009349	.0017999
#2	-.000899	.002162	.0008055	-.001117	-.001085	-.048406	.0000038
#3	-.000652	.001780	.0000471	.003495	-.000118	-.040297	-.001366

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000088**	**.0001350**	**-.011834**	**.0005204**	**-.000227**	**-.000419**	**-.000982**
Stddev	.0001012	.0000195	.011019	.0008320	.000268	.000131	.015585
%RSD	1144.901	14.47215	93.10792	159.8939	118.1112	31.16368	1587.697
#1	.0001171	.0001129	.000853	-.000434	-.000038	-.000550	.010896
#2	-.000083	.0001422	-.017349	.000900	-.000533	-.000418	.004787
#3	-.000007	.0001499	-.019006	.001095	-.000109	-.000289	-.018628

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000764**	**-.029633**	**-.000043**	**-.001164**	**.0060112**	**.0048988**	**-.000381**
Stddev	.000122	.034376	.000197	.000100	.0146680	.0085992	.000386
%RSD	15.95032	116.0040	457.7210	8.599423	244.0102	175.5392	101.4127
#1	-.000894	-.066413	.000182	-.001063	.0160389	-.004687	-.000198
#2	-.000746	.001684	-.000184	-.001263	-.010824	.011935	-.000824
#3	-.000652	-.024171	-.000127	-.001165	.012818	.007448	-.000120

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0016806**	**.0003571**	**.0031617**	**-.000534**	**-.003041**	**-.000315**	**-.000158**
Stddev	.0004993	.0006277	.0022175	.000418	.003755	.001312	.000791
%RSD	29.70945	175.7676	70.13521	78.15606	123.4557	416.6830	499.5920
#1	.0019879	-.000365	.0056092	-.000972	-.001562	-.000997	.000266
#2	.0019493	.000661	.0025897	-.000141	-.000252	.001198	.000329
#3	.0011045	.000775	.0012863	-.000490	-.007310	-.001145	-.001070

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: PB168612BL Acquired: 6/26/2025 20:20:20 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.000349	-.017660	.0001707
Stddev	.001302	.004089	.0001777
%RSD	373.0807	23.15521	104.0880
#1	-.000726	-.013676	.0003756
#2	-.001421	-.021847	.0000600
#3	.001100	-.017457	.0000765

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4058.698	39267.68	2892.044	2459.695	5995.615
Stddev	3.325	23.62	15.163	5.859	6.416
%RSD	.0819243	.0601546	.5243089	.2382033	.1070155
#1	4056.707	39294.82	2899.600	2461.305	5992.598
#2	4056.851	39256.46	2901.945	2453.200	5991.263
#3	4062.537	39251.75	2874.588	2464.582	6002.983

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: PB168612BS Acquired: 6/26/2025 20:24:49 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7246333**	**1.936509**	**.9163082**	**1.891136**	**.7945427**	**1.989467**
Stddev	.0016694	.003863	.0014736	.004309	.0036024	.015463
%RSD	.2303813	.1995046	.1608180	.2278523	.4533884	.7772600
#1	.7227389	1.932600	.9178339	1.886281	.7918603	2.006362
#2	.7258891	1.936600	.9161978	1.894506	.7986372	1.976016
#3	.7252720	1.940325	.9148929	1.892622	.7931305	1.986023

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2007683**	**.1978654**	**.1844984**	**.9395322**	**.3992673**	**.1885434**
Stddev	.0008516	.0008105	.0001034	.0198448	.0002728	.0003042
%RSD	.4241713	.4096090	.0560634	2.112199	.0683200	.1613439
#1	.2002694	.1987597	.1844226	.9624338	.3990048	.1882004
#2	.2017516	.1976568	.1846162	.9287558	.3992477	.1887804
#3	.2002838	.1971795	.1844563	.9274072	.3995493	.1886495

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3077156**	**2.910826**	**.1986544**	**1.947946**	**.4703413**	**.0703402**
Stddev	.0015856	.022417	.0022913	.057525	.0009400	.0007776
%RSD	.5152861	.7701163	1.153429	2.953117	.1998540	1.105418
#1	.3095450	2.936711	.1971173	1.890953	.4692561	.0697972
#2	.3067369	2.897780	.2012880	2.005989	.4708650	.0712309
#3	.3068648	2.897989	.1975579	1.946896	.4709027	.0699925

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.869777**	**.2976656**	**.2110477**	**8.763237**	**5.282837**	**.2924834**
Stddev	.014341	.0086101	.0007743	.097964	.003277	.0014964
%RSD	.4997136	2.892556	.3668703	1.117895	.0620338	.5116053
#1	2.885491	.3075711	.2111266	8.819765	5.286345	.2937509
#2	2.857396	.2919747	.2102371	8.650118	5.282309	.2928667
#3	2.866444	.2934509	.2117796	8.819828	5.279855	.2908327

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: PB168612BS Acquired: 6/26/2025 20:24:49 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3844602	F -.001743	.9168218	.6482988	.1925830	.1925625
Stddev	.0003409	.005307	.0044093	.0008445	.0032221	.0035163
%RSD	.0886568	304.5615	.4809315	.1302665	1.673083	1.826065
#1	.3846367	.004226	.9219027	.6486588	.1957363	.1938135
#2	.3840673	-.005931	.9145647	.6489037	.1927164	.1952823
#3	.3846766	-.003523	.9139981	.6473340	.1892963	.1885918

Elem	Sr4077
Units	ppm
Avg	.2001121
Stddev	.0008478
%RSD	.4236609
#1	.2006161
#2	.2005869
#3	.1991333

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4037.119	38538.43	2870.666	2424.023	5766.693
Stddev	12.986	257.74	20.728	12.183	16.648
%RSD	.3216763	.6687918	.7220461	.5026088	.2886860
#1	4029.107	38345.02	2847.251	2416.700	5756.916
#2	4052.102	38831.04	2886.670	2438.087	5785.915
#3	4030.146	38439.25	2878.076	2417.282	5757.248

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2403-03 Acquired: 6/26/2025 20:29:11 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3216619**	**-.009793**	**.1662897**	**.0808912**	**.0576438**	**87.86495**	**1.075107**
Stddev	.0027609	.001623	.0009664	.0017933	.0009549	.10605	.002896
%RSD	.8583388	16.56981	.5811576	2.216936	1.656609	.1206978	.2693763
#1	.3194898	-.007961	.1670096	.0788850	.0567625	87.98723	1.072192
#2	.3207269	-.010367	.1666681	.0823386	.0586584	87.80951	1.077984
#3	.3247689	-.011050	.1651913	.0814501	.0575105	87.79812	1.075144

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0087849**	**-.003950**	**127.5948**	**1.443762**	**.1174489**	**.7643605**	**330.2860**
Stddev	.0001341	.000079	.2252	.008892	.0014663	.0162470	.9588
%RSD	1.526543	1.994360	.1764757	.6158885	1.248433	2.125562	.2903012
#1	.0086302	-.003910	127.3824	1.435578	.1165590	.7685426	329.8504
#2	.0088687	-.004040	127.8309	1.442486	.1191412	.7781075	331.3853
#3	.0088557	-.003899	127.5711	1.453224	.1166464	.7464313	329.6224

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.997489**	**69.83557**	**.2688062**	**-.003530**	**23.08974**	**.5341941**	**2.379616**
Stddev	.017440	.11465	.0009175	.000865	.19532	.0041881	.011706
%RSD	.2907853	.1641745	.3413271	24.50844	.8459269	.7839992	.4919194
#1	5.978828	69.70489	.2684838	-.003061	22.86572	.5308621	2.372253
#2	6.000267	69.88253	.2698414	-.003000	23.22435	.5388954	2.373482
#3	6.013374	69.91928	.2680935	-.004528	23.17916	.5328247	2.393114

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.28390**	**9.186234**	**.3321517**	**.1363390**	**6.391846**	**3.741550**	**.0716660**
Stddev	.55732	.106311	.0020798	.0001806	.070970	.063782	.0012288
%RSD	2.295017	1.157288	.6261711	.1324828	1.110316	1.704689	1.714625
#1	24.70277	9.082249	.3298680	.1362073	6.322013	3.739061	.0702696
#2	23.65136	9.294728	.3339372	.1365450	6.463900	3.806540	.0721463
#3	24.49756	9.181725	.3326499	.1362648	6.389625	3.679049	.0725821

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2403-03 Acquired: 6/26/2025 20:29:11 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	3.852419	.0849793	1.713586
Stddev	.009483	.0036524	.003673
%RSD	.2461697	4.298016	.2143417
#1	3.841970	.0849031	1.709446
#2	3.860480	.0886693	1.716453
#3	3.854808	.0813656	1.714858

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4090.072	40890.54	3242.477	2606.049	4755.999
Stddev	21.294	1172.09	19.461	49.724	37.528
%RSD	.5206295	2.866407	.6002045	1.908025	.7890650
#1	4112.262	41468.27	3261.569	2621.463	4791.365
#2	4069.804	41661.61	3243.198	2646.241	4716.630
#3	4088.152	39541.74	3222.666	2550.443	4760.004

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2403-05 Acquired: 6/26/2025 20:33:32 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0808527	k -.000158	k .1415810	s -.002306	s .0308372	k 183.7687	1.020424
Stddev	.0039918	.002771	.0073650	.012057	.0102179	.5884	.002330
%RSD	4.937086	1758.113	5.201998	522.9029	33.13481	.3201818	.2283590
#1	.0835330	.000759	.1453823	.003428	.0233885	183.4726	1.018653
#2	.0762651	k -.003271	k .1330920	s -.016159	s .0424857	k 184.4463	1.023064
#3	.0827601	.002039	.1462686	.005814	.0266375	183.3872	1.019556

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .0083805	-.001847	1527.646	.9734851	k .1042668	k .2477272	154.7534
Stddev	.0004935	.000098	75.578	.0134675	.0017359	.0142228	.2009
%RSD	5.889038	5.280545	4.947375	1.383431	1.664864	5.741304	.1298011
#1	.0078147	-.001907	1556.178	.9872361	.1045830	.2313164	154.5759
#2	k .0087223	-.001899	1441.955	.9603202	k .1023945	k .2553849	154.9715
#3	.0086046	-.001734	1584.805	.9728990	.1058228	.2564804	154.7129

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.332886	295.4525	.2409262	k .0043852	10.51049	k .2742952	1.886671
Stddev	.033246	1.3994	.0008057	.0020691	.45836	.0052960	.022852
%RSD	.3562261	.4736508	.3344063	47.18463	4.361009	1.930767	1.211220
#1	9.314058	294.1436	.2408327	.0020419	9.98273	.2701937	1.911837
#2	9.371273	296.9276	.2401713	k .0059609	10.73977	k .2802741	1.867217
#3	9.313327	295.2862	.2417745	.0051528	10.80898	.2724177	1.880960

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	46.97821	k 8.245846	k .3172116	s .0422422	^ *****	k 7.599834	.0586462
Stddev	.19963	.139105	.0090592	.0067868	-----	.359681	.0037142
%RSD	.4249358	1.686971	2.855886	16.06638	-----	4.732746	6.333222
#1	47.20869	8.196360	.3067595	.0380179	124.1803	7.185728	.0564325
#2	46.86644	k 8.138250	k .3228035	s .0500707	^ -----	k 7.779366	.0565719
#3	46.85952	8.402928	.3220717	.0386379	127.9038	7.834408	.0629342

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2403-05 Acquired: 6/26/2025 20:33:32 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	7.769122	.2525328	11.45473
Stddev	.046744	.0034420	.27285
%RSD	.6016613	1.363011	2.381978
#1	7.740357	.2498021	11.17650
#2	7.823057	.2563992	11.46584
#3	7.743951	.2513971	11.72185

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	^ *****	32715.97	2948.842	2122.018	3841.038
Stddev	-----	1872.20	17.490	99.092	56.323
%RSD	-----	5.722598	.5931201	4.669702	1.466350
#1	3609.101	30561.28	2966.794	2007.652	3845.157
#2	^ -----	33945.42	2947.880	2182.278	3895.189
#3	3556.250	33641.20	2931.853	2176.125	3782.769

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2405-01 Acquired: 6/26/2025 20:38:10 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0507945**	**-.020197**	**.2229776**	**.0948924**	**.0205402**	**177.8674**	**1.439068**
Stddev	.0071957	.001173	.0015126	.0027924	.0009425	.3505	.002641
%RSD	14.16634	5.806652	.6783660	2.942685	4.588444	.1970402	.1835333
#1	.0532194	-.019206	.2247113	.0933774	.0209054	177.8438	1.437409
#2	.0426996	-.019893	.2219273	.0981149	.0194697	178.2291	1.442114
#3	.0564645	-.021492	.2222941	.0931850	.0212454	177.5293	1.437681

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0122613**	**-.003981**	**14.56395**	**.2769369**	**.1620298**	**.4868659**	**315.4446**
Stddev	.0002238	.000085	.06285	.0005776	.0007338	.0015260	.5030
%RSD	1.825298	2.123381	.4315328	.2085523	.4529084	.3134334	.1594566
#1	.0120035	-.004063	14.57696	.2770260	.1611871	.4859229	315.4181
#2	.0124060	-.003985	14.61928	.2774647	.1625286	.4860484	315.9603
#3	.0123744	-.003894	14.49562	.2763199	.1623736	.4886265	314.9554

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.851443**	**77.42061**	**.3586724**	**-.002618**	**14.57085**	**.3513893**	**.8702465**
Stddev	.008428	.12548	.0003303	.001345	.01031	.0068065	.0028041
%RSD	.2955624	.1620713	.0920786	51.35850	.0707249	1.937026	.3222207
#1	2.850572	77.52785	.3590307	-.001498	14.56227	.3543953	.8701969
#2	2.860273	77.45135	.3586064	-.002247	14.56800	.3561754	.8730752
#3	2.843485	77.28262	.3583802	-.004110	14.58228	.3435974	.8674676

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**28.62042**	**5.532676**	**.2126147**	**.0004854**	**.6489407**	**7.345185**	**.0197233**
Stddev	.37469	.020175	.0028930	.0004935	.0010772	.115448	.0007588
%RSD	1.309184	.3646591	1.360656	101.6621	.1659953	1.571749	3.847352
#1	29.04064	5.509395	.2152215	-.000025	.6496926	7.221519	.0197480
#2	28.32111	5.543563	.2131204	.000960	.6494230	7.363912	.0189524
#3	28.49951	5.545069	.2095023	.000521	.6477067	7.450126	.0204694

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2405-01 Acquired: 6/26/2025 20:38:10 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	4.882242	.3743882	.1123669
Stddev	.014943	.0118558	.0001626
%RSD	.3060707	3.166711	.1446978
#1	4.875922	.3701171	.1121895
#2	4.899307	.3877878	.1125088
#3	4.871498	.3652598	.1124023

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4613.342	43159.88	3390.235	2755.065	5170.397
Stddev	9.335	286.08	13.355	18.701	13.255
%RSD	.2023420	.6628280	.3939353	.6787765	.2563642
#1	4615.345	42841.05	3374.852	2735.939	5181.229
#2	4621.514	43244.44	3398.867	2755.945	5174.347
#3	4603.169	43394.14	3396.986	2773.310	5155.616

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2403-07 Acquired: 6/26/2025 20:42:34 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2092884	-.013489	.6591253	.1099793	.0392053	235.9340	1.331784
Stddev	.0027153	.001754	.0119238	.0035847	.0018327	1.1813	.006808
%RSD	1.297394	13.00020	1.809038	3.259433	4.674596	.5006791	.5111682
#1	.2095639	-.011467	.6534361	.1116966	.0385616	237.0367	1.338986
#2	.2064458	-.014596	.6511116	.1123823	.0412731	234.6874	1.325455
#3	.2118554	-.014403	.6728282	.1058590	.0377814	236.0780	1.330913

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0155459	-.003970	69.48354	.6008077	.1868245	.2704021	390.1446
Stddev	.0008645	.000028	.31921	.0079378	.0009423	.0171357	1.6511
%RSD	5.561103	.6940229	.4594031	1.321191	.5043561	6.337114	.4232058
#1	.0162745	-.003954	69.85194	.5920579	.1862299	.2870707	391.5060
#2	.0157725	-.003954	69.28903	.6028184	.1863326	.2713010	388.3080
#3	.0145906	-.004002	69.30965	.6075469	.1879109	.2528347	390.6199

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.394130	33.51226	.1944042	-.006227	^ *****	.5232631	1.433485
Stddev	.022443	.32359	.0008642	.001520	-----	.0176556	.030668
%RSD	.5107413	.9655864	.4445604	24.41470	-----	3.374136	2.139374
#1	4.418432	33.88084	.1940325	-.004900	4.035204	.5431617	1.405894
#2	4.374187	33.27481	.1937879	-.005896	4.067156	.5171549	1.428056
#3	4.389770	33.38115	.1953921	-.007886	^ -----	.5094726	1.466504

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.77534	9.139131	.1928867	.0028121	3.582441	6.115448	.0326223
Stddev	1.35828	.193349	.0148665	.0006538	.067410	.300436	.0016775
%RSD	9.192863	2.115619	7.707375	23.24930	1.881665	4.912735	5.142272
#1	16.32453	9.059910	.1808709	.0025818	3.548583	6.399935	.0331455
#2	14.21268	8.997974	.1882772	.0023046	3.538672	6.145140	.0339758
#3	13.78881	9.359509	.2095120	.0035499	3.660068	5.801268	.0307455

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2403-07 Acquired: 6/26/2025 20:42:34 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	2.924958	.0932373	.3190899
Stddev	.016535	.0081561	.0015290
%RSD	.5653030	8.747720	.4791642
#1	2.942907	.0925459	.3207677
#2	2.910347	.0854489	.3177751
#3	2.921619	.1017172	.3187270

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4359.002	40154.20	3410.064	2640.524	4881.008
Stddev	17.486	2588.71	43.365	130.197	22.732
%RSD	.4011359	6.446926	1.271668	4.930724	.4657273
#1	4344.666	42570.24	3365.657	2754.436	4876.931
#2	4378.482	40470.47	3412.228	2668.536	4905.503
#3	4353.857	37421.88	3452.305	2498.602	4860.591

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCV05 Acquired: 6/26/2025 20:46:55 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi 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	**5.167937**	**4.972567**	**4.949814**	**4.989112**	**5.095352**	**10.20534**	**10.17425**
Stddev	.107625	.026703	.057072	.116301	.053208	.10199	.03762
%RSD	2.082546	.5370084	1.153019	2.331094	1.044250	.9994109	.3698000
#1	5.167327	4.981100	4.962949	4.992876	5.086115	10.09499	10.13199
#2	5.275865	4.993961	4.999174	5.103485	5.152574	10.22488	10.20411
#3	5.060618	4.942640	4.887320	4.870975	5.047367	10.29614	10.18665

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2517495**	**2.500577**	**24.21691**	**1.049995**	**2.475205**	**1.271794**	**4.808574**
Stddev	.0115487	.028662	.24405	.012296	.004309	.054035	.050404
%RSD	4.587386	1.146215	1.007782	1.171085	.1740769	4.248744	1.048218
#1	.2650715	2.507528	23.96184	1.063905	2.478468	1.334005	4.771686
#2	.2445730	2.525124	24.44820	1.040572	2.476826	1.236540	4.788030
#3	.2456040	2.469079	24.24069	1.045508	2.470321	1.244838	4.866006

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.485161**	**24.05046**	**2.475961**	**1.244260**	**26.26491**	**2.547141**	**2.638287**
Stddev	.013591	.22847	.008420	.015981	1.81250	.017313	.026342
%RSD	.5469051	.9499711	.3400880	1.284399	6.900851	.6797193	.9984648
#1	2.473156	23.86419	2.478505	1.262713	28.35561	2.528190	2.664613
#2	2.499918	24.30539	2.482816	1.235058	25.13653	2.562130	2.611928
#3	2.482409	23.98181	2.466562	1.235007	25.30259	2.551105	2.638321

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**27.21291**	**5.040190**	**5.126143**	**4.949197**	**4.931409**	**5.225905**	**4.988287**
Stddev	2.84950	.124817	.248413	.009176	.132810	.284059	.049574
%RSD	10.47114	2.476443	4.846011	.1853948	2.693154	5.435594	.9938082
#1	30.49679	5.064783	5.411626	4.939755	4.967098	5.552573	5.003500
#2	25.74915	5.150880	4.959241	4.958080	5.042728	5.036967	5.028472
#3	25.39279	4.904907	5.007562	4.949757	4.784400	5.088175	4.932889

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCV05 Acquired: 6/26/2025 20:46:55 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.944757**	**4.705987**	**5.051245**
Stddev	.035385	.202456	.039774
%RSD	.7155964	4.302100	.7874052
#1	4.903900	4.472264	5.006522
#2	4.965385	4.827182	5.082653
#3	4.964988	4.818515	5.064559

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3733.188**	**35856.84**	**2670.886**	**2261.680**	**4960.498**
Stddev	138.885	2446.08	258.272	117.133	190.981
%RSD	3.720279	6.821787	9.669886	5.179048	3.850046
#1	3650.346	33043.99	2372.918	2126.848	4839.334
#2	3655.688	37041.46	2809.119	2319.847	4861.508
#3	3893.529	37485.07	2830.622	2338.344	5180.653

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCB05 Acquired: 6/26/2025 20:51:11 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010804	-.001979	.0018593	.0048325	.0001275	-.017251
Stddev	.0012754	.000867	.0017813	.0020260	.0020068	.008730
%RSD	118.0558	43.81949	95.80501	41.92337	1574.504	50.60338
#1	.0016396	-.002145	.0019174	.0056322	-.001371	-.027131
#2	-.000379	-.001041	.0000497	.0063366	.002407	-.014045
#3	.001981	-.002752	.0036109	.0025288	-.000654	-.010578

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013628	.0004074	.0003527	.0123886	.0004194	.0003864
Stddev	.0012815	.0002400	.0000441	.0364306	.0006640	.0005129
%RSD	94.03508	58.91281	12.50101	294.0658	158.3157	132.7655
#1	.0008513	.0003516	.0003370	.0525550	.0001690	.0001943
#2	.0004160	.0006703	.0004026	-.018520	.0011722	.0009676
#3	.0028211	.0002001	.0003187	.003131	-.000083	-.000003

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017210	.0004987	.0006511	-.010704	.0001104	.0000380
Stddev	.0040349	.0067929	.0005692	.050936	.0002646	.0021002
%RSD	234.4493	1362.107	87.42901	475.8718	239.7716	5521.749
#1	.0037231	-.001685	.0002289	.004916	.0001543	-.001206
#2	-.002923	-.004934	.0012985	-.067620	.0003502	.002463
#3	.004363	.008115	.0004259	.030593	-.000173	-.001143

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	-.003837	.0004712	^ *****	.0016539	F .0148679
Stddev	-----	.007917	.0002180	-----	.0010445	.0041633
%RSD	-----	206.3049	46.27702	-----	63.15236	28.00216
#1	-.039664	-.012299	.0006335	.0141153	.0021983	.0181889
#2	^ -----	-.002604	.0005567	^ -----	.0004497	.0101972
#3	-.026300	.003390	.0002233	.0168241	.0023137	.0162176

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCB05 Acquired: 6/26/2025 20:51:11 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004921	.0048894	.0067441	.0005148	-.001111	-.015072
Stddev	.0003075	.0022339	.0088854	.0010656	.001522	.002133
%RSD	62.48108	45.68793	131.7494	206.9759	136.9669	14.15439
#1	.0008387	.0054928	.0121878	.0017449	.000590	-.013546
#2	.0002521	.0067596	-.003509	-.000072	-.002343	-.014160
#3	.0003855	.0024158	.011554	-.000128	-.001579	-.017509

Elem	Sr4077
Units	ppm
Avg	.0002277
Stddev	.0003111
%RSD	136.5880
#1	-.000131
#2	.000393
#3	.000422

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3696.140	36021.11	2287.792	2261.494	5490.361
Stddev	37.536	5462.66	512.264	310.872	49.649
%RSD	1.015545	15.16516	22.39119	13.74632	.9042874
#1	3696.628	39493.16	2037.942	2455.901	5483.770
#2	3733.429	29724.47	2877.039	1902.955	5542.977
#3	3658.362	38845.71	1948.394	2425.624	5444.338

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2403-07DUP Acquired: 6/26/2025 20:55:41 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1898409	-.014140	.6710908	.0946526	.0269605	254.6748	1.463054
Stddev	.0022197	.002987	.0116940	.0030027	.0036004	2.0547	.001001
%RSD	1.169264	21.12679	1.742533	3.172355	13.35425	.8068059	.0683960
#1	.1881421	-.010784	.6606729	.0926039	.0228032	252.3096	1.462664
#2	.1923525	-.016508	.6688600	.0932543	.0290598	255.6961	1.462308
#3	.1890281	-.015129	.6837395	.0980994	.0290185	256.0188	1.464191

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0162581	-.002058	63.77177	.3401539	.2018625	.2855177	334.8053
Stddev	.0034719	.000091	.48729	.0081241	.0007593	.0512277	.5825
%RSD	21.35506	4.424665	.7641109	2.388359	.3761228	17.94203	.1739919
#1	.0201517	-.002090	63.25404	.3360141	.2013355	.3411803	335.3696
#2	.0134841	-.002128	64.22146	.3495141	.2015193	.2403506	334.8400
#3	.0151386	-.001955	63.83983	.3349337	.2027328	.2750223	334.2061

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.832444	29.28847	.2011377	-.006272	^ *****	.4778201	1.696306
Stddev	.011668	.32357	.0012201	.001522	-----	.0006645	.034894
%RSD	.2414446	1.104765	.6066047	24.26685	-----	.1390792	2.057086
#1	4.819804	28.95080	.2001295	-.005644	4.714549	.4772093	1.686058
#2	4.842802	29.59580	.2007894	-.008007	^ -----	.4777232	1.735178
#3	4.834726	29.31882	.2024940	-.005164	3.784431	.4785278	1.667684

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.08337	8.068168	.1512768	.0021974	3.557397	9.017483	.0367327
Stddev	2.67324	.218245	.0410526	.0004019	.102522	1.598436	.0011244
%RSD	17.72312	2.705013	27.13739	18.29116	2.881939	17.72596	3.061120
#1	18.17005	7.819242	.1053051	.0021628	3.440209	10.79438	.0355762
#2	13.51686	8.158607	.1842759	.0026154	3.601462	7.69664	.0367999
#3	13.56320	8.226656	.1642494	.0018138	3.630519	8.56143	.0378221

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2403-07DUP Acquired: 6/26/2025 20:55:41 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	3.149803	.0916700	.3110175
Stddev	.004651	.0090075	.0021890
%RSD	.1476535	9.826000	.7038085
#1	3.146587	.0835834	.3084970
#2	3.155136	.1013781	.3121139
#3	3.147687	.0900483	.3124417

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4549.225	41012.06	3212.856	2692.401	5034.815
Stddev	122.212	3440.72	423.317	148.012	137.383
%RSD	2.686427	8.389540	13.17571	5.497404	2.728669
#1	4681.392	42912.55	2725.151	2768.600	5188.106
#2	4440.310	37040.28	3485.072	2521.814	4922.805
#3	4525.971	43083.34	3428.345	2786.788	4993.535

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2403-07LX5 Acquired: 6/26/2025 21:00:02 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0422961	k -.002725	.1363267	.0253563	k .0100020	53.17086	.3008060
Stddev	.0016460	.000779	.0026237	.0028610	.0024935	.29791	.0025605
%RSD	3.891634	28.59827	1.924594	11.28302	24.92989	.5602849	.8512176
#1	.0433501	k -.002823	.1334781	.0275294	k .0124880	53.27199	.3015245
#2	.0403994	-.001901	.1386444	.0264246	.0100171	52.83555	.2979630
#3	.0431388	-.003450	.1368575	.0221149	.0075011	53.40504	.3029304

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0038186	-.001243	15.80636	s .1499392	.0412484	.0652262	89.35715
Stddev	.0004375	.000106	.08530	.0288390	.0005022	.0089969	.40481
%RSD	11.45850	8.504753	.5396307	19.23379	1.217489	13.79336	.4530275
#1	.0037915	-.001349	15.89621	s .1832320	.0408640	.0682058	89.56968
#2	.0042690	-.001243	15.72650	.1326734	.0418166	.0723553	88.89033
#3	.0033952	-.001137	15.79637	.1339123	.0410646	.0551175	89.61142

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.002703	7.667779	.0375966	s -.004328	^ *****	k .1139458	.3207144
Stddev	.004110	.059137	.0006327	.004892	-----	.0023528	.0064991
%RSD	.4098643	.7712450	1.682894	113.0311	-----	2.064874	2.026443
#1	1.006574	7.701440	.0378983	s -.009957	.9262586	k .1120685	.3165357
#2	.998390	7.599495	.0380220	-.001925	.9905359	.1165853	.3174054
#3	1.003145	7.702400	.0368695	-.001103	^ -----	.1131837	.3282021

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	1.719740	k .0456230	-.001120	.6692149	1.496527	.0047686
Stddev	-----	.008327	.0061089	.000690	.0057179	.170693	.0005315
%RSD	-----	.4841900	13.39000	61.63058	.8544168	11.40594	11.14649
#1	2.572196	1.711573	k .0458132	-.001870	.6664761	1.527539	.0041945
#2	2.759197	1.719429	.0394213	-.000977	.6653816	1.649587	.0052435
#3	^ -----	1.728218	.0516347	-.000513	.6757871	1.312454	.0048679

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2403-07LX5 Acquired: 6/26/2025 21:00:02 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.6499693	.0160259	.0722864
Stddev	.0083915	.0054337	.0003153
%RSD	1.291069	33.90590	.4361928
#1	.6592362	.0103030	.0723469
#2	.6428839	.0211148	.0719452
#3	.6477879	.0166599	.0725670

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4010.574	^ *****	2915.977	2378.532	5337.706
Stddev	71.824	-----	130.936	232.534	90.633
%RSD	1.790871	-----	4.490286	9.776372	1.697971
#1	4006.368	^ -----	2983.189	2525.319	5323.055
#2	4084.409	39558.89	2765.085	2499.850	5434.771
#3	3940.945	32434.99	2999.658	2110.428	5255.291

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2403-07MS Acquired: 6/26/2025 21:04:20 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .9635115	k 1.886264	k 1.510812	k 1.608802	k .4131949	^ *****	^ *****
Stddev	.0420319	.018015	.045533	.105555	.0024723	-----	-----
%RSD	4.362366	.9550710	3.013812	6.561093	.5983298	-----	-----
#1	.9598780	1.876481	1.506691	1.621377	.4111397	236.6319	1.307974
#2	k .9234144	k 1.875258	k 1.467479	k 1.497523	k .4159384	^ -----	^ -----
#3	1.007242	1.907054	1.558265	1.707506	.4125065	286.4950	1.582114

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .1827248	k .2005734	^ *****	k .6512095	.4132134	k .4903995	^ *****
Stddev	.0214007	.0053509	-----	.0176581	.0022220	.0382345	-----
%RSD	11.71197	2.667806	-----	2.711579	.5377416	7.796600	-----
#1	.1608413	.1956278	45.29151	.6399335	.4133907	.4472421	249.3792
#2	k .2036075	k .2062537	^ -----	k .6715596	.4109080	k .5200378	^ -----
#3	.1837256	.1998387	54.52680	.6421354	.4153414	.5039184	301.7461

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.309349	26.02247	.6801611	k .0337861	6.032242	k .6852273	1.428073
Stddev	.838487	4.05059	.0055392	.0340759	.780010	.1010146	.003309
%RSD	15.79265	15.56574	.8144012	100.8578	12.93069	14.74176	.2317452
#1	4.441282	21.89243	.6769186	.0470773	5.190208	.5803217	1.425745
#2	6.114738	29.98863	.6770077	k -.004932	6.730117	k .7818396	1.431862
#3	5.372026	26.18634	.6865571	.059213	6.176402	.6935206	1.426614

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.75076	k 12.95940	k .2102277	.3213858	2.925412	7.846162	.7090804
Stddev	2.79440	.31795	.1941461	.0006622	.081259	.836015	.0115291
%RSD	12.28268	2.453445	92.35040	.2060597	2.777701	10.65508	1.625928
#1	19.96182	12.78753	.2904024	.3209307	2.866017	6.974434	.7037756
#2	25.55059	k 12.76436	k -.011165	.3210812	2.892203	8.641176	.7011586
#3	22.73987	13.32629	.351446	.3221455	3.018016	7.922877	.7223071

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2403-07MS Acquired: 6/26/2025 21:04:20 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	3.028742	.2588388	^ *****
Stddev	.474070	.0351672	-----
%RSD	15.65237	13.58652	-----
#1	2.540066	.2198356	.3799862
#2	3.486714	.2881278	^ -----
#3	3.059448	.2685530	.4590397

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4579.603	41680.51	3420.493	2725.613	5148.718
Stddev	76.622	538.99	403.245	16.983	93.994
%RSD	1.673113	1.293145	11.78908	.6230981	1.825580
#1	4630.651	42175.51	3846.726	2733.894	5214.208
#2	4616.662	41106.30	3045.049	2706.078	5190.929
#3	4491.497	41759.71	3369.705	2736.867	5041.019

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2403-07MSD Acquired: 6/26/2025 21:08:37 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .9321672	k 1.814846	k 1.465140	k 1.550673	k .3868957	^ *****	^ *****
Stddev	.0385257	.019705	.048395	.104678	.0049984	-----	-----
%RSD	4.132913	1.085779	3.303124	6.750508	1.291915	-----	-----
#1	.9550523	1.827376	1.495836	1.609885	.3811642	279.0311	1.540314
#2	k .8876878	k 1.792132	k 1.409351	k 1.429810	k .3903496	^ -----	^ -----
#3	.9537614	1.825028	1.490232	1.612326	.3891732	277.4179	1.541887

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .1770833	k .1927928	^ *****	k .6424803	.3875048	k .4704648	^ *****
Stddev	.0024584	.0046020	-----	.0168781	.0018246	.0201330	-----
%RSD	1.388286	2.387010	-----	2.627027	.4708591	4.279393	-----
#1	.1783516	.1904428	51.07015	.6318033	.3891910	.4891885	313.4401
#2	k .1786485	k .1980953	^ -----	k .6619388	.3855677	k .4491695	^ -----
#3	.1742497	.1898403	51.05030	.6336989	.3877556	.4730363	312.7779

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.632877	25.77502	.6579237	k .0341914	5.966215	k .7039656	1.384344
Stddev	.004797	.18230	.0043077	.0381306	.112562	.0038014	.003745
%RSD	.1035504	.7072780	.6547404	111.5212	1.886656	.5400037	.2705035
#1	4.627842	25.98488	.6606998	.0560311	6.087412	.7025998	1.387094
#2	4.637395	25.68428	.6529613	k -.009838	5.946281	k .7010357	1.380079
#3	4.633395	25.65590	.6601100	.056381	5.864952	.7082612	1.385859

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.50715	k 13.03576	k .2266242	.3131406	3.002925	8.428023	.7011159
Stddev	3.35795	.20152	.2196534	.0008958	.043917	.147126	.0124507
%RSD	13.70190	1.545928	96.92407	.2860710	1.462486	1.745677	1.775838
#1	22.24722	13.15817	.3505533	.3129969	3.020777	8.581421	.7101151
#2	28.36573	k 12.80317	k -.026988	.3140996	2.952893	8.414552	.6869065
#3	22.90850	13.14595	.356307	.3123253	3.035105	8.288096	.7063261

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2403-07MSD Acquired: 6/26/2025 21:08:37 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	2.940495	.2552414	^ *****
Stddev	.010302	.0111768	-----
%RSD	.3503559	4.378915	-----
#1	2.933087	.2652008	.4329907
#2	2.936137	.2573699	^ -----
#3	2.952260	.2431533	.4321862

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4620.407	41890.05	3387.994	2711.158	5183.460
Stddev	25.722	812.95	31.027	41.405	19.292
%RSD	.5566943	1.940666	.9157930	1.527203	.3721930
#1	4649.874	42382.28	3363.878	2732.257	5196.125
#2	4608.894	42336.15	3422.997	2737.764	5192.999
#3	4602.452	40951.72	3377.107	2663.454	5161.256

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2403-07A Acquired: 6/26/2025 21:12:54 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9975551**	**1.808644**	**1.564753**	**1.685158**	**.7033851**	**235.6090**	**1.477937**
Stddev	.0183606	.005769	.011625	.032280	.0061769	2.2172	.009791
%RSD	1.840558	.3189712	.7429411	1.915519	.8781667	.9410540	.6624732
#1	.9787356	1.801987	1.551387	1.651846	.6965930	235.2738	1.475615
#2	1.015420	1.811764	1.572506	1.716294	.7086666	233.5785	1.469516
#3	.998510	1.812181	1.570367	1.687334	.7048957	237.9747	1.488680

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1957119**	**.1861558**	**69.33000**	**.9434584**	**.3730206**	**.5747245**	**389.1218**
Stddev	.0319934	.0019221	.60702	.0177459	.0009265	.0899631	2.1778
%RSD	16.34717	1.032526	.8755522	1.880946	.2483897	15.65325	.5596726
#1	.1737982	.1840371	69.30891	.9358142	.3720996	.5199224	386.6134
#2	.2324257	.1877877	68.73380	.9308156	.3730094	.6785514	390.2218
#3	.1809119	.1866427	69.94729	.9637455	.3739526	.5256998	390.5303

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.481153**	**34.20662**	**.6763327**	**.0543519**	**7.114585**	**.7654451**	**1.557527**
Stddev	.016223	.28217	.0036300	.0005829	.993910	.0155208	.010567
%RSD	.3620315	.8248857	.5367121	1.072407	13.97003	2.027679	.6784708
#1	4.469983	34.05572	.6723754	.0545384	6.212075	.7705218	1.545546
#2	4.473713	34.03200	.6795078	.0548186	8.179814	.7480217	1.565520
#3	4.499761	34.53215	.6771149	.0536985	6.951868	.7777918	1.561515

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.48133**	**14.42806**	**.4059879**	**.3304788**	**3.422711**	**10.01208**	**.6967915**
Stddev	5.31101	.33757	.0085229	.0000315	.085848	1.53128	.0071071
%RSD	20.05567	2.339657	2.099301	.0095204	2.508179	15.29435	1.019980
#1	22.85218	14.07005	.4136181	.3304466	3.328065	8.96776	.6889093
#2	32.57711	14.74057	.3967900	.3305095	3.495557	11.76991	.7027112
#3	24.01469	14.47356	.4075557	.3304803	3.444511	9.29858	.6987540

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2403-07A Acquired: 6/26/2025 21:12:54 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	3.094723	.2484326	.4795813
Stddev	.016055	.0110876	.0046158
%RSD	.5187730	4.463006	.9624546
#1	3.085811	.2502051	.4792218
#2	3.085101	.2365655	.4751558
#3	3.113257	.2585271	.4843663

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4463.315	42644.46	3146.285	2771.636	5013.983
Stddev	106.305	529.58	441.984	24.134	126.388
%RSD	2.381752	1.241854	14.04781	.8707478	2.520713
#1	4566.000	42609.72	3447.469	2748.452	5140.843
#2	4353.726	43190.56	2638.879	2769.837	4888.072
#3	4470.218	42133.11	3352.506	2796.619	5013.034

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-01 Acquired: 6/26/2025 21:17:10 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.008602**	**.0012252**	**.0038798**	**-.002278**	**.0025524**	**.0802750**	**.0269222**
Stddev	.001153	.0009527	.0011785	.002511	.0006615	.0249156	.0029218
%RSD	13.40190	77.75575	30.37612	110.2395	25.91792	31.03781	10.85269
#1	-.007674	.0006090	.0052004	.000511	.0033110	.1088889	.0243980
#2	-.009892	.0007441	.0029351	-.002986	.0022509	.0685609	.0301229
#3	-.008239	.0023225	.0035038	-.004359	.0020954	.0633753	.0262458

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000035**	**.0000947**	**11.13877**	**.0010559**	**.0070658**	**.6603341**	**.1779366**
Stddev	.000140	.0000707	1.00825	.0002598	.0001766	.1105871	.0371927
%RSD	405.1048	74.60236	9.051759	24.60505	2.498867	16.74715	20.90220
#1	.000122	.0000354	10.00311	.0009029	.0069076	.5386135	.2148952
#2	-.000148	.0000759	11.92861	.0009089	.0072563	.7546246	.1784005
#3	-.000078	.0001729	11.48457	.0013559	.0070336	.6877642	.1405141

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0811138**	**2.451894**	**.2165989**	**.0002418**	**22.26314**	**-.002529**	**1.423472**
Stddev	.0088679	.159473	.0012018	.0011958	2.98025	.005377	.048683
%RSD	10.93263	6.504058	.5548453	494.6160	13.38648	212.5951	3.419987
#1	.0713480	2.268686	.2165930	-.000527	19.49930	-.004036	1.479656
#2	.0886635	2.559545	.2178036	-.000367	25.42067	.003440	1.396981
#3	.0833298	2.527451	.2154001	.001619	21.86945	-.006992	1.393780

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**^ *****	**1.422669**	**.0125483**	**-.002652**	**1.964814**	**1.704591**	**.0005855**
Stddev	-----	.034589	.0020360	.000188	.048115	.271265	.0000467
%RSD	-----	2.431294	16.22531	7.082438	2.448824	15.91378	7.975246
#1	^ -----	1.440078	.0102102	-.002635	1.993145	1.407043	.0006345
#2	^ -----	1.445096	.0139297	-.002848	1.992037	1.938121	.0005806
#3	1.149490	1.382834	.0135052	-.002473	1.909259	1.768610	.0005415

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-01 Acquired: 6/26/2025 21:17:10 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0042720	-.030022	.0395874
Stddev	.0040326	.015189	.0033139
%RSD	94.39744	50.59418	8.371114
#1	.0003644	-.014944	.0357951
#2	.0084190	-.045321	.0419262
#3	.0040325	-.029801	.0410409

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3905.236	36850.03	2917.242	2331.529	5618.191
Stddev	137.535	3214.97	341.188	161.617	192.358
%RSD	3.521805	8.724480	11.69556	6.931808	3.423835
#1	3821.269	33153.52	3276.851	2144.996	5501.655
#2	3830.480	38401.78	2598.082	2419.875	5512.703
#3	4063.958	38994.80	2876.794	2429.716	5840.215

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-02 Acquired: 6/26/2025 21:21:31 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003987**	**.0003258**	**.0019156**	**-.004171**	**.0015467**	**.0835662**	**.0327242**
Stddev	.002794	.0020566	.0018528	.002067	.0020744	.0258978	.0014732
%RSD	70.07600	631.2382	96.72518	49.53891	134.1198	30.99073	4.501990
#1	-.007205	.0014834	.0017876	-.005438	-.000202	.1113087	.0343840
#2	-.002570	-.002049	.0038291	-.005289	.001003	.0793622	.0315715
#3	-.002185	.001543	.0001300	-.001787	.003839	.0600276	.0322170

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000978**	**.0000347**	**11.70793**	**.0006098**	**.0067526**	**.3126921**	**.1616708**
Stddev	.0001896	.0000740	.05677	.0006238	.0002386	.0687523	.0147307
%RSD	193.8173	213.5957	.4848775	102.2905	3.533119	21.98722	9.111534
#1	-.000001	.0000380	11.67229	.0005910	.0070081	.3873844	.1786194
#2	.000316	-.000041	11.77340	.0012427	.0065356	.2520507	.1519504
#3	-.000022	.000107	11.67811	-.000004	.0067140	.2986412	.1544426

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1285777**	**2.642101**	**.0010612**	**-.000623**	**23.90545**	**-.004897**	**.0320857**
Stddev	.0009735	.057613	.0003500	.000397	4.34719	.006014	.0004641
%RSD	.7570969	2.180585	32.97809	63.72725	18.18494	122.8124	1.446458
#1	.1296103	2.597875	.0013390	-.000199	28.78103	-.011383	.0324294
#2	.1284460	2.621175	.0011765	-.000987	20.43343	.000493	.0322700
#3	.1276768	2.707253	.0006682	-.000685	22.50191	-.003800	.0315578

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**^ *******	**1.488556**	**.0114198**	**-.002637**	**2.054588**	**2.042260**	**-.000571**
Stddev	-----	.040924	.0044947	.000300	.062278	.429893	.001589
%RSD	-----	2.749250	39.35861	11.38475	3.031153	21.04985	278.2241
#1	1.559951	1.443002	.0159469	-.002545	1.983885	2.521388	-.000408
#2	^ -----	1.500452	.0069583	-.002973	2.078571	1.690291	.000930
#3	1.210271	1.522215	.0113542	-.002394	2.101309	1.915101	-.002235

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-02 Acquired: 6/26/2025 21:21:31 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0025766	-.035041	.0421259
Stddev	.0024673	.010645	.0002882
%RSD	95.75863	30.37838	.6841850
#1	-.000050	-.046518	.0418384
#2	.002934	-.033111	.0424148
#3	.004846	-.025493	.0421245

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3873.182	36387.47	2653.841	2293.392	5558.794
Stddev	148.998	3650.47	374.471	206.809	213.116
%RSD	3.846926	10.03223	14.11052	9.017613	3.833857
#1	4043.241	38429.40	2221.479	2408.043	5803.187
#2	3765.563	32172.94	2875.052	2054.652	5411.645
#3	3810.740	38560.06	2864.994	2417.481	5461.550

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-03 Acquired: 6/26/2025 21:25:56 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003568**	**-.001075**	**.0027502**	**-.002073**	**.0046090**	**.0557251**	**.0297491**
Stddev	.001358	.002389	.0007876	.001995	.0024063	.0185183	.0014765
%RSD	38.05628	222.1333	28.63911	96.24479	52.20866	33.23156	4.963240
#1	-.003182	.000956	.0018612	-.002408	.0043100	.0362203	.0309937
#2	-.005078	-.000475	.0030287	.000068	.0023662	.0578881	.0301360
#3	-.002445	-.003707	.0033608	-.003879	.0071509	.0730670	.0281177

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000100**	**.0001092**	**12.16741**	**.0012770**	**.0071036**	**.0944308**	**.0996180**
Stddev	.000093	.0000834	.05063	.0006586	.0000965	.0013474	.0126803
%RSD	93.55025	76.34657	.4161017	51.57391	1.357807	1.426839	12.72889
#1	-.000056	.0000543	12.12679	.0012158	.0069923	.0957752	.0852241
#2	-.000036	.0002051	12.15132	.0006511	.0071556	.0944368	.1091390
#3	-.000207	.0000682	12.22413	.0019640	.0071629	.0930805	.1044910

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0494950**	**2.810828**	**.0017174**	**.0002473**	**23.60629**	**.0020125**	**.0262833**
Stddev	.0008970	.026496	.0004811	.0012116	.07283	.0036005	.0002572
%RSD	1.812238	.9426296	28.01112	489.9993	.3085374	178.9091	.9784707
#1	.0505117	2.799650	.0017427	-.001077	23.68593	.0003766	.0261656
#2	.0488152	2.791753	.0012241	.001301	23.58988	-.000480	.0265782
#3	.0491582	2.841081	.0021852	.000518	23.54306	.006141	.0261060

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.266657**	**1.482486**	**.0128860**	**-.002534**	**2.048787**	**1.787677**	**-.001488**
Stddev	.002356	.035391	.0009003	.000602	.059240	.013449	.000203
%RSD	.1860338	2.387264	6.986433	23.76802	2.891487	.7523087	13.67121
#1	1.266688	1.461545	.0136621	-.002820	2.016234	1.796727	-.001267
#2	1.268997	1.462565	.0118990	-.002941	2.012962	1.794081	-.001529
#3	1.264285	1.523347	.0130970	-.001842	2.117166	1.772223	-.001668

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-03 Acquired: 6/26/2025 21:25:56 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0021950	-.031457	.0434674
Stddev	.0041368	.006087	.0004628
%RSD	188.4632	19.35064	1.064653
#1	-.001695	-.024662	.0429388
#2	.006541	-.036412	.0436640
#3	.001739	-.033296	.0437994

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3936.053	38205.04	2820.968	2385.798	5648.871
Stddev	81.861	146.04	32.052	16.037	129.481
%RSD	2.079781	.3822586	1.136222	.6721977	2.292164
#1	3989.874	38077.07	2798.676	2374.775	5724.411
#2	3976.438	38173.91	2806.527	2378.422	5722.841
#3	3841.847	38364.14	2857.700	2404.196	5499.361

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-04 Acquired: 6/26/2025 21:30:22 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003436**	**.0014268**	**.0024295**	**-.005292**	**.0028633**	**.0291474**	**.0284965**
Stddev	.002306	.0016372	.0003590	.002707	.0021561	.0061756	.0008458
%RSD	67.10302	114.7507	14.77448	51.14766	75.30014	21.18742	2.967978
#1	-.001041	.0033043	.0027836	-.006410	.0043902	.0277444	.0277792
#2	-.005641	.0002970	.0020659	-.007261	.0038027	.0359037	.0294291
#3	-.003627	.0006789	.0024390	-.002205	.0003969	.0237940	.0282813

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000213**	**.0001007**	**11.77219**	**.0003633**	**.0068796**	**.0413888**	**.0611153**
Stddev	.000186	.0000205	.01785	.0006972	.0002356	.0006610	.0036241
%RSD	87.35397	20.35731	.1515983	191.9201	3.425225	1.596971	5.929893
#1	-.000243	.0001219	11.77191	-.000115	.0071499	.0420044	.0574036
#2	-.000014	.0000811	11.75448	.001163	.0067714	.0414718	.0646449
#3	-.000383	.0000990	11.79017	.000041	.0067174	.0406903	.0612975

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0428075**	**2.631633**	**.0001312**	**-.000691**	**22.41671**	**-.004508**	**.0060522**
Stddev	.0006986	.070676	.0003746	.001148	.20773	.003682	.0002813
%RSD	1.631853	2.685625	285.4589	166.1855	.9266784	81.67213	4.648619
#1	.0430461	2.605743	.0005574	-.000811	22.65636	-.004217	.0058143
#2	.0433554	2.577552	-.000018	-.001773	22.28802	-.008327	.0063627
#3	.0420209	2.711602	-.000146	.000513	22.30576	-.000980	.0059795

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.199555**	**1.419088**	**.0102050**	**-.002774**	**1.945790**	**1.720430**	**-.001690**
Stddev	.007920	.005126	.0007710	.000536	.003750	.015020	.001058
%RSD	.6602285	.3612296	7.554937	19.31975	.1927469	.8730097	62.63665
#1	1.208355	1.413475	.0110953	-.002277	1.948856	1.736820	-.001036
#2	1.197308	1.423522	.0097625	-.003342	1.946905	1.707324	-.002911
#3	1.193001	1.420267	.0097573	-.002704	1.941608	1.717146	-.001122

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-04 Acquired: 6/26/2025 21:30:22 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.000645	-.033816	.0421576
Stddev	.001389	.006271	.0003618
%RSD	215.3774	18.54503	.8583379
#1	.000337	-.040983	.0425748
#2	-.000037	-.029333	.0419291
#3	-.002235	-.031133	.0419689

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4003.908	38536.93	2884.703	2406.912	5754.721
Stddev	14.108	121.84	6.991	10.939	24.291
%RSD	.3523655	.3161755	.2423518	.4544713	.4221007
#1	4019.792	38657.86	2876.712	2409.164	5781.283
#2	3992.833	38414.19	2887.706	2395.023	5733.638
#3	3999.098	38538.74	2889.691	2416.550	5749.241

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-05 Acquired: 6/26/2025 21:34:45 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.006807**	**.0008224**	**.0033678**	**-.002228**	**.0026100**	**.0253609**	**.0287604**
Stddev	.000467	.0012492	.0012535	.002115	.0015918	.0311944	.0010006
%RSD	6.857670	151.9109	37.21954	94.93411	60.99007	123.0017	3.479103
#1	-.007304	.0022601	.0024265	-.002415	.0025005	.0062778	.0285433
#2	-.006738	.0002050	.0047907	-.000025	.0010757	.0084457	.0298517
#3	-.006378	.0000019	.0028863	-.004242	.0042537	.0613593	.0278861

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000112**	**.0000903**	**11.58259**	**-.000004**	**.0064784**	**.4478611**	**.0521596**
Stddev	.000068	.0000707	.02867	.000568	.0002808	.0008870	.0075532
%RSD	60.49709	78.28321	.2475499	15052.05	4.333844	.1980459	14.48089
#1	-.000155	.0001357	11.55419	.000164	.0061630	.4469134	.0565121
#2	-.000034	.0000089	11.58206	.000461	.0067010	.4479986	.0565289
#3	-.000147	.0001265	11.61152	-.000637	.0065712	.4486713	.0434380

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0347323**	**2.599497**	**.0060601**	**-.001153**	**22.09423**	**-.004894**	**.2143850**
Stddev	.0007157	.073475	.0003735	.000831	.05229	.003536	.0013440
%RSD	2.060487	2.826521	6.163285	72.09926	.2366846	72.25725	.6269186
#1	.0354131	2.662699	.0056643	-.000358	22.12125	-.008487	.2130284
#2	.0339863	2.616915	.0061095	-.001084	22.03395	-.001417	.2144107
#3	.0347976	2.518878	.0064063	-.002017	22.12749	-.004778	.2157160

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.201804**	**1.367270**	**.0108090**	**-.002750**	**1.911936**	**1.701141**	**-.001525**
Stddev	.000781	.002080	.0005282	.000176	.006623	.006446	.000223
%RSD	.0649745	.1520986	4.887091	6.382254	.3464033	.3789339	14.62208
#1	1.201634	1.365119	.0102245	-.002934	1.918324	1.699661	-.001334
#2	1.202655	1.367420	.0112523	-.002585	1.912384	1.695563	-.001770
#3	1.201121	1.369270	.0109504	-.002730	1.905101	1.708198	-.001471

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-05 Acquired: 6/26/2025 21:34:45 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0028532	-.033257	.0415272
Stddev	.0033134	.005103	.0000853
%RSD	116.1289	15.34348	.2053890
#1	.0058538	-.037327	.0415110
#2	.0034085	-.034911	.0416194
#3	-.000703	-.027532	.0414511

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4019.103	38706.99	2885.475	2410.149	5791.900
Stddev	8.865	156.48	10.085	13.487	11.428
%RSD	.2205741	.4042688	.3494986	.5596111	.1973161
#1	4024.216	38826.47	2892.970	2425.510	5804.016
#2	4024.226	38529.86	2874.009	2400.245	5790.372
#3	4008.866	38764.62	2889.446	2404.692	5781.313

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCV06 Acquired: 6/26/2025 21:39:05 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi 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	**5.072667**	**4.911882**	**4.879909**	**4.884295**	**5.048852**	**10.24651**	**10.13020**
Stddev	.052236	.021333	.013245	.066613	.020408	.02584	.02016
%RSD	1.029763	.4343172	.2714178	1.363811	.4042025	.2521520	.1990399
#1	5.043859	4.891252	4.864701	4.832573	5.035851	10.24338	10.11226
#2	5.132965	4.933854	4.888914	4.959460	5.072373	10.27377	10.15202
#3	5.041178	4.910540	4.886113	4.860853	5.038332	10.22239	10.12632

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2441401**	**2.468251**	**24.27227**	**1.067558**	**2.463374**	**1.235249**	**4.787552**
Stddev	.0005156	.011754	.07233	.002872	.005643	.002766	.042085
%RSD	.2111994	.4762126	.2980003	.2690432	.2290789	.2239341	.8790525
#1	.2435556	2.454960	24.21109	1.070873	2.456953	1.236417	4.741579
#2	.2445303	2.477276	24.35210	1.065998	2.465627	1.232090	4.796899
#3	.2443346	2.472518	24.25363	1.065803	2.467543	1.237239	4.824178

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.476796**	**24.04368**	**2.469112**	**1.241732**	**25.51225**	**2.555466**	**2.611978**
Stddev	.002564	.04730	.006898	.000197	.04691	.008415	.020967
%RSD	.1035242	.1967050	.2793835	.0159021	.1838723	.3292932	.8027133
#1	2.476716	24.06233	2.461249	1.241866	25.51190	2.556579	2.636096
#2	2.474272	23.98991	2.474148	1.241505	25.55934	2.546550	2.601757
#3	2.479399	24.07882	2.471938	1.241824	25.46552	2.563269	2.598083

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.46646**	**4.929544**	**4.962502**	**4.938690**	**4.784797**	**5.056189**	**4.932915**
Stddev	.16300	.061217	.012033	.008090	.077960	.013754	.017510
%RSD	.6400768	1.241840	.2424831	.1638099	1.629337	.2720287	.3549578
#1	25.31722	4.882263	4.975611	4.930108	4.731006	5.071228	4.912697
#2	25.44174	4.998692	4.959938	4.946177	4.874204	5.044247	4.943029
#3	25.64040	4.907678	4.951957	4.939785	4.749181	5.053092	4.943021

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCV06 Acquired: 6/26/2025 21:39:05 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	4.955732	4.844378	5.050282
Stddev	.000494	.008235	.006563
%RSD	.0099741	.1699996	.1299529
#1	4.956049	4.853669	5.042735
#2	4.955983	4.837976	5.054655
#3	4.955162	4.841489	5.053455

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3795.145	36932.91	2809.596	2330.629	5047.241
Stddev	159.079	14.53	6.801	7.564	205.507
%RSD	4.191639	.0393405	.2420647	.3245542	4.071661
#1	3884.539	36921.97	2816.554	2323.142	5163.877
#2	3611.478	36927.37	2809.269	2330.478	4809.954
#3	3889.417	36949.40	2802.964	2338.267	5167.892

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCB06 Acquired: 6/26/2025 21:43:21 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi 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	.0025692	k -.002198	.0032196	-.000089	k -.000063	-.025029	.0016332
Stddev	.0016886	.002510	.0015007	.002089	.001631	.003386	.0008763
%RSD	65.72402	114.2079	46.61073	2350.994	2594.533	13.53048	53.65586
#1	.0039440	k -.002384	.0043347	-.001978	k .001624	-.028026	.0026413
#2	.0030793	.000400	.0038108	.002155	-.001632	-.021355	.0012053
#3	.0006844	-.004610	.0015134	-.000444	-.000181	-.025705	.0010531

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001691	.0004288	-.012082	s .0023703	.0003601	.0008589	-.008356
Stddev	.0000637	.0001557	.006382	.0044310	.0003569	.0014774	.040539
%RSD	37.67659	36.31999	52.82155	186.9362	99.09392	172.0040	485.1773
#1	.0002416	.0006033	-.005549	s .0074680	.0007617	.0025300	-.026529
#2	.0001224	.0003039	-.012396	.0002015	.0002393	.0003206	-.036628
#3	.0001432	.0003791	-.018300	-.000559	.0000794	-.000274	.038091

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004978	-.019212	.0000464	s .0013708	-.006178	k -.002882	.0008211
Stddev	.0012412	.032532	.0006079	.0023700	.021578	.001983	.0004301
%RSD	249.3504	169.3298	1309.855	172.8898	349.2730	68.79556	52.38025
#1	.0011683	-.007022	.0006828	s .0041068	-.028256	k -.004469	.0003786
#2	.0012594	.005464	-.000015	-.000054	-.005141	-.003519	.0008470
#3	-.000934	-.056078	-.000528	.000060	.014863	-.000659	.0012376

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0059904	.0012915	k .0098572	.0005795	.0021550	.0023645	.0005409
Stddev	.0050458	.0028881	.0017301	.0008273	.0016885	.0044248	.0001578
%RSD	84.23158	223.6246	17.55140	142.7560	78.35464	187.1308	29.18554
#1	.0117976	.0046133	k .0117802	.0015311	.0032323	.0072960	.0003762
#2	.0026778	-.000114	.0093646	.0000301	.0002090	-.001258	.0005554
#3	.0034958	-.000625	.0084269	.0001775	.0030237	.001056	.0006909

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCB06 Acquired: 6/26/2025 21:43:21 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.001184	.0045693	.0007917
Stddev	.003200	.0032021	.0000878
%RSD	270.2935	70.07830	11.09607
#1	.002487	.0040867	.0008795
#2	-.003382	.0016359	.0007038
#3	-.002656	.0079852	.0007918

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3838.379	^ *****	2638.992	2442.171	5681.643
Stddev	192.191	-----	423.631	1.795	277.704
%RSD	5.007089	-----	16.05277	.0735060	4.887747
#1	3702.646	^ -----	2150.136	2444.038	5475.847
#2	4058.297	38915.31	2868.297	2440.457	5997.510
#3	3754.192	38882.32	2898.542	2442.018	5571.572

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-06 Acquired: 6/26/2025 21:47:48 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.002755**	**.0018637**	**.0027252**	**-.005339**	**.0036606**	**.0207595**	**.0304457**
Stddev	.000362	.0009090	.0017542	.002990	.0004026	.0180815	.0010642
%RSD	13.13436	48.77404	64.36691	56.00827	10.99932	87.09984	3.495420
#1	-.002370	.0022145	.0011302	-.001976	.0032367	.0400121	.0313154
#2	-.002806	.0025450	.0046040	-.006342	.0040380	.0041374	.0292590
#3	-.003088	.0008316	.0024416	-.007697	.0037070	.0181288	.0307627

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000074**	**.0001134**	**12.21254**	**.0010657**	**.0069889**	**.0631797**	**.1235093**
Stddev	.000223	.0000258	.24264	.0015696	.0002899	.0075638	.0063173
%RSD	303.0132	22.71299	1.986796	147.2786	4.148575	11.97187	5.114809
#1	.000178	.0001057	12.47567	.0027667	.0070195	.0544486	.1299820
#2	-.000249	.0001422	12.16430	.0007569	.0066848	.0677393	.1231859
#3	-.000150	.0000924	11.99764	-.000326	.0072623	.0673510	.1173599

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0634179**	**2.699414**	**.0005003**	**-.000998**	**22.03852**	**-.002299**	**.0066837**
Stddev	.0009343	.020271	.0001494	.001783	2.47637	.002906	.0003037
%RSD	1.473187	.7509387	29.85895	178.5986	11.23657	126.4008	4.544179
#1	.0639496	2.700546	.0004467	.000320	19.18023	-.002639	.0068843
#2	.0639649	2.678600	.0006691	-.000288	23.53875	-.005020	.0063343
#3	.0623391	2.719095	.0003851	-.003026	23.39659	.000762	.0068325

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.213840**	**1.463150**	**.0151163**	**-.002528**	**2.011201**	**1.687309**	**.0010005**
Stddev	.089792	.003322	.0010356	.000115	.003511	.164935	.0011277
%RSD	7.397389	.2270331	6.851185	4.559825	.1745870	9.775027	112.7120
#1	1.110156	1.460557	.0139303	-.002460	2.010863	1.496935	.0007638
#2	1.265741	1.466894	.0155765	-.002463	2.014868	1.787173	.0022278
#3	1.265622	1.461998	.0158421	-.002661	2.007870	1.777819	.0000100

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-06 Acquired: 6/26/2025 21:47:48 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0052818	-.029134	.0434654
Stddev	.0015378	.002134	.0007806
%RSD	29.11432	7.324582	1.796011
#1	.0066615	-.031278	.0443664
#2	.0055600	-.029112	.0430393
#3	.0036239	-.027011	.0429906

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4036.769	35532.35	2872.304	2231.247	5789.903
Stddev	8.497	5166.40	65.809	322.325	14.564
%RSD	.2105025	14.53999	2.291150	14.44598	.2515349
#1	4030.911	29567.21	2796.782	1859.079	5781.953
#2	4032.881	38581.72	2902.779	2420.754	5781.046
#3	4046.515	38448.13	2917.351	2413.908	5806.712

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-07 Acquired: 6/26/2025 21:52:11 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.006173**	**.0019591**	**.0041296**	**-.002997**	**.0022202**	**.0576968**	**.0315380**
Stddev	.001082	.0008603	.0010612	.001554	.0027101	.0331457	.0005474
%RSD	17.52268	43.90966	25.69777	51.84086	122.0652	57.44808	1.735708
#1	-.007055	.0012517	.0037218	-.001326	.0051331	.0785129	.0321212
#2	-.006497	.0029167	.0033328	-.003268	-.000227	.0751033	.0310353
#3	-.004966	.0017090	.0053342	-.004397	.001754	.0194741	.0314575

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000106**	**.0001498**	**12.42847**	**.0009857**	**.0071822**	**.0624922**	**.1314961**
Stddev	.000038	.0000303	.04764	.0008335	.0000605	.0002268	.0385244
%RSD	35.53434	20.22086	.3833097	84.56673	.8423014	.3629801	29.29698
#1	-.000088	.0001172	12.37774	.0000314	.0071450	.0623821	.0998300
#2	-.000080	.0001551	12.47226	.0013540	.0072520	.0627531	.1202723
#3	-.000149	.0001770	12.43540	.0015716	.0071497	.0623414	.1743860

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0579563**	**2.889917**	**.0011202**	**-.001148**	**23.70676**	**-.003788**	**.0225348**
Stddev	.0012048	.038506	.0004460	.001181	.23237	.005043	.0004740
%RSD	2.078765	1.332414	39.81271	102.8807	.9801862	133.1207	2.103294
#1	.0582916	2.901508	.0006063	-.001046	23.50833	-.009607	.0223550
#2	.0589580	2.921295	.0014063	-.002376	23.64956	-.001067	.0230723
#3	.0566194	2.846947	.0013480	-.000021	23.96239	-.000690	.0221770

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.309501**	**1.497136**	**.0140874**	**-.002861**	**2.082133**	**1.845454**	**-.000544**
Stddev	.009553	.004110	.0002912	.000491	.008292	.011610	.001139
%RSD	.7294804	.2745546	2.067247	17.15934	.3982556	.6291029	209.2521
#1	1.304827	1.493679	.0137811	-.002313	2.073020	1.835351	-.001839
#2	1.303185	1.496048	.0141204	-.003260	2.084145	1.842874	-.000100
#3	1.320491	1.501681	.0143607	-.003009	2.089234	1.858137	.000306

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-07 Acquired: 6/26/2025 21:52:11 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0009454	-.030364	.0442495
Stddev	.0047314	.002648	.0003413
%RSD	500.4407	8.720746	.7714108
#1	-.000311	-.030392	.0440505
#2	-.003031	-.027702	.0440543
#3	.006178	-.032998	.0446436

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4008.835	38479.29	2861.649	2408.333	5750.989
Stddev	14.281	377.11	30.649	22.456	23.009
%RSD	.3562506	.9800300	1.071012	.9324373	.4000815
#1	3992.413	38828.35	2890.124	2431.423	5724.457
#2	4015.741	38530.21	2865.609	2407.006	5765.449
#3	4018.351	38079.31	2829.212	2386.570	5763.061

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-08 Acquired: 6/26/2025 21:56:34 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.002580**	**.0012925**	**.0032845**	**-.004931**	**.0016578**	**.0065653**	**.0297832**
Stddev	.001817	.0015183	.0010524	.002015	.0010275	.0198246	.0000266
%RSD	70.40115	117.4638	32.04265	40.87003	61.97847	301.9614	.0892714
#1	-.004351	.0028842	.0020772	-.004735	.0005397	.0197000	.0297845
#2	-.002669	-.000140	.0037682	-.007036	.0018731	-.016239	.0298092
#3	-.000721	.001133	.0040082	-.003020	.0025606	.016234	.0297560

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000150**	**.0001339**	**11.84593**	**.0004310**	**.0068933**	**.0503299**	**.1220019**
Stddev	.000030	.0000223	.02599	.0005873	.0002080	.0000562	.0149400
%RSD	19.91488	16.64572	.2193833	136.2592	3.016705	.1117723	12.24571
#1	-.000122	.0001286	11.86460	.0001760	.0066836	.0503275	.1392470
#2	-.000182	.0001147	11.85693	.0000144	.0068969	.0503873	.1137796
#3	-.000148	.0001584	11.81625	.0011028	.0070994	.0502749	.1129792

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0616409**	**2.645776**	**.0001762**	**-.000582**	**23.03925**	**-.005170**	**.0095375**
Stddev	.0015159	.053566	.0000512	.000995	.17416	.008106	.0003873
%RSD	2.459298	2.024590	29.04507	171.0927	.7559100	156.7771	4.060577
#1	.0633779	2.703765	.0001574	.000283	22.85658	-.013929	.0097363
#2	.0605853	2.635415	.0001372	-.001669	23.05774	.002068	.0097850
#3	.0609594	2.598147	.0002342	-.000359	23.20342	-.003650	.0090912

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.248392**	**1.436236**	**.0116204**	**-.002197**	**1.988293**	**1.792209**	**-.000351**
Stddev	.004100	.002115	.0017131	.000491	.001882	.020370	.001213
%RSD	.3284515	.1472363	14.74234	22.33429	.0946319	1.136607	345.3190
#1	1.245325	1.436945	.0109968	-.002672	1.989381	1.768741	-.000374
#2	1.246801	1.433858	.0135580	-.002228	1.989378	1.805316	.000873
#3	1.253049	1.437906	.0103065	-.001692	1.986120	1.802572	-.001553

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-08 Acquired: 6/26/2025 21:56:34 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0055983	-.032268	.0425371
Stddev	.0026252	.010724	.0001817
%RSD	46.89216	33.23554	.4272028
#1	.0059437	-.039775	.0427442
#2	.0080337	-.019985	.0424630
#3	.0028176	-.037043	.0424042

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4022.759	38732.19	2852.559	2420.159	5775.590
Stddev	8.955	175.80	3.984	11.789	7.154
%RSD	.2226113	.4538841	.1396630	.4871121	.1238648
#1	4017.080	38548.36	2856.739	2406.779	5770.575
#2	4033.082	38898.67	2852.130	2424.676	5783.782
#3	4018.115	38749.54	2848.806	2429.021	5772.414

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-09 Acquired: 6/26/2025 22:00:57 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.004398**	**-.000162**	**.0022026**	**-.002792**	**-.000310**	**.0254214**	**.0299483**
Stddev	.004996	.000127	.0016458	.002257	.001821	.0147387	.0005657
%RSD	113.6133	78.42144	74.71830	80.84183	586.6366	57.97754	1.888946
#1	-.007363	-.000239	.0009374	-.005325	.001426	.0260216	.0295920
#2	-.007201	-.000232	.0016073	-.002055	-.000151	.0103917	.0306006
#3	.001371	-.000015	.0040632	-.000995	-.002206	.0398508	.0296523

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000091**	**.0001558**	**11.97179**	**.0007601**	**.0068538**	**.1059443**	**.0686973**
Stddev	.000164	.0000696	.04604	.0002745	.0000790	.0011337	.0163238
%RSD	179.9096	44.69865	.3845710	36.11431	1.151988	1.070066	23.76196
#1	-.000192	.0002336	11.96261	.0010714	.0068091	.1048977	.0702491
#2	-.000178	.0000990	11.93103	.0005528	.0068074	.1057867	.0516530
#3	.000098	.0001349	12.02173	.0006560	.0069450	.1071486	.0841899

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0561824**	**2.658345**	**.0006725**	**-.000380**	**23.37519**	**-.008910**	**.0427524**
Stddev	.0008351	.039853	.0001434	.001773	.17474	.009648	.0004197
%RSD	1.486383	1.499158	21.31723	465.9839	.7475498	108.2803	.9817911
#1	.0568062	2.683880	.0008380	.001483	23.27077	-.014446	.0423694
#2	.0552337	2.612423	.0005940	-.000579	23.27788	-.014515	.0432011
#3	.0565073	2.678732	.0005856	-.002046	23.57692	.002230	.0426866

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.238323**	**1.449302**	**.0122248**	**-.002836**	**1.996527**	**1.765605**	**-.001380**
Stddev	.013914	.005014	.0010405	.000108	.004301	.015654	.001017
%RSD	1.123586	.3459770	8.511036	3.811580	.2154422	.8865914	73.72399
#1	1.235063	1.452229	.0133751	-.002711	1.999529	1.755149	-.000648
#2	1.226329	1.443512	.0119500	-.002901	1.998453	1.758064	-.000950
#3	1.253577	1.452164	.0113494	-.002896	1.991600	1.783602	-.002541

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-09 Acquired: 6/26/2025 22:00:57 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0016689	-.030323	.0426399
Stddev	.0034802	.006737	.0004509
%RSD	208.5273	22.21796	1.057511
#1	.0048390	-.023697	.0421455
#2	-.002055	-.037167	.0427457
#3	.002223	-.030106	.0430286

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4038.752	38933.10	2894.904	2433.441	5793.801
Stddev	11.426	111.47	12.756	10.836	9.890
%RSD	.2829134	.2862989	.4406299	.4452796	.1706929
#1	4051.606	38902.56	2904.506	2428.397	5805.072
#2	4029.748	38840.08	2899.776	2426.047	5786.577
#3	4034.901	39056.65	2880.430	2445.879	5789.754

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-10 Acquired: 6/26/2025 22:05:21 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.004868**	**.0013137**	**.0015760**	**-.001976**	**.0048052**	**.0131773**	**.0300768**
Stddev	.000923	.0009960	.0010803	.005669	.0041725	.0076072	.0014779
%RSD	18.95209	75.81598	68.54495	286.8732	86.83313	57.72942	4.913629
#1	-.004055	.0014962	.0011586	-.007388	.0012863	.0106088	.0311641
#2	-.004678	.0002391	.0028028	-.002461	.0037145	.0071868	.0283942
#3	-.005870	.0022059	.0007668	.003920	.0094147	.0217362	.0306723

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000099**	**.0001307**	**11.92500**	**.0006820**	**.0067346**	**.0359751**	**.0645297**
Stddev	.000101	.0000500	.02775	.0003683	.0003171	.0002204	.0270026
%RSD	101.4230	38.29315	.2326865	54.01016	4.708359	.6127264	41.84527
#1	-.000153	.0001883	11.95680	.0011033	.0070572	.0357531	.0678083
#2	-.000163	.0001057	11.91253	.0004213	.0064233	.0361939	.0897434
#3	.000017	.0000981	11.90568	.0005213	.0067235	.0359782	.0360375

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0467791**	**2.692527**	**-.000074**	**-.000135**	**23.06731**	**-.000168**	**.0048055**
Stddev	.0002504	.035534	.000857	.000430	.16083	.008723	.0005770
%RSD	.5352169	1.319712	1163.885	319.3870	.6972161	5187.859	12.00800
#1	.0465652	2.652285	.000550	.000301	23.20629	.006892	.0045989
#2	.0467176	2.705719	.000280	-.000559	22.89115	-.009919	.0043603
#3	.0470544	2.719579	-.001051	-.000146	23.10449	.002523	.0054575

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.232380**	**1.442829**	**.0096630**	**-.002661**	**1.968320**	**1.746054**	**-.001221**
Stddev	.006236	.005706	.0007872	.000149	.004875	.014587	.000236
%RSD	.5059754	.3955045	8.146990	5.588230	.2476883	.8354227	19.36792
#1	1.238062	1.442197	.0096905	-.002494	1.963101	1.752135	-.000976
#2	1.225709	1.437465	.0088623	-.002778	1.972757	1.729411	-.001447
#3	1.233370	1.448826	.0104361	-.002712	1.969102	1.756617	-.001239

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-10 Acquired: 6/26/2025 22:05:21 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0001575	-.028078	.0427016
Stddev	.0039218	.008286	.0005070
%RSD	2490.841	29.51198	1.187304
#1	.0036498	-.035034	.0432862
#2	-.004085	-.030290	.0423826
#3	.000908	-.018910	.0424359

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4026.984	38681.17	2876.569	2416.822	5780.357
Stddev	12.730	189.56	19.169	7.905	8.840
%RSD	.3161102	.4900582	.6663971	.3270781	.1529348
#1	4033.369	38899.07	2876.197	2425.857	5786.664
#2	4012.325	38590.22	2895.921	2411.181	5770.252
#3	4035.257	38554.23	2857.588	2413.427	5784.153

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-11 Acquired: 6/26/2025 22:09:45 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.010666**	**.0017001**	**.0449077**	**-.000733**	**.0035792**	**.1254771**	**.0330102**
Stddev	.001469	.0008318	.0023740	.004563	.0018250	.0075276	.0010572
%RSD	13.76940	48.92521	5.286289	622.8472	50.98964	5.999166	3.202737
#1	-.011986	.0017505	.0463080	-.005771	.0036924	.1168994	.0332542
#2	-.009084	.0025056	.0462484	.003122	.0017002	.1285486	.0339242
#3	-.010928	.0008443	.0421667	.000451	.0053449	.1309832	.0318524

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000252**	**.0004634**	**12.31826**	**.0005116**	**.0076697**	**.9300490**	**.3629207**
Stddev	.000049	.0001344	.05526	.0004097	.0001854	.0010093	.0023440
%RSD	19.36558	29.00575	.4486326	80.08659	2.416682	.1085178	.6458759
#1	-.000220	.0003190	12.26704	.0007814	.0074587	.9291306	.3602275
#2	-.000308	.0004862	12.37683	.0000401	.0078065	.9311295	.3645005
#3	-.000227	.0005849	12.31091	.0007131	.0077438	.9298868	.3640340

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2637472**	**2.858419**	**.0407079**	**-.000372**	**23.72383**	**.0012036**	**7.234407**
Stddev	.0016157	.019899	.0002518	.000719	.07034	.0145036	.030693
%RSD	.6125941	.6961678	.6185097	193.1856	.2965121	1205.051	.4242700
#1	.2624951	2.835961	.0404980	.000448	23.65132	-.004705	7.249732
#2	.2655710	2.865437	.0406386	-.000673	23.79178	.017729	7.254420
#3	.2631755	2.873858	.0409871	-.000891	23.72840	-.009413	7.199069

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.257852**	**.8610075**	**.0121616**	**-.002184**	**2.142717**	**2.087700**	**.0035542**
Stddev	.004436	.0022386	.0009298	.000170	.003943	.010422	.0012466
%RSD	.3526582	.2599932	7.645361	7.802678	.1840310	.4992000	35.07459
#1	1.253237	.8628929	.0121925	-.001988	2.141723	2.080449	.0048161
#2	1.262084	.8585334	.0130756	-.002301	2.139366	2.099643	.0035232
#3	1.258233	.8615960	.0112168	-.002262	2.147062	2.083009	.0023234

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-11 Acquired: 6/26/2025 22:09:45 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0014552	-.031488	.0436400
Stddev	.0019327	.004874	.0001388
%RSD	132.8160	15.47887	.3180707
#1	.0034889	-.034922	.0435768
#2	.0012342	-.033632	.0437992
#3	-.000358	-.025909	.0435441

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3939.280	37769.99	2825.706	2354.946	5638.877
Stddev	6.073	149.94	12.986	16.946	7.408
%RSD	.1541693	.3969777	.4595700	.7195915	.1313710
#1	3938.095	37615.10	2814.724	2341.411	5633.382
#2	3945.859	37780.44	2822.354	2349.477	5647.302
#3	3933.887	37914.43	2840.039	2373.952	5635.948

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-12 Acquired: 6/26/2025 22:14:08 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.005691**	**.0005494**	**.0059063**	**-.003996**	**.0019720**	**.0372459**	**.0291126**
Stddev	.002934	.0016389	.0008101	.004444	.0024700	.0125177	.0003893
%RSD	51.56512	298.2950	13.71539	111.2180	125.2504	33.60824	1.337037
#1	-.008065	.0024361	.0066681	.000970	.0019934	.0474280	.0292469
#2	-.002410	-.000521	.0050553	-.007599	.0044313	.0410395	.0294169
#3	-.006596	-.000267	.0059956	-.005358	-.000509	.0232702	.0286740

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000103**	**.0001211**	**11.83575**	**.0006386**	**.0065992**	**.1343654**	**.1159515**
Stddev	.000093	.0000665	.08221	.0005388	.0002436	.0014947	.0117702
%RSD	90.33285	54.90884	.6945696	84.36515	3.691420	1.112385	10.15096
#1	-.000139	.0000733	11.76187	.0003076	.0064561	.1360430	.1099089
#2	-.000173	.0001971	11.92431	.0012603	.0064610	.1338777	.1084298
#3	.000003	.0000931	11.82107	.0003480	.0068805	.1331755	.1295156

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0655962**	**2.669137**	**.0003650**	**.0001466**	**22.55193**	**.0001743**	**.1159770**
Stddev	.0011930	.054854	.0004526	.0007227	.09055	.0009817	.0006159
%RSD	1.818763	2.055111	124.0076	492.7830	.4015268	563.3636	.5310711
#1	.0669556	2.615801	.0008707	-.000661	22.44849	.0000962	.1159712
#2	.0651101	2.666218	.0002261	.000732	22.61686	.0011927	.1165957
#3	.0647230	2.725392	-.000002	.000368	22.59043	-.000766	.1153639

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.211193**	**1.446923**	**.0086974**	**-.002235**	**1.956794**	**1.792065**	**-.000290**
Stddev	.002134	.001053	.0006739	.000569	.001698	.012241	.000309
%RSD	.1761705	.0727421	7.748152	25.44903	.0867647	.6830852	106.3103
#1	1.208900	1.445820	.0089468	-.002401	1.955978	1.794080	-.000589
#2	1.213120	1.447033	.0092110	-.001602	1.958746	1.803174	.000027
#3	1.211559	1.447916	.0079344	-.002703	1.955659	1.778942	-.000309

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-12 Acquired: 6/26/2025 22:14:08 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0029519	-.031535	.0423164
Stddev	.0044120	.002613	.0004074
%RSD	149.4630	8.284857	.9627049
#1	-.000964	-.028546	.0418760
#2	.002088	-.033383	.0426799
#3	.007732	-.032676	.0423932

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4005.834	38504.39	2890.056	2389.748	5756.105
Stddev	7.739	266.10	12.062	17.399	11.048
%RSD	.1931941	.6910830	.4173549	.7280767	.1919365
#1	4014.768	38783.09	2896.064	2405.344	5766.048
#2	4001.549	38253.00	2876.170	2370.981	5758.054
#3	4001.185	38477.07	2897.933	2392.918	5744.212

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-12DUP Acquired: 6/26/2025 22:18:32 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.006316**	**.0003476**	**.0042785**	**-.003950**	**.0030169**	**.0391845**	**.0301982**
Stddev	.000643	.0009335	.0007532	.001887	.0020353	.0198523	.0001761
%RSD	10.18137	268.5535	17.60346	47.76082	67.46396	50.66359	.5831953
#1	-.007053	.0003216	.0036763	-.006109	.0050327	.0491367	.0300089
#2	-.006023	-.000573	.0040362	-.003123	.0009626	.0163247	.0303571
#3	-.005871	.001294	.0051230	-.002618	.0030554	.0520921	.0302287

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000069**	**.0001964**	**11.86592**	**.0014099**	**.0066859**	**.1357452**	**.1528047**
Stddev	.000054	.0000187	.06009	.0000200	.0003832	.0009812	.0265585
%RSD	78.96242	9.519223	.5064248	1.420916	5.730876	.7228228	17.38066
#1	-.000028	.0001915	11.85644	.0014224	.0071222	.1359577	.1497922
#2	-.000131	.0002170	11.81114	.0014206	.0064039	.1346752	.1807409
#3	-.000048	.0001806	11.93019	.0013868	.0065318	.1366027	.1278809

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0668100**	**2.667585**	**.0006256**	**-.000730**	**22.69710**	**-.009130**	**.1169885**
Stddev	.0016846	.037892	.0003838	.000965	.14452	.002750	.0002821
%RSD	2.521514	1.420442	61.33809	132.2735	.6367175	30.12206	.2410920
#1	.0649982	2.679460	.0004686	-.000337	22.64385	-.007855	.1173141
#2	.0683291	2.698117	.0003454	-.001829	22.58677	-.007248	.1168306
#3	.0671027	2.625179	.0010630	-.000023	22.86069	-.012286	.1168208

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.213752**	**1.450676**	**.0097584**	**-.002410**	**1.961994**	**1.823886**	**-.000023**
Stddev	.008658	.003347	.0003942	.000368	.004580	.005109	.000964
%RSD	.7133372	.2307107	4.039899	15.28326	.2334231	.2801255	4181.881
#1	1.204905	1.447949	.0095245	-.002082	1.957241	1.818035	.000963
#2	1.214142	1.454411	.0102135	-.002340	1.962361	1.827469	-.000963
#3	1.222208	1.449668	.0095370	-.002809	1.966379	1.826153	-.000070

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-12DUP Acquired: 6/26/2025 22:18:32 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0019684	-.033198	.0425078
Stddev	.0048842	.009327	.0001025
%RSD	248.1264	28.09497	.2410623
#1	-.000195	-.042011	.0424816
#2	.007561	-.023431	.0424210
#3	-.001460	-.034152	.0426209

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4009.966	38455.97	2876.556	2398.758	5755.343
Stddev	7.224	96.91	2.735	8.010	12.793
%RSD	.1801398	.2519945	.0950625	.3339314	.2222803
#1	4005.407	38381.13	2879.655	2397.246	5742.922
#2	4018.295	38421.36	2875.530	2391.612	5768.478
#3	4006.197	38565.44	2874.482	2407.417	5754.630

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-12LX5 Acquired: 6/26/2025 22:22:54 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.002268**	**.0011845**	**.0015686**	**.0000866**	**-.001091**	**-.000449**	**.0055032**
Stddev	.002569	.0024553	.0005595	.0014052	.001054	.012676	.0003114
%RSD	113.2700	207.2791	35.67116	1622.772	96.65674	2821.773	5.657777
#1	.000657	.0039461	.0018374	.0004319	.000125	.004900	.0058144
#2	-.003304	.0003591	.0019430	-.001459	-.001647	-.014923	.0051917
#3	-.004157	-.000752	.0009254	.001287	-.001751	.008675	.0055033

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000059**	**.0001315**	**2.345686**	**.0007491**	**.0018286**	**.0269548**	**.0172823**
Stddev	.000073	.0000368	.017476	.0002144	.0000641	.0003714	.0125304
%RSD	124.8799	27.97867	.7450115	28.62557	3.505676	1.377763	72.50451
#1	-.000015	.0001477	2.326001	.0009965	.0017985	.0267264	.0220791
#2	-.000143	.0001574	2.359372	.0006330	.0017851	.0267547	.0030621
#3	-.000017	.0000894	2.351685	.0006177	.0019022	.0273833	.0267057

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0132095**	**.5029205**	**.0003992**	**-.000590**	**4.353963**	**-.002474**	**.0230445**
Stddev	.0012557	.0147470	.0001077	.001078	.018763	.001480	.0003219
%RSD	9.506018	2.932281	26.98643	182.7679	.4309470	59.82011	1.396698
#1	.0139632	.4959112	.0004584	-.000587	4.344196	-.003813	.0234158
#2	.0139054	.4929854	.0002748	-.001668	4.342097	-.000885	.0228726
#3	.0117599	.5198649	.0004643	.000487	4.375595	-.002725	.0228450

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1998101**	**.2826247**	**.0008392**	**-.000970**	**.3855702**	**.3757727**	**-.000074**
Stddev	.0010778	.0014626	.0023522	.000249	.0020663	.0069412	.000815
%RSD	.5394079	.5175113	280.3015	25.65044	.5359167	1.847178	1101.038
#1	.1989702	.2809371	-.001585	-.000910	.3879393	.3821578	-.000933
#2	.1994348	.2834116	.000990	-.001243	.3846314	.3683845	.000688
#3	.2010254	.2835254	.003112	-.000756	.3841399	.3767758	.000024

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-12LX5 Acquired: 6/26/2025 22:22:54 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0015986	.0036026	.0084508
Stddev	.0041861	.0075971	.0000819
%RSD	261.8615	210.8780	.9687092
#1	-.003218	.0005641	.0083987
#2	.003655	.0122486	.0085452
#3	.004359	-.002005	.0084087

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4031.146	38718.27	2876.038	2424.199	5880.289
Stddev	12.414	270.80	5.753	22.229	15.135
%RSD	.3079616	.6994222	.2000398	.9169801	.2573773
#1	4017.573	38544.22	2869.924	2410.361	5863.570
#2	4033.937	38580.33	2881.345	2412.395	5884.242
#3	4041.927	39030.28	2876.845	2449.840	5893.054

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-12MS Acquired: 6/26/2025 22:27:23 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7296421**	**1.881046**	**.9242330**	**1.798522**	**.8122310**	**2.125903**	**.2349268**
Stddev	.0036712	.002549	.0036094	.009514	.0051109	.009771	.0008773
%RSD	.5031517	.1355045	.3905252	.5290100	.6292360	.4596043	.3734233
#1	.7254172	1.883951	.9234394	1.787623	.8103488	2.117180	.2339148
#2	.7314546	1.880004	.9281731	1.805172	.8083281	2.136461	.2353932
#3	.7320547	1.879184	.9210865	1.802770	.8180160	2.124068	.2354723

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1917563**	**.1856016**	**12.84869**	**.4118965**	**.1979233**	**.4473050**	**3.085558**
Stddev	.0020199	.0001382	.02913	.0005234	.0003891	.0048049	.050591
%RSD	1.053342	.0744564	.2267491	.1270648	.1965983	1.074178	1.639619
#1	.1897284	.1854655	12.83739	.4125000	.1983001	.4422949	3.063692
#2	.1937680	.1857418	12.88178	.4116225	.1979470	.4518742	3.143405
#3	.1917724	.1855974	12.82689	.4115670	.1975230	.4477459	3.049577

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2653038**	**4.567959**	**.4737662**	**.0665271**	**25.68892**	**.3015993**	**.3210855**
Stddev	.0008996	.010053	.0003068	.0008211	.29581	.0050586	.0010414
%RSD	.3390781	.2200699	.0647601	1.234294	1.151506	1.677269	.3243235
#1	.2642800	4.570816	.4735587	.0674462	25.35906	.3019460	.3207563
#2	.2656633	4.576273	.4741186	.0658657	25.93066	.2963763	.3222517
#3	.2659681	4.556787	.4736213	.0662693	25.77704	.3064757	.3202486

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.31664**	**6.800998**	**.2810288**	**.4094725**	**1.981400**	**2.748986**	**.6784811**
Stddev	.15809	.011390	.0037021	.0011392	.003388	.041771	.0002561
%RSD	1.396942	.1674722	1.317351	.2782004	.1710091	1.519513	.0377521
#1	11.16969	6.799810	.2767540	.4104106	1.977768	2.702510	.6785319
#2	11.48390	6.812935	.2831478	.4082050	1.981958	2.783396	.6787081
#3	11.29633	6.790249	.2831846	.4098020	1.984475	2.761053	.6782034

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-12MS Acquired: 6/26/2025 22:27:23 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2074592	.1628151	.2454025
Stddev	.0023245	.0031374	.0009617
%RSD	1.120458	1.926938	.3918854
#1	.2052204	.1593140	.2451611
#2	.2072964	.1653715	.2464619
#3	.2098608	.1637600	.2445845

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3991.804	38260.63	2855.692	2398.497	5629.734
Stddev	6.369	10.87	37.096	5.075	10.197
%RSD	.1595553	.0284193	1.299010	.2116001	.1811346
#1	3999.011	38271.96	2894.308	2399.415	5636.237
#2	3986.929	38250.29	2820.332	2393.025	5617.981
#3	3989.473	38259.64	2852.435	2403.050	5634.984

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCV07 Acquired: 6/26/2025 22:31:42 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi 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	**5.023605**	**4.877222**	**4.838160**	**4.792792**	**5.013989**	**10.08915**	**10.02529**
Stddev	.012139	.016792	.016645	.007923	.013478	.03548	.02668
%RSD	.2416403	.3442861	.3440254	.1653163	.2688160	.3516896	.2660839
#1	5.010227	4.858090	4.820925	4.785276	4.999867	10.12846	10.05054
#2	5.026669	4.884061	4.839410	4.801068	5.026715	10.07952	9.99738
#3	5.033918	4.889514	4.854144	4.792033	5.015384	10.05948	10.02794

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2396295**	**2.445868**	**23.88999**	**1.059628**	**2.446213**	**1.214525**	**4.747681**
Stddev	.0021398	.007976	.04341	.005362	.007984	.012036	.036933
%RSD	.8929760	.3261164	.1817083	.5059826	.3263959	.9910225	.7779129
#1	.2415003	2.438580	23.89737	1.058723	2.439899	1.226076	4.757521
#2	.2400921	2.444634	23.92923	1.054777	2.443552	1.215443	4.778697
#3	.2372962	2.454389	23.84336	1.065385	2.455188	1.202056	4.706825

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.453553**	**23.82333**	**2.446417**	**1.231650**	**25.20388**	**2.520155**	**2.600666**
Stddev	.008674	.04122	.007586	.001088	.28637	.005882	.019536
%RSD	.3535438	.1730394	.3100905	.0883634	1.136222	.2334113	.7511948
#1	2.463223	23.81743	2.440725	1.231573	25.42517	2.513635	2.582992
#2	2.446457	23.78537	2.443497	1.230602	25.30602	2.525063	2.597362
#3	2.450979	23.86718	2.455029	1.232774	24.88044	2.521768	2.621643

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.13954**	**4.865816**	**4.877958**	**4.904225**	**4.674575**	**4.966028**	**4.886188**
Stddev	.15977	.018462	.039660	.005387	.013966	.049575	.013891
%RSD	.6355197	.3794129	.8130440	.1098380	.2987747	.9982790	.2842965
#1	25.19604	4.851542	4.920227	4.898591	4.661140	5.009674	4.873078
#2	25.26337	4.859241	4.872084	4.909324	4.673567	4.976283	4.884739
#3	24.95919	4.886665	4.841562	4.904762	4.689019	4.912128	4.900747

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCV07 Acquired: 6/26/2025 22:31:42 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCV07 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.896419**	**4.759246**	**4.995845**
Stddev	.017186	.012248	.007141
%RSD	.3509839	.2573574	.1429376
#1	4.916256	4.768243	4.999064
#2	4.886042	4.764199	4.987662
#3	4.886959	4.745297	5.000811

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3871.143**	**36840.85**	**2831.623**	**2325.651**	**5141.331**
Stddev	8.589	147.83	23.307	19.044	19.759
%RSD	.2218747	.4012775	.8230928	.8188695	.3843208
#1	3880.868	36905.55	2806.629	2344.473	5161.250
#2	3867.967	36945.31	2835.478	2326.087	5141.007
#3	3864.595	36671.70	2852.762	2306.392	5121.736

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCB07 Acquired: 6/26/2025 22:35:59 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi 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	**-.000809**	**-.000247**	**.0015103**	**.0000568**	**.0010000**	**-.018573**	**.0006562**
Stddev	.001969	.001251	.0003173	.0015675	.0029550	.037670	.0010653
%RSD	243.3020	505.5720	21.01023	2761.564	295.4837	202.8239	162.3485
#1	-.000417	-.001688	.0016409	.0008035	-.000412	.023905	-.000226
#2	-.002944	.000388	.0017415	-.001745	-.000984	-.031701	.001840
#3	.000934	.000559	.0011486	.001111	.004396	-.047921	.000355

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000424**	**.0002892**	**-.015032**	**.0004199**	**.0002792**	**.0003107**	**.0094900**
Stddev	.0000644	.0000959	.014557	.0001761	.0000500	.0006837	.0144034
%RSD	151.9570	33.14383	96.84247	41.93219	17.92454	220.0158	151.7736
#1	-.000014	.0003039	-.000560	.0003419	.0002918	.0006754	-.005679
#2	.000029	.0001869	-.014863	.0002964	.0002240	.0007348	.011167
#3	.000112	.0003769	-.029673	.0006216	.0003217	-.000478	.022981

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000154**	**-.086929**	**.0003761**	**-.000572**	**-.009456**	**-.001279**	**.0000396**
Stddev	.001048	.041142	.0002216	.001474	.012385	.013198	.0006911
%RSD	678.7710	47.32805	58.92076	257.8490	130.9742	1032.146	1746.603
#1	-.000760	-.128465	.0005573	.000562	-.023748	.007298	.0003206
#2	.001056	-.086131	.0001290	-.000039	-.001885	-.016476	-.000748
#3	-.000760	-.046192	.0004420	-.002238	-.002735	.005342	.000546

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012453**	**-.000072**	**.0097441**	**.0001357**	**.0001232**	**-.000840**	**.0006331**
Stddev	.0002553	.002546	.0016050	.0004324	.0043072	.000621	.0005501
%RSD	20.50026	3530.151	16.47114	318.6955	3495.528	73.96679	86.88513
#1	.0015214	.000516	.0114846	.0005467	-.000367	-.001556	.0012663
#2	.0011968	-.002860	.0083227	-.000315	.004655	-.000522	.0003605
#3	.0010178	.002128	.0094249	.000176	-.003918	-.000442	.0002726

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCB07 Acquired: 6/26/2025 22:35:59 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCB07 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0014854	-.000274	.0003227
Stddev	.0020136	.003532	.0000495
%RSD	135.5600	1291.257	15.34515
#1	-.000363	-.000989	.0002901
#2	.001187	.003561	.0002984
#3	.003631	-.003393	.0003797

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4023.833	38818.04	2831.349	2420.747	5935.772
Stddev	15.422	100.81	7.443	9.299	24.851
%RSD	.3832714	.2597080	.2628943	.3841194	.4186597
#1	4026.258	38763.50	2829.109	2410.055	5936.675
#2	4037.899	38756.24	2825.282	2425.245	5960.159
#3	4007.342	38934.37	2839.655	2426.942	5910.483

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-12MSD Acquired: 6/26/2025 22:40:28 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7413957**	**1.906223**	**.9401542**	**1.828562**	**.8175610**	**2.142506**	**.2406599**
Stddev	.0067361	.007923	.0047889	.007217	.0057432	.008838	.0015730
%RSD	.9085640	.4156621	.5093721	.3946902	.7024759	.4124917	.6536166
#1	.7489315	1.915230	.9455565	1.836804	.8232655	2.143924	.2388528
#2	.7359594	1.903110	.9364309	1.825508	.8176375	2.133044	.2414055
#3	.7392962	1.900329	.9384752	1.823373	.8117799	2.150548	.2417215

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1941678**	**.1885269**	**13.09186**	**.4210847**	**.2017202**	**.4551594**	**3.091953**
Stddev	.0009036	.0013846	.06634	.0015600	.0015417	.0033875	.017213
%RSD	.4653643	.7344464	.5067286	.3704727	.7642951	.7442543	.5566897
#1	.1934579	.1901257	13.04241	.4213806	.2034965	.4544102	3.095546
#2	.1938607	.1877181	13.06592	.4224756	.2007296	.4522092	3.107086
#3	.1951850	.1877369	13.16726	.4193980	.2009346	.4588588	3.073228

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3318117**	**4.727388**	**.4806283**	**.0677856**	**26.45672**	**.3206491**	**.3277708**
Stddev	.0026479	.036133	.0041681	.0002784	.12939	.0077324	.0029962
%RSD	.7980111	.7643364	.8672095	.4107093	.4890607	2.411475	.9141242
#1	.3296652	4.758766	.4854376	.0675147	26.40313	.3121507	.3306455
#2	.3309994	4.687884	.4780631	.0677713	26.36273	.3272695	.3280006
#3	.3347707	4.735516	.4783842	.0680709	26.60429	.3225272	.3246663

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.69899**	**6.933455**	**.2908558**	**.4116452**	**2.027597**	**2.799522**	**.6820864**
Stddev	.03555	.058825	.0034988	.0026207	.016259	.017893	.0042505
%RSD	.3038896	.8484180	1.202939	.6366306	.8018977	.6391583	.6231642
#1	11.72251	7.001225	.2894527	.4146327	2.045380	2.796143	.6869059
#2	11.71636	6.895596	.2882762	.4097342	2.023920	2.783559	.6788730
#3	11.65809	6.903543	.2948383	.4105688	2.013491	2.818864	.6804802

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-12MSD Acquired: 6/26/2025 22:40:28 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2048727	.1666023	.2502342
Stddev	.0034768	.0025108	.0008016
%RSD	1.697065	1.507044	.3203395
#1	.2019038	.1688315	.2497984
#2	.2040168	.1638824	.2497449
#3	.2086976	.1670930	.2511593

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3967.078	38094.04	2833.718	2374.222	5590.389
Stddev	22.501	245.96	18.700	22.756	32.661
%RSD	.5671939	.6456712	.6599249	.9584564	.5842434
#1	3941.205	37865.95	2828.130	2353.213	5552.754
#2	3977.951	38061.52	2854.575	2371.059	5607.087
#3	3982.077	38354.64	2818.448	2398.394	5611.326

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-12A Acquired: 6/26/2025 22:44:48 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7023262**	**1.812595**	**.8918010**	**1.740365**	**.7700435**	**2.053916**	**.2291333**
Stddev	.0015686	.000791	.0029105	.006198	.0006227	.034299	.0018790
%RSD	.2233391	.0436503	.3263646	.3561412	.0808647	1.669919	.8200279
#1	.7029712	1.811690	.8898170	1.733976	.7700703	2.083847	.2298830
#2	.7005379	1.812937	.8904438	1.740765	.7694079	2.061410	.2269952
#3	.7034694	1.813158	.8951423	1.746353	.7706524	2.016489	.2305216

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1855974**	**.1793172**	**12.70782**	**.3988186**	**.1914032**	**.4371862**	**2.975666**
Stddev	.0022628	.0002601	.00847	.0002526	.0008271	.0050328	.030784
%RSD	1.219181	.1450309	.0666337	.0633324	.4321356	1.151178	1.034527
#1	.1864256	.1791758	12.71278	.3991013	.1912645	.4379871	3.010545
#2	.1830372	.1791586	12.69805	.3986150	.1922909	.4318010	2.952288
#3	.1873294	.1796174	12.71265	.3987396	.1906542	.4417705	2.964165

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2597168**	**4.552107**	**.4569031**	**.0632257**	**25.64244**	**.3073863**	**.3155728**
Stddev	.0007130	.051794	.0014595	.0011904	.25666	.0012314	.0005942
%RSD	.2745288	1.137801	.3194336	1.882773	1.000919	.4005943	.1883055
#1	.2598567	4.565251	.4574847	.0637681	25.58267	.3085529	.3148867
#2	.2589442	4.596062	.4552424	.0618607	25.42094	.3060990	.3159088
#3	.2603495	4.495007	.4579820	.0640483	25.92371	.3075070	.3159229

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.08480**	**6.605045**	**.2754074**	**.3886420**	**1.952583**	**2.747486**	**.6439143**
Stddev	.02284	.009639	.0020924	.0002756	.002972	.040313	.0021160
%RSD	.2060718	.1459347	.7597406	.0709030	.1521874	1.467285	.3286078
#1	11.07632	6.597259	.2758709	.3883983	1.950071	2.759959	.6416802
#2	11.11067	6.602051	.2731222	.3885866	1.951815	2.702411	.6441747
#3	11.06741	6.615826	.2772292	.3889410	1.955863	2.780089	.6458880

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: Q2404-12A Acquired: 6/26/2025 22:44:48 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.1944910	.1539003	.2392753
Stddev	.0022148	.0055397	.0006320
%RSD	1.138781	3.599553	.2641182
#1	.1943284	.1600484	.2394101
#2	.1923620	.1492968	.2385868
#3	.1967827	.1523557	.2398290

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3966.253	38278.89	2845.959	2390.244	5607.068
Stddev	7.981	428.47	2.843	25.831	12.705
%RSD	.2012309	1.119330	.0998880	1.080679	.2265827
#1	3959.459	38347.34	2846.159	2398.678	5594.556
#2	3964.258	37820.32	2848.696	2361.250	5606.694
#3	3975.043	38669.01	2843.021	2410.803	5619.956

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCV08 Acquired: 6/26/2025 22:49:08 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi 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	**5.022235**	**4.883746**	**4.840394**	**4.803362**	**5.007883**	**10.22402**	**10.16547**
Stddev	.009305	.008221	.005984	.005388	.002392	.00234	.01845
%RSD	.1852696	.1683344	.1236207	.1121623	.0477724	.0229175	.1814541
#1	5.029527	4.890306	4.845414	4.801113	5.005157	10.22615	10.17208
#2	5.011755	4.874524	4.833773	4.799463	5.009633	10.22441	10.14463
#3	5.025422	4.886410	4.841995	4.809509	5.008858	10.22151	10.17970

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2433473**	**2.449130**	**24.10829**	**1.062678**	**2.446981**	**1.235538**	**4.802357**
Stddev	.0020949	.005006	.06528	.002704	.004659	.006546	.018891
%RSD	.8608721	.2044016	.2707947	.2544182	.1903961	.5298331	.3933618
#1	.2412624	2.454424	24.18190	1.059919	2.451717	1.228637	4.793435
#2	.2454521	2.444473	24.05741	1.062792	2.442403	1.241661	4.824056
#3	.2433273	2.448493	24.08555	1.065323	2.446823	1.236315	4.789580

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.474581**	**24.05920**	**2.447203**	**1.234943**	**25.53519**	**2.548533**	**2.610963**
Stddev	.005426	.08997	.004158	.002559	.14455	.008274	.006424
%RSD	.2192640	.3739550	.1699266	.2072373	.5660633	.3246633	.2460405
#1	2.477636	24.03063	2.451177	1.232137	25.36970	2.557244	2.610781
#2	2.468317	23.98698	2.442882	1.235542	25.59920	2.540778	2.617476
#3	2.477791	24.15999	2.447551	1.237150	25.63669	2.547578	2.604632

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.40528**	**4.871972**	**4.963426**	**4.904508**	**4.682731**	**5.048246**	**4.892759**
Stddev	.19947	.012123	.027596	.000619	.008986	.027803	.007735
%RSD	.7851546	.2488227	.5559955	.0126291	.1919044	.5507396	.1580876
#1	25.18764	4.883445	4.933698	4.904253	4.688306	5.016205	4.899474
#2	25.44879	4.859290	4.988227	4.905214	4.672364	5.066003	4.884301
#3	25.57940	4.873181	4.968354	4.904056	4.687522	5.062529	4.894501

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCV08 Acquired: 6/26/2025 22:49:08 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCV08 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	4.957788	4.802277	5.055095
Stddev	.011536	.009288	.008224
%RSD	.2326869	.1933982	.1626807
#1	4.964754	4.791570	5.056209
#2	4.944472	4.808162	5.046372
#3	4.964138	4.807098	5.062706

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3888.114	36946.28	2795.695	2324.017	5163.563
Stddev	3.700	135.48	9.949	5.505	1.415
%RSD	.0951523	.3667039	.3558614	.2368780	.0274098
#1	3891.693	36977.55	2807.045	2317.661	5162.388
#2	3884.304	37063.39	2791.558	2327.184	5163.167
#3	3888.344	36797.89	2788.483	2327.207	5165.134

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

Sample Name: CCB08 Acquired: 6/26/2025 22:53:23 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCB08 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0021394**	**.0008842**	**.0018229**	**-.000302**	**.0014011**	**-.026594**
Stddev	.0020338	.0024567	.0009772	.000454	.0021619	.008764
%RSD	95.06576	277.8461	53.60707	150.5736	154.2976	32.95682
#1	.0023344	.0036215	.0009832	-.000553	.0033177	-.035845
#2	.0040688	-.001129	.0015899	.000223	-.000942	-.018415
#3	.0000151	.000160	.0028956	-.000575	.001828	-.025521

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005994**	**.0000871**	**.0002681**	**-.002999**	**.0000943**	**.0000494**
Stddev	.0005805	.0001561	.0000539	.025697	.0008615	.0002318
%RSD	96.85079	179.1228	20.09165	856.8977	913.2938	469.3157
#1	.0002437	-.000093	.0003301	-.030351	-.000301	.0002669
#2	.0012692	.000179	.0002425	.020638	-.000498	.0000758
#3	.0002851	.000176	.0002319	.000717	.001083	-.000194

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001027**	**-.007835**	**-.000251**	**-.050659**	**-.000099**	**-.000809**
Stddev	.000500	.026037	.000466	.070853	.000084	.000980
%RSD	48.68382	332.2980	185.5544	139.8620	84.65829	121.1820
#1	-.001441	-.003978	-.000788	-.051132	-.000172	.000305
#2	-.000472	.016058	.000042	.020429	-.000008	-.001542
#3	-.001168	-.035586	-.000007	-.121275	-.000117	-.001190

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0032774**	**-.001390**	**.0006098**	**.0019157**	**.0014135**	F **.0132911**
Stddev	.0136896	.003701	.0000788	.0007019	.0017733	.0014469
%RSD	417.6957	266.2870	12.91422	36.64088	125.4508	10.88613
#1	.0186226	-.000559	.0006366	.0025721	-.000580	.0120713
#2	-.001109	.001825	.0006717	.0019992	.002007	.0148897
#3	-.007681	-.005436	.0005211	.0011757	.002814	.0129122

Reviewed By:jaswal
On:6/27/2025 1:19:18 PM
Inst Id :P5
LB :LB136305

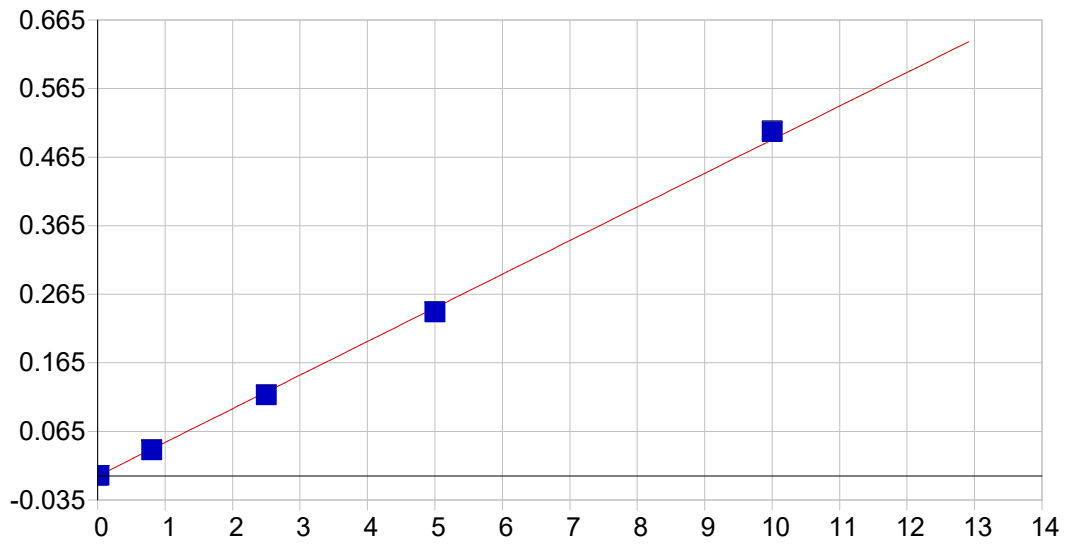
Sample Name: CCB08 Acquired: 6/26/2025 22:53:23 Type: Unk
Method: METHOD 6010D, 200.7 M(v6) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCB08 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003205	-.001978	.0012711	-.000093	.0006201	.0079772
Stddev	.0002423	.000389	.0011213	.000237	.0010653	.0054596
%RSD	75.60289	19.67684	88.21490	254.5188	171.7929	68.44066
#1	.0005516	-.002045	.0021083	-.000119	.0004934	.0017030
#2	.0000684	-.002329	.0017078	.000156	.0017430	.0116466
#3	.0003416	-.001559	-.000003	-.000315	-.000376	.0105821

Elem	Sr4077
Units	ppm
Avg	.0007268
Stddev	.0002017
%RSD	27.75673
#1	.0009495
#2	.0006748
#3	.0005561

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4042.891	38483.49	2872.306	2411.219	5957.617
Stddev	8.877	705.97	12.636	36.940	19.624
%RSD	.2195648	1.834486	.4399163	1.532008	.3293986
#1	4032.877	37694.72	2874.664	2369.661	5935.608
#2	4046.008	38699.58	2858.658	2423.675	5963.952
#3	4049.790	39056.16	2883.597	2440.320	5973.292

Reviewed By:
On:
Inst Id :P5
LB :LB136377



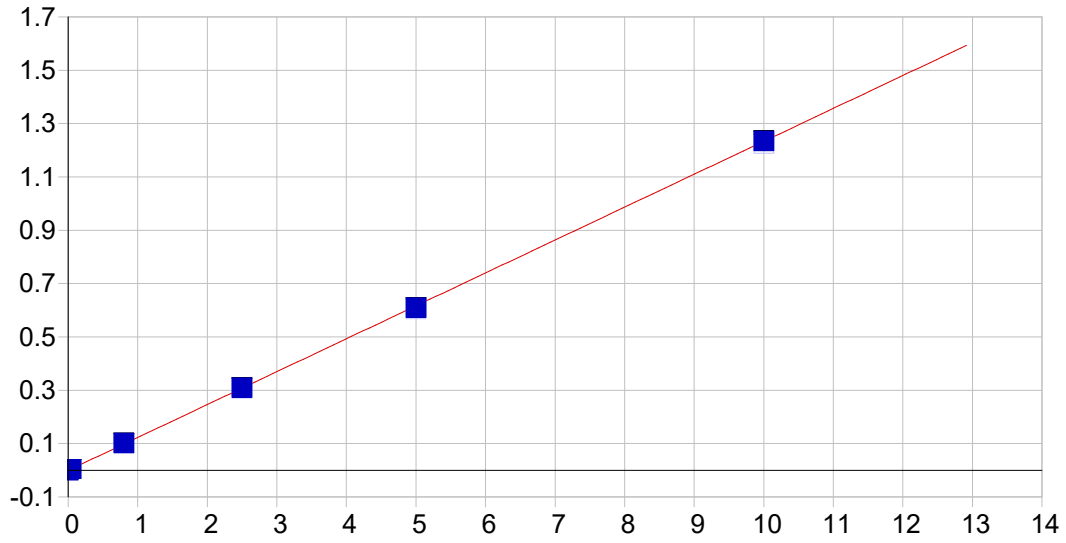
As 189.042 {479}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000030	Re-Slope:	1.000000
A1 (Gain):	0.049051	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999639	Status:	OK.
Std Error of Est:	0.000031		
Predicted MDL:	0.002599		
Predicted MQL:	0.008664		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00003	.000	1
S1	.02000	.02160	.002	8.02	.00103	.000	1
S2	.80000	.77491	-.025	-3.14	.03797	.000	1
S3	2.5000	2.4079	-.092	-3.68	.11806	.000	1
S4	5.0000	4.8750	-.125	-2.50	.23905	.000	1
S5	10.000	10.241	.241	2.41	.50220	.001	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



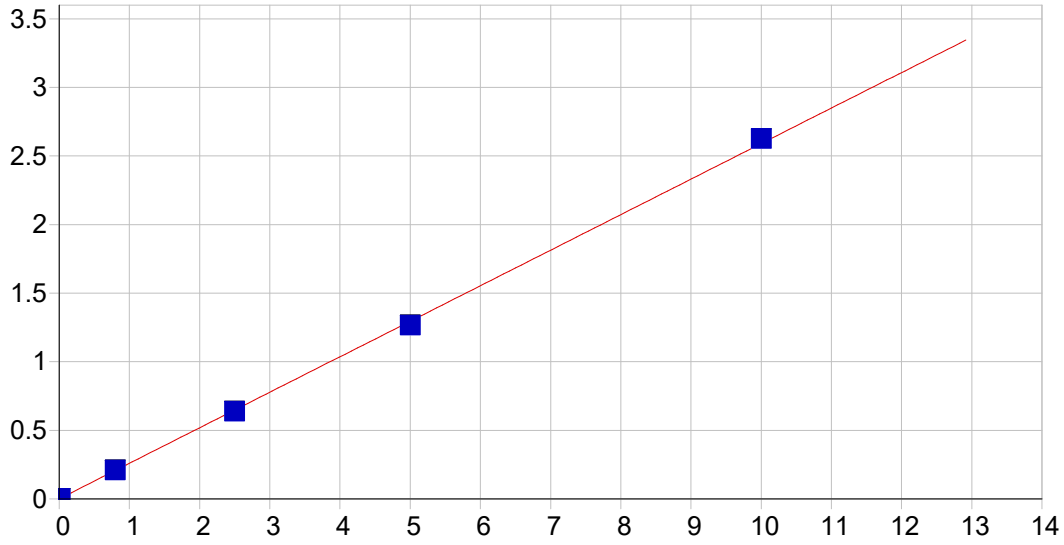
Tl 190.856 {477}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000555	Re-Slope:	1.000000
A1 (Gain):	0.123396	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999947	Status:	OK.
Std Error of Est:	0.000042		
Predicted MDL:	0.001688		
Predicted MQL:	0.005626		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00056	.000	1
S1	.04000	.04075	.001	1.89	.00436	.000	1
S2	.80000	.83142	.031	3.93	.10127	.000	1
S3	2.5000	2.5140	.014	.561	.30726	.000	1
S4	5.0000	4.9459	-.054	-1.08	.60493	.001	1
S5	10.000	10.008	.008	.079	1.2248	.002	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



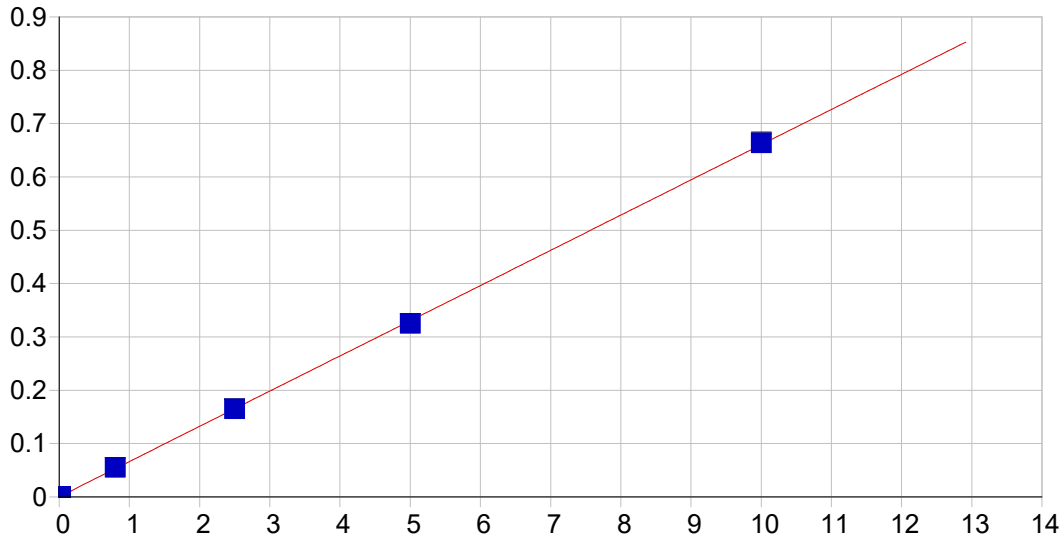
Pb 220.353 {453}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000541	Re-Slope:	1.000000
A1 (Gain):	0.258980	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999859	Status:	OK.
Std Error of Est:	0.000079		
Predicted MDL:	0.001583		
Predicted MQL:	0.005276		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00054	.000	1
S1	.01200	.01111	-.001	-7.40	.00335	.000	1
S2	.80000	.80963	.010	1.20	.21003	.000	1
S3	2.5000	2.4629	-.037	-1.48	.63781	.001	1
S4	5.0000	4.8887	-.111	-2.23	1.2655	.000	1
S5	10.000	10.140	.140	1.40	2.6242	.001	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



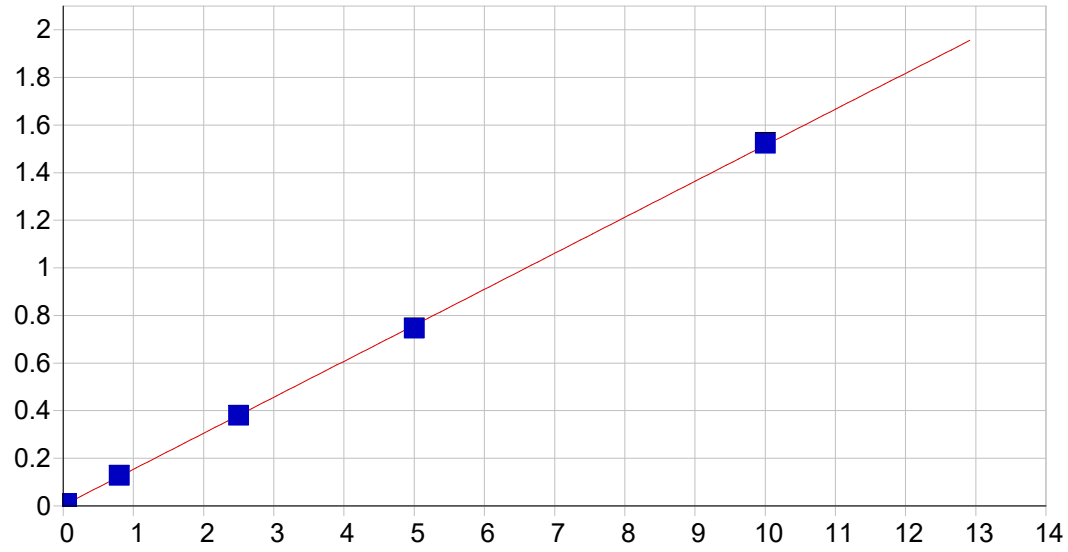
Se 196.090 {472}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000248	Re-Slope:	1.000000
A1 (Gain):	0.066014	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999921	Status:	OK.
Std Error of Est:	0.000019		
Predicted MDL:	0.003764		
Predicted MQL:	0.012548		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00025	.000	1
S1	.02000	.01876	-.001	-6.21	.00148	.000	1
S2	.80000	.83158	.032	3.95	.05511	.000	1
S3	2.5000	2.4984	-.002	-.064	.16508	.001	1
S4	5.0000	4.9192	-.081	-1.62	.32480	.000	1
S5	10.000	10.052	.052	.520	.66344	.001	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



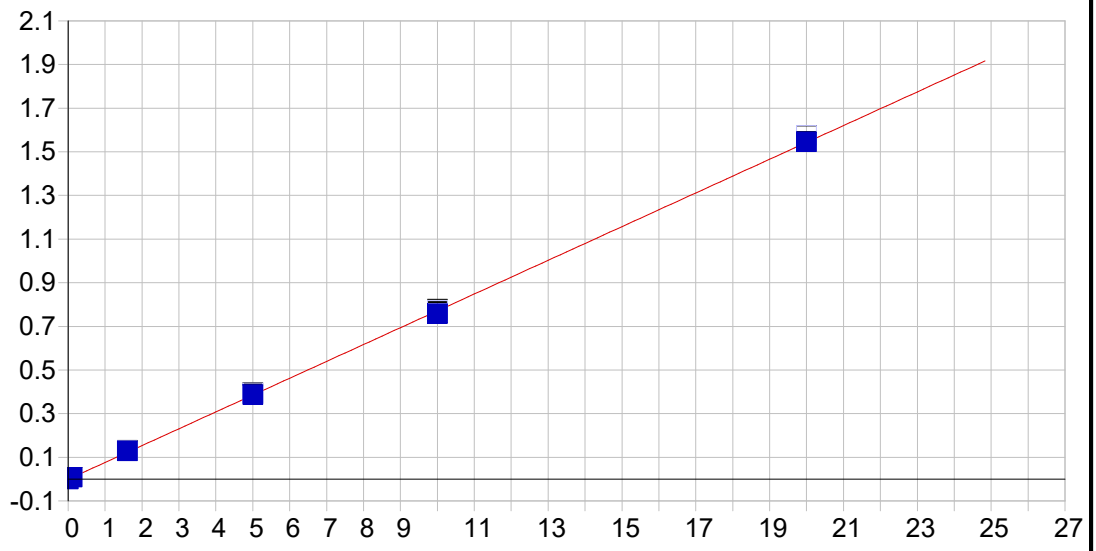
Sb 206.833 {463}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002576	Re-Slope:	1.000000
A1 (Gain):	0.151245	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999926	Status:	OK.
Std Error of Est:	0.000068		
Predicted MDL:	0.002273		
Predicted MQL:	0.007576		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00258	.000	1
S1	.05000	.04999	-.000	-.026	.01006	.000	1
S2	.80000	.83062	.031	3.83	.12802	.000	1
S3	2.5000	2.4956	-.004	-.175	.37946	.000	1
S4	5.0000	4.9206	-.079	-1.59	.74564	.001	1
S5	10.000	10.053	.053	.532	1.5208	.005	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



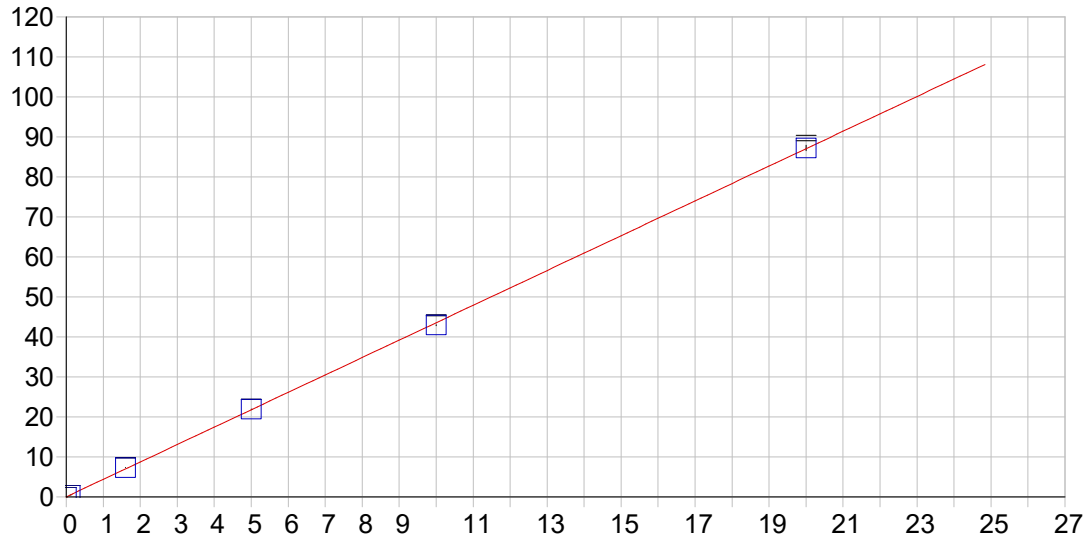
Al 396.152 { 85}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000877	Re-Slope:	1.000000
A1 (Gain):	0.077199	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999805	Status:	OK.
Std Error of Est:	0.000115		
Predicted MDL:	0.025225		
Predicted MQL:	0.084084		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00003	-.000	.000	-.00088	.001	1
S1	.10000	.12907	.029	29.1	.00966	.001	1
S2	1.6000	1.6770	.077	4.81	.13088	.001	1
S3	5.0000	5.0216	.022	.432	.39397	.002	1
S4	10.000	9.8395	-.161	-1.61	.77309	.005	1
S5	20.000	20.031	.031	.157	1.5743	.001	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



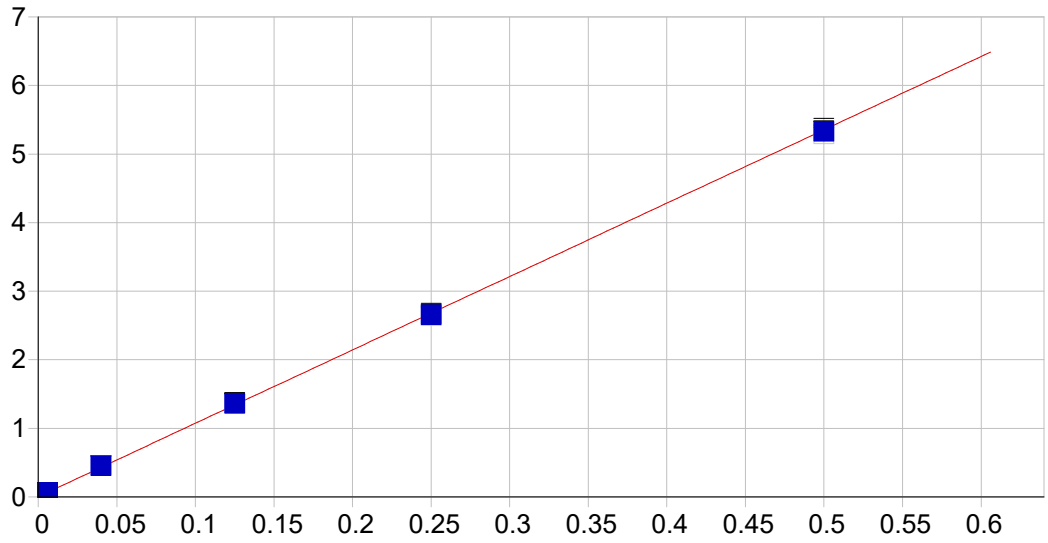
Ba 493.409 { 68}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.033262	Re-Slope:	1.000000
A1 (Gain):	4.351229	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999930	Status:	OK.
Std Error of Est:	0.003826		
Predicted MDL:	0.000815		
Predicted MQL:	0.002715		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.03325	.004	1
S1	.10000	.09935	-.001	-.648	.46557	.002	1
S2	1.6000	1.6698	.070	4.36	7.2988	.038	1
S3	5.0000	5.0306	.031	.613	21.923	.028	1
S4	10.000	9.8637	-.136	-1.36	42.952	.118	1
S5	20.000	20.037	.037	.183	87.217	.682	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



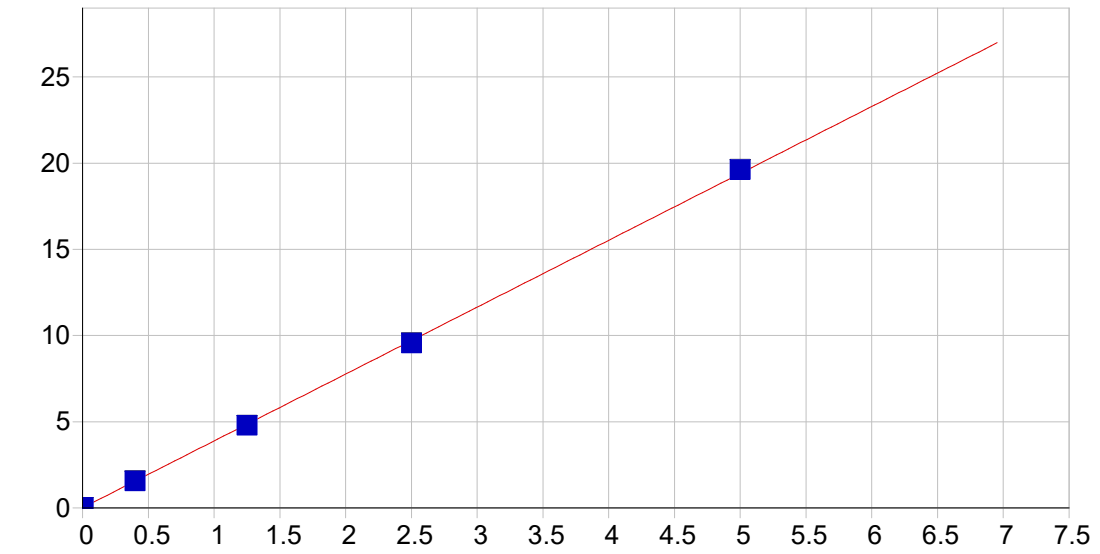
Be 234.861 {144}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.004107	Re-Slope:	1.000000
A1 (Gain):	10.698809	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999900	Status:	OK.
Std Error of Est:	0.000432		
Predicted MDL:	0.000115		
Predicted MQL:	0.000384		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00410	.001	1
S1	.00600	.00611	.000	1.78	.06876	.003	1
S2	.04000	.04214	.002	5.34	.45207	.004	1
S3	.12500	.12717	.002	1.74	1.3558	.012	1
S4	.25000	.24801	-.002	-.797	2.6397	.020	1
S5	.50000	.49758	-.002	-.484	5.2919	.048	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



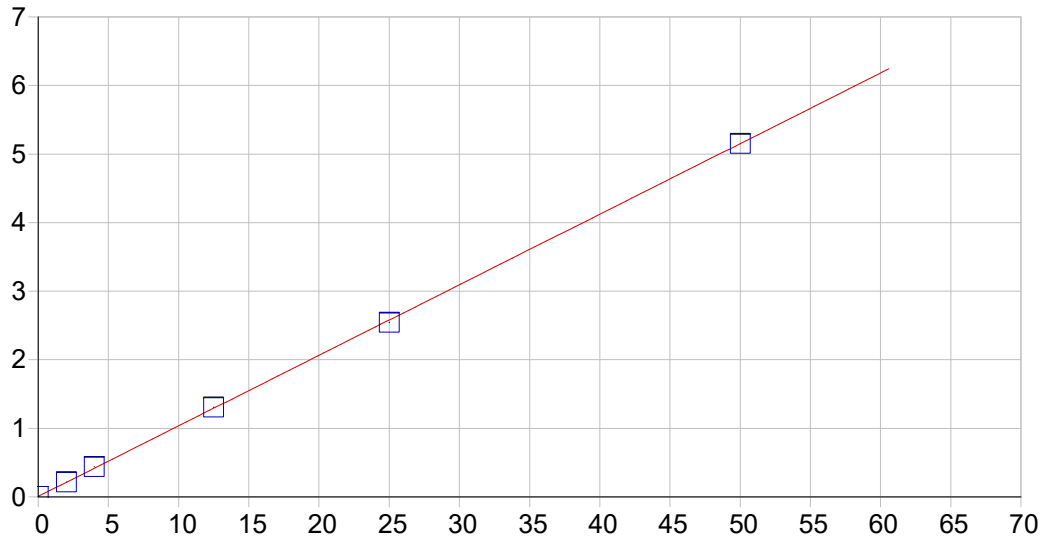
Cd 214.438 {457}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.004572	Re-Slope:	1.000000
A1 (Gain):	3.880745	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999916	Status:	OK.
Std Error of Est:	0.000457		
Predicted MDL:	0.000070		
Predicted MQL:	0.000233		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00457	.000	1
S1	.00600	.00564	-.000	-6.02	.02647	.000	1
S2	.40000	.39982	-.000	-.045	1.5563	.002	1
S3	1.2500	1.2310	-.019	-1.52	4.7820	.005	1
S4	2.5000	2.4622	-.038	-1.51	9.5606	.006	1
S5	5.0000	5.0574	.057	1.15	19.632	.013	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



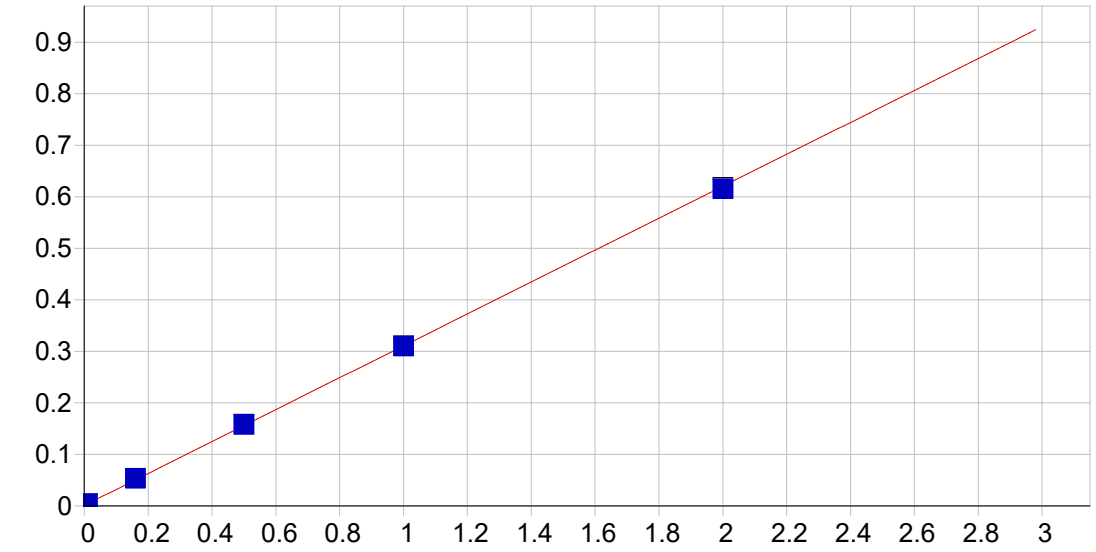
Ca 373.690 { 90}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.007576	Re-Slope:	1.000000
A1 (Gain):	0.102885	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999904	Status:	OK.
Std Error of Est:	0.000753		
Predicted MDL:	0.017658		
Predicted MQL:	0.058861		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00012	-.000	.000	.00756	.001	1
S1	2.0000	2.0214	.021	1.07	.21555	.003	1
S2	4.0000	4.2088	.209	5.22	.44060	.002	1
S3	12.500	12.642	.142	1.13	1.3082	.005	1
S4	25.000	24.642	-.358	-1.43	2.5428	.005	1
S5	50.000	49.986	-.014	-.027	5.1504	.005	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



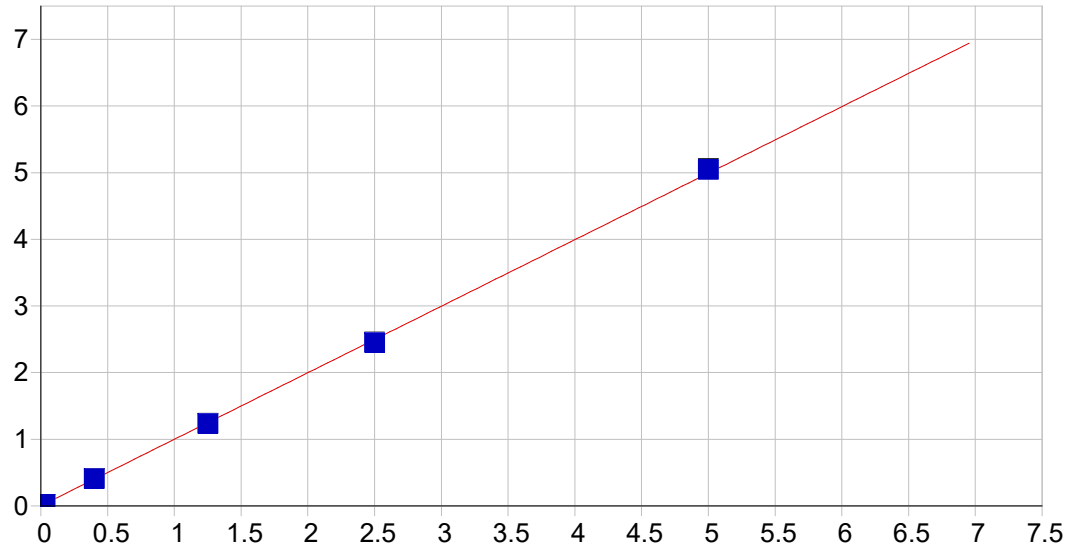
Cr 267.716 {126}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000992	Re-Slope:	1.000000
A1 (Gain):	0.309821	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999882	Status:	OK.
Std Error of Est:	0.000035		
Predicted MDL:	0.000740		
Predicted MQL:	0.002467		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00099	.000	1
S1	.01000	.01133	.001	13.3	.00451	.000	1
S2	.16000	.16872	.009	5.45	.05331	.000	1
S3	.50000	.50701	.007	1.40	.15821	.000	1
S4	1.0000	.99798	-.002	-.202	.31046	.001	1
S5	2.0000	1.9850	-.015	-.752	.61653	.002	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



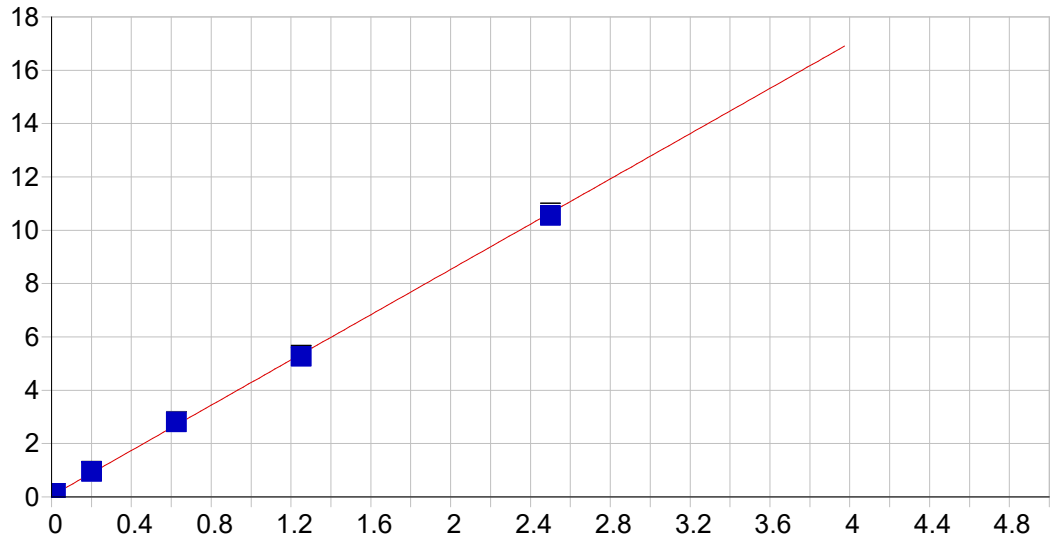
Co 228.616 {448}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001676	Re-Slope:	1.000000
A1 (Gain):	0.998162	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999907	Status:	OK.
Std Error of Est:	0.000277		
Predicted MDL:	0.000286		
Predicted MQL:	0.000953		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00168	.000	1
S1	.03000	.02917	-.001	-2.76	.03062	.000	1
S2	.40000	.40614	.006	1.53	.40755	.001	1
S3	1.2500	1.2363	-.014	-1.10	1.2372	.001	1
S4	2.5000	2.4539	-.046	-1.84	2.4541	.002	1
S5	5.0000	5.0544	.054	1.09	5.0529	.008	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



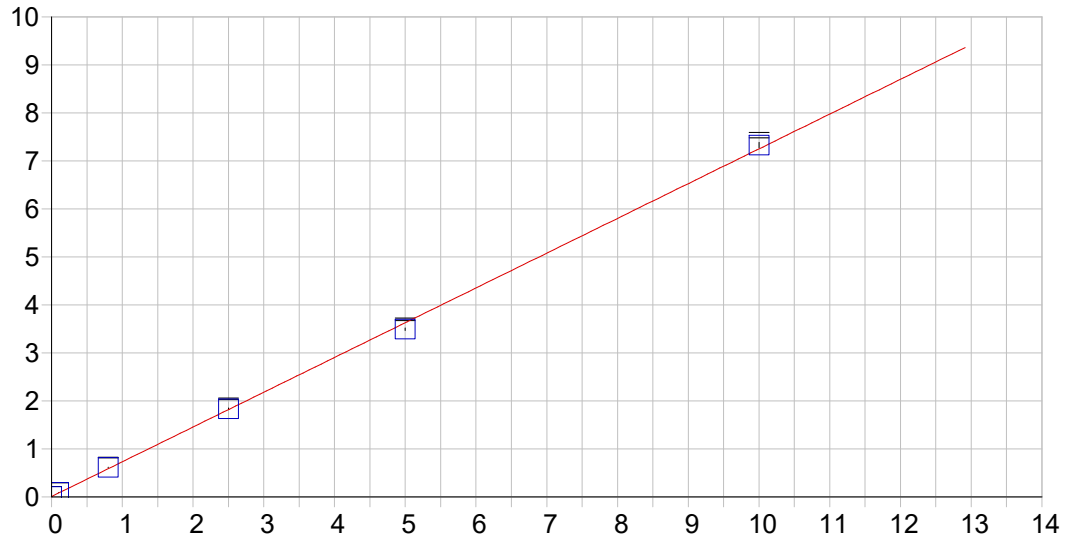
Cu 324.754 {104}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.043597	Re-Slope:	1.000000
A1 (Gain):	4.243075	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999659	Status:	OK.
Std Error of Est:	0.001300		
Predicted MDL:	0.000693		
Predicted MQL:	0.002309		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.04358	.002	1
S1	.02000	.02348	.003	17.4	.14328	.004	1
S2	.20000	.21326	.013	6.63	.94890	.008	1
S3	.62500	.65144	.026	4.23	2.8090	.022	1
S4	1.2500	1.2305	-.019	-1.56	5.2674	.045	1
S5	2.5000	2.4763	-.024	-.948	10.556	.092	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



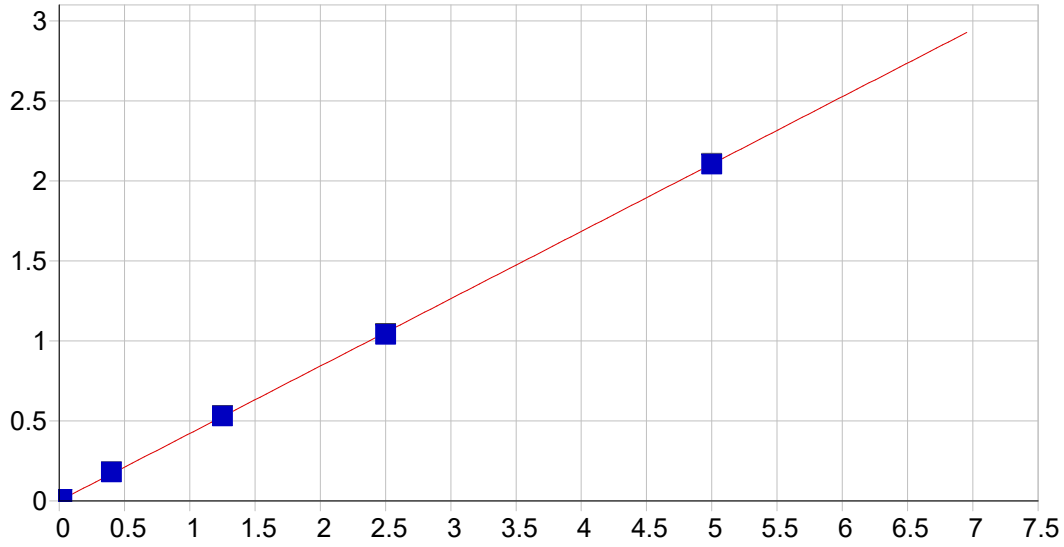
Fe 259.837 {130}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.007729	Re-Slope:	1.000000
A1 (Gain):	0.724344	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999649	Status:	OK.
Std Error of Est:	0.001007		
Predicted MDL:	0.001869		
Predicted MQL:	0.006229		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	.00771	.001	1
S1	.10000	.11576	.016	15.8	.09158	.002	1
S2	.80000	.83960	.040	4.95	.61589	.007	1
S3	2.5000	2.5246	.025	.985	1.8364	.018	1
S4	5.0000	4.8122	-.188	-3.76	3.4934	.024	1
S5	10.000	10.108	.108	1.08	7.3293	.059	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



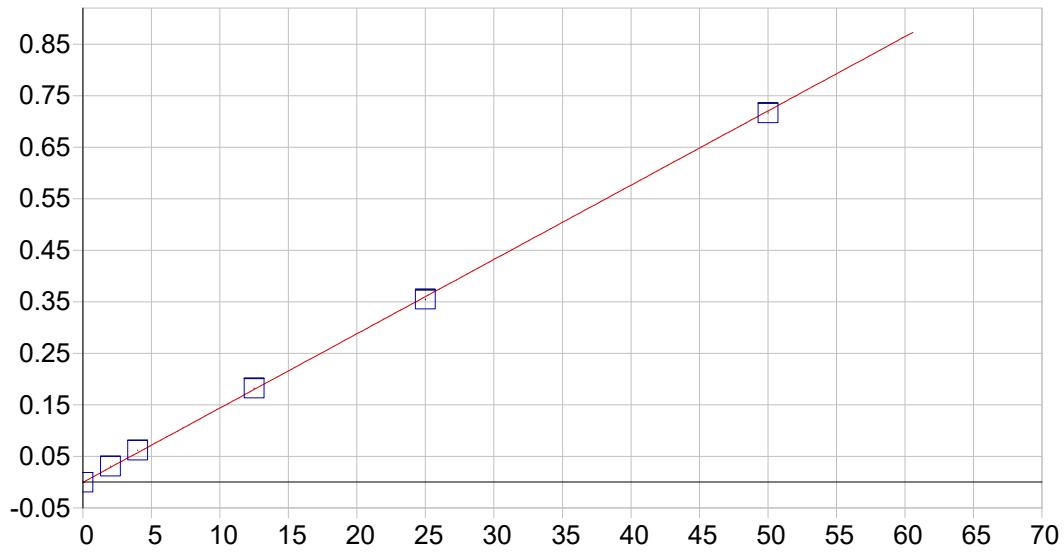
Mn 257.610 {131}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000543	Re-Slope:	1.000000
A1 (Gain):	0.420959	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999874	Status:	OK.
Std Error of Est:	0.000111		
Predicted MDL:	0.001264		
Predicted MQL:	0.004214		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00054	.000	1
S1	.02000	.02294	.003	14.7	.01021	.000	1
S2	.40000	.42425	.024	6.06	.17929	.000	1
S3	1.2500	1.2575	.008	.602	.53038	.002	1
S4	2.5000	2.4701	-.030	-1.20	1.0413	.003	1
S5	5.0000	4.9952	-.005	-.096	2.1052	.004	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



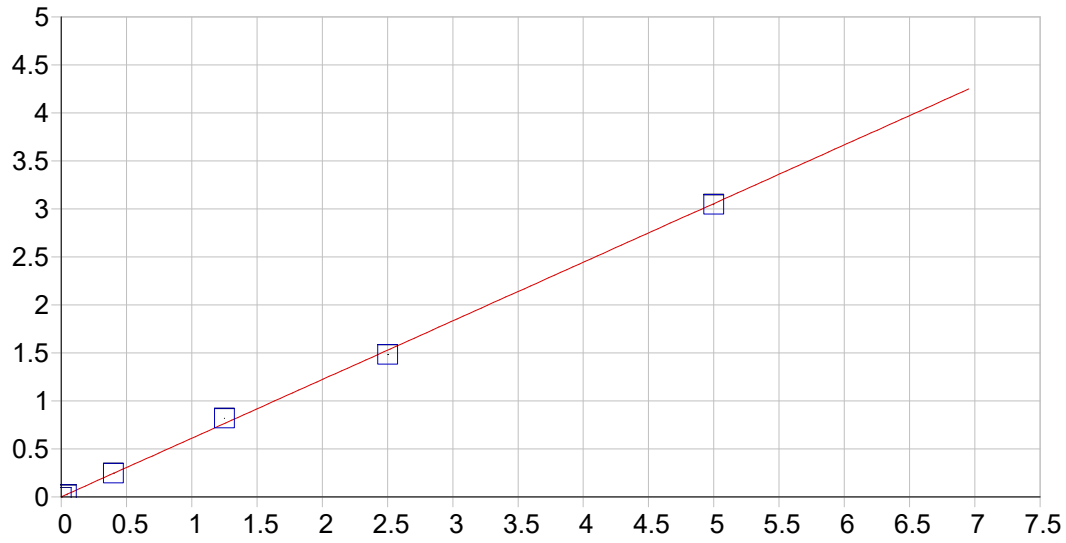
Mg 279.079 {121}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000310	Re-Slope:	1.000000
A1 (Gain):	0.014414	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999747	Status:	OK.
Std Error of Est:	0.000172		
Predicted MDL:	0.048000		
Predicted MQL:	0.160000		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00030	-.000	.000	-.00031	.000	1
S1	2.0000	2.1587	.159	7.94	.03081	.000	1
S2	4.0000	4.3179	.318	7.95	.06193	.000	1
S3	12.500	12.668	.168	1.35	.18229	.001	1
S4	25.000	24.623	-.377	-1.51	.35460	.001	1
S5	50.000	49.732	-.268	-.535	.71653	.000	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



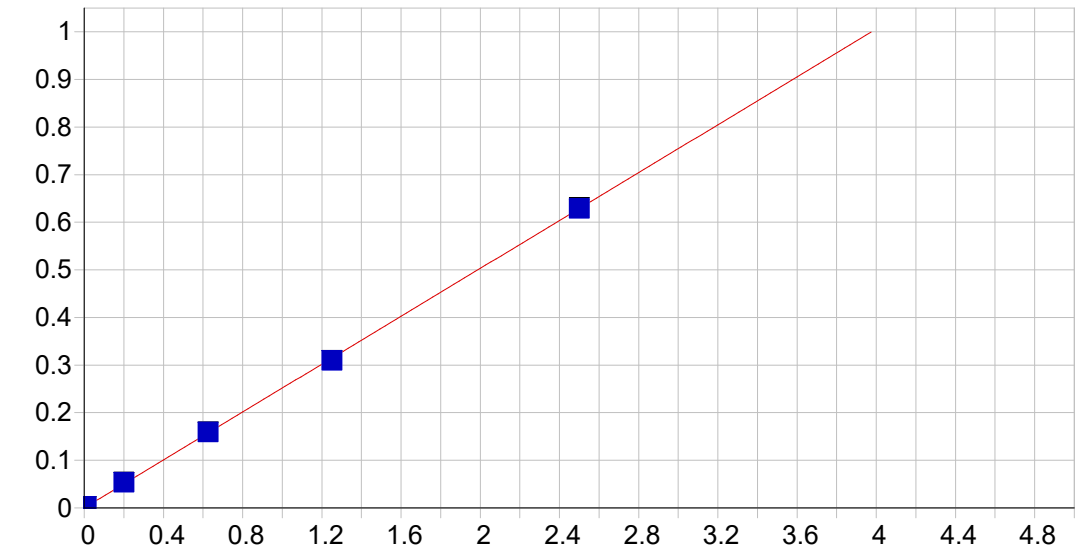
Ni 231.604 {446}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000589	Re-Slope:	1.000000
A1 (Gain):	0.611006	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999531	Status:	OK.
Std Error of Est:	0.000439		
Predicted MDL:	0.000494		
Predicted MQL:	0.001646		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00059	.000	1
S1	.04000	.03917	-.001	-2.08	.02452	.000	1
S2	.40000	.40182	.002	.455	.24610	.000	1
S3	1.2500	1.3392	.089	7.14	.81888	.001	1
S4	2.5000	2.4262	-.074	-2.95	1.4830	.000	1
S5	5.0000	4.9836	-.016	-.328	3.0456	.004	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



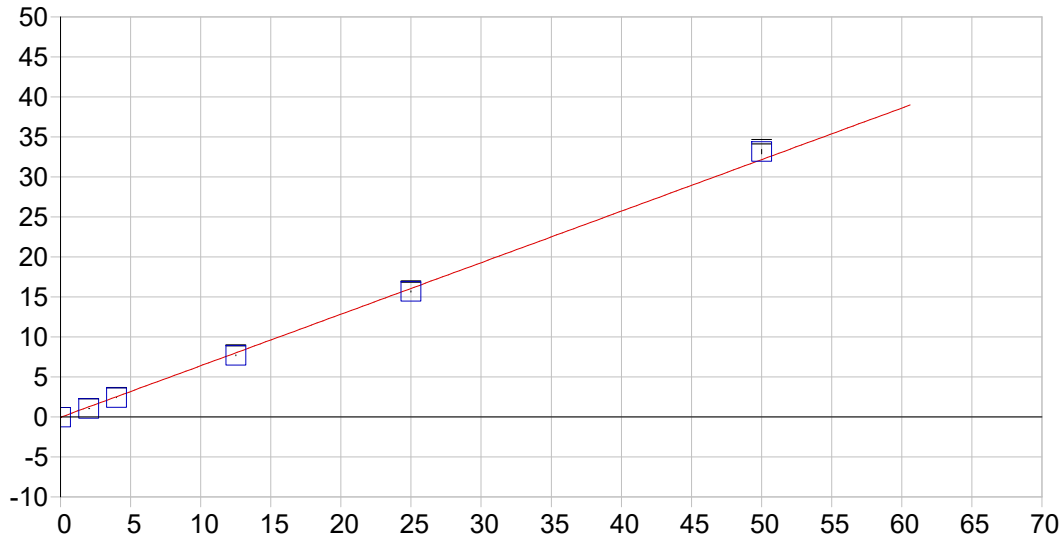
Ag 328.068 {103}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000374	Re-Slope:	1.000000
A1 (Gain):	0.251416	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999872	Status:	OK.
Std Error of Est:	0.000033		
Predicted MDL:	0.001076		
Predicted MQL:	0.003585		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00037	.000	1
S1	.01000	.00938	-.001	-6.18	.00273	.000	1
S2	.20000	.21215	.012	6.07	.05367	.000	1
S3	.62500	.63216	.007	1.15	.15918	.000	1
S4	1.2500	1.2302	-.020	-1.58	.30941	.000	1
S5	2.5000	2.5011	.001	.043	.62866	.002	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



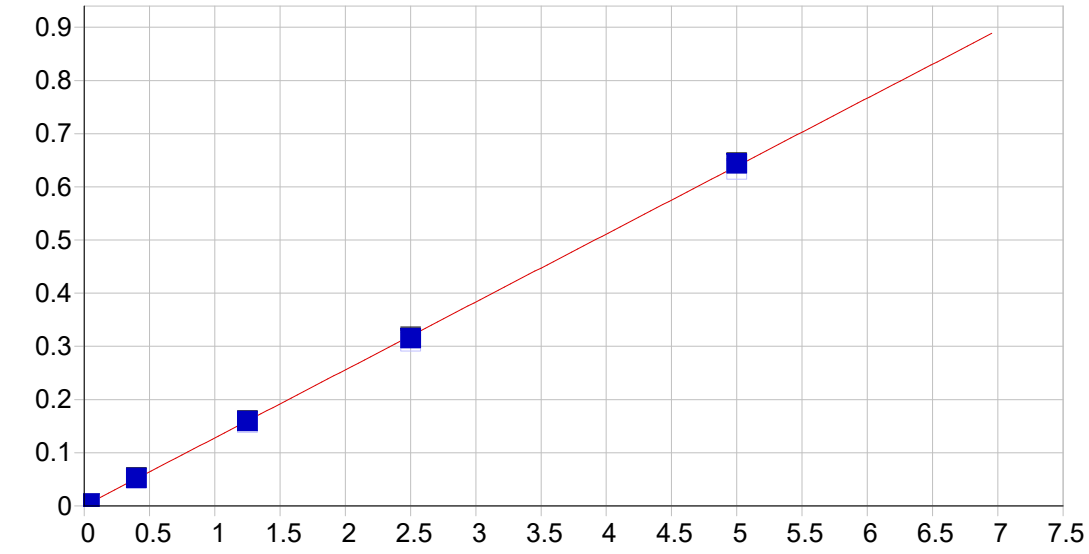
Na 818.326 { 41}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.044783	Re-Slope:	1.000000
A1 (Gain):	0.644079	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999260	Status:	OK.
Std Error of Est:	0.013118		
Predicted MDL:	0.013492		
Predicted MQL:	0.044973		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00047	.000	.000	-.04448	.006	1
S1	2.0000	1.6928	-.307	-15.4	1.0455	.009	1
S2	4.0000	3.8060	-.194	-4.85	2.4066	.023	1
S3	12.500	12.015	-.485	-3.88	7.6937	.065	1
S4	25.000	24.416	-.584	-2.34	15.681	.080	1
S5	50.000	51.571	1.57	3.14	33.171	.284	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



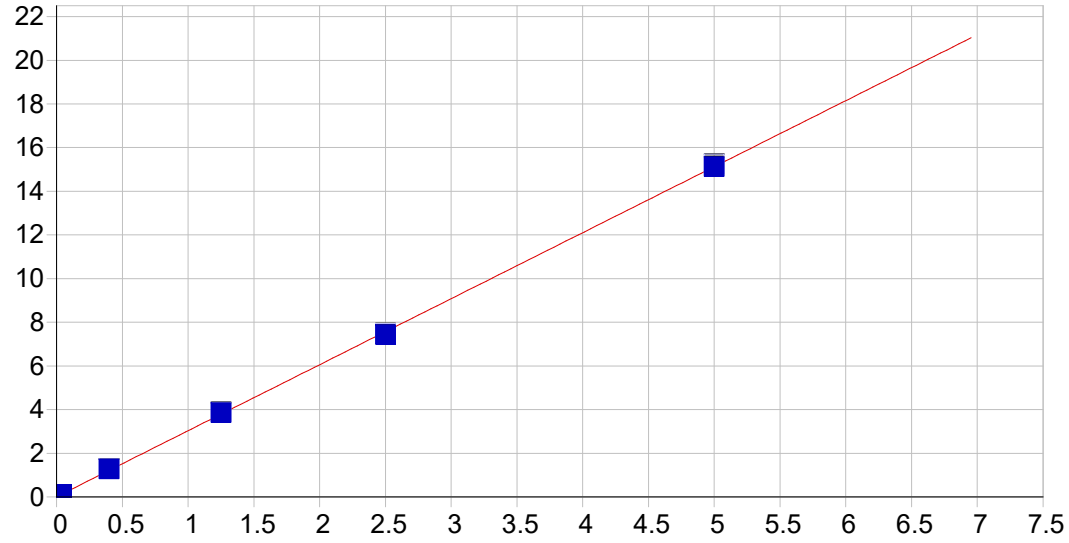
V 292.402 {115}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000165	Re-Slope:	1.000000
A1 (Gain):	0.127776	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999874	Status:	OK.
Std Error of Est:	0.000047		
Predicted MDL:	0.006421		
Predicted MQL:	0.021404		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00017	.000	1
S1	.04000	.03283	-.007	-17.9	.00414	.000	1
S2	.40000	.40896	.009	2.24	.05151	.000	1
S3	1.2500	1.2446	-.005	-.436	.15634	.001	1
S4	2.5000	2.4663	-.034	-1.35	.30960	.002	1
S5	5.0000	5.0371	.037	.743	.63239	.001	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



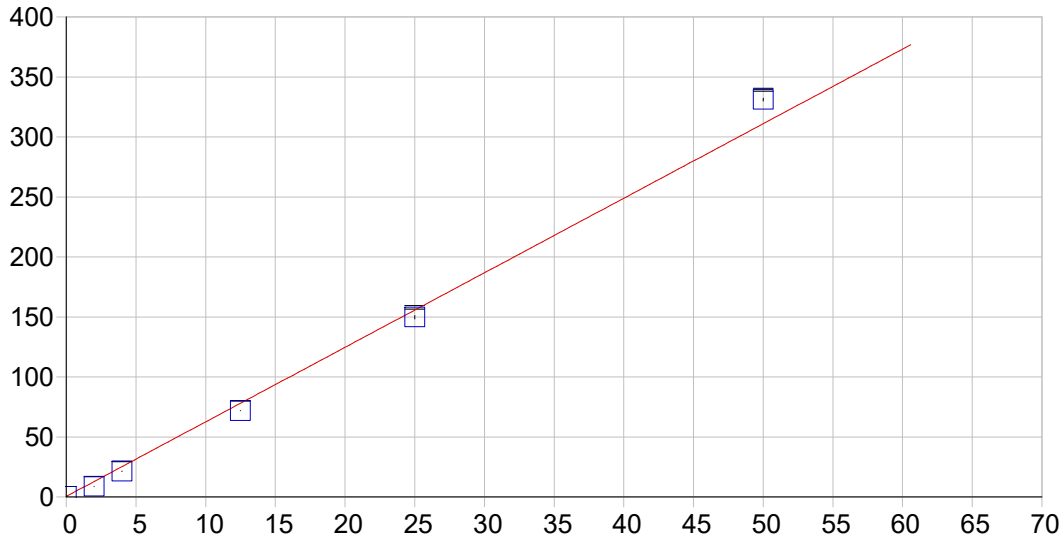
Zn 213.856 {158}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.007679	Re-Slope:	1.000000
A1 (Gain):	3.023844	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999889	Status:	OK.
Std Error of Est:	0.001066		
Predicted MDL:	0.000372		
Predicted MQL:	0.001239		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00767	.001	1
S1	.04000	.04004	.000	.092	.12962	.000	1
S2	.40000	.41942	.019	4.85	1.2847	.001	1
S3	1.2500	1.2726	.023	1.81	3.8833	.015	1
S4	2.5000	2.4575	-.042	-1.70	7.4938	.017	1
S5	5.0000	5.0004	.000	.009	15.238	.020	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



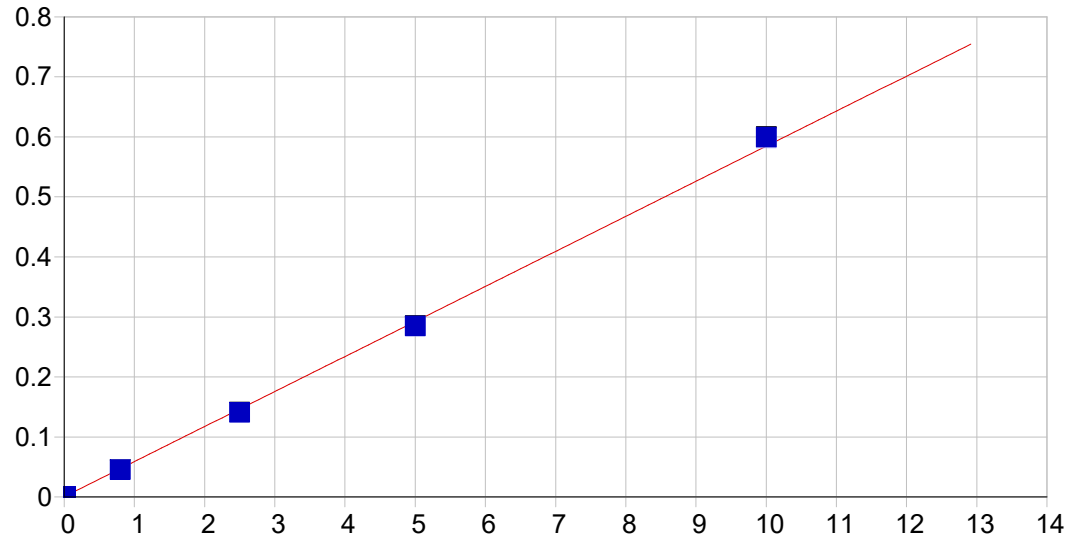
K 769.896 { 44}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.423926	Re-Slope:	1.000000
A1 (Gain):	6.211417	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.996571	Status:	OK.
Std Error of Est:	0.272816		
Predicted MDL:	0.001241		
Predicted MQL:	0.004138		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00108	.001	.000	.43063	.001	1
S1	2.0000	1.3410	-.659	-33.0	8.7534	.118	1
S2	4.0000	3.3741	-.626	-15.6	21.382	.214	1
S3	12.500	11.491	-1.01	-8.07	71.800	.172	1
S4	25.000	24.047	-.953	-3.81	149.79	1.49	1
S5	50.000	53.246	3.25	6.49	331.16	1.20	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



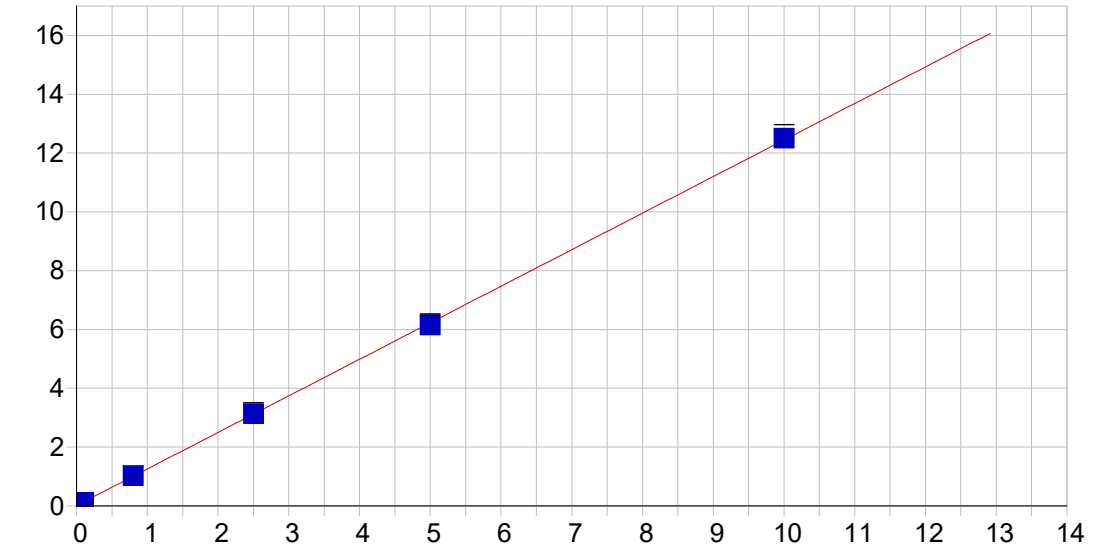
P 177.495 {490}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000384	Re-Slope:	1.000000
A1 (Gain):	0.058406	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999568	Status:	OK.
Std Error of Est:	0.000040		
Predicted MDL:	0.002385		
Predicted MQL:	0.007950		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00038	.000	1
S1	.02000	.01514	-.005	-24.3	.00126	.000	1
S2	.80000	.76754	-.032	-4.06	.04510	.000	1
S3	2.5000	2.4074	-.093	-3.70	.14065	.000	1
S4	5.0000	4.8728	-.127	-2.54	.28431	.001	1
S5	10.000	10.257	.257	2.57	.59810	.001	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



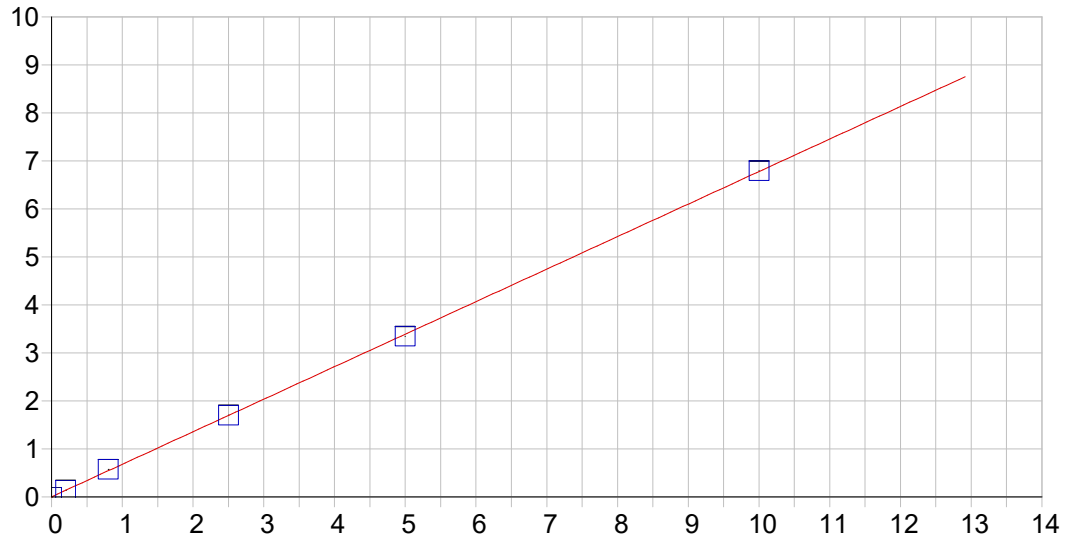
B 249.678 {135}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.012589	Re-Slope:	1.000000
A1 (Gain):	1.243212	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999947	Status:	OK.
Std Error of Est:	0.000670		
Predicted MDL:	0.001248		
Predicted MQL:	0.004160		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.01260	.002	1
S1	.10000	.09309	-.007	-6.91	.12817	.003	1
S2	.80000	.81491	.015	1.86	1.0249	.007	1
S3	2.5000	2.5120	.012	.480	3.1332	.030	1
S4	5.0000	4.9328	-.067	-1.34	6.1404	.047	1
S5	10.000	10.047	.047	.472	12.494	.128	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



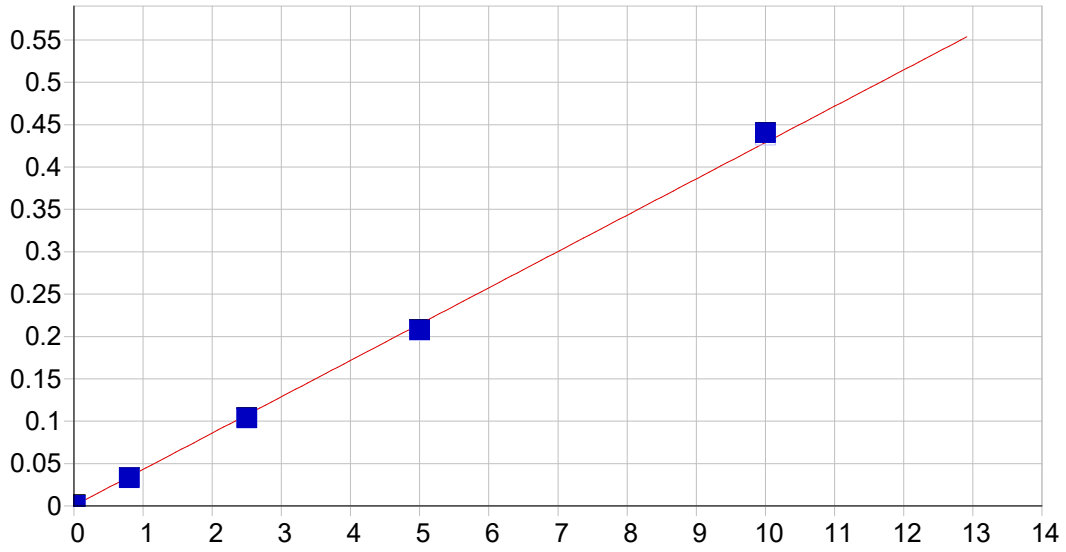
Mo 202.030 {467}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002276	Re-Slope:	1.000000
A1 (Gain):	0.677597	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999922	Status:	OK.
Std Error of Est:	0.000629		
Predicted MDL:	0.000419		
Predicted MQL:	0.001397		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00227	.000	1
S1	.20000	.19923	-.001	-.387	.13727	.000	1
S2	.80000	.83883	.039	4.85	.57066	.000	1
S3	2.5000	2.5076	.008	.304	1.7014	.003	1
S4	5.0000	4.9323	-.068	-1.35	3.3444	.004	1
S5	10.000	10.022	.022	.221	6.7932	.010	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



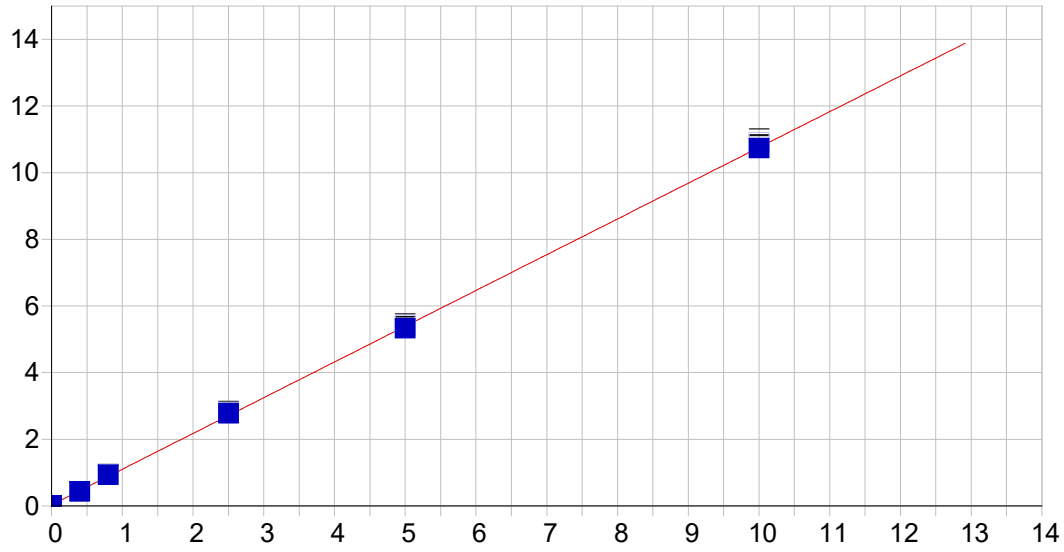
S 182.034 {485}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000247	Re-Slope:	1.000000
A1 (Gain):	0.042859	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999536	Status:	OK.
Std Error of Est:	0.000030		
Predicted MDL:	0.003207		
Predicted MQL:	0.010691		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00025	.000	1
S1	.02000	.02352	.004	17.6	.00119	.000	1
S2	.80000	.76779	-.032	-4.03	.03293	.000	1
S3	2.5000	2.4159	-.084	-3.37	.10308	.000	1
S4	5.0000	4.8447	-.155	-3.11	.20646	.000	1
S5	10.000	10.268	.268	2.68	.43749	.001	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



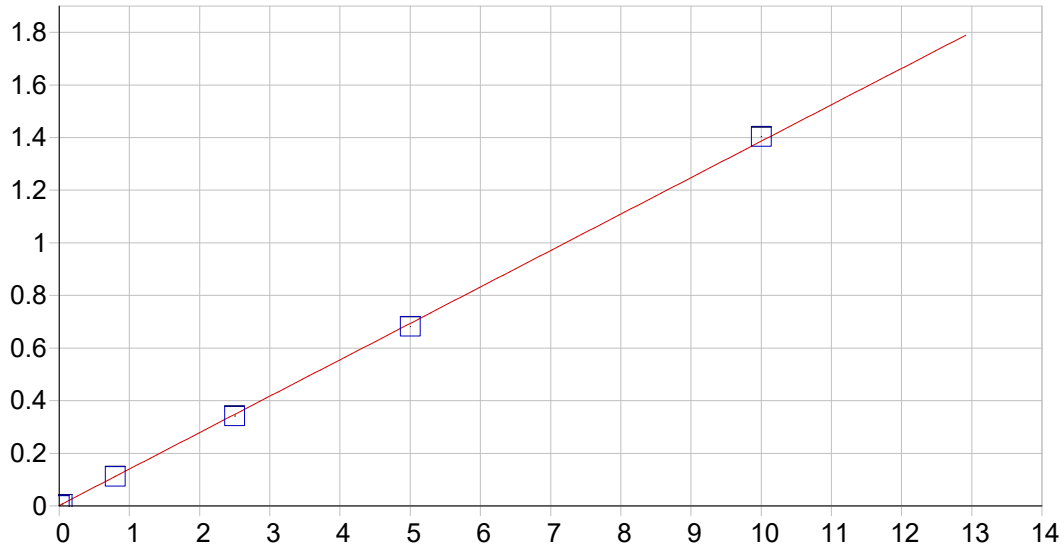
Si 251.611 {134}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.028129	Re-Slope:	1.000000
A1 (Gain):	1.072943	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999846	Status:	OK.
Std Error of Est:	0.002027		
Predicted MDL:	0.001313		
Predicted MQL:	0.004378		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.02813	.001	1
S1	.40000	.37292	-.027	-6.77	.43075	.005	1
S2	.80000	.84198	.042	5.25	.94540	.010	1
S3	2.5000	2.5569	.057	2.28	2.8149	.027	1
S4	5.0000	4.9455	-.055	-1.09	5.4211	.044	1
S5	10.000	9.9824	-.018	-.176	10.912	.102	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



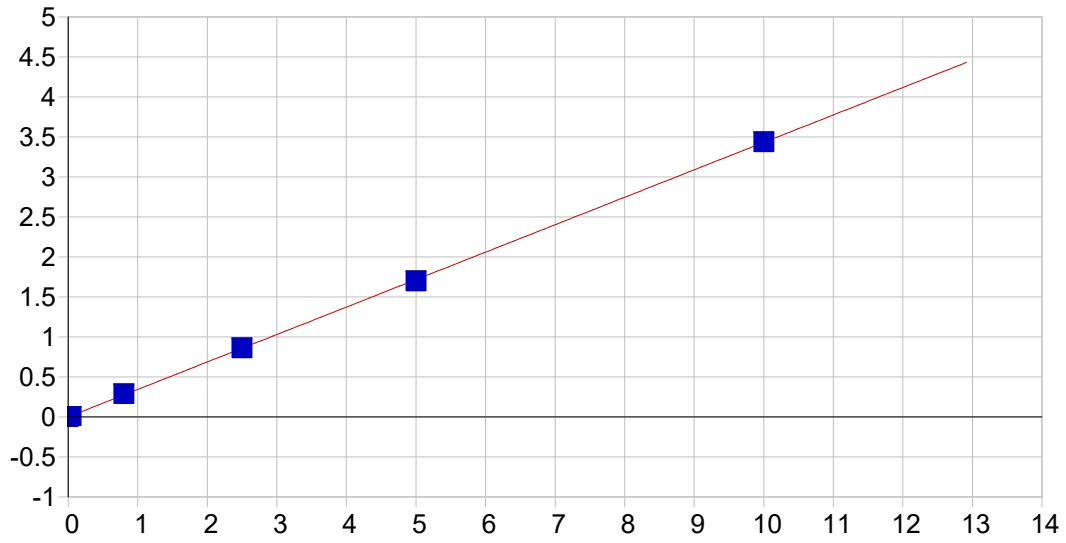
Sn 189.989 {478}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001620	Re-Slope:	1.000000
A1 (Gain):	0.138447	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999895	Status:	OK.
Std Error of Est:	0.000066		
Predicted MDL:	0.000940		
Predicted MQL:	0.003135		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00162	.000	1
S1	.04000	.03894	-.001	-2.65	.00701	.000	1
S2	.80000	.79857	-.001	-.179	.11218	.000	1
S3	2.5000	2.4571	-.043	-1.72	.34179	.001	1
S4	5.0000	4.9161	-.084	-1.68	.68224	.001	1
S5	10.000	10.129	.129	1.29	1.4040	.001	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



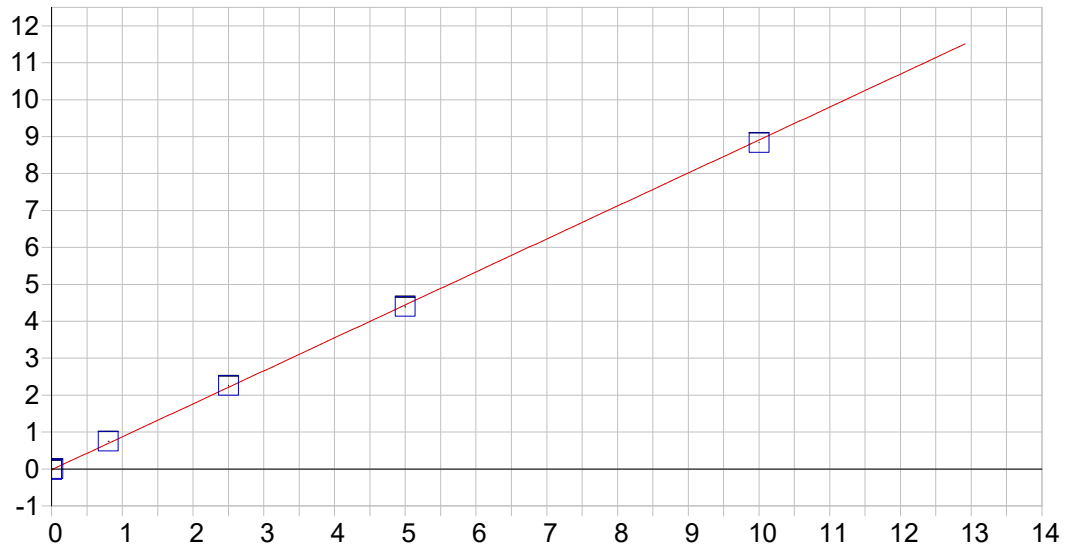
Ti 336.121 {100}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000386	Re-Slope:	1.000000
A1 (Gain):	0.343095	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999940	Status:	OK.
Std Error of Est:	0.000125		
Predicted MDL:	0.003354		
Predicted MQL:	0.011180		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00039	.001	1
S1	.04000	.03751	-.002	-6.22	.01324	.000	1
S2	.80000	.83365	.034	4.21	.28627	.003	1
S3	2.5000	2.5074	.007	.294	.86022	.002	1
S4	5.0000	4.9456	-.054	-1.09	1.6963	.002	1
S5	10.000	10.016	.016	.159	3.4351	.006	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377



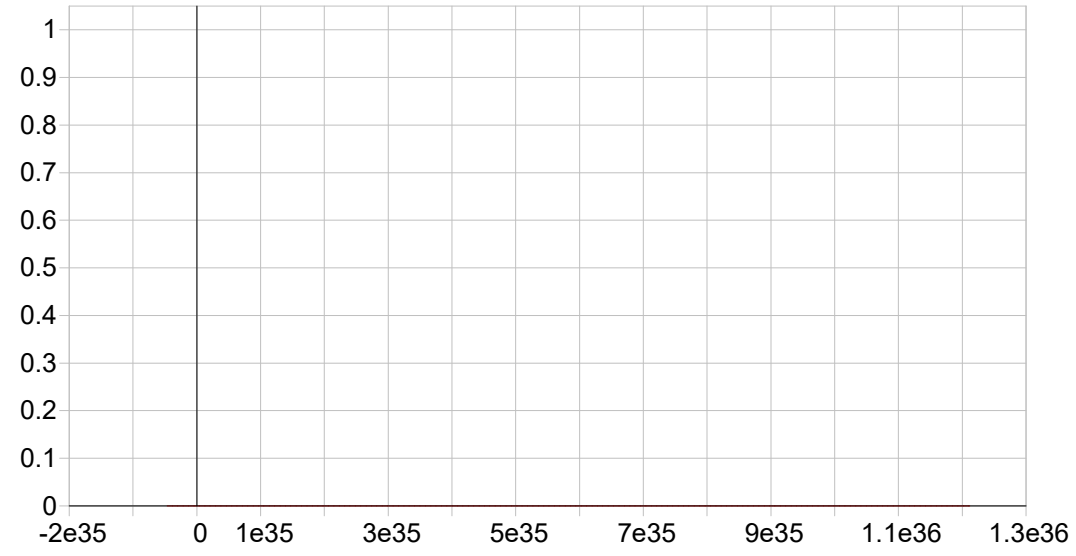
Li 670.784 { 50}

Date of Fit:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.022048	Re-Slope:	1.000000
A1 (Gain):	0.893005	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999658	Status:	OK.
Std Error of Est:	0.000548		
Predicted MDL:	0.005730		
Predicted MQL:	0.019101		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.02206	.004	1
S5	10.000	9.9207	-.079	-.793	8.8371	.006	1
S4	5.0000	4.9509	-.049	-.981	4.3992	.014	1
S3	2.5000	2.5532	.053	2.13	2.2579	.009	1
S2	.80000	.86525	.065	8.16	.75063	.001	1
S1	.02000	.02998	.010	49.9	.00472	.008	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377

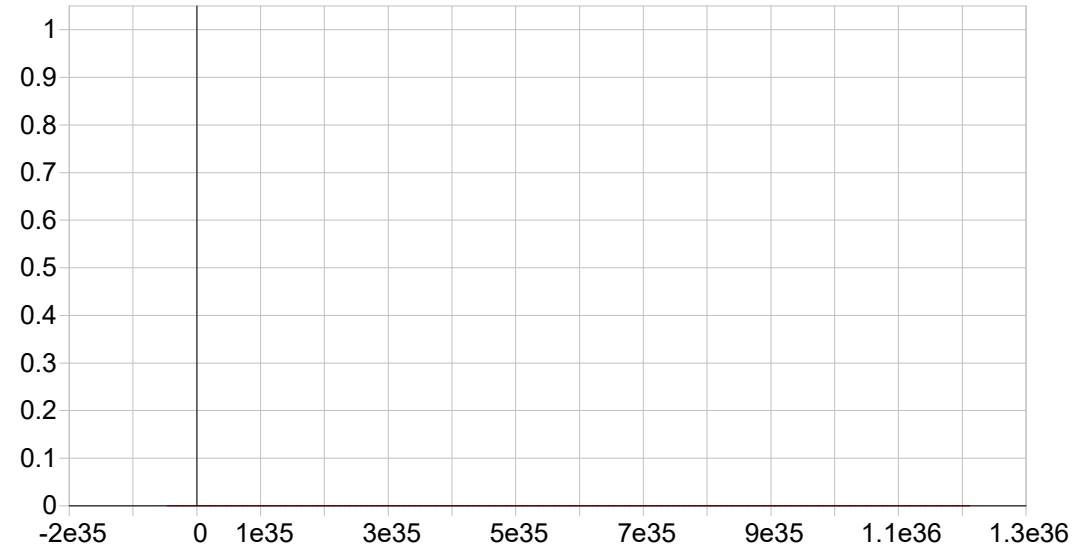


Y 224.306 {450}*

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}*

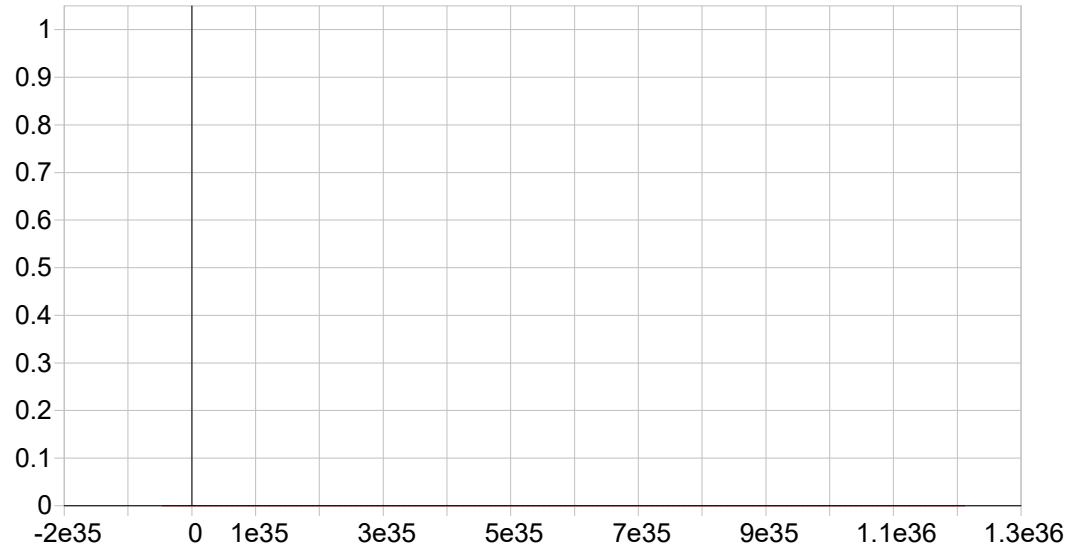
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:
On:
Inst Id :P5
LB :LB136377

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

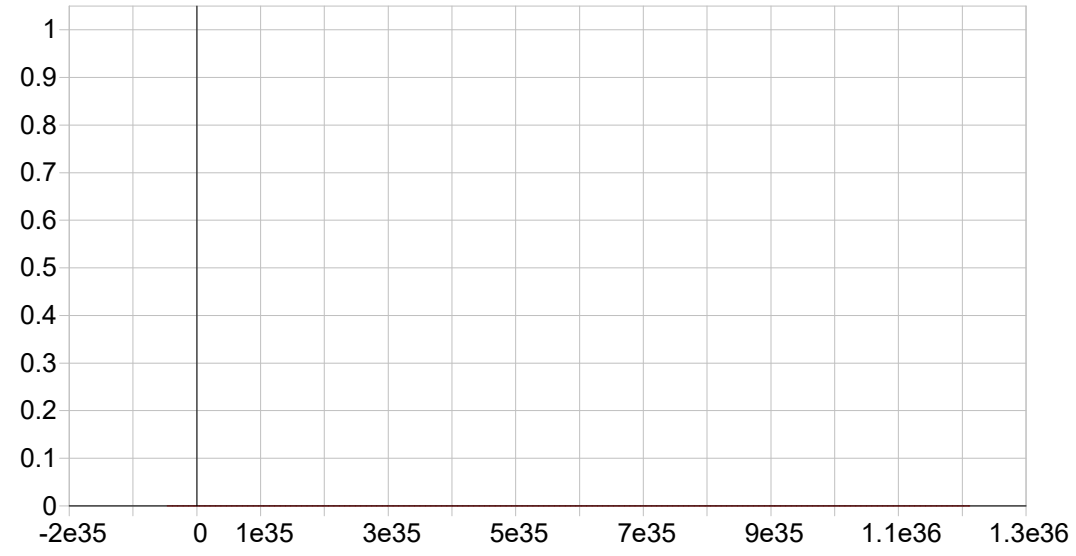


Y 371.030 { 91}*

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:
On:
Inst Id :P5
LB :LB136377

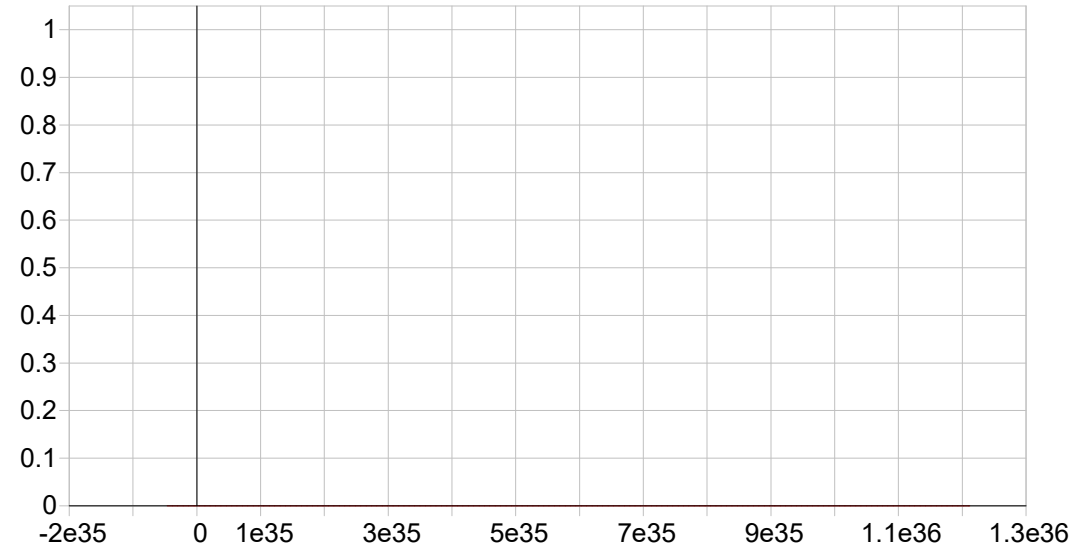


Y 224.306 {150}*

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}*

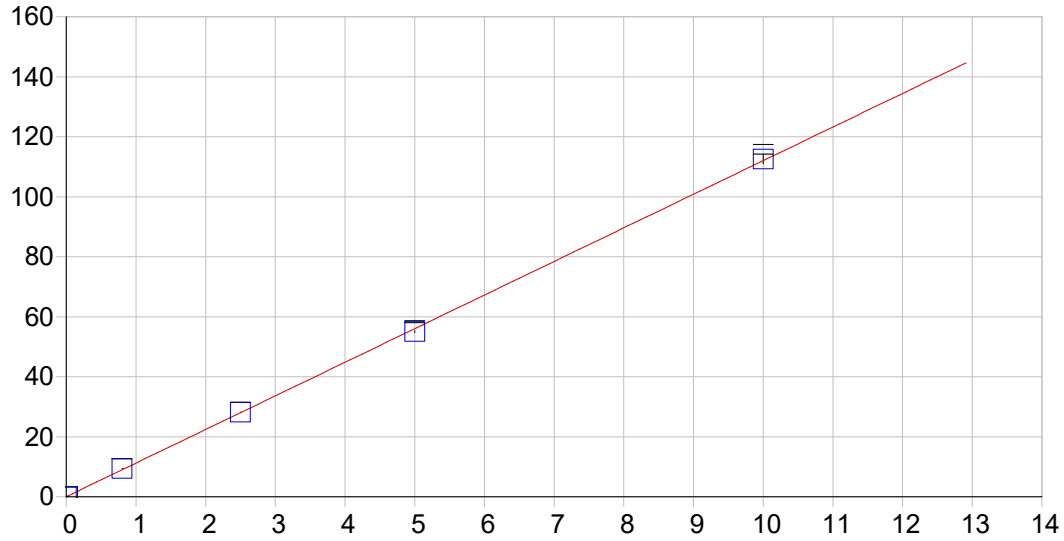
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:
On:
Inst Id :P5
LB :LB136377

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:	7/3/2025 18:28:55	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.029193	Re-Slope:	1.000000
A1 (Gain):	11.200525	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999915	Status:	OK.
Std Error of Est:	0.003419		
Predicted MDL:	0.000180		
Predicted MQL:	0.000600		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.02919	.002	1
S1	.02000	.01973	-.000	-1.37	.25012	.004	1
S2	.80000	.83354	.034	4.19	9.3653	.018	1
S3	2.5000	2.5094	.009	.375	28.135	.025	1
S4	5.0000	4.9141	-.086	-1.72	55.069	.304	1
S5	10.000	10.043	.043	.433	112.52	1.64	1

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: S0 Acquired: 7/3/2025 13:30:04 Type: Cal
Method: METHOD 6010D, 200.7 M(v26) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	**-.00003**	**-.00056**	**.00054**	**.00025**	**.00258**	**-.00088**	**.03325**	**.00129**
Stddev	.00004	.00022	.00031	.00015	.00039	.00101	.00429	.00033
%RSD	137.68	39.408	56.446	60.376	15.014	114.68	12.908	25.787
#1	.00002	-.00080	.00062	.00010	.00230	-.00045	.02892	.00128
#2	-.00007	-.00037	.00080	.00024	.00302	-.00016	.03750	.00095
#3	-.00004	-.00050	.00020	.00040	.00241	-.00203	.03333	.00162

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	**.00457**	**.00756**	**.00099**	**.00168**	**.04072**	**.00771**	**.00054**	**-.00031**
Stddev	.00007	.00083	.00009	.00013	.00090	.00129	.00036	.00028
%RSD	1.5545	11.038	8.7308	7.9779	2.2162	16.677	66.076	89.426
#1	.00456	.00796	.00098	.00167	.04092	.00920	.00019	-.00056
#2	.00465	.00812	.00108	.00181	.03973	.00687	.00053	-.00038
#3	.00451	.00660	.00091	.00155	.04151	.00708	.00090	-.00001

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	**.00059**	**.00037**	**-.00636**	**.00017**	**.00767**	**.57014**	**.00038**	**.01260**
Stddev	.00030	.00020	.00326	.00009	.00081	.00393	.00005	.00242
%RSD	50.688	53.505	51.262	56.469	10.616	.68859	13.673	19.203
#1	.00093	.00019	-.00487	.00027	.00689	.56566	.00041	.01463
#2	.00036	.00059	-.01010	.00011	.00851	.57297	.00032	.01324
#3	.00048	.00034	-.00411	.00011	.00762	.57180	.00042	.00992

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	**.00227**	**.00025**	**.02813**	**.00162**	**.00039**	**-.02206**	**.02919**
Stddev	.00026	.00005	.00102	.00008	.00136	.00395	.00217
%RSD	11.648	20.111	3.6216	4.6801	353.74	17.920	7.4391
#1	.00211	.00019	.02701	.00165	-.00040	-.02650	.02984
#2	.00213	.00028	.02838	.00153	-.00041	-.01894	.02677
#3	.00258	.00027	.02900	.00168	.00196	-.02074	.03096

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: S0 Acquired: 7/3/2025 13:30:04 Type: Cal
Method: METHOD 6010D, 200.7 M(v26) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	4059.1	41422.	3584.0	2568.6	5742.2
Stddev	3.7	356.	17.5	19.7	1.1
%RSD	.09010	.85907	.48943	.76770	.01873
#1	4061.0	41701.	3578.3	2581.3	5742.5
#2	4054.8	41022.	3570.1	2545.9	5743.1
#3	4061.3	41544.	3603.7	2578.7	5741.0

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: S1 Acquired: 7/3/2025 13:34:36 Type: Cal
Method: METHOD 6010D, 200.7 M(v26) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	**.00103**	**.00436**	**.00335**	**.00148**	**.01006**	**.00966**	**.46557**	**.06133**
Stddev	.00012	.00010	.00007	.00013	.00005	.00090	.00179	.00169
%RSD	11.865	2.2559	1.9518	9.0080	.48962	9.3660	.38365	2.7583
#1	.00090	.00444	.00328	.00152	.01002	.00862	.46351	.06015
#2	.00103	.00439	.00338	.00133	.01011	.01026	.46649	.06056
#3	.00115	.00425	.00341	.00159	.01004	.01011	.46670	.06327

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	**.02647**	**.21555**	**.00451**	**.03062**	**.08797**	**.09158**	**.01021**	**.03081**
Stddev	.00008	.00308	.00028	.00024	.00221	.00159	.00022	.00030
%RSD	.28744	1.4296	6.1313	.76808	2.5101	1.7374	2.1768	.97459
#1	.02655	.21454	.00451	.03089	.08713	.08975	.01008	.03047
#2	.02639	.21309	.00478	.03050	.08631	.09234	.01047	.03105
#3	.02647	.21900	.00423	.03048	.09048	.09265	.01009	.03089

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	**.02452**	**.00273**	**.31516**	**.00414**	**.12962**	**7.5344**	**.00126**	**.12817**
Stddev	.00002	.00033	.00592	.00050	.00034	.1005	.00008	.00286
%RSD	.09164	12.228	1.8781	12.003	.26315	1.3344	6.3468	2.2343
#1	.02455	.00309	.30949	.00456	.13001	7.5074	.00127	.12755
#2	.02451	.00243	.31469	.00359	.12948	7.4501	.00133	.12567
#3	.02451	.00267	.32130	.00428	.12938	7.6457	.00117	.13130

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	**.13727**	**.00119**	**.43075**	**.00701**	**.01324**	**.00472**	**.25012**
Stddev	.00034	.00009	.00536	.00005	.00035	.00834	.00394
%RSD	.25047	7.4650	1.2443	.66926	2.6706	176.67	1.5753
#1	.13756	.00117	.43295	.00702	.01300	.00523	.24672
#2	.13689	.00111	.42464	.00696	.01308	.01280	.25444
#3	.13736	.00129	.43466	.00705	.01365	-.00387	.24921

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: S1 Acquired: 7/3/2025 13:34:36 Type: Cal
Method: METHOD 6010D, 200.7 M(v26) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	4021.0	41419.	3587.5	2546.8	5628.5
Stddev	2.6	389.	28.2	30.1	2.8
%RSD	.06569	.94026	.78523	1.1829	.05000
#1	4022.1	41062.	3572.3	2515.7	5627.9
#2	4023.0	41360.	3620.0	2548.7	5631.5
#3	4018.1	41834.	3570.3	2575.9	5626.0

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: S2 Acquired: 7/3/2025 13:39:00 Type: Cal
Method: METHOD 6010D, 200.7 M(v26) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	**.03797**	**.10127**	**.21003**	**.05511**	**.12802**	**.13088**	**7.2988**	**.42197**
Stddev	.00011	.00016	.00011	.00034	.00021	.00127	.0382	.00415
%RSD	.29296	.15430	.05179	.61440	.16253	.97411	.52352	.98254
#1	.03801	.10111	.21016	.05493	.12778	.13164	7.3293	.42661
#2	.03785	.10142	.20997	.05490	.12816	.13160	7.3111	.42068
#3	.03806	.10127	.20997	.05550	.12812	.12941	7.2559	.41862

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	**1.5563**	**.44060**	**.05331**	**.40755**	**.46466**	**.61589**	**.17929**	**.06193**
Stddev	.0017	.00163	.00020	.00075	.00335	.00670	.00024	.00037
%RSD	.10880	.36937	.37392	.18331	.72172	1.0873	.13554	.59159
#1	1.5547	.44197	.05313	.40669	.46823	.62333	.17954	.06195
#2	1.5581	.44104	.05353	.40796	.46418	.61401	.17927	.06228
#3	1.5561	.43880	.05327	.40800	.46158	.61033	.17905	.06155

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	**.24610**	**.05367**	**.71197**	**.05151**	**1.2847**	**17.755**	**.04510**	**1.0249**
Stddev	.00004	.00023	.00774	.00045	.0009	.166	.00020	.0072
%RSD	.01539	.41947	1.0874	.87016	.06656	.93508	.43884	.69820
#1	.24608	.05373	.71150	.05159	1.2847	17.945	.04488	1.0309
#2	.24608	.05386	.71993	.05191	1.2856	17.679	.04525	1.0270
#3	.24615	.05342	.70447	.05103	1.2839	17.640	.04518	1.0170

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	**.57066**	**.03293**	**.94540**	**.11218**	**.28627**	**.75063**	**9.3653**
Stddev	.00047	.00002	.01009	.00044	.00257	.00145	.0184
%RSD	.08247	.06738	1.0677	.38897	.89672	.19381	.19678
#1	.57023	.03294	.95299	.11168	.28647	.75045	9.3791
#2	.57059	.03290	.94927	.11237	.28872	.75216	9.3723
#3	.57116	.03294	.93395	.11249	.28360	.74927	9.3444

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: S2 Acquired: 7/3/2025 13:39:00 Type: Cal
Method: METHOD 6010D, 200.7 M(v26) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	4047.7	41256.	3589.8	2552.5	5584.9
Stddev	4.6	397.	23.1	21.7	1.5
%RSD	.11242	.96126	.64431	.85199	.02648
#1	4045.7	41676.	3592.2	2576.8	5583.2
#2	4052.9	40888.	3565.5	2534.8	5586.0
#3	4044.5	41204.	3611.6	2546.1	5585.5

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: S3 Acquired: 7/3/2025 13:43:15 Type: Cal
Method: METHOD 6010D, 200.7 M(v26) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	**.11806**	**.30726**	**.63781**	**.16508**	**.37946**	**.39397**	**21.923**	**1.2727**
Stddev	.00006	.00029	.00104	.00072	.00006	.00180	.028	.0168
%RSD	.05056	.09447	.16318	.43495	.01579	.45676	.12581	1.3222
#1	.11800	.30713	.63661	.16591	.37952	.39189	21.891	1.2888
#2	.11806	.30759	.63842	.16470	.37940	.39504	21.934	1.2740
#3	.11812	.30706	.63840	.16464	.37945	.39497	21.943	1.2552

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	**4.7820**	**1.3082**	**.15821**	**1.2372**	**1.3399**	**1.8364**	**.53038**	**.18229**
Stddev	.0052	.0050	.00047	.0006	.0195	.0179	.00207	.00074
%RSD	.10950	.38252	.29826	.04470	1.4579	.97184	.39043	.40624
#1	4.7775	1.3065	.15782	1.2371	1.3604	1.8521	.52822	.18174
#2	4.7878	1.3043	.15808	1.2378	1.3378	1.8401	.53059	.18313
#3	4.7808	1.3139	.15874	1.2368	1.3215	1.8170	.53234	.18199

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	**.81888**	**.15918**	**2.2507**	**.15634**	**3.8833**	**59.417**	**.14065**	**3.1332**
Stddev	.00073	.00035	.0297	.00087	.0150	.519	.00022	.0296
%RSD	.08871	.22265	1.3182	.55348	.38662	.87423	.15480	.94567
#1	.81815	.15889	2.2811	.15539	3.8821	59.915	.14043	3.1633
#2	.81887	.15907	2.2494	.15653	3.8989	59.458	.14068	3.1323
#3	.81961	.15957	2.2218	.15709	3.8690	58.878	.14086	3.1040

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	**1.7014**	**.10308**	**2.8149**	**.34179**	**.86022**	**2.2579**	**28.135**
Stddev	.0027	.00041	.0268	.00051	.00226	.0093	.025
%RSD	.15944	.40189	.95051	.14966	.26281	.41040	.08752
#1	1.6984	.10262	2.8356	.34120	.85907	2.2572	28.123
#2	1.7022	.10343	2.8245	.34208	.85876	2.2491	28.120
#3	1.7036	.10317	2.7847	.34210	.86282	2.2676	28.164

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: S3 Acquired: 7/3/2025 13:43:15 Type: Cal
Method: METHOD 6010D, 200.7 M(v26) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	3988.3	40950.	3573.9	2537.1	5341.8
Stddev	10.0	184.	22.6	11.7	10.7
%RSD	.25179	.44926	.63168	.45947	.20043
#1	3998.3	41139.	3553.9	2550.5	5353.7
#2	3988.5	40939.	3569.3	2531.8	5338.9
#3	3978.2	40772.	3598.4	2529.0	5332.9

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: S4 Acquired: 7/3/2025 13:47:32 Type: Cal
Method: METHOD 6010D, 200.7 M(v26) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	**.23905**	**.60493**	**1.2655**	**.32480**	**.74564**	**.77309**	**42.952**	**2.4587**
Stddev	.00025	.00087	.0004	.00019	.00076	.00538	.118	.0204
%RSD	.10645	.14300	.03412	.05741	.10229	.69586	.27517	.82987
#1	.23878	.60432	1.2650	.32495	.74613	.76735	42.888	2.4351
#2	.23928	.60592	1.2657	.32459	.74476	.77392	42.880	2.4706
#3	.23910	.60454	1.2658	.32485	.74603	.77801	43.089	2.4703

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	**9.5606**	**2.5428**	**.31046**	**2.4541**	**2.4335**	**3.4934**	**1.0413**	**.35460**
Stddev	.0064	.0048	.00104	.0022	.0191	.0242	.0030	.00097
%RSD	.06672	.18867	.33518	.09156	.78282	.69195	.28838	.27454
#1	9.5533	2.5420	.31167	2.4542	2.4130	3.4694	1.0414	.35370
#2	9.5634	2.5385	.30987	2.4519	2.4366	3.4930	1.0382	.35447
#3	9.5651	2.5480	.30986	2.4563	2.4508	3.5177	1.0442	.35564

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	**1.4830**	**.30941**	**4.4546**	**.30960**	**7.4938**	**120.59**	**.28431**	**6.1404**
Stddev	.0003	.00002	.0217	.00220	.0170	.94	.00059	.0468
%RSD	.01791	.00637	.48688	.71089	.22654	.78056	.20850	.76281
#1	1.4833	.30939	4.4323	.30783	7.5105	120.28	.28362	6.0979
#2	1.4829	.30943	4.4559	.30891	7.4766	119.84	.28465	6.1325
#3	1.4828	.30941	4.4756	.31207	7.4944	121.64	.28466	6.1906

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	**3.3444**	**.20646**	**5.4211**	**.68224**	**1.6963**	**4.3992**	**55.069**
Stddev	.0040	.00013	.0444	.00053	.0019	.0140	.304
%RSD	.12014	.06267	.81927	.07800	.11081	.31785	.55204
#1	3.3442	.20631	5.3807	.68281	1.6974	4.4033	55.418
#2	3.3404	.20654	5.4139	.68176	1.6942	4.3836	54.862
#3	3.3485	.20654	5.4687	.68216	1.6974	4.4106	54.928

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: S4 Acquired: 7/3/2025 13:47:32 Type: Cal
Method: METHOD 6010D, 200.7 M(v26) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	3929.4	40179.	3506.6	2489.9	5135.7
Stddev	7.4	207.	15.5	15.2	6.0
%RSD	.18729	.51534	.44329	.61191	.11630
#1	3931.2	39946.	3515.9	2472.3	5141.7
#2	3935.7	40343.	3515.3	2497.7	5135.7
#3	3921.3	40248.	3488.7	2499.6	5129.7

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: S5 Acquired: 7/3/2025 13:51:56 Type: Cal
Method: METHOD 6010D, 200.7 M(v26) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	**.50220**	**1.2248**	**2.6242**	**.66344**	**1.5208**	**1.5743**	**87.217**	**4.9349**
Stddev	.00068	.0018	.0013	.00132	.0048	.0013	.682	.0297
%RSD	.13444	.14876	.04949	.19857	.31730	.08346	.78164	.60197
#1	.50147	1.2228	2.6232	.66199	1.5169	1.5748	87.999	4.9511
#2	.50232	1.2250	2.6237	.66456	1.5192	1.5752	86.744	4.9530
#3	.50281	1.2265	2.6257	.66377	1.5262	1.5728	86.908	4.9006

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	**19.632**	**5.1504**	**.61653**	**5.0529**	**4.8428**	**7.3293**	**2.1052**	**.71653**
Stddev	.013	.0054	.00160	.0084	.0158	.0589	.0039	.00030
%RSD	.06706	.10476	.25965	.16677	.32703	.80308	.18466	.04175
#1	19.617	5.1470	.61835	5.0447	4.8604	7.3516	2.1061	.71642
#2	19.640	5.1566	.61533	5.0525	4.8299	7.3738	2.1009	.71630
#3	19.640	5.1476	.61592	5.0615	4.8380	7.2626	2.1086	.71687

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	**3.0456**	**.62866**	**9.2840**	**.63239**	**15.238**	**258.81**	**.59810**	**12.494**
Stddev	.0038	.00179	.0538	.00138	.020	2.32	.00084	.128
%RSD	.12615	.28397	.57968	.21854	.13347	.89471	.13994	1.0226
#1	3.0423	.63043	9.3428	.63127	15.228	256.22	.59880	12.506
#2	3.0446	.62686	9.2719	.63196	15.225	259.55	.59834	12.615
#3	3.0498	.62869	9.2373	.63393	15.262	260.67	.59717	12.360

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	**6.7932**	**.43749**	**10.912**	**1.4040**	**3.4351**	**8.8371**	**112.52**
Stddev	.0096	.00064	.102	.0015	.0062	.0064	1.64
%RSD	.14129	.14712	.93264	.10623	.18176	.07254	1.4535
#1	6.7838	.43676	10.911	1.4024	3.4314	8.8307	114.05
#2	6.7927	.43776	11.014	1.4042	3.4316	8.8372	112.70
#3	6.8030	.43795	10.811	1.4053	3.4423	8.8435	110.80

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: S5 Acquired: 7/3/2025 13:51:56 Type: Cal
Method: METHOD 6010D, 200.7 M(v26) Mode: IR Corr. Factor: 1.000000
User: Janvi 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	**3832.7**	**39494.**	**3443.1**	**2436.0**	**4900.5**
Stddev	6.8	112.	22.3	12.3	3.8
%RSD	.17625	.28451	.64800	.50676	.07703
#1	3836.2	39432.	3436.0	2438.2	4899.3
#2	3837.0	39624.	3425.3	2447.0	4904.8
#3	3824.9	39427.	3468.1	2422.7	4897.5

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: ICV01 Acquired: 7/3/2025 14:50:30 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.657262**	**3.776229**	**3.960848**	**3.883100**	**4.006574**	**7.710051**
Stddev	.003445	.006739	.005159	.003283	.001484	.070931
%RSD	.0942070	.1784575	.1302444	.0845434	.0370406	.9199750
#1	3.656740	3.781993	3.955568	3.880165	4.007483	7.706271
#2	3.654108	3.768820	3.961100	3.882491	4.004862	7.782796
#3	3.660939	3.777875	3.965877	3.886645	4.007378	7.641087

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.706481**	**.2083819**	**1.933331**	**19.92761**	**.7817980**	**1.897012**
Stddev	.039721	.0021426	.002564	.06373	.0025711	.002160
%RSD	.5154222	1.028191	.1326323	.3198021	.3288684	.1138835
#1	7.679101	.2074925	1.931337	19.90778	.7822459	1.896723
#2	7.752038	.2108259	1.932433	19.99890	.7841157	1.895012
#3	7.688303	.2068273	1.936224	19.87615	.7790324	1.899303

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9449893**	**4.104262**	**1.990499**	**19.93428**	**1.974068**	**.9721677**
Stddev	.0078441	.035609	.008664	.03036	.002232	.0037784
%RSD	.8300689	.8676185	.4352833	.1523192	.1130559	.3886550
#1	.9437280	4.097747	1.984841	19.96064	1.972699	.9737776
#2	.9533876	4.142679	2.000473	19.94112	1.972861	.9748744
#3	.9378524	4.072360	1.986182	19.90108	1.976643	.9678510

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.47763**	**1.947539**	**1.963967**	**18.05957**	F **.0188465**	F **4.455520**
Stddev	.20184	.012150	.005564	.28424	.0012288	.052077
%RSD	1.036247	.6238437	.2833158	1.573879	6.519780	1.168822
#1	19.34084	1.934966	1.968068	18.04845	.0181333	4.428442
#2	19.70944	1.959216	1.966200	18.34920	.0181408	4.515557
#3	19.38263	1.948434	1.957633	17.78106	.0202653	4.422560

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: ICV01 Acquired: 7/3/2025 14:50:30 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.936359	F .0450172	4.238046	3.849693	3.891022	F .0255259
Stddev	.003714	.0009545	.042314	.009360	.019939	.0065470
%RSD	.0943622	2.120343	.9984396	.2431408	.5124424	25.64832
#1	3.932075	.0444634	4.212620	3.842556	3.881048	.0231619
#2	3.938670	.0461194	4.286893	3.846233	3.913981	.0204893
#3	3.938333	.0444689	4.214626	3.860291	3.878039	.0329265

Elem	Sr4077
Units	ppm
Avg	F -.000462
Stddev	.000079
%RSD	17.00836
#1	-.000440
#2	-.000550
#3	-.000397

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3870.709	39467.61	3177.682	2447.685	5225.711
Stddev	3.860	180.69	34.980	6.930	7.563
%RSD	.0997112	.4578271	1.100818	.2831406	.1447259
#1	3875.165	39506.06	3193.402	2444.084	5233.703
#2	3868.426	39270.79	3137.600	2443.295	5224.762
#3	3868.535	39625.98	3202.045	2455.674	5218.667

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: LLICV01 Acquired: 7/3/2025 14:55:55 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0184684**	**.0405558**	**.0108718**	**.0217652**	**.0510290**	**.1069191**
Stddev	.0006197	.0015730	.0015035	.0022229	.0014264	.0053665
%RSD	3.355568	3.878690	13.82924	10.21291	2.795176	5.019170
#1	.0183571	.0388714	.0113263	.0192638	.0524492	.1007572
#2	.0191362	.0419867	.0120956	.0225173	.0510413	.1105670
#3	.0179118	.0408092	.0091935	.0235144	.0495966	.1094333

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0975504**	**.0070670**	**.0051791**	**2.054781**	**.0106987**	**.0280156**
Stddev	.0012777	.0002732	.0000306	.005390	.0006716	.0000683
%RSD	1.309752	3.865489	.5902683	.2622978	6.277775	.2437988
#1	.0988920	.0068567	.0051459	2.057479	.0103382	.0279905
#2	.0963480	.0069685	.0051854	2.058289	.0102843	.0279634
#3	.0974114	.0073757	.0052061	2.048576	.0114737	.0280929

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0202138**	**.0987433**	**.0220419**	**2.217988**	**.0375707**	**.0108005**
Stddev	.0004189	.0018806	.0006076	.015631	.0006603	.0001729
%RSD	2.072334	1.904570	2.756403	.7047459	1.757343	1.600969
#1	.0200288	.1000988	.0213507	2.213564	.0380863	.0109114
#2	.0199192	.0965963	.0222835	2.205046	.0368265	.0106013
#3	.0206933	.0995348	.0224915	2.235354	.0377992	.0108890

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.257216**	**.0350533**	**.0403757**	**1.843929**	**.0169740**	**.1141235**
Stddev	.012405	.0072248	.0001529	.008337	.0010840	.0013862
%RSD	.5495828	20.61094	.3786904	.4521062	6.386353	1.214686
#1	2.246923	.0329537	.0402031	1.846926	.0168246	.1145558
#2	2.253735	.0291108	.0404299	1.834508	.0181250	.1125726
#3	2.270990	.0430953	.0404942	1.850353	.0159724	.1152421

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: LLICV01 Acquired: 7/3/2025 14:55:55 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2016652	.0217469	.4470604	.0367336	.0400800	F .0494910
Stddev	.0000639	.0033854	.0051546	.0006178	.0043359	.0051441
%RSD	.0316968	15.56715	1.153004	1.681759	10.81820	10.39402
#1	.2016094	.0198754	.4495634	.0360510	.0366027	.0552996
#2	.2016514	.0197104	.4411322	.0372543	.0386992	.0455112
#3	.2017350	.0256548	.4504856	.0368955	.0449382	.0476622

Elem	Sr4077
Units	ppm
Avg	.0192271
Stddev	.0000529
%RSD	.2751294
#1	.0192807
#2	.0191749
#3	.0192258

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3957.582	40887.52	3199.920	2503.067	5709.331
Stddev	3.563	232.42	19.117	22.744	6.602
%RSD	.0900304	.5684271	.5974207	.9086639	.1156323
#1	3957.651	41152.49	3207.151	2529.326	5707.029
#2	3961.110	40718.16	3214.367	2490.279	5716.775
#3	3953.985	40791.90	3178.242	2489.594	5704.188

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: ICB01 Acquired: 7/3/2025 15:32:36 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi 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	**-.000071**	**.0016446**	**-.000921**	**-.000237**	**-.009776**	**.0181820**	**.0000218**
Stddev	.001270	.0007723	.001260	.000730	.001476	.0076208	.0003256
%RSD	1797.498	46.95698	136.8009	307.6252	15.10225	41.91405	1492.186
#1	-.001516	.0017523	.000533	.000543	-.011479	.0244664	-.000318
#2	.000865	.0023573	-.001613	-.000903	-.008853	.0203742	.000053
#3	.000439	.0008241	-.001684	-.000352	-.008997	.0097053	.000330

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000172**	**-.000266**	**.0161062**	**-.001256**	**-.000573**	**.0041005**	**.0125074**
Stddev	.0000675	.000020	.0144898	.000317	.000253	.0005856	.0006322
%RSD	391.1961	7.537281	89.96468	25.20472	44.18831	14.28178	5.054577
#1	.0000132	-.000287	.0185134	-.001621	-.000780	.0034496	.0130397
#2	.0000867	-.000247	.0005634	-.001054	-.000649	.0042672	.0118086
#3	-.000048	-.000263	.0292416	-.001093	-.000291	.0045847	.0126739

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010224**	**.0213606**	**-.000362**	**.0002017**	**-.011649**	**.0021319**	**-.000289**
Stddev	.0005133	.0527217	.000288	.0002447	.035714	.0079916	.000467
%RSD	50.20921	246.8174	79.49229	121.3259	306.5849	374.8562	161.7112
#1	.0009838	.0641875	-.000290	.0004673	-.013311	.0059078	-.000046
#2	.0005294	-.037522	-.000118	-.000015	-.046502	-.007048	-.000828
#3	.0015539	.037417	-.000680	.000152	.024867	.007536	.000007

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0073330**	**.0004829**	**-.006916**	**-.000455**	**.0002628**	**.0020111**	**-.007864**
Stddev	.0011078	.0003229	.000798	.000382	.0029239	.0012834	.000727
%RSD	15.10739	66.86528	11.53835	83.85133	1112.457	63.81434	9.245278
#1	.0060541	.0001222	-.007549	-.000638	-.000944	.0034691	-.007229
#2	.0079967	.0007450	-.007179	-.000017	-.001864	.0015116	-.007705
#3	.0079482	.0005815	-.006020	-.000711	.003597	.0010526	-.008657

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: ICB01 Acquired: 7/3/2025 15:32:36 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0005041	.0199307	-.000524
Stddev	.0013531	.0053096	.000389
%RSD	268.4079	26.64048	74.32927
#1	.0020308	.0140612	-.000563
#2	-.000547	.0243996	-.000116
#3	.000029	.0213314	-.000892

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4042.647	41961.09	3214.947	2580.337	5944.024
Stddev	9.430	257.97	2.499	16.204	15.760
%RSD	.2332529	.6147736	.0777379	.6279931	.2651324
#1	4032.581	41955.24	3216.939	2583.783	5926.032
#2	4051.275	42221.94	3215.758	2594.542	5950.659
#3	4044.085	41706.10	3212.142	2562.688	5955.381

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: CRI01 Acquired: 7/3/2025 15:37:06 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0167803**	**.0392153**	**.0110995**	**.0197238**	**.0404033**	**.0893920**
Stddev	.0016677	.0004486	.0007778	.0028640	.0013697	.0148222
%RSD	9.938291	1.143955	7.007880	14.52034	3.390139	16.58113
#1	.0186831	.0389386	.0112952	.0165049	.0403133	.0722817
#2	.0155725	.0397329	.0102425	.0219902	.0390808	.0975900
#3	.0160854	.0389744	.0117608	.0206762	.0418159	.0983041

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0917694**	**.0063027**	**.0048144**	**1.964433**	**.0077116**	**.0267990**
Stddev	.0004165	.0000927	.0000363	.026083	.0003784	.0001099
%RSD	.4538011	1.470553	.7542580	1.327767	4.907270	.4101836
#1	.0917351	.0063673	.0047823	1.983760	.0073021	.0267970
#2	.0913711	.0061965	.0048538	1.934765	.0077842	.0266901
#3	.0922019	.0063443	.0048072	1.974774	.0080484	.0269100

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0255950**	**.1116350**	**.0203658**	**2.079390**	**.0351872**	**.0101511**
Stddev	.0010951	.0034651	.0003772	.016265	.0005935	.0011049
%RSD	4.278356	3.103926	1.852387	.7821825	1.686585	10.88427
#1	.0268075	.1110399	.0201174	2.084599	.0355563	.0111386
#2	.0246781	.1085061	.0201800	2.092413	.0355026	.0089578
#3	.0252994	.1153591	.0207999	2.061160	.0345026	.0103570

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.773333**	**.0304481**	**.0384478**	**1.554353**	**.0162251**	**.1050652**
Stddev	.038614	.0021121	.0002051	.017542	.0010597	.0010656
%RSD	2.177484	6.936783	.5335671	1.128579	6.531376	1.014204
#1	1.736249	.0327373	.0385871	1.551003	.0158913	.1062310
#2	1.770437	.0300320	.0382122	1.538728	.0174115	.1041415
#3	1.813314	.0285750	.0385440	1.573329	.0153725	.1048230

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: CRI01 Acquired: 7/3/2025 15:37:06 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1941211	.0231294	.4348622	.0410284	.0394654	F .0379446
Stddev	.0007311	.0021518	.0034536	.0002520	.0014354	.0032022
%RSD	.3766202	9.303526	.7941729	.6142181	3.637086	8.439003
#1	.1949256	.0255360	.4384657	.0410314	.0409229	.0416371
#2	.1939403	.0213905	.4315813	.0412789	.0380532	.0359319
#3	.1934974	.0224619	.4345397	.0407749	.0394201	.0362648

Elem	Sr4077
Units	ppm
Avg	.0180262
Stddev	.0001237
%RSD	.6859351
#1	.0178845
#2	.0180824
#3	.0181118

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4049.433	41999.12	3226.686	2584.547	5894.697
Stddev	5.165	237.88	6.477	6.691	12.923
%RSD	.1275541	.5664034	.2007197	.2588729	.2192392
#1	4049.484	42128.94	3224.512	2589.828	5897.489
#2	4054.572	41724.57	3233.970	2577.023	5905.997
#3	4044.242	42143.86	3221.576	2586.790	5880.606

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: ICSA01 Acquired: 7/3/2025 15:41:29 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0090254	.0151017	.0010685	.0016636	.0098761	267.2292
Stddev	.0015839	.0030045	.0007416	.0033982	.0052401	2.1431
%RSD	17.54973	19.89521	69.40536	204.2667	53.05829	.8019856
#1	.0095039	.0119526	.0018416	-.001920	.0039359	268.8625
#2	.0072574	.0154154	.0010010	.002070	.0138433	268.0225
#3	.0103150	.0179371	.0003630	.004840	.0118490	264.8025

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0058093	-.002562	-.000617	266.0944	.0532574	.0210393
Stddev	.0005480	.000122	.000100	2.4800	.0002329	.0004822
%RSD	9.433860	4.768106	16.25717	.9319879	.4373488	2.291780
#1	.0058721	-.002578	-.000724	268.1234	.0535027	.0211555
#2	.0063233	-.002433	-.000600	266.8299	.0532303	.0205096
#3	.0052326	-.002675	-.000526	263.3298	.0530392	.0214527

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0141902	109.1510	.0043906	273.2567	.0136248	.0040009
Stddev	.0010695	2.4116	.0002486	2.9034	.0005653	.0020899
%RSD	7.537156	2.209436	5.662211	1.062513	4.149058	52.23637
#1	.0142908	111.3706	.0041037	276.1145	.0134235	.0063215
#2	.0130739	109.4976	.0045401	273.3459	.0131876	.0022672
#3	.0152058	106.5849	.0045282	270.3098	.0142631	.0034138

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.332988	.0035262	.0126114	.0491432	.0117015	.0206375
Stddev	.033516	.0021794	.0001069	.0002204	.0042365	.0022107
%RSD	10.06529	61.80647	.8475510	.4484235	36.20470	10.71198
#1	-.322600	.0019030	.0126150	.0491292	.0080188	.0222901
#2	-.305895	.0026724	.0127164	.0493702	.0163314	.0214960
#3	-.370468	.0060033	.0125027	.0489301	.0107543	.0181263

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: ICSA01 Acquired: 7/3/2025 15:41:29 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.006484	F .0244845	-.005119	.0056597	-.001798	F .0334199
Stddev	.000360	.0048387	.001013	.0004179	.001225	.0079386
%RSD	5.547031	19.76217	19.78071	7.384328	68.13016	23.75402
#1	-.006674	.0247423	-.005675	.0054466	-.000944	.0347987
#2	-.006709	.0195221	-.003950	.0061412	-.003202	.0248822
#3	-.006070	.0291891	-.005732	.0053913	-.001249	.0405787

Elem	Sr4077
Units	ppm
Avg	F .1072308
Stddev	.0014384
%RSD	1.341365
#1	.1085131
#2	.1075037
#3	.1056755

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3641.157	35679.46	3092.317	2262.870	4594.893
Stddev	16.807	459.57	33.684	13.510	25.191
%RSD	.4615826	1.288055	1.089266	.5970287	.5482354
#1	3638.551	35149.82	3055.003	2247.277	4595.450
#2	3659.114	35915.66	3101.470	2270.268	4619.801
#3	3625.805	35972.89	3120.478	2271.066	4569.429

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: ICSAB01 Acquired: 7/3/2025 15:45:59 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1035297**	**.0975095**	**.0445655**	**.0501653**	**.5893464**	**237.3220**
Stddev	.0016386	.0015574	.0020036	.0008381	.0018869	.0863
%RSD	1.582734	1.597150	4.495930	1.670607	.3201736	.0363839
#1	.1052519	.0978293	.0444691	.0509361	.5908361	237.3741
#2	.1019900	.0988821	.0426119	.0502864	.5872246	237.2223
#3	.1033472	.0958170	.0466157	.0492732	.5899787	237.3696

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4906287**	**.5191397**	**.9462660**	**237.6077**	**.5358210**	**.4850236**
Stddev	.0031506	.0033321	.0020737	.4410	.0011512	.0006927
%RSD	.6421506	.6418596	.2191415	.1855886	.2148465	.1428143
#1	.4931137	.5206797	.9454710	238.1104	.5364160	.4852050
#2	.4870852	.5153161	.9447074	237.2859	.5365529	.4842583
#3	.4916873	.5214233	.9486195	237.4269	.5344941	.4856076

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4533494**	**100.7747**	**.4857713**	**246.5517**	**.9402064**	**.2299577**
Stddev	.0056993	1.5560	.0012526	.3595	.0021607	.0015099
%RSD	1.257151	1.544000	.2578524	.1458095	.2298140	.6565923
#1	.4568231	101.9821	.4871581	246.9657	.9391902	.2313684
#2	.4467719	99.0188	.4854333	246.3189	.9387410	.2301396
#3	.4564531	101.3232	.4847223	246.3704	.9426878	.2283651

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.305472**	**.4733397**	**1.005725**	**.0352711**	F **.0210631**	F **1.173298**
Stddev	.050433	.0093283	.001273	.0007721	.0039029	.010131
%RSD	16.50978	1.970749	.1266068	2.189152	18.52969	.8634832
#1	-.268047	.4629652	1.004574	.0344266	.0166685	1.178878
#2	-.362823	.4760181	1.005507	.0359409	.0223950	1.161604
#3	-.285544	.4810359	1.007093	.0354457	.0241256	1.179413

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: ICSAB01 Acquired: 7/3/2025 15:45:59 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.029096	F .0323527	1.072143	1.044473	1.025512	F .0319636
Stddev	.003172	.0027129	.009149	.002804	.001661	.0051856
%RSD	.3082143	8.385287	.8533544	.2684266	.1619275	16.22357
#1	1.027755	.0339788	1.079345	1.043748	1.023724	.0369158
#2	1.026815	.0292210	1.061848	1.042103	1.025807	.0265724
#3	1.032718	.0338584	1.075236	1.047568	1.027006	.0324026

Elem	Sr4077
Units	ppm
Avg	F .0964589
Stddev	.0001146
%RSD	.1187727
#1	.0965370
#2	.0965122
#3	.0963274

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3663.846	36297.04	3081.556	2296.461	4644.049
Stddev	10.284	87.44	9.690	8.962	11.783
%RSD	.2806940	.2408911	.3144510	.3902465	.2537282
#1	3659.478	36298.92	3072.572	2302.293	4643.404
#2	3675.593	36208.67	3091.824	2286.142	4656.142
#3	3656.466	36383.52	3080.271	2300.947	4632.602

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: ICSA01DLX20 Acquired: 7/3/2025 15:50:20 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi 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	.0024108	.0035830	.0026807	-.004302	-.005911	11.92821	-.000828
Stddev	.0006041	.0004523	.0006194	.003198	.002513	.03429	.000771
%RSD	25.05657	12.62340	23.10453	74.34620	42.51817	.2874891	93.14650
#1	.0017228	.0032371	.0033813	-.005050	-.003712	11.96686	-.001634
#2	.0026555	.0040948	.0024545	-.000796	-.008651	11.91632	-.000098
#3	.0028541	.0034172	.0022062	-.007059	-.005370	11.90144	-.000750

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000154	-.000353	12.12495	.0028394	.0047509	.0063861	5.602053
Stddev	.000171	.000054	.08754	.0008709	.0002746	.0019652	.041559
%RSD	110.8373	15.22917	.7219647	30.67218	5.779498	30.77248	.7418499
#1	-.000349	-.000336	12.21622	.0035878	.0045053	.0084093	5.639700
#2	-.000029	-.000310	12.11694	.0030470	.0047002	.0044846	5.557458
#3	-.000084	-.000413	12.04169	.0018835	.0050474	.0062643	5.609002

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008035	12.78072	.0005801	-.000020	.0130713	-.001165	.0113973
Stddev	.0014714	.10844	.0001730	.001373	.0481895	.006157	.0004914
%RSD	183.1236	.8484414	29.82534	7031.521	368.6655	528.5619	4.311553
#1	-.000886	12.87642	.0005887	-.001605	-.041489	.002049	.0119409
#2	.001489	12.80281	.0007487	.000727	.030886	.002720	.0109845
#3	.001807	12.66294	.0004030	.000819	.049817	-.008264	.0112667

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0615341	-.002413	-.002757	-.002034	.0052559	.0064995	.0004191
Stddev	.0015145	.001834	.000994	.000264	.0018150	.0015012	.0007970
%RSD	2.461309	76.00365	36.05204	12.97948	34.53166	23.09752	190.1663
#1	.0602233	-.002198	-.003757	-.002281	.0041014	.0079682	-.000499
#2	.0611869	-.004344	-.001769	-.002064	.0043184	.0049677	.000824
#3	.0631921	-.000695	-.002746	-.001756	.0073479	.0065627	.000932

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: ICSA01DLX20 Acquired: 7/3/2025 15:50:20 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0018219	.0226283	.0039620
Stddev	.0012344	.0019075	.0001587
%RSD	67.75471	8.429585	4.006443
#1	.0018334	.0242185	.0041245
#2	.0005818	.0231529	.0038074
#3	.0030505	.0205134	.0039540

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3994.588	40812.02	3191.316	2527.777	5590.158
Stddev	4.634	189.19	20.202	9.644	9.324
%RSD	.1160134	.4635755	.6330410	.3815310	.1667936
#1	3997.835	40844.60	3168.276	2519.463	5588.404
#2	3996.649	40608.64	3205.997	2538.350	5600.234
#3	3989.281	40982.80	3199.676	2525.518	5581.835

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: ICSAB01DLX20 Acquired: 7/3/2025 15:54:46 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi 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	.0034325	.0070382	.0043714	-.002073	.0212770	11.83613	.0231911
Stddev	.0019662	.0016734	.0018653	.000904	.0010128	.07264	.0002888
%RSD	57.28348	23.77542	42.67142	43.59773	4.760281	.6137462	1.245386
#1	.0016100	.0068330	.0024253	-.001943	.0217714	11.76422	.0234900
#2	.0055163	.0088047	.0061438	-.001241	.0201119	11.90948	.0231697
#3	.0031711	.0054769	.0045450	-.003034	.0219476	11.83468	.0229136

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0260920	.0441028	12.06588	.0269552	.0265613	.0274845	5.496609
Stddev	.0002601	.0001686	.00730	.0005755	.0004032	.0008548	.018799
%RSD	.9969065	.3821713	.0604818	2.135033	1.517874	3.110181	.3420109
#1	.0258532	.0439129	12.06641	.0263301	.0264505	.0266282	5.488011
#2	.0260536	.0441607	12.07290	.0270726	.0262251	.0274873	5.518169
#3	.0263692	.0442347	12.05834	.0274630	.0270083	.0283379	5.483645

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0237619	12.54551	.0448352	.0111677	.0247182	.0237288	.0487045
Stddev	.0008171	.05403	.0004047	.0002806	.0272150	.0048266	.0004746
%RSD	3.438747	.4306689	.9026146	2.512307	110.1014	20.34076	.9744243
#1	.0233600	12.48314	.0444246	.0113831	.0560782	.0188383	.0483776
#2	.0247021	12.57781	.0448472	.0112696	.0072866	.0284889	.0492488
#3	.0232235	12.57560	.0452337	.0108504	.0107897	.0238591	.0484870

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0562308	.0000854	.0541615	.0495629	.0073605	.0618181	.0503521
Stddev	.0013831	.0005923	.0008584	.0003105	.0014692	.0017364	.0006900
%RSD	2.459619	693.6125	1.584969	.6265527	19.96046	2.808925	1.370348
#1	.0547241	-.000517	.0536962	.0492273	.0085455	.0609675	.0505593
#2	.0565256	.000668	.0536362	.0496214	.0078194	.0638158	.0509148
#3	.0574427	.000105	.0551521	.0498401	.0057167	.0606710	.0495823

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: ICSAB01DLX20 Acquired: 7/3/2025 15:54:46 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0533963	.0255985	.0039691
Stddev	.0012980	.0008101	.0001091
%RSD	2.430855	3.164477	2.748533
#1	.0519185	.0252832	.0040594
#2	.0543514	.0249936	.0039999
#3	.0539191	.0265188	.0038478

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3984.680	40463.68	3209.106	2507.958	5580.068
Stddev	10.672	91.01	14.935	5.588	13.617
%RSD	.2678143	.2249162	.4653908	.2228269	.2440316
#1	3980.965	40372.86	3208.255	2501.525	5581.603
#2	3996.712	40463.31	3194.615	2511.613	5592.852
#3	3976.362	40554.88	3224.449	2510.736	5565.748

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: CCV01 Acquired: 7/3/2025 16:06:34 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.647857**	**4.882015**	**4.687008**	**4.902508**	**4.846732**	**9.514834**
Stddev	.003934	.005166	.003705	.008653	.002098	.047264
%RSD	.0846496	.1058249	.0790465	.1765007	.0432946	.4967399
#1	4.651981	4.877085	4.688211	4.893876	4.847382	9.472965
#2	4.644144	4.881572	4.682851	4.902467	4.844385	9.566085
#3	4.647446	4.887389	4.689961	4.911182	4.848428	9.505451

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.557359**	**.2587612**	**2.328262**	**24.84982**	**.9584817**	**2.319827**
Stddev	.043150	.0028374	.003375	.05910	.0012184	.003731
%RSD	.4514863	1.096533	.1449604	.2378450	.1271123	.1608108
#1	9.568875	.2565561	2.324692	24.82173	.9598134	2.316087
#2	9.593583	.2619623	2.328694	24.91773	.9582085	2.319845
#3	9.509619	.2577651	2.331400	24.80999	.9574231	2.323548

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.150500**	**5.163927**	**2.462075**	**24.49135**	**2.315279**	**1.252000**
Stddev	.022129	.066499	.009138	.09833	.002993	.002480
%RSD	1.923397	1.287769	.3711572	.4014774	.1292917	.1981033
#1	1.143047	5.104466	2.457306	24.50575	2.314694	1.250887
#2	1.175393	5.235734	2.472611	24.58168	2.312621	1.254841
#3	1.133060	5.151579	2.456308	24.38661	2.318521	1.250271

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.87340**	**2.413042**	**2.432437**	**25.25603**	**4.828997**	F **5.649632**
Stddev	.23506	.018068	.014299	.13079	.004593	.050624
%RSD	.9450193	.7487681	.5878587	.5178642	.0951027	.8960605
#1	24.62690	2.433734	2.446320	25.11645	4.827103	5.598546
#2	25.09504	2.405009	2.417755	25.27587	4.834233	5.699781
#3	24.89826	2.400384	2.433236	25.37576	4.825653	5.650568

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: CCV01 Acquired: 7/3/2025 16:06:34 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.833277**	**4.706075**	F **5.726447**	**4.738747**	**4.793804**	**5.173534**
Stddev	.003894	.006983	.044829	.008889	.011420	.002347
%RSD	.0805581	.1483792	.7828359	.1875904	.2382310	.0453685
#1	4.834718	4.706068	5.679644	4.729970	4.794734	5.174522
#2	4.828868	4.699096	5.768999	4.738525	4.804731	5.175226
#3	4.836245	4.713062	5.730698	4.747745	4.781947	5.170855

Elem	Sr4077
Units	ppm
Avg	**4.774287**
Stddev	.018389
%RSD	.3851621
#1	4.777147
#2	4.791078
#3	4.754636

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3887.301**	**39533.63**	**3121.166**	**2444.226**	**5181.081**
Stddev	13.786	290.97	14.821	21.610	12.540
%RSD	.3546409	.7359987	.4748648	.8841429	.2420433
#1	3871.466	39315.44	3138.085	2424.305	5166.603
#2	3893.808	39863.99	3110.472	2467.201	5188.081
#3	3896.629	39421.47	3114.943	2441.172	5188.559

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: CCB01 Acquired: 7/3/2025 16:10:49 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018251	.0040008	-.000264	-.002121	-.014534	.0163439
Stddev	.0004337	.0000103	.000130	.001741	.000904	.0022417
%RSD	23.76323	.2560764	49.36461	82.07697	6.220253	13.71565
#1	.0019280	.0040110	-.000133	-.000114	-.014286	.0170181
#2	.0013491	.0040009	-.000394	-.003030	-.013780	.0138425
#3	.0021980	.0039905	-.000265	-.003219	-.015536	.0181710

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002871	-.000048	-.000437	-.046051	-.002186	-.000872
Stddev	.000368	.000056	.000028	.001212	.000221	.000057
%RSD	12.83357	116.1281	6.307303	2.632766	10.11157	6.536251
#1	-.002551	-.000098	-.000405	-.045563	-.001939	-.000836
#2	-.003274	.000012	-.000453	-.047431	-.002255	-.000842
#3	-.002788	-.000059	-.000452	-.045158	-.002365	-.000937

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.007021	-.006393	.0000266	.0087889	-.000543	-.000859
Stddev	.000544	.000707	.0004904	.0195299	.000056	.000141
%RSD	7.743492	11.05270	1841.548	222.2115	10.26818	16.36614
#1	-.006409	-.006681	.0002093	-.013747	-.000608	-.000742
#2	-.007449	-.006910	.0003995	.020775	-.000512	-.000821
#3	-.007205	-.005588	-.000529	.019338	-.000510	-.001015

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.036321	.0016792	-.000906	-.111827	-.004461	-.004045
Stddev	.019307	.0013944	.000073	.000074	.000823	.000596
%RSD	53.15666	83.04219	8.001897	.0661847	18.46020	14.74195
#1	-.056267	.0016201	-.000843	-.111874	-.005395	-.004234
#2	-.017724	.0003152	-.000890	-.111864	-.003842	-.003377
#3	-.034973	.0031022	-.000986	-.111741	-.004145	-.004524

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: CCB01 Acquired: 7/3/2025 16:10:49 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000994	-.003039	-.019604	-.010336	.0026262	F .0260121
Stddev	.000135	.000851	.000344	.000180	.0012404	.0034848
%RSD	13.58535	27.99471	1.752260	1.744350	47.23008	13.39680
#1	-.001149	-.002062	-.019596	-.010360	.0017932	.0220441
#2	-.000900	-.003441	-.019951	-.010503	.0020338	.0274174
#3	-.000933	-.003614	-.019264	-.010145	.0040517	.0285749

Elem	Sr4077
Units	ppm
Avg	-.000866
Stddev	.000054
%RSD	6.183283
#1	-.000837
#2	-.000833
#3	-.000927

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	11494.98	118346.7	7588.664	7154.191	18806.33
Stddev	640.98	2059.4	219.056	115.947	998.22
%RSD	5.576190	1.740139	2.886622	1.620682	5.307905
#1	10758.18	118040.0	7827.267	7124.252	17658.53
#2	11924.26	116457.9	7396.650	7056.150	19471.64
#3	11802.48	120542.3	7542.076	7282.171	19288.82

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2404-12 Acquired: 7/3/2025 16:15:16 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.006219**	**.0013303**	**.0051723**	**-.006270**	**-.010624**	**.2225134**	**.0287219**
Stddev	.002649	.0004701	.0009066	.000838	.001189	.0343537	.0007996
%RSD	42.58995	35.34099	17.52775	13.36596	11.19064	15.43893	2.784055
#1	-.004263	.0009970	.0042713	-.006883	-.010057	.1883044	.0294101
#2	-.005161	.0011258	.0060844	-.005315	-.009825	.2570099	.0278447
#3	-.009234	.0018680	.0051614	-.006610	-.011990	.2222258	.0289109

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000115**	**-.000351**	**12.73839**	**.0020430**	**.0043155**	**.1410790**	**.1932379**
Stddev	.000118	.000056	.05439	.0002407	.0004055	.0023740	.0009865
%RSD	102.6282	16.06284	.4269825	11.78221	9.397270	1.682773	.5105149
#1	-.000190	-.000318	12.79637	.0022318	.0045770	.1396460	.1939027
#2	-.000178	-.000417	12.73030	.0017719	.0038483	.1438193	.1937066
#3	.000021	-.000319	12.68850	.0021252	.0045211	.1397715	.1921045

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0694415**	**2.896459**	**.0016187**	**.0002627**	**23.48180**	**-.002810**	**.1118683**
Stddev	.0014904	.081839	.0002961	.0005708	.17839	.003224	.0007310
%RSD	2.146278	2.825497	18.29421	217.3100	.7597047	114.7238	.6534310
#1	.0699592	2.837985	.0013612	-.000394	23.32666	-.000680	.1114751
#2	.0677613	2.989986	.0015525	.000636	23.67673	-.001232	.1114182
#3	.0706041	2.861406	.0019423	.000546	23.44200	-.006519	.1127118

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.178526**	**1.513077**	**.0078084**	**-.002266**	**2.090709**	**2.239243**	**-.008778**
Stddev	.012066	.011916	.0007469	.000458	.007395	.006799	.000260
%RSD	1.023838	.7875502	9.565131	20.19373	.3537280	.3036294	2.959281
#1	1.166397	1.500148	.0072211	-.002072	2.082202	2.234596	-.008653
#2	1.190529	1.515465	.0086490	-.002789	2.095601	2.247046	-.008605
#3	1.178653	1.523619	.0075551	-.001938	2.094326	2.236086	-.009077

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2404-12 Acquired: 7/3/2025 16:15:16 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0022275	.0069312	.0418307
Stddev	.0022406	.0035960	.0003522
%RSD	100.5876	51.88103	.8418866
#1	.0037162	.0090692	.0414819
#2	.0033158	.0027795	.0418242
#3	-.000349	.0089447	.0421861

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4057.280	41852.52	3236.291	2562.346	5825.887
Stddev	9.623	65.59	19.569	15.410	21.363
%RSD	.2371893	.1567090	.6046858	.6013854	.3666848
#1	4057.091	41817.63	3257.042	2579.418	5840.508
#2	4066.997	41928.18	3218.170	2558.154	5835.783
#3	4047.752	41811.75	3233.661	2549.467	5801.371

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2404-12DUP Acquired: 7/3/2025 16:19:39 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.005627**	**.0010082**	**.0058946**	**-.006823**	**-.009208**	**.2738592**	**.0292001**
Stddev	.000437	.0015697	.0006904	.002481	.001269	.0228159	.0003884
%RSD	7.767149	155.6930	11.71176	36.35979	13.77976	8.331252	1.330322
#1	-.005452	.0027947	.0052514	-.009646	-.007752	.2881838	.0291173
#2	-.006125	.0003800	.0058082	-.004990	-.009794	.2475483	.0296232
#3	-.005305	-.000150	.0066240	-.005833	-.010077	.2858454	.0288597

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000220**	**-.000329**	**12.65259**	**.0026617**	**.0042894**	**.1414794**	**.2040948**
Stddev	.000099	.000074	.10341	.0004939	.0003780	.0038905	.0019343
%RSD	45.21067	22.66213	.8173132	18.55543	8.812612	2.749838	.9477480
#1	-.000312	-.000395	12.54276	.0021062	.0039182	.1371277	.2026585
#2	-.000233	-.000343	12.66692	.0028279	.0042760	.1446210	.2062943
#3	-.000114	-.000248	12.74809	.0030511	.0046739	.1426896	.2033317

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0704219**	**2.875113**	**.0019524**	**-.000386**	**23.86809**	**.0026469**	**.1122911**
Stddev	.0012875	.048262	.0002630	.000541	.28777	.0035055	.0005547
%RSD	1.828251	1.678629	13.47184	140.1419	1.205666	132.4377	.4939760
#1	.0706660	2.830743	.0022485	.000198	23.59867	-.000461	.1123384
#2	.0715699	2.868097	.0018630	-.000485	24.17124	.001955	.1128206
#3	.0690299	2.926500	.0017457	-.000870	23.83436	.006447	.1117142

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.186535**	**1.498562**	**.0065319**	**-.002226**	**2.076572**	**2.340794**	**-.007924**
Stddev	.018278	.003946	.0009428	.000261	.003552	.027491	.000366
%RSD	1.540431	.2633251	14.43441	11.72301	.1710420	1.174419	4.623964
#1	1.168747	1.494018	.0064481	-.002024	2.078234	2.346089	-.007865
#2	1.205266	1.500544	.0075138	-.002134	2.072494	2.311041	-.008317
#3	1.185592	1.501124	.0056337	-.002521	2.078989	2.365252	-.007591

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2404-12DUP Acquired: 7/3/2025 16:19:39 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0022953	.0066198	.0418254
Stddev	.0006644	.0010185	.0004034
%RSD	28.94421	15.38590	.9645024
#1	.0029896	.0057207	.0413888
#2	.0022307	.0064127	.0419030
#3	.0016656	.0077259	.0421844

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4078.916	41516.65	3220.016	2542.050	5847.730
Stddev	5.165	227.03	10.748	8.725	12.767
%RSD	.1266172	.5468521	.3337784	.3432404	.2183265
#1	4079.716	41464.37	3229.142	2543.312	5842.397
#2	4083.633	41765.26	3222.736	2550.075	5862.299
#3	4073.397	41320.31	3208.170	2532.762	5838.494

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2404-12LX5 Acquired: 7/3/2025 16:24:01 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001054**	**-.000108**	**-.000038**	**-.001330**	**-.005437**	**.0424181**	**.0046578**
Stddev	.000910	.001765	.001395	.001745	.000981	.0266926	.0005811
%RSD	86.35343	1637.709	3654.646	131.1996	18.04238	62.92742	12.47681
#1	-.001212	.001796	-.000092	-.001967	-.006569	.0149884	.0039896
#2	-.000075	-.001690	.001383	.000644	-.004874	.0683069	.0050454
#3	-.001875	-.000429	-.001405	-.002666	-.004866	.0439589	.0049384

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000092**	**-.000357**	**2.424901**	**-.000445**	**.0005001**	**.0306283**	**.0333054**
Stddev	.000117	.000034	.027495	.000568	.0001475	.0002638	.0021973
%RSD	127.0458	9.432572	1.133858	127.5741	29.48904	.8612493	6.597288
#1	-.000217	-.000320	2.411975	-.000430	.0005114	.0303391	.0311275
#2	.000013	-.000365	2.406251	.000115	.0003474	.0306902	.0355215
#3	-.000072	-.000387	2.456477	-.001021	.0006417	.0308557	.0332672

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0146774**	**.5563820**	**-.000273**	**.0010845**	**4.478302**	**-.004114**	**.0207126**
Stddev	.0012487	.0714912	.000322	.0004541	.078399	.006959	.0002851
%RSD	8.507457	12.84929	117.7976	41.87003	1.750643	169.1498	1.376593
#1	.0142486	.4761849	-.000331	.0009278	4.491970	.003917	.0209748
#2	.0160839	.5795308	-.000562	.0007295	4.548969	-.007903	.0207540
#3	.0136996	.6134304	.000074	.0015962	4.393968	-.008356	.0204091

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2126130**	**.2878281**	**-.003797**	**-.001030**	**.4059561**	**.4788601**	**-.000758**
Stddev	.0007560	.0011549	.001529	.000262	.0005711	.0188322	.000149
%RSD	.3555720	.4012370	40.27905	25.40950	.1406819	3.932718	19.65358
#1	.2133164	.2887243	-.002054	-.001204	.4062713	.4998864	-.000705
#2	.2118136	.2882352	-.004914	-.001157	.4063001	.4635434	-.000926
#3	.2127090	.2865248	-.004423	-.000729	.4052968	.4731505	-.000643

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2404-12LX5 Acquired: 7/3/2025 16:24:01 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0009659	.0228233	.0075199
Stddev	.0032762	.0046213	.0001162
%RSD	339.1936	20.24826	1.545420
#1	-.002740	.0279841	.0073879
#2	.002163	.0214180	.0076067
#3	.003476	.0190677	.0075651

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4051.911	41457.08	3186.236	2544.297	5871.067
Stddev	7.151	269.01	7.381	22.040	11.434
%RSD	.1764806	.6488974	.2316608	.8662375	.1947463
#1	4045.865	41278.43	3183.994	2518.860	5863.255
#2	4059.804	41766.48	3194.479	2557.696	5884.190
#3	4050.063	41326.34	3180.236	2556.335	5865.756

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2404-12MS Acquired: 7/3/2025 16:28:29 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7091943**	**1.930452**	**.9274309**	**1.882571**	**.8054448**	**2.180177**	**.2313796**
Stddev	.0018641	.002731	.0012716	.006638	.0020742	.020501	.0017283
%RSD	.2628480	.1414599	.1371071	.3526049	.2575229	.9403485	.7469631
#1	.7077407	1.929776	.9266344	1.883073	.8078155	2.174846	.2293866
#2	.7112960	1.933457	.9267608	1.875697	.8039641	2.162868	.2324654
#3	.7085464	1.928123	.9288973	1.888944	.8045547	2.202817	.2322869

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2132243**	**.1836233**	**13.76411**	**.4101791**	**.1947097**	**.4579485**	**3.670744**
Stddev	.0022428	.0004666	.04033	.0015210	.0005532	.0053919	.026522
%RSD	1.051832	.2541205	.2930188	.3708217	.2841021	1.177396	.7225183
#1	.2127386	.1833121	13.72351	.4092987	.1946463	.4593247	3.667087
#2	.2112642	.1833979	13.76466	.4119354	.1941910	.4520019	3.646241
#3	.2156701	.1841598	13.80417	.4093031	.1952919	.4625189	3.698905

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3254143**	**4.970808**	**.4725137**	**.0600860**	**27.32947**	**.3026861**	**.3174620**
Stddev	.0050834	.074338	.0005030	.0005832	.35937	.0088975	.0026218
%RSD	1.562126	1.495488	.1064603	.9705690	1.314967	2.939524	.8258752
#1	.3205066	4.886223	.4719863	.0594768	27.24841	.2924383	.3186818
#2	.3250795	5.000444	.4725667	.0606391	27.01755	.3084449	.3144525
#3	.3306568	5.025757	.4729882	.0601421	27.72245	.3071752	.3192517

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.98906**	**7.130589**	**.3243477**	**.4187637**	**2.136520**	**3.234472**	**.6770174**
Stddev	.23142	.011564	.0033706	.0007070	.006165	.050336	.0023565
%RSD	1.930276	.1621812	1.039196	.1688334	.2885356	1.556246	.3480728
#1	11.77045	7.141245	.3241158	.4193195	2.132569	3.222219	.6758194
#2	11.96527	7.118291	.3210991	.4190036	2.133369	3.191393	.6755005
#3	12.23146	7.132232	.3278283	.4179679	2.143624	3.289803	.6797322

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2404-12MS Acquired: 7/3/2025 16:28:29 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2098330	.2265799	.2461545
Stddev	.0038386	.0054942	.0010176
%RSD	1.829349	2.424831	.4134163
#1	.2090535	.2293723	.2451273
#2	.2140015	.2202503	.2461740
#3	.2064440	.2301170	.2471623

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4061.743	41249.65	3237.660	2538.415	5717.845
Stddev	7.580	225.83	41.877	14.565	6.584
%RSD	.1866165	.5474646	1.293446	.5737905	.1151536
#1	4053.489	41500.64	3259.988	2547.330	5710.509
#2	4063.350	41185.42	3263.642	2546.307	5723.241
#3	4068.391	41062.89	3189.350	2521.607	5719.786

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2404-12MSD Acquired: 7/3/2025 16:32:48 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6997860**	**1.913439**	**.9193951**	**1.867878**	**.7973045**	**2.166788**	**.2307951**
Stddev	.0024147	.003672	.0022474	.001827	.0049004	.020573	.0011345
%RSD	.3450697	.1919129	.2444435	.0978366	.6146258	.9494687	.4915418
#1	.6994881	1.917645	.9178193	1.868786	.8029466	2.181892	.2315781
#2	.6975340	1.911803	.9219686	1.869074	.7941102	2.175115	.2313131
#3	.7023358	1.910869	.9183975	1.865775	.7948566	2.143357	.2294941

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2122069**	**.1819471**	**13.69853**	**.4061316**	**.1927529**	**.4611720**	**3.664837**
Stddev	.0030164	.0001090	.04588	.0007468	.0002655	.0060022	.032539
%RSD	1.421429	.0598990	.3349330	.1838788	.1377385	1.301506	.8878743
#1	.2143824	.1818892	13.72968	.4057976	.1924487	.4659250	3.681510
#2	.2134746	.1820728	13.72006	.4069872	.1928721	.4631638	3.685660
#3	.2087635	.1818793	13.64584	.4056102	.1929379	.4544271	3.627340

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3316142**	**5.022061**	**.4670896**	**.0604447**	**27.34418**	**.3071477**	**.3170112**
Stddev	.0001420	.103828	.0009518	.0008505	.21749	.0119014	.0017170
%RSD	.0428066	2.067433	.2037822	1.407147	.7953675	3.874808	.5416348
#1	.3317125	5.136686	.4681813	.0610916	27.38488	.3130947	.3184264
#2	.3316787	4.995182	.4664339	.0607611	27.53844	.3149035	.3151011
#3	.3314515	4.934316	.4666534	.0594812	27.10922	.2934449	.3175061

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**12.13344**	**7.052219**	**.3231176**	**.4161391**	**2.117299**	**3.222668**	**.6683562**
Stddev	.15163	.005445	.0015552	.0006213	.005806	.031994	.0025402
%RSD	1.249680	.0772141	.4813160	.1492921	.2742255	.9927736	.3800628
#1	11.98698	7.052225	.3228698	.4154288	2.122682	3.247376	.6708534
#2	12.28976	7.046770	.3247819	.4164069	2.111146	3.234099	.6684399
#3	12.12359	7.057661	.3217012	.4165815	2.118069	3.186529	.6657752

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2404-12MSD Acquired: 7/3/2025 16:32:48 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2061391	.2218500	.2457136
Stddev	.0030230	.0073001	.0015665
%RSD	1.466502	3.290558	.6375123
#1	.2072428	.2274533	.2464156
#2	.2084551	.2135945	.2468062
#3	.2027193	.2245022	.2439189

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4051.694	41159.19	3220.901	2525.368	5718.298
Stddev	6.206	249.44	21.706	13.686	11.938
%RSD	.1531682	.6060467	.6739047	.5419267	.2087630
#1	4058.323	41402.64	3216.933	2529.167	5729.431
#2	4046.022	41170.77	3201.452	2536.753	5705.692
#3	4050.736	40904.15	3244.316	2510.184	5719.770

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2404-12A Acquired: 7/3/2025 16:37:08 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6922449	1.882744	.9053228	1.842031	.7890295	2.029059	.2272754
Stddev	.0012714	.001629	.0011526	.010093	.0029328	.003102	.0008871
%RSD	.1836598	.0865322	.1273131	.5479521	.3716926	.1528888	.3903404
#1	.6933185	1.881623	.9056644	1.830681	.7858999	2.031050	.2273010
#2	.6925752	1.881997	.9062659	1.850000	.7917147	2.025485	.2263757
#3	.6908409	1.884613	.9040380	1.845411	.7894737	2.030643	.2281495

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2101623	.1791453	13.38881	.3959169	.1894865	.4566967	3.607349
Stddev	.0007917	.0000842	.05925	.0014152	.0005884	.0011219	.025244
%RSD	.3767119	.0470023	.4425367	.3574530	.3105283	.2456544	.6998021
#1	.2099327	.1792425	13.33322	.3945986	.1898310	.4576195	3.580855
#2	.2095108	.1790983	13.38207	.3957397	.1898214	.4554479	3.610070
#3	.2110434	.1790951	13.45114	.3974124	.1888071	.4570227	3.631123

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2909491	4.899196	.4602395	.0633314	27.13677	.3058889	.3087252
Stddev	.0040847	.008694	.0004110	.0015354	.16970	.0037030	.0011410
%RSD	1.403907	.1774651	.0892920	2.424421	.6253465	1.210575	.3695720
#1	.2907156	4.909221	.4598171	.0626269	27.26821	.3016689	.3096691
#2	.2869862	4.894642	.4606379	.0622745	26.94519	.3074023	.3074573
#3	.2951455	4.893724	.4602635	.0650926	27.19689	.3085956	.3090493

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.97127	6.936733	.3202766	.4107194	2.072582	3.337727	.6602337
Stddev	.04425	.008910	.0027086	.0005719	.005380	.027851	.0017378
%RSD	.3696473	.1284414	.8457141	.1392374	.2595833	.8344329	.2632148
#1	11.95506	6.938913	.3185386	.4102044	2.075467	3.348061	.6600687
#2	11.93741	6.944351	.3188937	.4113348	2.075903	3.306186	.6620482
#3	12.02134	6.926936	.3233975	.4106191	2.066374	3.358934	.6585843

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2404-12A Acquired: 7/3/2025 16:37:08 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2052388	.2175003	.2416228
Stddev	.0048162	.0016545	.0007254
%RSD	2.346638	.7607043	.3002036
#1	.1997076	.2156038	.2413528
#2	.2085050	.2186485	.2410711
#3	.2075037	.2182486	.2424444

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4067.800	41395.07	3216.159	2540.499	5727.521
Stddev	9.961	46.53	15.582	8.952	12.577
%RSD	.2448853	.1124162	.4844847	.3523617	.2195840
#1	4076.251	41400.90	3229.223	2531.001	5734.443
#2	4056.817	41438.41	3220.342	2548.780	5713.003
#3	4070.333	41345.89	3198.913	2541.717	5735.115

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2444-08 Acquired: 7/3/2025 16:41:26 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.004259**	**.0019539**	**.0016553**	**-.002568**	**-.009665**	**.0617748**	**.0442455**
Stddev	.000432	.0011423	.0019853	.003898	.002195	.0044574	.0002230
%RSD	10.14483	58.46335	119.9385	151.8032	22.71451	7.215558	.5039177
#1	-.004521	.0023553	.0029333	.001919	-.012126	.0656137	.0440166
#2	-.004495	.0028413	-.000632	-.005118	-.007910	.0568863	.0442578
#3	-.003760	.0006651	.002664	-.004504	-.008958	.0628245	.0444620

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000035**	**-.000329**	**12.26297**	**-.000670**	**.0039890**	**.0462172**	**.0859406**
Stddev	.000100	.000085	.06248	.000112	.0001807	.0010076	.0003924
%RSD	288.1784	25.78552	.5094851	16.75625	4.528663	2.180136	.4565815
#1	.000050	-.000232	12.33294	-.000619	.0037880	.0451136	.0862997
#2	-.000146	-.000384	12.21279	-.000591	.0041379	.0470881	.0855217
#3	-.000009	-.000373	12.24317	-.000798	.0040412	.0464499	.0860004

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0294970**	**2.828416**	**-.000867**	**.0001026**	**22.42706**	**-.005259**	**.0154173**
Stddev	.0015203	.033329	.000410	.0010534	.12503	.007551	.0002288
%RSD	5.153941	1.178352	47.34938	1026.493	.5575068	143.5842	1.484001
#1	.0278387	2.866350	-.001126	.0008033	22.54516	-.001480	.0155993
#2	.0298273	2.803832	-.001081	.0006134	22.43995	-.000344	.0154921
#3	.0308249	2.815066	-.000394	-.001109	22.29609	-.013954	.0151604

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.160559**	**1.415285**	**.0054543**	**-.002402**	**2.023517**	**2.081505**	**-.007060**
Stddev	.008762	.004057	.0012160	.000277	.009894	.010615	.001005
%RSD	.7550241	.2866205	22.29452	11.54786	.4889272	.5099518	14.24000
#1	1.167345	1.415344	.0058417	-.002690	2.030233	2.069669	-.006459
#2	1.163665	1.411200	.0064293	-.002380	2.012156	2.090180	-.008220
#3	1.150666	1.419312	.0040917	-.002137	2.028163	2.084666	-.006500

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2444-08 Acquired: 7/3/2025 16:41:26 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0030519	-.003299	.0407476
Stddev	.0016284	.003189	.0002475
%RSD	53.35792	96.66551	.6072652
#1	.0038194	-.001915	.0407489
#2	.0011815	-.006947	.0404995
#3	.0041547	-.001036	.0409944

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4057.076	41392.10	3202.099	2539.105	5841.478
Stddev	9.485	265.31	8.540	15.342	15.655
%RSD	.2337978	.6409611	.2667119	.6042388	.2679910
#1	4047.421	41203.48	3211.561	2530.178	5826.783
#2	4066.382	41277.34	3199.776	2530.316	5857.942
#3	4057.427	41695.46	3194.961	2556.820	5839.708

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: CCV02 Acquired: 7/3/2025 16:53:01 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.719500**	**4.901146**	**4.740540**	**4.935872**	**4.904697**	**9.761003**
Stddev	.007348	.013243	.012798	.006437	.000539	.043221
%RSD	.1556981	.2702035	.2699746	.1304078	.0109935	.4427927
#1	4.714460	4.886188	4.727796	4.929133	4.904088	9.740405
#2	4.716107	4.905875	4.740433	4.936526	4.904888	9.731933
#3	4.727931	4.911375	4.753392	4.941957	4.905114	9.810670

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.773448**	**.2673446**	**2.348120**	**25.13279**	**.9687641**	**2.349412**
Stddev	.033818	.0012541	.003726	.05425	.0021097	.001830
%RSD	.3460175	.4690794	.1586953	.2158719	.2177686	.0778726
#1	9.755082	.2681874	2.344902	25.07046	.9711969	2.348677
#2	9.812475	.2679428	2.347255	25.15849	.9676551	2.348065
#3	9.752787	.2659034	2.352202	25.16943	.9674402	2.351495

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.236632**	**5.188005**	**2.499724**	**25.18517**	**2.337722**	**1.268154**
Stddev	.008129	.032535	.011728	.06307	.003420	.002258
%RSD	.6573597	.6271231	.4691697	.2504242	.1462916	.1780329
#1	1.244574	5.181302	2.489460	25.24723	2.333818	1.266590
#2	1.236994	5.223370	2.512507	25.18714	2.339163	1.267129
#3	1.228328	5.159344	2.497205	25.12113	2.340186	1.270742

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.67837**	**2.452901**	**2.479568**	**26.68597**	**4.898473**	F **5.751036**
Stddev	.11594	.010265	.003655	.14523	.008318	.029935
%RSD	.4345714	.4185034	.1474135	.5442093	.1698087	.5205090
#1	26.76930	2.447924	2.479593	26.77489	4.890569	5.735310
#2	26.71799	2.464706	2.475901	26.51838	4.897700	5.785557
#3	26.54781	2.446072	2.483211	26.76465	4.907151	5.732242

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: CCV02 Acquired: 7/3/2025 16:53:01 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.864855**	**4.789728**	F **5.848615**	**4.784194**	**4.905819**	**5.177597**
Stddev	.005958	.007968	.023474	.007528	.022796	.007973
%RSD	.1224716	.1663663	.4013517	.1573558	.4646689	.1539841
#1	4.859174	4.790294	5.835897	4.780460	4.884590	5.174073
#2	4.864335	4.797399	5.875703	4.779264	4.929912	5.171994
#3	4.871056	4.781492	5.834245	4.792860	4.902955	5.186725

Elem	Sr4077
Units	ppm
Avg	**4.906024**
Stddev	.011956
%RSD	.2436902
#1	4.895523
#2	4.919035
#3	4.903513

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3933.403**	**40018.78**	**3157.940**	**2472.207**	**5232.699**
Stddev	14.205	297.67	17.139	14.404	19.957
%RSD	.3611484	.7438329	.5427348	.5826528	.3813901
#1	3937.605	39689.59	3142.381	2455.574	5238.420
#2	3945.034	40269.01	3155.126	2480.641	5249.170
#3	3917.571	40097.75	3176.312	2480.405	5210.506

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: CCB02 Acquired: 7/3/2025 16:57:16 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0022252	.0041060	-.000521	-.002688	-.014452	.0105619
Stddev	.0007224	.0001838	.000422	.000077	.000271	.0056492
%RSD	32.46400	4.475986	80.98728	2.873445	1.877847	53.48724
#1	.0022063	.0042605	-.000770	-.002646	-.014505	.0050533
#2	.0029568	.0039028	-.000758	-.002778	-.014693	.0102903
#3	.0015124	.0041548	-.000034	-.002641	-.014158	.0163420

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002872	-.000046	-.000464	-.046960	-.002342	-.000909
Stddev	.000177	.000021	.000025	.002752	.000254	.000042
%RSD	6.159007	44.65652	5.339649	5.859309	10.82603	4.632937
#1	-.003051	-.000058	-.000481	-.048921	-.002514	-.000956
#2	-.002698	-.000059	-.000436	-.048144	-.002051	-.000876
#3	-.002865	-.000022	-.000476	-.043814	-.002461	-.000894

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.006545	-.005987	.0002182	.0252521	-.000588	-.000317
Stddev	.001222	.000535	.0003833	.0301503	.000019	.000381
%RSD	18.67042	8.943635	175.6869	119.3973	3.282991	120.1883
#1	-.005976	-.006464	.0004284	.0388324	-.000572	-.000594
#2	-.005711	-.005408	.0004504	-.009300	-.000609	-.000474
#3	-.007947	-.006089	-.000224	.046224	-.000583	.000117

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.063349	-.002093	-.000785	-.112099	-.004176	-.003916
Stddev	.023346	.001514	.000124	.001600	.000255	.000707
%RSD	36.85369	72.34119	15.74475	1.427363	6.096253	18.04378
#1	-.090227	-.002543	-.000644	-.111628	-.003911	-.003676
#2	-.051705	-.003330	-.000872	-.110787	-.004197	-.003360
#3	-.048114	-.000405	-.000841	-.113882	-.004418	-.004711

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: CCB02 Acquired: 7/3/2025 16:57:16 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001097	-.003361	-.020116	-.010212	.0016589	F .0222119
Stddev	.000071	.000148	.000958	.000256	.0006567	.0022794
%RSD	6.444158	4.401796	4.760853	2.502132	39.58463	10.26215
#1	-.001018	-.003374	-.019394	-.010290	.0009007	.0196036
#2	-.001118	-.003502	-.019750	-.009927	.0020350	.0232106
#3	-.001155	-.003207	-.021202	-.010420	.0020411	.0238215

Elem	Sr4077
Units	ppm
Avg	-.000835
Stddev	.000073
%RSD	8.709717
#1	-.000792
#2	-.000919
#3	-.000795

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	11753.91	121944.3	7977.703	7399.606	19217.93
Stddev	154.92	4035.8	71.656	238.679	228.42
%RSD	1.318014	3.309534	.8982014	3.225569	1.188568
#1	11844.28	121940.9	7946.825	7407.565	19336.44
#2	11842.43	125981.8	7926.663	7634.207	19362.74
#3	11575.03	117910.3	8059.621	7157.047	18954.61

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2393-11 Acquired: 7/3/2025 17:01:44 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0861278	-.025000	.3440885	.0876481	.0234710	189.4609	.9717546
Stddev	.0024635	.002647	.0022397	.0049792	.0019627	.3856	.0041506
%RSD	2.860307	10.58825	.6509188	5.680898	8.362176	.2035097	.4271207
#1	.0860880	-.022104	.3426108	.0928697	.0232687	189.7483	.9765382
#2	.0836844	-.025602	.3429892	.0829531	.0216173	189.6118	.9691079
#3	.0886110	-.027295	.3466654	.0871216	.0255270	189.0227	.9696178

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004552	.0094277	142.1613	.2540767	.2428027	.5393535	465.8367
Stddev	.0002504	.0001813	.3417	.0002334	.0001888	.0055278	3.2211
%RSD	55.01531	1.923081	.2403477	.0918664	.0777525	1.024897	.6914683
#1	.0003071	.0092245	142.5272	.2543455	.2430076	.5339853	469.3590
#2	.0003141	.0094859	142.1061	.2539262	.2427646	.5390471	463.0409
#3	.0007443	.0095728	141.8506	.2539583	.2426359	.5450282	465.1101

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.406536	55.10461	.3560724	-.017082	5.885171	.6698795	.7152916
Stddev	.022659	.12787	.0001365	.001731	.076338	.0036052	.0040214
%RSD	.2408816	.2320490	.0383430	10.13308	1.297131	.5381899	.5622091
#1	9.432678	55.25059	.3560260	-.016770	5.842728	.6737748	.7150482
#2	9.394383	55.01245	.3562261	-.015528	5.839487	.6692036	.7194293
#3	9.392546	55.05078	.3559652	-.018947	5.973299	.6666601	.7113975

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.46841	8.384534	.0751717	.0079148	6.081209	11.62347	.0303224
Stddev	.09696	.004818	.0101246	.0005256	.005838	.09578	.0010968
%RSD	.6701754	.0574683	13.46863	6.640288	.0960043	.8240590	3.617024
#1	14.49510	8.389395	.0862744	.0075740	6.075235	11.51396	.0293414
#2	14.54923	8.379759	.0664494	.0085200	6.081490	11.66483	.0301192
#3	14.36090	8.384449	.0727913	.0076502	6.086902	11.69164	.0315065

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2393-11 Acquired: 7/3/2025 17:01:44 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	7.246923	.1700263	.6033276
Stddev	.023407	.0034056	.0021084
%RSD	.3229907	2.003007	.3494563
#1	7.273860	.1730655	.6056960
#2	7.235377	.1706679	.6026314
#3	7.231532	.1663455	.6016553

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5347.988	52786.90	4504.674	3319.039	4840.307
Stddev	13.067	331.44	23.772	26.303	12.363
%RSD	.2443343	.6278835	.5277215	.7924767	.2554233
#1	5359.907	52496.62	4527.137	3309.705	4852.450
#2	5350.040	52716.03	4479.780	3298.676	4840.736
#3	5334.016	53148.04	4507.106	3348.736	4827.735

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2393-11DUP Acquired: 7/3/2025 17:06:13 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0872979	-.020900	.3262103	.1043544	.0250377	174.1399
Stddev	.0008044	.002632	.0023155	.0032820	.0013129	.7583
%RSD	.9214329	12.59270	.7098226	3.145077	5.243580	.4354809
#1	.0867300	-.023184	.3279546	.1043502	.0256363	174.8154
#2	.0869452	-.018022	.3235832	.1010745	.0235322	173.3196
#3	.0882184	-.021494	.3270930	.1076385	.0259446	174.2848

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9175734	-.003538	.0106547	117.9418	.2753172	.2314916
Stddev	.0055942	.000148	.0002260	.4525	.0015648	.0004349
%RSD	.6096723	4.195906	2.121257	.3836948	.5683661	.1878855
#1	.9193076	-.003374	.0104152	118.2819	.2735114	.2312646
#2	.9113174	-.003576	.0108642	117.4282	.2761642	.2312171
#3	.9220951	-.003664	.0106846	118.1153	.2762759	.2319930

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6229965	564.2368	10.80698	48.76698	.3988099	-.024027
Stddev	.0077095	5.7589	.05238	.25820	.0014788	.001692
%RSD	1.237491	1.020651	.4847075	.5294556	.3708036	7.040946
#1	.6163742	568.9322	10.84927	48.84003	.3991068	-.022115
#2	.6211556	557.8112	10.74839	48.48012	.3972051	-.025328
#3	.6314599	565.9670	10.82329	48.98078	.4001177	-.024640

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.756306	.6544950	.7199349	13.86421	7.627858	.0481195
Stddev	.083436	.0051890	.0010654	.26065	.006313	.0060005
%RSD	1.449469	.7928216	.1479880	1.880053	.0827597	12.46991
#1	5.767866	.6592325	.7187241	13.96379	7.625002	.0458678
#2	5.667693	.6489493	.7207288	13.56844	7.623477	.0435706
#3	5.833359	.6553031	.7203518	14.06039	7.635094	.0549201

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2393-11DUP Acquired: 7/3/2025 17:06:13 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0130964	5.165308	F 21.10755	.0351216	7.164721	.1706620
Stddev	.0004807	.010955	.10799	.0015837	.041325	.0040322
%RSD	3.670570	.2120904	.5116282	4.509249	.5767870	2.362663
#1	.0135018	5.164120	21.20776	.0334462	7.186755	.1696549
#2	.0132221	5.154995	20.99318	.0353243	7.117049	.1672289
#3	.0125654	5.176808	21.12172	.0365941	7.190361	.1751023

Elem	Sr4077
Units	ppm
Avg	.5497672
Stddev	.0027126
%RSD	.4934073
#1	.5511257
#2	.5466438
#3	.5515322

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5155.968	51317.90	4326.765	3228.318	4875.103
Stddev	9.949	329.89	44.692	8.602	11.316
%RSD	.1929614	.6428295	1.032919	.2664502	.2321261
#1	5167.245	50995.63	4281.468	3218.401	4878.664
#2	5152.227	51654.91	4370.826	3233.751	4884.210
#3	5148.431	51303.15	4328.000	3232.802	4862.434

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2393-11LX5 Acquired: 7/3/2025 17:10:44 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0276273	.0005092	.0883508	.0429895	.0019678	43.31297	.2320104
Stddev	.0017163	.0012092	.0004299	.0029483	.0027632	.22974	.0013664
%RSD	6.212458	237.4710	.4865568	6.858232	140.4197	.5304148	.5889446
#1	.0269890	.0007487	.0888419	.0446837	.0002924	43.17683	.2310978
#2	.0295714	-.000802	.0881680	.0446998	.0004539	43.18386	.2313519
#3	.0263217	.001581	.0880426	.0395851	.0051571	43.57822	.2335813

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001615	-.001590	30.75795	.0597799	.0519588	.1784585	192.4543
Stddev	.000266	.000044	.08513	.0003878	.0002670	.0026605	1.5209
%RSD	16.46457	2.784924	.2767753	.6487694	.5138377	1.490848	.7902594
#1	-.001901	-.001622	30.66871	.0601196	.0517469	.1770326	190.6985
#2	-.001570	-.001609	30.76687	.0593573	.0518707	.1768148	193.3639
#3	-.001375	-.001539	30.83827	.0598629	.0522586	.1815281	193.3004

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.850192	12.75500	.0799770	.0040152	1.479882	.1689667	.1850904
Stddev	.012999	.11081	.0006457	.0002348	.060838	.0017207	.0023687
%RSD	.4560797	.8687635	.8073101	5.847970	4.110989	1.018384	1.279741
#1	2.839641	12.82749	.0807164	.0041936	1.475621	.1676835	.1823770
#2	2.846222	12.62745	.0796901	.0041029	1.421286	.1709221	.1867449
#3	2.864714	12.81008	.0795245	.0037492	1.542738	.1682946	.1861492

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.819697	1.494602	.0603976	.0002319	1.001935	3.369805	.0013425
Stddev	.023513	.004890	.0030211	.0004740	.003539	.037199	.0003136
%RSD	.8338958	.3271564	5.002000	204.3970	.3531978	1.103903	23.35781
#1	2.797749	1.489641	.0600425	-.000158	1.002362	3.340240	.0011718
#2	2.816828	1.494749	.0635805	.000759	.998202	3.357601	.0011512
#3	2.844513	1.499418	.0575697	.000095	1.005241	3.411573	.0017044

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2393-11LX5 Acquired: 7/3/2025 17:10:44 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.764573	.0544906	.1391845
Stddev	.009990	.0051391	.0005998
%RSD	.5661407	9.431127	.4309563
#1	1.757079	.0509788	.1388724
#2	1.760725	.0603890	.1388051
#3	1.775915	.0521040	.1398760

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4256.096	42545.35	3430.585	2651.569	5404.517
Stddev	11.601	92.24	25.047	10.541	17.811
%RSD	.2725759	.2168081	.7301231	.3975471	.3295643
#1	4253.001	42448.96	3452.566	2663.030	5394.969
#2	4246.357	42554.30	3435.872	2642.290	5393.516
#3	4268.931	42632.79	3403.316	2649.387	5425.067

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2393-11MS Acquired: 7/3/2025 17:15:10 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8532498**	**1.937128**	**1.222884**	**1.476957**	**.2369609**	**176.3906**
Stddev	.0061242	.001808	.003052	.007546	.0019352	1.0596
%RSD	.7177526	.0933464	.2495438	.5109237	.8166915	.6007229
#1	.8501166	1.936129	1.224303	1.476606	.2365234	177.1443
#2	.8603067	1.939215	1.224967	1.484672	.2352820	175.1791
#3	.8493262	1.936040	1.219381	1.469592	.2390775	176.8485

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9870937**	**.1646440**	**.2018266**	**112.1483**	**.4757171**	**.3913816**
Stddev	.0026926	.0022886	.0008516	.5251	.0035268	.0016259
%RSD	.2727828	1.390034	.4219374	.4682451	.7413591	.4154127
#1	.9901083	.1651473	.2014277	112.4972	.4718697	.3911162
#2	.9849273	.1621457	.2028045	111.5444	.4764847	.3931239
#3	.9862456	.1666391	.2012478	112.4034	.4787968	.3899048

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5449316**	**310.5810**	**5.894483**	**45.05147**	**.7277564**	**.0566918**
Stddev	.0113017	4.3044	.026882	.13529	.0025789	.0004569
%RSD	2.073974	1.385904	.4560515	.3003112	.3543591	.8059438
#1	.5518604	314.1726	5.914364	45.17792	.7253831	.0570317
#2	.5318900	305.8098	5.863898	44.90880	.7305007	.0561724
#3	.5510444	311.7606	5.905187	45.06768	.7273853	.0568713

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.327987**	**.7772892**	**.7433987**	**21.68812**	**13.39458**	**.3168736**
Stddev	.082782	.0088079	.0008868	.51730	.05928	.0056936
%RSD	1.129666	1.133157	.1192935	2.385186	.4426037	1.796814
#1	7.351441	.7874473	.7429874	21.85120	13.36719	.3230115
#2	7.236009	.7717744	.7444165	21.10893	13.46261	.3117645
#3	7.396511	.7726460	.7427923	22.10423	13.35394	.3158448

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2393-11MS Acquired: 7/3/2025 17:15:10 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2678248	4.551913	F 18.41905	.7074039	6.600430	.3185015
Stddev	.0011650	.011236	.26359	.0036810	.022499	.0062211
%RSD	.4349871	.2468375	1.431057	.5203593	.3408710	1.953247
#1	.2665210	4.541154	18.41024	.7036708	6.623957	.3256818
#2	.2681897	4.563572	18.15998	.7110305	6.579124	.3147262
#3	.2687637	4.551013	18.68693	.7075104	6.598208	.3150964

Elem	Sr4077
Units	ppm
Avg	.6207291
Stddev	.0031550
%RSD	.5082660
#1	.6238494
#2	.6175406
#3	.6207974

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5181.351	51286.82	4265.900	3241.997	4933.389
Stddev	12.231	391.45	69.727	12.488	7.988
%RSD	.2360545	.7632617	1.634530	.3852029	.1619183
#1	5194.341	51685.43	4285.167	3255.125	4941.841
#2	5179.655	51272.08	4323.968	3240.601	4925.963
#3	5170.057	50902.94	4188.565	3230.266	4932.364

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2393-11MSD Acquired: 7/3/2025 17:19:35 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8042407	1.807931	1.181877	1.374868	.1840436	192.1817
Stddev	.0028819	.012423	.003761	.004811	.0017713	1.1549
%RSD	.3583347	.6871345	.3182336	.3498922	.9624405	.6009629
#1	.8009670	1.801972	1.179521	1.375227	.1826787	192.6878
#2	.8053601	1.799609	1.179896	1.369889	.1834069	192.9973
#3	.8063949	1.822210	1.186215	1.379490	.1860453	190.8602

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.054073	.1542175	.1892862	96.58175	.4687418	.3958689
Stddev	.008009	.0044124	.0011870	.77181	.0024772	.0021413
%RSD	.7597690	2.861143	.6270830	.7991210	.5284806	.5409160
#1	1.061733	.1591031	.1884096	97.09360	.4700468	.3945943
#2	1.054729	.1530266	.1888120	96.95764	.4658849	.3946714
#3	1.045756	.1505228	.1906370	95.69401	.4702936	.3983411

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5376568	332.7791	6.487679	47.20042	.7210103	.0534682
Stddev	.0191457	7.2245	.044603	.40225	.0035328	.0013179
%RSD	3.560955	2.170946	.6875021	.8522161	.4899814	2.464817
#1	.5593663	340.9173	6.515729	47.64325	.7190417	.0545798
#2	.5304193	330.2973	6.511062	47.10038	.7189003	.0538125
#3	.5231850	327.1226	6.436247	46.85764	.7250888	.0520123

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.177878	.8237613	.7776775	21.87362	13.11055	.2996635
Stddev	.205659	.0039098	.0014646	.31978	.06274	.0088109
%RSD	2.865184	.4746225	.1883313	1.461944	.4785243	2.940250
#1	7.413749	.8275523	.7793668	22.21240	13.08379	.3097198
#2	7.083807	.8239888	.7769019	21.83144	13.06563	.2959707
#3	7.036079	.8197427	.7767638	21.57702	13.18223	.2932999

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2393-11MSD Acquired: 7/3/2025 17:19:35 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2382398	3.867768	F 22.20401	.6625807	7.294651	.3229143
Stddev	.0014261	.015522	.52861	.0055119	.048298	.0006730
%RSD	.5986128	.4013055	2.380691	.8318798	.6621081	.2084278
#1	.2370974	3.855063	22.78946	.6598001	7.326301	.3231456
#2	.2377838	3.863171	22.06082	.6590130	7.318594	.3234411
#3	.2398382	3.885068	21.76175	.6689290	7.239059	.3221560

Elem	Sr4077
Units	ppm
Avg	.5610576
Stddev	.0039626
%RSD	.7062798
#1	.5636115
#2	.5630686
#3	.5564927

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5262.709	51879.77	4275.665	3287.836	4958.331
Stddev	38.376	259.50	78.825	14.233	38.336
%RSD	.7292068	.5001882	1.843575	.4328890	.7731686
#1	5298.907	51858.01	4186.423	3300.000	4988.410
#2	5266.746	52149.46	4304.785	3291.325	4971.418
#3	5222.474	51631.84	4335.788	3272.183	4915.165

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2393-11A Acquired: 7/3/2025 17:24:00 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8419027**	**1.806389**	**1.224401**	**1.483305**	**.5990166**	**171.3137**	**1.050368**
Stddev	.0041985	.004134	.001736	.004482	.0024206	.5307	.003109
%RSD	.4986924	.2288774	.1417816	.3021728	.4041008	.3097775	.2959824
#1	.8417287	1.807586	1.223359	1.480534	.6017622	171.5030	1.053870
#2	.8461855	1.809793	1.226406	1.480905	.5971903	170.7143	1.049301
#3	.8377938	1.801788	1.223440	1.488476	.5980973	171.7238	1.047933

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1479973**	**.1963640**	**117.8361**	**.5548219**	**.4152034**	**.8125447**	**572.1173**
Stddev	.0011930	.0005107	.3188	.0006883	.0004324	.0126772	3.1127
%RSD	.8061065	.2600852	.2705527	.1240641	.1041394	1.560185	.5440649
#1	.1466236	.1960979	117.8749	.5547250	.4147043	.7981286	568.5480
#2	.1485944	.1969528	117.4997	.5541871	.4154394	.8175520	573.5358
#3	.1487738	.1960413	118.1337	.5555535	.4154664	.8219536	574.2681

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.92181**	**49.45454**	**.8579497**	**.0343650**	**7.683046**	**.8568271**	**.8715009**
Stddev	.02518	.16076	.0019898	.0012183	.073368	.0053907	.0048169
%RSD	.2305163	.3250658	.2319270	3.545123	.9549321	.6291470	.5527073
#1	10.94015	49.53954	.8577743	.0337920	7.625283	.8589815	.8662530
#2	10.89310	49.26913	.8600215	.0357642	7.658258	.8608074	.8757208
#3	10.93217	49.55497	.8560535	.0335389	7.765597	.8506924	.8725289

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.21888**	**13.38139**	**.2617116**	**.3007355**	**5.104006**	**12.80810**	**.6940285**
Stddev	.20575	.02691	.0022552	.0014408	.008304	.09800	.0031408
%RSD	.9260233	.2011282	.8617141	.4791000	.1626861	.7651699	.4525487
#1	22.13898	13.37674	.2642693	.3015789	5.105144	12.69642	.6918591
#2	22.45259	13.41032	.2608567	.2990718	5.111681	12.87973	.6976301
#3	22.06506	13.35710	.2600089	.3015557	5.095192	12.84817	.6925963

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: Q2393-11A Acquired: 7/3/2025 17:24:00 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	7.028081	.3257729	.6909466
Stddev	.014229	.0017150	.0006190
%RSD	.2024572	.5264435	.0895831
#1	7.044505	.3260295	.6916558
#2	7.020230	.3239440	.6905151
#3	7.019507	.3273452	.6906689

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5099.824	50877.45	4257.290	3186.912	4854.126
Stddev	28.487	117.84	21.595	8.926	18.960
%RSD	.5585879	.2316206	.5072555	.2800823	.3906055
#1	5121.402	50788.14	4280.732	3197.020	4873.498
#2	5110.537	51011.02	4252.934	3183.602	4853.273
#3	5067.534	50833.20	4238.205	3180.114	4835.606

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: CCV03 Acquired: 7/3/2025 17:28:25 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.676878**	**4.891916**	**4.720421**	**4.919966**	**4.886802**	**9.628434**
Stddev	.007367	.002410	.001238	.006484	.011374	.066630
%RSD	.1575183	.0492642	.0262315	.1317837	.2327463	.6920149
#1	4.668448	4.889145	4.719068	4.918009	4.886506	9.643629
#2	4.680112	4.893088	4.721499	4.914686	4.875580	9.555519
#3	4.682076	4.893516	4.720697	4.927203	4.898321	9.686155

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.787424**	**.2615692**	**2.342000**	**24.95288**	**.9728771**	**2.332686**
Stddev	.057464	.0014899	.001204	.15002	.0083388	.004266
%RSD	.5871203	.5696066	.0514086	.6012064	.8571237	.1828612
#1	9.796670	.2632885	2.340634	24.99401	.9707672	2.328185
#2	9.725897	.2606555	2.342462	24.78659	.9657959	2.333205
#3	9.839704	.2607637	2.342905	25.07805	.9820681	2.336669

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.166236**	**5.234911**	**2.489016**	**25.03494**	**2.332592**	**1.274365**
Stddev	.003422	.030756	.019384	.20643	.001415	.007725
%RSD	.2934461	.5875098	.7787807	.8245718	.0606762	.6061866
#1	1.165919	5.269810	2.489405	25.22748	2.332166	1.275060
#2	1.169806	5.223159	2.469441	24.81697	2.331439	1.266317
#3	1.162983	5.211765	2.508203	25.06036	2.334172	1.281720

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.29433**	**2.436913**	**2.490020**	**25.36159**	**4.891244**	F **5.761842**
Stddev	.07064	.010361	.010540	.42164	.005649	.030195
%RSD	.2792544	.4251874	.4232719	1.662518	.1154942	.5240497
#1	25.33240	2.434223	2.491760	25.43574	4.887899	5.793309
#2	25.33777	2.428161	2.478719	24.90779	4.888066	5.759112
#3	25.21283	2.448354	2.499582	25.74124	4.897766	5.733105

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: CCV03 Acquired: 7/3/2025 17:28:25 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.878054**	**4.737188**	F **5.901979**	**4.769095**	**4.911584**	**5.156024**
Stddev	.015317	.004164	.025740	.005167	.023013	.024580
%RSD	.3139889	.0879080	.4361256	.1083536	.4685511	.4767263
#1	4.866603	4.732639	5.929787	4.769365	4.924344	5.172467
#2	4.872107	4.738113	5.897161	4.763797	4.885017	5.127768
#3	4.895453	4.740813	5.878988	4.774121	4.925390	5.167838

Elem	Sr4077
Units	ppm
Avg	**4.921717**
Stddev	.028682
%RSD	.5827625
#1	4.927234
#2	4.890678
#3	4.947240

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3887.412**	**39263.20**	**3095.141**	**2425.331**	**5188.930**
Stddev	5.605	488.15	25.842	23.922	9.186
%RSD	.1441739	1.243286	.8349376	.9863375	.1770269
#1	3893.613	39165.63	3066.807	2415.162	5189.515
#2	3882.707	39792.77	3117.415	2452.658	5179.466
#3	3885.915	38831.20	3101.200	2408.174	5197.810

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: CCB03 Acquired: 7/3/2025 17:37:25 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi 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	**.0014652**	**.0039474**	**-.000775**	**-.002886**	**-.014926**	**.0130305**	**-.002982**
Stddev	.0003471	.0003950	.000500	.001575	.000374	.0046923	.000445
%RSD	23.68682	10.00773	64.50321	54.57211	2.505891	36.00969	14.93786
#1	.0015664	.0043435	-.001035	-.003090	-.014641	.0150199	-.003073
#2	.0010788	.0039453	-.001092	-.004350	-.014787	.0164004	-.002498
#3	.0017504	.0035535	-.000199	-.001219	-.015349	.0076713	-.003375

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000078**	**-.000519**	**-.047998**	**-.002368**	**-.000980**	**-.007843**	**-.006319**
Stddev	.000038	.000009	.001095	.000316	.000038	.000825	.001039
%RSD	49.09113	1.764695	2.280745	13.35622	3.826126	10.51691	16.44577
#1	-.000076	-.000517	-.047070	-.002227	-.000970	-.008785	-.005247
#2	-.000041	-.000529	-.049205	-.002146	-.001022	-.007490	-.007322
#3	-.000118	-.000512	-.047718	-.002730	-.000949	-.007253	-.006386

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000205**	**.0158730**	**-.000461**	**-.000631**	**-.063531**	**-.001545**	**-.001025**
Stddev	.000380	.0206448	.000143	.000451	.001413	.002506	.000091
%RSD	185.6928	130.0627	31.04780	71.53642	2.223839	162.1453	8.910650
#1	.000150	-.004335	-.000569	-.000697	-.062387	-.003659	-.001117
#2	-.000158	.036928	-.000515	-.000150	-.065110	-.002200	-.001023
#3	-.000605	.015026	-.000298	-.001046	-.063095	.001223	-.000934

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.115125**	**-.004040**	**-.007097**	**-.001227**	**-.002734**	**-.019425**	**-.010295**
Stddev	.000923	.000547	.000620	.000064	.000217	.000863	.000257
%RSD	.8018760	13.54447	8.737771	5.196683	7.933452	4.441258	2.494255
#1	-.114092	-.003639	-.007462	-.001189	-.002813	-.019900	-.010001
#2	-.115416	-.003818	-.006381	-.001190	-.002489	-.018429	-.010410
#3	-.115868	-.004664	-.007448	-.001300	-.002901	-.019945	-.010475

Reviewed By:
On:
Inst Id :P5
LB :LB136377

Sample Name: CCB03 Acquired: 7/3/2025 17:37:25 Type: Unk
Method: METHOD 6010D, 200.7 M(v26) Mode: CONC Corr. Factor: 1.000000
User: Janvi Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

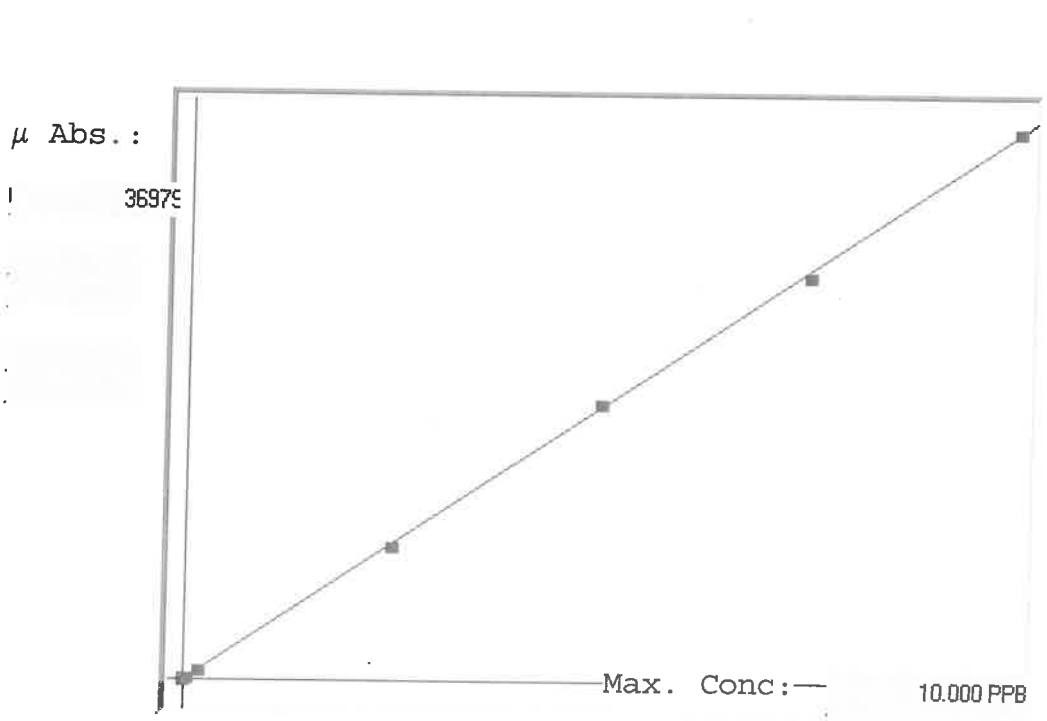
Elem	Ti3361	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0012146	.0172576	-.000904
Stddev	.0012340	.0008958	.000071
%RSD	101.5990	5.190877	7.874718
#1	.0009135	.0178875	-.000976
#2	.0001590	.0162321	-.000834
#3	.0025712	.0176532	-.000901

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	11082.35	111929.6	7746.977	6729.673	18235.42
Stddev	273.65	3765.2	421.056	231.607	420.71
%RSD	2.469222	3.363926	5.435105	3.441573	2.307122
#1	10779.89	114106.0	8214.704	6873.579	17775.56
#2	11312.76	114100.9	7398.170	6852.938	18600.99
#3	11154.41	107581.9	7628.057	6462.503	18329.72

Reviewed By:jaswal
On:7/2/2025 4:48:37 PM
Inst Id :CV1
LB :LB136313

LB136313

245.1 INSTRUMENT ID: CV1



A= 0.0000e+000

B= 2.7097e-004

C= 1.8680e-002

Rho= 0.9999310

Accept=Accepted

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	%dD
0.0	0.000	-0.007	-0.007	-96	0.000	-96					-
0.05	0.050	0.060	0.010	153	0.0 %	153	0				20
0.2	0.200	0.207	0.007	695	0.0 %	695					3
2.5	2.500	2.478	-0.022	9075	0.0 %	9075					-1
5.0	5.000	5.060	0.060	18605	0.0 %	18605					1
7.5	7.500	7.413	-0.087	27290	0.0 %	27290					-1
10.0	10.000	10.039	0.039	36979	0.0 %	36979					0

Reviewed By:jaswal
On:7/2/2025 4:48:37 PM
Inst Id :CV1
LB :LB136313

LB136313 INSTRUMENT ID : CV1

Method: 245.1 Operator: Admin Date of Analysis: 27 Jun 2025 12:11:10

Type	Sample ID	Extended ID	Conc	µ Abs	Units	Date	Method	Type	Stnd Conc
S	0.0 - 1	SC	-	-96	PPB	27 Jun 2025	12:23:21 245.1	Std	0.0000
S	0.05 - 1	S0.05	-	153	PPB	27 Jun 2025	12:25:38 245.1	Std	0.0500
S	0.2 - 1	S0.2	-	695	PPB	27 Jun 2025	12:27:55 245.1	Std	0.2000
S	2.5 - 1	S2.5	-	9075	PPB	27 Jun 2025	12:30:12 245.1	Std	2.5000
S	5.0 - 1	S5	-	18605	PPB	27 Jun 2025	12:32:28 245.1	Std	5.0000
S	7.5 - 1	S7.5	-	27290	PPB	27 Jun 2025	12:34:45 245.1	Std	7.5000
S	10.0 - 1	S10	-	36979	PPB	27 Jun 2025	12:48:32 245.1	Std	10.0000
U	ICV09 - 1	ICV09	4.1857	15378	PPB	27 Jun 2025	12:54:54 245.1	SMPL	-
U	ICB09 - 1	ICB09	-0.0423	-225	PPB	27 Jun 2025	12:57:09 245.1	SMPL	-
U	CCV27 - 1	CCV27	5.1503	18938	PPB	27 Jun 2025	12:59:26 245.1	SMPL	-
U	CCB27 - 1	CCB27	-0.0217	-149	PPB	27 Jun 2025	13:01:41 245.1	SMPL	-
U	CRA - 1	CRA	0.0466	103	PPB	27 Jun 2025	13:06:58 245.1	SMPL	-
U	HighStd - 1	HighStd	9.9403	36615	PPB	27 Jun 2025	13:09:12 245.1	SMPL	-
U	ChkStd - 1	ChkStd	7.3604	27094	PPB	27 Jun 2025	13:11:27 245.1	SMPL	-
U	PB168650BL - 1	PBW	0.0005	-67	PPB	27 Jun 2025	13:16:44 245.1	SMPL	-
U	PB168650BS - 1	LCSW	3.8927	14297	PPB	27 Jun 2025	13:22:19 245.1	SMPL	-
U	Q2126-10 - 1	LOD-MDL-WATER-04-QT2-2025	0.0428	89	PPB	27 Jun 2025	13:34:04 245.1	SMPL	-
U	Q2126-11 - 1	LOQ-WATER-05-QT2-2025	0.2103	707	PPB	27 Jun 2025	13:39:15 245.1	SMPL	-
U	Q2376-02 - 1	EFFLUENT-METALS	0.1647	539	PPB	27 Jun 2025	13:43:07 245.1	SMPL	-
U	Q2376-02DUP - 1	EFFLUENT-METALSDUP	0.1046	317	PPB	27 Jun 2025	13:45:26 245.1	SMPL	-
U	Q2376-02MS - 1	EFFLUENT-METALSMS	3.8898	14286	PPB	27 Jun 2025	13:47:42 245.1	SMPL	-
U	CCV28 - 1	CCV28	4.9682	18266	PPB	27 Jun 2025	13:49:57 245.1	SMPL	-
U	CCB28 - 1	CCB28	-0.0553	-273	PPB	27 Jun 2025	13:52:15 245.1	SMPL	-
U	Q2376-02MSD - 1	EFFLUENT-METALSMSD	3.7684	13838	PPB	27 Jun 2025	13:54:32 245.1	SMPL	-
U	Q2376-02LX5 - 1		-0.0133	-118	PPB	27 Jun 2025	13:56:47 245.1	SMPL	-
U	Q2376-02A - 1		4.7043	17292	PPB	27 Jun 2025	13:59:05 245.1	SMPL	-
U	CCV29 - 1	CCV29	4.8840	17955	PPB	27 Jun 2025	14:01:21 245.1	SMPL	-
U	CCB29 - 1	CCB29	-0.0564	-277	PPB	27 Jun 2025	14:03:39 245.1	SMPL	-

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB168611

SOP ID : M200.7-Trace Elements-22

SDG No : N/A

Matrix : WATER

Pippete ID: ICP A

Balance ID : N/A

Filter paper ID : N/A

pH Strip ID : M6069

Hood ID : #3

Block ID: 1. HOT BLOCK #1 2. N/A

Start Digest Date: 06/25/2025 **Time :** 14:50 **Temp :** 96 °C

End Digest Date: 06/25/2025 **Time :** 18:52 **Temp :** 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: SPB. met dig

Supervisor Signature: MG

Temp : 1. 96°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
LFS-1	0.25	M6007
LFS-2	0.25	M6015
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Conc. HNO3	3.00	M6158
1:1 HCL	5.00	MP85156
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

HOT BLOCK#1 CELL#50 96C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
06/25/25 19:52	SPB met dig	MG - metal lab
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB168611

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
PB168611BL	PBW611	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	1
PB168611BS	LCS611	<2	50	25	Colorless	Colorless	Clear	Clear	M6007,M6015	2
Q2376-02	EFFLUENT-METALS	<2	50	25	Colorless	Colorless	Cloudy	Clear	N/A	3
Q2404-01	1ST-FL-CHILD-CARE-BATH-SINK-1	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	4
Q2404-02	1ST-FL-CHILD-CARE-BATH-SINK-2	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	5
Q2404-03	1ST-FL-CHILD-CARE-MULTIPUPOSE-ROOM-SINK-1	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	6
Q2404-04	1ST-FL-CHILD-CARE-MULTIPUPOSE-ROOM-SINK-2	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	7
Q2404-05	1ST-FL-HALLWAY-BATH-1ST-SINK-1	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	8
Q2404-06	1ST-FL-HALLWAY-BATH-1ST-SINK-2	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	9
Q2404-07	1ST-FL-HALLWAY-BATH-2ND-SINK-1	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	10
Q2404-08	1ST-FL-HALLWAY-BATH-2ND-SINK-2	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	11
Q2404-09	1ST-FL-HALLWAY-BATH-3RD-SINK-1	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	12
Q2404-10	1ST-FL-HALLWAY-BATH-3RD-SINK-2	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	13
Q2404-11	1ST-FL-CHILD-CARE-SINK-1	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	14
Q2404-12	1ST-FL-CHILD-CARE-SINK-2	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	15
Q2404-12MS	1ST-FL-CHILD-CARE-SINK-2 MS	<2	50	25	Colorless	Colorless	Clear	Clear	M6007,M6015	17
Q2404-12MSD	1ST-FL-CHILD-CARE-SINK-2 MSD	<2	50	25	Colorless	Colorless	Clear	Clear	M6007,M6015	18
Q2404-12DUP	1ST-FL-CHILD-CARE-SINK-2 DUP	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	16
Q2426-01	001-WILLETS-PT-BLVD(MAY)	<2	50	25	Colorless	Colorless	Cloudy	Clear	N/A	19
Q2426-02	002-35TH-AVE(MAY)	<2	50	25	Colorless	Colorless	Cloudy	Clear	N/A	20

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB168611 **WorkList ID :** 190371 **Department :** Digestion **Date :** 06-25-2025 09:50:00

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2376-02	EFFLUENT-METALS	Water	Metals ICP-Group1	1:1 HNO3 to pH < 2	LEOI01	D51	06/19/2025	200.7
Q2404-01	1ST-FL-CHILD-CARE-BATH-SI	Water	Metals Group4	1:1 HNO3 to pH < 2	TOTA02	A42	06/23/2025	200.7
Q2404-02	1ST-FL-CHILD-CARE-BATH-SI	Water	Metals Group4	1:1 HNO3 to pH < 2	TOTA02	A42	06/23/2025	200.7
Q2404-03	1ST-FL-CHILD-CARE-MULTIPL	Water	Metals Group4	1:1 HNO3 to pH < 2	TOTA02	A42	06/23/2025	200.7
Q2404-04	1ST-FL-CHILD-CARE-MULTIPL	Water	Metals Group4	1:1 HNO3 to pH < 2	TOTA02	A42	06/23/2025	200.7
Q2404-05	1ST-FL-HALLWAY-BATH-1ST-S	Water	Metals Group4	1:1 HNO3 to pH < 2	TOTA02	A42	06/23/2025	200.7
Q2404-06	1ST-FL-HALLWAY-BATH-1ST-S	Water	Metals Group4	1:1 HNO3 to pH < 2	TOTA02	A42	06/23/2025	200.7
Q2404-07	1ST-FL-HALLWAY-BATH-2ND-S	Water	Metals Group4	1:1 HNO3 to pH < 2	TOTA02	A42	06/23/2025	200.7
Q2404-08	1ST-FL-HALLWAY-BATH-2ND-S	Water	Metals Group4	1:1 HNO3 to pH < 2	TOTA02	A42	06/23/2025	200.7
Q2404-09	1ST-FL-HALLWAY-BATH-3RD-S	Water	Metals Group4	1:1 HNO3 to pH < 2	TOTA02	A42	06/23/2025	200.7
Q2404-10	1ST-FL-HALLWAY-BATH-3RD-S	Water	Metals Group4	1:1 HNO3 to pH < 2	TOTA02	A42	06/23/2025	200.7
Q2404-11	1ST-FL-CHILD-CARE-SINK-1	Water	Metals Group4	1:1 HNO3 to pH < 2	TOTA02	A42	06/23/2025	200.7
Q2404-12	1ST-FL-CHILD-CARE-SINK-2	Water	Metals Group4	1:1 HNO3 to pH < 2	TOTA02	A42	06/23/2025	200.7
Q2426-01	001-WILLETS-PT-BLVD(MAY)	Water	Metals Group 12	1:1 HNO3 to pH < 2	TULL01	A53	06/24/2025	200.7
Q2426-02	002-35th-Ave(May)	Water	Metals Group 12	1:1 HNO3 to pH < 2	TULL01	A53	06/24/2025	200.7

Date/Time 06/25/25 10:10
Raw Sample Received by: SLS.met.dis
Raw Sample Relinquished by: CR Sm

Date/Time 06/25/25 11:10
Raw Sample Received by: CR Sm
Raw Sample Relinquished by: SLS met dis

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB168650

SOP ID : M245.1-Mercury-20

SDG No : N/A

Matrix : WATER

Pippete ID: HG A

Balance ID : N/A

Filter paper ID : N/A

pH Strip ID : M6069

Hood ID : #1

Block ID: 1. HG HOT BLOCK#3 2. N/A

Start Digest Date: 06/27/2025 **Time :** 12:10 **Temp :** 95 °C

End Digest Date: 06/27/2025 **Time :** 14:14 **Temp :** 95 °C

Digestion tube ID: M5595

Block thermometer ID: HG-DIG#3

Dig Technician Signature: MB

Supervisor Signature: 12

Temp : 1. 95°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
ICV	30mL	MP86230
CCV	30mL	MP86232
CRA	30mL	MP86234
Blank Spike	0.48mL	MP86222
Matrix Spike	0.48mL	MP86222

Chemical Used	ML/SAMPLE USED	Lot Number
HNO3/H2SO4(1:2)	2.25mL	MP85892
KMnO4 (5%)	4.5mL	MP85893
K2S2O8 (5%)	2.4mL	MP85894
Hydroxylamine HCL (12%)	1.8mL	MP85895
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	MP86223
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	30mL	MP86225
2.5 ppb	S2.5	30mL	MP86226
5.0 ppb	S5.0	30mL	MP86227
7.5 ppb	S7.5	30mL	MP86228
10.0 ppb	S10.0	30mL	MP86229
ICV	ICV	30mL	MP86230
ICB	ICB	30mL	MP86231
CCV	CCV	30mL	MP86232
CCB	CCB	30mL	MP86233
CRI	CRI	30mL	MP86234
CHK STD	CHK STD	30mL	MP86235

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
6/27/25 @ 14:46	MB - Dig. Lab	MB - Metal Lab
	Preparation Group	**Analysis Group**

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB168650

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Comment	Prep Pos
PB168650BL	PBW650	30	30	<2	N/A	3-1
PB168650BS	LCS650	30	30	<2	MP86222	2
Q2126-10	LOD-MDL-WATER-04-QT2-2025	30	30	<2	N/A	3
Q2126-11	LOQ-WATER-05-QT2-2025	30	30	<2	N/A	4
Q2376-02	EFFLUENT-METALS	30	30	<2	N/A	5
Q2376-02MS	EFFLUENT-METALSMS	30	30	<2	MP86222	7
Q2376-02MSD	EFFLUENT-METALSMSD	30	30	<2	MP86222	8
Q2376-02DUP	EFFLUENT-METALSDUP	30	30	<2	N/A	6

WORKLIST(Hardcopy Internal Chain)

WorkList Name : 062725_245.1 **WorkList ID :** 190425 **Department :** Digestion **Date :** 06-27-2025 08:07:45

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2126-10	LOD-MDL-WATER-04-QT2-202	Water	Mercury	1:1 HNO3 to pH < 2	ALLI03	QA Of	05/23/2025	245.1
Q2126-11	LOQ-WATER-05-QT2-2025	Water	Mercury	1:1 HNO3 to pH < 2	ALLI03	QA Of	05/23/2025	245.1
Q2376-02	EFFLUENT-METALS	Water	Mercury	1:1 HNO3 to pH < 2	LEOI01	D51	06/19/2025	245.1

Date/Time 6/27/25 @ 12:15

Raw Sample Received by: [illegible]

Raw Sample Relinquished by: [illegible]

Date/Time 6/27/25 @ 12:15

Raw Sample Received by: [illegible]

Raw Sample Relinquished by: [illegible]

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Fax : 908 789 8922

Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB136305

Review By	Janvi	Review On	6/27/2025 11:36:27 AM
Supervise By	jaswal	Supervise On	6/27/2025 1:19:18 PM

STD. NAME	STD REF.#
ICAL Standard	MP86193,MP86193,MP86194,MP86195,MP86196,MP86212
ICV Standard	MP86219
CCV Standard	MP86216
ICSA Standard	MP86214,MP86220
CRI Standard	MP86212
LCS Standard	
Chk Standard	MP86217,MP86218

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	06/26/25 16:41		Janvi	OK
2	S1	S1	CAL2	06/26/25 16:45		Janvi	OK
3	S2	S2	CAL3	06/26/25 16:50		Janvi	OK
4	S3	S3	CAL4	06/26/25 16:54		Janvi	OK
5	S4	S4	CAL5	06/26/25 16:58		Janvi	OK
6	S5	S5	CAL6	06/26/25 17:03		Janvi	OK
7	ICV01	ICV01	ICV	06/26/25 17:07		Janvi	OK
8	LLICV01	LLICV01	LLICV	06/26/25 17:19		Janvi	OK
9	ICB01	ICB01	ICB	06/26/25 17:23		Janvi	OK
10	CRI01	CRI01	CRDL	06/26/25 17:28		Janvi	OK
11	ICSA01	ICSA01	ICSA	06/26/25 17:37		Janvi	OK
12	ICSAB01	ICSAB01	ICSAB	06/26/25 17:42		Janvi	OK
13	ICSADL	ICSADL	ICSA	06/26/25 17:46		Janvi	OK
14	ICSABDL	ICSABDL	ICSAB	06/26/25 17:50		Janvi	OK
15	CCV01	CCV01	CCV	06/26/25 17:55		Janvi	OK
16	CCB01	CCB01	CCB	06/26/25 17:59		Janvi	OK
17	Q2389-04	MH-J-I	SAM	06/26/25 18:03		Janvi	OK
18	Q2394-04	MH-K/L	SAM	06/26/25 18:08		Janvi	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB136305

Review By	Janvi	Review On	6/27/2025 11:36:27 AM
Supervise By	jaswal	Supervise On	6/27/2025 1:19:18 PM

STD. NAME	STD REF.#
ICAL Standard	MP86193,MP86193,MP86194,MP86195,MP86196,MP86212
ICV Standard	MP86219
CCV Standard	MP86216
ICSA Standard	MP86214,MP86220
CRI Standard	MP86212
LCS Standard	
Chk Standard	MP86217,MP86218

19	PB168551BL	PB168551BL	MB	06/26/25 18:13		Janvi	OK
20	PB168551BS	PB168551BS	LCS	06/26/25 18:17		Janvi	OK
21	PB168613BL	PB168613BL	MB	06/26/25 18:21		Janvi	OK
22	PB168613BS	PB168613BS	LCS	06/26/25 18:26		Janvi	OK
23	Q2381-01DL2	291431DL2	SAM	06/26/25 18:30	10x for all elements	Janvi	OK
24	Q2381-01DUPDL2	291431DUPDL2	DUP	06/26/25 18:35	10x for all elements	Janvi	OK
25	Q2381-01LDL2	291431LDL2	SD	06/26/25 18:39	50x for all elements	Janvi	OK
26	Q2381-01MSDL2	291431MSDL2	MS	06/26/25 18:43	10x for all elements	Janvi	OK
27	CCV02	CCV02	CCV	06/26/25 18:48		Janvi	OK
28	CCB02	CCB02	CCB	06/26/25 18:52		Janvi	OK
29	Q2381-01MSDDL2	291431MSDDL2	MSD	06/26/25 18:56	10x for all elements	Janvi	OK
30	Q2412-01	TR-05-062425	SAM	06/26/25 19:05		Janvi	OK
31	Q2423-01	RT915	SAM	06/26/25 19:09		Janvi	OK
32	Q2419-01	EO-3-6-25-2025	SAM	06/26/25 19:13		Janvi	OK
33	Q2376-02	EFFLUENT-METALS	SAM	06/26/25 19:18		Janvi	OK
34	Q2381-01ADL2	291431ADL2	PS	06/26/25 19:22	10x for all elements	Janvi	OK
35	CCV03	CCV03	CCV	06/26/25 19:27		Janvi	OK
36	CCB03	CCB03	CCB	06/26/25 19:31		Janvi	OK
37	Q2409-02	COP-SOIL-PILE	SAM	06/26/25 19:35		Janvi	OK
38	Q2409-02DUP	COP-SOIL-PILEDUP	DUP	06/26/25 19:40		Janvi	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB136305

Review By	Janvi	Review On	6/27/2025 11:36:27 AM
Supervise By	jaswal	Supervise On	6/27/2025 1:19:18 PM

STD. NAME	STD REF.#
ICAL Standard	MP86193,MP86193,MP86194,MP86195,MP86196,MP86212
ICV Standard	MP86219
CCV Standard	MP86216
ICSA Standard	MP86214,MP86220
CRI Standard	MP86212
LCS Standard	
Chk Standard	MP86217,MP86218

39	Q2409-02L	COP-SOIL-PILEL	SD	06/26/25 19:44		Janvi	OK
40	Q2409-02MS	COP-SOIL-PILEMS	MS	06/26/25 19:49		Janvi	OK
41	Q2409-02MSD	COP-SOIL-PILEMSD	MSD	06/26/25 19:53		Janvi	OK
42	Q2409-02A	COP-SOIL-PILEA	PS	06/26/25 19:58		Janvi	OK
43	CCV04	CCV04	CCV	06/26/25 20:02		Janvi	OK
44	CCB04	CCB04	CCB	06/26/25 20:07		Janvi	OK
45	PB168611BL	PB168611BL	MB	06/26/25 20:11		Janvi	OK
46	PB168611BS	PB168611BS	LCS	06/26/25 20:15		Janvi	OK
47	CCV05	CCV05	CCV	06/26/25 20:46		Janvi	OK
48	CCB05	CCB05	CCB	06/26/25 20:51	CCB fail Na,K (oversaturated)	Janvi	OK

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Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB136313

Review By	MOHAN	Review On	7/2/2025 7:51:30 AM
Supervise By	jaswal	Supervise On	7/2/2025 4:48:37 PM

STD. NAME	STD REF.#
ICAL Standard	MP86223,MP86224,MP86225,MP86226,MP86227,MP86228,MP86229
ICV Standard	MP86230
CCV Standard	MP86232
ICSA Standard	
CRI Standard	MP86234
LCS Standard	
Chk Standard	MP86231,MP86233,MP86235,MP86221

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	06/27/25 12:23		MOHAN	OK
2	S0.05	S0.05	CAL2	06/27/25 12:25		MOHAN	OK
3	S0.2	S0.2	CAL3	06/27/25 12:27		MOHAN	OK
4	S2.5	S2.5	CAL4	06/27/25 12:30		MOHAN	OK
5	S5	S5	CAL5	06/27/25 12:32		MOHAN	OK
6	S7.5	S7.5	CAL6	06/27/25 12:34		MOHAN	OK
7	S10	S10	CAL7	06/27/25 12:48		MOHAN	OK
8	ICV09	ICV09	ICV	06/27/25 12:54		MOHAN	OK
9	ICB09	ICB09	ICB	06/27/25 12:57		MOHAN	OK
10	CCV27	CCV27	CCV	06/27/25 12:59		MOHAN	OK
11	CCB27	CCB27	CCB	06/27/25 13:01		MOHAN	OK
12	CRA	CRA	CRDL	06/27/25 13:06		MOHAN	OK
13	HighStd	HighStd	HIGH STD	06/27/25 13:09		MOHAN	OK
14	ChkStd	ChkStd	SAM	06/27/25 13:11		MOHAN	OK
15	PB168650BL	PB168650BL	MB	06/27/25 13:16		MOHAN	OK
16	PB168650BS	PB168650BS	LCS	06/27/25 13:22		MOHAN	OK
17	Q2126-10	LOD-MDL-WATER-04	SAM	06/27/25 13:34		MOHAN	OK
18	Q2126-11	LOQ-WATER-05-QT2	LOQ	06/27/25 13:39		MOHAN	OK

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Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB136313

Review By	MOHAN	Review On	7/2/2025 7:51:30 AM
Supervise By	jaswal	Supervise On	7/2/2025 4:48:37 PM

STD. NAME	STD REF.#
ICAL Standard	MP86223,MP86224,MP86225,MP86226,MP86227,MP86228,MP86229
ICV Standard	MP86230
CCV Standard	MP86232
ICSA Standard	
CRI Standard	MP86234
LCS Standard	
Chk Standard	MP86231,MP86233,MP86235,MP86221

19	Q2376-02	EFFLUENT-METALS	SAM	06/27/25 13:43		MOHAN	OK
20	Q2376-02DUP	EFFLUENT-METALSD	DUP	06/27/25 13:45		MOHAN	OK
21	Q2376-02MS	EFFLUENT-METALSM	MS	06/27/25 13:47		MOHAN	OK
22	CCV28	CCV28	CCV	06/27/25 13:49		MOHAN	OK
23	CCB28	CCB28	CCB	06/27/25 13:52		MOHAN	OK
24	Q2376-02MSD	EFFLUENT-METALSM	MSD	06/27/25 13:54		MOHAN	OK
25	Q2376-02L	EFFLUENT-METALSL	SD	06/27/25 13:56		MOHAN	OK
26	Q2376-02A	EFFLUENT-METALSA	PS	06/27/25 13:59		MOHAN	OK
27	CCV29	CCV29	CCV	06/27/25 14:01		MOHAN	OK
28	CCB29	CCB29	CCB	06/27/25 14:03		MOHAN	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB136377

Review By	Review On
Supervise By	Supervise On

STD. NAME	STD REF.#
ICAL Standard	
ICV Standard	
CCV Standard	
ICSA Standard	
CRI Standard	
LCS Standard	
Chk Standard	

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	07/03/25 13:30		Janvi	OK
2	S1	S1	CAL2	07/03/25 13:34		Janvi	OK
3	S2	S2	CAL3	07/03/25 13:39		Janvi	OK
4	S3	S3	CAL4	07/03/25 13:43		Janvi	OK
5	S4	S4	CAL5	07/03/25 13:47		Janvi	OK
6	S5	S5	CAL6	07/03/25 13:51		Janvi	OK
7	ICV01	ICV01	ICV	07/03/25 14:50	ICV fail for As,Co,K,Tl (200.7) (95-105)	Janvi	OK
8	LLICV01	LLICV01	LLICV	07/03/25 14:55		Janvi	OK
9	ICB01	ICB01	ICB	07/03/25 15:32		Janvi	OK
10	CRI01	CRI01	CRDL	07/03/25 15:37		Janvi	OK
11	ICSA01	ICSA01	ICSA	07/03/25 15:41		Janvi	OK
12	ICSAB01	ICSAB01	ICSAB	07/03/25 15:45		Janvi	OK
13	ICSADL	ICSADL	ICSA	07/03/25 15:50		Janvi	OK
14	ICSABDL	ICSABDL	ICSAB	07/03/25 15:54		Janvi	OK
15	CCV01	CCV01	CCV	07/03/25 16:06		Janvi	OK
16	CCB01	CCB01	CCB	07/03/25 16:10		Janvi	OK
17	Q2404-12	1ST-FL-CHILD-CARE	SAM	07/03/25 16:15		Janvi	OK
18	Q2404-12DUP	1ST-FL-CHILD-CARE	DUP	07/03/25 16:19		Janvi	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB136377

Review By	Review On
Supervise By	Supervise On

STD. NAME	STD REF.#
ICAL Standard	
ICV Standard	
CCV Standard	
ICSA Standard	
CRI Standard	
LCS Standard	
Chk Standard	

19	Q2404-12L	1ST-FL-CHILD-CARE	SD	07/03/25 16:24		Janvi	OK
20	Q2404-12MS	1ST-FL-CHILD-CARE	MS	07/03/25 16:28		Janvi	OK
21	Q2404-12MSD	1ST-FL-CHILD-CARE	MSD	07/03/25 16:32		Janvi	OK
22	Q2404-12A	1ST-FL-CHILD-CARE	PS	07/03/25 16:37		Janvi	OK
23	Q2444-08	1ST-PL-KITCHENSIN	SAM	07/03/25 16:41		Janvi	OK
24	CCV02	CCV02	CCV	07/03/25 16:53		Janvi	OK
25	CCB02	CCB02	CCB	07/03/25 16:57		Janvi	OK
26	Q2393-11	PARK AVE -6	SAM	07/03/25 17:01	NOT USE	Janvi	Not Ok
27	Q2393-11DUP	PARK AVE -6DUP	DUP	07/03/25 17:06	NOT USE	Janvi	Not Ok
28	Q2393-11L	PARK AVE -6L	SD	07/03/25 17:10	NOT USE	Janvi	Not Ok
29	Q2393-11MS	PARK AVE -6MS	MS	07/03/25 17:15	NOT USE	Janvi	Not Ok
30	Q2393-11MSD	PARK AVE -6MSD	MSD	07/03/25 17:19	NOT USE	Janvi	Not Ok
31	Q2393-11A	PARK AVE -6A	PS	07/03/25 17:24	NOT USE	Janvi	Not Ok
32	CCV03	CCV03	CCV	07/03/25 17:28		Janvi	OK
33	CCB03	CCB03	CCB	07/03/25 17:37		Janvi	OK

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Prep Standard - Chemical Standard Summary

Order ID : Q2376

Test : Mercury,Metals ICP-Group1

Prepbatch ID : PB168611,PB168650,

Sequence ID/Qc Batch ID: LB136305,LB136305,LB136313,LB136377,

Standard ID :

MP85156,MP85892,MP85893,MP85894,MP85895,MP86192,MP86193,MP86194,MP86195,MP86196,MP86211,MP86212,MP86214,MP86216,MP86217,MP86218,MP86219,MP86220,MP86221,MP86222,MP86223,MP86224,MP86225,MP86226,MP86227,MP86228,MP86229,MP86230,MP86231,MP86232,MP86233,MP86234,MP86235,

Chemical ID :

M4371,M4465,M4916,M5062,M5467,M5470,M5471,M5499,M5658,M5747,M5748,M5751,M5798,M5799,M5800,M5801,M5811,M5814,M5816,M5820,M5882,M5884,M5942,M5962,M5970,M5984,M5985,M5996,M5997,M6007,M6015,M6021,M6023,M6028,M6030,M6032,M6041,M6058,M6076,M6127,M6128,M6137,M6142,M6144,M6145,M6146,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
170	1:1HCL	MP85156	04/07/2025	08/18/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 1250.00000ml of M6151 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3965	2:1 H2SO4 : HNO3	MP85892	06/05/2025	11/27/2025	Mohan Bera	None	None	Sarabjit Jaswal 06/14/2025

FROM 1600.00000ml of M6041 + 800.00000ml of M6162 = Final Quantity: 3200.000 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
66	POTASSIUM PERSULFATE SOLUTION 5 %	MP85894	06/05/2025	08/06/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 06/14/2025

FROM 100.00000ml of M4465 + 2000.00000ml of W3112 = 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
67	SODIUM CHLORIDE - HYDROXYL- CHLORIDE SOLUTION	MP85895	06/05/2025	08/08/2025	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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
902	ICP AES CAL BLK (SO/ICB/CCB)	MP86192	06/25/2025	07/18/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/03/2025

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)	MP86193	06/25/2025	07/18/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/03/2025

FROM 5.00000ml of M5467 + 5.00000ml of M5470 + 5.00000ml of M5816 + 5.00000ml of M5820 + 5.00000ml of M5970 + 5.00000ml of M5996 + 5.00000ml of M5997 + 5.00000ml of M6076 + 5.00000ml of M6146 + 455.00000ml of MP86192 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
910	ICP AES STD S4	MP86194	06/25/2025	07/18/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/03/2025

FROM 50.00000ml of MP86192 + 50.00000ml of MP86193 = 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	MP86195	06/25/2025	07/18/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/03/2025

FROM 25.00000ml of MP86193 + 75.00000ml of MP86192 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3913	ICP AES STD S2	MP86196	06/25/2025	07/18/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/03/2025

FROM 16.00000ml of MP86193 + 184.00000ml of MP86192 = Final Quantity: 200.000 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	MP86211	06/25/2025	07/18/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/03/2025

FROM 0.03000ml of M5798 + 0.03000ml of M6028 + 0.04000ml of M6137 + 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 M5751 + 0.10000ml of M5801 + 0.10000ml of M5820 + 0.10000ml of M5962 + 0.10000ml of M5970 + 0.10000ml of M6128 + 0.15000ml of M5800 + 0.20000ml of M5748 + 0.20000ml of M5799 + 0.20000ml of M6021 + 0.20000ml of M6023 + 0.20000ml of M6145 + 0.25000ml of M5467 + 0.25000ml of M6146 + 0.50000ml of M5814 + 0.50000ml of M6032 + 1.00000ml of M5499 + 1.00000ml of M5942 + 1.00000ml of M6127 + 1.00000ml of M6142 + 1.00000ml of M6144 + 2.00000ml of M5816 + 89.29000ml of MP86192 = 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	MP86212	06/25/2025	07/18/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/03/2025

FROM 2.00000ml of MP86211 + 98.00000ml of MP86192 = 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
904	ICP AES ICSA SOLN	MP86214	06/25/2025	07/18/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/03/2025

FROM 10.00000ml of M6152 + 80.00000ml of MP86192 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
911	ICP AES CCV SOLN	MP86216	06/25/2025	07/18/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/03/2025

FROM 50.00000ml of MP86192 + 50.00000ml of MP86193 = 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	MP86217	06/25/2025	07/18/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/03/2025

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	MP86218	06/25/2025	07/18/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/03/2025

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
4163	NEW ICV-060925	MP86219	06/25/2025	07/18/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/03/2025

FROM 0.20000ml of M6058 + 0.20000ml of M6163 + 0.20000ml of M6164 + 0.20000ml of M6165 + 49.20000ml of MP86192 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3494	ICP AES ICSAB SOLN-1	MP86220	06/25/2025	06/30/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/03/2025

FROM 0.10000ml of M6076 + 10.00000ml of M6152 + 10.00000ml of M6155 + 79.90000ml of MP86192 = 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
68	STANNOUS CHLORIDE SOLUTION	MP86221	06/27/2025	06/28/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 07/03/2025

FROM 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6151 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP86222	06/27/2025	06/28/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 07/03/2025

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	MP86223	06/27/2025	06/28/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/03/2025

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
2750	Hg 0.05ppb	MP86224	06/27/2025	06/28/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/03/2025

FROM 2.50000ml of M6162 + 247.45000ml of W3112 + 0.05000ml of MP86222 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1341	Hg 0.2 PPB STD	MP86225	06/27/2025	06/28/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/03/2025

FROM 2.50000ml of M6162 + 247.30000ml of W3112 + 0.20000ml of MP86222 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1342	Hg 2.5 PPB STD	MP86226	06/27/2025	06/28/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/03/2025

FROM 2.50000ml of M6162 + 245.00000ml of W3112 + 2.50000ml of MP86222 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1343	Hg 5.0 PPB STD	MP86227	06/27/2025	06/28/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/03/2025

FROM 2.50000ml of M6162 + 242.50000ml of W3112 + 5.00000ml of MP86222 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1344	Hg 7.5 PPB STD	MP86228	06/27/2025	06/28/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/03/2025

FROM 2.50000ml of M6162 + 240.00000ml of W3112 + 7.50000ml of MP86222 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1345	Hg 10.0 PPB STD	MP86229	06/27/2025	06/28/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/03/2025

FROM 2.50000ml of M6162 + 237.50000ml of W3112 + 10.00000ml of MP86222 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1346	Hg ICV SOLUTION	MP86230	06/27/2025	06/28/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/03/2025

FROM 2.50000ml of M6161 + 2.50000ml of M6162 + 245.00000ml 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
1351	ICB (Hg 0.00 PPB SOLUTION)	MP86231	06/27/2025	06/28/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/03/2025

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
1358	CCV (Hg 5.0 PPB SOLUTION)	MP86232	06/27/2025	06/28/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/03/2025

FROM 485.00000ml of W3112 + 5.00000ml of M6162 + 10.00000ml of MP86222 = Final Quantity: 500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1352	CCB (Hg 0.00 PPB SOLUTION)	MP86233	06/27/2025	06/28/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/03/2025

FROM 495.00000ml of W3112 + 5.00000ml of M6162 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1349	CRA/CRI (Hg 0.2 PPB SOLUTION)	MP86234	06/27/2025	06/28/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/03/2025

FROM 2.50000ml of M6162 + 247.30000ml of W3112 + 0.20000ml of MP86222 = 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
1350	CHK STD (Hg 7.0 PPB SOLUTION)	MP86235	06/27/2025	06/28/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/03/2025

FROM 2.50000ml of M6162 + 240.50000ml of W3112 + 7.00000ml of MP86222 = Final Quantity: 250.000 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-3238-05 / Potassium Persulfate (2.5kg)	0000234156	08/06/2025	07/23/2019 /	07/25/2019 / manojkumar	M4465

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	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	M5470

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57038 / Sr, 1000 PPM, 125 ml	082922	08/29/2025	04/14/2025 / jaswal	03/16/2023 / jaswal	M5471

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	031523	03/15/2026	04/17/2025 / Janvi	03/17/2023 / bin	M5499

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.	/ 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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	071723	07/17/2026	10/01/2024 / Jaswal	08/25/2023 / jaswal	M5751

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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.	57016 / S, 1000 PPM, 125 ml	122923	12/29/2026	05/20/2024 / Jaswal	02/09/2024 / jaswal	M5816

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

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57003 / Li, 1000 PPM, 125 ml	061224	06/21/2027	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	03/17/2028	06/19/2025 / MOHAN	05/14/2024 / Jaswal	M6015

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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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	08/16/2024 / mohan	08/16/2024 / mohan	M6041

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CHEM-QC-4 / CHEM-QC-4, Second Source, 1000 ug/ml, B, Mo, Si, Sn, Ti	V2-MEB746173	01/29/2026	01/29/2025 / JANVI	08/22/2024 / Jaswal	M6058

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	Z9651Q / CHEM-CLP-4/.25L	V2-MEB746762	01/01/2026	01/01/2025 / kareem	09/19/2024 / kareem	M6076

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58119 / K, 10000 PPM, 500 ml	103024	10/30/2027	05/06/2025 / JANVI	01/13/2025 / Jaswal	M6142

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58111 / Na, 10000 PPM, 500 ml	072424	07/24/2027	01/23/2025 / kareem	01/13/2025 / Jaswal	M6144

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58030 / Zinc, Zn, 500 ml, 1000 PPM	121724	12/17/2027	02/04/2025 /	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 #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	08/18/2025	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART A / ICSA (ICP) STOCK SOLN	ICSA-1211	08/24/2025	02/24/2025 / kareem	04/20/2021 / kareem	M6152

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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 B / ICSAB (ICP) STOCK SOLN	ICSB-0710	06/30/2025	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

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

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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-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

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	T142	Quality Test / Release Date	08/17/2023
Lot Number	232820		
Description	STANNOUS CHLORIDE, DIHYDRATE CERTIFIED ACS (Suitable for Mercury Determination)		
Country of Origin	United States	Suggested Retest Date	Aug/2028
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear crystals
ASSAY	%	Inclusive Between 98 - 103	100.65
CALCIUM	%	<= 0.005	0.0017
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IRON (Fe)	%	<= 0.003	0.0011
LEAD (Pb)	%	<= 0.01	0.0006
MERCURY (Hg)	ppm	<= 0.05	<0.05
POTASSIUM (K)	%	<= 0.005	0.0001
SODIUM (Na)	%	<= 0.01	<0.01
SOLUBILITY IN HCL	PASS/FAIL	= PASS TEST	PASS TEST
SULFATE (SO4)	PASS/FAIL	= P.T. (ABOUT 0.003%)	P.T. (ABOUT 0.003%)

Harout Sahagian - Quality Control Supervisor - Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

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M6032

R: 8/5/24

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CERTIFIED WEIGHT REPORT:

Part Number:	**57056**		**Lot #**		
Lot Number:	**010924**	**Solvent:**	24002546	Nitric Acid	
Description:	**Barium (Ba)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	010927				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

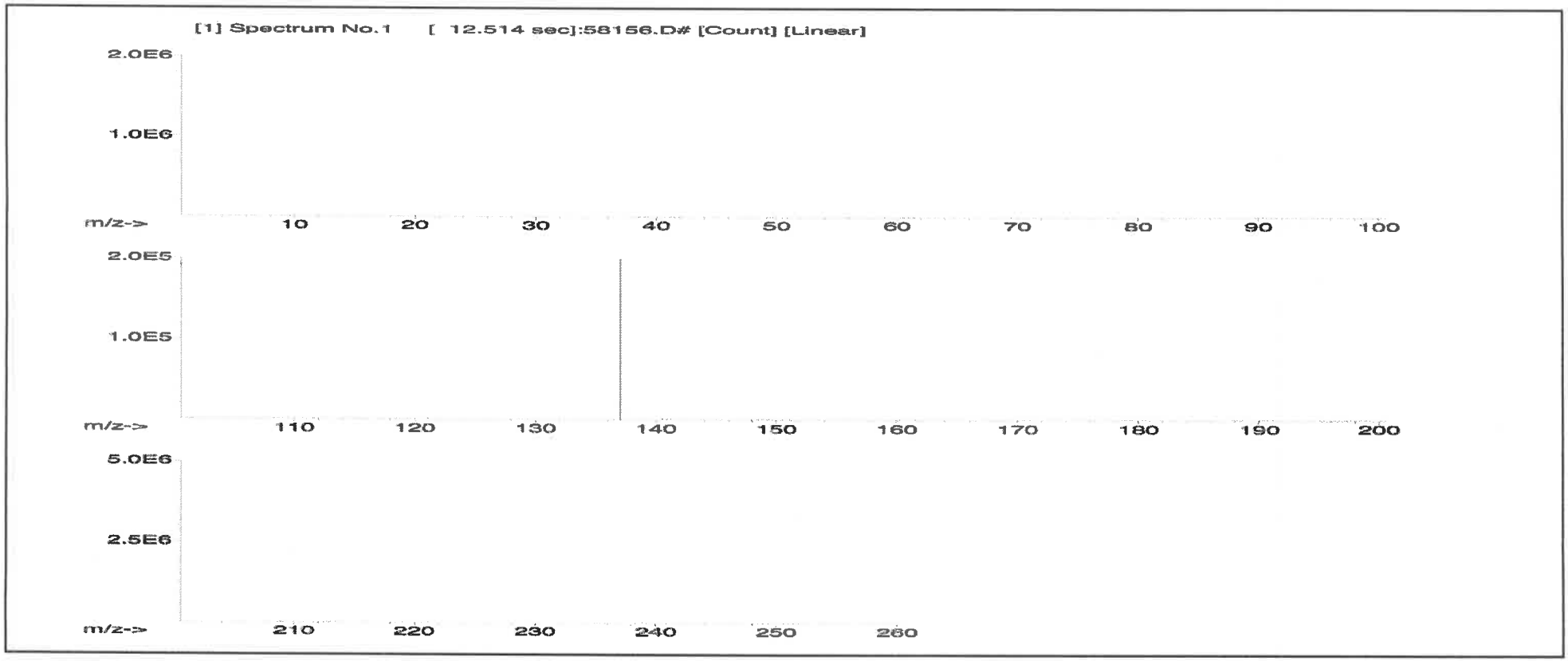
Giovanni Esposito

Formulated By:	Giovanni Esposito	010924

Pedro Rentas

Reviewed By:	Pedro L. Rentas	010924

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Barium nitrate (Ba)	IN023	BAD022019A1	1000	99.999	0.10	52.3	3.82417	3.82441	**1000.1**	**2.0**	10022-31-8	0.5 mg/m3	orl-rat 355 mg/kg	3104a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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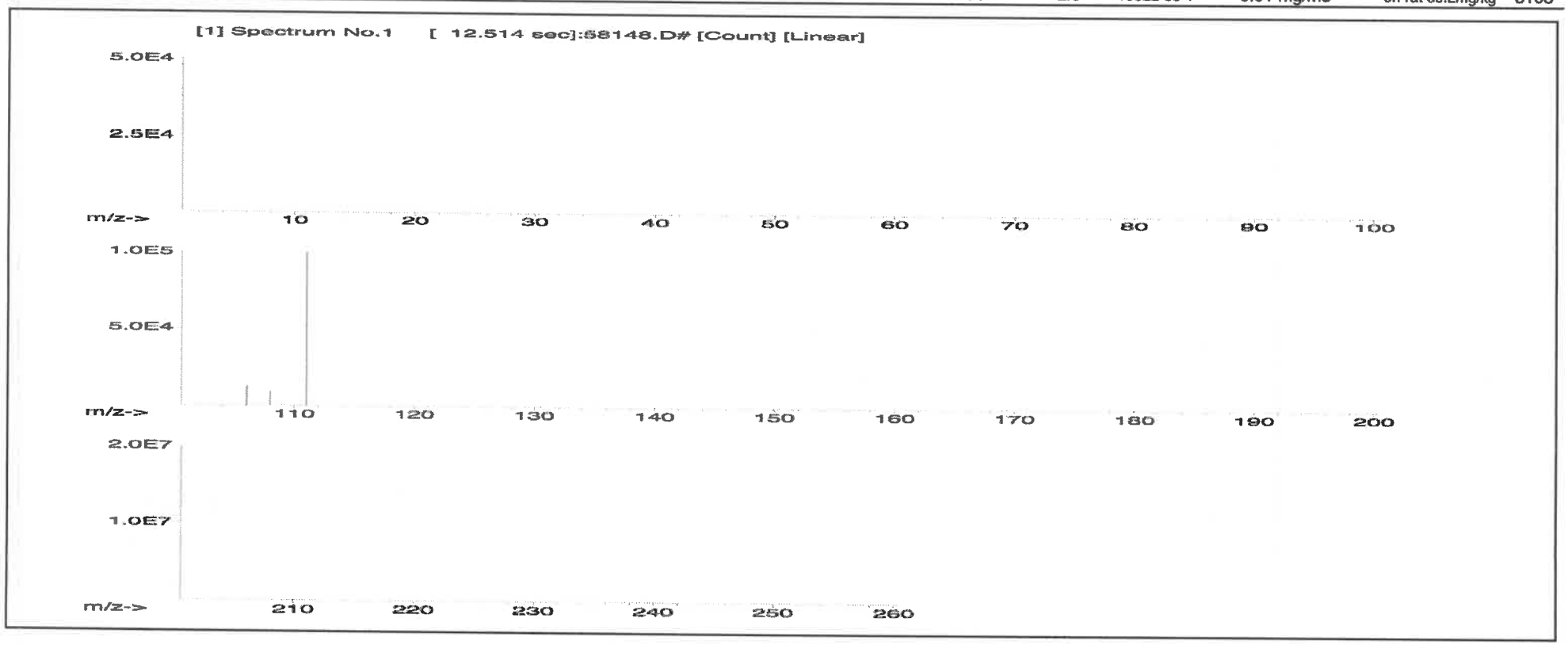
CERTIFIED WEIGHT REPORT:

Part Number:	**57048**		**Lot #**		
Lot Number:	**070124**	**Solvent:**	24002546	Nitric Acid	
Description:	**Cadmium (Cd)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	070127				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty		

Aleah O'Brady		
Formulated By:	Aleah O'Brady	070124
Pedro Rentas		
Reviewed By:	Pedro L. Rentas	070124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cadmium nitrate tetrahydrate (Cd)	IN024	CDM092021A1	1000	99.999	0.10	36.5	5.4797	5.4804	**1000.1**	**2.0**	10022-68-1	0.01 mg/m3	orl-rat 60.2mg/kg	3108



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	T	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
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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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R : 01/03/24. M5810, M5811

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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

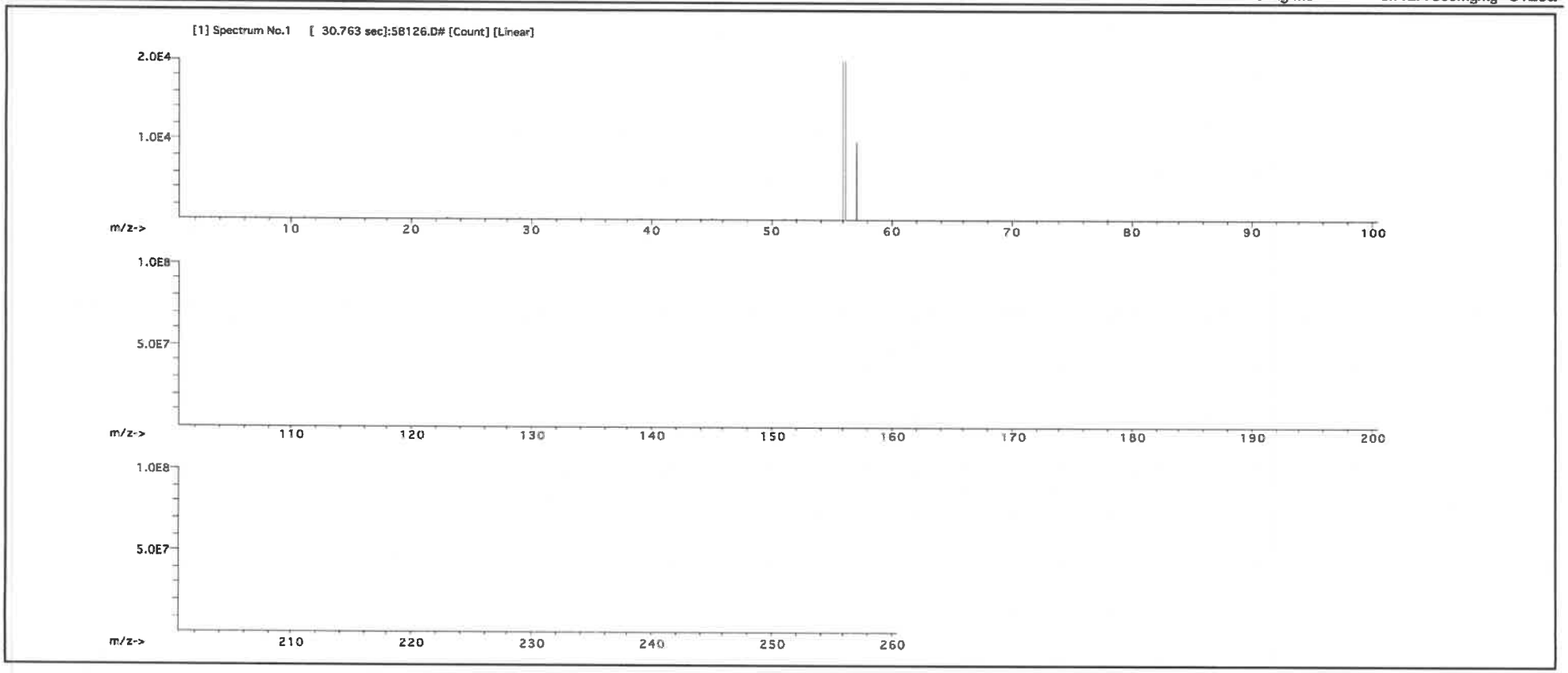
	Lot #		
Solvent:	21110221	Nitric Acid	
5.0%	250.0 (mL)	Nitric Acid	
5E-05	Balance Uncertainty		
0.12	Flask Uncertainty		

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:

* 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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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

INORGANIC VENTURES

Refine your results. Redefine your industry.

Certificate of Analysis

RD:05/14/2024

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 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

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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.

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Refine your results. Redefine your industry.

Certificate of Analysis

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Christiansburg, VA 24073 USA
inorganicventures.com

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F: 540-585-3012
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M5062
M5063
M3

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Mass Spec Solution
Catalog Number:	MSHG-10PPM
Lot Number:	S2-HG709270
Matrix:	10% (v/v) HCl
Value / Analyte(s):	10 µg/mL ea: Mercury
Starting Material:	Hg metal
Starting Material Lot#:	1959
Starting Material Purity:	99.9994%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10.001 ± 0.053 µg/mL

Density: 1.020 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
Hg	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance.

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

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

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

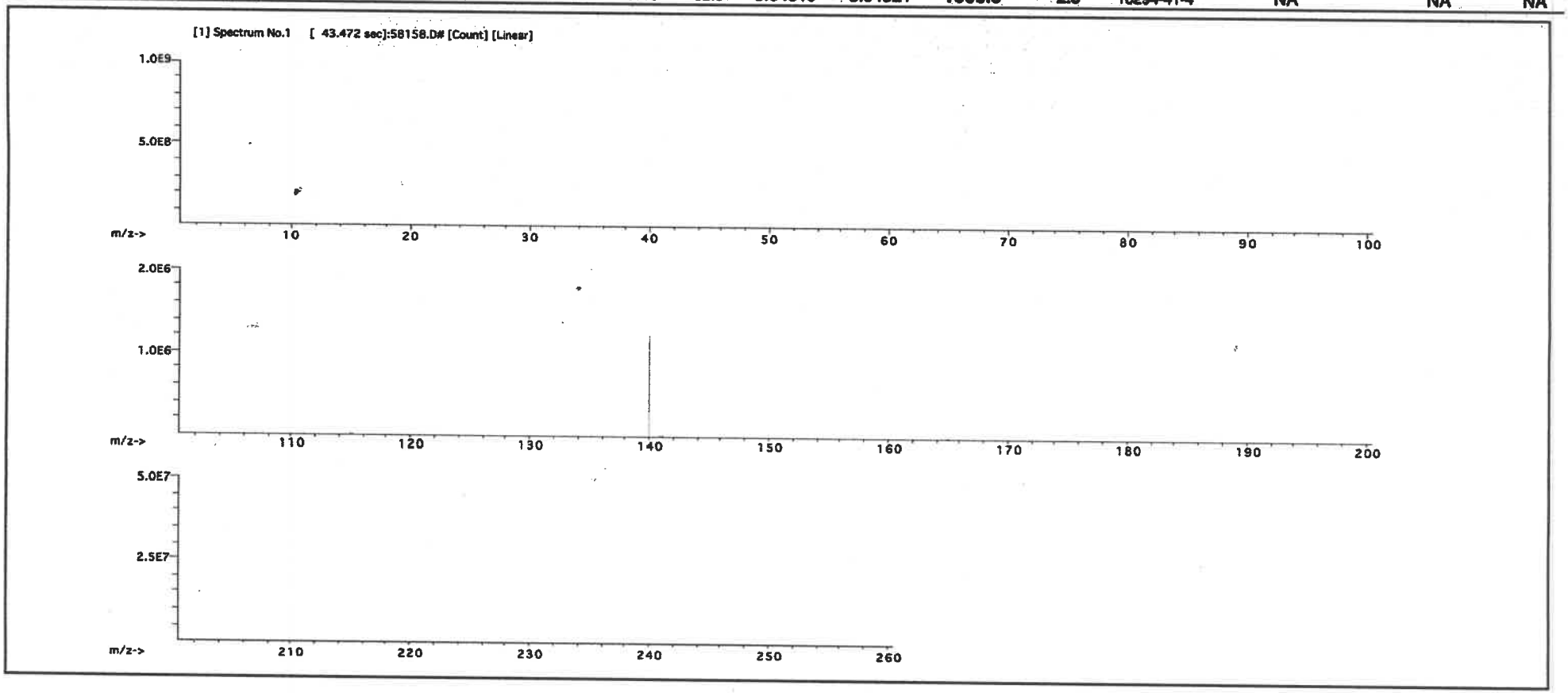
Weight shown below was diluted to (mL): 1000.12 0.058 Flask Uncertainty

		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.

* 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).

Sodium Chloride, Crystal
BAKER ANALYZED® A.C.S. Reagent

M5493 - M5708
Rad on 4/14/23
JMG

avantor™ | J.T.Baker®

Material No.: 3624-01
Batch No.: 0000281938
Manufactured Date: 2021-06-07
Retest Date: 2026-06-07
Revision No.: 2

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
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

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Certified Reference Material CRM

M5658 R! 8/25/23

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AR-1539 Certificate Number
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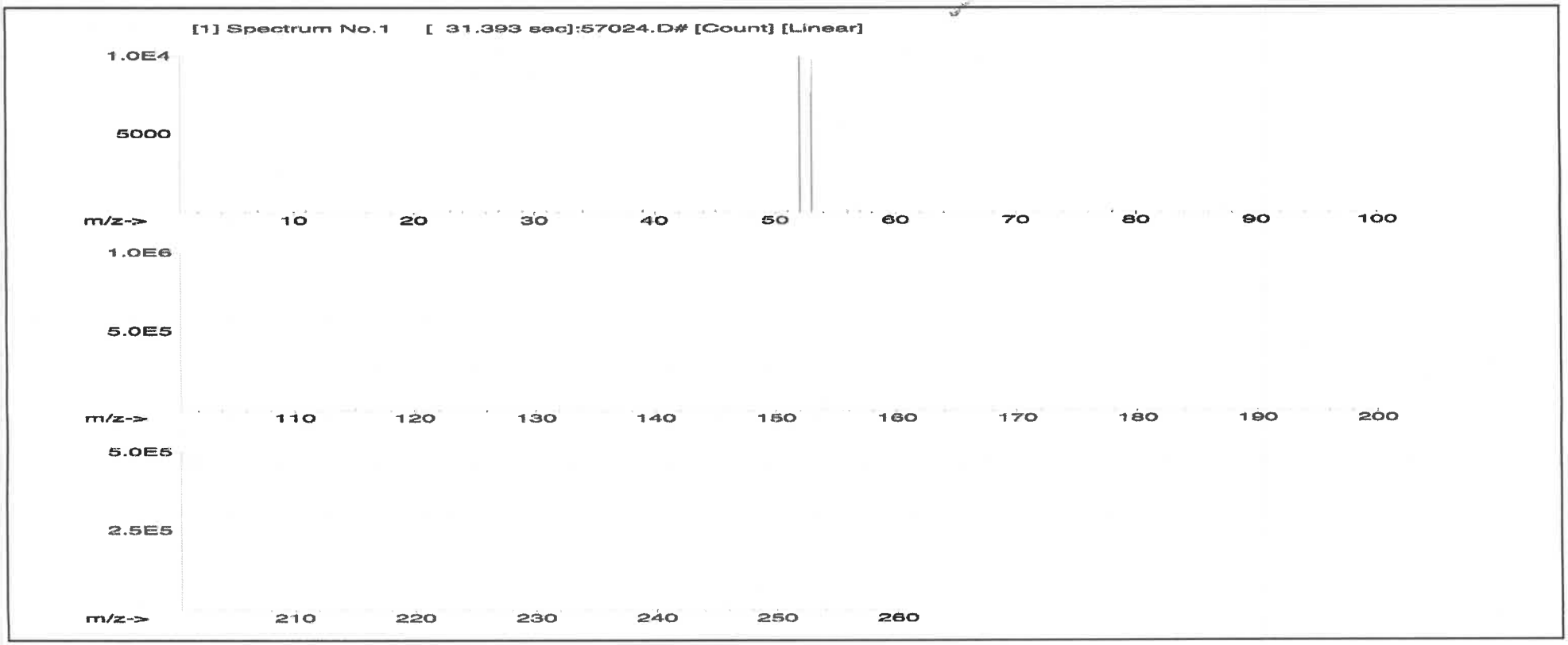
CERTIFIED WEIGHT REPORT:

		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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* 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: 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

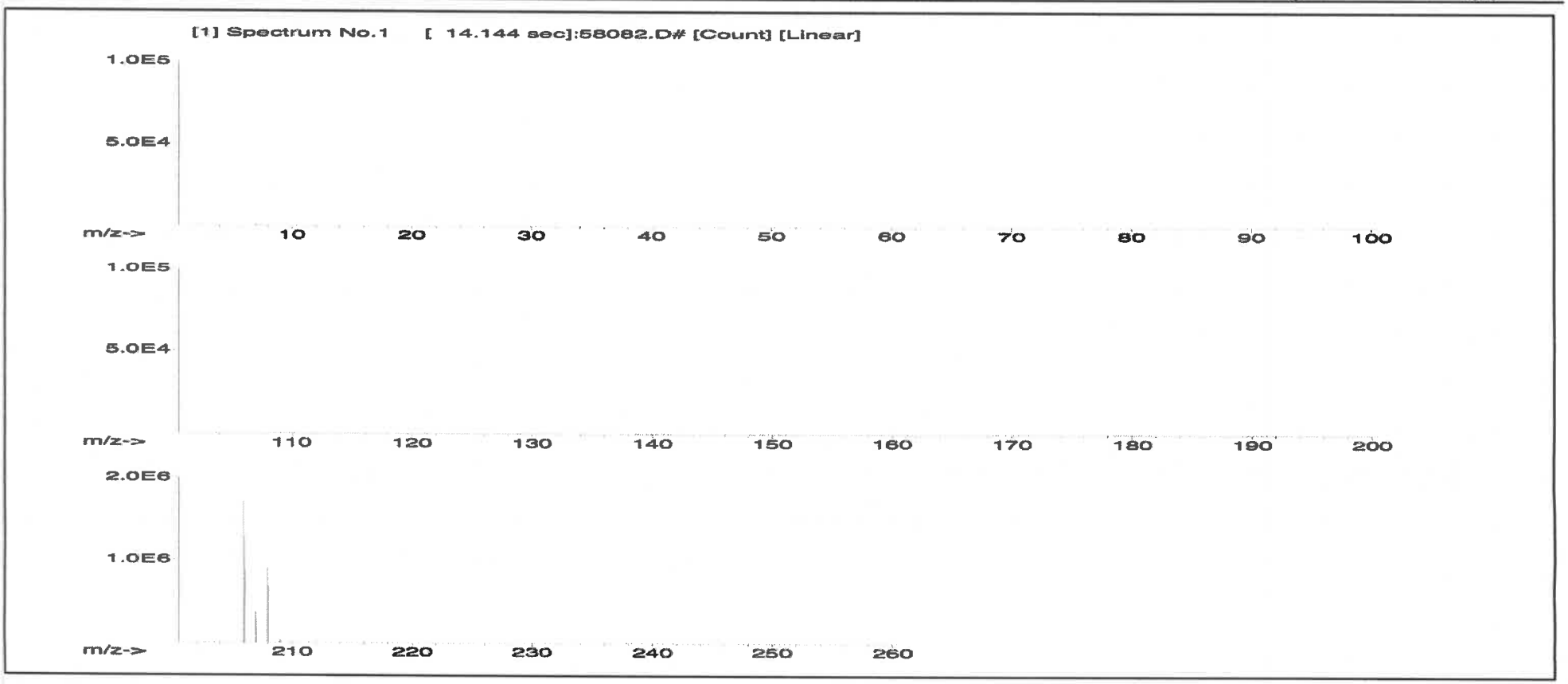
Weight shown below was diluted to (mL): 3000.41 ± 0.06 Flask Uncertainty

	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:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

R: 12/20/23 M5748

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AR-1539 Certificate Number
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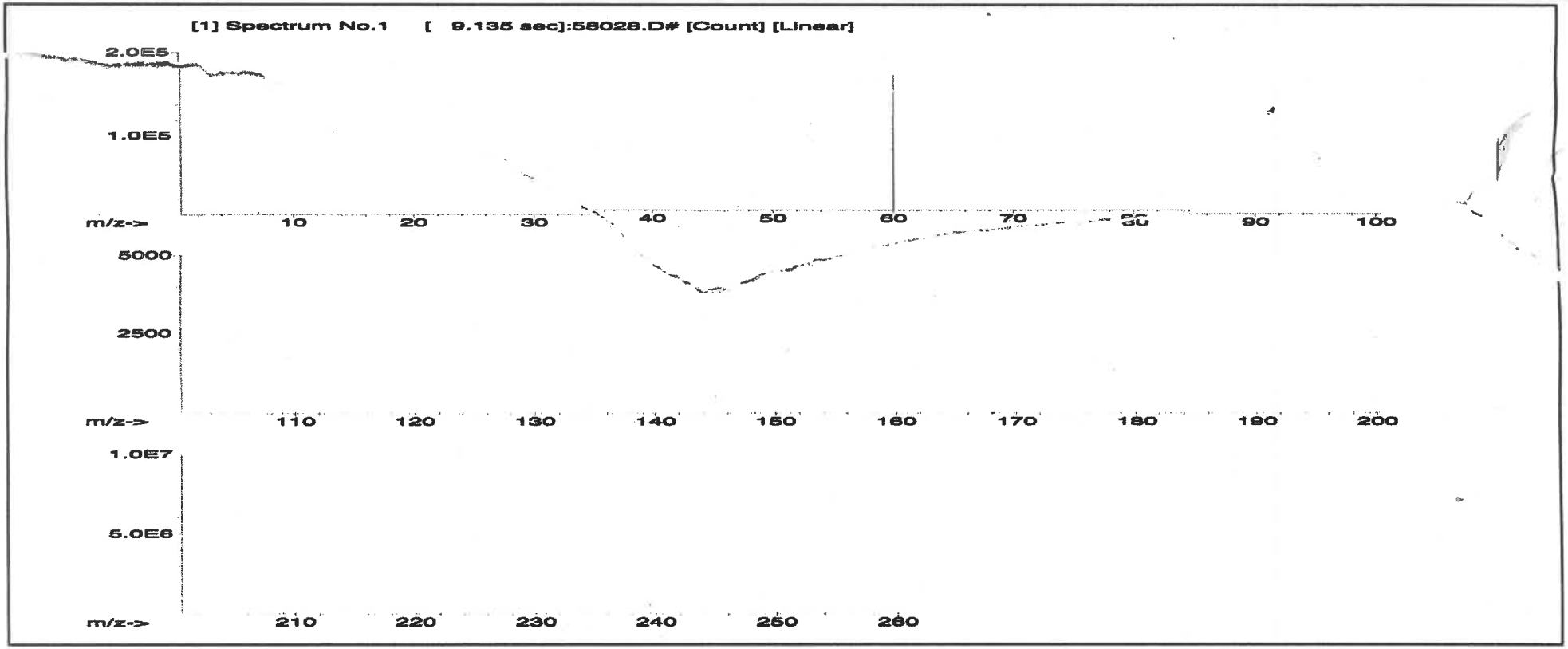
CERTIFIED WEIGHT REPORT:

		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
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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	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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Certified Reference Material CRM

R: 8/25/23 M5751

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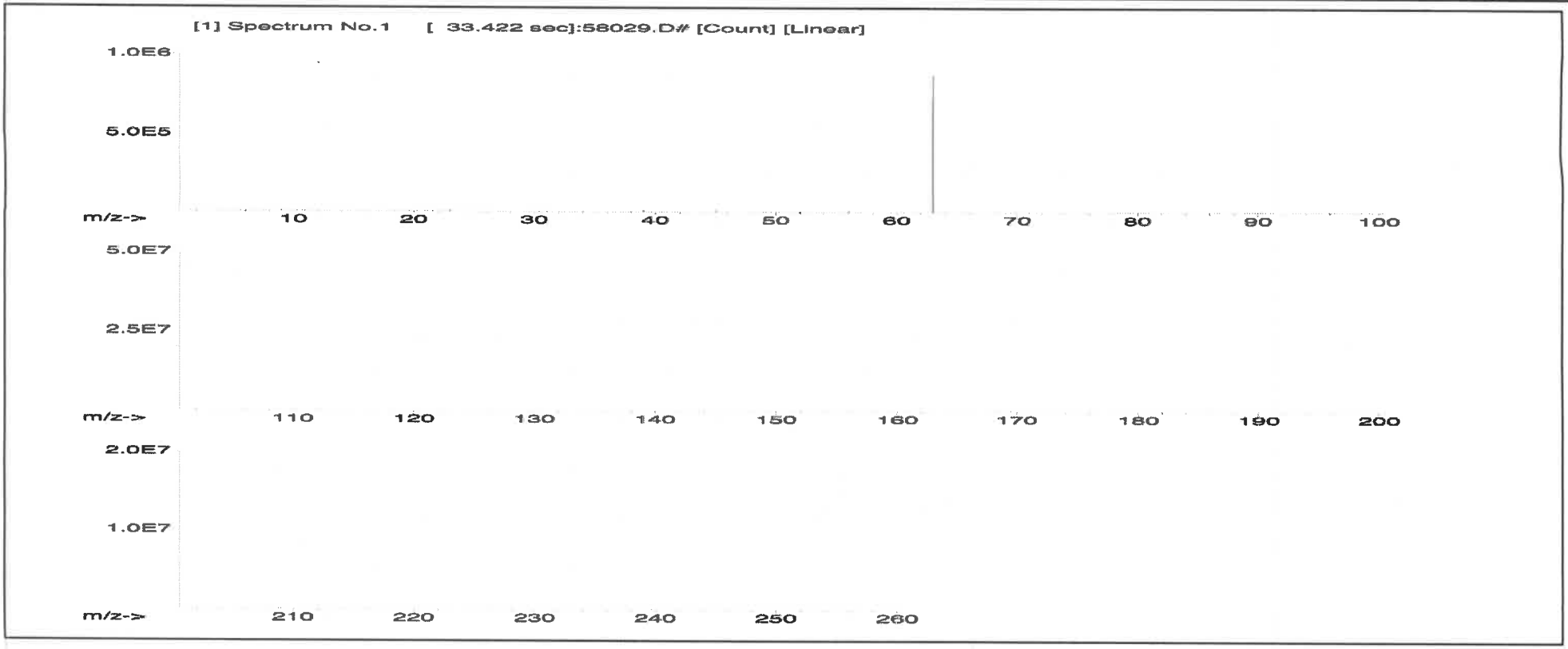
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58029**	21110221	Nitric Acid	
Lot Number:	**071723**			
Description:	**Copper (Cu)**	2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	071726			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	071723
Reviewed By:	Pedro L. Rentas	071723

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Copper(II) nitrate trihydrate (Cu)	58129	022723	0.1000	200.0	0.084	1000	10000.5	**1000.0**	**2.2**	10031-43-3	1 mg/m3	orl-rat 794 mg/kg	3114



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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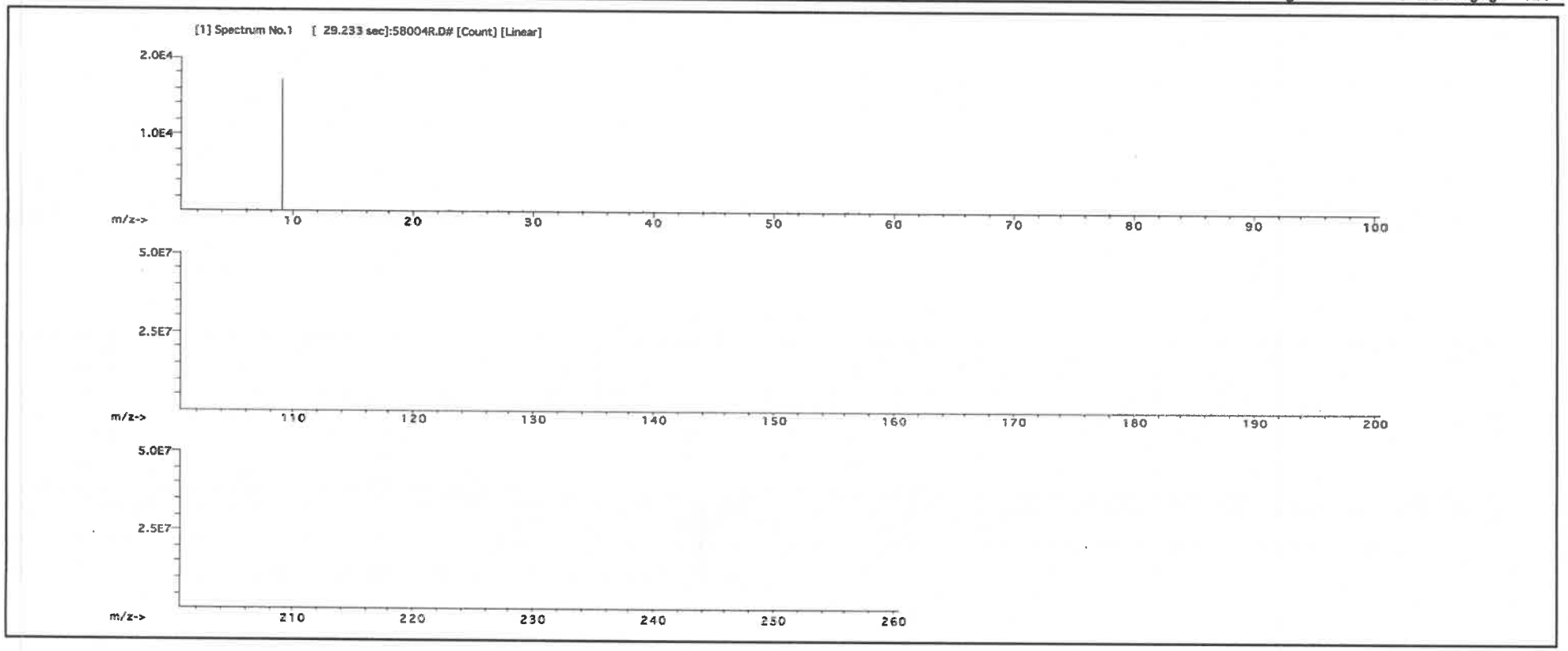
CERTIFIED WEIGHT REPORT:

		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)

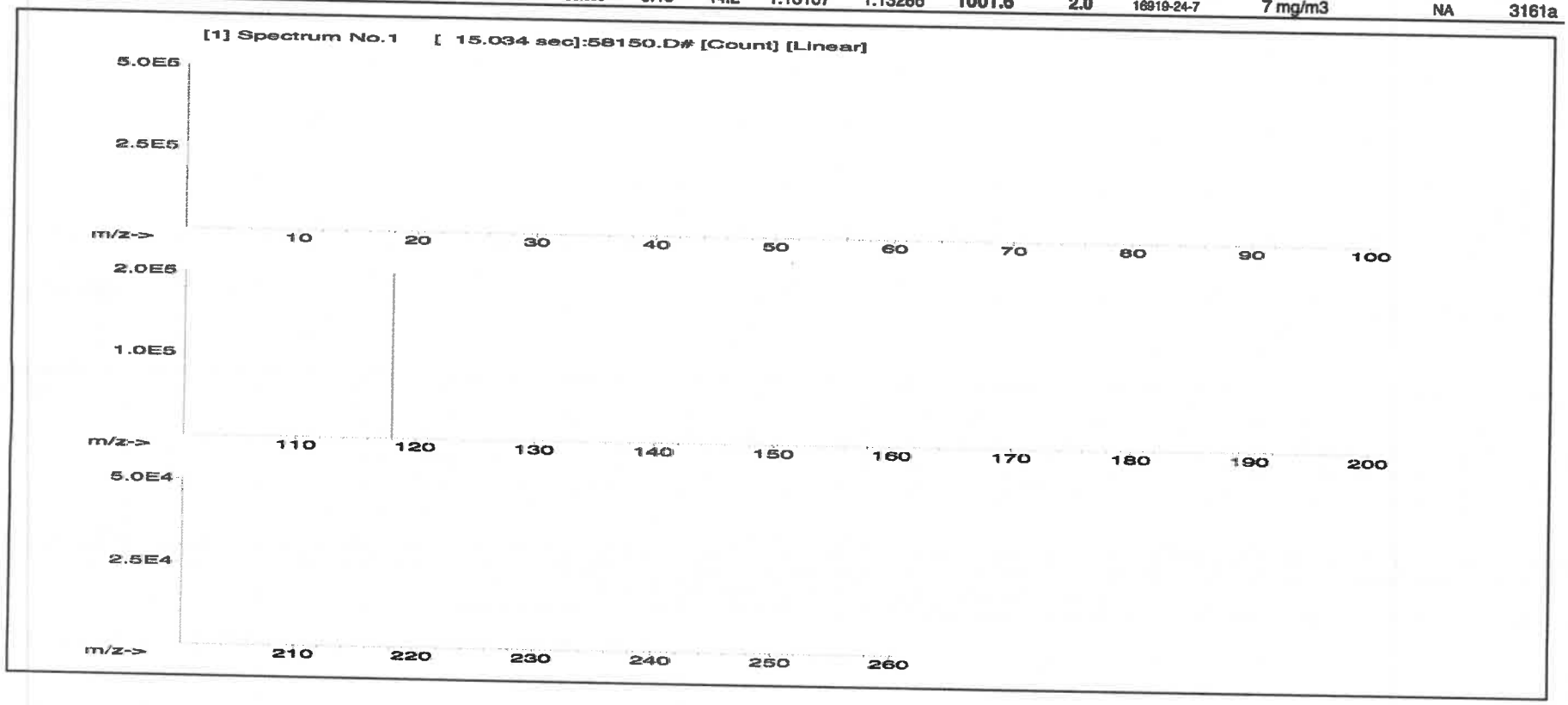
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	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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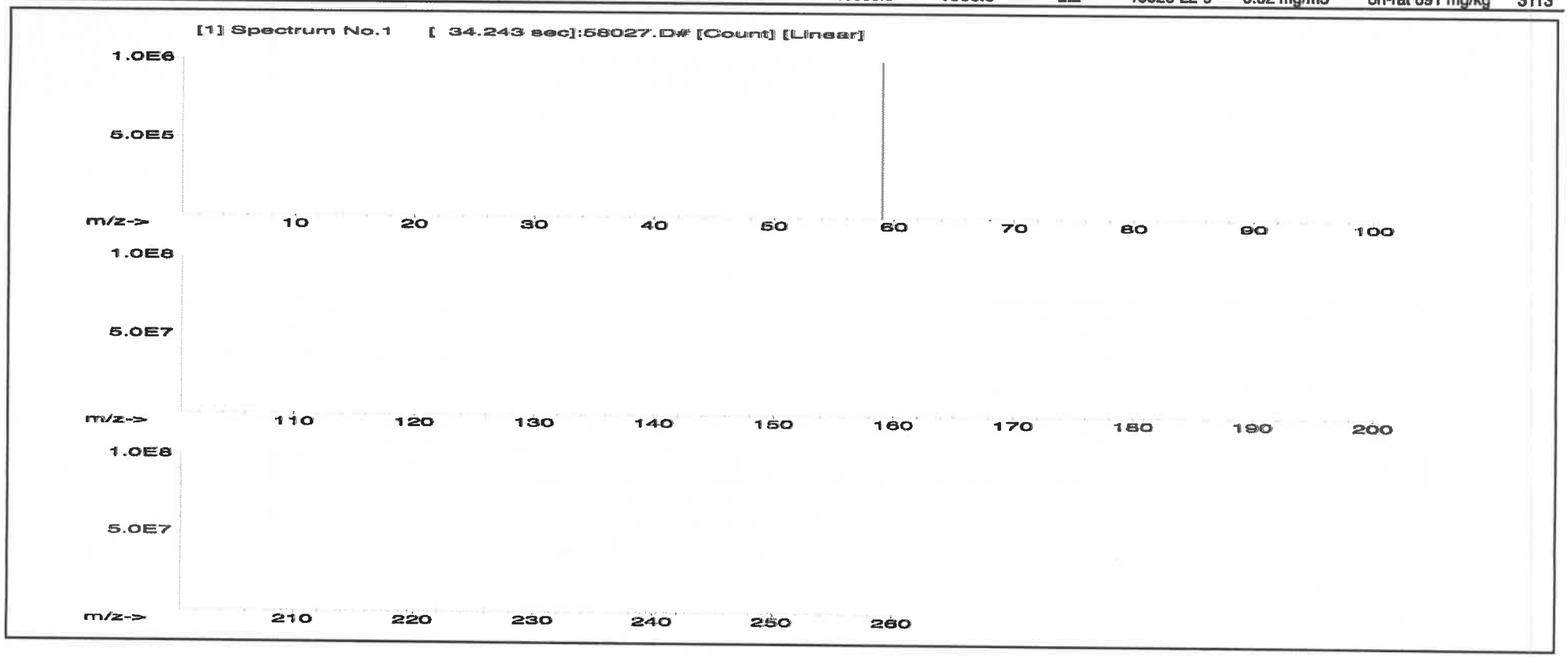
CERTIFIED WEIGHT REPORT:

		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:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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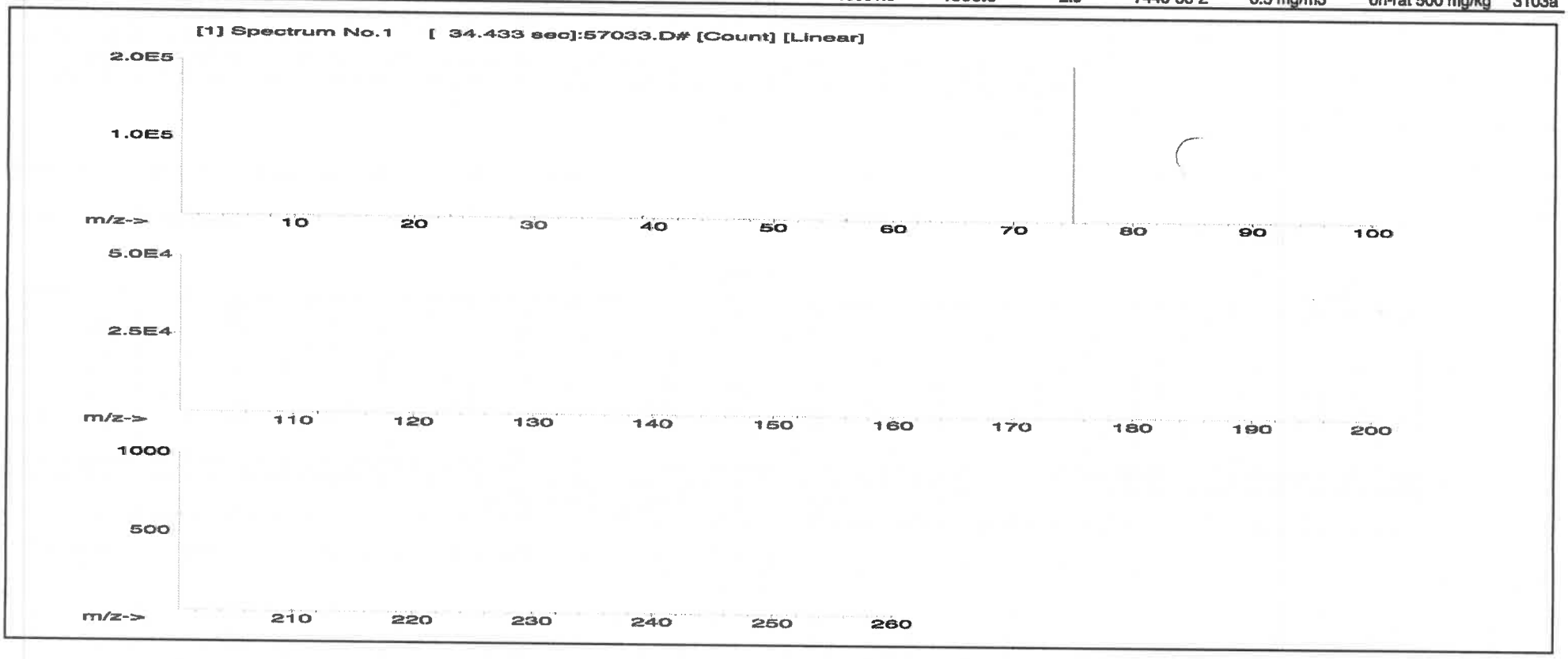
CERTIFIED **WEIGHT** REPORT:

		Lot #	Solvent:		
Part Number:	**57033**	24002546	Nitric Acid		
Lot Number:	**111323**				
Description:	**Arsenic (As)**	2.0%	80.0 (mL)	Nitric Acid	
Expiration Date:	111326				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty		

Formulated By:	Lawrence Barry	111323
Reviewed By:	Pedro L. Rentas	111323

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Arsenic (As)	58133	020522	0.1000	400.0	0.084	1000	10001.0	**1000.0**	**2.0**	7440-38-2	0.5 mg/m3	orl-rat 500 mg/kg	3103a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	T	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge*	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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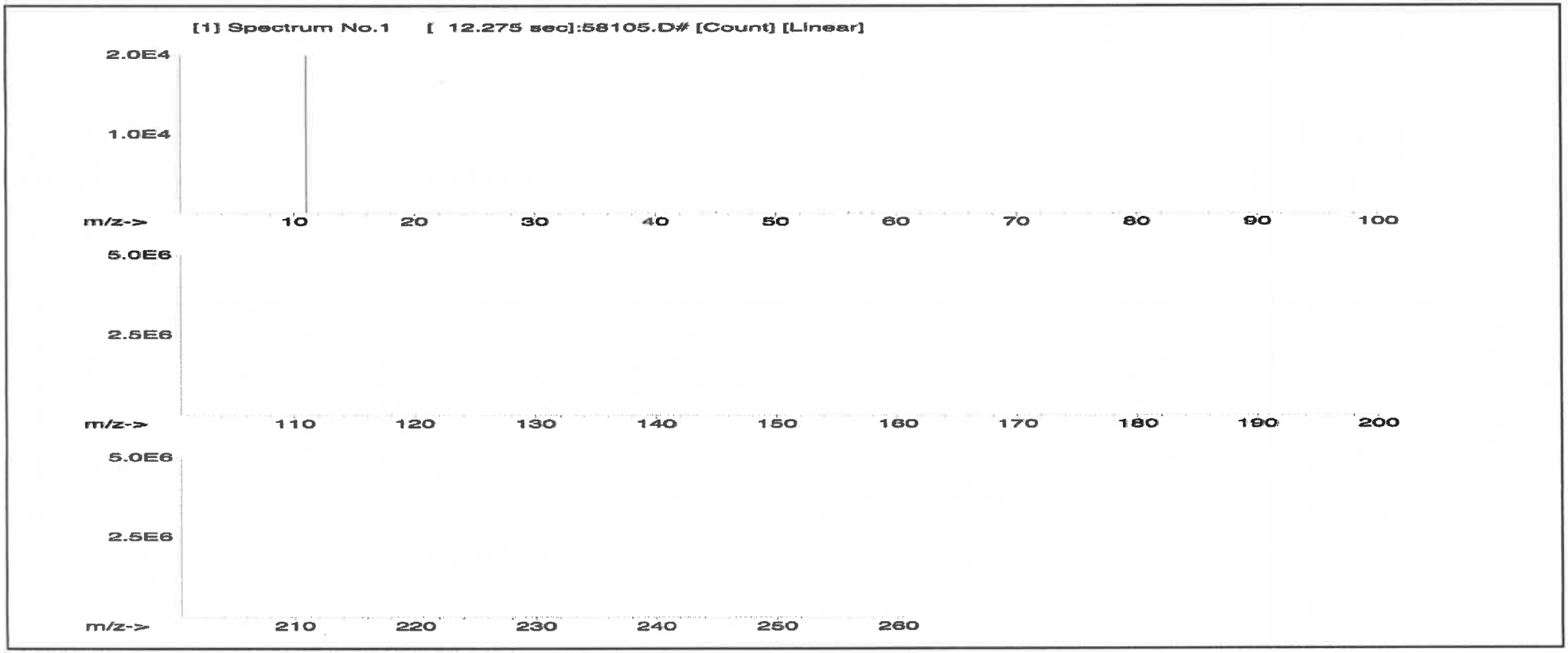
CERTIFIED WEIGHT REPORT:

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:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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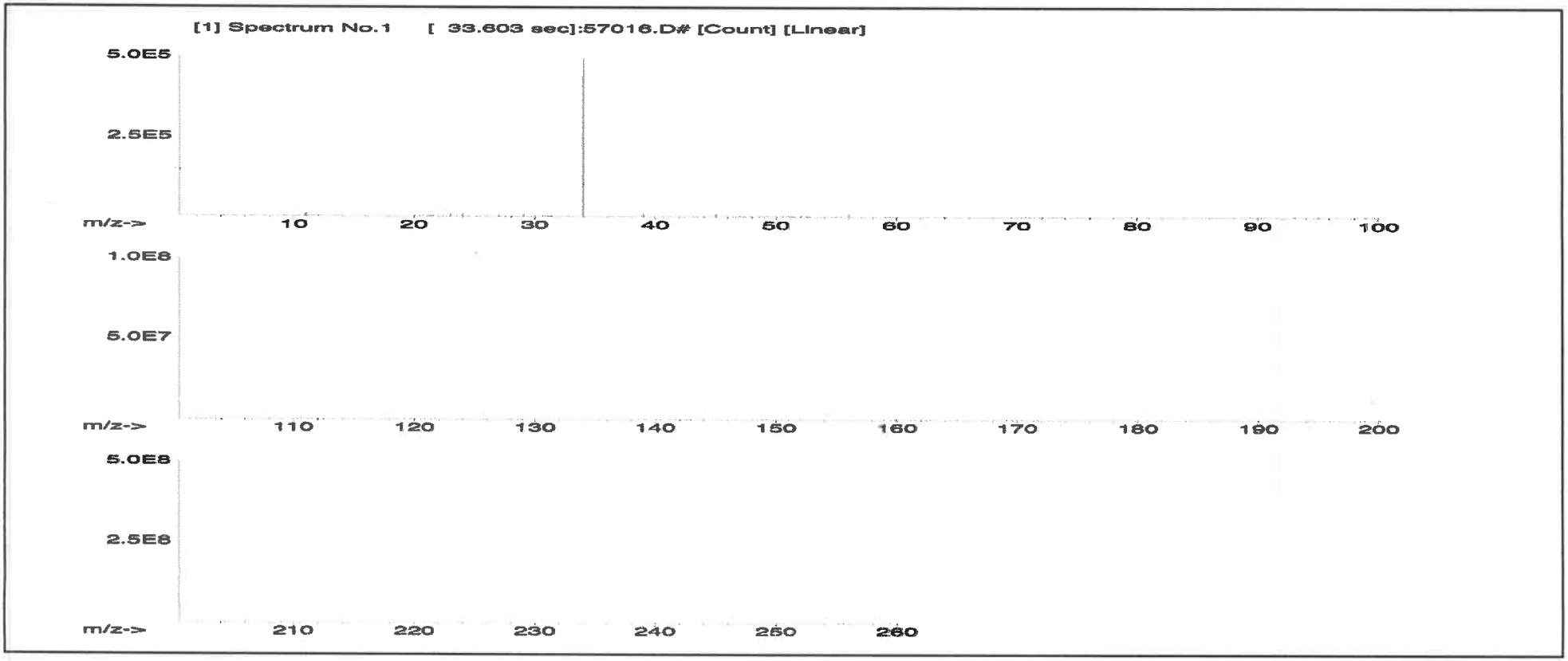
CERTIFIED WEIGHT REPORT:

Part Number:	**57016**	**Solvent:**	**Lot #** 122923	ASTM Type 1 Water
Lot Number:	**122923**			
Description:	**Sulfur (S)**			
Expiration Date:	122926			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty	

Formulated By:	Benson Chan	122923
Reviewed By:	Pedro L. Rentas	122923

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium sulfate (S)	IN117	SLBR7225V	1000	99.9	0.10	24.3	16.4979	16.4980	**1000.0**	**2.0**	7783-20-2	NA	orl-rat 4250mg/kg	3181



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	T	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

R: 02/09/24 M5820

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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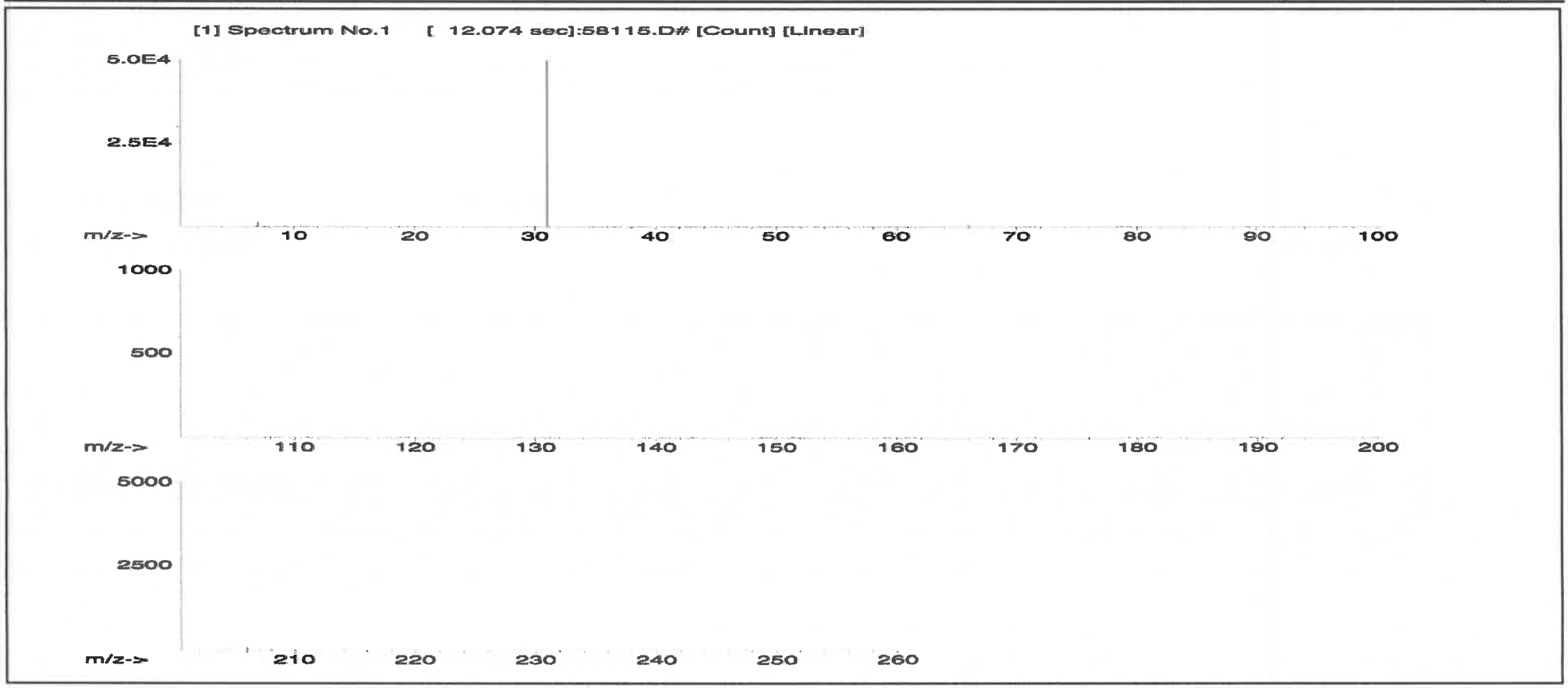
CERTIFIED WEIGHT REPORT:

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
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Sodium Chloride, Crystal
BAKER ANALYZED® A.C.S. Reagent

MT884
MB

avantor™ | J.T.Baker®

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
Avantor Performance Materials, LLC
100 Mansford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

R: 02/22/24 M5942

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:	Single Analyte Custom Grade Solution
Catalog Number:	CGTI1
Lot Number:	T2-TI719972
Matrix:	2% (v/v) HNO_3 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

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Certified Reference Material CRM

M5962 R! 06/14/24.

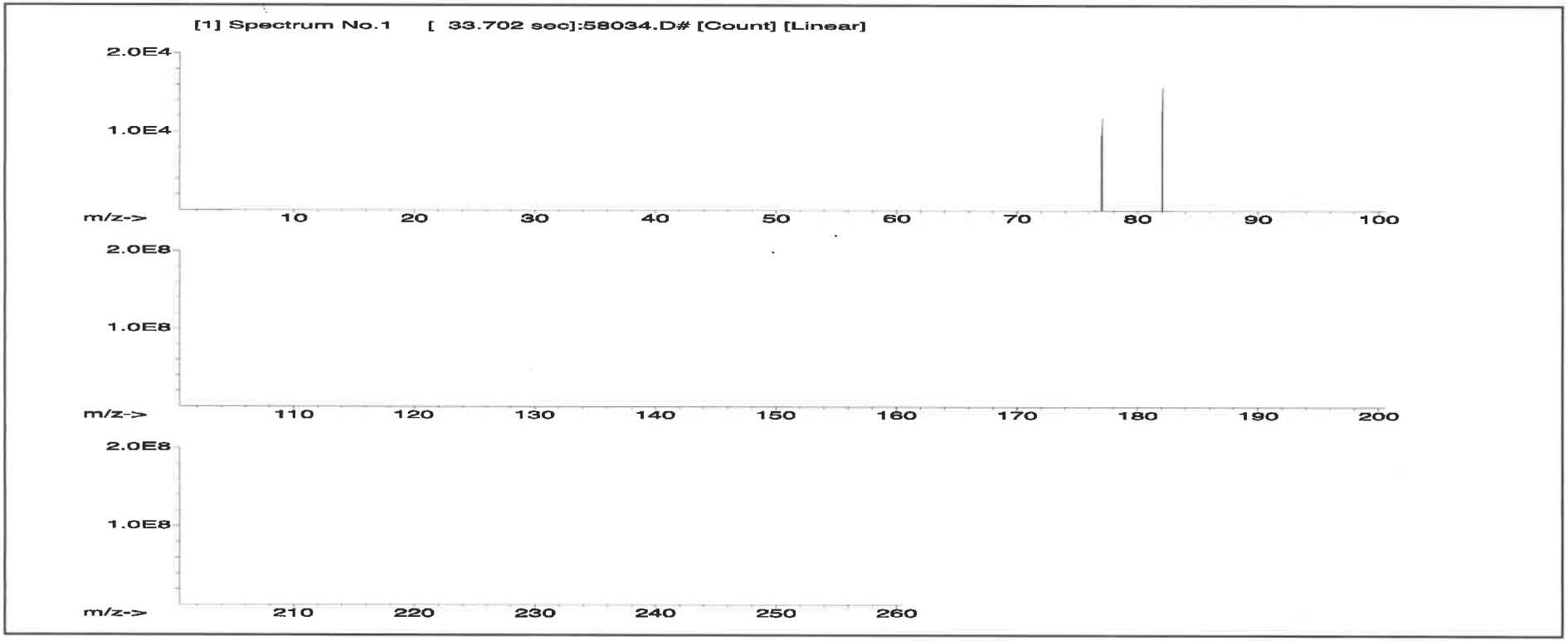
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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
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Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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Certified Reference Material CRM

M5970, M5971 R: 7/01/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

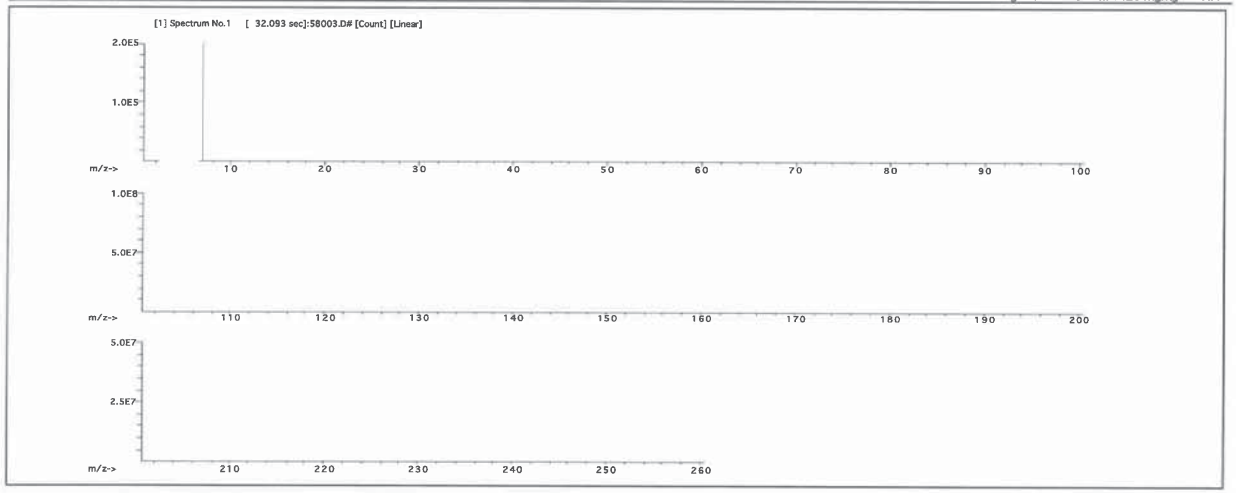
		Lot #	Solvent:
Part Number:	**57003**	24002546	Nitric Acid
Lot Number:	**062124**		
Description:	**Lithium (Li)**		
		2.0%	5.0 (mL) Nitric Acid
Expiration Date:	062127		
Recommended Storage:	Ambient (20 °C)		
Nominal Concentration (µg/mL):	**1000**		
NIST Test Number:	6UTB	5E-05 Balance Uncertainty	
Volume shown below was diluted to (mL):	250.11	0.016 Flask Uncertainty	

Giovanni Esposito

Formulated By: Giovanni Esposito 062124

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).

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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:	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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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

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
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M5996

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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

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

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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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

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

M 6041-46
MS

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010
Manufactured Date: 2023-03-22
Retest Date: 2028-03-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H_2SO_4)	95.0 – 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Substances Reducing Permanganate (as SO2)	≤ 2 ppm	< 2 ppm
Ammonium (NH_4)	≤ 1 ppm	1 ppm
Chloride (Cl)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO_3)	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO_4)	≤ 0.5 ppm	< 0.1 ppm
Trace Impurities – Aluminum (Al)	≤ 30.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities – Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities – Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities – Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities – Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
Trace Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010

Test	Specification	Result
Trace Impurities - Sodium (Na)	≤ 500.0 ppb	5.4 ppb
Trace Impurities - Strontium (Sr)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities - Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities - Zinc (Zn)	≤ 5.0 ppb	0.4 ppb

For Laboratory,Research,or Manufacturing Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

R! 08/22/24 M6058, M6059

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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:	CHEM-CLP-4
Lot Number:	V2-MEB746172
Matrix:	3% (v/v) HNO3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	1 000 ± 5 µg/mL	Molybdenum, Mo	1 000 ± 5 µg/mL
Silicon, Si	1 000 ± 7 µg/mL	Tin, Sn	1 000 ± 5 µg/mL
Titanium, Ti	1 000 ± 6 µg/mL		

Density: 1.032 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	190605
B	Calculated		See Sec. 4.2
Mo	ICP Assay	traceable to 3134	U2-MO739068
Si	ICP Assay	Traceable to 3150	S2-SI702546
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	traceable to 3162a	T2-TI725816

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

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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

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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

August 12, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- August 12, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Joseph Burns
Custom VS Manager

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

M6074
M6075
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M6077

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P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

EXP.: 9/6/2029

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CHEM-CLP-4
Lot Number:	V2-MEB746762
Matrix:	3% (v/v) HNO3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	1 000 ± 5 µg/mL	Molybdenum, Mo	1 000 ± 5 µg/mL
Silicon, Si	1 000 ± 7 µg/mL	Tin, Sn	1 000 ± 5 µg/mL
Titanium, Ti	1 000 ± 6 µg/mL		

Density: 1.033 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	190605
B	Calculated		See Sec. 4.2
Mo	ICP Assay	traceable to 3134	U2-MO739068
Si	ICP Assay	Traceable to 3150	S2-SI702546
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	traceable to 3162a	T2-TI725816

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

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.

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- 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.

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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

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	

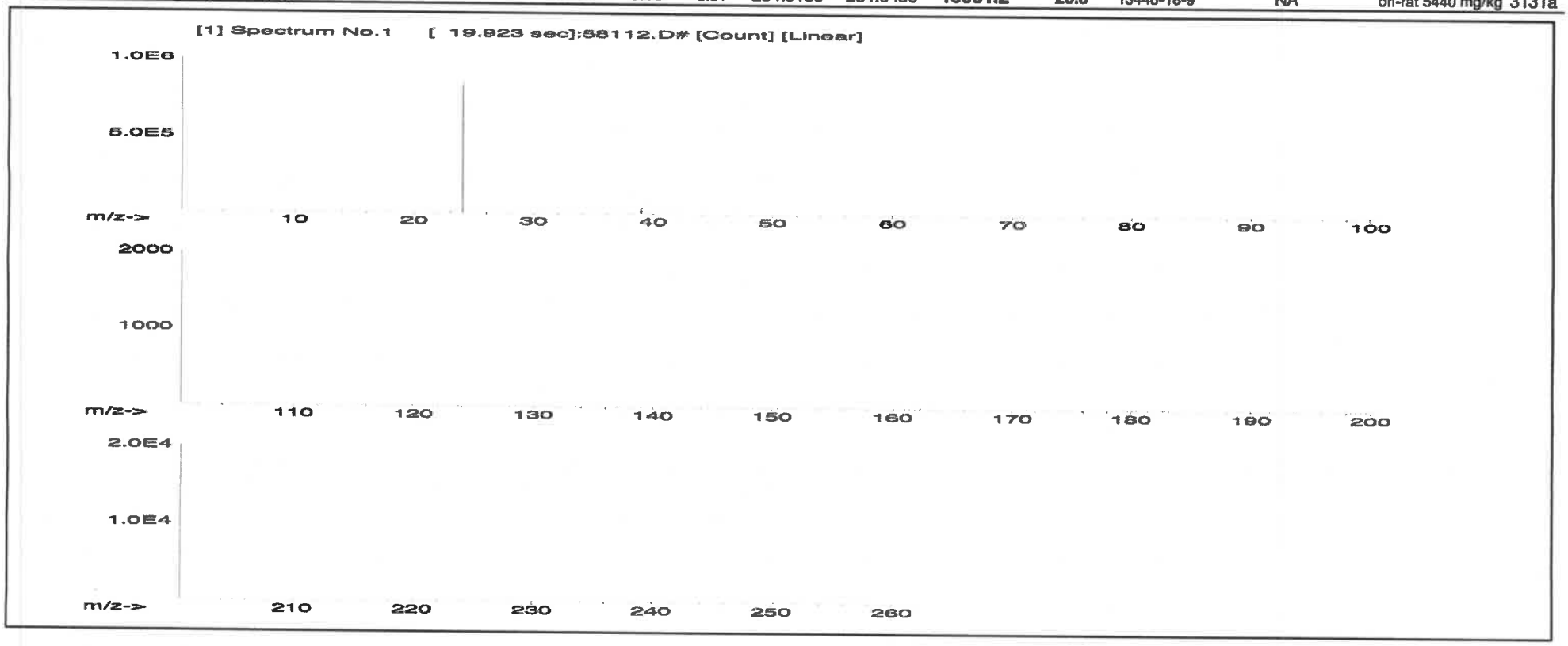
Giovanni Esposito

Formulated By:	Giovanni Esposito	112124

Pedro Rentas

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).

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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

R->1/13/28

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	

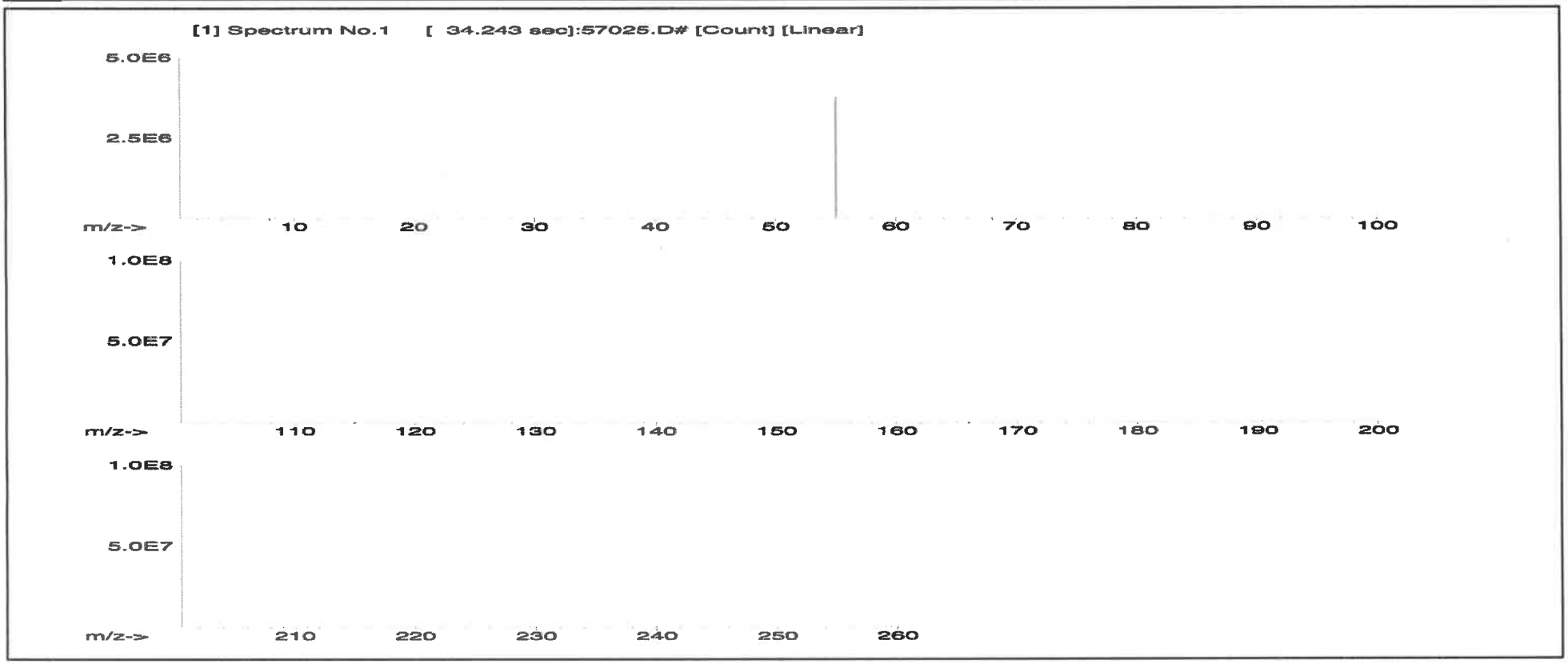
Giovanni Esposito

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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F: 540-585-3012
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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

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u_{bb} = bottle to bottle homogeneity standard uncertainty

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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.
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www.absolutestandards.com

Certified Reference Material CRM

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AR-1539 Certificate Number
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CERTIFIED WEIGHT REPORT:

R-> 1/13/25

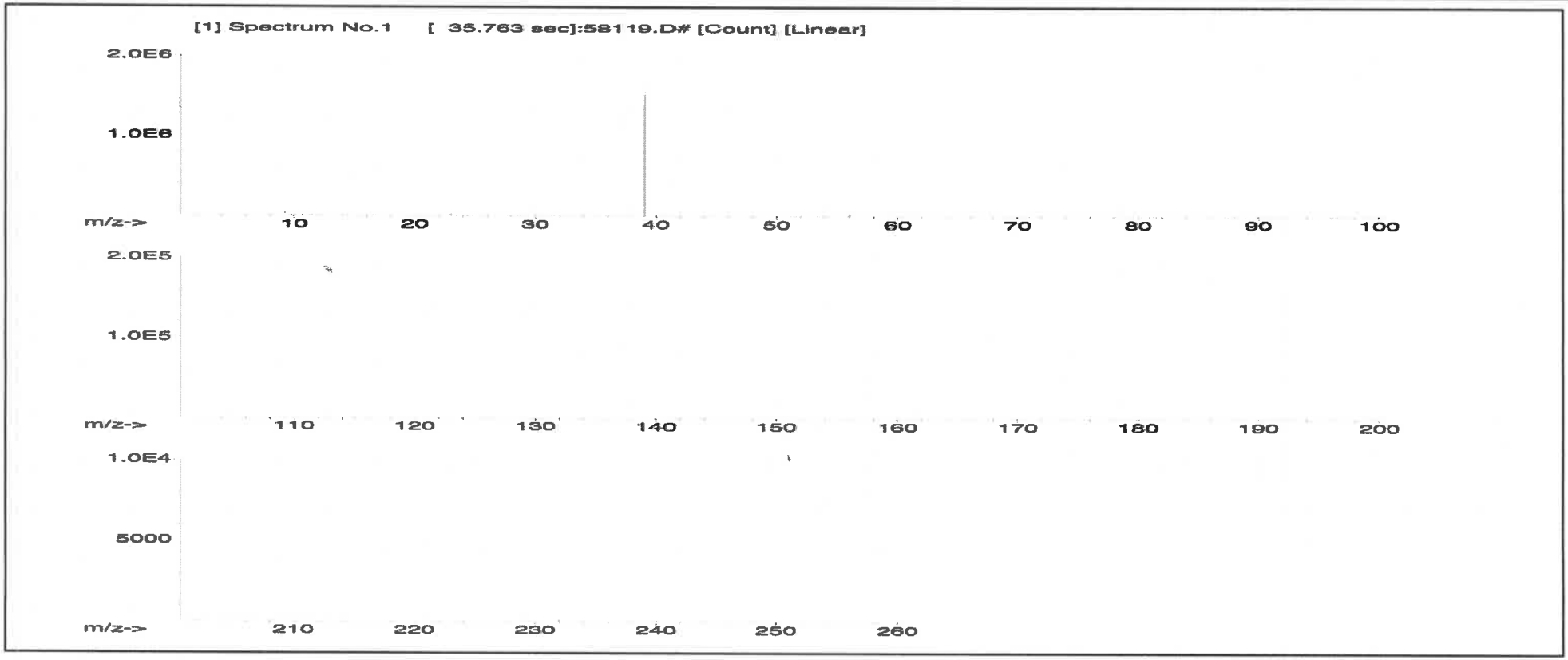
Part Number:	**57119**		**Lot #**		
Lot Number:	**103024**	**Solvent:**	24002546	Nitric Acid	
Description:	**Potassium (K)**	2%	80.0 (mL)	Nitric Acid	
Expiration Date:	103027				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	4000.1	0.15	Flask Uncertainty		

M6141
M6142
M6143

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

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CERTIFIED WEIGHT REPORT:

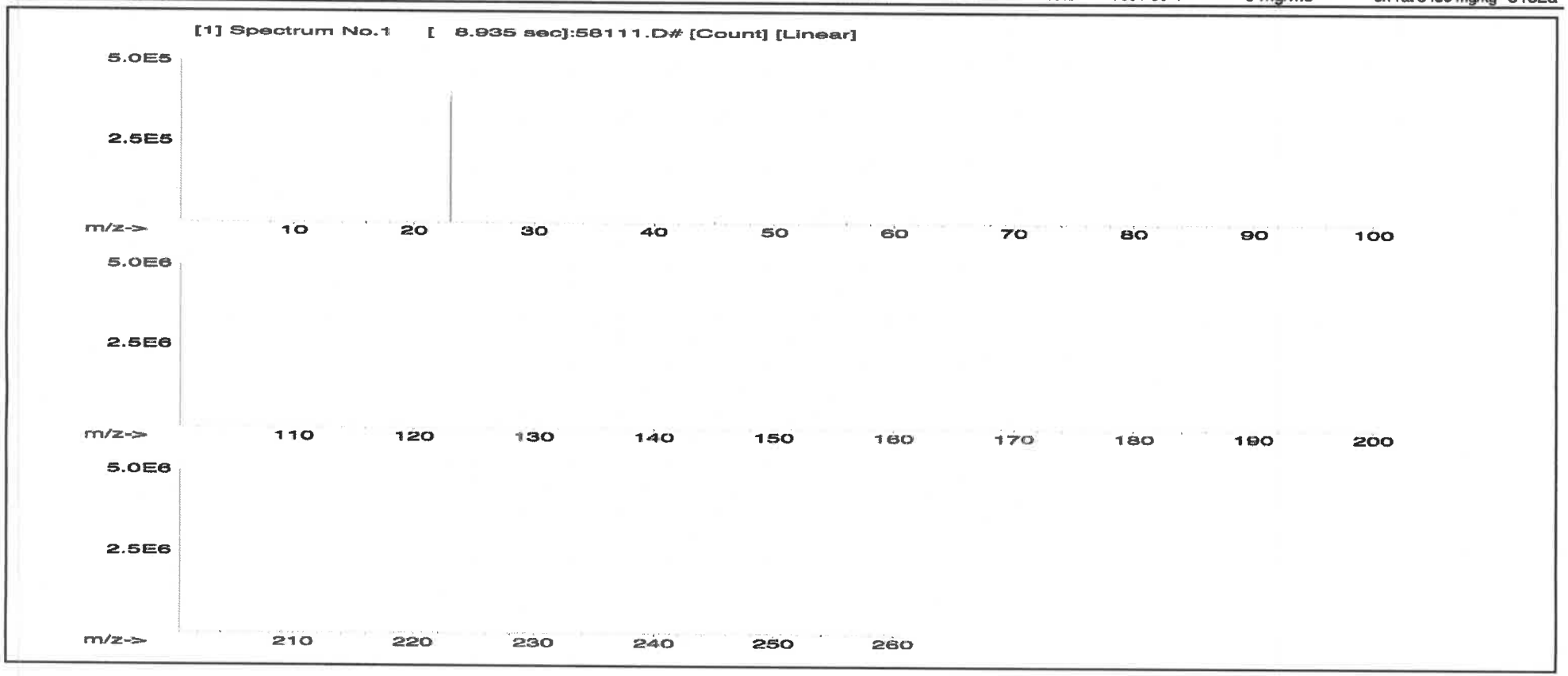
R->1/13/25

M6144

			Lot #	
Part Number:	**58111**	**Solvent:**	24002546	Nitric Acid
Lot Number:	**072424**			
Description:	**Sodium (Na)**	2%	80.0 (mL)	Nitric Acid
Expiration Date:	072427			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**10000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	4000.2	0.10	Flask Uncertainty	

Formulated By:	Benson Chan	072424
Reviewed By:	Pedro L. Rentas	072424

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Sodium nitrate (Na)	IN036	NAV012015I1	10000	99.999	0.10	26.9	148.7096	######	**10000.0**	**20.0**	7631-99-4	5 mg/m3	orl-rat 3430 mg/kg	3152a



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).

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CERTIFIED WEIGHT REPORT:

Part Number: 58030
Lot Number: 121724
Description: Zinc (Zn)

R → 1/13/25

M6145

Expiration Date: 121727
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

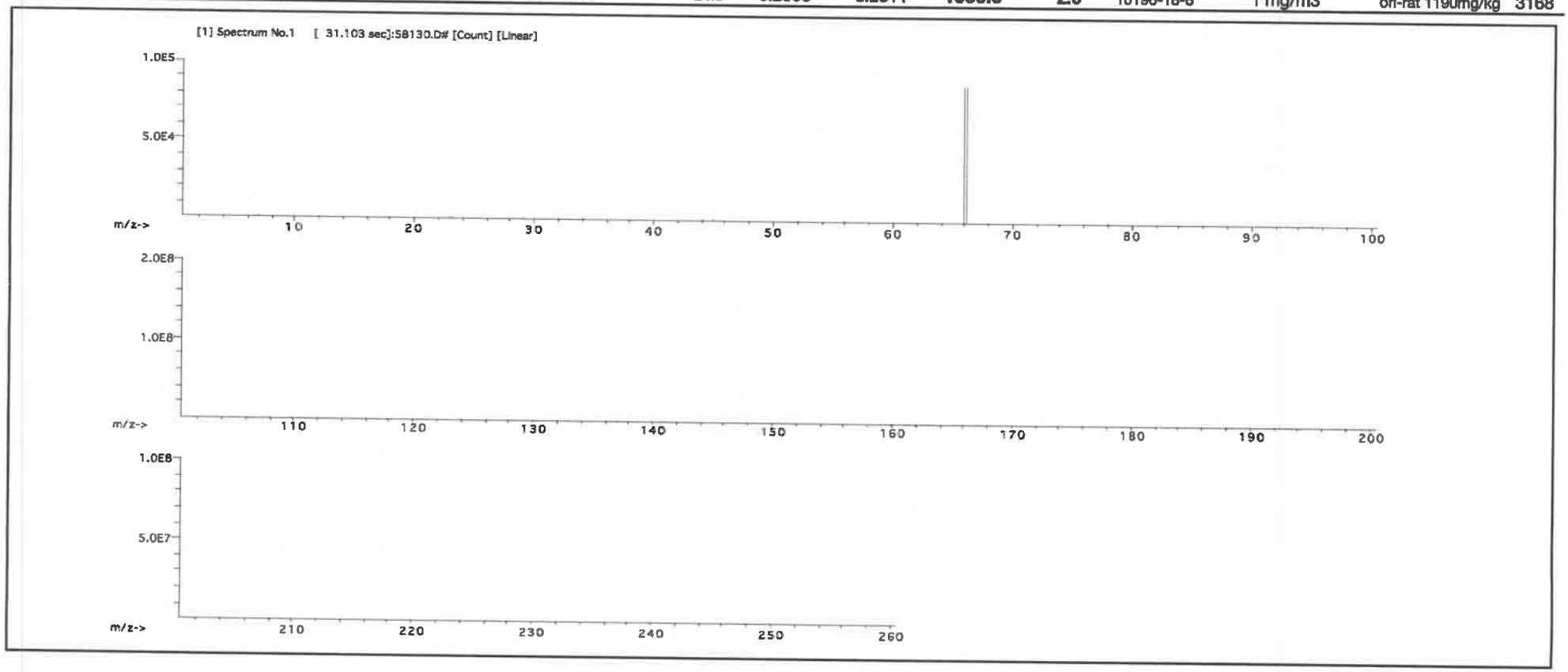
		Lot #	
Solvent:	24012496	Nitric Acid	
	2%	40.0 (mL)	Nitric Acid

5E-05 Balance Uncertainty
Weight shown below was diluted to (mL): 2000.1 0.10 Flask Uncertainty

Aleah O'Brady

Formulated By:	Aleah O'Brady	121724
Reviewed By:	Pedro L. Rentas	121724

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Zinc nitrate hexahydrate (Zn)	IN016	ZNE032021A1	1000	99.999	0.10	24.3	8.2308	8.2311	**1000.0**	**2.0**	10196-18-6	1 mg/m3	ori-rat 1190mg/kg	3168



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.
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Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

M6151

R→ 1/15/25

Material No.: 9530-33
Batch No.: 22G2862015
Manufactured Date: 2022-06-15
Retest Date: 2027-06-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl_2)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO_4)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO_3)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH_4)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
Trace Impurities - Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities - Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Magnesium (Mg)	≤ 10.0 ppb	2.9 ppb
Trace Impurities - Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities - Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities - Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities - Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities - Niobium (Nb)	≤ 1.0 ppb	0.8 ppb
Trace Impurities - Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities - Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities - Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities - Silver (Ag)	≤ 1.0 ppb	0.5 ppb
Trace Impurities - Sodium (Na)	≤ 100.0 ppb	2.3 ppb
Trace Impurities - Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Tantalum (Ta)	≤ 1.0 ppb	1.6 ppb
Trace Impurities - Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Tin (Sn)	≤ 5.0 ppb	4.0 ppb
Trace Impurities - Titanium (Ti)	≤ 1.0 ppb	1.5 ppb
Trace Impurities - Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities - Zirconium (Zr)	≤ 1.0 ppb	0.3 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result

For Laboratory,Research,or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

R-02102/2025

M-6158

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
Trace Impurities - Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities - Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities - Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities - Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities - Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count - 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count - 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

m-6162

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

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.

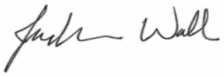
12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

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

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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F: 540-585-3012
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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

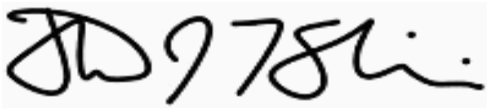
- Sealed TCT Bag Open Date: _____

- 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
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inorganicventures.com

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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	QCP-CICV-3
Lot Number:	V2-MEB749572
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	500 µg/mL ea: Arsenic, Lead, Selenium, Thallium, 250 µg/mL ea: Cadmium

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Arsenic, As	**500.0 ± 3.1 µg/mL**	**Cadmium, Cd**	**250.1 ± 1.1 µg/mL**
Lead, Pb	**500.0 ± 2.3 µg/mL**	**Selenium, Se**	**500.0 ± 3.2 µg/mL**
Thallium, Tl	**500.0 ± 3.0 µg/mL**		

Density: 1.040 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	ICP Assay	3103a	100818
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Tl	ICP Assay	3158	151215

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

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.

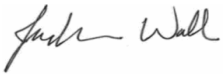
12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

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

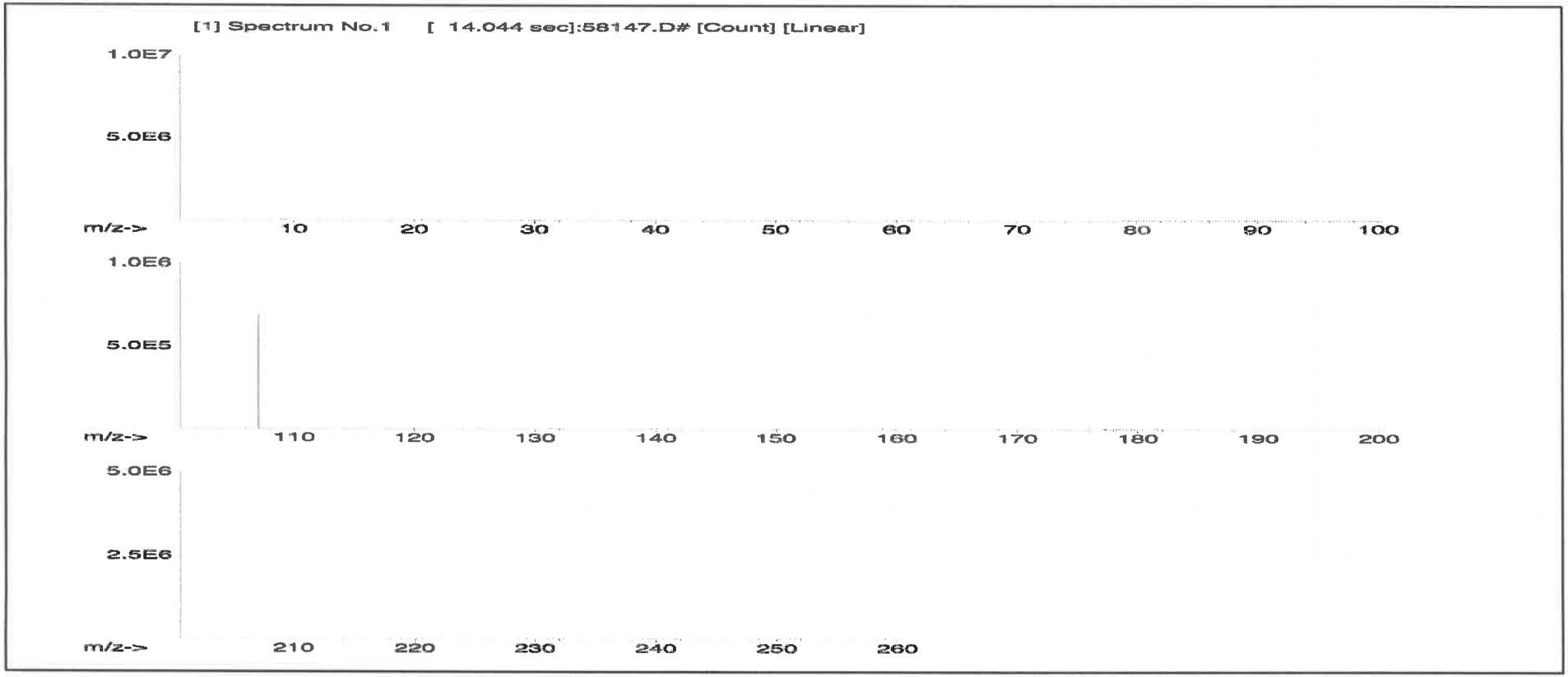
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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		

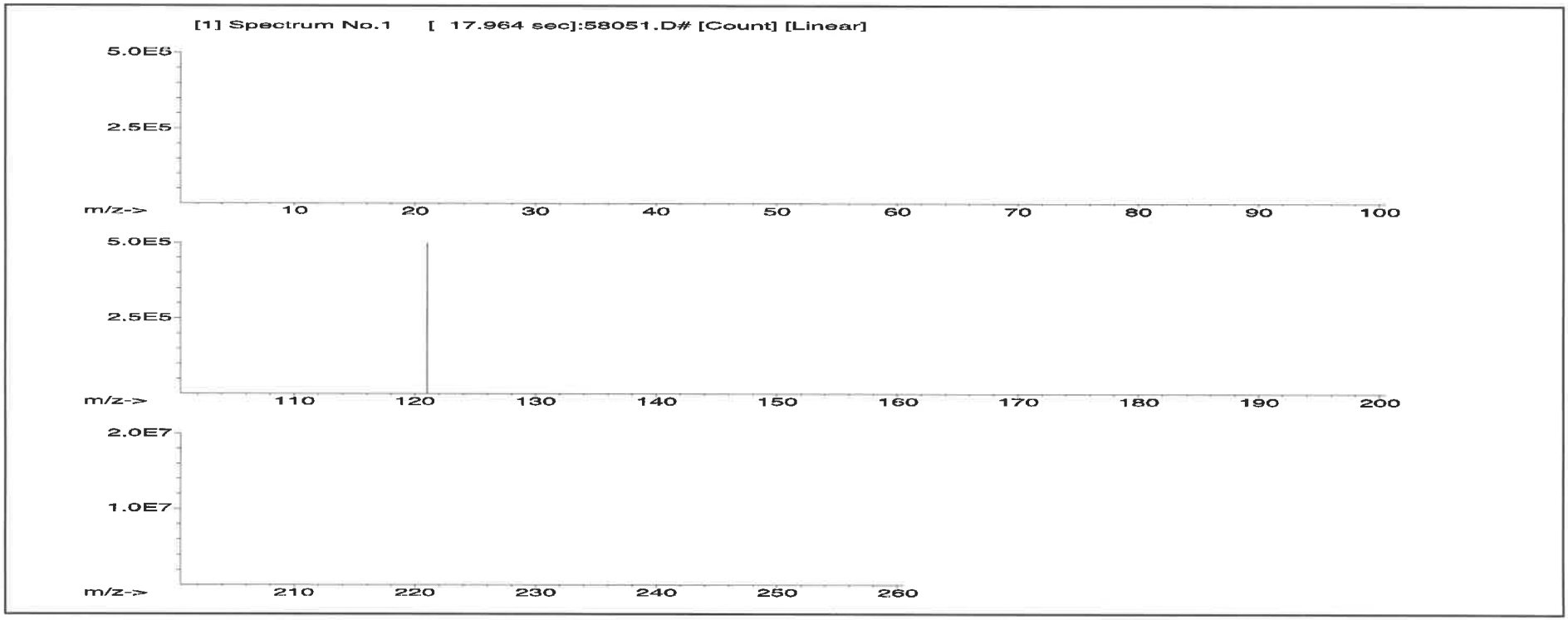
Giovanni Esposito

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
"An ISO 9001:2015 Certified Program"

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
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(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.

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Certificate of Analysis

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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 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

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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

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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 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

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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

M6023

R ! 8/5/24

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		

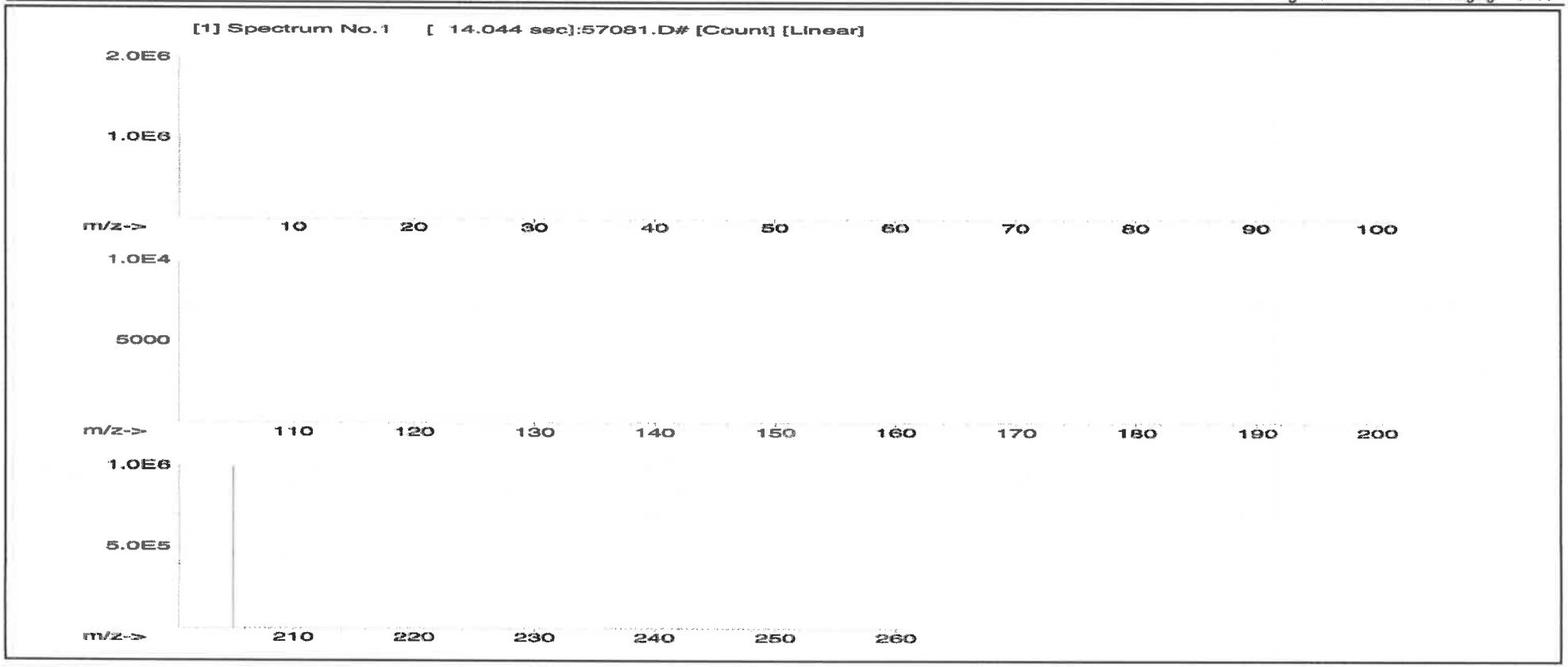
Aleah O'Brady

Formulated By:	Aleah O'Brady	062724

Pedro Rentas

Reviewed By:	Pedro L. Rentas	062724

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Thallium nitrate (Tl)	IN037	BCCF4399	1000	99.999	0.10	77.0	2.5975	2.5977	**1000.1**	**2.0**	10102-45-1	0.1 mg/m3	orl-mus 15mg/kg	3158



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

Rc. 8/5/24

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57023**			
Lot Number:	**062424**			
Description:	**Vanadium (V)**	24002546	Nitric Acid	
		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	

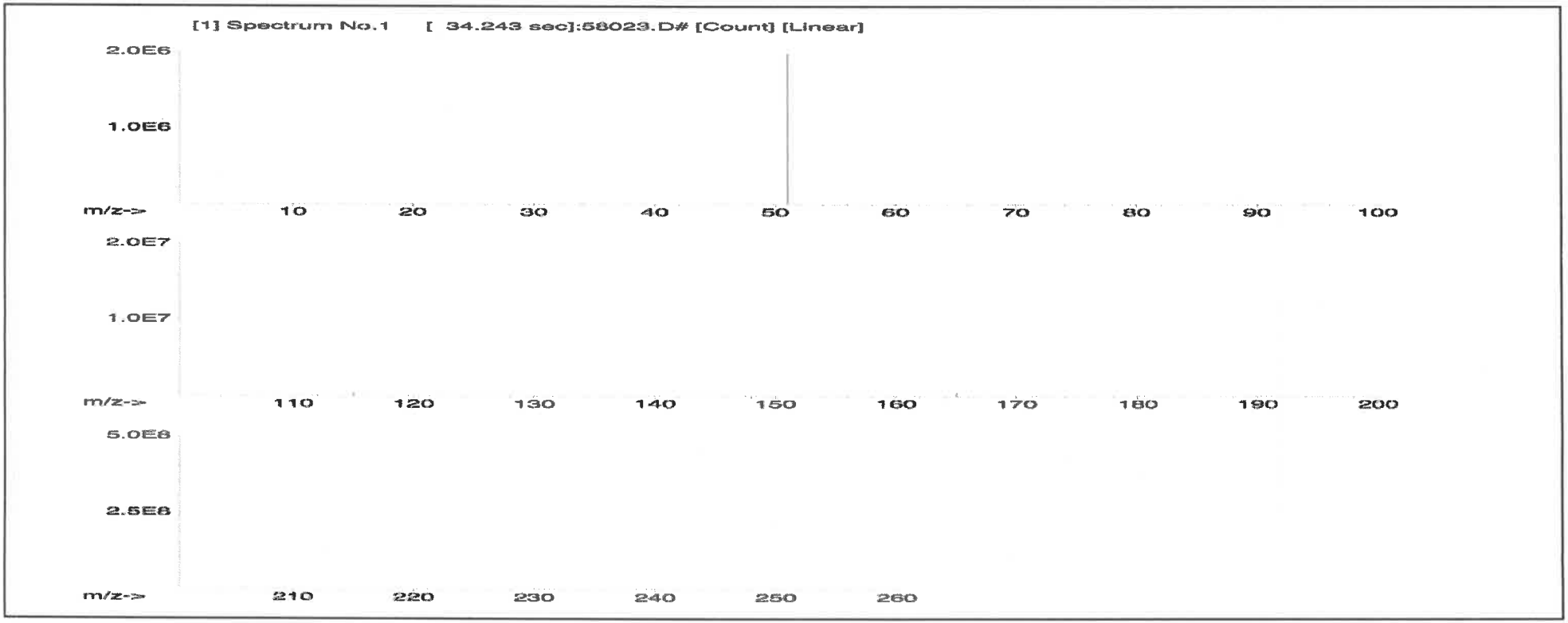
Aleah O'Brady

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:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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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. Q2376
COC Number 2046556

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Leo Ingwer Inc
ADDRESS: 62 W 47 Ste 1004
CITY NY STATE: NY ZIP: 10036
ATTENTION: Matt Seliy
PHONE: 212 719 1342 x 3176 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Leo Ingwer Water test
PROJECT NO.: LOCATION:
PROJECT MANAGER: Matt Seliy
e-mail: Matthews@leoingwer.com
PHONE: 212 719 1342 FAX:

CLIENT BILLING INFORMATION

BILL TO: Same PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): _____ DAYS*
EDD: _____ DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

- ❑ Level 1 (Results Only)
- ❑ Level 2 (Results + QC)
- ❑ Level 3 (Results + QC + Raw Data)
- ❑ EDD FORMAT _____
- ❑ Level 4 (QC + Full Raw Data)
- ❑ NJ Reduced ❑ US EPA CLP
- ❑ NYS ASP A ❑ NYS ASP B
- ❑ Other _____

ANALYSIS

PRESERVATIVES: 1 N 2 3 4 5 6 7 8 9

COMMENTS: ← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	1	2	3	4	5	6	7	8	9
1.	#1 - 612				6/12	10 AM	1	X								
2.					6/12											
3.	#2 - 612				6/12	11:30	1	X								
4.					6/12											
5.	#3 612				6/12	1 PM	1	X								
6.					6/12											
7.	#4 612				6/12	3:30	1	X								
8.																
9.																
10.																

Please For All Composite Metals

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	6/17/25 9:26	1.
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
2.		2.
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
3.		3.

Conditions of bottles or coolers at receipt: ❑ COMPLIANT ❑ NON COMPLIANT ❑ COOLER TEMP 4.8 °C °C
Comments: JT Cm # 1

Page ____ of

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

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 · Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO.
QUOTE NO. Q2376
COC Number 2047505

CLIENT INFORMATION (REPORT TO BE SENT TO:)

COMPANY: Leo Tower
ADDRESS:
CITY STATE: ZIP:
ATTENTION: 62 W 47
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Mall Sely / Attn Yaz
PROJECT NO: LOCATION:
PROJECT MANAGER:
e-mail:
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: meen PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): _____ DAYS*
EDD: _____ DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

- ❑ Level 1 (Results Only)
- ❑ Level 2 (Results + QC)
- ❑ Level 3 (Results + QC + Raw Data)
- ❑ EDD FORMAT _____
- ❑ Level 4 (QC + Full Raw Data)
- ❑ NJ Reduced ❑ US EPA CLP
- ❑ NYS ASP A ❑ NYS ASP B
- ❑ Other _____

ANALYSIS

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.	#1				6/19	10 AM											Nitric Acid pH 1.3 #80A0441
2.																	
3.																	
4.																	
5.	#2				6/19	12 PM											Nitric Acid pH 1.3 #80A0441
6.																	
7.																	
8.																	
9.																	
10.																	

Yaz meen Call Matt

← 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.	6/20/25 9:50	1. CR
2.	DATE/TIME:	2.
3.	DATE/TIME:	3.

RELINQUISHED BY SAMPLER: 2. RECEIVED BY: 2.
RELINQUISHED BY SAMPLER: 3. RECEIVED BY: 3.

Conditions of bottles or coolers at receipt: ❑ COMPLIANT ❑ NON COMPLIANT ❑ COOLER TEMP 2.4 °C
Comments: If Cont

Page ____ of

CLIENT: ❑ Hand Delivered ❑ Other

Shipment Complete ❑ YES ❑ NO

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Alliance Technical Group, LLC - Newark 284 Sheffield Street Mountainside, NJ 07092

Laboratory Composite Sample log

Lab Project number: Q2376 Date: 6/20/25

Client Name: LEO Ingwer, INC. Client Project Name : Waste Water 2025

Instructions: Composite samples (4:1)

Sample Custodian: C. Reria

Client Sample ID	Weigh /Volume used	New ID	Sample Description	Sample Composite time	Comments
#1 - 612	250 mL	EFFLUENT	Clear Water	11:30	
# 2 - 612	250 mL				
# 3 - 612	250 mL				
# 4 - 612	250 mL				

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