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

DATA PACKAGE

METALS

PROJECT NAME : NWIRP BETHPAGE - CTO WE13 1132341 WR6

TETRA TECH NUS, INC.

661 Andersen Drive

Suite 200

Pittsburgh, PA - 15220-2745

Phone No: 412-921-7090

ORDER ID : Q2745

ATTENTION : Ernie Wu

Laboratory Certification ID # 20012

Table Of Contents for Q2745

1) METALS DATA 2

2) Signature Page 4

3) Case Narrative 5

4) Qualifier Page 6

5) Conformance/Non Conformance 7

6) QA Checklist 8

7) Chronicle 9

8) Hit Summary 10

9) Sample Data 11

- 9.1) RW8-SP100-20250731 12
- 9.2) RW8-SP303-20250731 13

10) METALS CALIBRATION DATA 14

- 10.1) Initial and Continuing Calibration Verification 15
- 10.2) CRDL Standard For AA & ICP 21
- 10.3) Initial and Continuing Calibration Blank Summary 22
- 10.4) Preparation Blank Summary 26
- 10.5) Interference Check Sample 27

11) METALS QC DATA 28

- 11.1) Matrix Spike Summary 29
- 11.2) Post Digest Spike Summary 31
- 11.3) Duplicate Sample Summary 32
- 11.4) Laboratory Control Sample Summary 34
- 11.5) ICP Serial Dilutions 35

12) METALS PREPARATION & INSTRUMENT DATA 36

- 12.1) ICP Interelement Correction Factors 37

13) PREPARATION & ANALYTICAL SUMMARY 42

- 13.1) Sample Preparation Summary 43
- 13.2) Analysis Run Log 44

14) METALS RAW DATA 46

- 14.1) METALS RAW DATA - ANALYTICAL 47
- 14.2) LB136697 47
- 14.3) LB136729 243
- 14.4) METALS RAW DATA - PREP 355
  - 14.4.1) PB169098 355

15) Analytical Runlogs 358

16) Standard Prep Logs 366
17) Shipping Document 504
17.1) Chain Of Custody 505
17.2) Lab Certificate 506

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

Cover Page

Order ID : Q2745

Project ID : NWIRP Bethpage - CTO WE13 1132341 WR6

Client : Tetra Tech NUS, Inc.

Lab Sample Number	Client Sample Number
Q2745-01	RW8-SP100-20250731
Q2745-02	RW8-SP303-20250731

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 : APPROVED
By Nimisha Pandya, QA/QC Supervisor at 1:42 pm, Aug 08, 2025

Date: 8/8/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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

CASE NARRATIVE

Tetra Tech NUS, Inc.
Project Name: NWIRP Bethpage - CTO WE13 1132341 WR6
Project Manager : Ernie Wu
Order ID # Q2745
Test Name: Metals Group4

A. Number of Samples and Date of Receipt:
1 Water sample was received on 08/01/2025.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Metals Group4, SVOC-SIMGroup1, TDS and TSS. This data package contains results for Metals Group4.

C. Analytical Techniques:
The analysis of Metals Group4 was based on method 6010D and digestion based on method 3010 (waters).

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Blank Spike met requirements for all compounds.
The Duplicate analysis met criteria for all compounds.
The Matrix Spike (71725MS) analysis met criteria for all compounds except for Iron due to Chemical Interference during Digestion Process.
The Matrix Spike Duplicate (71725MSD) analysis met criteria for all compounds except for Iron due to Chemical Interference during Digestion Process.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.
The Serial Dilution met the acceptable requirements.

E. Additional Comments:
The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is).

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

Signature_ APPROVED
By Nimisha Pandya, QA/QC Supervisor at 1:43 pm, Aug 08, 2025

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

ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092

NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

ORDER ID: Q2745 MATRIX: Water

METHOD: 6010D

		NA	NO	YES
1.	Calibration Summary met criteria.			✓
2.	ICP Interference Check Sample Results Summary Submitted.			✓
3.	Serial Dilution Summary (if applicable) Submitted.			✓
4.	Laboratory Control Sample Summary (if applicable) Submitted.			✓
5.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Met Criteria		✓	
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
	The Matrix Spike (71725MS) analysis met criteria for all compounds except for Iron due to Chemical Interference during Digestion Process. The Matrix Spike Duplicate (71725MSD) analysis met criteria for all compounds except for Iron due to Chemical Interference during Digestion Process.			
7.	Sample Duplicate Analysis Met QC Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
8.	Digestion Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			
9.	Analysis Holding Time Met			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			

ADDITIONAL COMMENTS:

The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is).

QA REVIEW

REVIEWED
By Sohil Jodhani, QA/QC Director at 9:39 am, Aug 08, 2025

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2745

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

QA Review Signature: SOHIL JODHANI **Date:** 08/08/2025

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

LAB CHRONICLE

OrderID:	Q2745	**OrderDate:**	8/1/2025 10:26:00 AM
Client:	Tetra Tech NUS, Inc.	**Project:**	NWIRP Bethpage - CTO WE13 1132341 WR6
Contact:	Ernie Wu	**Location:**	O41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2745-01	**RW8-SP100-20250731**	**Water**			**07/31/25**			**08/01/25**
			Metals Group4	6010D		08/04/25	08/04/25	
Q2745-02	**RW8-SP303-20250731**	**Water**			**07/31/25**			**08/01/25**
			Metals Group4	6010D		08/04/25	08/04/25	

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

Hit Summary Sheet
SW-846

SDG No.:	Q2745	**Order ID:**	Q2745
Client:	Tetra Tech NUS, Inc.	**Project ID:**	NWIRP Bethpage - CTO WE13 1132341 W

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : RW8-SP303-20250731									
Q2745-02	RW8-SP303-20250731	Water	Iron	42.8	J	11.7	40.0	50.0	ug/L

SAMPLE DATA

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/31/25
Project:	NWIRP Bethpage - CTO WE13 1132341 WR6	Date Received:	08/01/25
Client Sample ID:	RW8-SP100-20250731	SDG No.:	Q2745
Lab Sample ID:	Q2745-01	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7439-89-6	Iron	40.0	UN	1	11.7	40.0	50.0	ug/L	08/04/25 10:10	08/04/25 17:08	6010D	SW3010

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

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

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

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/31/25
Project:	NWIRP Bethpage - CTO WE13 1132341 WR6	Date Received:	08/01/25
Client Sample ID:	RW8-SP303-20250731	SDG No.:	Q2745
Lab Sample ID:	Q2745-02	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7439-89-6	Iron	42.8	JN	1	11.7	40.0	50.0	ug/L	08/04/25 10:10	08/04/25 17:12	6010D	SW3010

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

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

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

METAL CALIBRATION DATA

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Iron	3980	4000	100	90 - 110	P	08/04/2025	11:41	LB136697

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Iron	102	100	102	80 - 120	P	08/04/2025	11:45	LB136697

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Iron	4860	5000	97	90 - 110	P	08/04/2025	12:25	LB136697
CCV02	Iron	4930	5000	99	90 - 110	P	08/04/2025	13:37	LB136697
CCV03	Iron	4990	5000	100	90 - 110	P	08/04/2025	14:43	LB136697
CCV04	Iron	4900	5000	98	90 - 110	P	08/04/2025	15:48	LB136697
CCV05	Iron	5040	5000	101	90 - 110	P	08/04/2025	16:51	LB136697
CCV06	Iron	5210	5000	104	90 - 110	P	08/04/2025	17:41	LB136697
CCV07	Iron	5150	5000	103	90 - 110	P	08/04/2025	17:58	LB136697

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Iron	4000	4000	100	90 - 110	P	08/06/2025	11:55	LB136729

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Iron	108	100	108	80 - 120	P	08/06/2025	12:09	LB136729

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Iron	4990	5000	100	90 - 110	P	08/06/2025	12:47	LB136729
CCV02	Iron	4940	5000	99	90 - 110	P	08/06/2025	13:37	LB136729
CCV03	Iron	5270	5000	106	90 - 110	P	08/06/2025	14:49	LB136729

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

Metals

- 2b -
CRDL STANDARD FOR AA & ICP

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRI01	Iron	111	100	111	65 - 135	P	08/04/2025	11:57	LB136697
CRI01	Iron	97.9	100	98	65 - 135	P	08/06/2025	12:26	LB136729

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Iron	23.4	+/-50	U	80.0	100	P	08/04/2025	11:52	LB136697

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Iron	23.4	+/-50	U	80.0	100	P	08/04/2025	12:29	LB136697
CCB02	Iron	23.4	+/-50	U	80.0	100	P	08/04/2025	13:41	LB136697
CCB03	Iron	23.4	+/-50	U	80.0	100	P	08/04/2025	14:54	LB136697
CCB04	Iron	23.4	+/-50	U	80.0	100	P	08/04/2025	15:53	LB136697
CCB05	Iron	23.4	+/-50	U	80.0	100	P	08/04/2025	16:55	LB136697
CCB06	Iron	23.4	+/-50	U	80.0	100	P	08/04/2025	17:45	LB136697
CCB07	Iron	23.4	+/-50	U	80.0	100	P	08/04/2025	18:02	LB136697

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Iron	23.4	+/-50	U	80.0	100	P	08/06/2025	12:21	LB136729

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Iron	23.4	+/-50	U	80.0	100	P	08/06/2025	12:52	LB136729
CCB02	Iron	23.4	+/-50	U	80.0	100	P	08/06/2025	13:52	LB136729
CCB03	Iron	23.4	+/-50	U	80.0	100	P	08/06/2025	14:53	LB136729

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

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB169098BL		**WATER**		**Batch Number:**		**PB169098**		**Prep Date:**	**08/04/2025**	
	Iron	11.7	<25	U	40.0	50.0	P	08/06/2025	12:57	LB136729

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

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

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

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Iron	98400	101000	97	85600	116500	08/04/2025	12:01	LB136697
ICSAB01	Iron	101000	99300	102	84400	114500	08/04/2025	12:05	LB136697
ICSA01	Iron	102000	101000	101	85600	116500	08/06/2025	12:31	LB136729
ICSAB01	Iron	101000	99300	102	84400	114500	08/06/2025	12:35	LB136729

METAL QC DATA

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

metals
- 5a -
MATRIX SPIKE SUMMARY

client: Tetra Tech NUS, Inc. **level:** low **sdg no.:** Q2745

contract: TETR06 **lab code:** ACE

matrix: Water **sample id:** Q2756-01 **client id:** 71725MS

Percent Solids for Sample: NA **Spiked ID:** Q2756-01MS **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Iron	ug/L	87 - 115	6750		5880		1500	58	N	P

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

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: Tetra Tech NUS, Inc. **level:** low **sdg no.:** Q2745

contract: TETR06 **lab code:** ACE

matrix: Water **sample id:** Q2756-01 **client id:** 71725MSD

Percent Solids for Sample: NA **Spiked ID:** Q2756-01MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Iron	ug/L	87 - 115	7070		5880		1500	79	N	P

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

Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Matrix: Water **Level:** LOW **Client ID:** 71725A

Sample ID: Q2756-01 **Spiked ID:** Q2756-01A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Iron	ug/L	87 - 115	7270		5880		1500	93		P

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

Metals

- 6 -
DUPLICATE SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **Level:** LOW **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Matrix: Water **Sample ID:** Q2756-01 **Client ID:** 71725DUP

Percent Solids for Sample: NA **Duplicate ID** Q2756-01DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	5880		5820		1		P

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

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

Metals

- 6 -
DUPLICATE SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **Level:** LOW **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Matrix: Water **Sample ID:** Q2756-01MS **Client ID:** 71725MSD

Percent Solids for Sample: NA **Duplicate ID** Q2756-01MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	6750		7070		5		P

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

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

LABORATORY CONTROL SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB169098BS							
Iron	ug/L	1500	1550		103	87 - 115	P

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

Metals

-9 -

ICP SERIAL DILUTIONS

SAMPLE NO.

71725L

Lab Name: Alliance **Contract:** TETR06

Lab Code: ACE **Lb No.:** lb136729 **Lab Sample ID :** Q2756-01L **SDG No.:** Q2745

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
Iron	5880		5280		10		P

METAL PREPARATION & INSTRUMENT DATA

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

Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Al	Ca	Fe	Mg	Ag
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

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

Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: As	Ba	Be	Cd	Co
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	-0.0039600

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

Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Cr	Cu	K	Mn	Mo
Iron	240.488	0.0000000	0.0000000	0.0000730	0.0000000	-0.0015250

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

Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Na	Ni	Pb	Sb	Se
Iron	240.488	0.0000000	-0.0017000	0.0000000	0.0000000	0.0000000

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

Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Sn	Ti	Tl	V	Zn
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

METAL PREPARATION & ANALYICAL SUMMARY

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

Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2745

Contract: TETR06 **Lab Code:** ACE **Method:**

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB169098**						
PB169098BL	PB169098BL	MB	WATER	08/04/2025	50.0	25.0	
PB169098BS	PB169098BS	LCS	WATER	08/04/2025	50.0	25.0	
Q2745-01	RW8-SP100-20250731	SAM	WATER	08/04/2025	50.0	25.0	
Q2745-02	RW8-SP303-20250731	SAM	WATER	08/04/2025	50.0	25.0	
Q2756-01DUP	71725DUP	DUP	WATER	08/04/2025	50.0	25.0	
Q2756-01MS	71725MS	MS	WATER	08/04/2025	50.0	25.0	
Q2756-01MSD	71725MSD	MSD	WATER	08/04/2025	50.0	25.0	

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

metals
- 14 -
ANALYSIS RUN LOG

Client: Tetra Tech NUS, Inc. **Contract:** TETR06

Lab code: ACE **Sdg no.:** Q2745

Instrument id number: **Method:** **Run number:** LB136697

Start date: 08/04/2025 **End date:** 08/04/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1115	Fe
S1	S1	1	1120	Fe
S2	S2	1	1124	Fe
S3	S3	1	1128	Fe
S4	S4	1	1132	Fe
S5	S5	1	1136	Fe
ICV01	ICV01	1	1141	Fe
LLICV01	LLICV01	1	1145	Fe
ICB01	ICB01	1	1152	Fe
CRI01	CRI01	1	1157	Fe
ICSA01	ICSA01	1	1201	Fe
ICSAB01	ICSAB01	1	1205	Fe
CCV01	CCV01	1	1225	Fe
CCB01	CCB01	1	1229	Fe
CCV02	CCV02	1	1337	Fe
CCB02	CCB02	1	1341	Fe
CCV03	CCV03	1	1443	Fe
CCB03	CCB03	1	1454	Fe
CCV04	CCV04	1	1548	Fe
CCB04	CCB04	1	1553	Fe
CCV05	CCV05	1	1651	Fe
CCB05	CCB05	1	1655	Fe
Q2745-01	RW8-SP100-20250731	1	1708	Fe
Q2745-02	RW8-SP303-20250731	1	1712	Fe
CCV06	CCV06	1	1741	Fe
CCB06	CCB06	1	1745	Fe
CCV07	CCV07	1	1758	Fe
CCB07	CCB07	1	1802	Fe

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

metals
- 14 -
ANALYSIS RUN LOG

Client: Tetra Tech NUS, Inc. **Contract:** TETR06

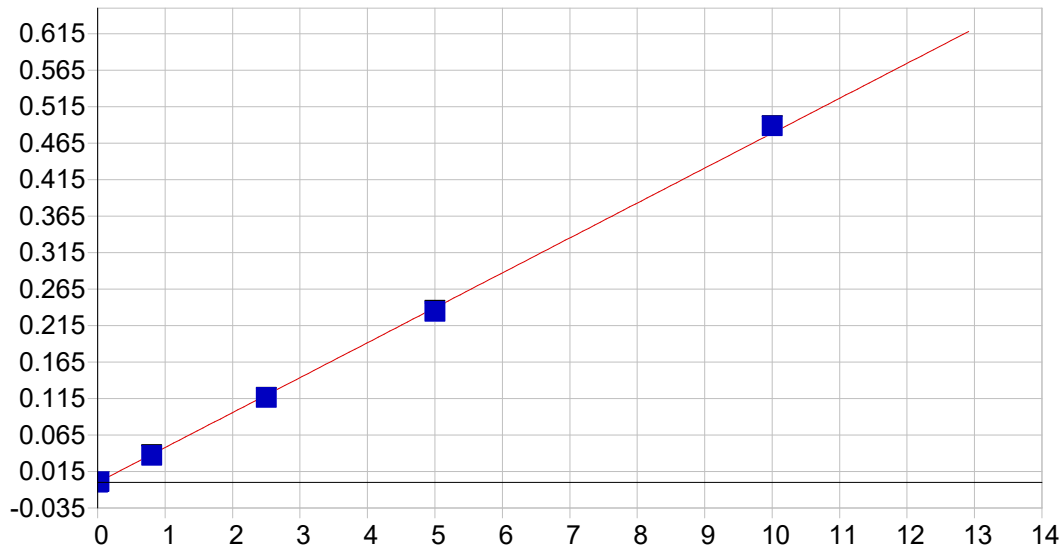
Lab code: ACE **Sdg no.:** Q2745

Instrument id number: **Method:** **Run number:** LB136729

Start date: 08/06/2025 **End date:** 08/06/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1130	Fe
S1	S1	1	1135	Fe
S2	S2	1	1139	Fe
S3	S3	1	1143	Fe
S4	S4	1	1147	Fe
S5	S5	1	1151	Fe
ICV01	ICV01	1	1155	Fe
LLICV01	LLICV01	1	1209	Fe
ICB01	ICB01	1	1221	Fe
CRI01	CRI01	1	1226	Fe
ICSA01	ICSA01	1	1231	Fe
ICSAB01	ICSAB01	1	1235	Fe
CCV01	CCV01	1	1247	Fe
CCB01	CCB01	1	1252	Fe
PB169098BL	PB169098BL	1	1257	Fe
PB169098BS	PB169098BS	1	1301	Fe
Q2756-01DUP	71725DUP	1	1314	Fe
Q2756-01L	71725L	5	1318	Fe
Q2756-01MS	71725MS	1	1322	Fe
Q2756-01MSD	71725MSD	1	1329	Fe
Q2756-01A	71725A	1	1333	Fe
CCV02	CCV02	1	1337	Fe
CCB02	CCB02	1	1352	Fe
CCV03	CCV03	1	1449	Fe
CCB03	CCB03	1	1453	Fe

METAL
RAW DATA

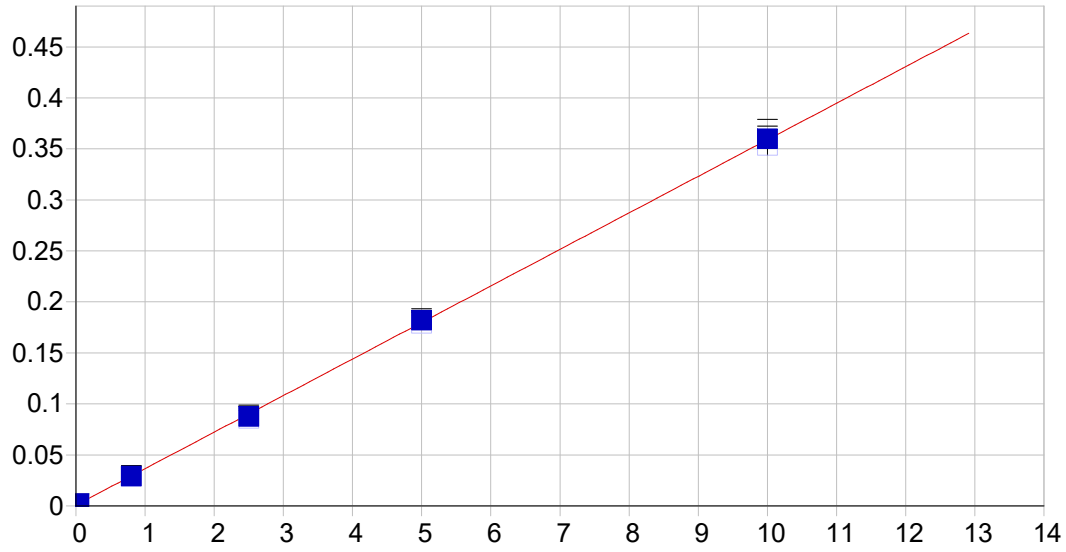


As 189.042 {479}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000019	Re-Slope:	1.000000
A1 (Gain):	0.047860	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999726	Status:	OK.
Std Error of Est:	0.000026		
Predicted MDL:	0.002523		
Predicted MQL:	0.008410		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00002	.000	1
S1	.02000	.02243	.002	12.2	.00109	.000	1
S3	2.5000	2.4254	-.075	-2.99	.11597	.000	1
S4	5.0000	4.8916	-.108	-2.17	.23387	.002	1
S5	10.000	10.207	.207	2.07	.48801	.000	1
S2	.80000	.77352	-.026	-3.31	.03700	.001	1

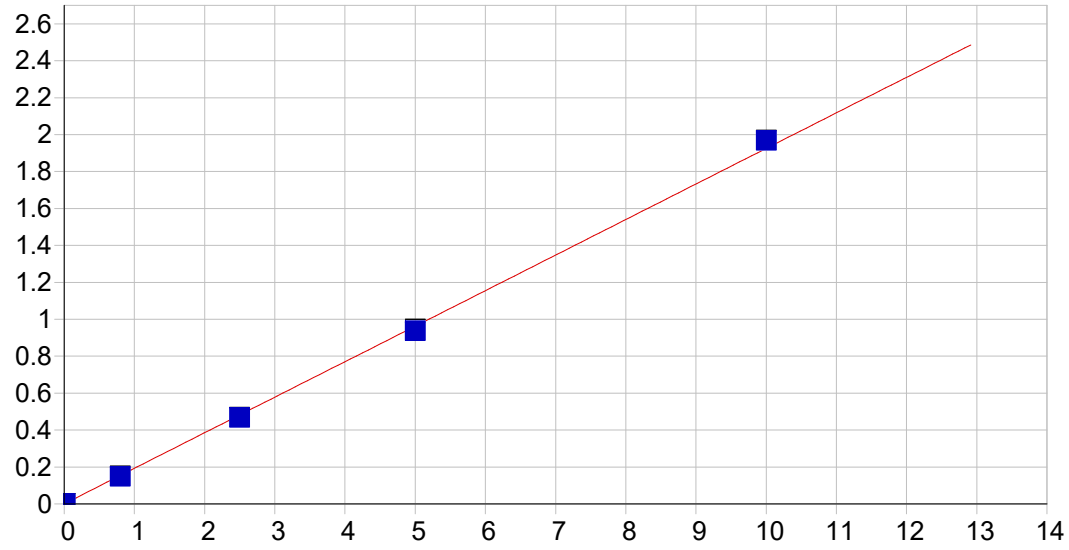


Tl 190.856 {477}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000682	Re-Slope:	1.000000
A1 (Gain):	0.035823	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999899	Status:	OK.
Std Error of Est:	0.000017		
Predicted MDL:	0.002419		
Predicted MQL:	0.008062		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00068	.000	1
S1	.04000	.04277	.003	6.93	.00212	.000	1
S3	2.5000	2.4203	-.080	-3.19	.08575	.002	1
S4	5.0000	5.0609	.061	1.22	.17871	.002	1
S5	10.000	10.021	.021	.213	.35314	.010	1
S2	.80000	.79495	-.005	-.632	.02864	.001	1

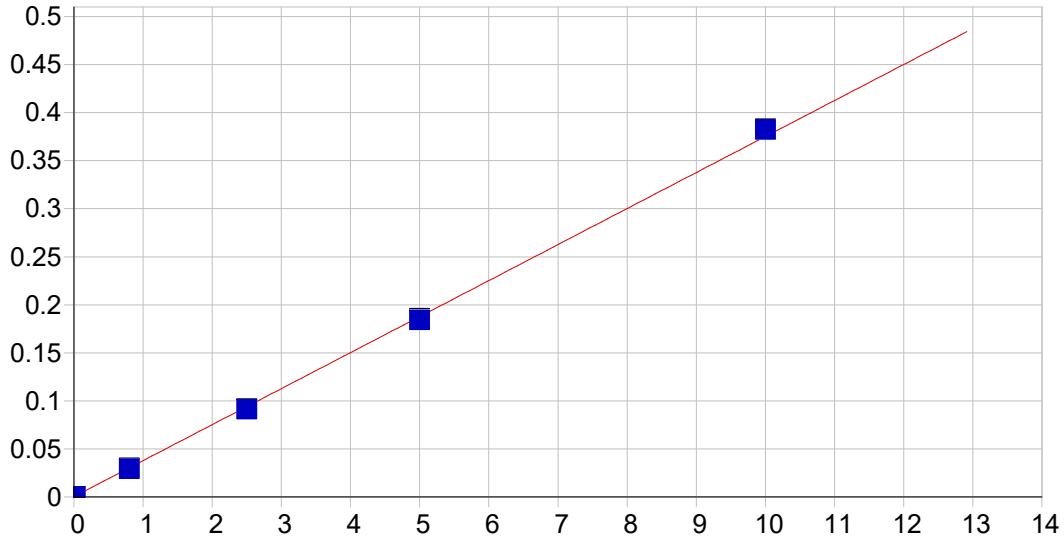


Pb 220.353 {453}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000221	Re-Slope:	1.000000
A1 (Gain):	0.192481	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999688	Status:	OK.
Std Error of Est:	0.000087		
Predicted MDL:	0.001464		
Predicted MQL:	0.004879		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00022	.000	1
S1	.01200	.01119	-.001	-6.74	.00233	.000	1
S3	2.5000	2.4309	-.069	-2.76	.46763	.001	1
S4	5.0000	4.8716	-.128	-2.57	.93691	.009	1
S5	10.000	10.227	.227	2.27	1.9667	.002	1
S2	.80000	.77157	-.028	-3.55	.14857	.003	1

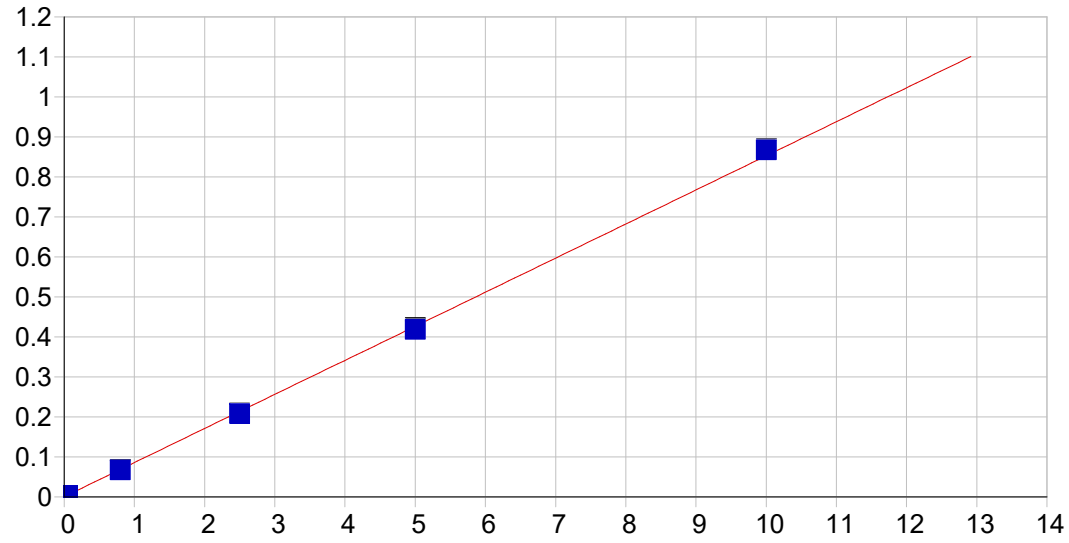


Se 196.090 {472}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000269	Re-Slope:	1.000000
A1 (Gain):	0.037485	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999771	Status:	OK.
Std Error of Est:	0.000019		
Predicted MDL:	0.003882		
Predicted MQL:	0.012940		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00027	.000	1
S1	.02000	.02062	.001	3.09	.00104	.000	1
S3	2.5000	2.4287	-.071	-2.85	.09128	.000	1
S4	5.0000	4.9049	-.095	-1.90	.18408	.002	1
S5	10.000	10.192	.192	1.92	.38220	.001	1
S2	.80000	.77396	-.026	-3.25	.02927	.001	1

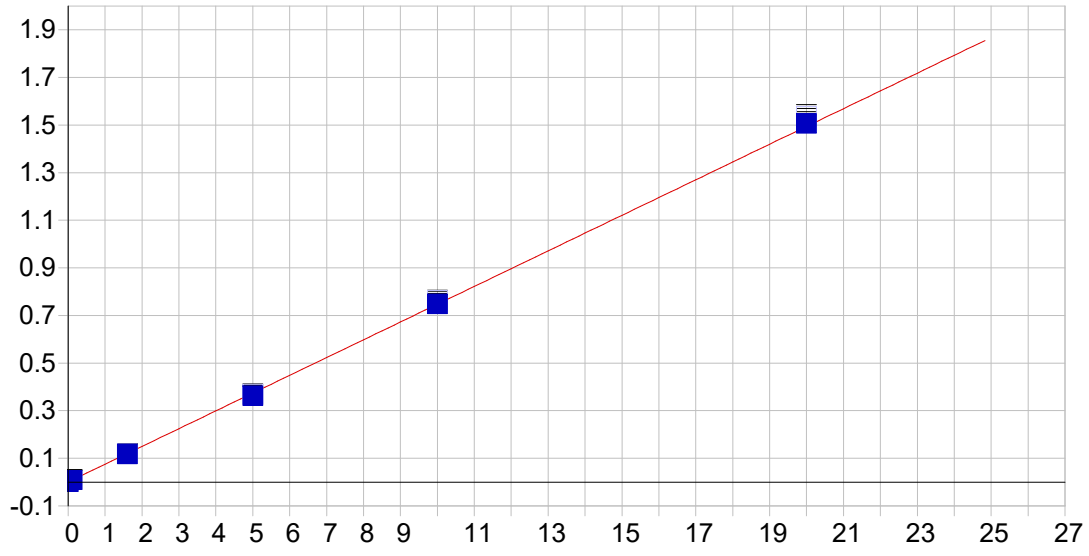


Sb 206.833 {463}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000633	Re-Slope:	1.000000
A1 (Gain):	0.085194	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999809	Status:	OK.
Std Error of Est:	0.000062		
Predicted MDL:	0.002277		
Predicted MQL:	0.007588		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00063	.000	1
S1	.05000	.05178	.002	3.56	.00505	.000	1
S3	2.5000	2.4371	-.063	-2.51	.20884	.001	1
S4	5.0000	4.9064	-.094	-1.87	.41979	.003	1
S5	10.000	10.176	.176	1.76	.86987	.000	1
S2	.80000	.77880	-.021	-2.65	.06717	.001	1

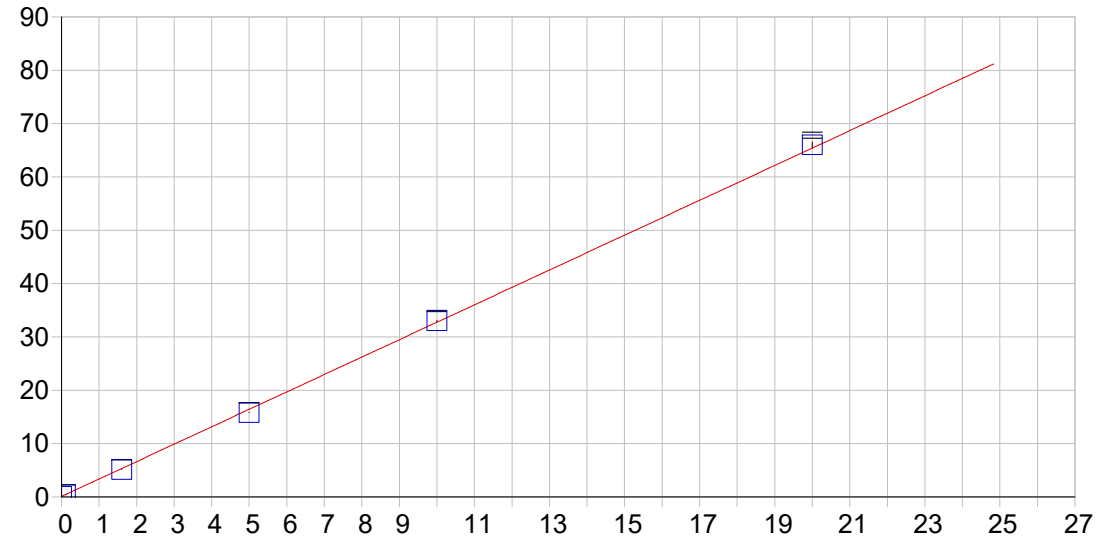


Al 396.152 { 85}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000528	Re-Slope:	1.000000
A1 (Gain):	0.074687	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999896	Status:	OK.
Std Error of Est:	0.000081		
Predicted MDL:	0.014039		
Predicted MQL:	0.046797		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00053	.001	1
S1	.10000	.10899	.009	8.99	.00925	.001	1
S3	5.0000	4.8444	-.156	-3.11	.36959	.001	1
S4	10.000	10.015	.015	.153	.76303	.002	1
S5	20.000	20.168	.168	.839	1.5358	.008	1
S2	1.6000	1.5630	-.037	-2.31	.11958	.000	1

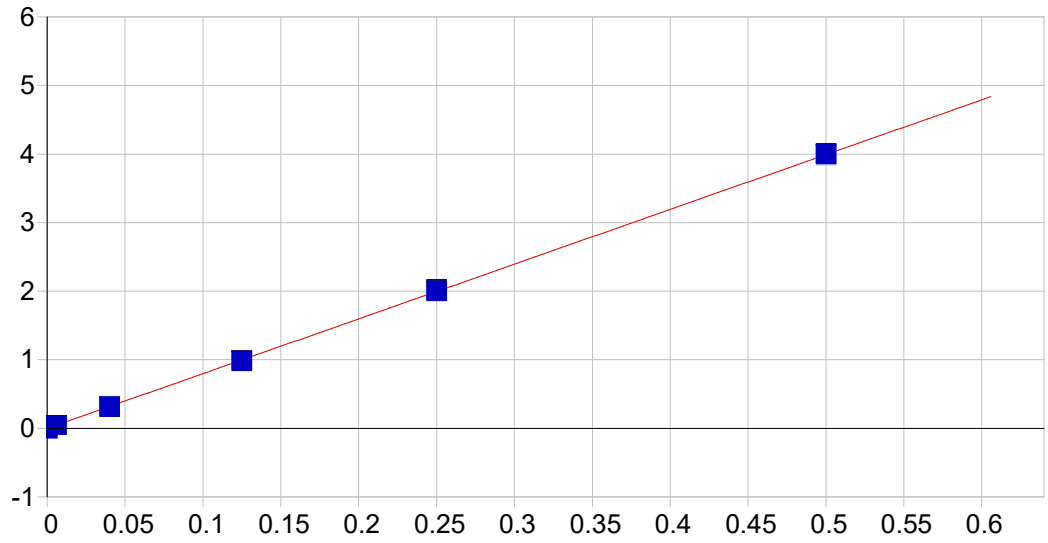


Ba 493.409 { 68}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.092638	Re-Slope:	1.000000
A1 (Gain):	3.265758	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999841	Status:	OK.
Std Error of Est:	0.004320		
Predicted MDL:	0.000859		
Predicted MQL:	0.002862		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.09266	.002	1
S1	.10000	.10055	.001	.545	.42099	.004	1
S3	5.0000	4.8065	-.193	-3.87	15.790	.038	1
S4	10.000	10.077	.077	.769	33.001	.109	1
S5	20.000	20.174	.174	.869	65.975	.570	1
S2	1.6000	1.5422	-.058	-3.61	5.1292	.033	1

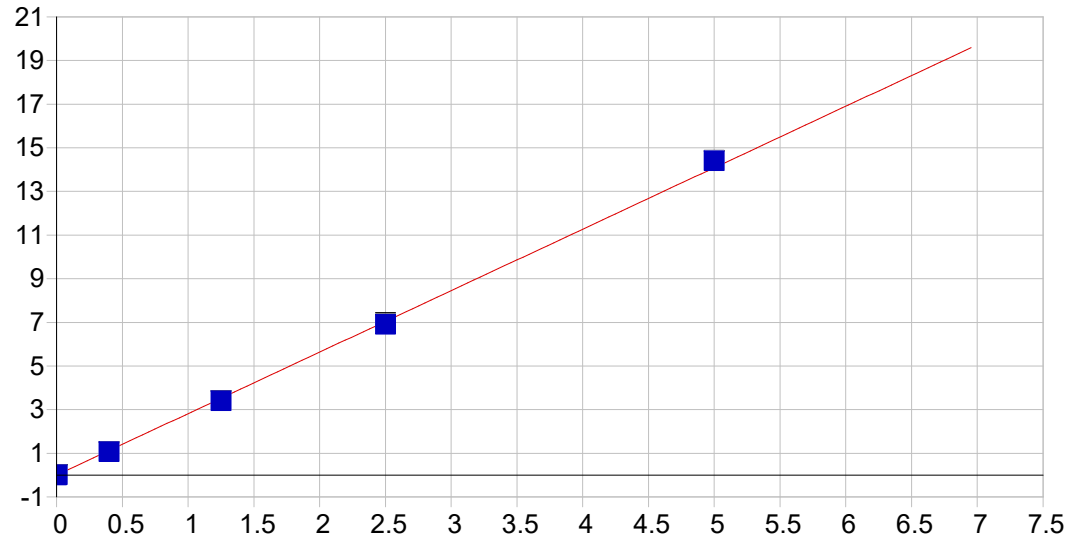


Be 234.861 {144}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000575	Re-Slope:	1.000000
A1 (Gain):	7.984463	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999977	Status:	OK.
Std Error of Est:	0.000154		
Predicted MDL:	0.000077		
Predicted MQL:	0.000258		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00058	.000	1
S1	.00600	.00618	.000	3.07	.04844	.002	1
S3	.12500	.12317	-.002	-1.46	.97841	.006	1
S4	.25000	.25108	.001	.430	1.9952	.018	1
S5	.50000	.50090	.001	.180	3.9810	.006	1
S2	.04000	.03967	-.000	-.831	.31472	.004	1

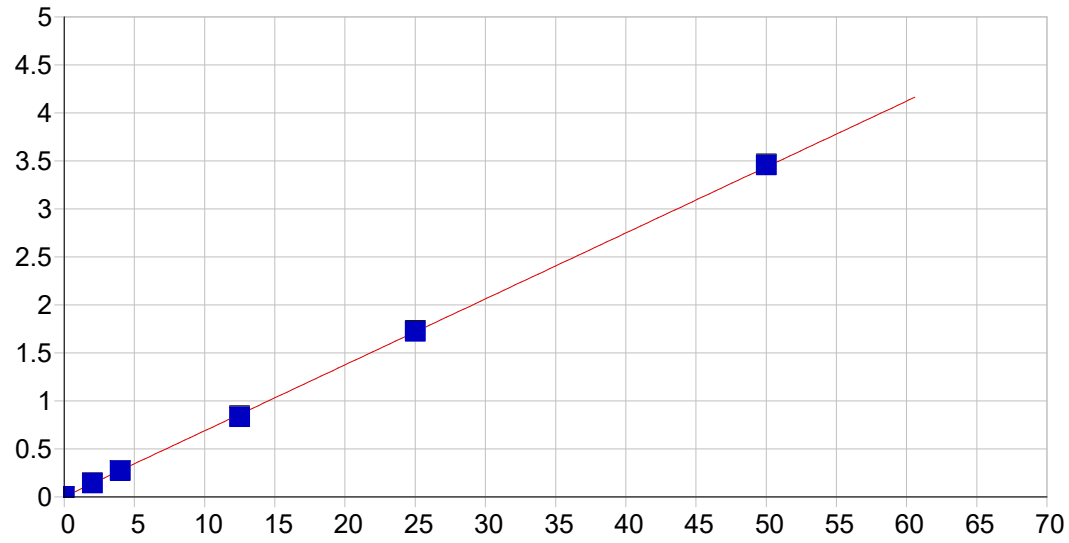


Cd 226.502 {449}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000366	Re-Slope:	1.000000
A1 (Gain):	2.817559	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999666	Status:	OK.
Std Error of Est:	0.000662		
Predicted MDL:	0.000084		
Predicted MQL:	0.000280		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00036	.000	1
S1	.00600	.00590	-.000	-1.61	.01632	.000	1
S3	1.2500	1.2066	-.043	-3.47	3.4017	.008	1
S4	2.5000	2.4528	-.047	-1.89	6.9153	.065	1
S5	5.0000	5.1126	.113	2.25	14.414	.012	1
S2	.40000	.37808	-.022	-5.48	1.0656	.022	1

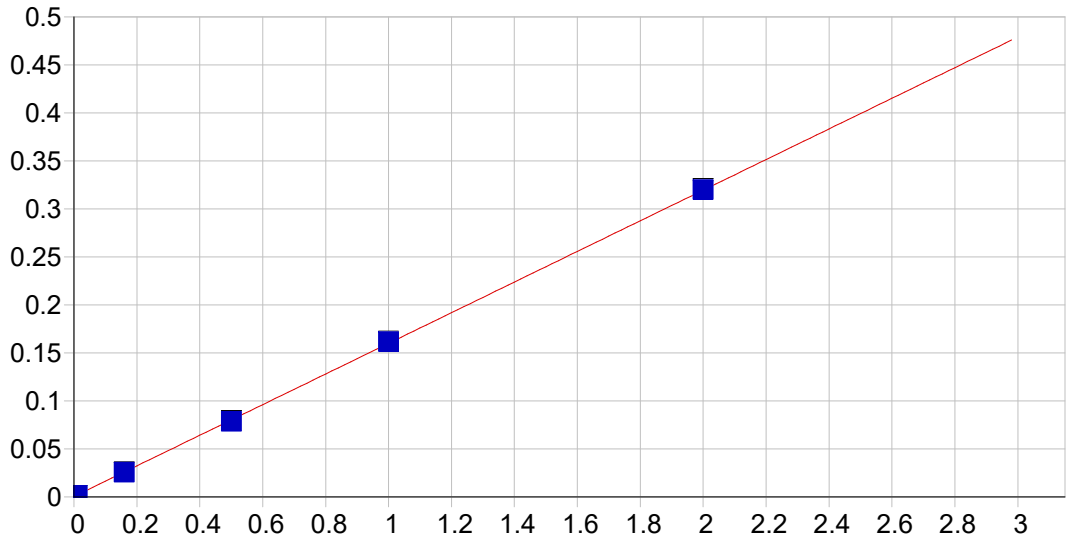


Ca 373.690 { 90}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001986	Re-Slope:	1.000000
A1 (Gain):	0.068677	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999913	Status:	OK.
Std Error of Est:	0.000480		
Predicted MDL:	0.012789		
Predicted MQL:	0.042631		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	.00199	.002	1
S2	4.0000	3.9327	-.067	-1.68	.27207	.002	1
S3	12.500	12.123	-.377	-3.02	.83456	.008	1
S4	25.000	25.075	.075	.300	1.7241	.006	1
S5	50.000	50.311	.311	.623	3.4572	.011	1
S1	2.0000	2.0579	.058	2.90	.14332	.001	1

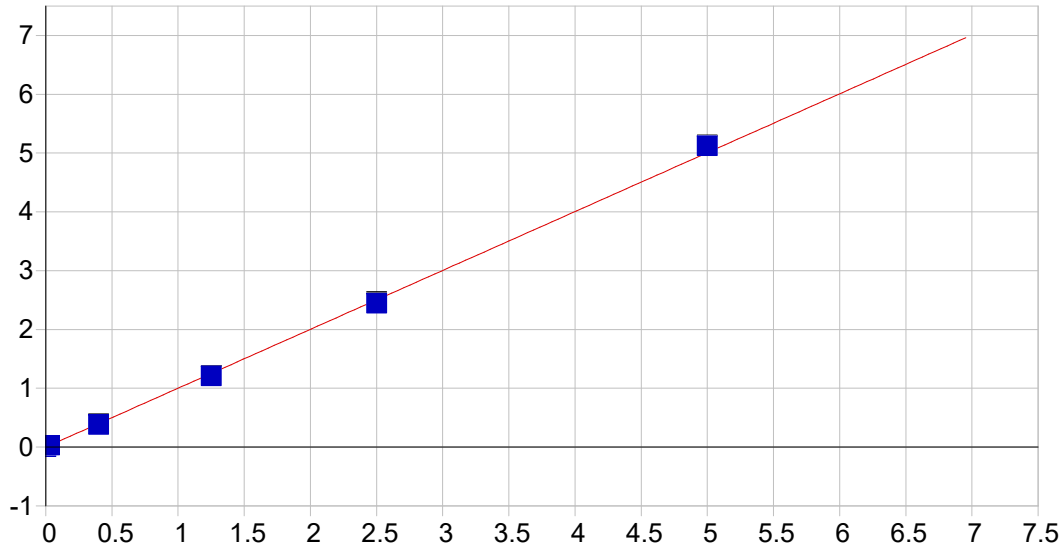


Cr 267.716 {126}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000416	Re-Slope:	1.000000
A1 (Gain):	0.159550	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999946	Status:	OK.
Std Error of Est:	0.000012		
Predicted MDL:	0.000430		
Predicted MQL:	0.001432		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00042	.000	1
S1	.01000	.00922	-.001	-7.83	.00189	.000	1
S3	.50000	.49002	-.010	-2.00	.07863	.001	1
S4	1.0000	1.0097	.010	.972	.16158	.001	1
S5	2.0000	2.0034	.003	.168	.32018	.001	1
S2	.16000	.15768	-.002	-1.45	.02558	.000	1

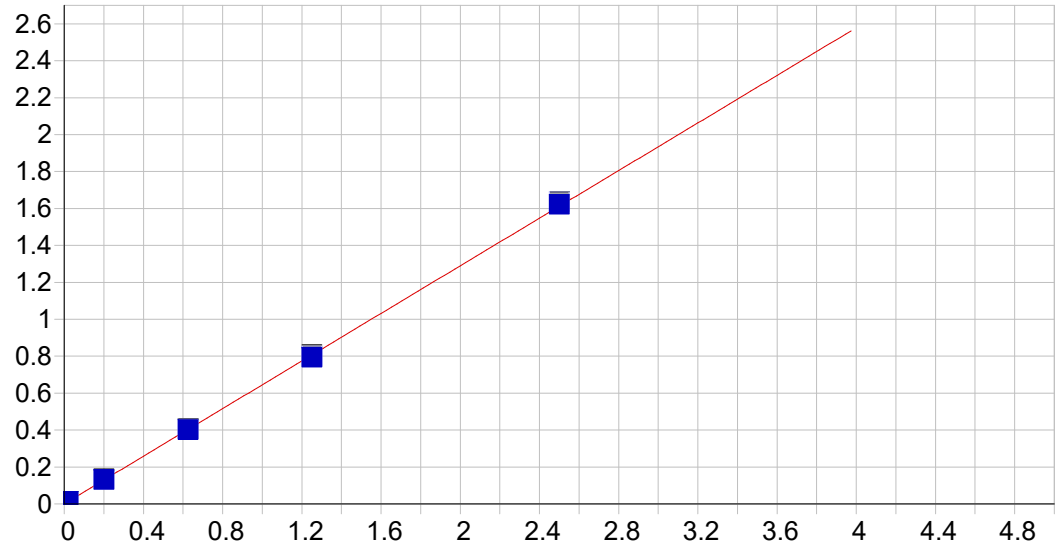


Co 228.616 {448}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000123	Re-Slope:	1.000000
A1 (Gain):	1.001307	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999675	Status:	OK.
Std Error of Est:	0.000520		
Predicted MDL:	0.000214		
Predicted MQL:	0.000715		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00012	.000	1
S1	.03000	.03105	.001	3.49	.03108	.000	1
S3	1.2500	1.2080	-.042	-3.36	1.2118	.002	1
S4	2.5000	2.4433	-.057	-2.27	2.4509	.022	1
S5	5.0000	5.1139	.114	2.28	5.1292	.007	1
S2	.40000	.38375	-.016	-4.06	.38505	.008	1

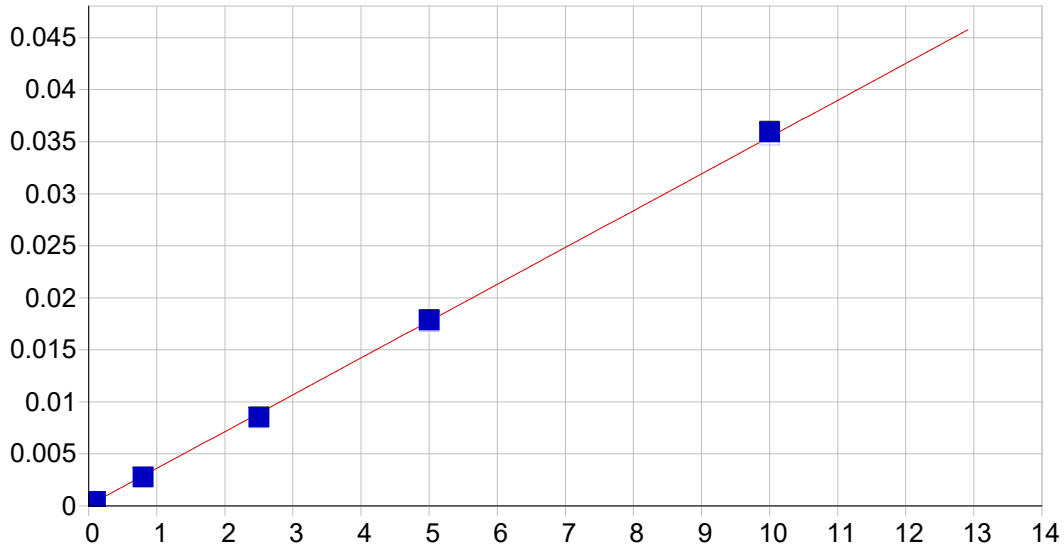


Cu 224.700 {450}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000584	Re-Slope:	1.000000
A1 (Gain):	0.644569	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999930	Status:	OK.
Std Error of Est:	0.000090		
Predicted MDL:	0.000463		
Predicted MQL:	0.001542		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00058	.000	1
S1	.02000	.02225	.002	11.2	.01507	.000	1
S3	.62500	.62380	-.001	-.192	.40602	.001	1
S4	1.2500	1.2314	-.019	-1.49	.80099	.006	1
S5	2.5000	2.5152	.015	.609	1.6352	.002	1
S2	.20000	.20236	.002	1.18	.13210	.002	1

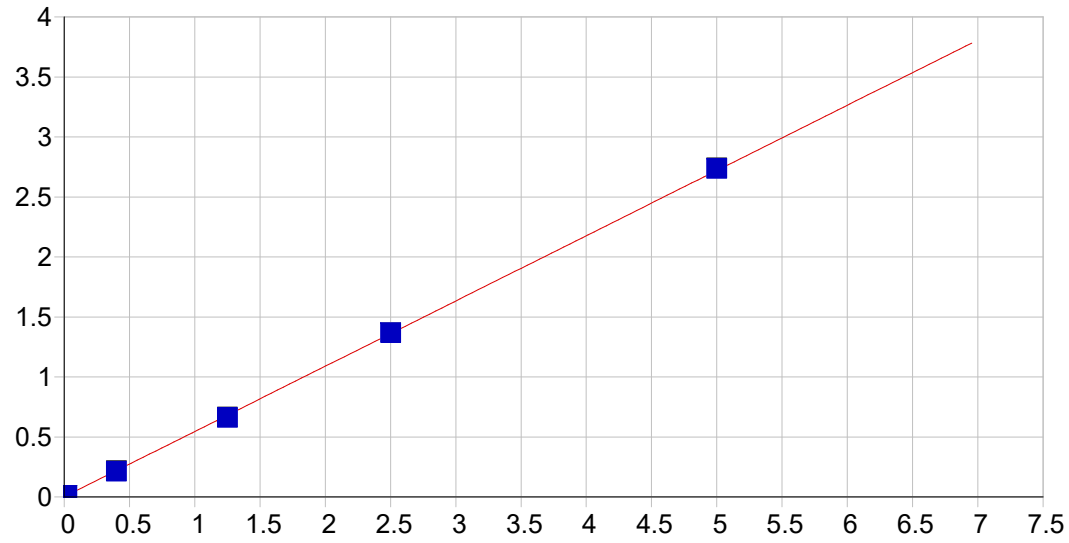


Fe 240.488 {140}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000065	Re-Slope:	1.000000
A1 (Gain):	0.003538	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999749	Status:	OK.
Std Error of Est:	0.000004		
Predicted MDL:	0.007011		
Predicted MQL:	0.023370		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00006	.000	1
S1	.10000	.10016	.000	.160	.00041	.000	1
S3	2.5000	2.3857	-.114	-4.57	.00843	.000	1
S4	5.0000	5.0237	.024	.474	.01769	.000	1
S5	10.000	10.131	.131	1.31	.03561	.000	1
S2	.80000	.75966	-.040	-5.04	.00273	.000	1

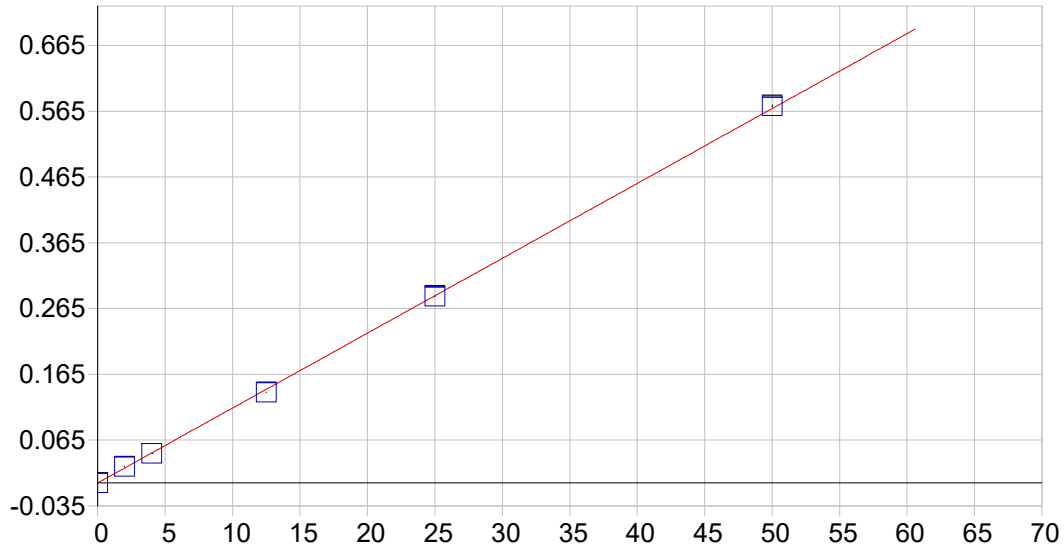


Mn 257.610 {131}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001340	Re-Slope:	1.000000
A1 (Gain):	0.543743	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999918	Status:	OK.
Std Error of Est:	0.000115		
Predicted MDL:	0.000599		
Predicted MQL:	0.001997		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00134	.000	1
S1	.02000	.02048	.000	2.40	.01248	.000	1
S3	1.2500	1.2137	-.036	-2.90	.66142	.002	1
S4	2.5000	2.5127	.013	.509	1.3679	.000	1
S5	5.0000	5.0314	.031	.628	2.7377	.003	1
S2	.40000	.39164	-.008	-2.09	.21434	.001	1

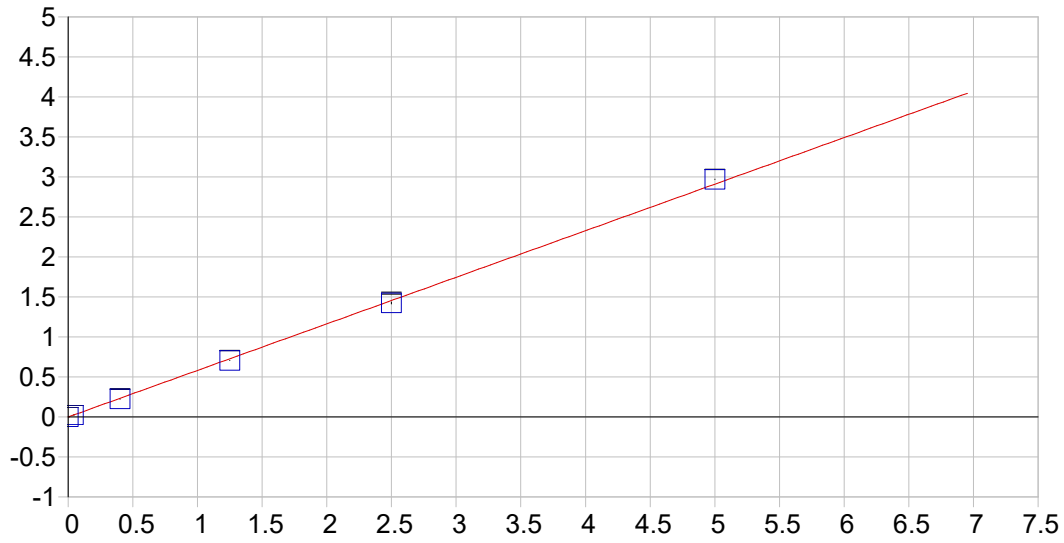


Mg 279.079 {121}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000071	Re-Slope:	1.000000
A1 (Gain):	0.011385	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999807	Status:	OK.
Std Error of Est:	0.000118		
Predicted MDL:	0.032467		
Predicted MQL:	0.108222		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00011	-.000	.000	-.00007	.000	1
S2	4.0000	3.9351	-.065	-1.62	.04473	.000	1
S3	12.500	12.093	-.407	-3.25	.13761	.001	1
S4	25.000	24.940	-.060	-.240	.28387	.001	1
S5	50.000	50.335	.335	.670	.57300	.002	1
S1	2.0000	2.1967	.197	9.83	.02494	.001	1

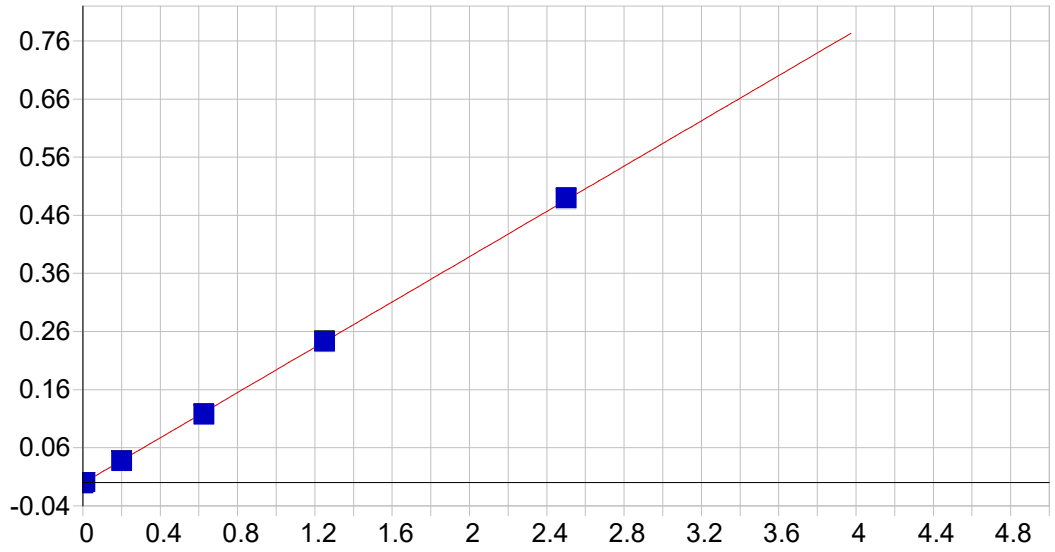


Ni 231.604 {446}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000426	Re-Slope:	1.000000
A1 (Gain):	0.581937	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999738	Status:	OK.
Std Error of Est:	0.000313		
Predicted MDL:	0.000391		
Predicted MQL:	0.001304		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00043	.000	1
S1	.04000	.04143	.001	3.59	.02369	.000	1
S3	1.2500	1.2137	-.036	-2.90	.70587	.002	1
S4	2.5000	2.4470	-.053	-2.12	1.4236	.012	1
S5	5.0000	5.1021	.102	2.04	2.9687	.002	1
S2	.40000	.38573	-.014	-3.57	.22405	.005	1

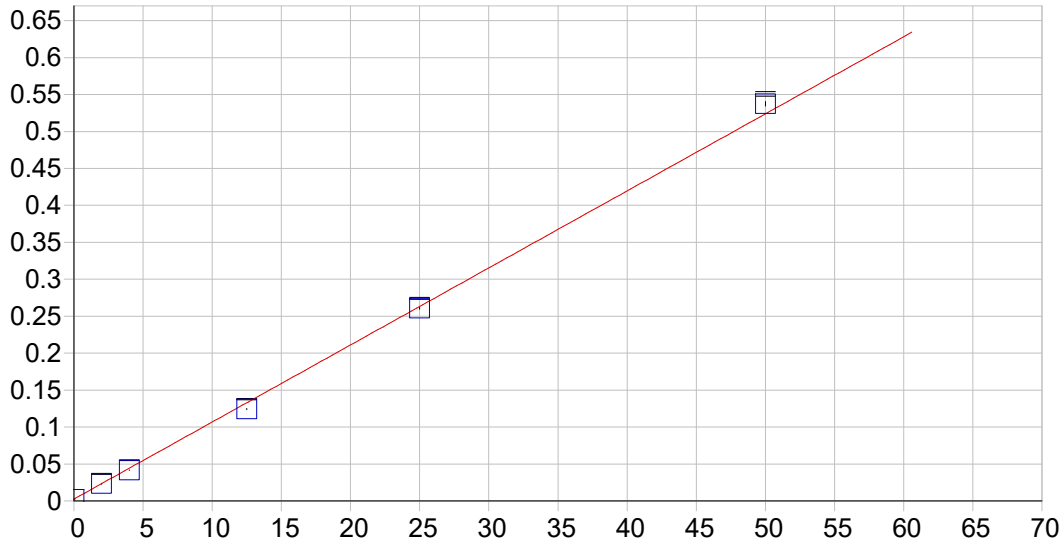


Ag 328.068 {103}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000803	Re-Slope:	1.000000
A1 (Gain):	0.194782	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999922	Status:	OK.
Std Error of Est:	0.000020		
Predicted MDL:	0.000612		
Predicted MQL:	0.002040		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00080	.000	1
S1	.01000	.01051	.001	5.06	.00123	.000	1
S3	.62500	.60738	-.018	-2.82	.11691	.001	1
S4	1.2500	1.2530	.003	.236	.24207	.001	1
S5	2.5000	2.5174	.017	.698	.48719	.001	1
S2	.20000	.19672	-.003	-1.64	.03733	.000	1

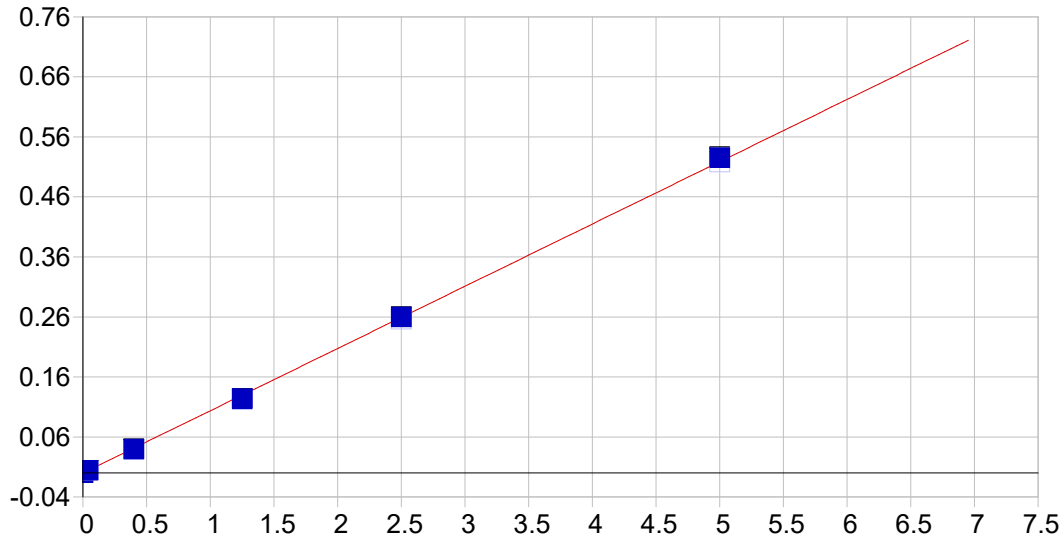


Na 589.592 { 57}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002534	Re-Slope:	1.000000
A1 (Gain):	0.010426	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999439	Status:	OK.
Std Error of Est:	0.000185		
Predicted MDL:	0.015157		
Predicted MQL:	0.050524		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00023	.000	.000	.00254	.000	1
S2	4.0000	3.7564	-.244	-6.09	.04170	.000	1
S3	12.500	11.679	-.821	-6.57	.12430	.001	1
S4	25.000	24.771	-.229	-.916	.26080	.001	1
S5	50.000	51.304	1.30	2.61	.53745	.003	1
S1	2.0000	1.9895	-.010	-.523	.02328	.001	1

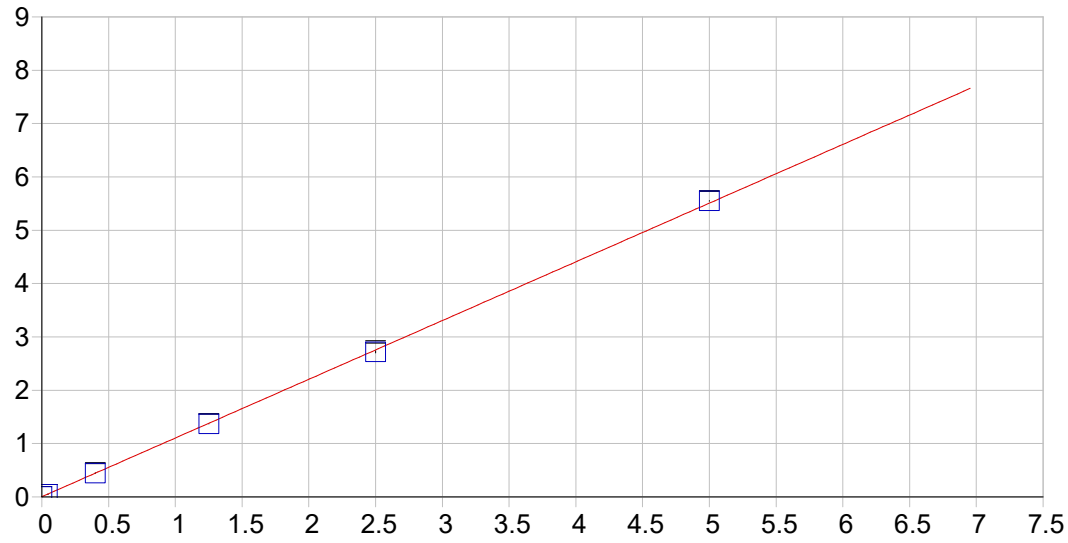


V 292.402 {115}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000187	Re-Slope:	1.000000
A1 (Gain):	0.103759	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999750	Status:	OK.
Std Error of Est:	0.000054		
Predicted MDL:	0.003895		
Predicted MQL:	0.012982		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00019	.000	1
S1	.04000	.04231	.002	5.77	.00405	.000	1
S3	1.2500	1.1925	-.058	-4.60	.12165	.000	1
S4	2.5000	2.5074	.007	.297	.25620	.001	1
S5	5.0000	5.0657	.066	1.31	.51787	.001	1
S2	.40000	.38211	-.018	-4.47	.03885	.001	1

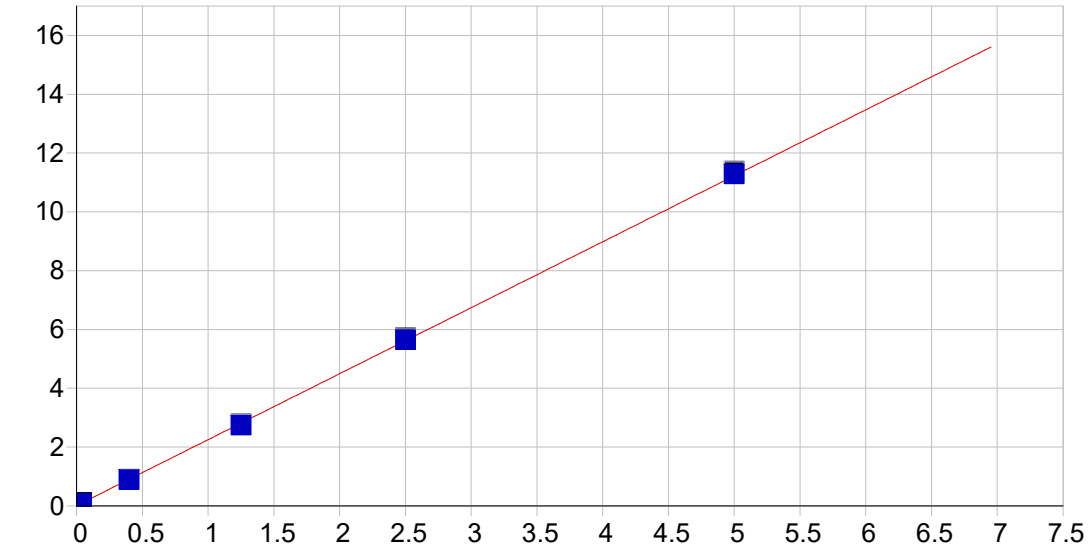


Zn 206.200 {464}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003780	Re-Slope:	1.000000
A1 (Gain):	1.100957	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999950	Status:	OK.
Std Error of Est:	0.000258		
Predicted MDL:	0.000160		
Predicted MQL:	0.000533		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00378	.000	1
S1	.04000	.04205	.002	5.12	.05007	.000	1
S3	1.2500	1.2414	-.009	-.689	1.3705	.001	1
S4	2.5000	2.4665	-.034	-1.34	2.7193	.022	1
S5	5.0000	5.0386	.039	.773	5.5511	.006	1
S2	.40000	.40145	.001	.363	.44576	.009	1

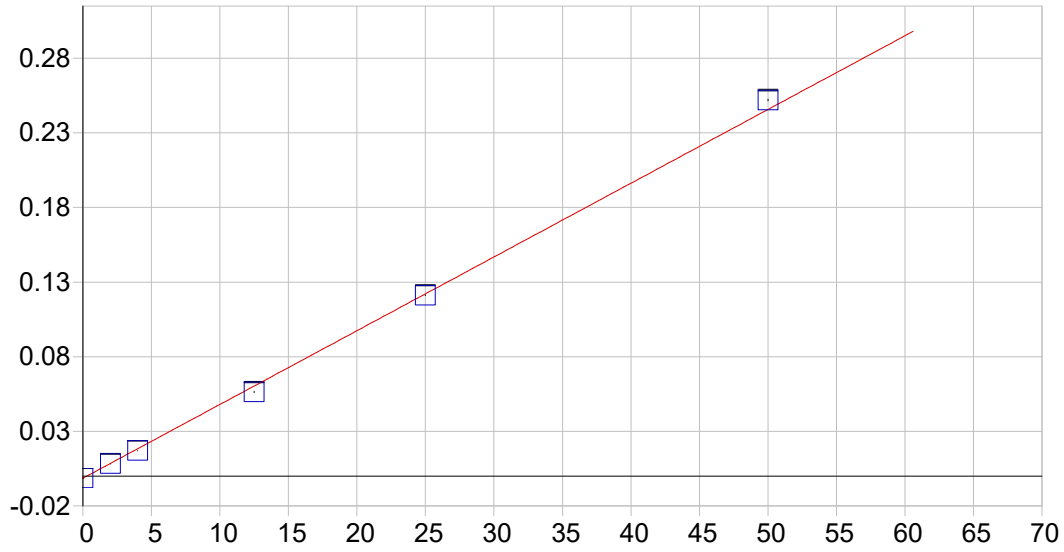


Zn 213.856 {158}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.008735	Re-Slope:	1.000000
A1 (Gain):	2.243877	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999939	Status:	OK.
Std Error of Est:	0.000587		
Predicted MDL:	0.000263		
Predicted MQL:	0.000876		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00874	.001	1
S1	.04000	.04078	.001	1.96	.10088	.004	1
S3	1.2500	1.2174	-.033	-2.61	2.7599	.024	1
S4	2.5000	2.5119	.012	.474	5.6841	.034	1
S5	5.0000	5.0259	.026	.518	11.364	.019	1
S2	.40000	.39409	-.006	-1.48	.89927	.001	1

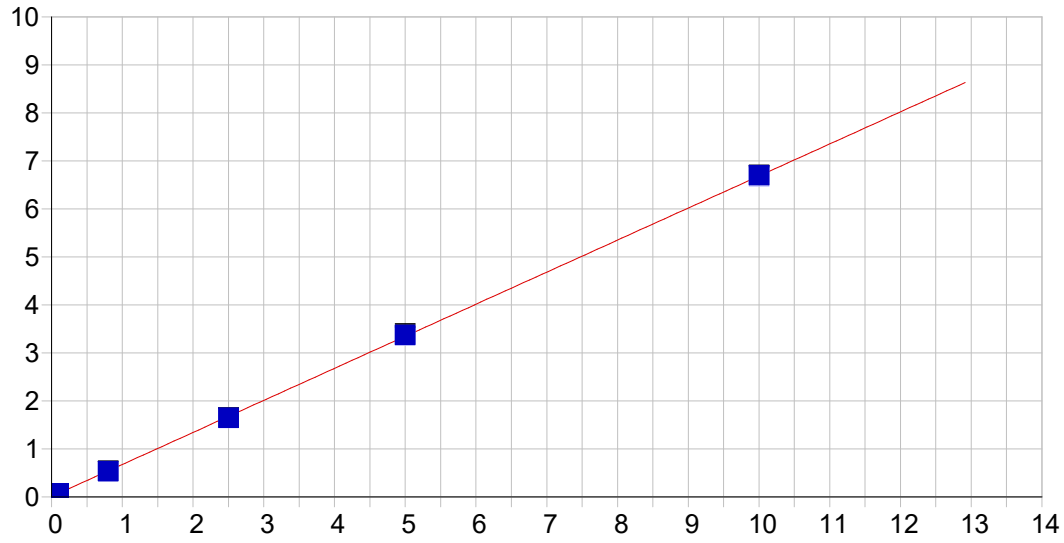


K 766.490 { 44}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001430	Re-Slope:	1.000000
A1 (Gain):	0.004942	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999450	Status:	OK.
Std Error of Est:	0.000087		
Predicted MDL:	0.041652		
Predicted MQL:	0.138841		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00025	.000	.000	-.00143	.000	1
S2	4.0000	3.7422	-.258	-6.45	.01706	.000	1
S3	12.500	11.701	-.799	-6.39	.05640	.000	1
S4	25.000	24.800	-.200	-.799	.12114	.000	1
S5	50.000	51.287	1.29	2.57	.25205	.001	1
S1	2.0000	1.9699	-.030	-1.50	.00831	.000	1

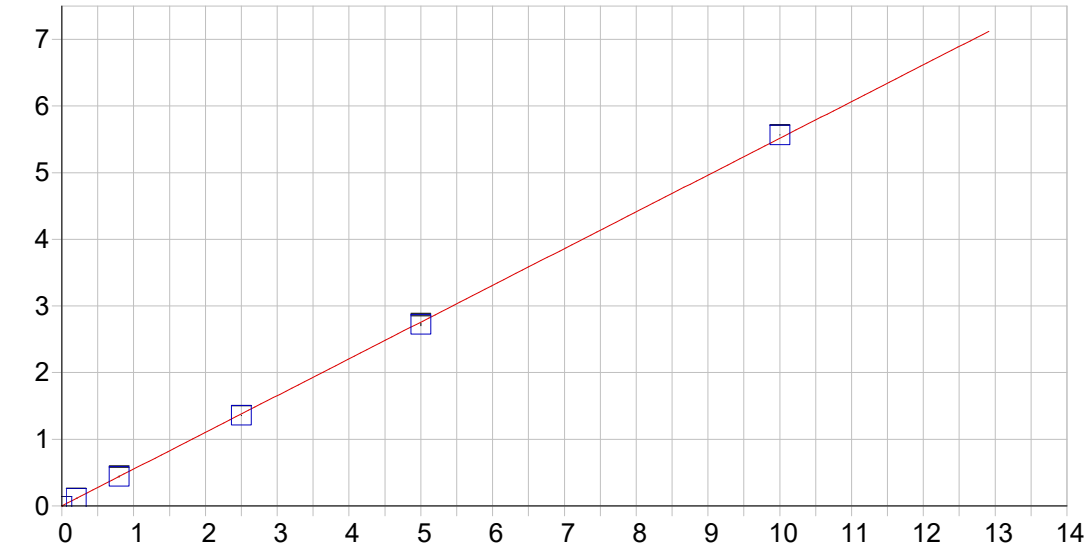


B 249.678 {135}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.007510	Re-Slope:	1.000000
A1 (Gain):	0.667828	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999963	Status:	OK.
Std Error of Est:	0.000301		
Predicted MDL:	0.000982		
Predicted MQL:	0.003274		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00751	.000	1
S1	.10000	.10009	.000	.088	.07396	.001	1
S3	2.5000	2.4529	-.047	-1.88	1.6396	.011	1
S4	5.0000	5.0369	.037	.738	3.3593	.031	1
S5	10.000	10.021	.021	.210	6.6757	.007	1
S2	.80000	.78914	-.011	-1.36	.53259	.005	1

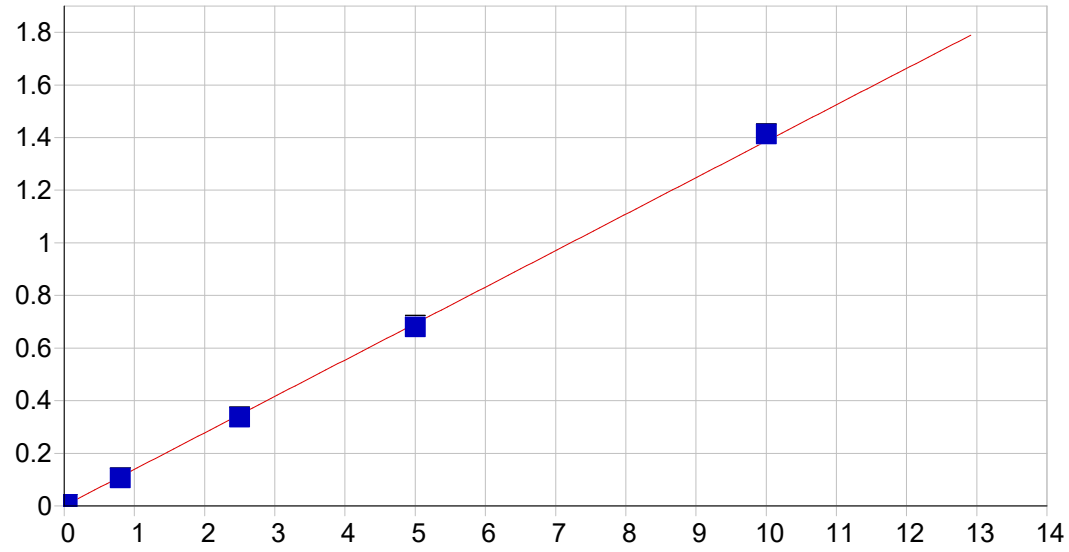


Mo 202.030 {467}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000483	Re-Slope:	1.000000
A1 (Gain):	0.551490	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999921	Status:	OK.
Std Error of Est:	0.000517		
Predicted MDL:	0.000323		
Predicted MQL:	0.001076		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00048	.000	1
S1	.20000	.21086	.011	5.43	.11677	.000	1
S3	2.5000	2.4598	-.040	-1.61	1.3570	.003	1
S4	5.0000	4.9365	-.063	-1.27	2.7229	.019	1
S5	10.000	10.094	.094	.941	5.5673	.000	1
S2	.80000	.79872	-.001	-.160	.44097	.008	1

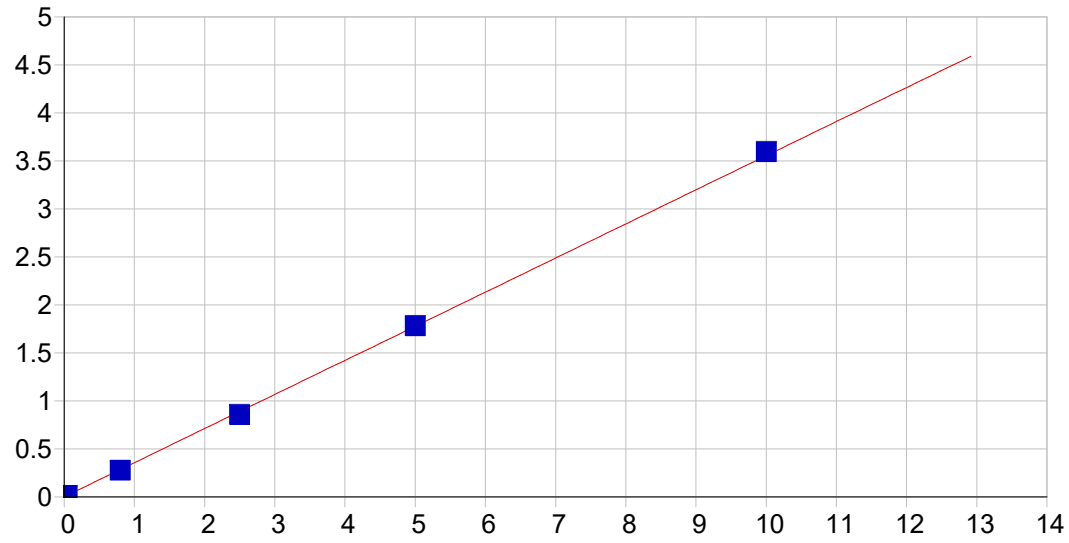


Sn 189.989 {478}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000436	Re-Slope:	1.000000
A1 (Gain):	0.138550	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999754	Status:	OK.
Std Error of Est:	0.000102		
Predicted MDL:	0.000721		
Predicted MQL:	0.002404		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00044	.000	1
S1	.04000	.03934	-.001	-1.66	.00588	.000	1
S3	2.5000	2.4324	-.068	-2.70	.33709	.001	1
S4	5.0000	4.9080	-.092	-1.84	.67973	.007	1
S5	10.000	10.196	.196	1.96	1.4117	.001	1
S2	.80000	.76386	-.036	-4.52	.10616	.002	1

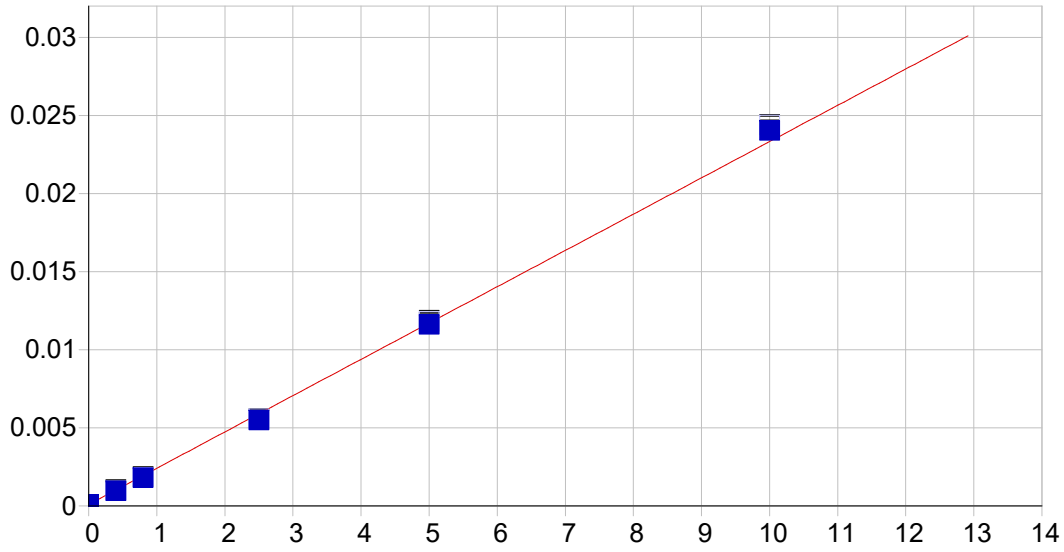


Ti 336.121 {100}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001367	Re-Slope:	1.000000
A1 (Gain):	0.355269	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999844	Status:	OK.
Std Error of Est:	0.000208		
Predicted MDL:	0.001783		
Predicted MQL:	0.005942		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00137	.000	1
S1	.04000	.03944	-.001	-1.39	.01537	.001	1
S3	2.5000	2.4075	-.093	-3.70	.85635	.004	1
S4	5.0000	5.0101	.010	.203	1.7807	.005	1
S5	10.000	10.112	.112	1.12	3.5924	.006	1
S2	.80000	.77142	-.029	-3.57	.27533	.003	1

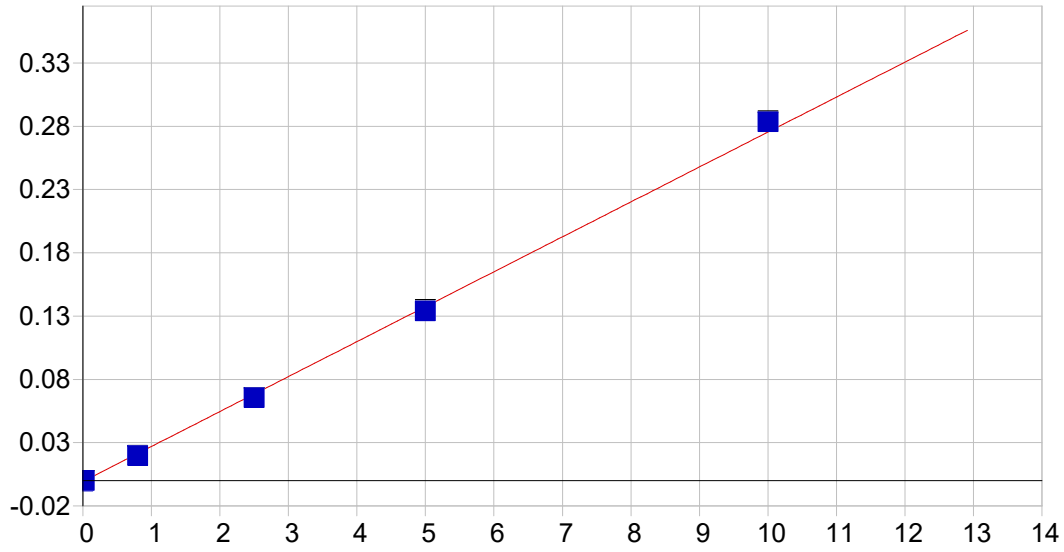


Si 288.158 {117}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000089	Re-Slope:	1.000000
A1 (Gain):	0.002323	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999257	Status:	OK.
Std Error of Est:	0.000010		
Predicted MDL:	0.016561		
Predicted MQL:	0.055204		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00008	.000	.000	.00009	.000	1
S1	.40000	.37508	-.025	-6.23	.00096	.000	1
S3	2.5000	2.3215	-.179	-7.14	.00557	.000	1
S4	5.0000	4.9642	-.036	-.716	.01180	.000	1
S5	10.000	10.302	.302	3.02	.02437	.000	1
S2	.80000	.73708	-.063	-7.87	.00183	.000	1

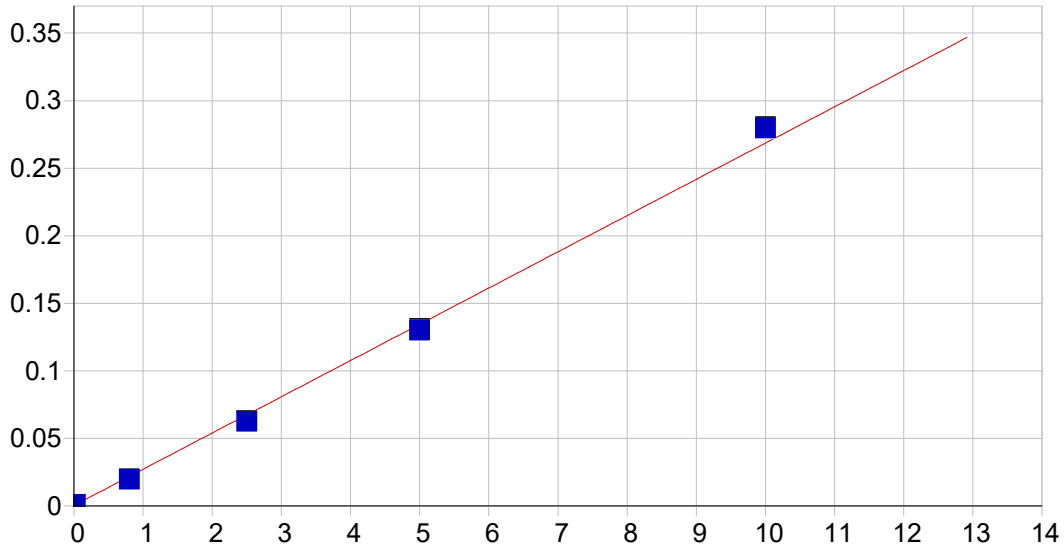


P 177.495 {490}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000639	Re-Slope:	1.000000
A1 (Gain):	0.027609	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999418	Status:	OK.
Std Error of Est:	0.000022		
Predicted MDL:	0.002703		
Predicted MQL:	0.009009		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00064	.000	1
S1	.02000	.02075	.001	3.73	-.00007	.000	1
S3	2.5000	2.3921	-.108	-4.31	.06540	.000	1
S4	5.0000	4.8798	-.120	-2.40	.13407	.001	1
S5	10.000	10.292	.292	2.92	.28348	.001	1
S2	.80000	.73518	-.065	-8.10	.01966	.000	1

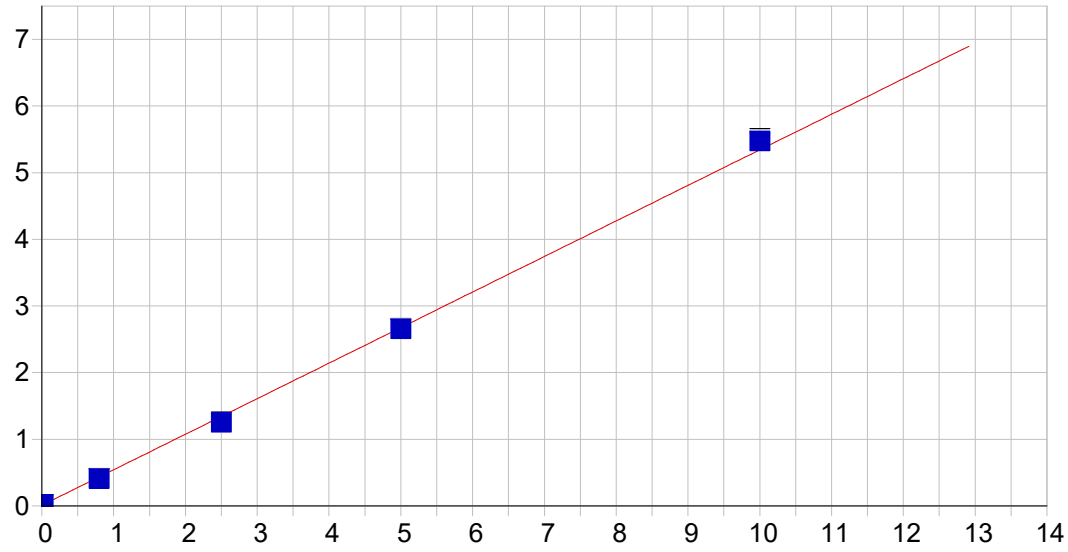


S 182.034 {485}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000338	Re-Slope:	1.000000
A1 (Gain):	0.026823	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998806	Status:	OK.
Std Error of Est:	0.000031		
Predicted MDL:	0.003334		
Predicted MQL:	0.011113		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00034	.000	1
S1	.02000	.02119	.001	5.96	.00088	.000	1
S3	2.5000	2.3223	-.178	-7.11	.06245	.000	1
S4	5.0000	4.8393	-.161	-3.21	.12979	.001	1
S5	10.000	10.418	.418	4.18	.27909	.001	1
S2	.80000	.71887	-.081	-10.1	.01956	.000	1

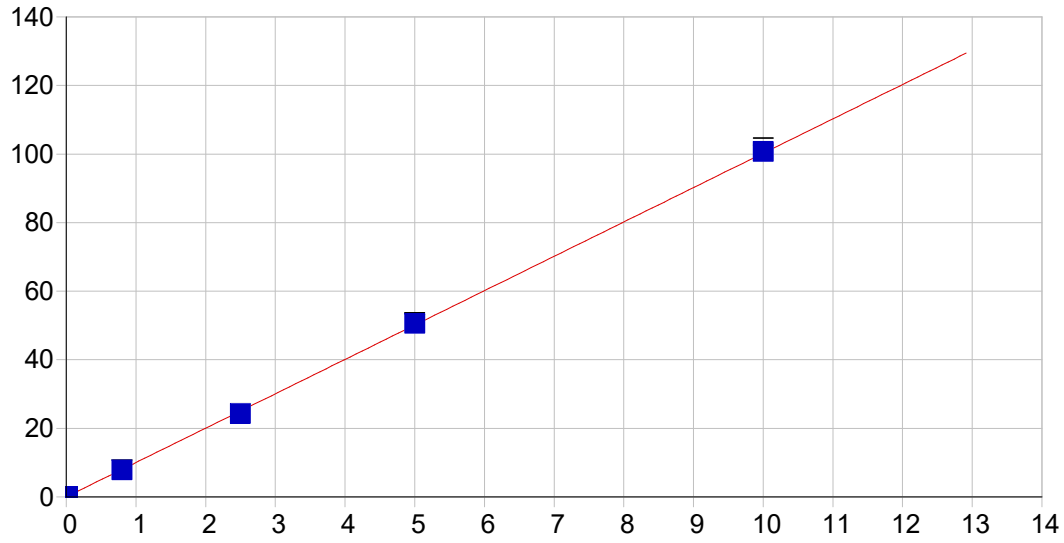


Li 670.784 { 50}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.008499	Re-Slope:	1.000000
A1 (Gain):	0.533450	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999438	Status:	OK.
Std Error of Est:	0.000420		
Predicted MDL:	0.004088		
Predicted MQL:	0.013626		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00850	.000	1
S5	10.000	10.248	.248	2.48	5.4795	.035	1
S4	5.0000	4.9651	-.035	-.697	2.6593	.005	1
S3	2.5000	2.3331	-.167	-6.68	1.2542	.003	1
S1	.02000	.02207	.002	10.4	.02046	.001	1
S2	.80000	.75180	-.048	-6.03	.40989	.004	1

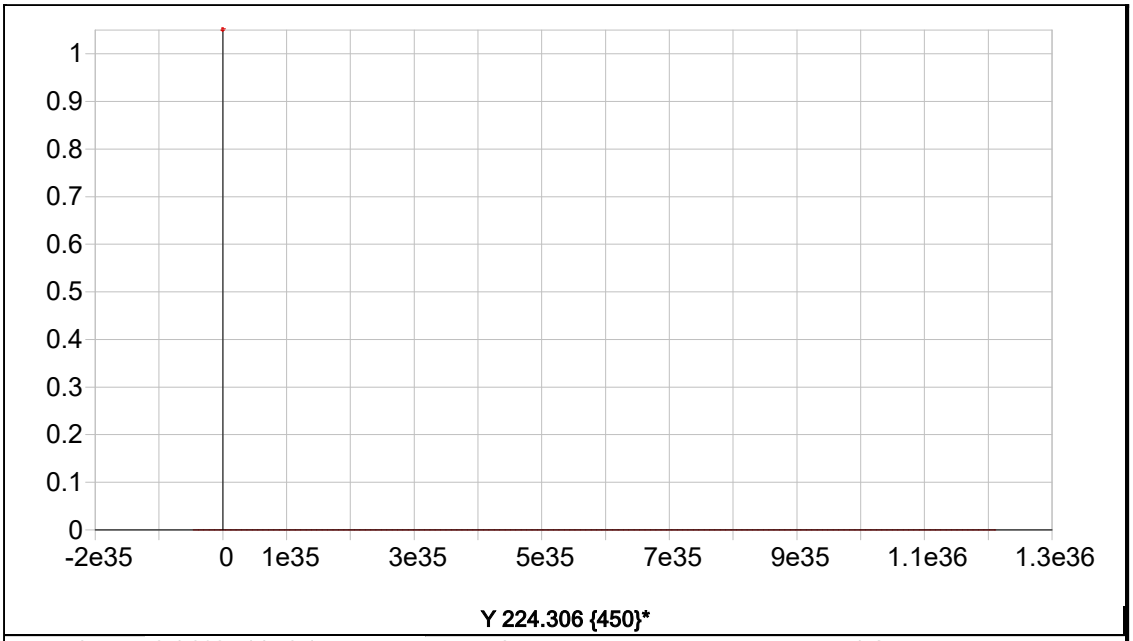


Sr 407.771 { 83}

Date of Fit:	8/4/2025 14:58:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002780	Re-Slope:	1.000000
A1 (Gain):	10.023203	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999910	Status:	OK.
Std Error of Est:	0.003149		
Predicted MDL:	0.000111		
Predicted MQL:	0.000371		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00278	.000	1
S1	.02000	.02037	.000	1.85	.20791	.003	1
S3	2.5000	2.4231	-.077	-3.08	24.314	.056	1
S4	5.0000	5.0451	.045	.902	50.619	.272	1
S5	10.000	10.047	.047	.468	100.80	1.00	1
S2	.80000	.78463	-.015	-1.92	7.8750	.050	1

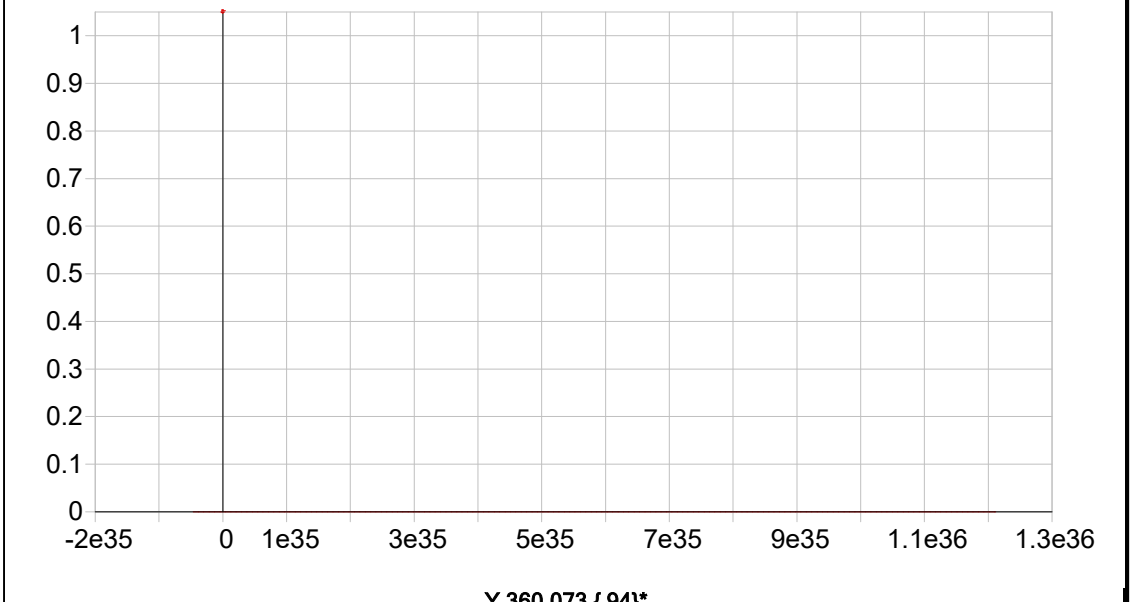


Y 224.306 {450}*

Date of Fit:	8/4/2025 14:58:15	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}*

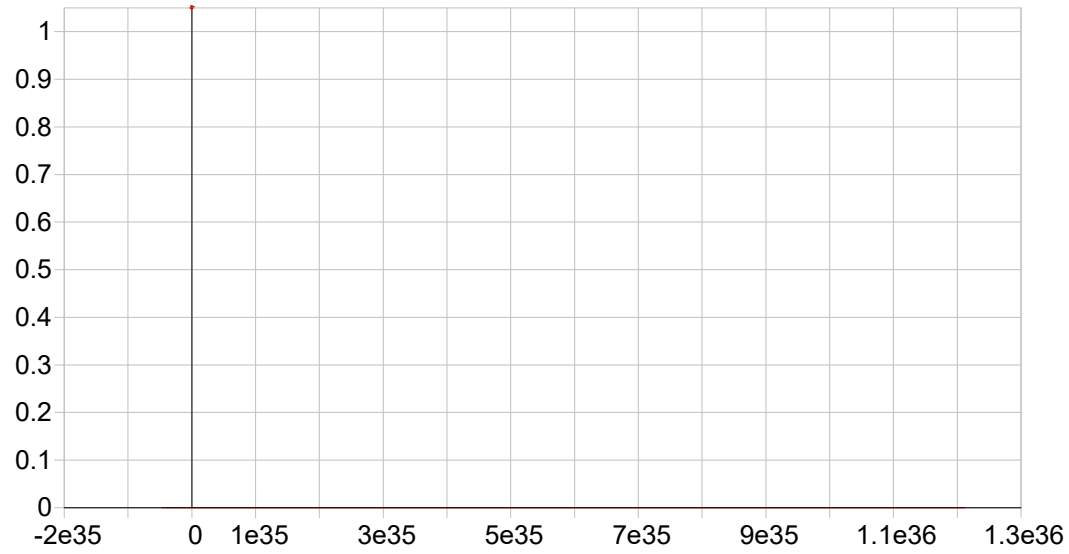
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

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

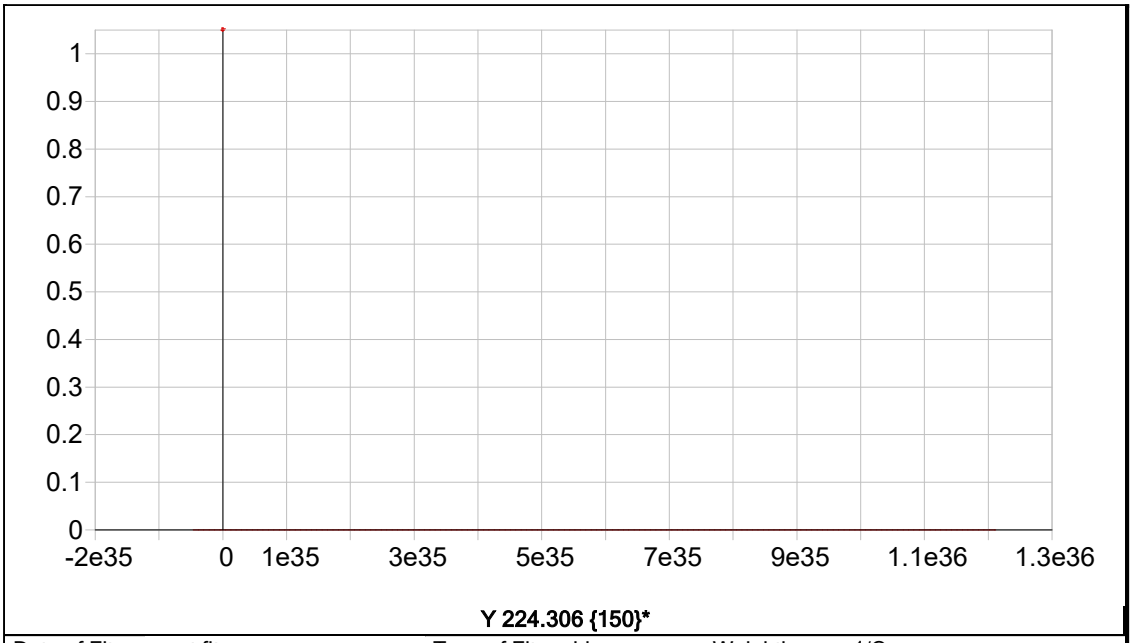
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



Y 371.030 { 91}*

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

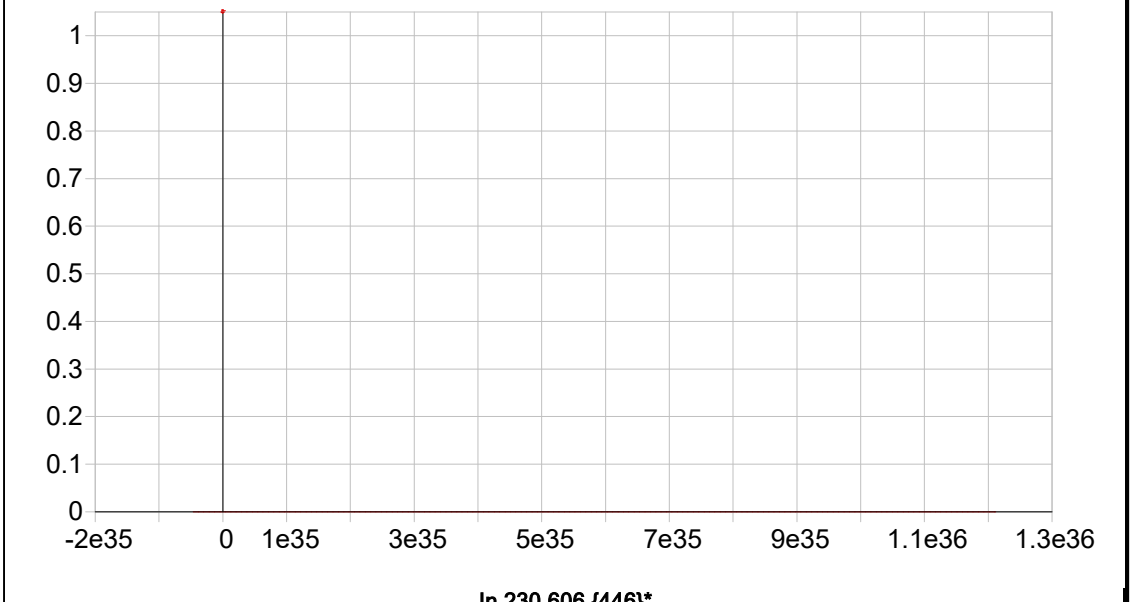
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



Y 224.306 {150}*

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

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



ln 230.606 {446}*

Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc
A0 (Offset):	0.000000		Re-Slope:	1.000000	
A1 (Gain):	0.000000		Y-int:	0.000000	

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

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: S0 Acquired: 8/4/2025 11:15:54 Type: Cal
Method: 6010-200.7 NEW(v81) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00002**	**.00068**	**.00022**	**.00027**	**.00063**	**.00053**	**.09266**	**-.00058**
Stddev	.00011	.00005	.00015	.00009	.00010	.00065	.00155	.00043
%RSD	586.32	6.6741	66.618	31.827	16.276	123.72	1.6679	74.200
#1	.00004	.00073	.00038	.00025	.00052	.00009	.09441	-.00093
#2	-.00010	.00065	.00008	.00019	.00065	.00128	.09150	-.00069
#3	.00012	.00066	.00020	.00036	.00073	.00021	.09205	-.00010

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00036**	**.00199**	**.00042**	**.00012**	**.00058**	**.00006**	**.00134**	**-.00007**
Stddev	.00010	.00184	.00004	.00022	.00016	.00002	.00015	.00040
%RSD	27.194	92.803	10.559	174.49	27.025	25.139	11.024	550.11
#1	-.00047	-.00001	.00037	.00038	.00061	.00005	.00141	.00027
#2	-.00036	.00363	.00046	.00000	.00041	.00008	.00117	-.00051
#3	-.00027	.00233	.00042	-.00000	.00072	.00006	.00144	.00002

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00043**	**-.00080**	**.00254**	**-.00019**	**.00874**	**-.00143**	**.00751**	**.00048**
Stddev	.00002	.00002	.00013	.00025	.00053	.00004	.00025	.00010
%RSD	4.3818	2.4894	4.9740	133.47	6.0983	3.0357	3.3123	19.906
#1	-.00041	-.00083	.00266	-.00037	.00820	-.00138	.00735	.00037
#2	-.00045	-.00079	.00241	.00010	.00927	-.00145	.00780	.00055
#3	-.00042	-.00079	.00253	-.00029	.00874	-.00146	.00738	.00052

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00044**	**.00137**	**.00009**	**-.00064**	**.00034**	**.00850**	**.00278**
Stddev	.00006	.00042	.00002	.00009	.00005	.00021	.00042
%RSD	12.803	30.487	22.622	13.529	13.926	2.4895	15.217
#1	.00038	.00151	.00007	-.00071	.00029	.00843	.00239
#2	.00049	.00169	.00010	-.00067	.00034	.00874	.00323
#3	.00045	.00090	.00010	-.00054	.00039	.00833	.00273

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: S0 Acquired: 8/4/2025 11:15:54 Type: Cal
Method: 6010-200.7 NEW(v81) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5554.9**	**94078.**	**7815.4**	**4760.9**	**7044.2**
Stddev	10.2	2956.	1.6	140.5	9.1
%RSD	.18365	3.1425	.02032	2.9504	.12979
#1	5550.1	96870.	7817.1	4892.2	7036.8
#2	5566.6	90981.	7814.1	4612.8	7054.4
#3	5548.0	94382.	7814.9	4777.7	7041.3

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: S1 Acquired: 8/4/2025 11:20:17 Type: Cal
Method: 6010-200.7 NEW(v81) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00109**	**.00212**	**.00233**	**.00104**	**.00505**	**.00925**	**.42099**	**.04844**
Stddev	.00017	.00010	.00003	.00002	.00007	.00116	.00446	.00151
%RSD	15.857	4.8558	1.4303	1.9170	1.4048	12.585	1.0587	3.1268
#1	.00090	.00217	.00234	.00103	.00513	.00837	.41602	.04698
#2	.00123	.00200	.00229	.00107	.00500	.00880	.42233	.04835
#3	.00114	.00219	.00236	.00103	.00503	.01057	.42463	.05000

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.01632**	**.14332**	**.00189**	**.03108**	**.01507**	**.00041**	**.01248**	**.02494**
Stddev	.00039	.00077	.00006	.00021	.00019	.00001	.00028	.00051
%RSD	2.3943	.53674	3.2371	.66045	1.2552	2.2572	2.2642	2.0426
#1	.01677	.14314	.00188	.03129	.01485	.00040	.01227	.02463
#2	.01608	.14265	.00183	.03108	.01515	.00042	.01237	.02466
#3	.01611	.14416	.00195	.03088	.01520	.00042	.01280	.02553

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.02369**	**.00123**	**.02328**	**.00405**	**.10088**	**.00831**	**.07396**	**.11677**
Stddev	.00037	.00023	.00055	.00016	.00363	.00031	.00135	.00021
%RSD	1.5606	18.792	2.3519	3.9906	3.5962	3.6866	1.8227	.17904
#1	.02378	.00125	.02311	.00415	.09980	.00823	.07307	.11701
#2	.02400	.00098	.02283	.00386	.09791	.00805	.07329	.11668
#3	.02328	.00144	.02389	.00413	.10492	.00864	.07551	.11663

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00588**	**.01537**	**.00096**	**-.00007**	**.00088**	**.02046**	**.20791**
Stddev	.00003	.00064	.00006	.00003	.00003	.00096	.00264
%RSD	.45088	4.1696	5.9547	42.941	3.0380	4.7012	1.2675
#1	.00586	.01518	.00095	-.00006	.00089	.01984	.20518
#2	.00591	.01608	.00091	-.00009	.00091	.02157	.20810
#3	.00586	.01484	.00103	-.00004	.00086	.01997	.21044

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: S1 Acquired: 8/4/2025 11:20:17 Type: Cal
Method: 6010-200.7 NEW(v81) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5506.9**	**94154.**	**7855.6**	**4799.4**	**6855.9**
Stddev	34.3	2698.	110.4	153.5	38.7
%RSD	.62341	2.8658	1.4053	3.1981	.56435
#1	5479.4	94605.	7941.3	4844.1	6829.3
#2	5495.9	96599.	7894.6	4925.5	6838.2
#3	5545.4	91259.	7731.0	4628.5	6900.3

Sample Name: S2 Acquired: 8/4/2025 11:24:37 Type: Cal
Method: 6010-200.7 NEW(v81) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348	Cd2265
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.03700	.02864	.14857	.02927	.06717	.11958	5.1292	.31472	1.0656
Stddev	.00063	.00057	.00280	.00064	.00118	.00045	.0326	.00353	.0219
%RSD	1.7047	1.9818	1.8869	2.1942	1.7598	.38006	.63615	1.1214	2.0520
#1	.03627	.02830	.14536	.02854	.06580	.11906	5.1329	.31081	1.0406
#2	.03733	.02929	.14983	.02972	.06778	.11976	5.0949	.31567	1.0749
#3	.03739	.02832	.15053	.02956	.06792	.11991	5.1598	.31767	1.0813

Elem	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.27207	.02558	.38505	.13210	.00273	.21434	.04473	.22405	.03733
Stddev	.00245	.00028	.00764	.00238	.00002	.00094	.00014	.00452	.00009
%RSD	.90037	1.1070	1.9848	1.7982	.55472	.43865	.31145	2.0159	.22999
#1	.27114	.02591	.37630	.12939	.00274	.21424	.04464	.21892	.03740
#2	.27022	.02546	.38846	.13304	.00273	.21345	.04466	.22578	.03734
#3	.27485	.02539	.39040	.13385	.00271	.21532	.04489	.22744	.03723

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.04170	.03885	.89927	.01706	.53259	.44097	.10616	.27533	.00183
Stddev	.00047	.00076	.00097	.00014	.00528	.00814	.00193	.00267	.00004
%RSD	1.1339	1.9685	.10821	.81197	.99203	1.8470	1.8181	.97071	2.1104
#1	.04220	.03928	.89843	.01722	.52724	.43157	.10394	.27449	.00186
#2	.04126	.03797	.90034	.01703	.53274	.44538	.10702	.27318	.00179
#3	.04164	.03931	.89904	.01695	.53780	.44595	.10750	.27832	.00184

Elem	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.01966	.01956	.40989	7.8750
Stddev	.00039	.00028	.00395	.0499
%RSD	1.9926	1.4276	.96409	.63402
#1	.01921	.01930	.41258	7.8787
#2	.01992	.01986	.40535	7.8232
#3	.01984	.01953	.41173	7.9229

Sample Name: S2 Acquired: 8/4/2025 11:24:37 Type: Cal
Method: 6010-200.7 NEW(v81) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5469.2	92158.	7662.4	4715.1	6716.4
Stddev	94.5	365.	61.9	15.1	127.8
%RSD	1.7285	.39620	.80719	.32021	1.9024
#1	5571.6	91740.	7719.3	4731.9	6852.9
#2	5450.5	92319.	7671.5	4710.9	6696.7
#3	5385.3	92416.	7596.6	4702.6	6599.6

Sample Name: S3 Acquired: 8/4/2025 11:28:41 Type: Cal
Method: 6010-200.7 NEW(v81) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348	Cd2265
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.11597**	**.08575**	**.46763**	**.09128**	**.20884**	**.36959**	**15.790**	**.97841**	**3.4017**
Stddev	.00048	.00182	.00114	.00031	.00089	.00100	.038	.00605	.0081
%RSD	.41461	2.1269	.24332	.33846	.42441	.27141	.24071	.61788	.23720
#1	.11596	.08612	.46665	.09147	.20950	.37024	15.747	.97143	3.3941
#2	.11549	.08377	.46736	.09092	.20783	.37009	15.801	.98215	3.4007
#3	.11645	.08736	.46888	.09145	.20919	.36843	15.821	.98164	3.4102

Elem	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.83456**	**.07863**	**1.2118**	**.40602**	**.00843**	**.66142**	**.13761**	**.70587**	**.11691**
Stddev	.00757	.00092	.0018	.00105	.00005	.00212	.00058	.00181	.00091
%RSD	.90699	1.1676	.14471	.25741	.55376	.32012	.42025	.25624	.77807
#1	.82674	.07880	1.2100	.40563	.00839	.65904	.13798	.70407	.11645
#2	.83508	.07764	1.2118	.40523	.00841	.66215	.13792	.70585	.11633
#3	.84185	.07945	1.2135	.40721	.00848	.66308	.13695	.70768	.11796

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.12430**	**.12165**	**2.7599**	**.05640**	**1.6396**	**1.3570**	**.33709**	**.85635**	**.00557**
Stddev	.00068	.00028	.0243	.00048	.0107	.0031	.00073	.00450	.00001
%RSD	.54475	.22902	.88100	.85123	.65115	.22777	.21682	.52528	.17655
#1	.12458	.12194	2.7502	.05621	1.6284	1.3576	.33700	.85186	.00557
#2	.12353	.12164	2.7419	.05604	1.6407	1.3537	.33641	.85633	.00556
#3	.12479	.12138	2.7876	.05695	1.6497	1.3598	.33786	.86086	.00558

Elem	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.06540**	**.06245**	**1.2542**	**24.314**
Stddev	.00026	.00034	.0034	.056
%RSD	.40330	.54971	.27431	.23107
#1	.06537	.06270	1.2572	24.367
#2	.06514	.06206	1.2549	24.320
#3	.06567	.06260	1.2504	24.255

Sample Name: S3 Acquired: 8/4/2025 11:28:41 Type: Cal
Method: 6010-200.7 NEW(v81) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5363.0	90097.	7577.3	4631.0	6409.1
Stddev	6.2	681.	8.6	31.1	5.4
%RSD	.11509	.75631	.11370	.67202	.08368
#1	5357.4	89975.	7585.1	4641.1	6413.0
#2	5361.9	90831.	7578.8	4655.9	6403.0
#3	5369.6	89485.	7568.0	4596.1	6411.2

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: S4 Acquired: 8/4/2025 11:32:45 Type: Cal
Method: 6010-200.7 NEW(v81) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348	Cd2265
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.23387	.17871	.93691	.18408	.41979	.76303	33.001	1.9952	6.9153
Stddev	.00180	.00156	.00864	.00167	.00314	.00204	.109	.0184	.0650
%RSD	.77129	.87031	.92175	.90926	.74706	.26797	.33063	.92254	.94032
#1	.23595	.18047	.94639	.18601	.42326	.76460	33.092	1.9837	6.9878
#2	.23267	.17813	.92948	.18307	.41715	.76378	33.032	1.9854	6.8620
#3	.23300	.17752	.93487	.18315	.41896	.76072	32.880	2.0164	6.8962

Elem	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.7241	.16158	2.4509	.80099	.01769	1.3679	.28387	1.4236	.24207
Stddev	.0064	.00060	.0221	.00574	.00005	.0004	.00110	.0124	.00103
%RSD	.37255	.36879	.89953	.71697	.28366	.02876	.38732	.87302	.42509
#1	1.7221	.16123	2.4758	.80758	.01763	1.3681	.28467	1.4377	.24121
#2	1.7189	.16124	2.4339	.79704	.01773	1.3674	.28432	1.4142	.24179
#3	1.7312	.16227	2.4430	.79837	.01770	1.3681	.28262	1.4189	.24321

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.26080	.25620	5.6841	.12114	3.3593	2.7229	.67973	1.7807	.01180
Stddev	.00143	.00053	.0337	.00033	.0310	.0194	.00684	.0047	.00009
%RSD	.54988	.20834	.59326	.27048	.92379	.71425	1.0062	.26198	.74000
#1	.26094	.25681	5.6558	.12103	3.3399	2.7451	.68738	1.7764	.01178
#2	.26217	.25592	5.6750	.12151	3.3428	2.7087	.67422	1.7799	.01189
#3	.25931	.25586	5.7214	.12089	3.3951	2.7150	.67757	1.7857	.01172

Elem	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.13407	.12979	2.6593	50.619
Stddev	.00106	.00116	.0052	.272
%RSD	.79090	.89617	.19434	.53761
#1	.13529	.13113	2.6577	50.876
#2	.13344	.12906	2.6651	50.334
#3	.13348	.12918	2.6551	50.647

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: S4 Acquired: 8/4/2025 11:32:45 Type: Cal
Method: 6010-200.7 NEW(v81) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5474.9	89848.	7646.1	4601.7	6412.0
Stddev	32.1	291.	46.8	14.5	50.5
%RSD	.58716	.32397	.61167	.31407	.78711
#1	5437.9	89579.	7636.0	4603.1	6355.3
#2	5495.8	90157.	7697.1	4615.5	6452.0
#3	5491.0	89808.	7605.3	4586.7	6428.8

Sample Name: S5 Acquired: 8/4/2025 11:36:56 Type: Cal
Method: 6010-200.7 NEW(v81) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348	Cd2265
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.48801	.35314	1.9667	.38220	.86987	1.5358	65.975	3.9810	14.414
Stddev	.00049	.00951	.0022	.00061	.00024	.0082	.570	.0063	.012
%RSD	.09959	2.6936	.11103	.16048	.02762	.53449	.86420	.15925	.08471
#1	.48833	.34309	1.9690	.38155	.87001	1.5445	65.414	3.9737	14.420
#2	.48745	.35432	1.9647	.38229	.86959	1.5282	65.958	3.9841	14.400
#3	.48825	.36200	1.9664	.38277	.87000	1.5347	66.554	3.9851	14.422

Elem	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.4572	.32018	5.1292	1.6352	.03561	2.7377	.57300	2.9687	.48719
Stddev	.0107	.00107	.0065	.0016	.00012	.0027	.00152	.0021	.00091
%RSD	.30808	.33467	.12675	.09931	.33803	.09893	.26581	.07093	.18608
#1	3.4529	.32082	5.1327	1.6367	.03566	2.7408	.57475	2.9709	.48818
#2	3.4693	.32078	5.1217	1.6335	.03570	2.7363	.57197	2.9667	.48640
#3	3.4493	.31894	5.1332	1.6355	.03547	2.7360	.57227	2.9685	.48698

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.53745	.51787	11.364	.25205	6.6757	5.5673	1.4117	3.5924	.02437
Stddev	.00288	.00139	.019	.00062	.0066	.0003	.0012	.0057	.00005
%RSD	.53515	.26899	.16335	.24411	.09887	.00504	.08737	.15940	.21992
#1	.54060	.51836	11.385	.25276	6.6831	5.5676	1.4119	3.5923	.02443
#2	.53497	.51629	11.351	.25170	6.6703	5.5673	1.4104	3.5982	.02432
#3	.53677	.51894	11.357	.25169	6.6738	5.5670	1.4129	3.5867	.02437

Elem	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.28348	.27909	5.4795	100.80
Stddev	.00064	.00097	.0348	1.00
%RSD	.22428	.34630	.63475	.99341
#1	.28398	.27811	5.5119	99.750
#2	.28276	.27913	5.4427	100.91
#3	.28369	.28004	5.4838	101.74

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: S5 Acquired: 8/4/2025 11:36:56 Type: Cal
Method: 6010-200.7 NEW(v81) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5294.8	89133.	7622.3	4530.1	6056.4
Stddev	9.8	85.	4.5	11.0	9.8
%RSD	.18581	.09551	.05905	.24390	.16253
#1	5283.5	89036.	7626.7	4530.9	6046.9
#2	5301.6	89196.	7622.4	4540.8	6066.6
#3	5299.4	89167.	7617.7	4518.7	6055.7

Sample Name: ICV01 Acquired: 8/4/2025 11:41:07 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.970826**	**3.972482**	**4.075526**	**4.002757**	**4.138520**	**7.865382**
Stddev	.010276	.033433	.008147	.005625	.008330	.017771
%RSD	.2587869	.8416129	.1999045	.1405263	.2012724	.2259428
#1	3.976634	4.011034	4.066245	3.996747	4.135534	7.879640
#2	3.958961	3.951461	4.078834	4.007896	4.132096	7.871034
#3	3.976883	3.954950	4.081498	4.003627	4.147932	7.845472

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.810448**	**.2018685**	**1.977440**	**19.66004**	**.8120606**	**2.014839**
Stddev	.105028	.0013510	.004753	.22994	.0165251	.004210
%RSD	1.344716	.6692455	.2403500	1.169594	2.034955	.2089527
#1	7.691678	.2003867	1.972245	19.39487	.8006967	2.011623
#2	7.891073	.2030318	1.978506	19.80441	.8310175	2.013291
#3	7.848595	.2021871	1.981570	19.78083	.8044677	2.019605

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.030504**	**3.983941**	**1.975045**	**19.70113**	**2.009473**	**.9823004**
Stddev	.002369	.063284	.004191	.00964	.004961	.0169513
%RSD	.2298636	1.588477	.2121916	.0489146	.2468889	1.725670
#1	1.028782	3.963842	1.970752	19.70024	2.005527	.9684612
#2	1.029526	4.054833	1.979125	19.71118	2.007850	1.001208
#3	1.033206	3.933147	1.975259	19.69197	2.015043	.977232

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.51425**	**2.004055**	**2.006169**	**19.63089**	F **.0126930**	F **.0015014**
Stddev	.23255	.002291	.036770	.33004	.0004605	.0007056
%RSD	1.191668	.1143403	1.832861	1.681218	3.627858	46.99724
#1	19.37367	2.006369	1.972589	19.31068	.0131619	.0023033
#2	19.78267	2.001786	2.045461	19.96994	.0126758	.0012254
#3	19.38642	2.004011	2.000457	19.61205	.0122414	.0009755

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: ICV01 Acquired: 8/4/2025 11:41:07 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.000778	F -.003790	F -.039857	F .0075561	F .0194793	F -.002126
Stddev	.000862	.001678	.002427	.0027049	.0016459	.003895
%RSD	110.8294	44.26866	6.089980	35.79813	8.449688	183.1908
#1	.000205	-.003315	-.039510	.0093531	.0212499	-.003567
#2	-.001408	-.002400	-.042439	.0088700	.0191923	.002284
#3	-.001131	-.005653	-.037622	.0044452	.0179958	-.005096

Elem	Sr4077
Units	ppm
Avg	F -.003295
Stddev	.000047
%RSD	1.414195
#1	-.003299
#2	-.003339
#3	-.003246

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5464.930	91550.36	7903.256	4690.455	6496.263
Stddev	8.325	1317.39	24.544	59.169	7.396
%RSD	.1523266	1.438974	.3105547	1.261476	.1138559
#1	5465.339	92531.58	7922.220	4747.262	6503.233
#2	5473.043	90053.06	7875.534	4629.177	6497.051
#3	5456.409	92066.42	7912.014	4694.926	6488.504

Sample Name: LLICV01 Acquired: 8/4/2025 11:45:17 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0215443**	**.0449848**	**.0123908**	**.0201424**	**.0525370**	**.1139109**
Stddev	.0010647	.0003750	.0005710	.0050069	.0012762	.0096646
%RSD	4.941712	.8336628	4.608431	24.85752	2.429079	8.484354
#1	.0218187	.0446213	.0129070	.0196526	.0510684	.1027756
#2	.0203693	.0453703	.0124880	.0253761	.0533757	.1188404
#3	.0224449	.0449628	.0117774	.0153983	.0531670	.1201168

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1061102**	**.0066805**	**.0062637**	**2.153539**	**.0089209**	**.0313337**
Stddev	.0006088	.0000825	.0000374	.007678	.0001885	.0001097
%RSD	.5737107	1.235013	.5970980	.3565373	2.113002	.3500663
#1	.1062864	.0065897	.0062759	2.147237	.0089147	.0312807
#2	.1054328	.0067509	.0062217	2.162091	.0087356	.0312606
#3	.1066115	.0067009	.0062935	2.151291	.0091125	.0314598

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0227216**	**.1019264**	**.0212719**	**2.305166**	**.0419151**	**.0106542**
Stddev	.0001537	.0029504	.0004318	.014357	.0000954	.0001644
%RSD	.6765221	2.894598	2.029958	.6228122	.2276590	1.542671
#1	.0227267	.0986772	.0216937	2.314633	.0419210	.0107897
#2	.0228727	.1026641	.0208308	2.288647	.0420074	.0107016
#3	.0225654	.1044379	.0212912	2.312219	.0418169	.0104714

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.994837**	**.0413055**	**.0424445**	**1.961085**	**.1165120**	**.2105705**
Stddev	.037751	.0016782	.0000529	.045861	.0022036	.0007520
%RSD	1.892423	4.062905	.1245760	2.338576	1.891322	.3571301
#1	2.037751	.0422522	.0425029	1.995719	.1139679	.2101909
#2	1.980006	.0393678	.0424307	1.909075	.1177419	.2100840
#3	1.966753	.0422964	.0423999	1.978463	.1178261	.2114367

Sample Name: LLICV01 Acquired: 8/4/2025 11:45:17 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0402276	.0417660	.3642282	F .0244153	.0200131	.0168092
Stddev	.0001070	.0014874	.0137037	.0010485	.0012053	.0006968
%RSD	.2658645	3.561237	3.762399	4.294445	6.022509	4.145121
#1	.0401808	.0404559	.3751618	.0232413	.0196694	.0166688
#2	.0401520	.0433828	.3488551	.0247462	.0213529	.0175655
#3	.0403500	.0414592	.3686677	.0252585	.0190169	.0161934

Elem	Sr4077
Units	ppm
Avg	.0217058
Stddev	.0000447
%RSD	.2060711
#1	.0217105
#2	.0217480
#3	.0216589

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5574.351	94111.95	7788.779	4786.518	6965.481
Stddev	16.409	178.39	65.770	15.762	32.394
%RSD	.2943588	.1895476	.8444240	.3292988	.4650647
#1	5587.607	93920.21	7860.293	4779.400	6999.983
#2	5579.447	94273.01	7775.159	4775.571	6960.741
#3	5555.999	94142.62	7730.885	4804.584	6935.718

Sample Name: ICB01 Acquired: 8/4/2025 11:52:59 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0019492**	**.0010461**	**.0000104**	**-.000021**	**.0001429**	**.0104415**	**.0001923**
Stddev	.0010364	.0023794	.0013042	.001345	.0026243	.0170816	.0006568
%RSD	53.16981	227.4646	12566.81	6458.937	1836.976	163.5931	341.5063
#1	.0029830	-.001592	.0002588	-.000643	.0027759	.0176128	.0005024
#2	.0009102	.003030	.0011725	-.000942	-.002473	-.009057	.0006366
#3	.0019546	.001700	-.001400	.001522	.000125	.022768	-.000562

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000074**	**.0000541**	**-.021076**	**-.001376**	**.0002093**	**-.000325**	**-.005593**
Stddev	.000034	.0000518	.006313	.000343	.0000711	.000320	.001678
%RSD	46.28627	95.69635	29.95117	24.89533	33.99225	98.49070	30.00975
#1	-.000036	.0000885	-.022099	-.001366	.0001733	-.000199	-.007254
#2	-.000102	-.000005	-.014315	-.001039	.0001633	-.000088	-.005627
#3	-.000085	.000079	-.026815	-.001724	.0002912	-.000689	-.003898

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001494**	**.0342257**	**-.000244**	**.0002548**	**-.041003**	**.0002989**	**-.001059**
Stddev	.000355	.0190104	.000364	.0002992	.013170	.0033880	.000079
%RSD	23.79159	55.54426	149.1971	117.4257	32.12063	1133.494	7.509143
#1	-.001898	.0468311	-.000657	.0002936	-.025828	-.003516	-.001032
#2	-.001356	.0434865	-.000107	-.000062	-.047720	.002958	-.000996
#3	-.001228	.0123594	.000032	.000533	-.049461	.001454	-.001148

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.015639**	**.0013176**	**-.000035**	**-.000283**	**.0011092**	**.0050955**	**.0030152**
Stddev	.025424	.0006872	.000129	.000196	.0011624	.0056406	.0007751
%RSD	162.5619	52.15735	366.2804	69.27489	104.7960	110.6995	25.70809
#1	-.008371	.0005813	-.000184	-.000060	.0008887	.0001006	.0036947
#2	.005358	.0019421	.000049	-.000362	.0023661	.0039727	.0031799
#3	-.043906	.0014295	.000029	-.000426	.0000728	.0112131	.0021709

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: ICB01 Acquired: 8/4/2025 11:52:59 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.002900	-.001802	.0000217
Stddev	.001764	.004766	.0000934
%RSD	60.83250	264.4492	430.8285
#1	-.001648	.002704	.0001174
#2	-.002134	-.001320	-.000069
#3	-.004918	-.006790	.000017

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5636.625	94626.86	7891.266	4824.616	7147.156
Stddev	3.625	265.87	57.854	20.499	4.647
%RSD	.0643172	.2809627	.7331387	.4248843	.0650176
#1	5640.466	94728.29	7934.641	4828.397	7150.980
#2	5636.146	94827.08	7825.578	4842.961	7148.505
#3	5633.263	94325.21	7913.579	4802.489	7141.984

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: CRI01 Acquired: 8/4/2025 11:57:19 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0201108**	**.0463621**	**.0111678**	**.0219563**	**.0526086**	**.1114632**	**.1029082**
Stddev	.0017145	.0020333	.0019569	.0046384	.0022556	.0189786	.0002840
%RSD	8.525444	4.385744	17.52301	21.12565	4.287495	17.02681	.2759654
#1	.0193755	.0479002	.0091212	.0170184	.0550829	.1090829	.1032045
#2	.0220704	.0440568	.0130207	.0262218	.0506671	.0937870	.1028819
#3	.0188866	.0471294	.0113614	.0226287	.0520758	.1315197	.1026383

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0064109**	**.0061367**	**2.082241**	**.0098539**	**.0312075**	**.0229449**	**.1108585**
Stddev	.0000437	.0000390	.006844	.0002566	.0002312	.0003483	.0099969
%RSD	.6818832	.6351684	.3286947	2.604037	.7406770	1.518058	9.017698
#1	.0064277	.0061490	2.076250	.0097082	.0311320	.0230239	.0996249
#2	.0064438	.0060931	2.080772	.0101501	.0310235	.0225639	.1187757
#3	.0063613	.0061680	2.089700	.0097032	.0314669	.0232470	.1141750

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0205362**	**2.208710**	**.0418287**	**.0110505**	**2.034302**	**.0432490**	**.0447602**
Stddev	.0004428	.032576	.0004196	.0002847	.041786	.0005332	.0018730
%RSD	2.155936	1.474866	1.003039	2.576742	2.054084	1.232872	4.184482
#1	.0202349	2.228961	.0418262	.0111232	1.992989	.0426442	.0432673
#2	.0210445	2.171133	.0414104	.0112919	2.076546	.0436513	.0468618
#3	.0203292	2.226037	.0422495	.0107365	2.033371	.0434516	.0441515

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.028348**	**.1027240**	**.2096478**	**.0400882**	**.0391410**	**.3756268**	**.0229598**
Stddev	.081914	.0006753	.0003572	.0004069	.0018974	.0134698	.0026640
%RSD	4.038444	.6573764	.1703893	1.014922	4.847603	3.585956	11.60295
#1	1.957896	.1034454	.2100049	.0402590	.0412878	.3609635	.0256594
#2	2.118230	.1026197	.2092904	.0396238	.0376886	.3784665	.0203329
#3	2.008920	.1021069	.2096482	.0403819	.0384466	.3874503	.0228871

Sample Name: CRI01 Acquired: 8/4/2025 11:57:19 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0211588	.0198792	.0208125
Stddev	.0007094	.0007344	.0001794
%RSD	3.352772	3.694288	.8617556
#1	.0206568	.0198395	.0209567
#2	.0219703	.0206326	.0206117
#3	.0208492	.0191654	.0208693

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5526.401	91443.93	7981.003	4657.235	6896.418
Stddev	4.736	2459.20	16.482	145.597	6.918
%RSD	.0857000	2.689294	.2065181	3.126246	.1003105
#1	5530.020	93936.58	7999.172	4801.966	6892.006
#2	5528.143	89019.62	7976.827	4510.787	6904.391
#3	5521.041	91375.60	7967.011	4658.953	6892.857

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: ICSA01 Acquired: 8/4/2025 12:01:34 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0094505**	**.0146292**	**-.008462**	**.0002255**	**-.004941**	**249.4825**
Stddev	.0009085	.0005499	.002572	.0022830	.000897	.1950
%RSD	9.613245	3.759169	30.39994	1012.384	18.14908	.0781541
#1	.0092813	.0147063	-.011155	-.002069	-.004632	249.3236
#2	.0086384	.0140448	-.008202	.000248	-.004240	249.4240
#3	.0104316	.0151366	-.006029	.002497	-.005952	249.7001

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0062431**	**.0017363**	**-.000556**	**237.6221**	**.0560673**	**.0022170**
Stddev	.0003580	.0000712	.000212	1.1982	.0007463	.0000723
%RSD	5.734137	4.101786	38.16431	.5042258	1.331088	3.261531
#1	.0059169	.0016923	-.000801	236.4535	.0559100	.0021340
#2	.0061863	.0018185	-.000431	238.8478	.0554122	.0022669
#3	.0066261	.0016981	-.000436	237.5648	.0568797	.0022500

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0104863**	**98.44583**	**.0065898**	**249.0685**	**.0049211**	**.0022201**
Stddev	.0009754	.40846	.0007865	.5518	.0001826	.0002445
%RSD	9.301367	.4149044	11.93568	.2215269	3.710853	11.01391
#1	.0093775	98.90054	.0074981	248.8291	.0050938	.0024270
#2	.0112117	98.32697	.0061327	248.6768	.0047300	.0019502
#3	.0108697	98.11000	.0061387	249.6995	.0049395	.0022830

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1153356**	**.0029899**	**.0003306**	**.1145506**	**.0267066**	**.0008150**
Stddev	.0128468	.0014385	.0004329	.0483303	.0026558	.0004895
%RSD	11.13863	48.11315	130.9548	42.19127	9.944458	60.05658
#1	.1007169	.0046227	.0005905	.0833859	.0297726	.0006901
#2	.1248268	.0024377	-.000169	.1702252	.0251136	.0013548
#3	.1204630	.0019093	.000570	.0900406	.0252337	.0004001

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: ICSA01 Acquired: 8/4/2025 12:01:34 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003988	-.005183	.0148946	.0045160	-.000491	F .0204200
Stddev	.000754	.000799	.0163778	.0037236	.003231	.0034843
%RSD	18.91182	15.42124	109.9584	82.45265	657.8403	17.06309
#1	-.003872	-.006081	.0227744	.0045645	-.000393	.0171142
#2	-.004793	-.004549	-.003934	.0082150	.002690	.0240589
#3	-.003298	-.004919	.025843	.0007684	-.003770	.0200870

Elem	Sr4077
Units	ppm
Avg	.0038664
Stddev	.0006026
%RSD	15.58622
#1	.0031722
#2	.0042547
#3	.0041723

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5022.703	83394.11	7478.325	4281.521	5679.793
Stddev	18.319	26.84	43.556	14.591	16.534
%RSD	.3647218	.0321830	.5824250	.3407980	.2911020
#1	5016.031	83363.60	7528.248	4264.677	5676.234
#2	5008.654	83404.66	7448.083	4290.293	5665.329
#3	5043.422	83414.07	7458.644	4289.593	5697.817

Sample Name: ICSAB01 Acquired: 8/4/2025 12:05:46 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1059510**	**.1057156**	**.0374783**	**.0420910**	**.5985184**	**256.8488**
Stddev	.0016232	.0005604	.0011931	.0043622	.0080785	2.0178
%RSD	1.532001	.5300888	3.183542	10.36383	1.349756	.7856041
#1	.1041548	.1061228	.0362000	.0371300	.5981712	259.0388
#2	.1063856	.1050765	.0385624	.0438166	.5906190	256.4427
#3	.1073127	.1059476	.0376726	.0453265	.6067649	255.0650

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5095980**	**.5079346**	**.9832673**	**244.1377**	**.5525148**	**.4982504**
Stddev	.0057795	.0016416	.0001626	2.1142	.0030516	.0008751
%RSD	1.134129	.3231932	.0165373	.8659665	.5523107	.1756327
#1	.5157912	.5072718	.9834029	246.4598	.5534541	.4981954
#2	.5086544	.5098040	.9833119	243.6293	.5491040	.4974041
#3	.5043483	.5067280	.9830870	242.3242	.5549863	.4991517

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4901521**	**101.0005**	**.4993994**	**256.6415**	**.9884317**	**.2140074**
Stddev	.0010649	1.0523	.0034560	1.8832	.0011960	.0010139
%RSD	.2172589	1.041903	.6920216	.7337830	.1209988	.4737656
#1	.4889872	102.2155	.5028579	258.2681	.9873392	.2147418
#2	.4903935	100.3767	.4993945	257.0780	.9882465	.2128506
#3	.4910756	100.4094	.4959460	254.5784	.9897095	.2144298

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0942303**	**.4904849**	**1.023926**	**.0138259**	F **.0255963**	F **.0002879**
Stddev	.0099415	.0057096	.004101	.0261530	.0035793	.0002259
%RSD	10.55019	1.164079	.4005449	189.1598	13.98383	78.47210
#1	.0868874	.4954313	1.025835	.0400557	.0297188	.0000290
#2	.0902602	.4842368	1.026726	-.012250	.0237901	.0003896
#3	.1055434	.4917867	1.019219	.013671	.0232799	.0004450

Sample Name: ICSAB01 Acquired: 8/4/2025 12:05:46 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.003632	F -.005898	F .0227982	F .0100404	F -.004046	F .0221497
Stddev	.000654	.001074	.0126949	.0043741	.004619	.0071902
%RSD	18.01061	18.20445	55.68345	43.56515	114.1593	32.46196
#1	-.003202	-.006563	.0104336	.0148436	-.002476	.0221809
#2	-.004385	-.006472	.0221618	.0062860	-.009246	.0293243
#3	-.003309	-.004660	.0357994	.0089917	-.000417	.0149440

Elem	Sr4077
Units	ppm
Avg	F .0044242
Stddev	.0001486
%RSD	3.359650
#1	.0045082
#2	.0045119
#3	.0042526

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5017.741	82562.15	7381.396	4258.237	5672.480
Stddev	4.190	346.05	25.542	26.068	12.664
%RSD	.0834966	.4191345	.3460323	.6121797	.2232513
#1	5013.454	82165.62	7373.391	4242.097	5659.560
#2	5017.941	82803.08	7360.816	4244.303	5673.008
#3	5021.826	82717.77	7409.982	4288.311	5684.871

Sample Name: ICSADLX20 Acquired: 8/4/2025 12:09:51 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000411**	**-.000150**	**-.000862**	**-.001057**	**-.001762**	**11.96915**	**.0007584**
Stddev	.0020148	.002385	.001304	.002472	.001477	.05001	.0009972
%RSD	4898.590	1588.238	151.2342	233.9579	83.82112	.4178602	131.4925
#1	-.001962	.002399	.000448	-.003251	-.003450	11.91293	.0006927
#2	.000019	-.002327	-.000874	.001621	-.000704	12.00871	-.000204
#3	.002067	-.000522	-.002160	-.001540	-.001133	11.98580	.001787

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001030**	**.0000321**	**12.00350**	**.0011385**	**.0002790**	**.0007556**	**4.601203**
Stddev	.0000864	.0000606	.06636	.0005551	.0000961	.0003687	.016397
%RSD	83.85765	189.1784	.5528390	48.75699	34.43782	48.78962	.3563545
#1	.0000110	.0000952	11.93982	.0016361	.0002938	.0003383	4.589105
#2	.0001823	.0000266	11.99843	.0005398	.0001764	.0010369	4.594640
#3	.0001158	-.000026	12.07225	.0012396	.0003669	.0008918	4.619865

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001502**	**12.35236**	**.0002199**	**.0000335**	**-.002984**	**.0016155**	**-.001160**
Stddev	.000426	.07626	.0002572	.0006955	.009713	.0014306	.000425
%RSD	28.35351	.6173611	116.9457	2077.248	325.5241	88.55372	36.66940
#1	-.001011	12.26805	.0000711	-.000335	-.012527	.0019601	-.001612
#2	-.001731	12.41653	.0005169	.000836	.006891	.0000441	-.000767
#3	-.001765	12.37250	.0000717	-.000400	-.003316	.0028423	-.001101

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.048035**	**-.003381**	**.0001425**	**-.001507**	**.0007646**	**.0044678**	**.0012109**
Stddev	.031795	.000962	.0002850	.000495	.0018849	.0089077	.0015550
%RSD	66.19247	28.44744	200.0176	32.86014	246.5084	199.3739	128.4154
#1	-.012020	-.004269	.0004616	-.000944	.0009426	-.003756	.0025417
#2	-.059868	-.003515	-.000087	-.001704	.0025543	.003230	.0015893
#3	-.072217	-.002360	.000053	-.001874	-.001203	.013930	-.000498

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: ICSADLX20 Acquired: 8/4/2025 12:09:51 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.000741	-.003260	.0006088
Stddev	.004562	.001304	.0001208
%RSD	615.3321	40.00911	19.83496
#1	-.005715	-.004194	.0007471
#2	.000243	-.001770	.0005552
#3	.003248	-.003817	.0005242

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5639.484	94954.14	7791.799	4814.573	6933.823
Stddev	16.975	212.62	26.923	17.412	17.595
%RSD	.3010000	.2239215	.3455248	.3616455	.2537622
#1	5658.811	95010.49	7812.292	4799.133	6954.026
#2	5626.991	94719.02	7761.308	4811.140	6925.590
#3	5632.650	95132.91	7801.797	4833.445	6921.854

Sample Name: ICSABDLX20 Acquired: 8/4/2025 12:14:08 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0047066**	**.0073572**	**.0016688**	**.0041451**	**.0274458**	**12.29528**	**.0242850**
Stddev	.0010737	.0005617	.0010951	.0023667	.0017801	.03554	.0010828
%RSD	22.81316	7.634363	65.62197	57.09668	6.485903	.2890702	4.458788
#1	.0039793	.0067443	.0005526	.0058860	.0291689	12.27160	.0252178
#2	.0059398	.0078473	.0027416	.0014503	.0275547	12.27808	.0230975
#3	.0042007	.0074799	.0017123	.0050990	.0256137	12.33615	.0245396

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0254067**	**.0464320**	**12.31758**	**.0256734**	**.0239283**	**.0250344**	**4.733396**
Stddev	.0001447	.0000544	.05969	.0002870	.0000150	.0002639	.016044
%RSD	.5696287	.1172303	.4846219	1.117918	.0628753	1.054109	.3389438
#1	.0254327	.0463827	12.27520	.0254706	.0239290	.0250646	4.750778
#2	.0252507	.0464904	12.29169	.0255479	.0239430	.0247567	4.730253
#3	.0255366	.0464227	12.38585	.0260018	.0239129	.0252818	4.719155

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0236964**	**12.72179**	**.0473704**	**.0098069**	**-.005726**	**.0260998**	**.0477226**
Stddev	.0003407	.04182	.0002204	.0004380	.000333	.0013106	.0003675
%RSD	1.437679	.3287247	.4652030	4.466451	5.807543	5.021657	.7700631
#1	.0238140	12.71251	.0474467	.0093068	-.005682	.0245906	.0477906
#2	.0233124	12.68539	.0471220	.0099917	-.006079	.0269518	.0480514
#3	.0239626	12.76747	.0475424	.0101222	-.005418	.0267570	.0473259

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.056592**	**-.004341**	**-.000214**	**-.002296**	**-.000625**	**.0103056**	**.0022319**
Stddev	.045157	.000659	.000103	.000209	.000982	.0036413	.0016198
%RSD	79.79430	15.19118	48.39817	9.079775	157.1129	35.33363	72.57120
#1	-.071132	-.003580	-.000095	-.002487	-.001745	.0062061	.0006624
#2	-.005956	-.004705	-.000265	-.002328	-.000219	.0131647	.0038976
#3	-.092689	-.004738	-.000281	-.002074	.000089	.0115459	.0021359

Sample Name: ICSABDLX20 Acquired: 8/4/2025 12:14:08 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.003040	-.000786	.0004173
Stddev	.001012	.002089	.0000915
%RSD	33.28923	265.6700	21.92607
#1	-.002974	.000127	.0004656
#2	-.002063	-.003176	.0003118
#3	-.004084	.000690	.0004744

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5598.930	93714.16	7718.210	4764.623	6872.137
Stddev	10.977	152.21	25.937	36.269	15.070
%RSD	.1960569	.1624143	.3360509	.7612096	.2192879
#1	5591.100	93544.10	7748.135	4736.149	6857.187
#2	5611.477	93760.75	7704.292	4752.264	6887.323
#3	5594.212	93837.62	7702.203	4805.456	6871.902

Sample Name: CCV01 Acquired: 8/4/2025 12:25:48 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.060849**	**5.083540**	**5.012367**	**5.077162**	**5.067103**	**9.768089**	**9.827098**
Stddev	.014770	.041769	.006566	.014536	.022948	.021779	.079086
%RSD	.2918492	.8216471	.1309955	.2862975	.4528747	.2229629	.8047704
#1	5.049845	5.070537	5.011392	5.061837	5.049106	9.792027	9.874738
#2	5.055066	5.130263	5.006343	5.078895	5.059259	9.749444	9.870749
#3	5.077635	5.049819	5.019366	5.090753	5.092944	9.762795	9.735807

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2485301**	**2.527172**	**24.75087**	**.9689963**	**2.519516**	**1.269896**	**4.855037**
Stddev	.0013406	.003280	.10041	.0032563	.004636	.004485	.014489
%RSD	.5394121	.1297896	.4056759	.3360493	.1840140	.3532102	.2984289
#1	.2482308	2.523738	24.84373	.9699514	2.517342	1.267124	4.847359
#2	.2499951	2.527504	24.76457	.9653692	2.516367	1.267492	4.846003
#3	.2473644	2.530273	24.64432	.9716682	2.524840	1.275071	4.871749

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.456087**	**24.32707**	**2.526155**	**1.220470**	**23.88739**	**2.443236**	**2.460782**
Stddev	.002350	.08892	.005830	.001278	.07121	.007247	.006857
%RSD	.0956762	.3655277	.2307665	.1047226	.2981243	.2966079	.2786600
#1	2.458771	24.22787	2.524714	1.220360	23.88528	2.434895	2.456262
#2	2.454401	24.35372	2.521181	1.221800	23.81725	2.446821	2.468672
#3	2.455088	24.39962	2.532570	1.219251	23.95963	2.447991	2.457412

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.21192**	**4.945154**	**5.112872**	**5.053609**	**4.926107**	**4.766929**	**5.069554**
Stddev	.12554	.024876	.014280	.007898	.018219	.040967	.003987
%RSD	.5185053	.5030332	.2792920	.1562884	.3698392	.8593907	.0786445
#1	24.28033	4.939430	5.103329	5.044510	4.947122	4.757303	5.070331
#2	24.06704	4.972392	5.105998	5.057627	4.914761	4.731634	5.073095
#3	24.28840	4.923639	5.129289	5.058691	4.916439	4.811852	5.065236

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: CCV01 Acquired: 8/4/2025 12:25:48 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.984252**	**4.857331**	**5.021200**
Stddev	.003939	.012003	.075191
%RSD	.0790202	.2471188	1.497473
#1	4.981016	4.855018	4.934381
#2	4.983103	4.846652	5.063918
#3	4.988638	4.870323	5.065302

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5338.003**	**91544.27**	**7710.983**	**4639.815**	**6251.902**
Stddev	12.219	214.48	27.657	24.264	11.703
%RSD	.2288988	.2342944	.3586714	.5229611	.1871869
#1	5326.259	91781.10	7728.239	4661.006	6238.577
#2	5350.646	91363.11	7679.083	4613.346	6256.622
#3	5337.103	91488.61	7725.627	4645.093	6260.508

Sample Name: CCB01 Acquired: 8/4/2025 12:29:59 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000409**	**.0000547**	**.0004553**	**-.003658**	**-.001511**	**.0041848**	**.0002834**
Stddev	.001300	.0014591	.0004570	.002004	.000643	.0034877	.0002338
%RSD	317.8230	2665.657	100.3658	54.78674	42.56449	83.34290	82.51076
#1	.000635	-.001083	.0009792	-.004356	-.000880	.0009894	.0000166
#2	-.001866	.001700	.0001384	-.001398	-.001487	.0036597	.0004525
#3	.000004	-.000452	.0002484	-.005219	-.002166	.0079053	.0003811

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000158**	**.0001915**	**-.018062**	**-.001615**	**.0003681**	**-.000215**	**-.005396**
Stddev	.0000621	.0000567	.000465	.000084	.0000889	.000153	.006371
%RSD	394.1836	29.58791	2.572537	5.209032	24.14135	70.89249	118.0733
#1	.0000875	.0001946	-.018053	-.001679	.0003062	-.000061	-.002523
#2	-.000018	.0001334	-.018532	-.001646	.0003281	-.000366	-.000967
#3	-.000022	.0002466	-.017602	-.001519	.0004699	-.000220	-.012697

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001577**	**.0192606**	**.0002638**	**.0006259**	**-.073059**	**.0017648**	**-.001158**
Stddev	.000647	.0248650	.0000667	.0004927	.002280	.0026545	.000324
%RSD	41.01429	129.0976	25.28046	78.72757	3.121304	150.4129	27.98762
#1	-.001030	.0395489	.0002981	.0010652	-.074559	.0028729	-.001180
#2	-.002290	.0267107	.0003064	.0000931	-.070435	.0036858	-.001470
#3	-.001410	-.008478	.0001869	.0007193	-.074184	-.001264	-.000823

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.051084**	**-.000389**	**.0007631**	**-.000790**	**.0001017**	**.0035501**	**.0029787**
Stddev	.020648	.000647	.0002094	.000546	.0004064	.0067710	.0016884
%RSD	40.41920	166.1551	27.43555	69.08735	399.6282	190.7258	56.68295
#1	-.039359	-.000382	.0005987	-.001163	.0005111	.0000599	.0019517
#2	-.074925	-.001040	.0009988	-.000164	.0000957	.0113541	.0020571
#3	-.038968	.000254	.0006919	-.001044	-.000302	-.000764	.0049274

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: CCB01 Acquired: 8/4/2025 12:29:59 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.003612	-.004832	.0002893
Stddev	.002491	.003301	.0000394
%RSD	68.96672	68.31611	13.60488
#1	-.000756	-.001351	.0002923
#2	-.004742	-.007917	.0003272
#3	-.005337	-.005229	.0002486

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5763.665	97910.48	7934.030	4911.567	7371.574
Stddev	22.605	371.30	46.630	19.423	20.675
%RSD	.3921927	.3792279	.5877160	.3954573	.2804683
#1	5786.343	98105.92	7976.053	4907.403	7391.280
#2	5763.515	97482.28	7942.171	4894.563	7373.394
#3	5741.135	98143.24	7883.866	4932.734	7350.050

Sample Name: PB169076BL Acquired: 8/4/2025 12:55:46 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000409**	**.0005247**	**-.001466**	**-.003589**	**-.000037**	**.0010573**	**-.000780**
Stddev	.001066	.0010454	.000692	.000316	.001298	.0105593	.000297
%RSD	260.7675	199.2265	47.21850	8.794613	3513.371	998.6993	38.12975
#1	-.001593	.0016235	-.001286	-.003341	-.000692	-.004782	-.000697
#2	.000474	-.000457	-.000881	-.003944	.001458	.013247	-.001110
#3	-.000107	.000408	-.002230	-.003480	-.000876	-.005293	-.000533

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000095**	**-.000080**	**-.014105**	**-.001374**	**.0001256**	**-.000318**	**-.005026**
Stddev	.000050	.000063	.013836	.000355	.0000958	.000163	.003263
%RSD	52.74016	78.59852	98.08897	25.80458	76.25648	51.08528	64.92518
#1	-.000057	-.000113	-.005104	-.001112	.0002250	-.000490	-.002412
#2	-.000152	-.000120	-.030037	-.001778	.0000338	-.000167	-.003983
#3	-.000077	-.000008	-.007176	-.001232	.0001181	-.000298	-.008683

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001803**	**.0446813**	**-.000013**	**.0007303**	**.0516572**	**.0015263**	**-.001257**
Stddev	.000139	.0120106	.000130	.0004620	.0042265	.0027391	.000263
%RSD	7.710235	26.88055	1023.774	63.25470	8.181821	179.4656	20.94861
#1	-.001769	.0314383	.000098	.0010906	.0468779	.0045755	-.000955
#2	-.001956	.0477363	.000020	.0008908	.0549023	-.000726	-.001377
#3	-.001684	.0548694	-.000156	.0002095	.0531915	.000729	-.001440

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0288158**	**-.005820**	**-.000228**	**-.000400**	**.0008543**	**.0062952**	**.0029287**
Stddev	.0428773	.000925	.000287	.000281	.0015536	.0055663	.0029491
%RSD	148.7978	15.89259	125.8975	70.08666	181.8595	88.42115	100.6975
#1	.0715075	-.005074	-.000360	-.000185	.0015424	.0003869	.0059330
#2	.0291846	-.005532	-.000426	-.000298	.0019450	.0070579	.0028151
#3	-.014245	-.006855	.000101	-.000718	-.000925	.0114409	.0000380

Sample Name: PB169076BL Acquired: 8/4/2025 12:55:46 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.000591	-.001200	-.000051
Stddev	.003267	.001409	.000066
%RSD	552.8025	117.4049	129.2372
#1	-.001249	-.002489	.000011
#2	.002955	.000304	-.000043
#3	-.003478	-.001415	-.000120

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5563.683	94505.53	7711.596	4738.546	7083.163
Stddev	8.483	490.37	53.956	7.459	24.423
%RSD	.1524665	.5188759	.6996763	.1574184	.3448104
#1	5553.903	93943.46	7654.304	4730.001	7065.142
#2	5568.111	94727.29	7761.444	4743.757	7073.388
#3	5569.036	94845.85	7719.040	4741.880	7110.960

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: PB169076BS Acquired: 8/4/2025 13:00:05 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8210445**	**2.097352**	**1.002583**	**2.096728**	**.8516797**	**2.084883**	**.2094819**
Stddev	.0064652	.020564	.001670	.006575	.0029313	.017008	.0016250
%RSD	.7874409	.9804669	.1665861	.3135684	.3441838	.8157707	.7757363
#1	.8179566	2.081959	1.003010	2.092707	.8508014	2.104328	.2084117
#2	.8167022	2.120706	1.000741	2.093161	.8492879	2.077542	.2113518
#3	.8284748	2.089391	1.003998	2.104315	.8549497	2.072778	.2086822

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2142352**	**.1997192**	**1.060671**	**.4124050**	**.2051471**	**.3253058**	**3.068103**
Stddev	.0029010	.0006467	.008311	.0008419	.0009927	.0007235	.019612
%RSD	1.354103	.3238219	.7835938	.2041448	.4839109	.2224139	.6392068
#1	.2109402	.1993756	1.054479	.4114712	.2047071	.3247286	3.090682
#2	.2164049	.1993168	1.070117	.4131062	.2044504	.3250713	3.058311
#3	.2153606	.2004652	1.057417	.4126375	.2062837	.3261175	3.055316

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2102447**	**2.070620**	**.5165034**	**.0791097**	**2.920803**	**.3124155**	**.2160298**
Stddev	.0011466	.011929	.0014262	.0005826	.025933	.0003840	.0036713
%RSD	.5453515	.5761172	.2761239	.7364727	.8878611	.1229258	1.699463
#1	.2094308	2.076594	.5153709	.0784372	2.941809	.3120259	.2118050
#2	.2115559	2.078382	.5160341	.0794302	2.928782	.3124267	.2184455
#3	.2097473	2.056884	.5181051	.0794616	2.891819	.3127937	.2178389

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.926115**	**.3077650**	**.4268291**	**.7053696**	**.2035969**	**.8606385**	**5.752698**
Stddev	.039639	.0036494	.0004448	.0005758	.0015335	.0170843	.020590
%RSD	.3993408	1.185791	.1042118	.0816369	.7532062	1.985077	.3579213
#1	9.961113	.3035790	.4263367	.7050071	.2027919	.8476031	5.746800
#2	9.934164	.3094378	.4272020	.7050681	.2053653	.8799794	5.735700
#3	9.883070	.3102781	.4269485	.7060336	.2026336	.8543330	5.775593

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: PB169076BS Acquired: 8/4/2025 13:00:05 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	F -.005772	.2001170	.2059167
Stddev	.004027	.0042521	.0014094
%RSD	69.77378	2.124821	.6844553
#1	-.006748	.1997889	.2056758
#2	-.001346	.2045236	.2074310
#3	-.009221	.1960384	.2046433

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5721.629	97761.94	8133.054	4897.082	7111.302
Stddev	12.096	360.51	66.429	55.978	12.517
%RSD	.2114158	.3687626	.8167835	1.143085	.1760141
#1	5735.323	98105.68	8203.302	4959.487	7125.438
#2	5712.401	97386.72	8071.251	4851.295	7106.843
#3	5717.162	97793.42	8124.608	4880.463	7101.625

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2725-02DLX5 Acquired: 8/4/2025 13:04:05 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000408**	**.0000579**	**.0171130**	**.0024134**	**.0115317**	**.7184436**	**.0469131**
Stddev	.000770	.0016373	.0008444	.0019593	.0005027	.0125916	.0012633
%RSD	188.6331	2827.404	4.934209	81.18613	4.359531	1.752621	2.692788
#1	-.000338	.0006812	.0180879	.0046054	.0120650	.7326550	.0469080
#2	-.000363	.0012920	.0166390	.0018027	.0110664	.7139977	.0481789
#3	-.001200	-.001800	.0166121	.0008321	.0114636	.7086781	.0456524

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000175**	**.0005470**	**5.365103**	**.0091479**	**.0010586**	**.0788294**	**3.911829**
Stddev	.0000229	.0001034	.021801	.0007839	.0002017	.0001229	.027888
%RSD	130.5335	18.91126	.4063416	8.569054	19.05223	.1559208	.7129035
#1	-.000002	.0005153	5.382149	.0083969	.0012881	.0788949	3.882702
#2	.000043	.0004631	5.372622	.0090858	.0009097	.0786876	3.938285
#3	.000013	.0006625	5.340538	.0099610	.0009779	.0789057	3.914498

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0389943**	**1.293794**	**.0100052**	**.0013359**	**79.27096**	**.0035159**	**.2925311**
Stddev	.0002570	.032451	.0003092	.0001167	.43768	.0029227	.0018113
%RSD	.6590386	2.508195	3.090784	8.735068	.5521352	83.12743	.6191826
#1	.0387573	1.272026	.0097432	.0014482	78.77319	.0066896	.2926961
#2	.0392675	1.278265	.0099261	.0012153	79.44413	.0009352	.2906429
#3	.0389582	1.331092	.0103463	.0013442	79.59557	.0029228	.2942542

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.817396**	**.0223412**	**.0038925**	**.0056174**	**.0270565**	**7.055822**	**1.754923**
Stddev	.037011	.0002676	.0001857	.0001098	.0007261	.079226	.005162
%RSD	.9695413	1.197727	4.769989	1.954491	2.683735	1.122852	.2941437
#1	3.778451	.0224396	.0040424	.0057290	.0264052	6.964618	1.759994
#2	3.821627	.0225457	.0036848	.0055095	.0278395	7.107601	1.749675
#3	3.852110	.0220384	.0039503	.0056137	.0269250	7.095247	1.755099

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2725-02DLX5 Acquired: 8/4/2025 13:04:05 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.635555	.0013569	.0404925
Stddev	.018877	.0034252	.0000800
%RSD	.3349699	252.4231	.1976398
#1	5.630903	.0039190	.0405669
#2	5.619439	.0026851	.0405028
#3	5.656324	-.002533	.0404078

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5553.216	95377.92	8320.393	4740.175	6738.415
Stddev	16.466	342.36	46.420	12.240	24.324
%RSD	.2965155	.3589534	.5579118	.2582144	.3609703
#1	5542.508	95772.04	8275.518	4753.684	6724.597
#2	5572.177	95154.17	8317.443	4729.824	6766.500
#3	5544.965	95207.55	8368.218	4737.016	6724.147

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2725-02DUPDLX5 Acquired: 8/4/2025 13:08:17 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001039**	**.0003502**	**.0162352**	**-.001134**	**.0088812**	**.6975950**	**.0441233**
Stddev	.003279	.0030691	.0003032	.003691	.0013498	.0084167	.0003029
%RSD	315.7255	876.4420	1.867354	325.6496	15.19795	1.206535	.6865832
#1	-.000888	.0030013	.0165846	-.003361	.0086164	.7028953	.0444625
#2	-.004391	-.003012	.0160797	-.003166	.0103437	.7019998	.0440278
#3	.002163	.001061	.0160414	.003127	.0076834	.6878900	.0438796

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000200**	**.0004991**	**5.188263**	**.0088772**	**.0009593**	**.0748616**	**3.813133**
Stddev	.0000669	.0000597	.035759	.0004561	.0002116	.0002830	.025953
%RSD	334.4127	11.95447	.6892300	5.137633	22.06104	.3779586	.6806294
#1	-.000051	.0004618	5.210333	.0086192	.0008035	.0751882	3.828788
#2	.000030	.0004676	5.207451	.0086086	.0012003	.0746900	3.827435
#3	.000081	.0005679	5.147006	.0094038	.0008742	.0747067	3.783174

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0377642**	**1.246638**	**.0093495**	**.0009651**	**77.18316**	**.0023315**	**.2819026**
Stddev	.0006331	.004516	.0001949	.0001663	.59993	.0026497	.0010657
%RSD	1.676540	.3622636	2.084770	17.22782	.7772848	113.6478	.3780337
#1	.0375062	1.243478	.0095023	.0007971	77.71780	.0042617	.2807312
#2	.0384855	1.251811	.0091300	.0009685	77.29733	-.000689	.2821617
#3	.0373007	1.244625	.0094163	.0011296	76.53434	.003422	.2828148

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.726659**	**.0212183**	**.0035555**	**.0061605**	**.0275202**	**6.870395**	**1.660225**
Stddev	.028397	.0002230	.0003107	.0004625	.0009376	.083940	.002130
%RSD	.7619992	1.050949	8.738445	7.507701	3.406936	1.221761	.1283133
#1	3.716678	.0212166	.0038862	.0056946	.0284418	6.930978	1.662634
#2	3.758699	.0214421	.0035105	.0061673	.0275516	6.905626	1.659447
#3	3.704600	.0209961	.0032697	.0066196	.0265674	6.774581	1.658592

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2725-02DUPDLX5 Acquired: 8/4/2025 13:08:17 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.337970	.0025065	.0393549
Stddev	.062098	.0016524	.0003729
%RSD	1.163324	65.92316	.9475951
#1	5.407110	.0014452	.0396478
#2	5.286943	.0044103	.0394818
#3	5.319856	.0016640	.0389350

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5624.068	96301.52	8443.704	4767.884	6840.820
Stddev	7.243	287.40	36.558	10.518	10.977
%RSD	.1287824	.2984368	.4329674	.2205927	.1604620
#1	5629.175	95970.97	8405.360	4770.769	6843.415
#2	5615.779	96492.31	8478.168	4776.659	6828.778
#3	5627.250	96441.28	8447.583	4756.225	6850.267

Sample Name: Q2725-02LDLX25 Acquired: 8/4/2025 13:12:28 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000781**	**-.000613**	**.0030800**	**-.002453**	**.0016432**	**.1366319**	**.0076965**
Stddev	.001975	.000955	.0007305	.003908	.0013836	.0041494	.0013348
%RSD	252.9188	155.6487	23.71794	159.3315	84.20359	3.036915	17.34318
#1	-.002781	.000210	.0029226	-.001279	.0007591	.1364899	.0085459
#2	-.000732	-.000390	.0024410	-.006813	.0009327	.1325554	.0061580
#3	.001169	-.001660	.0038764	.000734	.0032377	.1408505	.0083857

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000153**	**.0000682**	**1.066512**	**.0005759**	**.0002815**	**.0154604**	**.7444685**
Stddev	.0000270	.0000300	.018524	.0001090	.0001709	.0002678	.0079418
%RSD	176.7438	44.02049	1.736909	18.92322	60.70417	1.732004	1.066775
#1	.0000443	.0000444	1.086749	.0005711	.0003769	.0155529	.7532255
#2	.0000105	.0001019	1.062393	.0006872	.0003833	.0156696	.7424475
#3	-.000009	.0000583	1.050394	.0004694	.0000842	.0151586	.7377324

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0060295**	**.2737440**	**.0016441**	**.0003185**	**14.84163**	**-.000791**	**.0554773**
Stddev	.0005690	.0559883	.0002124	.0005505	.11690	.000325	.0005257
%RSD	9.436529	20.45279	12.92176	172.8456	.7876727	41.09349	.9476390
#1	.0063930	.3247301	.0017302	-.000265	14.72798	-.000419	.0559704
#2	.0053738	.2826747	.0014021	.000828	14.96153	-.000936	.0549241
#3	.0063216	.2138271	.0018000	.000393	14.83539	-.001019	.0555373

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7624236**	**-.001289**	**.0007368**	**.0001037**	**.0047915**	**1.335417**	**.3274656**
Stddev	.0163112	.000827	.0001176	.0005000	.0011692	.027812	.0014433
%RSD	2.139384	64.14542	15.95696	482.2495	24.40096	2.082648	.4407513
#1	.7791126	-.000360	.0007549	-.000305	.0039928	1.320806	.3289051
#2	.7616397	-.001945	.0006112	-.000045	.0061335	1.367489	.3274733
#3	.7465185	-.001563	.0008442	.000661	.0042483	1.317954	.3260185

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2725-02LDLX25 Acquired: 8/4/2025 13:12:28 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**1.043788**	**-.000572**	**.0080509**
Stddev	.004554	.004298	.0001158
%RSD	.4362621	751.0788	1.438241
#1	1.044131	-.001633	.0081782
#2	1.048161	.004157	.0080228
#3	1.039073	-.004241	.0079518

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5697.078**	**98085.33**	**8287.380**	**4815.789**	**7145.674**
Stddev	12.015	270.52	23.024	10.759	24.667
%RSD	.2108944	.2758045	.2778255	.2234198	.3452003
#1	5683.818	98374.40	8260.892	4820.268	7119.317
#2	5700.176	97838.27	8302.598	4803.514	7149.500
#3	5707.241	98043.32	8298.651	4823.586	7168.204

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2725-02MSDLX5 Acquired: 8/4/2025 13:16:46 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1617189**	**.3805913**	**.2082561**	**.4092892**	**.1763906**	**1.127036**	**.0873424**
Stddev	.0010451	.0005770	.0023999	.0003349	.0015702	.005861	.0010178
%RSD	.6462768	.1515926	1.152368	.0818306	.8901598	.5200614	1.165333
#1	.1605241	.3812426	.2096825	.4090738	.1770268	1.121307	.0865536
#2	.1624636	.3801443	.2096005	.4091187	.1746022	1.133021	.0869824
#3	.1621691	.3803870	.2054854	.4096751	.1775429	1.126778	.0884913

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0401697**	**.0392473**	**5.527545**	**.0898661**	**.0411943**	**.1387488**	**4.477504**
Stddev	.0003570	.0001600	.017982	.0002518	.0000112	.0002907	.027969
%RSD	.8887602	.4076633	.3253152	.2801940	.0271687	.2094834	.6246641
#1	.0401175	.0393093	5.506935	.0899007	.0411815	.1389203	4.472015
#2	.0398416	.0393670	5.535666	.0900988	.0412021	.1389128	4.507810
#3	.0405499	.0390656	5.540035	.0895988	.0411994	.1384132	4.452685

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0795049**	**1.710341**	**.1096310**	**.0115984**	**80.06507**	**.0621022**	**.3297506**
Stddev	.0004935	.035634	.0002933	.0005009	.77976	.0041014	.0013899
%RSD	.6206666	2.083429	.2675508	4.318637	.9739110	6.604243	.4214958
#1	.0792977	1.682720	.1094377	.0121668	80.11990	.0607236	.3310101
#2	.0791488	1.750563	.1094868	.0114072	80.81598	.0588678	.3299823
#3	.0800682	1.697741	.1099685	.0112213	79.25935	.0667153	.3282594

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.910485**	**.0807295**	**.0845407**	**.1165250**	**.0644637**	**7.149679**	**2.850533**
Stddev	.077162	.0007739	.0002693	.0002441	.0001217	.080596	.017309
%RSD	1.305519	.9586829	.3185812	.2094770	.1887469	1.127274	.6072217
#1	5.919758	.0800851	.0842343	.1165692	.0646042	7.146976	2.865420
#2	5.982592	.0805153	.0847399	.1167440	.0643903	7.231592	2.854638
#3	5.829105	.0815879	.0846480	.1162618	.0643967	7.070467	2.831540

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2725-02MSDLX5 Acquired: 8/4/2025 13:16:46 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.501836	.0459916	.0808216
Stddev	.021138	.0007976	.0000926
%RSD	.3842030	1.734166	.1146243
#1	5.521174	.0455773	.0808768
#2	5.505065	.0454866	.0808735
#3	5.479269	.0469111	.0807147

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5603.381	95625.90	8349.345	4757.715	6796.952
Stddev	13.384	386.58	60.273	16.064	22.696
%RSD	.2388568	.4042579	.7218892	.3376428	.3339204
#1	5588.015	95661.01	8354.036	4739.199	6771.208
#2	5612.497	95222.97	8407.135	4766.011	6805.576
#3	5609.631	95993.73	8286.863	4767.934	6814.073

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2725-02MSDDLX5 Acquired: 8/4/2025 13:20:51 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1535992**	**.3880999**	**.2009885**	**.3975718**	**.1713148**	**1.065223**	**.0839314**
Stddev	.0006311	.0019015	.0007486	.0013917	.0004811	.009209	.0002948
%RSD	.4108984	.4899646	.3724529	.3500397	.2808052	.8644930	.3511992
#1	.1540625	.3859263	.2018413	.3969217	.1714682	1.070567	.0842220
#2	.1538547	.3889177	.2004395	.3966241	.1717004	1.054589	.0836326
#3	.1528804	.3894557	.2006848	.3991695	.1707757	1.070511	.0839397

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0383722**	**.0378578**	**5.313604**	**.0859640**	**.0395382**	**.1334486**	**4.416835**
Stddev	.0003032	.0001255	.015888	.0008436	.0002220	.0007346	.024513
%RSD	.7900788	.3316142	.2990045	.9813150	.5613992	.5504368	.5549936
#1	.0386034	.0378669	5.321221	.0864831	.0396311	.1338250	4.406897
#2	.0380289	.0377280	5.295342	.0864183	.0392849	.1326021	4.444757
#3	.0384842	.0379786	5.324250	.0849906	.0396986	.1339186	4.398852

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0771972**	**1.617161**	**.1056566**	**.0124863**	**77.52059**	**.0620778**	**.3198760**
Stddev	.0008044	.019295	.0005948	.0003665	.30963	.0011379	.0007719
%RSD	1.042075	1.193144	.5629216	2.935036	.3994158	1.833050	.2413118
#1	.0778496	1.604254	.1056239	.0122672	77.45494	.0612365	.3191009
#2	.0762984	1.639342	.1050789	.0129094	77.85779	.0616244	.3198823
#3	.0774436	1.607886	.1062671	.0122823	77.24906	.0633725	.3206447

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.755188**	**.0771970**	**.0823235**	**.1103027**	**.0583993**	**6.978444**	**2.747304**
Stddev	.031089	.0012084	.0002544	.0005989	.0011678	.051394	.013493
%RSD	.5401992	1.565367	.3089711	.5429245	1.999627	.7364660	.4911303
#1	5.779785	.0782402	.0825630	.1097042	.0586862	6.984822	2.746761
#2	5.765534	.0758729	.0820566	.1109019	.0571148	7.026352	2.734091
#3	5.720244	.0774779	.0823509	.1103022	.0593969	6.924160	2.761060

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2725-02MSDDLX5 Acquired: 8/4/2025 13:20:51 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.324639	.0426092	.0781949
Stddev	.013067	.0024975	.0005168
%RSD	.2454021	5.861288	.6609009
#1	5.331626	.0453181	.0787274
#2	5.309564	.0421115	.0776954
#3	5.332727	.0403981	.0781618

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5633.755	95823.62	8522.271	4726.013	6840.648
Stddev	12.347	322.70	39.876	20.450	21.474
%RSD	.2191609	.3367657	.4679054	.4327038	.3139120
#1	5633.601	95967.15	8490.777	4744.327	6841.109
#2	5646.178	95454.05	8567.107	4703.947	6861.887
#3	5621.485	96049.65	8508.928	4729.765	6818.947

Sample Name: Q2725-02ADLX5 Acquired: 8/4/2025 13:24:57 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1621476**	**.3954910**	**.2062012**	**.4132871**	**.1709934**	**1.058836**	**.0827141**
Stddev	.0009447	.0077539	.0015875	.0037807	.0009570	.010641	.0004587
%RSD	.5825912	1.960581	.7698574	.9147762	.5596980	1.004969	.5545064
#1	.1624879	.3973666	.2073636	.4091412	.1713485	1.070039	.0832308
#2	.1628750	.4021350	.2043926	.4165441	.1699095	1.057605	.0823548
#3	.1610800	.3869712	.2068475	.4141760	.1717221	1.048864	.0825568

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0386796**	**.0386140**	**5.202346**	**.0869981**	**.0405302**	**.1349367**	**4.382522**
Stddev	.0000638	.0001274	.015174	.0003158	.0000809	.0008297	.030776
%RSD	.1648174	.3299212	.2916773	.3630009	.1995043	.6148631	.7022374
#1	.0387135	.0385183	5.218714	.0866364	.0406069	.1340895	4.359763
#2	.0387192	.0385650	5.199579	.0871394	.0405378	.1349730	4.417538
#3	.0386061	.0387586	5.188747	.0872187	.0404458	.1357476	4.370266

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0764622**	**1.579015**	**.1078320**	**.0164799**	**77.08034**	**.0636767**	**.3217365**
Stddev	.0003364	.011778	.0002604	.0006029	.25934	.0016797	.0007330
%RSD	.4399629	.7459317	.2414749	3.658662	.3364579	2.637917	.2278210
#1	.0760843	1.569210	.1080131	.0167806	76.78487	.0654882	.3218665
#2	.0767290	1.575754	.1075336	.0168734	77.27026	.0621707	.3223957
#3	.0765732	1.592080	.1079494	.0157858	77.18590	.0633712	.3209472

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.796109**	**.0769958**	**.0835833**	**.1362182**	**.0604222**	**6.916811**	**2.761693**
Stddev	.008070	.0005454	.0001198	.0009798	.0006999	.043074	.016270
%RSD	.1392388	.7083019	.1433004	.7192927	1.158345	.6227364	.5891159
#1	5.799826	.0764487	.0835673	.1372833	.0601714	6.876837	2.747820
#2	5.786849	.0769994	.0837103	.1353552	.0612130	6.911169	2.757658
#3	5.801650	.0775394	.0834723	.1360162	.0598823	6.962428	2.779600

Sample Name: Q2725-02ADLX5 Acquired: 8/4/2025 13:24:57 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**5.316886**	**.0409967**	**.0771801**
Stddev	.015151	.0018513	.0000916
%RSD	.2849527	4.515683	.1186321
#1	5.328753	.0390373	.0771429
#2	5.322083	.0427165	.0772844
#3	5.299820	.0412364	.0771130

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5509.112**	**94112.83**	**8516.440**	**4633.057**	**6710.146**
Stddev	12.597	164.15	15.051	10.550	18.998
%RSD	.2286520	.1744206	.1767231	.2277112	.2831260
#1	5512.823	94198.65	8508.059	4645.236	6716.991
#2	5519.437	93923.56	8507.446	4626.739	6724.774
#3	5495.077	94216.29	8533.815	4627.195	6688.674

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: PB169078BL Acquired: 8/4/2025 13:29:01 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001134**	**.0004508**	**.0000626**	**.0000079**	**.0000082**	**.0087174**	**.0009443**
Stddev	.001530	.0007580	.0005016	.0024140	.0015357	.0142036	.0004743
%RSD	135.0056	168.1436	801.9796	30712.35	18726.46	162.9344	50.22967
#1	-.000063	.0001392	-.000145	.0013919	.0006295	.0231804	.0009867
#2	-.002886	-.000102	.000635	-.002780	.0011359	-.005212	.0004502
#3	-.000451	.001315	-.000302	.001411	-.001741	.008183	.0013959

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000040**	**-.000001**	**-.013577**	**-.001298**	**.0001991**	**-.000208**	**-.006013**
Stddev	.000048	.000021	.004473	.000450	.0002012	.000484	.004413
%RSD	119.5796	3023.864	32.94359	34.65691	101.0192	233.1166	73.39418
#1	-.000091	.000014	-.015494	-.000866	-.000003	.000085	-.005373
#2	-.000035	-.000025	-.008465	-.001263	.000201	-.000767	-.001955
#3	.000005	.000008	-.016772	-.001764	.000400	.000058	-.010712

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000535**	**.0365046**	**.0000460**	**.0005997**	**.0000296**	**-.000023**	**-.001304**
Stddev	.000499	.0292906	.0000751	.0002579	.0181865	.001338	.000197
%RSD	93.30766	80.23807	163.1660	42.99936	61423.36	5709.242	15.14149
#1	.000031	.0312048	-.000009	.0008775	.0206821	-.001305	-.001532
#2	-.000724	.0680832	.000016	.0003679	-.007002	-.000130	-.001198
#3	-.000911	.0102258	.000131	.0005537	-.013591	.001365	-.001182

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0046945**	**-.007204**	**.0000659**	**-.000739**	**.0004511**	**-.003438**	**.0027656**
Stddev	.0114187	.000322	.0001144	.000101	.0005983	.007361	.0008597
%RSD	243.2377	4.468080	173.6963	13.61378	132.6261	214.0879	31.08687
#1	.0125971	-.006934	.0000617	-.000849	.0011072	.004132	.0026247
#2	.0098836	-.007560	-.000046	-.000651	-.000065	-.010571	.0019850
#3	-.008397	-.007118	.000182	-.000718	.000311	-.003876	.0036871

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: PB169078BL Acquired: 8/4/2025 13:29:01 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.000883	-.002052	-.000025
Stddev	.003037	.000596	.000021
%RSD	343.8447	29.03334	84.71714
#1	.000902	-.002740	-.000005
#2	.000838	-.001732	-.000047
#3	-.004390	-.001685	-.000022

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5660.613	96393.91	7828.447	4858.169	7156.092
Stddev	30.907	203.60	84.874	19.385	44.865
%RSD	.5459923	.2112154	1.084177	.3990223	.6269510
#1	5686.604	96570.75	7901.558	4868.062	7187.020
#2	5668.797	96171.33	7848.415	4835.833	7176.622
#3	5626.438	96439.63	7735.370	4870.611	7104.635

Sample Name: PB169078BS Acquired: 8/4/2025 13:33:20 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8019180**	**2.029820**	**.9920813**	**2.040115**	**.8348023**	**2.102406**
Stddev	.0015482	.081919	.0030705	.008419	.0033015	.002536
%RSD	.1930688	4.035760	.3094983	.4126965	.3954891	.1206247
#1	.8018540	1.995408	.9950855	2.034936	.8353591	2.105132
#2	.8034973	2.123332	.9922099	2.049830	.8377900	2.101972
#3	.8004028	1.970721	.9889486	2.035579	.8312578	2.100116

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2108946**	**.2198643**	**.1991054**	**1.073372**	**.4107877**	**.2036875**
Stddev	.0010175	.0006639	.0005323	.004775	.0018201	.0005838
%RSD	.4824836	.3019752	.2673551	.4448923	.4430802	.2866128
#1	.2098281	.2197093	.1996665	1.076623	.4127436	.2042757
#2	.2110011	.2192916	.1990421	1.067889	.4091437	.2036784
#3	.2118548	.2205920	.1986075	1.075604	.4104758	.2031082

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3209897**	**3.048395**	**.2125575**	**2.136002**	**.5125507**	**.0779420**
Stddev	.0004500	.012033	.0009994	.016851	.0013692	.0005343
%RSD	.1402007	.3947472	.4701820	.7888943	.2671412	.6855063
#1	.3211329	3.036638	.2122234	2.121266	.5140298	.0773479
#2	.3204855	3.060687	.2117679	2.154374	.5122948	.0780950
#3	.3213507	3.047861	.2136811	2.132366	.5113274	.0783831

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.867985**	**.3118284**	**.2140110**	**9.826666**	**.3116487**	**.4211933**
Stddev	.014327	.0060699	.0005417	.020704	.0007152	.0008390
%RSD	.4995389	1.946548	.2530972	.2106882	.2294985	.1991967
#1	2.871064	.3112754	.2136056	9.803894	.3111618	.4207920
#2	2.880522	.3060540	.2146262	9.844354	.3124699	.4221576
#3	2.852369	.3181559	.2138012	9.831748	.3113145	.4206303

Sample Name: PB169078BS Acquired: 8/4/2025 13:33:20 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7084975	.2068019	.8516927	5.778570	F .0002977	.2026280
Stddev	.0028777	.0021494	.0102564	.012708	.0026228	.0008799
%RSD	.4061753	1.039370	1.204234	.2199199	881.1444	.4342426
#1	.7106882	.2068354	.8486199	5.774224	.0005048	.2025822
#2	.7095659	.2046359	.8433240	5.792881	-.002423	.2017720
#3	.7052383	.2089344	.8631342	5.768605	.002811	.2035299

Elem	Sr4077
Units	ppm
Avg	.2055891
Stddev	.0005788
%RSD	.2815516
#1	.2059433
#2	.2049211
#3	.2059028

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5622.161	93897.14	7621.201	4776.281	6928.086
Stddev	13.243	442.52	41.815	30.611	29.101
%RSD	.2355473	.4712783	.5486679	.6408995	.4200452
#1	5607.455	94398.91	7663.462	4811.069	6898.408
#2	5625.885	93729.88	7620.293	4753.465	6929.277
#3	5633.143	93562.64	7579.847	4764.309	6956.574

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: CCV02 Acquired: 8/4/2025 13:37:21 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.044256**	**5.116285**	**5.020518**	**5.052884**	**5.066582**	**10.18681**	**10.11519**
Stddev	.015592	.067535	.013133	.016314	.014483	.01377	.11640
%RSD	.3091018	1.320009	.2615951	.3228559	.2858457	.1351766	1.150732
#1	5.061910	5.135108	5.005984	5.060335	5.079719	10.17451	10.19295
#2	5.038488	5.172412	5.024037	5.064142	5.068976	10.20169	10.17127
#3	5.032369	5.041335	5.031534	5.034175	5.051052	10.18425	9.98137

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2610663**	**2.531869**	**25.72237**	**1.002143**	**2.522469**	**1.267525**	**4.934868**
Stddev	.0013740	.004405	.16692	.003233	.003079	.000571	.000966
%RSD	.5263218	.1739712	.6489383	.3226279	.1220718	.0450865	.0195720
#1	.2600335	2.527661	25.65848	1.005869	2.519702	1.267888	4.935685
#2	.2626257	2.531499	25.91180	1.000482	2.521917	1.267822	4.935116
#3	.2605396	2.536447	25.59683	1.000078	2.525786	1.266867	4.933802

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.548653**	**25.24492**	**2.527188**	**1.251122**	**24.46183**	**2.539086**	**2.533969**
Stddev	.007732	.05303	.004615	.000631	.06389	.002570	.001798
%RSD	.3033785	.2100778	.1826075	.0504639	.2611892	.1012337	.0709660
#1	2.543944	25.19375	2.522521	1.250645	24.51590	2.536541	2.535326
#2	2.557576	25.29964	2.527296	1.251838	24.39133	2.541681	2.531930
#3	2.544438	25.24137	2.531749	1.250883	24.47826	2.539035	2.534652

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.66047**	**5.186282**	**5.146561**	**5.070777**	**5.124191**	**4.849548**	**4.993434**
Stddev	.15460	.020820	.007772	.005410	.024999	.003283	.027321
%RSD	.6269007	.4014352	.1510178	.1066990	.4878598	.0676991	.5471342
#1	24.71121	5.165666	5.155312	5.065078	5.118278	4.853104	4.963558
#2	24.78331	5.207299	5.143909	5.071411	5.151616	4.846633	4.999599
#3	24.48688	5.185882	5.140461	5.075843	5.102678	4.848907	5.017146

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: CCV02 Acquired: 8/4/2025 13:37:21 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.954045**	**5.101930**	**5.122174**
Stddev	.011737	.007386	.063459
%RSD	.2369103	.1447663	1.238900
#1	4.955895	5.107153	5.158537
#2	4.964747	5.105158	5.159086
#3	4.941494	5.093480	5.048899

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5387.498**	**90494.32**	**7442.399**	**4583.475**	**6298.303**
Stddev	17.251	597.42	51.959	20.070	23.401
%RSD	.3202043	.6601767	.6981457	.4378860	.3715367
#1	5389.062	90216.92	7444.472	4589.140	6313.019
#2	5403.914	90086.04	7389.435	4561.181	6310.570
#3	5369.519	91180.02	7493.291	4600.105	6271.319

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: CCB02 Acquired: 8/4/2025 13:41:33 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002426**	**.0020982**	**.0005508**	**-.002520**	**-.001671**	**.0129371**	**.0084268**
Stddev	.0013719	.0011029	.0005188	.001213	.001792	.0071782	.0006792
%RSD	565.3981	52.56566	94.20750	48.11683	107.2375	55.48526	8.060348
#1	.0015292	.0031689	.0011403	-.002599	-.000290	.0160412	.0076773
#2	-.001201	.0009656	.0001634	-.003692	-.001027	.0047293	.0086015
#3	.000400	.0021602	.0003486	-.001270	-.003696	.0180410	.0090017

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000489**	**.0003023**	**-.003923**	**-.001155**	**.0005064**	**.0001650**	**-.004090**
Stddev	.0000609	.0000408	.014030	.000219	.0001129	.0004479	.008587
%RSD	124.5203	13.50904	357.6350	18.91904	22.30169	271.4352	209.9306
#1	.0000687	.0003453	-.017812	-.001396	.0003809	.0004576	-.013673
#2	.0000974	.0002640	.010245	-.001101	.0005385	.0003881	-.001505
#3	-.000019	.0002975	-.004202	-.000969	.0005998	-.000351	.002907

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000795**	**.0053208**	**.0003540**	**.0009359**	**-.056320**	**.0018674**	**-.000068**
Stddev	.000199	.0150894	.0001507	.0003429	.005396	.0025282	.000182
%RSD	25.08085	283.5952	42.57371	36.63661	9.580137	135.3900	269.3029
#1	-.001025	.0222368	.0005273	.0007602	-.050092	.0008349	.000088
#2	-.000696	-.006753	.0002531	.0013310	-.059597	.0000187	-.000023
#3	-.000665	.000479	.0002816	.0007164	-.059269	.0047484	-.000268

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.020369**	**-.002453**	**.0009143**	**.0002569**	**.0010473**	**.0082199**	**.0045763**
Stddev	.022860	.000136	.0003159	.0001483	.0004029	.0146711	.0024293
%RSD	112.2297	5.528355	34.54728	57.72210	38.46808	178.4831	53.08479
#1	-.020269	-.002302	.0012367	.0003235	.0006015	-.008029	.0028336
#2	-.043278	-.002564	.0009007	.0000870	.0011550	.012193	.0035440
#3	.002441	-.002493	.0006054	.0003601	.0013853	.020495	.0073513

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: CCB02 Acquired: 8/4/2025 13:41:33 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0010369	-.001870	.0010538
Stddev	.0012580	.000583	.0000989
%RSD	121.3245	31.17455	9.385509
#1	.0020038	-.001917	.0009588
#2	.0014921	-.002427	.0010466
#3	-.000385	-.001264	.0011562

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5591.497	94016.26	7607.926	4723.208	7099.461
Stddev	11.664	588.89	60.180	32.875	22.858
%RSD	.2086103	.6263738	.7910218	.6960263	.3219640
#1	5578.862	93347.24	7676.802	4687.457	7073.440
#2	5601.855	94456.13	7565.505	4730.029	7116.299
#3	5593.773	94245.42	7581.471	4752.137	7108.644

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2733-01 Acquired: 8/4/2025 13:45:52 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003354**	**.0062572**	**.0012926**	**-.009477**	**.0036121**	**1.456116**
Stddev	.001311	.0017782	.0009404	.002794	.0012204	.004646
%RSD	39.10213	28.41864	72.75187	29.47767	33.78490	.3190758
#1	-.001930	.0052085	.0004814	-.006874	.0048623	1.459817
#2	-.003619	.0052527	.0023234	-.012429	.0024240	1.457630
#3	-.004512	.0083103	.0010731	-.009129	.0035500	1.450902

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4464486**	**-.000116**	**-.000200**	**452.0804**	**.0035857**	**.0008364**
Stddev	.0011567	.000074	.000155	3.3236	.0002735	.0001942
%RSD	.2590902	63.66906	77.48631	.7351697	7.628440	23.22502
#1	.4451812	-.000143	-.000265	455.5547	.0036259	.0009974
#2	.4467172	-.000032	-.000023	451.7548	.0032943	.0006206
#3	.4474473	-.000172	-.000313	448.9315	.0038369	.0008910

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0038320**	**3.534552**	**-.001213**	**.0502651**	**.0048347**	**-.000298**
Stddev	.0002531	.035492	.000326	.0245856	.0003133	.000610
%RSD	6.603955	1.004141	26.87485	48.91183	6.479904	204.7548
#1	.0036149	3.498232	-.001523	.0281763	.0049904	-.000825
#2	.0041099	3.536270	-.000873	.0767534	.0044741	.000371
#3	.0037712	3.569153	-.001243	.0458656	.0050396	-.000439

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**147.5353**	**.0056354**	**.0080425**	**337.7085**	**.0715547**	**.2244317**
Stddev	1.5762	.0019054	.0003389	3.9290	.0010680	.0005527
%RSD	1.068382	33.81109	4.213595	1.163443	1.492516	.2462769
#1	146.2158	.0064799	.0084331	334.1859	.0723905	.2240974
#2	147.1092	.0069725	.0078681	336.9938	.0719221	.2241280
#3	149.2807	.0034537	.0078264	341.9458	.0703515	.2250697

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2733-01 Acquired: 8/4/2025 13:45:52 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003759	-.015937	9.131645	.0399664	F 245.8212	.2349308
Stddev	.000297	.000446	.070439	.0026525	.2345	.0030963
%RSD	7.903512	2.796297	.7713712	6.636730	.0954004	1.317943
#1	-.003435	-.015968	9.052704	.0385854	245.8674	.2376008
#2	-.003825	-.015476	9.154150	.0430244	246.0293	.2315366
#3	-.004018	-.016366	9.188081	.0382893	245.5671	.2356549

Elem	Sr4077
Units	ppm
Avg	8.288325
Stddev	.111880
%RSD	1.349850
#1	8.389282
#2	8.307652
#3	8.168040

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4941.670	82453.68	7532.294	4153.293	5654.118
Stddev	4.095	425.47	49.076	7.557	8.955
%RSD	.0828570	.5160156	.6515460	.1819494	.1583845
#1	4942.911	82940.56	7508.143	4159.003	5650.436
#2	4937.099	82267.15	7499.973	4144.724	5647.589
#3	4945.001	82153.33	7588.766	4156.152	5664.327

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2733-01DUP Acquired: 8/4/2025 13:50:22 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001843**	**.0057335**	**.0021715**	**-.008432**	**.0053262**	**1.567064**
Stddev	.003432	.0013391	.0018827	.002082	.0007475	.013838
%RSD	186.2437	23.35645	86.69866	24.69685	14.03384	.8830547
#1	-.003659	.0041985	.0025383	-.006123	.0045949	1.577483
#2	-.003986	.0066626	.0001324	-.010167	.0052949	1.551363
#3	.002116	.0063394	.0038439	-.009006	.0060888	1.572346

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4796693**	**-.000175**	**-.000259**	**486.0359**	**.0041227**	**.0007953**
Stddev	.0028301	.000018	.000115	2.6763	.0004762	.0000700
%RSD	.5900036	10.44682	44.23033	.5506436	11.55137	8.803609
#1	.4822736	-.000175	-.000243	489.0781	.0036400	.0007715
#2	.4766576	-.000193	-.000153	484.9854	.0045922	.0008741
#3	.4800767	-.000156	-.000381	484.0442	.0041360	.0007402

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0043151**	**3.679424**	**-.000800**	**.0662786**	**.0052987**	**-.000166**
Stddev	.0002033	.041804	.000377	.0243873	.0003409	.000205
%RSD	4.710226	1.136164	47.15484	36.79517	6.434068	123.4662
#1	.0043576	3.632057	-.001232	.0636478	.0051818	-.000315
#2	.0040940	3.695056	-.000542	.0918748	.0056827	.000068
#3	.0044938	3.711160	-.000625	.0433134	.0050316	-.000251

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**154.4201**	**.0066777**	**.0069822**	**354.0719**	**.0740135**	**.2433133**
Stddev	1.6312	.0022608	.0003415	3.1336	.0012054	.0007926
%RSD	1.056313	33.85549	4.890367	.8850084	1.628580	.3257470
#1	152.8955	.0085875	.0066720	351.7314	.0754047	.2424742
#2	154.2245	.0072640	.0069266	352.8524	.0733537	.2434164
#3	156.1402	.0041815	.0073481	357.6318	.0732821	.2440493

Sample Name: Q2733-01DUP Acquired: 8/4/2025 13:50:22 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003094	-.016084	9.505135	.0435500	F 258.4034	.2590912
Stddev	.000352	.001856	.093528	.0026054	1.3545	.0001554
%RSD	11.36362	11.53780	.9839730	5.982615	.5241983	.0599753
#1	-.002833	-.018224	9.400245	.0406831	258.8708	.2591358
#2	-.003494	-.014921	9.535307	.0441935	259.4624	.2592194
#3	-.002956	-.015107	9.579852	.0457733	256.8771	.2589184

Elem	Sr4077
Units	ppm
Avg	8.988087
Stddev	.127799
%RSD	1.421872
#1	9.100253
#2	9.015050
#3	8.848958

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4961.185	83071.71	7350.325	4187.698	5680.189
Stddev	21.099	95.64	97.682	17.908	27.213
%RSD	.4252829	.1151269	1.328946	.4276454	.4790878
#1	4944.208	83090.30	7250.196	4187.366	5655.741
#2	4954.539	82968.15	7355.419	4205.770	5675.318
#3	4984.806	83156.69	7445.361	4169.958	5709.509

Sample Name: Q2733-01LX5 Acquired: 8/4/2025 13:54:52 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.004085**	**.0000081**	**-.001333**	**-.005440**	**-.000228**	**.3574689**
Stddev	.002268	.0007315	.001786	.004246	.001135	.0043926
%RSD	55.51791	9031.232	134.0661	78.06237	498.4973	1.228803
#1	-.005200	-.000272	-.000471	-.001380	-.000517	.3538035
#2	-.001475	-.000542	-.003387	-.009851	.001024	.3623378
#3	-.005580	.000838	-.000140	-.005088	-.001190	.3562653

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0928724**	**-.000035**	**-.000053**	**95.24700**	**-.000519**	**.0002308**
Stddev	.0003646	.000044	.000024	.13345	.000318	.0001447
%RSD	.3926140	128.1297	45.06020	.1401070	61.28591	62.70013
#1	.0929966	.000016	-.000070	95.39968	-.000833	.0000898
#2	.0924620	-.000067	-.000062	95.15263	-.000197	.0002236
#3	.0931588	-.000052	-.000026	95.18869	-.000527	.0003789

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003638**	**.6867678**	**-.001425**	**.0251396**	**.0009051**	**.0000407**
Stddev	.0004832	.0049870	.000467	.0249113	.0001405	.0001969
%RSD	132.8166	.7261573	32.78794	99.09191	15.51942	483.4069
#1	.0009060	.6906625	-.001122	.0250226	.0007612	.0000406
#2	-.000022	.6811470	-.001963	.0002870	.0010419	-.000156
#3	.000207	.6884937	-.001191	.0501091	.0009120	.000238

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.64293**	**.0031919**	**.0003934**	**63.18962**	**.0113836**	**.0446201**
Stddev	.25586	.0025054	.0001122	.62037	.0003852	.0002108
%RSD	.9603285	78.49051	28.50963	.9817596	3.383652	.4723272
#1	26.92184	.0004079	.0003598	63.87420	.0113909	.0447174
#2	26.58786	.0039029	.0005185	63.02998	.0117651	.0443783
#3	26.41908	.0052650	.0003019	62.66466	.0109948	.0447646

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2733-01LX5 Acquired: 8/4/2025 13:54:52 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003008**	**-.004089**	**1.724927**	**.0051540**	F **49.06202**	**.0605171**
Stddev	.000160	.001386	.019956	.0009764	.09234	.0006106
%RSD	5.326751	33.88517	1.156947	18.94477	.1882017	1.008980
#1	-.002963	-.002856	1.747661	.0048940	49.08889	.0606884
#2	-.003186	-.003823	1.716821	.0062341	49.13794	.0598391
#3	-.002875	-.005589	1.710299	.0043339	48.95923	.0610237

Elem	Sr4077
Units	ppm
Avg	**1.749234**
Stddev	.005718
%RSD	.3269134
#1	1.755347
#2	1.748339
#3	1.744015

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5441.609**	**91856.81**	**7768.481**	**4584.876**	**6440.260**
Stddev	13.466	396.22	58.328	21.859	10.191
%RSD	.2474637	.4313440	.7508293	.4767607	.1582413
#1	5426.062	91730.27	7830.154	4572.466	6428.893
#2	5449.153	91539.32	7714.203	4572.048	6443.305
#3	5449.612	92300.84	7761.087	4610.116	6448.581

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2733-01MS Acquired: 8/4/2025 13:59:08 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8564153**	**2.108251**	**.9632904**	**2.141653**	**.8563121**	**3.597349**
Stddev	.0023778	.040875	.0033284	.006793	.0008963	.026710
%RSD	.2776512	1.938820	.3455244	.3171914	.1046637	.7424998
#1	.8536704	2.124423	.9640401	2.133966	.8571967	3.566515
#2	.8577316	2.138567	.9661800	2.146848	.8554046	3.613380
#3	.8578440	2.061765	.9596510	2.144145	.8563350	3.612152

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6716131**	**.2064881**	**.2006994**	**476.2364**	**.4004350**	**.2064075**
Stddev	.0016544	.0006330	.0008237	8.5526	.0021255	.0005892
%RSD	.2463305	.3065603	.4104303	1.795869	.5308030	.2854596
#1	.6701206	.2071988	.2011911	466.8489	.4010347	.2066855
#2	.6713268	.2062805	.2011586	483.5860	.4021962	.2068063
#3	.6733920	.2059850	.1997484	478.2742	.3980740	.2057307

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3059002**	**6.667381**	**.2036410**	**1.978585**	**.5174045**	**.0102513**
Stddev	.0007383	.046743	.0007564	.035361	.0016468	.0006481
%RSD	.2413571	.7010628	.3714464	1.787204	.3182735	6.322153
#1	.3065278	6.613413	.2029172	2.014077	.5184943	.0096705
#2	.3060860	6.695017	.2035795	1.943356	.5182091	.0101331
#3	.3050867	6.693714	.2044263	1.978323	.5155101	.0109504

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**151.5442**	**.3109395**	**.2275575**	**351.1976**	**.3504029**	**.6609548**
Stddev	.6645	.0056745	.0003052	1.6428	.0015488	.0006142
%RSD	.4384565	1.824945	.1341089	.4677581	.4420178	.0929246
#1	150.8252	.3052810	.2272383	349.3354	.3519073	.6612785
#2	151.6717	.3109076	.2275878	351.8160	.3504883	.6602465
#3	152.1356	.3166298	.2278464	352.4414	.3488131	.6613395

Sample Name: Q2733-01MS Acquired: 8/4/2025 13:59:08 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7157296**	**.1843642**	**10.04689**	**6.260155**	F **252.1203**	**.4550409**
Stddev	.0016945	.0016600	.07519	.028497	1.1683	.0010896
%RSD	.2367543	.9003820	.7483638	.4552176	.4633705	.2394440
#1	.7172106	.1825817	9.97325	6.290771	252.9685	.4562947
#2	.7160965	.1858657	10.04387	6.255292	252.6045	.4545042
#3	.7138817	.1846453	10.12354	6.234402	250.7878	.4543238

Elem	Sr4077
Units	ppm
Avg	**8.858492**
Stddev	.049109
%RSD	.5543757
#1	8.848937
#2	8.911676
#3	8.814862

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5043.301**	**84952.75**	**7461.725**	**4244.126**	**5777.780**
Stddev	8.497	190.76	9.669	8.294	10.902
%RSD	.1684871	.2245430	.1295820	.1954213	.1886869
#1	5035.473	85140.82	7451.089	4237.742	5773.831
#2	5042.092	84759.41	7464.100	4241.136	5769.403
#3	5052.338	84958.01	7469.985	4253.501	5790.106

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2733-01MSD Acquired: 8/4/2025 14:03:23 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8680847**	**2.181309**	**.9674129**	**2.184958**	**.8768451**	**3.520964**
Stddev	.0052299	.013068	.0046492	.006835	.0004627	.011149
%RSD	.6024704	.5990771	.4805778	.3128251	.0527625	.3166446
#1	.8740424	2.181730	.9727526	2.190869	.8765831	3.513891
#2	.8642501	2.194160	.9652234	2.186531	.8773793	3.515185
#3	.8659618	2.168035	.9642627	2.177474	.8765729	3.533816

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6501589**	**.2046529**	**.2022542**	**447.7161**	**.4061083**	**.2082404**
Stddev	.0013707	.0018228	.0008302	1.4943	.0006046	.0006613
%RSD	.2108291	.8906700	.4104842	.3337513	.1488776	.3175818
#1	.6493103	.2066866	.2032072	449.4062	.4056820	.2088904
#2	.6494262	.2041059	.2016880	447.1721	.4058427	.2082626
#3	.6517403	.2031662	.2018674	446.5701	.4068002	.2075683

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3079170**	**6.615606**	**.2072884**	**2.002357**	**.5213830**	**.0153682**
Stddev	.0012131	.060099	.0006500	.022356	.0026973	.0006088
%RSD	.3939559	.9084357	.3135694	1.116501	.5173440	3.961756
#1	.3093079	6.565363	.2079968	2.028171	.5242844	.0150812
#2	.3070777	6.599272	.2067195	1.989651	.5189514	.0160675
#3	.3073655	6.682183	.2071488	1.989250	.5209134	.0149559

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**143.1260**	**.3203813**	**.2280418**	**332.1506**	**.3439351**	**.6637899**
Stddev	1.3279	.0020540	.0005057	2.5109	.0041643	.0025473
%RSD	.9278139	.6411220	.2217712	.7559423	1.210789	.3837529
#1	141.7753	.3184713	.2276957	329.8573	.3485378	.6665756
#2	143.1726	.3225541	.2278075	331.7610	.3428389	.6632147
#3	144.4300	.3201186	.2286222	334.8335	.3404284	.6615793

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2733-01MSD Acquired: 8/4/2025 14:03:23 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7269146	.1906587	9.607449	6.218804	F 236.2907	.4423169
Stddev	.0019167	.0010143	.097809	.034505	.7981	.0006849
%RSD	.2636784	.5320057	1.018053	.5548521	.3377423	.1548379
#1	.7288957	.1908785	9.501292	6.245637	237.0607	.4425596
#2	.7267786	.1915452	9.627142	6.230895	236.3441	.4415438
#3	.7250695	.1895526	9.693913	6.179881	235.4673	.4428474

Elem	Sr4077
Units	ppm
Avg	8.346451
Stddev	.072954
%RSD	.8740726
#1	8.420483
#2	8.344247
#3	8.274625

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5092.954	86154.27	7639.410	4283.724	5855.309
Stddev	18.370	29.80	63.609	14.359	15.955
%RSD	.3606903	.0345838	.8326461	.3352079	.2724910
#1	5072.428	86121.64	7572.473	4300.300	5836.890
#2	5098.583	86161.16	7646.692	4275.088	5864.142
#3	5107.850	86180.03	7699.065	4275.784	5864.894

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2733-01A Acquired: 8/4/2025 14:07:39 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8762060**	**2.147820**	**.9786462**	**2.212129**	**.8671257**	**3.572830**
Stddev	.0040190	.036001	.0035518	.004924	.0010622	.020453
%RSD	.4586804	1.676163	.3629323	.2225901	.1224936	.5724569
#1	.8716634	2.189382	.9749349	2.216230	.8659476	3.596424
#2	.8792993	2.126353	.9820136	2.206668	.8680103	3.560130
#3	.8776553	2.127723	.9789902	2.213489	.8674192	3.561936

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6689524**	**.2026647**	**.2036042**	**465.2209**	**.4031477**	**.2097631**
Stddev	.0021044	.0021250	.0005351	1.4823	.0021154	.0006080
%RSD	.3145775	1.048552	.2627904	.3186140	.5247160	.2898395
#1	.6707758	.2048528	.2030241	466.9232	.4013899	.2095729
#2	.6666497	.2006089	.2037103	464.5239	.4054954	.2092730
#3	.6694316	.2025326	.2040783	464.2157	.4025576	.2104435

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3102882**	**6.779218**	**.2052690**	**1.963455**	**.5261953**	**.0738947**
Stddev	.0007535	.101382	.0000601	.012236	.0017509	.0017750
%RSD	.2428501	1.495486	.0292690	.6231807	.3327508	2.402076
#1	.3095786	6.662917	.2052348	1.955462	.5242181	.0731323
#2	.3110791	6.848942	.2052337	1.977541	.5268185	.0759235
#3	.3102068	6.825795	.2053383	1.957361	.5275494	.0726283

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**150.8594**	**.3168698**	**.2311539**	**349.1856**	**.3447544**	**.6697015**
Stddev	2.0656	.0015168	.0011646	4.2646	.0040095	.0002285
%RSD	1.369247	.4786883	.5038328	1.221289	1.163010	.0341222
#1	148.4784	.3179352	.2298338	344.2987	.3489879	.6695170
#2	152.1724	.3151332	.2315918	352.1539	.3410145	.6696304
#3	151.9274	.3175410	.2320362	351.1041	.3442608	.6699571

Sample Name: Q2733-01A Acquired: 8/4/2025 14:07:39 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7231939	.1864815	10.18114	6.261934	F 248.5081	.4494269
Stddev	.0024484	.0011467	.13842	.015678	.6945	.0035911
%RSD	.3385522	.6149224	1.359583	.2503705	.2794588	.7990493
#1	.7204144	.1854002	10.02132	6.254948	249.1370	.4526657
#2	.7241362	.1863603	10.26283	6.279891	247.7627	.4455650
#3	.7250312	.1876840	10.25927	6.250964	248.6245	.4500500

Elem	Sr4077
Units	ppm
Avg	8.733306
Stddev	.083482
%RSD	.9559086
#1	8.761565
#2	8.639362
#3	8.798992

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5042.311	86020.00	7689.699	4262.086	5782.448
Stddev	8.280	600.52	62.126	28.873	12.888
%RSD	.1642190	.6981174	.8079167	.6774437	.2228870
#1	5050.592	86713.04	7621.794	4294.832	5797.199
#2	5034.031	85653.55	7743.685	4240.286	5773.366
#3	5042.310	85693.40	7703.619	4251.141	5776.779

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2742-01 Acquired: 8/4/2025 14:12:42 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003829**	**.0027149**	**.0005902**	**-.005823**	**.0012084**	**.1569377**
Stddev	.001987	.0013993	.0003238	.001565	.0014805	.0086528
%RSD	51.90592	51.53909	54.87340	26.87025	122.5180	5.513504
#1	-.006018	.0042039	.0009597	-.007024	.0010737	.1595328
#2	-.002139	.0014272	.0003561	-.004054	-.000200	.1472844
#3	-.003330	.0025136	.0004546	-.006390	.002752	.1639960

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1501213**	**-.000146**	**-.000094**	**234.5109**	**-.000005**	**.0001961**
Stddev	.0004076	.000018	.000052	1.3696	.000140	.0001436
%RSD	.2715000	12.07184	55.47557	.5840102	2893.416	73.23041
#1	.1502720	-.000166	-.000102	233.0837	-.000066	.0002865
#2	.1496599	-.000138	-.000142	235.8144	.000156	.0000305
#3	.1504322	-.000134	-.000039	234.6346	-.000104	.0002712

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0086836**	**1.198664**	**.0277668**	**74.44869**	**.0040542**	**.0003586**
Stddev	.0002244	.006182	.0003534	.20318	.0005060	.0001538
%RSD	2.583661	.5157244	1.272730	.2729063	12.47987	42.88272
#1	.0086776	1.203960	.0281748	74.31527	.0042858	.0005358
#2	.0089109	1.200161	.0275701	74.68252	.0044028	.0002802
#3	.0084623	1.191871	.0275555	74.34829	.0034739	.0002598

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**541.9473**	**.0026669**	**.0599476**	**12.06578**	**.0551459**	**.0039661**
Stddev	1.9249	.0022906	.0000886	.03969	.0005449	.0002668
%RSD	.3551783	85.89037	.1477246	.3289421	.9881114	6.726100
#1	540.4299	.0004569	.0600273	12.03494	.0546895	.0042730
#2	541.2995	.0050304	.0598523	12.05184	.0549990	.0038365
#3	544.1125	.0025135	.0599632	12.11056	.0557491	.0037890

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2742-01 Acquired: 8/4/2025 14:12:42 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0247877	-.009017	F 16.53599	.0145435	19.60802	.0176859
Stddev	.0012398	.000867	.05885	.0027977	.10226	.0019158
%RSD	5.001820	9.617379	.3558782	19.23713	.5215424	10.83229
#1	.0241425	-.009688	16.60386	.0127847	19.55489	.0166961
#2	.0240034	-.008038	16.49929	.0130761	19.54325	.0198941
#3	.0262171	-.009325	16.50480	.0177697	19.72591	.0164675

Elem	Sr4077
Units	ppm
Avg	.4803802
Stddev	.0011252
%RSD	.2342226
#1	.4790810
#2	.4810354
#3	.4810241

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5035.314	85379.42	7813.944	4273.637	5753.955
Stddev	17.362	277.87	42.923	26.623	20.518
%RSD	.3448139	.3254498	.5493175	.6229493	.3565844
#1	5055.113	85379.82	7853.037	4242.905	5777.331
#2	5022.682	85101.35	7768.012	4289.653	5738.929
#3	5028.147	85657.08	7820.785	4288.353	5745.606

Sample Name: Q2734-01 Acquired: 8/4/2025 14:17:05 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0798964**	**-.027845**	**1.132288**	**-.003430**	**-.013693**	**131.6035**	**.9531233**
Stddev	.0001153	.001210	.002794	.000649	.001298	.2110	.0014280
%RSD	.1442630	4.345557	.2467501	18.92314	9.481033	.1603088	.1498221
#1	.0798586	-.028193	1.135501	-.003509	-.012504	131.4614	.9530721
#2	.0800258	-.026499	1.130935	-.004036	-.015078	131.5032	.9517216
#3	.0798048	-.028843	1.130428	-.002745	-.013497	131.8459	.9545762

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0106720**	**.0079528**	**80.41663**	**.1867926**	**.1394471**	**1.276279**	**229.1042**
Stddev	.0000693	.0002242	.36337	.0012317	.0002315	.001499	1.8749
%RSD	.6490685	2.819126	.4518574	.6593887	.1659826	.1174764	.8183584
#1	.0107312	.0079497	80.28163	.1854160	.1396941	1.275690	230.2377
#2	.0105958	.0077302	80.14008	.1877905	.1394120	1.277983	230.1348
#3	.0106890	.0081786	80.82818	.1871714	.1392352	1.275163	226.9401

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.755149**	**63.09698**	**.3488094**	**.0056684**	**6.748539**	**.3631217**	**1.206606**
Stddev	.011912	.09068	.0001957	.0008064	.087090	.0044570	.001747
%RSD	.2069856	.1437118	.0560898	14.22674	1.290508	1.227418	.1447646
#1	5.753457	63.17454	.3487963	.0064049	6.812409	.3675342	1.205373
#2	5.744174	63.11911	.3490113	.0057937	6.783875	.3586214	1.205840
#3	5.767817	62.99728	.3486206	.0048067	6.649335	.3632095	1.208605

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.23257**	**.3168342**	**.0051675**	**.0979991**	**3.559032**	**6.254461**	**6.082272**
Stddev	.04288	.0069504	.0003498	.0009031	.018048	.056001	.035547
%RSD	.4190099	2.193698	6.768614	.9215328	.5071159	.8953772	.5844287
#1	10.27732	.3219722	.0050273	.0970356	3.561573	6.227250	6.049154
#2	10.22854	.3196046	.0049096	.0988263	3.539848	6.318868	6.119830
#3	10.19185	.3089259	.0055656	.0981352	3.575676	6.217265	6.077833

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2734-01 Acquired: 8/4/2025 14:17:05 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**2.557539**	**.2133904**	**.1112267**
Stddev	.012578	.0031538	.0024963
%RSD	.4917957	1.477956	2.244336
#1	2.544371	.2159074	.1104723
#2	2.558819	.2098526	.1091946
#3	2.569428	.2144111	.1140132

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6211.726**	**106302.4**	**8968.099**	**5286.772**	**6202.215**
Stddev	13.513	181.0	91.082	18.882	13.533
%RSD	.2175479	.1702361	1.015619	.3571638	.2181926
#1	6209.704	106507.8	9037.396	5272.379	6208.692
#2	6199.337	106166.4	9001.964	5308.152	6186.661
#3	6226.137	106233.0	8864.935	5279.785	6211.292

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2741-01 Acquired: 8/4/2025 14:21:05 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0681009**	**-.025500**	**.1910103**	**-.000839**	**-.011622**	**75.61708**	**.5076491**
Stddev	.0008846	.001116	.0029728	.001295	.002947	.07632	.0007040
%RSD	1.298917	4.376894	1.556375	154.3512	25.35986	.1009300	.1386740
#1	.0686174	-.024476	.1944256	.000239	-.014637	75.58746	.5083488
#2	.0670795	-.025336	.1890033	-.000481	-.008748	75.70377	.5069409
#3	.0686057	-.026690	.1896019	-.002276	-.011481	75.56001	.5076575

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0075302**	**.0002605**	**138.8727**	**.1538403**	**.0807967**	**.2194822**	**171.3996**
Stddev	.0000995	.0002223	.2685	.0005700	.0002093	.0015022	1.7433
%RSD	1.321734	85.33349	.1933536	.3705323	.2590934	.6844265	1.017111
#1	.0074267	.0002284	139.1740	.1531951	.0810316	.2210594	171.3749
#2	.0076252	.0004971	138.7851	.1540502	.0806298	.2180684	169.6687
#3	.0075389	.0000560	138.6589	.1542757	.0807289	.2193189	173.1551

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.814079**	**53.13684**	**.1529534**	**.0031652**	**3.263760**	**.2653356**	**.5830677**
Stddev	.002249	.16583	.0006261	.0003081	.057617	.0024855	.0013303
%RSD	.0589751	.3120809	.4093256	9.735655	1.765362	.9367543	.2281466
#1	3.816606	52.99501	.1531781	.0031532	3.256819	.2625192	.5844327
#2	3.812294	53.31917	.1522460	.0028632	3.209928	.2662653	.5829952
#3	3.813338	53.09635	.1534361	.0034791	3.324534	.2672223	.5817752

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**12.09051**	**.0416428**	**.0111158**	**.0146932**	**2.051517**	**7.318589**	**3.421180**
Stddev	.11521	.0128555	.0000792	.0003642	.018389	.298794	.016390
%RSD	.9529128	30.87093	.7126885	2.478832	.8963554	4.082670	.4790820
#1	12.08541	.0408347	.0111777	.0151049	2.048292	7.051662	3.439776
#2	11.97793	.0292104	.0110265	.0144130	2.071305	7.262739	3.414929
#3	12.20819	.0548833	.0111432	.0145615	2.034954	7.641368	3.408835

Sample Name: Q2741-01 Acquired: 8/4/2025 14:21:05 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**6.220330**	**.1361378**	**.7797567**
Stddev	.021679	.0005093	.0028634
%RSD	.3485178	.3741157	.3672229
#1	6.239478	.1355558	.7816136
#2	6.196792	.1363550	.7811976
#3	6.224720	.1365024	.7764590

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5778.546**	**98620.54**	**8318.733**	**4880.539**	**6206.342**
Stddev	18.266	152.21	82.825	2.546	9.745
%RSD	.3161088	.1543383	.9956419	.0521643	.1570197
#1	5763.928	98739.45	8321.042	4878.419	6195.188
#2	5799.023	98673.17	8234.777	4879.835	6213.208
#3	5772.687	98449.00	8400.379	4883.362	6210.630

Sample Name: Q2743-01 Acquired: 8/4/2025 14:25:08 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2026312**	**-.021863**	**11.05358**	**.0012240**	**.0029486**	**114.5813**
Stddev	.0008695	.002633	.03623	.0033835	.0012670	.3464
%RSD	.4291005	12.04550	.3277347	276.4349	42.96997	.3023451
#1	.2031049	-.023499	11.02609	.0041927	.0028075	114.9373
#2	.2031609	-.023264	11.04002	-.002460	.0042802	114.5611
#3	.2016277	-.018825	11.09463	.001939	.0017580	114.2453

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.051799**	**.0106260**	**.0135543**	**325.8345**	**.2291957**	**.1074341**
Stddev	.009883	.0001460	.0000165	1.0513	.0011899	.0002892
%RSD	.2439204	1.374040	.1219515	.3226369	.5191796	.2692226
#1	4.061074	.0106950	.0135724	326.9974	.2305177	.1074033
#2	4.052921	.0107247	.0135401	324.9514	.2288590	.1071615
#3	4.041403	.0104583	.0135503	325.5548	.2282103	.1077375

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.634524**	**193.1793**	**2.645489**	**71.86863**	**.2834584**	**.0153154**
Stddev	.009388	1.6399	.007431	.32162	.0014029	.0008697
%RSD	.3563613	.8488790	.2808901	.4475139	.4949043	5.678928
#1	2.628278	192.1179	2.653839	72.22737	.2826532	.0143156
#2	2.629973	192.3520	2.643028	71.77246	.2826437	.0157329
#3	2.645320	195.0680	2.639601	71.60607	.2850782	.0158976

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.580323**	**.3506352**	**4.457690**	**11.73480**	**.0833784**	**.0166948**
Stddev	.029356	.0021633	.008676	.11019	.0110878	.0000413
%RSD	.6409177	.6169667	.1946347	.9390061	13.29818	.2474628
#1	4.584635	.3483125	4.463668	11.66759	.0715330	.0166478
#2	4.549049	.3510006	4.461662	11.67483	.0850934	.0167110
#3	4.607285	.3525925	4.447738	11.86196	.0935088	.0167256

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2743-01 Acquired: 8/4/2025 14:25:08 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6490466	3.579469	F 21.85182	F 22.50887	6.010009	.2048905
Stddev	.0013743	.016668	.24991	.01308	.017774	.0030687
%RSD	.2117438	.4656481	1.143672	.0580957	.2957474	1.497740
#1	.6474609	3.580140	21.90387	22.52372	5.991119	.2026501
#2	.6497847	3.562476	21.57999	22.49910	6.012506	.2083882
#3	.6498940	3.595791	22.07162	22.50379	6.026404	.2036332

Elem	Sr4077
Units	ppm
Avg	2.013551
Stddev	.019468
%RSD	.9668285
#1	2.029163
#2	2.019751
#3	1.991738

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6039.484	102811.6	9178.543	5073.206	5946.380
Stddev	6.923	371.4	72.605	12.289	11.572
%RSD	.1146231	.3612195	.7910249	.2422269	.1946122
#1	6045.739	102785.7	9099.081	5080.788	5955.988
#2	6040.667	103195.2	9195.130	5079.802	5949.617
#3	6032.046	102453.8	9241.420	5059.028	5933.533

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: CCV03 Acquired: 8/4/2025 14:43:24 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.887699**	**5.424548**	**4.644272**	**5.051938**	**4.993085**	**9.425452**
Stddev	.024410	.082576	.021580	.010807	.019201	.115874
%RSD	.4994087	1.522260	.4646609	.2139268	.3845526	1.229377
#1	4.865246	5.334771	4.630106	5.041593	4.985627	9.556688
#2	4.884169	5.497254	4.633601	5.051065	4.978733	9.382411
#3	4.913681	5.441620	4.669109	5.063155	5.014897	9.337257

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.740061**	**.2356263**	**2.306539**	**24.44081**	**.9069431**	**2.322529**
Stddev	.119433	.0029379	.010066	.25087	.0049643	.010310
%RSD	1.226209	1.246855	.4364174	1.026428	.5473644	.4439102
#1	9.875268	.2390158	2.297734	24.72659	.9067920	2.315145
#2	9.648928	.2340527	2.304370	24.25690	.9119812	2.318134
#3	9.695988	.2338104	2.317513	24.33895	.9020561	2.334308

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.187689**	**4.988521**	**2.403007**	**22.99524**	**2.329188**	**1.212028**
Stddev	.004736	.014062	.022408	.31344	.009781	.000215
%RSD	.3987208	.2818931	.9325186	1.363065	.4199135	.0177035
#1	1.185105	4.972631	2.428860	23.34617	2.322664	1.212180
#2	1.184808	4.993571	2.391006	22.89644	2.324467	1.211782
#3	1.193155	4.999361	2.389154	22.74310	2.340434	1.212121

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.59068**	**2.376575**	**2.552583**	**25.11571**	**4.755081**	**4.882919**
Stddev	.01375	.032911	.003936	.05451	.067555	.017458
%RSD	.0582752	1.384798	.1541831	.2170433	1.420688	.3575417
#1	23.57485	2.413406	2.554993	25.05370	4.831805	4.870671
#2	23.59761	2.366268	2.554714	25.13733	4.728914	4.875177
#3	23.59958	2.350052	2.548041	25.15609	4.704524	4.902910

Sample Name: CCV03 Acquired: 8/4/2025 14:43:24 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.692204**	**4.907049**	**4.876584**	F **4.416047**	**4.791513**	**4.584649**
Stddev	.019448	.051800	.003399	.019544	.017386	.062031
%RSD	.4144782	1.055622	.0697024	.4425691	.3628398	1.353019
#1	4.672929	4.966740	4.874046	4.399414	4.774433	4.651243
#2	4.691863	4.873900	4.875260	4.411154	4.790919	4.574198
#3	4.711821	4.880506	4.880446	4.437572	4.809189	4.528508

Elem	Sr4077
Units	ppm
Avg	**4.813588**
Stddev	.049043
%RSD	1.018843
#1	4.869818
#2	4.791292
#3	4.779654

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5538.849**	**93952.66**	**8304.604**	**4615.462**	**6601.219**
Stddev	15.889	136.99	104.805	9.723	13.484
%RSD	.2868593	.1458127	1.262013	.2106521	.2042622
#1	5536.420	94078.53	8187.206	4617.776	6606.976
#2	5555.813	93806.75	8337.861	4623.819	6610.869
#3	5524.315	93972.72	8388.746	4604.791	6585.812

Sample Name: CCB03 Acquired: 8/4/2025 14:54:00 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001004**	**-.002587**	**-.000449**	**-.002294**	**-.001972**	**.0103815**	**-.001047**
Stddev	.001876	.001908	.000428	.002167	.001482	.0075638	.000294
%RSD	186.8362	73.76854	95.34063	94.44399	75.16611	72.85841	28.10387
#1	.000015	-.001550	-.000692	-.004779	-.002488	.0154775	-.001347
#2	.000141	-.001422	-.000700	-.000798	-.000301	.0016907	-.001035
#3	-.003169	-.004789	.000045	-.001305	-.003127	.0139763	-.000759

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000011**	**.0001790**	**.0107735**	**-.001616**	**.0003821**	**.0000369**	**-.003017**
Stddev	.0000426	.0000059	.0102869	.000435	.0001537	.0002036	.004215
%RSD	4020.786	3.275910	95.48322	26.90498	40.22742	550.9103	139.6932
#1	-.000011	.0001724	.0191212	-.001115	.0002462	-.000198	-.004511
#2	.000048	.0001813	.0139181	-.001831	.0005489	.000168	-.006282
#3	-.000034	.0001835	-.000719	-.001900	.0003512	.000140	.001741

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001003**	**.0409153**	**.0002490**	**.0003119**	**.0893059**	**.0013942**	**-.000553**
Stddev	.000362	.0306196	.0001906	.0003427	.0109424	.0024088	.000152
%RSD	36.07911	74.83658	76.53609	109.8619	12.25273	172.7769	27.43109
#1	-.000969	.0186428	.0004563	.0002871	.1011304	.0032729	-.000472
#2	-.000660	.0758320	.0000813	-.000018	.0795372	-.001321	-.000727
#3	-.001381	.0282711	.0002094	.000666	.0872501	.002231	-.000459

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2938677**	**-.002224**	**.0005655**	**-.000138**	**.0000446**	**.0038449**	**.0073822**
Stddev	.0216567	.000710	.0004134	.000467	.0019057	.0047645	.0016628
%RSD	7.369537	31.93202	73.09943	337.7094	4270.500	123.9160	22.52432
#1	.2786912	-.001437	.0006482	-.000243	.0021869	.0014573	.0081408
#2	.3186684	-.002417	.0001171	.000372	-.000591	.0007464	.0054754
#3	.2842437	-.002817	.0009314	-.000544	-.001462	.0093311	.0085303

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: CCB03 Acquired: 8/4/2025 14:54:00 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0063128	F -.010474	.0001927
Stddev	.0013811	.004020	.0000176
%RSD	21.87798	38.38015	9.108911
#1	.0078797	-.014620	.0002069
#2	.0052726	-.006593	.0001731
#3	.0057859	-.010211	.0001981

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5731.640	97444.49	8295.522	4770.804	7438.205
Stddev	5.190	212.63	29.327	14.947	14.198
%RSD	.0905518	.2182057	.3535267	.3133113	.1908764
#1	5725.882	97362.34	8311.979	4780.745	7430.057
#2	5735.957	97685.94	8312.925	4778.053	7454.599
#3	5733.082	97285.20	8261.663	4753.615	7429.959

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2753-01 Acquired: 8/4/2025 14:58:51 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0957210**	**-.004256**	**.7666531**	**-.010024**	**.0012154**	**174.9108**	**1.539126**
Stddev	.0040433	.001646	.0008593	.003657	.0028492	.1555	.001781
%RSD	4.224063	38.67491	.1120788	36.48494	234.4292	.0888837	.1157141
#1	.1003678	-.002387	.7665876	-.010810	.0031000	174.9577	1.541058
#2	.0937892	-.004889	.7658284	-.006037	.0026086	175.0375	1.537549
#3	.0930059	-.005492	.7675432	-.013224	-.002062	174.7373	1.538771

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0117925**	**.0121572**	**561.4770**	**3.737702**	**.2223763**	**.8773246**	**356.7957**
Stddev	.0001079	.0000859	3.5500	.003964	.0005678	.0034433	.7094
%RSD	.9151479	.7064084	.6322654	.1060598	.2553487	.3924819	.1988140
#1	.0116802	.0120800	557.3917	3.733133	.2218627	.8748547	357.2673
#2	.0118020	.0121418	563.2272	3.740228	.2222800	.8758613	355.9799
#3	.0118954	.0122497	563.8121	3.739746	.2229861	.8812580	357.1400

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.509101**	**340.4060**	**.5029179**	**.0151111**	**31.37846**	**.7742756**	**1.754994**
Stddev	.003508	.5521	.0021371	.0009541	.08208	.0030365	.008721
%RSD	.0636780	.1621880	.4249424	6.313765	.2615754	.3921789	.4969513
#1	5.511266	340.3437	.5020356	.0148015	31.47293	.7749904	1.764676
#2	5.505053	340.9866	.5013631	.0143503	31.33778	.7768910	1.752555
#3	5.510983	339.8877	.5053549	.0161816	31.32467	.7709455	1.747752

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**38.51879**	**.4215986**	**.0160442**	**.0733122**	**12.55244**	**12.19184**	**13.41759**
Stddev	.19889	.0027359	.0001649	.0009126	.03157	.12908	.07075
%RSD	.5163329	.6489444	1.027521	1.244809	.2515169	1.058730	.5272572
#1	38.70160	.4215592	.0162331	.0730274	12.55815	12.09925	13.38068
#2	38.30701	.4188826	.0159294	.0743332	12.51840	12.13700	13.37292
#3	38.54777	.4243541	.0159700	.0725759	12.58076	12.33929	13.49915

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2753-01 Acquired: 8/4/2025 14:58:51 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**19.05323**	**.2831442**	**2.239012**
Stddev	.10985	.0060079	.014626
%RSD	.5765624	2.121834	.6532305
#1	19.01812	.2890873	2.255472
#2	18.96523	.2770737	2.234054
#3	19.17635	.2832715	2.227509

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5895.692**	**103691.4**	**9773.511**	**5008.856**	**5434.167**
Stddev	13.670	187.5	43.537	22.615	16.037
%RSD	.2318641	.1808409	.4454588	.4515067	.2951130
#1	5907.773	103753.4	9814.827	4987.709	5444.269
#2	5898.450	103480.8	9728.050	5006.162	5442.556
#3	5880.854	103840.1	9777.656	5032.698	5415.675

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2758-01 Acquired: 8/4/2025 15:03:09 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2138828**	**-.050440**	**8.279147**	**.0103532**	**.0744110**	**91.94769**	**3.472369**
Stddev	.0013945	.003615	.010021	.0012284	.0032474	.31337	.012367
%RSD	.6519746	7.166020	.1210343	11.86522	4.364170	.3408118	.3561529
#1	.2123925	-.053493	8.276583	.0097794	.0747976	92.17046	3.479951
#2	.2151560	-.046449	8.270656	.0095166	.0774479	91.58936	3.458099
#3	.2140999	-.051377	8.290200	.0117635	.0709876	92.08325	3.479058

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0109097**	**.0481277**	**57.85778**	**.2908835**	**.1217018**	**2.720003**	**354.8127**
Stddev	.0000748	.0002363	.29096	.0008488	.0003324	.004216	1.1896
%RSD	.6859979	.4908948	.5028959	.2918113	.2731713	.1550159	.3352722
#1	.0109223	.0478554	57.93680	.2902078	.1214083	2.717475	356.1526
#2	.0109774	.0482495	57.53547	.2906064	.1216342	2.717664	353.8806
#3	.0108293	.0482782	58.10108	.2918363	.1220629	2.724870	354.4050

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.701109**	**27.84784**	**.5878527**	**.0787748**	**3.404661**	**.3960250**	**8.405977**
Stddev	.021618	.06079	.0003514	.0007075	.012147	.0011824	.020848
%RSD	.4598414	.2182775	.0597842	.8981748	.3567727	.2985710	.2480139
#1	4.714605	27.89761	.5880813	.0794331	3.412447	.3972315	8.415380
#2	4.676175	27.78009	.5874480	.0780266	3.410870	.3959754	8.382084
#3	4.712545	27.86583	.5880287	.0788646	3.390664	.3948683	8.420468

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.40596**	**.1059254**	**.0389463**	**1.545463**	**2.953953**	**6.218144**	**10.15438**
Stddev	.05764	.0097593	.0002101	.001353	.017344	.171672	.00648
%RSD	.5538797	9.213403	.5395273	.0875426	.5871363	2.760818	.0638422
#1	10.44300	.1156661	.0387087	1.543947	2.973848	6.397491	10.15385
#2	10.33955	.1059625	.0391077	1.545894	2.942019	6.055346	10.14818
#3	10.43531	.0961475	.0390226	1.546548	2.945993	6.201597	10.16112

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2758-01 Acquired: 8/4/2025 15:03:09 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**8.636914**	**.1650970**	**.0651473**
Stddev	.021434	.0005581	.0012892
%RSD	.2481662	.3380403	1.978847
#1	8.619462	.1645293	.0655420
#2	8.630442	.1656450	.0637069
#3	8.660838	.1651167	.0661929

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6292.784**	**109018.8**	**9864.917**	**5300.934**	**6470.275**
Stddev	4.973	193.7	24.057	12.943	6.848
%RSD	.0790330	.1776579	.2438644	.2441669	.1058446
#1	6296.336	108797.6	9866.941	5286.706	6470.517
#2	6294.916	109157.6	9887.898	5312.009	6476.999
#3	6287.100	109101.3	9839.912	5304.087	6463.308

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: PB169096BL Acquired: 8/4/2025 15:07:10 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001977**	**-.002884**	**-.000528**	**-.001637**	**-.004900**	**.0016097**	**-.002680**
Stddev	.000199	.000864	.000213	.001361	.001796	.0060949	.000517
%RSD	10.08525	29.96950	40.24217	83.11953	36.65833	378.6391	19.29425
#1	-.001844	-.003316	-.000772	-.002080	-.006351	.0085141	-.002666
#2	-.002206	-.003448	-.000387	-.002722	-.002891	-.000662	-.003203
#3	-.001880	-.001889	-.000425	-.000110	-.005457	-.003023	-.002170

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000152**	**-.000001**	**.0023385**	**-.001615**	**.0002250**	**-.000264**	**-.003889**
Stddev	.0000885	.000041	.0078937	.000068	.0001255	.000364	.001157
%RSD	584.1273	3902.284	337.5518	4.213027	55.76938	138.0304	29.74646
#1	-.000083	.000044	.0086970	-.001687	.0002763	-.000683	-.005140
#2	.000089	-.000011	.0048150	-.001552	.0000820	-.000031	-.002858
#3	.000039	-.000036	-.006496	-.001605	.0003166	-.000077	-.003670

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001492**	**.0096601**	**.0001442**	**.0006806**	**.1597940**	**-.001237**	**-.001059**
Stddev	.000337	.0066017	.0002597	.0004293	.0124086	.002326	.000295
%RSD	22.55678	68.33944	180.1316	63.07156	7.765366	188.0753	27.87411
#1	-.001134	.0078317	-.000113	.0004680	.1521892	.001441	-.001389
#2	-.001801	.0169833	.000139	.0011747	.1530799	-.002759	-.000967
#3	-.001541	.0041654	.000406	.0003991	.1741130	-.002393	-.000821

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3615645**	**-.005016**	**-.000156**	**-.000963**	**-.000403**	**-.006997**	**.0043014**
Stddev	.0385000	.000976	.000114	.000449	.000901	.016283	.0019691
%RSD	10.64816	19.46754	72.94046	46.59433	223.6372	232.7036	45.77687
#1	.4054588	-.004498	-.000198	-.001450	-.000248	-.025145	.0020901
#2	.3335167	-.006142	-.000027	-.000566	.000411	.006337	.0049491
#3	.3457181	-.004407	-.000243	-.000873	-.001371	-.002185	.0058650

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: PB169096BL Acquired: 8/4/2025 15:07:10 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0052634	-.004898	-.000125
Stddev	.0012532	.001441	.000050
%RSD	23.81049	29.42826	40.09690
#1	.0045169	-.005395	-.000140
#2	.0045630	-.003274	-.000166
#3	.0067102	-.006026	-.000069

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5845.319	101785.1	8372.885	4958.919	7527.062
Stddev	11.689	286.8	21.823	31.698	16.352
%RSD	.1999767	.2817397	.2606344	.6392020	.2172409
#1	5848.584	101883.8	8397.556	4988.710	7525.701
#2	5855.029	102009.5	8364.988	4962.438	7544.052
#3	5832.345	101462.0	8356.109	4925.608	7511.434

Sample Name: Q2740-01 Acquired: 8/4/2025 15:15:29 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0601583**	**-.021496**	**.2850456**	**.0005846**	**-.015433**	**114.0077**	**.4989343**
Stddev	.0008284	.003026	.0010466	.0020494	.001770	1.8975	.0081146
%RSD	1.377101	14.07479	.3671570	350.5650	11.47021	1.664392	1.626386
#1	.0608918	-.024977	.2848814	.0013865	-.016836	111.8576	.4897999
#2	.0592597	-.019498	.2840908	-.001744	-.016017	115.4480	.5053095
#3	.0603233	-.020014	.2861646	.002112	-.013444	114.7174	.5016936

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0079424**	**.0013461**	**40.88128**	**.1453248**	**.0899992**	**.2431471**	**214.9471**
Stddev	.0002341	.0002118	.69675	.0007582	.0001543	.0013621	1.0361
%RSD	2.947739	15.73117	1.704320	.5217509	.1713981	.5601883	.4820197
#1	.0076868	.0013432	40.07957	.1457745	.0900391	.2425425	215.2571
#2	.0081464	.0011358	41.34052	.1444494	.0898289	.2421919	215.7927
#3	.0079939	.0015593	41.22374	.1457506	.0901295	.2447068	213.7913

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.343718**	**40.68533**	**.1619377**	**.0076301**	**7.495061**	**.3018671**	**.5267707**
Stddev	.058923	.69786	.0005233	.0010430	.051692	.0034467	.0017169
%RSD	1.762204	1.715252	.3231413	13.66965	.6896861	1.141801	.3259214
#1	3.275912	39.88284	.1622128	.0075574	7.523675	.2980727	.5286984
#2	3.382482	41.14986	.1613342	.0087075	7.526119	.3027241	.5254060
#3	3.372762	41.02330	.1622660	.0066253	7.435388	.3048045	.5262078

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.445972**	**.0935112**	**.0036873**	**.0157001**	**2.927158**	**8.342020**	**5.966076**
Stddev	.088848	.0111795	.0000870	.0007995	.030667	.313479	.031427
%RSD	1.051960	11.95525	2.360571	5.092213	1.047678	3.757835	.5267574
#1	8.506332	.1045237	.0035868	.0165697	2.891898	8.331193	5.963218
#2	8.487636	.0938381	.0037341	.0155337	2.947624	8.660773	5.936176
#3	8.343948	.0821719	.0037409	.0149970	2.941952	8.034095	5.998834

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2740-01 Acquired: 8/4/2025 15:15:29 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**2.694316**	**.1179152**	**-.095517**
Stddev	.015477	.0033121	.002147
%RSD	.5744229	2.808904	2.247765
#1	2.707911	.1144568	-.097787
#2	2.677473	.1182301	-.095243
#3	2.697564	.1210586	-.093520

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6422.091**	**111158.3**	**10000.67**	**5433.276**	**6703.292**
Stddev	24.902	214.2	183.40	15.674	23.821
%RSD	.3877556	.1927386	1.833894	.2884756	.3553678
#1	6434.950	110966.5	10204.99	5415.389	6720.565
#2	6437.934	111389.6	9946.75	5439.833	6713.194
#3	6393.388	111118.9	9850.27	5444.607	6676.116

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2740-01DUP Acquired: 8/4/2025 15:19:31 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0587561**	**-.020789**	**.3159849**	**.0002960**	**-.017639**	**116.1339**	**.4946312**
Stddev	.0029039	.002465	.0019953	.0033254	.001943	.8005	.0031630
%RSD	4.942309	11.85785	.6314519	1123.501	11.01392	.6892977	.6394618
#1	.0605719	-.018023	.3137668	-.003501	-.017458	116.5661	.4967678
#2	.0602894	-.022755	.3165546	.002692	-.019667	116.6253	.4961281
#3	.0554069	-.021587	.3176335	.001697	-.015794	115.2101	.4909976

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0080066**	**.0016181**	**48.79580**	**.1468359**	**.0936180**	**.2652391**	**217.0486**
Stddev	.0000933	.0001069	.27064	.0004205	.0007623	.0015977	1.1050
%RSD	1.164909	6.605777	.5546456	.2863797	.8142250	.6023680	.5091022
#1	.0079394	.0014947	48.99578	.1465045	.0928641	.2640832	215.7991
#2	.0081131	.0016783	48.90380	.1473089	.0936015	.2645717	217.4496
#3	.0079674	.0016814	48.48784	.1466942	.0943884	.2670623	217.8971

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.598403**	**44.60370**	**.1653258**	**.0073409**	**7.510562**	**.3109951**	**.5166814**
Stddev	.020736	.18639	.0007128	.0003337	.053048	.0022334	.0014165
%RSD	.5762623	.4178701	.4311607	4.545498	.7063134	.7181394	.2741602
#1	3.606459	44.78385	.1647808	.0069920	7.453359	.3102637	.5154408
#2	3.613903	44.61560	.1661324	.0076570	7.558137	.3135025	.5182248
#3	3.574848	44.41165	.1650640	.0073735	7.520189	.3092192	.5163785

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.940663**	**.1016509**	**.0040851**	**.0146159**	**2.958903**	**8.537185**	**5.933210**
Stddev	.060901	.0029970	.0002171	.0015986	.035321	.098356	.017381
%RSD	.7669569	2.948369	5.314397	10.93737	1.193728	1.152093	.2929430
#1	7.870749	.0988760	.0038366	.0164440	2.994798	8.633126	5.915142
#2	7.969059	.1012475	.0042376	.0134803	2.957726	8.541849	5.949811
#3	7.982180	.1048292	.0041811	.0139235	2.924185	8.436579	5.934677

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2740-01DUP Acquired: 8/4/2025 15:19:31 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**2.569044**	**.1214514**	**-.089126**
Stddev	.014363	.0011400	.001695
%RSD	.5590605	.9386832	1.901633
#1	2.557388	.1209155	-.087389
#2	2.585089	.1206781	-.089215
#3	2.564653	.1227607	-.090775

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6383.076**	**109862.9**	**9892.069**	**5383.837**	**6614.727**
Stddev	19.092	351.5	65.647	24.291	22.304
%RSD	.2991048	.3199393	.6636299	.4511767	.3371845
#1	6403.077	110264.8	9844.557	5411.512	6639.871
#2	6381.108	109710.9	9864.673	5373.950	6606.984
#3	6365.045	109613.0	9966.976	5366.049	6597.327

Sample Name: Q2740-01LX5 Acquired: 8/4/2025 15:23:33 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0114247**	**-.004763**	**.0608822**	**-.001140**	**-.004428**	**27.33667**	**.1198741**
Stddev	.0031252	.002477	.0017784	.001447	.002236	.05185	.0007399
%RSD	27.35448	52.01002	2.920995	126.9597	50.50429	.1896684	.6172038
#1	.0149857	-.003468	.0628893	.000470	-.006651	27.39017	.1192073
#2	.0101499	-.003202	.0602544	-.002332	-.002178	27.28665	.1197450
#3	.0091383	-.007619	.0595029	-.001558	-.004455	27.33317	.1206700

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0020499**	**-.000314**	**10.05932**	**.0338072**	**.0186751**	**.0592371**	**51.39489**
Stddev	.0000452	.000092	.01541	.0001421	.0000913	.0001114	.29209
%RSD	2.204135	29.31808	.1531460	.4204012	.4891646	.1879716	.5683320
#1	.0020428	-.000312	10.06292	.0339710	.0186506	.0592413	51.72913
#2	.0020086	-.000407	10.07261	.0337155	.0185985	.0591237	51.26694
#3	.0020982	-.000223	10.04243	.0337352	.0187762	.0593463	51.18861

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8258233**	**10.04175**	**.0338293**	**.0013772**	**1.814524**	**.0731866**	**.1254675**
Stddev	.0015643	.09383	.0005142	.0001081	.006405	.0014151	.0005380
%RSD	.1894258	.9344308	1.519982	7.851305	.3529651	1.933610	.4288276
#1	.8260561	10.13927	.0344084	.0012563	1.817807	.0729877	.1260888
#2	.8272582	9.95210	.0334264	.0014105	1.807144	.0746907	.1251568
#3	.8241556	10.03389	.0336531	.0014648	1.818623	.0718815	.1251569

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.187361**	**.0087483**	**.0004761**	**.0017859**	**.7157088**	**2.171288**	**1.248960**
Stddev	.007548	.0006971	.0002154	.0003783	.0071458	.086899	.006303
%RSD	.3450953	7.968752	45.24824	21.18133	.9984288	4.002205	.5046981
#1	2.187159	.0095356	.0002372	.0015675	.7230291	2.237132	1.255407
#2	2.179915	.0082094	.0005356	.0015674	.7153459	2.072792	1.248662
#3	2.195008	.0084998	.0006556	.0022226	.7087513	2.203940	1.242811

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2740-01LX5 Acquired: 8/4/2025 15:23:33 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.5562493	.0227762	-.022328
Stddev	.0021657	.0009004	.000179
%RSD	.3893332	3.953438	.8028667
#1	.5566553	.0220899	-.022483
#2	.5539094	.0224429	-.022369
#3	.5581833	.0237958	-.022132

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5878.586	99868.39	8639.124	4888.806	7082.898
Stddev	9.100	394.29	31.135	12.996	7.984
%RSD	.1547934	.3948059	.3603910	.2658414	.1127233
#1	5868.191	99904.82	8658.630	4888.631	7076.269
#2	5885.110	99457.15	8603.218	4875.899	7080.662
#3	5882.457	100243.2	8655.524	4901.890	7091.761

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2740-01MS Acquired: 8/4/2025 15:27:42 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7496555	2.114708	1.215441	1.709726	.3516101	133.9694	.7096058
Stddev	.0042552	.028556	.002007	.007149	.0028020	.0153	.0004715
%RSD	.5676258	1.350354	.1651004	.4181524	.7969123	.0114036	.0664512
#1	.7533083	2.147048	1.217340	1.717972	.3543379	133.9572	.7097875
#2	.7449831	2.104109	1.215641	1.705941	.3487394	133.9865	.7090704
#3	.7506751	2.092968	1.213341	1.705265	.3517529	133.9645	.7099595

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1771721	.1902928	46.52999	.4876150	.2970501	.5357169	232.9811
Stddev	.0006555	.0002140	.21673	.0018377	.0004468	.0019311	.1559
%RSD	.3699855	.1124565	.4657865	.3768781	.1503999	.3604638	.0669174
#1	.1767149	.1904978	46.30774	.4890008	.2967419	.5354223	233.0947
#2	.1779232	.1900708	46.74075	.4883139	.2968459	.5339501	233.0454
#3	.1768784	.1903098	46.54149	.4855304	.2975625	.5377784	232.8034

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.112943	47.43986	.6631065	.0745779	10.41222	.5939609	.7451838
Stddev	.014253	.07135	.0008001	.0004281	.03314	.0014656	.0032235
%RSD	.3465340	.1503977	.1206641	.5740809	.3182344	.2467488	.4325803
#1	4.096794	47.39536	.6639786	.0740859	10.44956	.5942792	.7458843
#2	4.123763	47.52215	.6624063	.0747820	10.38634	.5952413	.7416676
#3	4.118272	47.40206	.6629345	.0748658	10.40074	.5923624	.7479994

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.35406	.2774447	.3536638	.6552097	3.082702	8.313481	11.45938
Stddev	.06188	.0011820	.0011324	.0006747	.002714	.061163	.02251
%RSD	.3565515	.4260127	.3201828	.1029768	.0880345	.7357102	.1964037
#1	17.42140	.2786897	.3537345	.6557604	3.084350	8.321583	11.43447
#2	17.29971	.2763380	.3524978	.6554116	3.084187	8.248671	11.46542
#3	17.34106	.2773064	.3547592	.6544571	3.079570	8.370190	11.47825

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2740-01MS Acquired: 8/4/2025 15:27:42 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**2.474113**	**.3103010**	**.0852198**
Stddev	.008928	.0023798	.0005076
%RSD	.3608576	.7669348	.5955955
#1	2.473345	.3099616	.0849503
#2	2.465594	.3128323	.0849039
#3	2.483400	.3081091	.0858053

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6302.975**	**108249.9**	**9651.923**	**5296.618**	**6485.342**
Stddev	29.629	268.4	29.964	23.897	17.636
%RSD	.4700800	.2479805	.3104485	.4511796	.2719393
#1	6322.690	108006.2	9680.681	5295.750	6503.164
#2	6317.333	108205.9	9620.883	5320.937	6484.965
#3	6268.903	108537.6	9654.203	5273.166	6467.897

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2740-01MSD Acquired: 8/4/2025 15:31:38 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7345470**	**2.097679**	**1.229112**	**1.673623**	**.3290827**	**138.9777**	**.7174662**
Stddev	.0020335	.032844	.000655	.003418	.0005487	.3294	.0017059
%RSD	.2768429	1.565714	.0532798	.2042551	.1667327	.2370466	.2377601
#1	.7323061	2.120392	1.229843	1.676052	.3295924	139.1037	.7180741
#2	.7362749	2.112625	1.228915	1.675103	.3285019	139.2255	.7187849
#3	.7350600	2.060021	1.228579	1.669714	.3291538	138.6038	.7155397

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1728371**	**.1862503**	**63.82360**	**.4734833**	**.3010534**	**.5615803**	**243.2166**
Stddev	.0011738	.0004644	.04518	.0034473	.0004368	.0035231	1.7228
%RSD	.6791313	.2493355	.0707902	.7280814	.1451016	.6273570	.7083397
#1	.1723102	.1861991	63.86555	.4771765	.3010368	.5582384	244.4318
#2	.1720191	.1858137	63.82950	.4729230	.3006251	.5612422	243.9730
#3	.1741820	.1867382	63.77576	.4703505	.3014983	.5652603	241.2450

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.050515**	**56.53255**	**.6624747**	**.0719712**	**10.95741**	**.6082517**	**.7880094**
Stddev	.006025	.09459	.0009600	.0010300	.12561	.0043670	.0015662
%RSD	.1487514	.1673201	.1449175	1.431179	1.146361	.7179677	.1987523
#1	4.056922	56.44609	.6620868	.0721153	11.03286	.6092186	.7862311
#2	4.049660	56.63358	.6617692	.0729216	11.02697	.6120542	.7886138
#3	4.044963	56.51799	.6635680	.0708767	10.81241	.6034822	.7891834

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**17.92717**	**.2563497**	**.3452924**	**.6374315**	**3.440887**	**11.01546**	**11.88616**
Stddev	.12868	.0041387	.0004717	.0023575	.009930	.07412	.02214
%RSD	.7177762	1.614476	.1366092	.3698456	.2886020	.6728560	.1862269
#1	17.97434	.2585886	.3448013	.6375707	3.436945	11.07638	11.87982
#2	18.02561	.2588866	.3457419	.6350075	3.452183	11.03706	11.86789
#3	17.78157	.2515738	.3453340	.6397163	3.433532	10.93294	11.91078

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2740-01MSD Acquired: 8/4/2025 15:31:38 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	3.093375	.3096774	.0852119
Stddev	.003052	.0026638	.0006529
%RSD	.0986528	.8601790	.7662577
#1	3.091000	.3121403	.0846520
#2	3.092307	.3100417	.0850546
#3	3.096817	.3068503	.0859291

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6356.273	109740.3	9764.137	5322.946	6453.302
Stddev	8.800	368.2	33.210	25.361	10.521
%RSD	.1384500	.3355348	.3401174	.4764442	.1630381
#1	6361.976	109632.7	9791.513	5352.230	6461.470
#2	6360.706	109437.9	9773.705	5308.314	6457.007
#3	6346.138	110150.3	9727.194	5308.293	6441.430

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2740-01A Acquired: 8/4/2025 15:35:34 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7824732**	**2.093827**	**1.246210**	**1.819257**	**.7551545**	**116.6964**	**.6812506**
Stddev	.0028056	.056526	.003303	.011707	.0041599	.3325	.0027077
%RSD	.3585577	2.699632	.2650227	.6434970	.5508705	.2848846	.3974580
#1	.7853335	2.084189	1.249925	1.813991	.7595593	116.5465	.6807399
#2	.7823606	2.154552	1.245099	1.832673	.7546112	116.4653	.6788346
#3	.7797256	2.042740	1.243606	1.811109	.7512929	117.0774	.6841772

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1816451**	**.1938285**	**46.12780**	**.4831797**	**.2904132**	**.5112817**	**221.4649**
Stddev	.0016564	.0007009	.36110	.0015334	.0011386	.0018534	1.3406
%RSD	.9119128	.3616358	.7828349	.3173566	.3920778	.3625045	.6053156
#1	.1817865	.1945657	46.09868	.4828914	.2917224	.5134189	221.6402
#2	.1799225	.1937495	45.78214	.4818109	.2896539	.5103104	222.7092
#3	.1832263	.1931704	46.50259	.4848368	.2898632	.5101159	220.0453

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.662507**	**44.42278**	**.6600598**	**.0783104**	**10.27925**	**.5706860**	**.7086514**
Stddev	.021517	.11771	.0020573	.0005804	.09187	.0059485	.0008086
%RSD	.5874824	.2649760	.3116882	.7411789	.8937466	1.042350	.1141007
#1	3.658525	44.39202	.6624220	.0786887	10.31829	.5639563	.7095264
#2	3.643260	44.32351	.6590964	.0786004	10.34515	.5728598	.7084959
#3	3.685737	44.55282	.6586609	.0776422	10.17431	.5752418	.7079318

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**17.99044**	**.3445693**	**.3862569**	**.7229155**	**3.137715**	**8.746515**	**11.24565**
Stddev	.09889	.0033691	.0016600	.0017963	.026636	.067018	.06484
%RSD	.5497051	.9777679	.4297548	.2484741	.8489082	.7662273	.5765858
#1	17.96590	.3474335	.3876394	.7246160	3.132980	8.670400	11.31765
#2	18.09930	.3454172	.3867155	.7230938	3.113763	8.796671	11.22743
#3	17.90613	.3408573	.3844159	.7210368	3.166401	8.772472	11.19186

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2740-01A Acquired: 8/4/2025 15:35:34 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**2.605949**	**.2926821**	**.0848243**
Stddev	.013028	.0013381	.0021579
%RSD	.4999483	.4571828	2.543923
#1	2.607049	.2912212	.0843475
#2	2.618393	.2938483	.0829447
#3	2.592406	.2929766	.0871807

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6228.052**	**106389.8**	**9648.521**	**5161.439**	**6477.047**
Stddev	19.848	88.5	108.246	10.274	24.602
%RSD	.3186875	.0831878	1.121897	.1990624	.3798325
#1	6218.416	106310.0	9657.856	5150.693	6455.172
#2	6214.863	106374.5	9751.798	5162.458	6472.289
#3	6250.879	106485.0	9535.909	5171.166	6503.681

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: PB169096BS Acquired: 8/4/2025 15:39:30 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8400997**	**2.261154**	**.9876114**	**2.194648**	**.8864899**	**2.084241**
Stddev	.0175596	.047431	.0203964	.046800	.0182592	.010550
%RSD	2.090186	2.097624	2.065228	2.132459	2.059714	.5061911
#1	.8319353	2.260571	.9794357	2.169420	.8792642	2.078340
#2	.8281087	2.214018	.9725713	2.165874	.8729494	2.096421
#3	.8602551	2.308874	1.010827	2.248649	.9072562	2.077962

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2133099**	**.2190446**	**.1943195**	**1.110407**	**.3939953**	**.2016720**
Stddev	.0003068	.0005982	.0037031	.003351	.0040976	.0041026
%RSD	.1438491	.2730984	1.905688	.3018266	1.040013	2.034299
#1	.2133457	.2186364	.1925286	1.110244	.3908725	.1996868
#2	.2135973	.2197313	.1918522	1.107139	.3986351	.1989396
#3	.2129868	.2187662	.1985776	1.113837	.3924784	.2063896

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3231059**	**3.174536**	**.2127403**	**2.063601**	**.5070956**	**.0809264**
Stddev	.0068632	.026606	.0014510	.008966	.0103919	.0010907
%RSD	2.124136	.8380986	.6820579	.4344693	2.049301	1.347791
#1	.3196573	3.149718	.2125866	2.054414	.5019835	.0797257
#2	.3186509	3.202627	.2142620	2.072328	.5002500	.0818560
#3	.3310095	3.171264	.2113722	2.064061	.5190533	.0811976

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.960448**	**.3062188**	**.2214626**	**10.45629**	**.3151953**	**.4314858**
Stddev	.029879	.0036205	.0021877	.05760	.0021240	.0089211
%RSD	1.009261	1.182335	.9878229	.5508999	.6738571	2.067528
#1	2.927522	.3034406	.2201232	10.39813	.3130652	.4266841
#2	2.985834	.3103133	.2239872	10.51332	.3173130	.4259940
#3	2.967988	.3049024	.2202776	10.45741	.3152078	.4417793

Sample Name: PB169096BS Acquired: 8/4/2025 15:39:30 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6999886**	**.2112517**	**.8728646**	**5.415255**	F **.0026339**	**.1884312**
Stddev	.0154115	.0010918	.0117234	.105252	.0008779	.0034840
%RSD	2.201682	.5168314	1.343093	1.943623	33.33247	1.848960
#1	.6928208	.2117386	.8699050	5.364722	.0032741	.1846286
#2	.6894664	.2100012	.8857842	5.344799	.0029944	.1914697
#3	.7176786	.2120154	.8629046	5.536244	.0016331	.1891954

Elem	Sr4077
Units	ppm
Avg	**.2101126**
Stddev	.0001489
%RSD	.0708854
#1	.2102805
#2	.2100610
#3	.2099963

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5745.071**	**99018.53**	**8316.721**	**4816.145**	**7257.747**
Stddev	104.393	929.60	30.440	32.986	123.870
%RSD	1.817085	.9388188	.3660110	.6849053	1.706731
#1	5801.057	99755.43	8334.409	4836.853	7320.551
#2	5809.528	97974.14	8281.572	4778.105	7337.635
#3	5624.628	99326.02	8334.181	4833.476	7115.054

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: CCV04 Acquired: 8/4/2025 15:48:51 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.933937**	**5.355718**	**4.718979**	**5.065650**	**5.061572**	**9.683473**
Stddev	.009231	.156443	.017587	.019588	.009046	.031926
%RSD	.1870990	2.921037	.3726774	.3866755	.1787104	.3296982
#1	4.939555	5.534329	4.739167	5.086799	5.066871	9.715381
#2	4.923283	5.243006	4.706982	5.048131	5.051127	9.683508
#3	4.938972	5.289819	4.710789	5.062022	5.066717	9.651529

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.10395**	**.2473070**	**2.340222**	**25.16229**	**.9162079**	**2.360378**
Stddev	.04271	.0029653	.005316	.12352	.0045715	.005616
%RSD	.4227281	1.199029	.2271641	.4909132	.4989581	.2379362
#1	10.14754	.2493117	2.346340	25.21282	.9133276	2.366795
#2	10.10216	.2439007	2.337595	25.02150	.9214790	2.356358
#3	10.06217	.2487085	2.336730	25.25253	.9138170	2.357982

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.205756**	**4.903295**	**2.462535**	**23.56326**	**2.368349**	**1.225786**
Stddev	.001049	.007049	.007970	.19950	.004981	.002869
%RSD	.0869593	.1437611	.3236309	.8466691	.2103034	.2340690
#1	1.206918	4.895733	2.462407	23.65064	2.374054	1.227517
#2	1.205467	4.909684	2.454631	23.33498	2.364868	1.222474
#3	1.204882	4.904468	2.470568	23.70416	2.366124	1.227368

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.22854**	**2.425313**	**2.526868**	**24.59942**	**4.961421**	**5.004750**
Stddev	.16493	.006140	.004078	.14016	.050150	.009677
%RSD	.7100410	.2531633	.1613950	.5697653	1.010805	.1933588
#1	23.12593	2.425484	2.527286	24.45022	4.997962	5.015842
#2	23.41879	2.419089	2.522596	24.72833	4.904245	4.998035
#3	23.14091	2.431365	2.530721	24.61970	4.982056	5.000373

Sample Name: CCV04 Acquired: 8/4/2025 15:48:51 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.752170**	**5.044555**	**4.878586**	F **4.444369**	**4.756237**	**4.700495**
Stddev	.021690	.021598	.064890	.015808	.036005	.008731
%RSD	.4564173	.4281357	1.330097	.3556786	.7570072	.1857517
#1	4.777201	5.064845	4.837599	4.461751	4.794050	4.700877
#2	4.740380	5.021852	4.953400	4.430852	4.722363	4.691579
#3	4.738930	5.046967	4.844758	4.440504	4.752299	4.709029

Elem	Sr4077
Units	ppm
Avg	**5.042140**
Stddev	.044425
%RSD	.8810828
#1	5.029139
#2	5.005665
#3	5.091615

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5598.193**	**95994.20**	**8104.002**	**4661.369**	**6698.053**
Stddev	5.881	353.84	73.940	23.942	15.130
%RSD	.1050560	.3686052	.9123842	.5136172	.2258861
#1	5591.408	95716.86	8031.421	4636.074	6680.594
#2	5601.825	95873.02	8179.229	4683.677	6707.327
#3	5601.347	96392.70	8101.357	4664.356	6706.239

Sample Name: CCB04 Acquired: 8/4/2025 15:53:27 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004171**	**-.000104**	**-.000581**	**-.002368**	**-.000545**	**.0219944**	**.0053843**
Stddev	.0006343	.001141	.000400	.002520	.000425	.0100631	.0005646
%RSD	152.0549	1097.797	68.92471	106.4365	77.94990	45.75309	10.48583
#1	-.000289	.001177	-.000984	.000498	-.000075	.0335871	.0055208
#2	.000602	-.001008	-.000183	-.004239	-.000658	.0168861	.0058681
#3	.000939	-.000481	-.000576	-.003363	-.000901	.0155099	.0047640

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000569**	**.0002837**	**.0050741**	**-.001739**	**.0003045**	**.0004712**	**.0025177**
Stddev	.0000245	.0000788	.0051008	.000061	.0000919	.0003230	.0044546
%RSD	43.14469	27.77987	100.5260	3.497457	30.19791	68.55107	176.9297
#1	.0000441	.0002220	.0027687	-.001808	.0001984	.0005004	.0014481
#2	.0000851	.0002566	.0015329	-.001693	.0003542	.0007786	-.001305
#3	.0000413	.0003725	.0109206	-.001715	.0003609	.0001346	.007410

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001208**	**.0017039**	**.0004202**	**.0008924**	**.0060575**	**-.000931**	**.0001160**
Stddev	.000284	.0212501	.0003857	.0004887	.0139764	.002366	.0001761
%RSD	23.48589	1247.177	91.78193	54.75853	230.7281	254.0818	151.8807
#1	-.001077	-.000072	.0002441	.0013290	.0007825	.000792	-.000040
#2	-.001013	-.018603	.0001541	.0003645	-.004514	.000043	.000080
#3	-.001533	.023786	.0008626	.0009836	.021904	-.003629	.000307

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2003097**	**.0007139**	**.0012626**	**.0004318**	**.0008577**	**-.002785**	**.0056832**
Stddev	.0130533	.0006135	.0001779	.0004277	.0008794	.002969	.0027214
%RSD	6.516559	85.93463	14.09353	99.04786	102.5355	106.6051	47.88533
#1	.2136801	.0002864	.0014651	.0005918	.0007212	-.000141	.0026087
#2	.1996506	.0004385	.0011311	-.000053	.0000544	-.005997	.0077832
#3	.1875984	.0014168	.0011916	.000756	.0017973	-.002217	.0066577

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: CCB04 Acquired: 8/4/2025 15:53:27 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0003928	F -.012139	.0006210
Stddev	.0028378	.002043	.0001149
%RSD	722.4573	16.82943	18.50723
#1	.0011947	-.014026	.0006355
#2	-.002760	-.012421	.0007279
#3	.002743	-.009970	.0004994

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5868.673	102564.3	8315.143	4947.055	7594.830
Stddev	17.630	31.0	41.740	11.651	13.110
%RSD	.3004064	.0302638	.5019753	.2355112	.1726111
#1	5852.269	102546.1	8298.429	4957.351	7588.192
#2	5887.315	102600.1	8284.350	4934.408	7609.931
#3	5866.434	102546.7	8362.649	4949.404	7586.367

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2734-02 Acquired: 8/4/2025 16:08:13 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003158**	**-.000758**	**.0052809**	**-.002741**	**.0009076**	**.1396059**	**.2464523**
Stddev	.002028	.001809	.0012945	.004091	.0008397	.0175862	.0000895
%RSD	64.21776	238.5616	24.51226	149.2603	92.51590	12.59703	.0363154
#1	-.004003	.000373	.0052949	-.007441	.0003712	.1333321	.2464284
#2	-.000844	.000197	.0065684	-.000797	.0018752	.1260170	.2463771
#3	-.004628	-.002845	.0039795	.000015	.0004763	.1594687	.2465513

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000212**	**.0013339**	**97.17866**	**-.001327**	**.0030524**	**.0375028**	**.0052035**
Stddev	.000055	.0000282	.47154	.000137	.0000770	.0007326	.0054431
%RSD	25.88837	2.112057	.4852288	10.35554	2.522796	1.953402	104.6034
#1	-.000209	.0013664	97.68175	-.001244	.0031409	.0382945	.0114846
#2	-.000269	.0013160	96.74677	-.001252	.0030004	.0373652	.0022583
#3	-.000159	.0013193	97.10746	-.001485	.0030160	.0368489	.0018677

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8317996**	**3.381918**	**.0077576**	**.0005191**	**374.1284**	**.0010376**	**.1021287**
Stddev	.0021661	.070475	.0001976	.0002941	.3601	.0025219	.0007303
%RSD	.2604155	2.083874	2.547454	56.65017	.0962586	243.0517	.7150511
#1	.8334699	3.404099	.0075758	.0001832	373.7562	.0014393	.1017207
#2	.8293521	3.303021	.0079679	.0007298	374.1538	.0033345	.1016935
#3	.8325768	3.438633	.0077290	.0006444	374.4751	-.001661	.1029718

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.531718**	**.0146688**	**.0007273**	**-.001640**	**-.003468**	**2.406620**	**.0194313**
Stddev	.039997	.0003096	.0002495	.000320	.001034	.013347	.0010594
%RSD	1.579847	2.110273	34.29893	19.51180	29.80146	.5546094	5.452099
#1	2.487637	.0149335	.0006784	-.001320	-.004656	2.392945	.0203595
#2	2.565693	.0147445	.0005059	-.001640	-.002771	2.407302	.0182772
#3	2.541823	.0143285	.0009976	-.001960	-.002979	2.419613	.0196573

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2734-02 Acquired: 8/4/2025 16:08:13 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.9345081	-.008328	.3585607
Stddev	.0147899	.001116	.0008715
%RSD	1.582634	13.39442	.2430649
#1	.9515857	-.008318	.3593261
#2	.9258950	-.009449	.3576122
#3	.9260436	-.007218	.3587438

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5353.987	92636.08	8330.835	4497.634	6286.259
Stddev	60.496	187.42	57.252	6.894	72.417
%RSD	1.129922	.2023238	.6872258	.1532767	1.151982
#1	5284.156	92733.13	8269.130	4504.196	6202.650
#2	5387.322	92755.08	8382.233	4490.450	6326.892
#3	5390.483	92420.03	8341.142	4498.255	6329.234

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2703-05 Acquired: 8/4/2025 16:12:37 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0055904**	**-.007673**	**.0003200**	**.0018439**	**-.004291**	**.0527921**	**.1485130**
Stddev	.0017540	.001940	.0011616	.0038136	.001196	.0092672	.0001480
%RSD	31.37556	25.27919	362.9935	206.8207	27.88173	17.55414	.0996759
#1	.0036267	-.009176	.0015025	.0049157	-.003540	.0432411	.1486753
#2	.0070017	-.008358	-.000820	-.002424	-.003662	.0617468	.1484784
#3	.0061429	-.005483	.000277	.003040	-.005671	.0533884	.1483853

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002687**	**-.000755**	**16.88295**	**-.000997**	**.0037732**	**.0004083**	**45.82412**
Stddev	.0000829	.000058	.02363	.000223	.0000922	.0002187	.17847
%RSD	30.84334	7.724654	.1399750	22.36853	2.442995	53.57753	.3894778
#1	.0002930	-.000725	16.90975	-.000887	.0038510	.0001559	45.69690
#2	.0001763	-.000718	16.86513	-.000851	.0037974	.0005251	46.02814
#3	.0003366	-.000822	16.87396	-.001254	.0036714	.0005437	45.74731

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.492877**	**7.925547**	**.0038324**	**.0029112**	**274.1330**	**-.000835**	**.0938304**
Stddev	.007327	.019760	.0003922	.0007585	1.7371	.001549	.0006705
%RSD	.1630695	.2493248	10.23255	26.05467	.6336639	185.5700	.7146072
#1	4.501235	7.920356	.0037421	.0037513	273.5968	-.002584	.0934291
#2	4.489835	7.908900	.0042618	.0027057	272.7273	-.000285	.0946045
#3	4.487563	7.947384	.0034933	.0022766	276.0750	.000364	.0934577

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.343011**	**.1052691**	**.0012989**	**-.001463**	**.0015170**	**2.796760**	**1.729402**
Stddev	.057838	.0009446	.0001740	.000622	.0008228	.031754	.004578
%RSD	1.331749	.8973385	13.39251	42.53864	54.24043	1.135387	.2647109
#1	4.281884	.1045350	.0012147	-.002178	.0022059	2.764396	1.731644
#2	4.396873	.1063348	.0014989	-.001041	.0006059	2.798018	1.732427
#3	4.350276	.1049375	.0011831	-.001171	.0017392	2.827867	1.724135

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2703-05 Acquired: 8/4/2025 16:12:37 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.4046088	-.005862	.1018619
Stddev	.0018804	.001653	.0002486
%RSD	.4647426	28.19044	.2440951
#1	.4059896	-.005190	.1016153
#2	.4053697	-.007745	.1021125
#3	.4024672	-.004652	.1018581

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5520.943	93968.95	8552.001	4590.987	6549.624
Stddev	6.412	125.23	16.079	18.417	14.071
%RSD	.1161460	.1332705	.1880127	.4011463	.2148368
#1	5513.598	94069.30	8540.095	4576.912	6537.582
#2	5525.423	93828.60	8570.291	4584.218	6546.198
#3	5523.810	94008.94	8545.615	4611.830	6565.092

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2743-02 Acquired: 8/4/2025 16:16:59 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003231**	**-.001415**	**.2491284**	**-.000844**	**.0000074**	**.1470087**	**.4631542**
Stddev	.001167	.000607	.0004147	.004288	.0017639	.0072663	.0019232
%RSD	36.13098	42.91434	.1664597	507.9929	23949.19	4.942742	.4152424
#1	-.001993	-.001691	.2486762	.003846	.0003166	.1552932	.4612740
#2	-.003388	-.000719	.2494909	-.004565	-.001891	.1440175	.4630710
#3	-.004312	-.001834	.2492180	-.001813	.001596	.1417155	.4651177

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000142**	**.0014188**	**72.82911**	**-.001956**	**.0006714**	**.0283514**	**.0127992**
Stddev	.000068	.0000666	.15716	.000188	.0001584	.0004252	.0014972
%RSD	47.94193	4.690642	.2157940	9.594688	23.59403	1.499619	11.69726
#1	-.000126	.0013420	72.73167	-.002167	.0008544	.0281057	.0110748
#2	-.000217	.0014550	73.01042	-.001896	.0005787	.0288423	.0135554
#3	-.000084	.0014594	72.74524	-.001806	.0005813	.0281061	.0137674

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0733620**	**4.305053**	**.0055463**	**.0005165**	**340.4104**	**.0033061**	**.4394339**
Stddev	.0006644	.024244	.0002970	.0002745	.4446	.0012410	.0003318
%RSD	.9056147	.5631551	5.355258	53.14419	.1306096	37.53749	.0754984
#1	.0731167	4.280503	.0053087	.0006630	340.8210	.0046340	.4391989
#2	.0728552	4.328979	.0054509	.0001999	340.4720	.0031087	.4398134
#3	.0741142	4.305677	.0058793	.0006868	339.9382	.0021756	.4392893

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.397331**	**.0225255**	**.0014014**	**-.001719**	**-.002367**	**3.834780**	**.0264549**
Stddev	.029221	.0007533	.0002089	.000603	.000273	.014124	.0035075
%RSD	2.091166	3.344431	14.90837	35.06248	11.52666	.3683169	13.25849
#1	1.368154	.0222897	.0016392	-.002026	-.002079	3.818778	.0291708
#2	1.397245	.0219183	.0013177	-.002105	-.002398	3.840054	.0276989
#3	1.426594	.0233686	.0012473	-.001024	-.002622	3.845509	.0224949

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2743-02 Acquired: 8/4/2025 16:16:59 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**1.281389**	**-.005353**	**.4790180**
Stddev	.012141	.002230	.0009394
%RSD	.9474911	41.65451	.1961163
#1	1.269142	-.005984	.4780697
#2	1.281603	-.007199	.4799483
#3	1.293421	-.002876	.4790360

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5471.478**	**94375.38**	**8464.895**	**4610.568**	**6454.322**
Stddev	10.216	393.08	16.783	15.312	10.596
%RSD	.1867221	.4165038	.1982713	.3321023	.1641714
#1	5462.761	93954.21	8446.702	4596.286	6453.176
#2	5482.720	94439.44	8468.206	4608.683	6465.445
#3	5468.954	94732.49	8479.776	4626.735	6444.346

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2753-02 Acquired: 8/4/2025 16:21:22 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001347**	**-.000468**	**-.000614**	**-.004237**	**-.004173**	**.0788907**	**.0695576**
Stddev	.001042	.001349	.001320	.002828	.001828	.0028808	.0004635
%RSD	77.34590	288.4039	214.9161	66.73460	43.81095	3.651593	.6663577
#1	-.001125	-.001900	-.001398	-.005856	-.006051	.0764813	.0700507
#2	-.000434	-.000281	-.001354	-.005884	-.002399	.0781091	.0691309
#3	-.002482	.000778	.000910	-.000972	-.004070	.0820816	.0694911

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001055**	**.0002363**	**40.42580**	**.0074878**	**.0009345**	**.0060888**	**.0041161**
Stddev	.0000322	.0000506	.12139	.0003812	.0001295	.0002247	.0070268
%RSD	30.49847	21.39975	.3002766	5.091145	13.86101	3.690205	170.7129
#1	.0001119	.0002182	40.50919	.0076823	.0007875	.0059282	.0050175
#2	.0001339	.0001972	40.48168	.0070486	.0009839	.0063456	.0106488
#3	.0000706	.0002934	40.28654	.0077326	.0010320	.0059927	-.003318

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1411790**	**6.233491**	**.0046825**	**.0011882**	**233.2891**	**.0021121**	**.0551203**
Stddev	.0003539	.001416	.0002853	.0001508	2.0076	.0014554	.0001410
%RSD	.2506568	.0227211	6.093380	12.69343	.8605825	68.90498	.2558588
#1	.1412395	6.232234	.0044526	.0011225	231.3638	.0030478	.0551704
#2	.1414987	6.235025	.0050018	.0013607	233.1334	.0028532	.0549610
#3	.1407988	6.233212	.0045932	.0010814	235.3700	.0004354	.0552294

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.399924**	**.0064630**	**-.000527**	**-.004068**	**-.001458**	**.4185896**	**.0098724**
Stddev	.031341	.0005244	.000128	.000087	.001258	.0061108	.0016131
%RSD	2.238748	8.114646	24.35678	2.146493	86.23561	1.459847	16.33940
#1	1.374931	.0070016	-.000642	-.004169	-.000189	.4171283	.0087428
#2	1.389754	.0064332	-.000550	-.004012	-.001483	.4252986	.0091546
#3	1.435086	.0059540	-.000388	-.004023	-.002704	.4133421	.0117199

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2753-02 Acquired: 8/4/2025 16:21:22 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**3.941334**	**-.012375**	**.1261452**
Stddev	.011014	.000348	.0001650
%RSD	.2794374	2.815563	.1308256
#1	3.929985	-.012545	.1260279
#2	3.951979	-.011974	.1263340
#3	3.942038	-.012606	.1260739

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5610.531**	**96482.49**	**8784.047**	**4716.450**	**6652.982**
Stddev	17.262	76.56	40.957	5.923	12.133
%RSD	.3076724	.0793524	.4662636	.1255717	.1823690
#1	5624.800	96570.67	8742.488	4714.032	6655.685
#2	5615.449	96432.94	8785.280	4712.118	6663.535
#3	5591.343	96443.86	8824.373	4723.198	6639.725

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2753-02DUP Acquired: 8/4/2025 16:25:47 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003129**	**.0016026**	**.0012538**	**-.005974**	**-.004041**	**.1223261**	**.1174975**
Stddev	.0015391	.0014764	.0006156	.001389	.001735	.0101439	.0006487
%RSD	491.8530	92.12417	49.09956	23.25457	42.93103	8.292528	.5521200
#1	-.001253	.0008720	.0007355	-.007579	-.002501	.1323053	.1179951
#2	.000369	.0006339	.0010916	-.005184	-.003702	.1120251	.1167638
#3	.001823	.0033018	.0019343	-.005161	-.005921	.1226477	.1177336

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000289**	**.0004235**	**66.33726**	**.0134379**	**.0018640**	**.0101021**	**.0072363**
Stddev	.0001079	.0000250	.28411	.0001488	.0001880	.0001097	.0032442
%RSD	373.0878	5.894037	.4282769	1.107062	10.08492	1.085566	44.83177
#1	.0000875	.0004042	66.46425	.0135294	.0020730	.0101321	.0092986
#2	.0000948	.0004147	66.01180	.0135181	.0017087	.0101937	.0034969
#3	-.000096	.0004517	66.53571	.0132663	.0018102	.0099806	.0089135

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2342796**	**10.21421**	**.0075606**	**.0011602**	**413.4146**	**.0007785**	**.0955069**
Stddev	.0010673	.04090	.0000726	.0004462	3.0816	.0021076	.0005286
%RSD	.4555472	.4004497	.9603508	38.45830	.7453908	270.7213	.5535040
#1	.2351140	10.25881	.0074839	.0006685	414.7674	-.001227	.0960208
#2	.2330770	10.20536	.0076283	.0012726	409.8880	.002975	.0949647
#3	.2346477	10.17846	.0075695	.0015394	415.5883	.000587	.0955353

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.534949**	**.0150171**	**.0000118**	**-.003541**	**-.002778**	**.7531656**	**.0179872**
Stddev	.022309	.0003354	.0001966	.000207	.000448	.0119043	.0020756
%RSD	.8800395	2.233297	1662.052	5.853709	16.12256	1.580571	11.53946
#1	2.540299	.0146554	.0000014	-.003313	-.002296	.7457862	.0184279
#2	2.554096	.0150781	-.000179	-.003589	-.003181	.7668987	.0198071
#3	2.510452	.0153178	.000213	-.003719	-.002856	.7468117	.0157266

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2753-02DUP Acquired: 8/4/2025 16:25:47 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	6.711361	-.010523	.2099763
Stddev	.013120	.001769	.0007381
%RSD	.1954842	16.80568	.3515210
#1	6.709624	-.008876	.2108237
#2	6.699197	-.010301	.2094734
#3	6.725263	-.012393	.2096319

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5371.602	91531.61	8860.132	4456.039	6262.147
Stddev	8.739	399.05	82.255	17.269	7.533
%RSD	.1626972	.4359664	.9283705	.3875525	.1202882
#1	5368.600	91983.27	8896.815	4465.884	6265.447
#2	5381.447	91226.78	8917.663	4466.134	6267.466
#3	5364.759	91384.77	8765.918	4436.098	6253.527

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2753-02LX5 Acquired: 8/4/2025 16:30:09 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000138**	**-.001557**	**-.001460**	**-.003628**	**-.002302**	**.0191961**	**.0106101**
Stddev	.000924	.001494	.000488	.002969	.000950	.0060298	.0012987
%RSD	667.3233	95.97899	33.42138	81.82773	41.25763	31.41163	12.23990
#1	-.001146	-.003023	-.000948	-.000515	-.002310	.0124591	.0119817
#2	.000668	-.001609	-.001919	-.006428	-.001348	.0240872	.0093993
#3	.000063	-.000037	-.001514	-.003942	-.003248	.0210421	.0104494

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000023**	**.0000264**	**7.677756**	**-.000049**	**.0002495**	**.0010828**	**-.004744**
Stddev	.000023	.0000331	.025388	.000234	.0000763	.0002590	.008240
%RSD	97.33440	125.4371	.3306729	478.2434	30.58653	23.91703	173.6825
#1	-.000014	.0000550	7.648446	.000045	.0002130	.0013790	-.014252
#2	-.000007	-.000010	7.691914	-.000315	.0003372	.0009701	.000316
#3	-.000049	.000034	7.692908	.000123	.0001983	.0008993	-.000297

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0255686**	**1.194560**	**.0008708**	**.0009748**	**37.92130**	**.0009080**	**.0086837**
Stddev	.0003223	.030030	.0001438	.0003326	.50831	.0043088	.0000988
%RSD	1.260464	2.513895	16.51010	34.11961	1.340433	474.5675	1.138255
#1	.0251964	1.227122	.0008676	.0007689	37.33997	-.001106	.0087787
#2	.0257543	1.167956	.0007286	.0013585	38.28215	.005855	.0086910
#3	.0257550	1.188602	.0010161	.0007970	38.14176	-.002025	.0085814

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.929360**	**-.004280**	**-.000154**	**-.001755**	**-.000793**	**.0753319**	**.0039150**
Stddev	.071772	.000177	.000065	.000181	.000828	.0058141	.0023132
%RSD	3.719976	4.128385	42.24786	10.31359	104.3937	7.718013	59.08415
#1	2.010597	-.004209	-.000190	-.001924	-.001693	.0818400	.0049076
#2	1.902939	-.004481	-.000194	-.001564	-.000625	.0706504	.0055663
#3	1.874543	-.004149	-.000079	-.001777	-.000062	.0735054	.0012712

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2753-02LX5 Acquired: 8/4/2025 16:30:09 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.6778322	.0242892	.0236516
Stddev	.0106854	.0029765	.0001133
%RSD	1.576406	12.25454	.4789016
#1	.6655113	.0274358	.0235436
#2	.6834236	.0215185	.0236417
#3	.6845617	.0239132	.0237695

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5650.763	98233.96	8366.823	4726.336	7004.255
Stddev	2.615	234.20	45.999	15.858	6.336
%RSD	.0462745	.2384128	.5497806	.3355149	.0904572
#1	5647.894	98272.58	8315.912	4721.954	7000.030
#2	5653.011	97982.85	8405.393	4713.130	7001.196
#3	5651.385	98446.45	8379.163	4743.923	7011.540

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2753-02MS Acquired: 8/4/2025 16:34:26 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8398932**	**2.045577**	**.9114502**	**2.151195**	**.8569874**	**2.111390**	**.3213753**
Stddev	.0022265	.099784	.0044200	.003700	.0022951	.009209	.0012562
%RSD	.2650872	4.878046	.4849443	.1720174	.2678135	.4361610	.3908922
#1	.8403058	2.109903	.9129412	2.150545	.8563066	2.120026	.3228031
#2	.8418845	2.096200	.9064775	2.147863	.8551096	2.101699	.3208830
#3	.8374893	1.930628	.9149319	2.155178	.8595458	2.112444	.3204397

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1917569**	**.1908848**	**64.80961**	**.3945520**	**.1970934**	**.3018463**	**3.271492**
Stddev	.0019997	.0005468	.34630	.0005230	.0007825	.0008085	.035179
%RSD	1.042825	.2864656	.5343276	.1325531	.3970203	.2678626	1.075312
#1	.1940659	.1905470	65.20750	.3951356	.1968074	.3017200	3.231871
#2	.1906050	.1905917	64.64501	.3943947	.1964942	.3011084	3.283547
#3	.1905998	.1915157	64.57630	.3941257	.1979787	.3027106	3.299059

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4286318**	**11.68458**	**.4965829**	**.0770439**	**377.2951**	**.3022892**	**.3026980**
Stddev	.0011435	.07996	.0017959	.0003651	4.2214	.0037909	.0008315
%RSD	.2667821	.6843063	.3616529	.4738572	1.118870	1.254050	.2747023
#1	.4293790	11.77683	.4959907	.0768716	381.8591	.3048183	.3026435
#2	.4273154	11.64169	.4951579	.0774632	373.5305	.2979305	.3018950
#3	.4292009	11.63522	.4986002	.0767967	376.4957	.3041187	.3035554

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**13.63537**	**.2723322**	**.4334339**	**.6776901**	**.2023708**	**1.632411**	**5.514006**
Stddev	.12181	.0038131	.0012364	.0031414	.0003306	.010212	.014108
%RSD	.8933284	1.400170	.2852585	.4635466	.1633823	.6255614	.2558580
#1	13.50759	.2766566	.4330328	.6756667	.2027521	1.624433	5.522623
#2	13.75017	.2708871	.4324479	.6760945	.2021964	1.628881	5.521670
#3	13.64836	.2694529	.4348211	.6813091	.2021639	1.643920	5.497725

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2753-02MS Acquired: 8/4/2025 16:34:26 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**5.751954**	**.1829014**	**.4002432**
Stddev	.025630	.0024485	.0006686
%RSD	.4455832	1.338692	.1670577
#1	5.776835	.1816436	.4006857
#2	5.753389	.1857232	.4005699
#3	5.725636	.1813375	.3994740

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5344.276**	**92050.11**	**8458.601**	**4450.378**	**6312.963**
Stddev	15.765	361.02	71.058	21.873	13.605
%RSD	.2949936	.3921945	.8400739	.4914765	.2155081
#1	5352.650	92452.96	8379.863	4474.555	6317.551
#2	5354.087	91755.85	8477.980	4431.964	6323.681
#3	5326.091	91941.52	8517.959	4444.616	6297.658

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2753-02MSD Acquired: 8/4/2025 16:38:32 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7570134**	**1.774206**	**.8200104**	**1.942775**	**.7734025**	**1.935918**	**.2832207**
Stddev	.0021520	.054385	.0018832	.014167	.0024574	.011288	.0003658
%RSD	.2842698	3.065317	.2296493	.7291986	.3177429	.5830969	.1291382
#1	.7556646	1.714142	.8180717	1.926768	.7755101	1.939545	.2834501
#2	.7558804	1.820111	.8201270	1.953701	.7707032	1.923262	.2834131
#3	.7594951	1.788366	.8218325	1.947854	.7739941	1.944947	.2827989

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1740792**	**.1728138**	**52.88993**	**.3638979**	**.1790844**	**.2749159**	**2.935407**
Stddev	.0015706	.0003999	.22715	.0012455	.0006513	.0006573	.030075
%RSD	.9022501	.2314363	.4294829	.3422575	.3636843	.2390882	1.024575
#1	.1754224	.1725968	53.05278	.3644191	.1788154	.2749090	2.903353
#2	.1744629	.1725692	52.98657	.3624765	.1786107	.2742620	2.939858
#3	.1723522	.1732753	52.63043	.3647982	.1798271	.2755765	2.963008

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3687832**	**9.750946**	**.4508134**	**.0674772**	**297.0097**	**.2762537**	**.2636469**
Stddev	.0005150	.065324	.0011677	.0006039	.9030	.0029108	.0003848
%RSD	.1396594	.6699261	.2590174	.8949553	.3040177	1.053665	.1459595
#1	.3686050	9.755416	.4499111	.0668554	296.5323	.2758667	.2633212
#2	.3683808	9.813921	.4503969	.0675147	296.4456	.2793386	.2635480
#3	.3693636	9.683502	.4521322	.0680615	298.0511	.2735557	.2640715

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.87142**	**.2430719**	**.4062817**	**.6146896**	**.1880823**	**1.401766**	**4.951852**
Stddev	.05602	.0030186	.0015668	.0018411	.0031079	.007425	.029042
%RSD	.4718851	1.241868	.3856408	.2995158	1.652393	.5297089	.5864861
#1	11.80795	.2454390	.4050329	.6125679	.1899138	1.393599	4.921144
#2	11.89233	.2441041	.4057726	.6158655	.1898391	1.403589	4.955537
#3	11.91397	.2396725	.4080398	.6156355	.1844939	1.408110	4.978876

Sample Name: Q2753-02MSD Acquired: 8/4/2025 16:38:32 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.358149**	**.1675862**	**.3473383**
Stddev	.013762	.0033317	.0006111
%RSD	.3157669	1.988073	.1759525
#1	4.342258	.1685785	.3470112
#2	4.366110	.1703091	.3480434
#3	4.366078	.1638711	.3469604

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5369.402**	**93502.61**	**8314.913**	**4489.592**	**6453.216**
Stddev	12.549	360.99	60.400	18.806	15.325
%RSD	.2337113	.3860710	.7264002	.4188828	.2374839
#1	5374.902	93852.06	8270.540	4504.262	6458.539
#2	5378.261	93131.10	8290.500	4468.391	6465.171
#3	5355.042	93524.67	8383.697	4496.124	6435.939

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2753-02A Acquired: 8/4/2025 16:42:38 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8931505**	**2.153681**	**.9721821**	**2.384159**	**.9236906**	**2.125508**	**.3031364**
Stddev	.0038881	.083274	.0027700	.004808	.0034143	.021248	.0016993
%RSD	.4353238	3.866593	.2849263	.2016505	.3696342	.9996837	.5605626
#1	.8887760	2.206437	.9694366	2.388824	.9232675	2.148371	.3019313
#2	.8944634	2.196924	.9721336	2.384432	.9272967	2.106366	.3023979
#3	.8962123	2.057681	.9749760	2.379220	.9205075	2.121786	.3050799

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2058085**	**.1994202**	**54.43700**	**.3971040**	**.2039678**	**.3144773**	**3.298823**
Stddev	.0008006	.0006180	.08399	.0006549	.0005720	.0003236	.009176
%RSD	.3889818	.3099057	.1542813	.1649122	.2804184	.1029073	.2781533
#1	.2061437	.1991933	54.52816	.3967574	.2033300	.3148509	3.290753
#2	.2048948	.1989477	54.42005	.3978594	.2041383	.3142886	3.296913
#3	.2063869	.2001196	54.36278	.3966953	.2044351	.3142922	3.308804

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3944886**	**10.18330**	**.5155753**	**.0808039**	**310.0165**	**.3064893**	**.3020094**
Stddev	.0004131	.01682	.0016785	.0004940	4.5336	.0016305	.0005240
%RSD	.1047275	.1652142	.3255609	.6113055	1.462387	.5319982	.1734872
#1	.3949290	10.20034	.5145618	.0809285	315.0664	.3061382	.3015884
#2	.3944272	10.16670	.5146512	.0812235	306.2967	.3082667	.3018436
#3	.3941096	10.18287	.5175127	.0802595	308.6863	.3050629	.3025962

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**13.44590**	**.3053052**	**.4473551**	**.7381658**	**.2125531**	**1.541211**	**5.882031**
Stddev	.00057	.0018777	.0006835	.0030069	.0004801	.018829	.002885
%RSD	.0042449	.6150128	.1527767	.4073493	.2258717	1.221711	.0490521
#1	13.44655	.3055900	.4476758	.7359609	.2127791	1.561102	5.884250
#2	13.44564	.3033014	.4465703	.7369455	.2128784	1.538867	5.883073
#3	13.44550	.3070242	.4478192	.7415910	.2120017	1.523664	5.878769

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2753-02A Acquired: 8/4/2025 16:42:38 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**5.212484**	**.1864561**	**.3705449**
Stddev	.013913	.0036528	.0011130
%RSD	.2669094	1.959073	.3003576
#1	5.223386	.1866900	.3695924
#2	5.217251	.1826919	.3702741
#3	5.196814	.1899863	.3717683

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5578.471**	**95820.70**	**8741.096**	**4682.985**	**6544.131**
Stddev	14.625	257.18	27.260	17.968	31.234
%RSD	.2621620	.2683956	.3118587	.3836873	.4772784
#1	5589.271	95631.58	8717.421	4672.289	6566.136
#2	5584.314	95716.96	8770.898	4672.937	6557.874
#3	5561.828	96113.54	8734.969	4703.729	6508.382

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: PB169079TB Acquired: 8/4/2025 16:46:44 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.002832**	**-.000223**	**-.001560**	**.0020740**	**.0009031**	**.0087036**	**-.003611**
Stddev	.000588	.001766	.000684	.0030456	.0005355	.0051250	.000767
%RSD	20.74549	792.3663	43.87211	146.8466	59.29050	58.88317	21.24844
#1	-.002598	-.001671	-.002049	.0023072	.0014018	.0031758	-.004142
#2	-.002399	.001745	-.000778	-.001082	.0003372	.0132973	-.002731
#3	-.003501	-.000742	-.001853	.004996	.0009704	.0096378	-.003959

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000229**	**-.000094**	**.1096785**	**-.001271**	**-.000136**	**-.000201**	**-.000049**
Stddev	.000039	.000011	.0077739	.000189	.000105	.000423	.001580
%RSD	16.96892	11.54909	7.087873	14.85825	77.63184	210.1439	3193.243
#1	-.000260	-.000092	.1103331	-.001091	-.000102	-.000665	.001559
#2	-.000186	-.000106	.1171044	-.001254	-.000253	.000166	-.000110
#3	-.000242	-.000085	.1015980	-.001468	-.000051	-.000105	-.001598

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0039757**	**.0036799**	**.0009315**	**.0008503**	**431.5816**	**-.000537**	**-.000326**
Stddev	.0002252	.0046463	.0002205	.0001144	3.7276	.000776	.000117
%RSD	5.665230	126.2607	23.67708	13.45858	.8636992	144.3593	35.79940
#1	.0038996	.0085716	.0010557	.0009723	435.8781	.000358	-.000262
#2	.0037984	.0031426	.0006768	.0007454	429.6573	-.000972	-.000256
#3	.0042291	-.000674	.0010619	.0008330	429.2095	-.000998	-.000461

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4314809**	**-.006179**	**.0007739**	**.0008398**	**.0003189**	**.0177407**	**.0078511**
Stddev	.0265127	.000541	.0000712	.0001986	.0021228	.0237740	.0004628
%RSD	6.144593	8.753080	9.203286	23.64153	665.7914	134.0081	5.895242
#1	.4610459	-.006475	.0008539	.0006446	.0002845	.0258509	.0079635
#2	.4098165	-.005555	.0007174	.0008333	.0024587	-.009027	.0073424
#3	.4235803	-.006508	.0007503	.0010416	-.001787	.036398	.0082474

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: PB169079TB Acquired: 8/4/2025 16:46:44 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.1614388	-.015539	.0002025
Stddev	.0033753	.001507	.0000639
%RSD	2.090742	9.697198	31.55809
#1	.1650741	-.015679	.0001979
#2	.1584041	-.013967	.0001410
#3	.1608383	-.016970	.0002685

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5360.970	91800.66	8505.768	4477.329	6359.662
Stddev	9.169	402.19	70.781	27.371	8.779
%RSD	.1710289	.4381123	.8321508	.6113302	.1380382
#1	5352.851	92236.80	8562.270	4508.912	6361.119
#2	5359.146	91444.41	8426.374	4462.585	6350.247
#3	5370.914	91720.77	8528.661	4460.491	6367.622

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: CCV05 Acquired: 8/4/2025 16:51:13 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.045389**	**5.467332**	**4.761515**	**5.200185**	**5.192293**	**9.769146**
Stddev	.011800	.086196	.011420	.013052	.008333	.026387
%RSD	.2338862	1.576569	.2398435	.2509861	.1604951	.2701076
#1	5.035874	5.553591	4.755721	5.202331	5.188395	9.743905
#2	5.041700	5.381199	4.754154	5.186194	5.186623	9.766988
#3	5.058594	5.467206	4.774671	5.212031	5.201861	9.796547

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.21710**	**.2485988**	**2.362057**	**25.37261**	**.9250536**	**2.390471**
Stddev	.18023	.0006163	.005557	.01028	.0021479	.007119
%RSD	1.764036	.2478978	.2352595	.0405070	.2321907	.2978028
#1	10.41033	.2488335	2.359826	25.36515	.9259539	2.386587
#2	10.18742	.2490633	2.357962	25.38433	.9226021	2.386140
#3	10.05354	.2478997	2.368383	25.36835	.9266049	2.398687

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.224184**	**5.038449**	**2.493760**	**23.70394**	**2.397817**	**1.250612**
Stddev	.002265	.037440	.003967	.08967	.005694	.001910
%RSD	.1850295	.7430840	.1590653	.3782824	.2374741	.1527081
#1	1.223328	5.003820	2.489475	23.60811	2.394711	1.249935
#2	1.222472	5.033349	2.497304	23.78580	2.394350	1.249133
#3	1.226753	5.078177	2.494501	23.71792	2.404388	1.252768

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.92344**	**2.456797**	**2.554071**	**25.97577**	**4.991582**	**5.100979**
Stddev	.13566	.003444	.002183	.06392	.006166	.011091
%RSD	.5917752	.1401985	.0854676	.2460936	.1235376	.2174292
#1	22.87518	2.452882	2.556513	25.99427	4.988429	5.096524
#2	22.81852	2.458152	2.552309	25.90464	4.998687	5.092808
#3	23.07663	2.459359	2.553392	26.02841	4.987629	5.113604

Sample Name: CCV05 Acquired: 8/4/2025 16:51:13 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.804484**	**5.128402**	**4.910328**	F **4.470553**	**4.838739**	**4.781711**
Stddev	.012009	.008364	.017222	.002523	.017564	.007772
%RSD	.2499627	.1630909	.3507369	.0564370	.3629959	.1625331
#1	4.802352	5.123536	4.904452	4.470746	4.837577	4.772814
#2	4.793683	5.123610	4.896813	4.467939	4.821784	4.785144
#3	4.817417	5.138060	4.929719	4.472974	4.856856	4.787176

Elem	Sr4077
Units	ppm
Avg	**5.151225**
Stddev	.049038
%RSD	.9519652
#1	5.105303
#2	5.145495
#3	5.202876

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5522.212**	**95192.88**	**8164.842**	**4597.654**	**6625.980**
Stddev	5.253	149.10	15.782	5.424	4.312
%RSD	.0951276	.1566290	.1932941	.1179670	.0650733
#1	5528.264	95224.30	8172.311	4594.400	6630.561
#2	5519.534	95323.77	8146.712	4594.647	6625.378
#3	5518.837	95030.58	8175.504	4603.915	6622.000

Sample Name: CCB05 Acquired: 8/4/2025 16:55:23 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001412**	**-.002559**	**-.000147**	**-.002958**	**-.001332**	**-.003873**	**-.002239**
Stddev	.001156	.001713	.000907	.002341	.000146	.002681	.000518
%RSD	81.92319	66.94086	617.0180	79.15541	10.97994	69.23721	23.14277
#1	-.000102	-.002062	.000757	-.004593	-.001452	-.005741	-.001707
#2	-.001841	-.004466	-.000142	-.004004	-.001376	-.005077	-.002269
#3	-.002292	-.001150	-.001056	-.000276	-.001169	-.000800	-.002742

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000253**	**.0002595**	**-.004178**	**-.001661**	**.0003623**	**-.000093**	**-.001394**
Stddev	.0000691	.0000546	.001253	.000064	.0002262	.000217	.002530
%RSD	273.0765	21.03772	30.00447	3.868330	62.43894	233.4908	181.4527
#1	-.000016	.0002978	-.003205	-.001714	.0006163	.000134	-.001194
#2	.000105	.0002838	-.003736	-.001680	.0002878	-.000298	.001029
#3	-.000013	.0001970	-.005592	-.001590	.0001827	-.000115	-.004019

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001494**	**.0128087**	**.0003759**	**.0009849**	**.6133761**	**-.001069**	**-.000775**
Stddev	.000647	.0307598	.0004622	.0002901	.0106258	.003042	.000130
%RSD	43.32349	240.1469	122.9379	29.45816	1.732350	284.5819	16.83380
#1	-.001882	-.019716	.0009013	.0009041	.6159950	-.000145	-.000926
#2	-.001853	.041432	.0001945	.0007437	.6224475	-.004466	-.000692
#3	-.000747	.016710	.0000320	.0013068	.6016857	.001404	-.000708

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7843530**	**-.001772**	**.0011708**	**.0004467**	**.0007808**	**-.008786**	**.0070010**
Stddev	.0278875	.000876	.0003256	.0004551	.0006785	.007596	.0009224
%RSD	3.555476	49.45570	27.81239	101.8647	86.89924	86.45074	13.17586
#1	.8068645	-.000774	.0015160	.0001137	.0015155	-.017147	.0080628
#2	.7531564	-.002125	.0011273	.0002612	.0006490	-.002311	.0063972
#3	.7930381	-.002416	.0008692	.0009653	.0001778	-.006901	.0065430

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: CCB05 Acquired: 8/4/2025 16:55:23 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.000274	.0027505	.0003584
Stddev	.001490	.0034052	.0000804
%RSD	544.2708	123.8036	22.42777
#1	.000442	-.000647	.0002656
#2	-.001987	.006163	.0004028
#3	.000724	.002735	.0004067

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5763.602	100941.6	8420.762	4819.244	7529.502
Stddev	3.617	204.0	14.627	8.885	14.834
%RSD	.0627500	.2020625	.1737013	.1843693	.1970131
#1	5767.778	100819.1	8432.139	4819.138	7542.452
#2	5761.505	100828.6	8425.884	4828.182	7532.735
#3	5761.522	101177.0	8404.263	4810.412	7513.318

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: PB169101BL Acquired: 8/4/2025 16:59:43 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001361**	**-.003057**	**-.001638**	**.0008507**	**-.001657**	**-.003085**	**-.002143**
Stddev	.000392	.000740	.001073	.0023219	.000567	.005671	.000191
%RSD	28.79500	24.19536	65.51154	272.9328	34.19622	183.8401	8.904787
#1	-.000946	-.003891	-.000622	-.000421	-.002289	.002868	-.001925
#2	-.001724	-.002481	-.002760	-.000557	-.001194	-.003698	-.002280
#3	-.001411	-.002799	-.001532	.003531	-.001488	-.008424	-.002224

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000022**	**-.000016**	**-.003969**	**-.001645**	**.0000066**	**-.000223**	**-.004623**
Stddev	.000010	.000047	.004156	.000204	.0002375	.000292	.002059
%RSD	42.97009	298.7474	104.7114	12.41291	3623.978	131.3153	44.54377
#1	-.000030	-.000067	-.007487	-.001418	.0002291	-.000516	-.006243
#2	-.000025	-.000005	-.005038	-.001704	.0000341	.000069	-.005321
#3	-.000012	.000025	.000617	-.001813	-.000244	-.000221	-.002306

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001411**	**.0129143**	**.0001187**	**.0010828**	**.5688024**	**-.002678**	**-.000392**
Stddev	.000258	.0101453	.0001868	.0002294	.0142334	.000362	.000173
%RSD	18.29895	78.55890	157.2977	21.18536	2.502339	13.53139	44.19097
#1	-.001147	.0235367	.0002502	.0008184	.5529228	-.002364	-.000586
#2	-.001663	.0118809	-.000095	.0012290	.5730728	-.002595	-.000336
#3	-.001424	.0033252	.000201	.0012011	.5804118	-.003075	-.000254

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7765640**	**-.003882**	**.0002023**	**-.000661**	**.0004905**	**-.003203**	**.0037968**
Stddev	.0071025	.000125	.0002438	.000523	.0012082	.003236	.0015385
%RSD	.9146004	3.232901	120.5015	79.17494	246.3310	101.0342	40.52234
#1	.7765664	-.003737	-.000077	-.001189	.0013403	.000461	.0020681
#2	.7836652	-.003961	.000374	-.000142	.0010237	-.004401	.0050159
#3	.7694603	-.003947	.000309	-.000652	-.000893	-.005669	.0043063

Sample Name: PB169101BL Acquired: 8/4/2025 16:59:43 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.001047	-.001312	-.000088
Stddev	.000411	.003578	.000039
%RSD	39.23689	272.6657	44.03750
#1	-.001171	.000578	-.000043
#2	-.000589	.000925	-.000109
#3	-.001382	-.005439	-.000112

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5777.614	100168.1	8178.732	4811.618	7502.089
Stddev	6.196	261.2	54.081	3.510	13.269
%RSD	.1072381	.2607597	.6612435	.0729582	.1768722
#1	5770.682	100466.9	8116.481	4815.253	7487.374
#2	5782.611	100054.0	8205.572	4811.353	7505.749
#3	5779.550	99983.4	8214.144	4808.247	7513.144

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: PB169101BS Acquired: 8/4/2025 17:04:03 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8341163**	**2.277296**	**.9791135**	**2.159901**	**.8753933**	**2.119021**	**.2205247**
Stddev	.0033898	.096677	.0020942	.010224	.0028607	.010623	.0006530
%RSD	.4063900	4.245254	.2138857	.4733641	.3267952	.5012933	.2961305
#1	.8349120	2.272142	.9769837	2.160834	.8785416	2.111870	.2203887
#2	.8303994	2.183299	.9791866	2.149242	.8729531	2.113965	.2199503
#3	.8370374	2.376447	.9811701	2.169626	.8746851	2.131227	.2212350

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2198950**	**.1930648**	**1.133548**	**.3943866**	**.2015689**	**.3202678**	**3.131049**
Stddev	.0008059	.0004843	.005765	.0019045	.0001802	.0008700	.009979
%RSD	.3664729	.2508651	.5086010	.4828944	.0894222	.2716567	.3187063
#1	.2197646	.1925804	1.130952	.3965852	.2015792	.3198573	3.141821
#2	.2191624	.1930648	1.129537	.3933265	.2013837	.3196789	3.129207
#3	.2207582	.1935491	1.140155	.3932481	.2017437	.3212671	3.122120

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2179455**	**2.083324**	**.5046666**	**.0810738**	**3.237253**	**.3174009**	**.2183420**
Stddev	.0013504	.027103	.0013026	.0004239	.010185	.0082108	.0009692
%RSD	.6196180	1.300970	.2581190	.5228120	.3146077	2.586891	.4438884
#1	.2186884	2.069348	.5032299	.0814085	3.248898	.3173168	.2192693
#2	.2163867	2.066061	.5049991	.0812157	3.232850	.3092324	.2184211
#3	.2187613	2.114563	.5057708	.0805972	3.230011	.3256534	.2173357

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.69693**	**.3211964**	**.4352903**	**.6903375**	**.2158186**	**.8605360**	**5.367101**
Stddev	.03136	.0011466	.0009628	.0040243	.0006950	.0057434	.015548
%RSD	.2931594	.3569914	.2211758	.5829447	.3220195	.6674230	.2896850
#1	10.71161	.3207139	.4357639	.6918405	.2150355	.8645261	5.371423
#2	10.71826	.3203698	.4341824	.6857780	.2163621	.8539533	5.349849
#3	10.66093	.3225054	.4359245	.6933939	.2160581	.8631284	5.380030

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: PB169101BS Acquired: 8/4/2025 17:04:03 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	F -.001127	.2028508	.2161019
Stddev	.002493	.0009183	.0006899
%RSD	221.2220	.4527220	.3192486
#1	.001293	.2035619	.2161424
#2	-.000987	.2031765	.2153926
#3	-.003687	.2018140	.2167707

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5685.499	98679.84	8080.234	4752.108	7182.894
Stddev	9.292	309.75	16.336	12.251	15.132
%RSD	.1634292	.3138940	.2021782	.2578007	.2106726
#1	5688.053	98498.47	8079.527	4744.054	7198.154
#2	5693.246	98503.54	8096.912	4746.063	7182.636
#3	5675.197	99037.49	8064.262	4766.207	7167.892

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2745-01 Acquired: 8/4/2025 17:08:04 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000923**	**-.015476**	**-.000797**	**-.006190**	**-.005163**	**-.007183**	**-.021701**
Stddev	.000094	.000067	.000279	.000603	.000127	.004854	.000087
%RSD	10.21894	.4304077	35.00440	9.743325	2.461007	67.57059	.3999574
#1	-.000952	-.015544	-.000628	-.006877	-.005094	-.010506	-.021635
#2	-.001000	-.015475	-.000645	-.005747	-.005086	-.009430	-.021799
#3	-.000818	-.015411	-.001120	-.005947	-.005310	-.001613	-.021667

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000092**	**.0001280**	**-.028056**	**-.002473**	**-.000079**	**-.000733**	**-.016467**
Stddev	.0000154	.0000227	.002553	.000107	.000033	.000060	.001279
%RSD	168.5322	17.72373	9.100879	4.330655	41.68234	8.242435	7.764544
#1	.0000038	.0001467	-.025993	-.002384	-.000106	-.000795	-.016641
#2	-.000003	.0001345	-.027263	-.002592	-.000089	-.000674	-.017650
#3	.000027	.0001027	-.030912	-.002444	-.000042	-.000731	-.015110

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001893**	**.0151405**	**.0005323**	**.0005180**	**-.226672**	**.0011011**	**-.002559**
Stddev	.000050	.0094223	.0000252	.0000972	.001829	.0006730	.000081
%RSD	2.645048	62.23217	4.725627	18.77070	.8067214	61.11994	3.183142
#1	-.001897	.0260018	.0005054	.0005498	-.224762	.0004207	-.002532
#2	-.001840	.0102618	.0005552	.0005953	-.226846	.0011163	-.002494
#3	-.001940	.0091580	.0005363	.0004088	-.228407	.0017664	-.002650

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1945188**	**-.008083**	**-.000636**	**-.002975**	**-.000191**	**-.035548**	**-.009091**
Stddev	.0161650	.000077	.000038	.000109	.000084	.001597	.000098
%RSD	8.310262	.9509016	5.898590	3.655278	43.78632	4.491904	1.081621
#1	.1921690	-.008043	-.000629	-.002888	-.000112	-.037028	-.009203
#2	.1796573	-.008172	-.000676	-.002939	-.000181	-.033856	-.009018
#3	.2117301	-.008035	-.000602	-.003097	-.000279	-.035761	-.009053

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2745-01 Acquired: 8/4/2025 17:08:04 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.010656	-.016227	-.000182
Stddev	.001122	.000332	.000032
%RSD	10.52455	2.048066	17.75410
#1	-.011014	-.016255	-.000145
#2	-.011555	-.016545	-.000194
#3	-.009399	-.015882	-.000206

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	24878.19	411765.2	24819.73	21097.95	32249.32
Stddev	38.46	5259.0	187.55	50.05	41.88
%RSD	.1546020	1.277189	.7556641	.2372288	.1298709
#1	24862.78	417806.9	24825.31	21150.44	32240.80
#2	24921.97	409274.1	24629.45	21092.64	32294.81
#3	24849.83	408214.7	25004.44	21050.76	32212.36

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2745-02 Acquired: 8/4/2025 17:12:31 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.002841**	**-.000659**	**.0052184**	**-.002580**	**-.000059**	**.0525176**	**.0027563**
Stddev	.000182	.001661	.0008764	.001566	.000775	.0058691	.0009117
%RSD	6.421512	252.2116	16.79511	60.68482	1324.440	11.17551	33.07604
#1	-.003040	-.001066	.0056774	-.003646	.000668	.0583833	.0035811
#2	-.002802	-.002078	.0057700	-.003313	-.000874	.0525244	.0017774
#3	-.002681	.001168	.0042078	-.000782	.000030	.0466451	.0029106

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000230**	**-.000058**	**4.411034**	**-.001653**	**.0068016**	**.0149624**	**.0856149**
Stddev	.000022	.000042	.032751	.000188	.0001026	.0001422	.0035295
%RSD	9.673478	71.84299	.7424679	11.39566	1.508114	.9501543	4.122525
#1	-.000255	-.000026	4.448746	-.001436	.0068737	.0149639	.0882937
#2	-.000224	-.000106	4.394614	-.001749	.0068470	.0148196	.0869356
#3	-.000211	-.000043	4.389741	-.001773	.0066842	.0151039	.0816156

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0203974**	**1.693124**	**.0085384**	**.0007467**	**13.57396**	**-.001063**	**.0541778**
Stddev	.0005061	.020931	.0004194	.0002373	.04019	.000259	.0003470
%RSD	2.480996	1.236233	4.912075	31.77466	.2961047	24.38225	.6405129
#1	.0209647	1.668988	.0080694	.0009124	13.56342	-.001130	.0540809
#2	.0202348	1.706285	.0086681	.0004749	13.61837	-.001282	.0545629
#3	.0199926	1.704099	.0088776	.0008529	13.54009	-.000777	.0538895

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.085240**	**.0027942**	**.0001465**	**.0023133**	**-.000052**	**5.684093**	**.0075338**
Stddev	.035388	.0004411	.0002606	.0003476	.000972	.042632	.0007695
%RSD	3.260829	15.78611	177.8308	15.02806	1872.354	.7500267	10.21440
#1	1.092078	.0024062	-.000039	.0020316	.001059	5.639339	.0074226
#2	1.046932	.0032740	.000034	.0022064	-.000470	5.724227	.0083529
#3	1.116709	.0027025	.000444	.0027018	-.000744	5.688713	.0068260

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2745-02 Acquired: 8/4/2025 17:12:31 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.023897	-.016426	.0240902
Stddev	.021341	.003132	.0001070
%RSD	.4247941	19.06437	.4441519
#1	5.000731	-.019612	.0242131
#2	5.028202	-.013352	.0240180
#3	5.042757	-.016314	.0240394

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5750.511	99861.55	8190.111	4839.801	7335.710
Stddev	3.652	347.63	71.846	23.671	6.174
%RSD	.0635082	.3481160	.8772277	.4890963	.0841638
#1	5746.294	99460.32	8109.435	4816.035	7342.138
#2	5752.652	100072.7	8213.706	4839.990	7329.826
#3	5752.587	100051.6	8247.193	4863.376	7335.166

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2756-01 Acquired: 8/4/2025 17:16:47 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0065968**	**.0003186**	**.0404387**	**.0002410**	**-.001429**	**.2347676**	**.1233951**
Stddev	.0028716	.0023743	.0001157	.0009378	.001593	.0073837	.0013113
%RSD	43.53049	745.2431	.2860422	389.1427	111.4388	3.145105	1.062690
#1	.0036200	-.000978	.0404598	-.000309	.000410	.2327440	.1225752
#2	.0093502	-.001125	.0403140	.001324	-.002334	.2429521	.1249075
#3	.0068201	.003059	.0405424	-.000292	-.002365	.2286067	.1227027

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000306**	**-.000108**	**73.21005**	**.0022463**	**.0071272**	**.0055409**	**11.94045**
Stddev	.000042	.000004	.08974	.0002463	.0000814	.0002235	.01423
%RSD	13.86656	3.337213	.1225731	10.96274	1.142435	4.033897	.1192014
#1	-.000355	-.000109	73.21140	.0021323	.0070720	.0052984	11.95555
#2	-.000282	-.000104	73.29911	.0020778	.0072207	.0057387	11.93853
#3	-.000281	-.000111	73.11965	.0025289	.0070888	.0055854	11.92728

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.456535**	**9.660896**	**.0229897**	**.0008795**	**109.4275**	**.0011712**	**.2545955**
Stddev	.004992	.035211	.0002513	.0001561	.5047	.0002909	.0007116
%RSD	.1444151	.3644643	1.093065	17.75023	.4612243	24.83996	.2794857
#1	3.459358	9.646468	.0231271	.0009226	109.9854	.0014804	.2551475
#2	3.459475	9.635191	.0231422	.0010095	109.0027	.0009028	.2548465
#3	3.450771	9.701029	.0226996	.0007063	109.2945	.0011306	.2537924

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**38.33082**	**.1046518**	**.0123367**	**-.002850**	**.0035140**	**9.384983**	**.5541484**
Stddev	.11654	.0006470	.0001852	.000218	.0014104	.083295	.0056685
%RSD	.3040475	.6182102	1.501233	7.639183	40.13747	.8875369	1.022916
#1	38.45110	.1041283	.0124438	-.003000	.0037342	9.479346	.5547622
#2	38.21842	.1044519	.0124434	-.002949	.0020064	9.321685	.5594850
#3	38.32293	.1053751	.0121228	-.002600	.0048013	9.353917	.5481980

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2756-01 Acquired: 8/4/2025 17:16:47 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**3.485168**	**-.003321**	**.7511036**
Stddev	.007975	.001725	.0010616
%RSD	.2288129	51.94070	.1413456
#1	3.476051	-.005307	.7523248
#2	3.490846	-.002186	.7505864
#3	3.488607	-.002471	.7503997

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5418.551**	**92475.47**	**8075.666**	**4536.815**	**6526.450**
Stddev	2.248	185.40	20.460	29.347	4.677
%RSD	.0414935	.2004861	.2533571	.6468615	.0716567
#1	5420.728	92316.26	8077.803	4519.653	6522.883
#2	5418.687	92431.13	8054.221	4520.091	6531.744
#3	5416.238	92679.02	8094.974	4570.701	6524.722

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2756-01DUP Acquired: 8/4/2025 17:20:59 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0079896**	**-.003535**	**.0405787**	**-.000252**	**-.000753**	**.2183800**	**.1207158**
Stddev	.0010074	.000511	.0011198	.002996	.000349	.0055148	.0013593
%RSD	12.60912	14.46273	2.759482	1187.275	46.30450	2.525320	1.126006
#1	.0088300	-.004054	.0401573	-.002702	-.000760	.2139155	.1193120
#2	.0068729	-.003518	.0397308	-.001144	-.001099	.2245447	.1208096
#3	.0082659	-.003032	.0418481	.003089	-.000401	.2166798	.1220257

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000290**	**-.000078**	**72.26127**	**-.000428**	**.0071883**	**.0052526**	**11.57145**
Stddev	.000025	.000022	.09205	.000104	.0001517	.0004302	.06862
%RSD	8.604879	28.82531	.1273835	24.29103	2.111002	8.190333	.5929898
#1	-.000317	-.000084	72.16170	-.000349	.0072986	.0048059	11.51462
#2	-.000268	-.000053	72.34327	-.000546	.0070152	.0052877	11.55206
#3	-.000286	-.000097	72.27885	-.000390	.0072510	.0056642	11.64768

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.415868**	**9.582448**	**.0222816**	**.0008409**	**106.2755**	**.0029982**	**.2501051**
Stddev	.006870	.093037	.0001717	.0004789	.2621	.0022394	.0001454
%RSD	.2011223	.9709096	.7705491	56.95432	.2466013	74.69364	.0581142
#1	3.408908	9.519722	.0224680	.0009958	106.1475	.0051934	.2502709
#2	3.422644	9.689342	.0221299	.0012233	106.5770	.0007170	.2500450
#3	3.416053	9.538278	.0222469	.0003037	106.1020	.0030842	.2499995

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**37.18525**	**.1028818**	**.0122811**	**-.000132**	**.0044454**	**9.146012**	**.5312861**
Stddev	.08272	.0000785	.0000985	.000390	.0021954	.013305	.0011746
%RSD	.2224611	.0763329	.8024539	294.4424	49.38512	.1454719	.2210865
#1	37.10326	.1029724	.0122785	-.000232	.0031686	9.146956	.5299775
#2	37.26869	.1028411	.0121838	-.000463	.0069804	9.158820	.5322492
#3	37.18380	.1028320	.0123809	.000297	.0031872	9.132261	.5316315

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2756-01DUP Acquired: 8/4/2025 17:20:59 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**3.416818**	**-.002886**	**.7431860**
Stddev	.030307	.003837	.0011567
%RSD	.8870053	132.9585	.1556448
#1	3.388871	-.007315	.7444235
#2	3.412548	-.000764	.7430027
#3	3.449033	-.000579	.7421319

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5574.965**	**96013.75**	**8266.070**	**4668.381**	**6709.954**
Stddev	8.934	465.16	26.055	24.552	16.051
%RSD	.1602591	.4844770	.3152041	.5259176	.2392099
#1	5580.900	96542.86	8294.181	4696.716	6720.174
#2	5579.306	95669.14	8242.730	4653.403	6718.234
#3	5564.690	95829.24	8261.300	4655.025	6691.454

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2756-01LX5 Acquired: 8/4/2025 17:25:10 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0019902**	**-.002526**	**.0088772**	**-.001394**	**-.001955**	**.0528297**	**.0238505**
Stddev	.0011782	.001712	.0011967	.002582	.000395	.0135561	.0007655
%RSD	59.19864	67.78709	13.48043	185.1987	20.18589	25.66009	3.209496
#1	.0014254	-.003725	.0075411	.001061	-.001501	.0461918	.0238720
#2	.0012008	-.000565	.0098506	-.001156	-.002146	.0684256	.0230745
#3	.0033445	-.003288	.0092398	-.004088	-.002218	.0438717	.0246050

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000102**	**-.000023**	**15.98740**	**-.000802**	**.0014830**	**.0008443**	**2.512668**
Stddev	.000008	.000033	.07530	.000254	.0000335	.0002108	.026100
%RSD	7.678193	148.2520	.4709747	31.70511	2.255805	24.96828	1.038717
#1	-.000095	-.000012	16.07183	-.000564	.0014653	.0008935	2.538397
#2	-.000110	-.000060	15.92719	-.001070	.0015215	.0006133	2.513393
#3	-.000101	.000004	15.96320	-.000771	.0014621	.0010263	2.486213

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7577342**	**2.157204**	**.0046404**	**.0009004**	**21.73043**	**.0005227**	**.0523714**
Stddev	.0020501	.003253	.0002983	.0000898	.14716	.0042664	.0000846
%RSD	.2705584	.1507801	6.428866	9.977778	.6772292	816.1894	.1614696
#1	.7598352	2.158794	.0049556	.0009364	21.82933	.0023669	.0524634
#2	.7576284	2.153463	.0043624	.0009666	21.80066	-.004356	.0522970
#3	.7557391	2.159356	.0046033	.0007981	21.56131	.003557	.0523537

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.497520**	**.0185290**	**.0024440**	**-.001881**	**.0027481**	**1.964946**	**.1124326**
Stddev	.046329	.0005166	.0000653	.000408	.0020185	.031936	.0030100
%RSD	.5452098	2.788042	2.670651	21.68436	73.45138	1.625265	2.677122
#1	8.529856	.0190177	.0025090	-.001870	.0004508	1.992153	.1140602
#2	8.518259	.0179884	.0023785	-.002294	.0042375	1.972901	.1089592
#3	8.444444	.0185810	.0024444	-.001478	.0035561	1.929785	.1142783

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2756-01LX5 Acquired: 8/4/2025 17:25:10 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.7213896	.0037919	.1627970
Stddev	.0054342	.0035414	.0003405
%RSD	.7533025	93.39265	.2091579
#1	.7273243	.0075839	.1630574
#2	.7201875	.0005704	.1629219
#3	.7166571	.0032215	.1624117

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5610.058	96439.74	8206.583	4682.765	6981.958
Stddev	8.844	7.07	33.371	12.030	13.550
%RSD	.1576433	.0073327	.4066329	.2569021	.1940785
#1	5618.669	96442.77	8229.235	4670.887	6991.232
#2	5610.507	96431.66	8222.251	4682.465	6988.235
#3	5600.998	96444.80	8168.261	4694.942	6966.407

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2756-01MS Acquired: 8/4/2025 17:29:26 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8449154**	**2.076044**	**.9859208**	**2.097338**	**.8516944**	**2.262961**	**.3303057**
Stddev	.0054908	.049140	.0004593	.009543	.0007566	.017792	.0006982
%RSD	.6498607	2.367025	.0465823	.4549904	.0888373	.7862136	.2113752
#1	.8449077	2.042310	.9857378	2.087806	.8509163	2.283321	.3310705
#2	.8394285	2.053397	.9855813	2.097316	.8517392	2.255156	.3297025
#3	.8504100	2.132424	.9864434	2.106892	.8524276	2.250405	.3301441

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1999118**	**.1938471**	**72.03852**	**.3963230**	**.2076575**	**.3090029**	**14.72017**
Stddev	.0006472	.0002945	.21699	.0020353	.0003905	.0006988	.04654
%RSD	.3237354	.1519123	.3012205	.5135411	.1880513	.2261512	.3161655
#1	.1998815	.1939874	72.28658	.3947484	.2080973	.3095700	14.72078
#2	.2005735	.1940452	71.88387	.3955993	.2075237	.3082222	14.67332
#3	.1992802	.1935087	71.94512	.3986212	.2073515	.3092164	14.76639

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.574420**	**11.39536**	**.5248802**	**.0768450**	**109.2837**	**.3149829**	**.4586746**
Stddev	.007243	.06826	.0006226	.0007496	.3422	.0041039	.0012469
%RSD	.2026480	.5990169	.1186151	.9754409	.3131553	1.302906	.2718381
#1	3.582721	11.38386	.5255899	.0776027	109.5123	.3194910	.4578517
#2	3.571159	11.46864	.5246244	.0768286	108.8903	.3139939	.4580630
#3	3.569380	11.33357	.5244262	.0761038	109.4487	.3114639	.4601092

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**47.70870**	**.3704846**	**.4619500**	**.6936969**	**.2115965**	**10.05036**	**6.073967**
Stddev	.16795	.0009444	.0003530	.0003246	.0030844	.05085	.016199
%RSD	.3520308	.2549068	.0764194	.0467937	1.457695	.5059405	.2666874
#1	47.84657	.3707107	.4620833	.6933305	.2124617	10.05959	6.090400
#2	47.52165	.3712954	.4615498	.6938118	.2081718	9.99553	6.058013
#3	47.75789	.3694477	.4622170	.6939485	.2141559	10.09597	6.073486

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2756-01MS Acquired: 8/4/2025 17:29:26 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**3.357179**	**.1936212**	**.9423980**
Stddev	.015196	.0014483	.0023168
%RSD	.4526516	.7480326	.2458427
#1	3.356447	.1924545	.9450210
#2	3.342362	.1931669	.9406309
#3	3.372728	.1952423	.9415423

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5572.941**	**96553.25**	**8424.019**	**4719.376**	**6683.804**
Stddev	11.400	40.58	17.478	20.530	12.188
%RSD	.2045686	.0420282	.2074762	.4350164	.1823556
#1	5568.342	96599.51	8425.197	4696.976	6673.492
#2	5585.923	96523.65	8405.982	4723.856	6697.255
#3	5564.559	96536.58	8440.879	4737.296	6680.665

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2756-01MSD Acquired: 8/4/2025 17:33:23 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8199562**	**2.060472**	**.9581171**	**2.052741**	**.8442549**	**2.203254**	**.3205217**
Stddev	.0037862	.034093	.0013123	.005366	.0042321	.008154	.0000717
%RSD	.4617615	1.654627	.1369658	.2614103	.5012863	.3700856	.0223596
#1	.8173474	2.084096	.9580775	2.047427	.8393687	2.195288	.3205621
#2	.8182223	2.075931	.9594487	2.052639	.8467678	2.202889	.3204389
#3	.8242989	2.021387	.9568250	2.058158	.8466281	2.211584	.3205640

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1946276**	**.1875539**	**70.52251**	**.3829856**	**.2010569**	**.2991747**	**14.35146**
Stddev	.0008812	.0002086	.22321	.0014702	.0005311	.0006973	.07127
%RSD	.4527810	.1112301	.3165098	.3838708	.2641776	.2330715	.4966320
#1	.1946233	.1873612	70.75627	.3813904	.2011080	.2988022	14.30870
#2	.1937486	.1877755	70.31161	.3842861	.2015607	.2987427	14.43374
#3	.1955110	.1875251	70.49965	.3832802	.2005021	.2999791	14.31194

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.509935**	**11.21388**	**.5069703**	**.0750437**	**107.8148**	**.3044273**	**.4500774**
Stddev	.004563	.03152	.0008643	.0005199	.3222	.0024557	.0023157
%RSD	.1300042	.2811248	.1704901	.6928066	.2988478	.8066487	.5145065
#1	3.515167	11.24161	.5066224	.0744438	107.6974	.3021113	.4485792
#2	3.507861	11.22044	.5079544	.0753229	108.1792	.3041685	.4489085
#3	3.506777	11.17959	.5063342	.0753643	107.5677	.3070021	.4527446

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**46.96124**	**.3645071**	**.4610047**	**.6802942**	**.2034495**	**9.872045**	**5.920330**
Stddev	.08454	.0013417	.0005941	.0014099	.0028832	.048711	.031179
%RSD	.1800305	.3680941	.1288654	.2072530	1.417132	.4934234	.5266418
#1	46.87053	.3651701	.4603412	.6790927	.2052651	9.830042	5.895822
#2	47.03784	.3629629	.4614873	.6799436	.2049583	9.925444	5.955424
#3	46.97534	.3653882	.4611856	.6818464	.2001250	9.860650	5.909743

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2756-01MSD Acquired: 8/4/2025 17:33:23 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**3.339844**	**.1893796**	**.9210524**
Stddev	.009393	.0015435	.0033891
%RSD	.2812497	.8150094	.3679597
#1	3.329016	.1877374	.9247715
#2	3.344704	.1908004	.9202476
#3	3.345811	.1896011	.9181381

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5535.035**	**95386.62**	**8299.829**	**4667.529**	**6636.606**
Stddev	2.978	73.26	34.838	15.242	11.153
%RSD	.0537986	.0768012	.4197424	.3265549	.1680491
#1	5532.406	95431.28	8269.912	4664.025	6634.993
#2	5534.429	95426.50	8338.077	4684.218	6626.347
#3	5538.269	95302.07	8291.498	4654.345	6648.477

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2756-01A Acquired: 8/4/2025 17:37:20 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8454532**	**2.072467**	**.9867124**	**2.116776**	**.8645448**	**2.283343**	**.3307969**
Stddev	.0033704	.006263	.0027858	.001311	.0010726	.014500	.0008854
%RSD	.3986475	.3021901	.2823323	.0619347	.1240635	.6350529	.2676662
#1	.8436307	2.066172	.9851097	2.116069	.8657520	2.273110	.3317626
#2	.8433865	2.078697	.9850984	2.115972	.8641808	2.299937	.3306050
#3	.8493424	2.072532	.9899292	2.118289	.8637016	2.276983	.3300232

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2007829**	**.1938617**	**71.95897**	**.3950669**	**.2080496**	**.3094195**	**14.66191**
Stddev	.0005636	.0001137	.25873	.0001678	.0006877	.0002618	.04407
%RSD	.2806780	.0586319	.3595525	.0424850	.3305695	.0846169	.3005506
#1	.2010180	.1937849	72.25770	.3949145	.2080393	.3095552	14.65148
#2	.2011908	.1938080	71.81320	.3952468	.2073671	.3091177	14.62398
#3	.2001399	.1939923	71.80602	.3950393	.2087425	.3095856	14.71025

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.565577**	**11.26407**	**.5248433**	**.0742927**	**108.3314**	**.3182622**	**.4581978**
Stddev	.009946	.06126	.0009324	.0004822	.3658	.0029899	.0007905
%RSD	.2789478	.5438661	.1776486	.6490149	.3376492	.9394464	.1725243
#1	3.576138	11.28223	.5247055	.0744396	108.0198	.3154808	.4579067
#2	3.556388	11.31420	.5239875	.0737541	108.2402	.3178816	.4590925
#3	3.564203	11.19578	.5258369	.0746843	108.7341	.3214242	.4575941

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**47.18572**	**.3740403**	**.4640683**	**.7059024**	**.2123980**	**10.01274**	**6.098130**
Stddev	.05399	.0021961	.0008196	.0032111	.0018912	.06877	.028486
%RSD	.1144241	.5871250	.1766110	.4548967	.8903833	.6868620	.4671263
#1	47.19292	.3759046	.4631551	.7044894	.2139219	9.98028	6.066671
#2	47.12849	.3745967	.4643096	.7036400	.2102815	9.96620	6.105542
#3	47.23576	.3716195	.4647401	.7095777	.2129905	10.09174	6.122178

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: Q2756-01A Acquired: 8/4/2025 17:37:20 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	3.363746	.1919704	.9413001
Stddev	.010991	.0027209	.0029028
%RSD	.3267362	1.417345	.3083859
#1	3.355743	.1950439	.9445878
#2	3.359218	.1909979	.9402221
#3	3.376277	.1898695	.9390906

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5547.961	96082.55	8339.612	4674.941	6641.222
Stddev	10.128	145.27	16.817	15.966	13.657
%RSD	.1825618	.1511883	.2016494	.3415214	.2056405
#1	5558.292	96238.66	8323.283	4689.015	6653.107
#2	5547.541	96057.63	8338.675	4657.592	6644.256
#3	5538.048	95951.35	8356.877	4678.217	6626.304

Sample Name: CCV06 Acquired: 8/4/2025 17:41:17 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.207554**	F **5.644167**	**4.947107**	**5.375657**	**5.335246**	**10.17259**
Stddev	.010264	.147212	.006867	.024157	.022224	.01373
%RSD	.1971023	2.608211	.1388038	.4493863	.4165545	.1349346
#1	5.215380	5.806622	4.945209	5.403114	5.325127	10.15677
#2	5.195933	5.519608	4.941389	5.357667	5.319882	10.17963
#3	5.211350	5.606271	4.954724	5.366190	5.360729	10.18137

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.48390**	**.2569625**	**2.456395**	**25.96603**	**.9816118**	**2.474372**
Stddev	.10991	.0006316	.004279	.10327	.0060713	.003413
%RSD	1.048406	.2457765	.1741914	.3977045	.6185085	.1379510
#1	10.56170	.2572847	2.459778	26.05919	.9884492	2.475726
#2	10.53183	.2573681	2.451585	25.98392	.9768518	2.470490
#3	10.35816	.2562349	2.457822	25.85499	.9795346	2.476901

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.263441**	**5.210934**	**2.573160**	**24.83924**	**2.480082**	**1.302802**
Stddev	.001756	.055596	.002870	.04237	.003887	.010940
%RSD	.1389562	1.066919	.1115554	.1705866	.1567160	.8397305
#1	1.265124	5.264695	2.576422	24.87532	2.483159	1.315225
#2	1.261621	5.153668	2.572037	24.79258	2.475714	1.294604
#3	1.263580	5.214438	2.571021	24.84982	2.481372	1.298578

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.62369**	**2.551277**	**2.608871**	**26.64902**	**5.183090**	**5.233687**
Stddev	.25104	.009301	.021695	.22955	.010968	.015200
%RSD	1.019490	.3645611	.8315860	.8613920	.2116176	.2904175
#1	24.84951	2.561696	2.633921	26.91047	5.183499	5.249362
#2	24.35338	2.543811	2.596135	26.48053	5.193848	5.219012
#3	24.66817	2.548326	2.596558	26.55605	5.171923	5.232688

Sample Name: CCV06 Acquired: 8/4/2025 17:41:17 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.002160**	**5.247242**	**5.167543**	**4.748392**	**5.048424**	**5.009154**
Stddev	.013804	.023049	.053569	.020304	.015739	.014447
%RSD	.2759628	.4392585	1.036646	.4275948	.3117689	.2884110
#1	5.014115	5.268161	5.201187	4.755037	5.055910	5.016127
#2	4.987052	5.251033	5.105769	4.725598	5.030339	4.992543
#3	5.005313	5.222533	5.195675	4.764541	5.059024	5.018792

Elem	Sr4077
Units	ppm
Avg	**5.160484**
Stddev	.044414
%RSD	.8606636
#1	5.188907
#2	5.109303
#3	5.183241

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5494.899**	**92713.57**	**8036.789**	**4582.226**	**6548.755**
Stddev	5.259	708.56	50.269	46.960	7.857
%RSD	.0956981	.7642462	.6254847	1.024832	.1199739
#1	5489.712	91895.88	8024.540	4531.648	6542.097
#2	5494.760	93097.89	7993.777	4590.585	6546.748
#3	5500.226	93146.93	8092.050	4624.446	6557.421

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: CCB06 Acquired: 8/4/2025 17:45:26 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001953**	**-.003278**	**-.000272**	**-.001002**	**.0009781**	**-.005556**	**-.001641**
Stddev	.002405	.001456	.001300	.003586	.0017039	.006302	.000408
%RSD	123.1707	44.41983	477.9699	357.8611	174.2140	113.4290	24.87114
#1	-.001426	-.004833	-.001030	-.001099	.0015423	.001654	-.001343
#2	.000145	-.003053	-.001015	-.004539	.0023282	-.010016	-.002107
#3	-.004578	-.001947	.001229	.002632	-.000936	-.008306	-.001475

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000067**	**-.000010**	**.0123406**	**-.001365**	**.0000370**	**.0001671**	**-.004097**
Stddev	.000020	.000073	.0054762	.000102	.0000857	.0004070	.005688
%RSD	29.07712	761.7588	44.37542	7.471912	231.5531	243.5202	138.8313
#1	-.000072	.000063	.0178040	-.001454	-.000033	-.000247	-.010627
#2	-.000084	-.000008	.0123660	-.001386	.000012	.000183	-.001445
#3	-.000046	-.000083	.0068517	-.001253	.000132	.000566	-.000220

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001748**	**.0197872**	**-.000056**	**.0003345**	**.4808028**	**-.000893**	**-.001483**
Stddev	.000061	.0092507	.000253	.0002591	.0118931	.003777	.000179
%RSD	3.503249	46.75085	449.4302	77.45057	2.473585	422.7134	12.07669
#1	-.001693	.0208723	.000217	.0002520	.4801000	-.004559	-.001389
#2	-.001814	.0100418	-.000281	.0001267	.4930316	-.001107	-.001372
#3	-.001736	.0284474	-.000105	.0006248	.4692767	.002985	-.001690

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7273479**	**-.001623**	**.0005332**	**-.000918**	**-.000185**	**-.001517**	**.0011179**
Stddev	.0052620	.000571	.0001027	.000455	.000794	.010933	.0009549
%RSD	.7234461	35.20468	19.25368	49.58882	428.2939	720.6270	85.42216
#1	.7334011	-.001134	.0006424	-.000906	-.000630	.009927	.0005516
#2	.7247771	-.002251	.0005186	-.000469	.000732	-.011855	.0022204
#3	.7238656	-.001484	.0004387	-.001378	-.000659	-.002624	.0005816

Sample Name: CCB06 Acquired: 8/4/2025 17:45:26 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0011899	.0017796	-.000075
Stddev	.0006709	.0004319	.000023
%RSD	56.38081	24.26922	31.12434
#1	.0015758	.0013542	-.000060
#2	.0015786	.0017668	-.000063
#3	.0004152	.0022177	-.000102

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5703.553	98376.85	8067.648	4791.889	7374.489
Stddev	10.647	441.68	57.211	29.602	14.215
%RSD	.1866792	.4489648	.7091464	.6177542	.1927632
#1	5697.221	97891.61	8097.315	4758.949	7367.984
#2	5715.846	98483.51	8103.933	4816.266	7390.792
#3	5697.593	98755.43	8001.697	4800.452	7364.689

Sample Name: PB169098BL Acquired: 8/4/2025 17:49:45 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001420**	**-.002579**	**-.000651**	**-.003239**	**-.001169**	**-.004212**	**-.002683**
Stddev	.000540	.001454	.001248	.003756	.000484	.012100	.000148
%RSD	38.00381	56.39078	191.7216	115.9394	41.45136	287.2963	5.511282
#1	-.000945	-.003325	-.001800	-.004377	-.001028	-.007112	-.002697
#2	-.001309	-.000903	-.000830	.000954	-.001708	-.014598	-.002824
#3	-.002007	-.003509	.000677	-.006295	-.000770	.009075	-.002529

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000067**	**-.000007**	**-.004343**	**-.001327**	**.0001634**	**-.000222**	**-.012412**
Stddev	.000040	.000058	.005282	.000245	.0001059	.000430	.003681
%RSD	60.20735	773.1005	121.6425	18.47547	64.83980	193.8757	29.65869
#1	-.000076	.000012	-.009049	-.001158	.0001459	.000245	-.013565
#2	-.000023	-.000072	-.005350	-.001214	.0000673	-.000309	-.008292
#3	-.000101	.000038	.001371	-.001608	.0002770	-.000601	-.015379

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001709**	**.0210407**	**.0003974**	**.0007210**	**.3002081**	**-.004211**	**-.001313**
Stddev	.000431	.0016385	.0004888	.0005602	.0113580	.001257	.000241
%RSD	25.19744	7.787496	122.9924	77.70040	3.783364	29.84614	18.37986
#1	-.001239	.0194739	.0009530	.0010216	.3031495	-.005649	-.001079
#2	-.002085	.0209056	.0002054	.0010666	.3098061	-.003318	-.001561
#3	-.001802	.0227427	.0000338	.0000746	.2876688	-.003667	-.001299

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4723482**	**-.004207**	**.0001235**	**-.000740**	**.0001848**	**-.008228**	**.0034968**
Stddev	.0278525	.001149	.0001008	.000327	.0011743	.010636	.0013830
%RSD	5.896595	27.32021	81.58071	44.19209	635.3455	129.2635	39.55121
#1	.4403612	-.005534	.0000693	-.001117	-.000862	-.012671	.0028865
#2	.4854461	-.003562	.0000615	-.000571	-.000038	.003909	.0050801
#3	.4912373	-.003526	.0002398	-.000532	.001455	-.015922	.0025239

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: PB169098BL Acquired: 8/4/2025 17:49:45 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.000189	-.004310	-.000047
Stddev	.002098	.001590	.000110
%RSD	1112.285	36.89291	233.9617
#1	-.000199	-.002869	-.000069
#2	-.002281	-.006016	.000072
#3	.001915	-.004045	-.000145

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5701.019	97998.73	8156.370	4790.984	7383.226
Stddev	12.150	107.56	65.638	19.314	22.343
%RSD	.2131210	.1097548	.8047443	.4031315	.3026173
#1	5699.376	98049.83	8125.308	4812.983	7383.569
#2	5713.907	98071.22	8231.773	4776.816	7405.395
#3	5689.774	97875.15	8112.028	4783.152	7360.713

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: PB169098BS Acquired: 8/4/2025 17:54:04 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8286884**	**2.268502**	**.9873966**	**2.146380**	**.8682653**	**2.098414**	**.2156878**
Stddev	.0035818	.059139	.0040384	.012312	.0022161	.010199	.0006649
%RSD	.4322261	2.606981	.4089995	.5735997	.2552341	.4860446	.3082749
#1	.8292880	2.273645	.9876906	2.144748	.8691944	2.110159	.2151837
#2	.8248447	2.206959	.9832191	2.134966	.8657359	2.093293	.2154384
#3	.8319327	2.324902	.9912799	2.159427	.8698657	2.091790	.2164414

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2158895**	**.1946567**	**1.097595**	**.4003897**	**.2017913**	**.3198428**	**3.117149**
Stddev	.0009104	.0005849	.012615	.0020871	.0005029	.0008979	.019873
%RSD	.4217086	.3004939	1.149300	.5212765	.2492358	.2807435	.6375385
#1	.2149280	.1943149	1.083474	.3996795	.2013563	.3199476	3.127775
#2	.2167385	.1943231	1.101563	.3987503	.2016755	.3188970	3.094222
#3	.2160019	.1953321	1.107749	.4027393	.2023420	.3206837	3.129451

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2145582**	**2.073511**	**.5070696**	**.0797174**	**3.125107**	**.3147398**	**.2144790**
Stddev	.0005428	.009966	.0011048	.0002964	.008516	.0031911	.0010143
%RSD	.2529889	.4806527	.2178781	.3718103	.2725148	1.013888	.4729191
#1	.2148245	2.062047	.5064280	.0800043	3.134819	.3114339	.2149394
#2	.2149164	2.080122	.5064355	.0794124	3.118917	.3178021	.2133161
#3	.2139337	2.078363	.5083453	.0797356	3.121583	.3149833	.2151814

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.39477**	**.3143765**	**.4320874**	**.6986423**	**.2095401**	**.8563865**	**5.470143**
Stddev	.08582	.0004240	.0006989	.0020346	.0022852	.0142156	.011452
%RSD	.8255843	.1348725	.1617412	.2912161	1.090589	1.659947	.2093554
#1	10.49266	.3148365	.4327755	.6987005	.2114854	.8688553	5.475571
#2	10.33247	.3140013	.4313783	.6965792	.2070234	.8409066	5.456986
#3	10.35919	.3142916	.4321084	.7006471	.2101115	.8593975	5.477872

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: PB169098BS Acquired: 8/4/2025 17:54:04 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	F -.002496	.1963459	.2113864
Stddev	.000217	.0025605	.0002282
%RSD	8.681902	1.304098	.1079485
#1	-.002337	.1992230	.2116449
#2	-.002743	.1943173	.2113016
#3	-.002409	.1954975	.2112128

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5692.692	98467.77	8131.479	4837.914	7133.981
Stddev	6.965	365.86	40.641	10.711	10.185
%RSD	.1223563	.3715567	.4997949	.2213934	.1427728
#1	5690.023	98309.71	8172.745	4825.552	7140.378
#2	5700.597	98886.09	8091.494	4844.425	7139.329
#3	5687.457	98207.50	8130.197	4843.765	7122.236

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: CCV07 Acquired: 8/4/2025 17:58:04 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal 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	**5.177838**	**5.474469**	**4.953695**	**5.296073**	**5.301003**	**10.17227**	**10.48381**
Stddev	.026512	.180847	.026838	.040153	.029469	.02762	.15564
%RSD	.5120189	3.303456	.5417707	.7581691	.5559043	.2715639	1.484566
#1	5.172757	5.456542	4.962264	5.300733	5.300638	10.18527	10.30933
#2	5.154235	5.303254	4.923620	5.253793	5.271718	10.19100	10.60835
#3	5.206522	5.663612	4.975202	5.333693	5.330652	10.14055	10.53374

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2569703**	**2.461921**	**26.04076**	**.9664635**	**2.481171**	**1.263141**	**5.152231**
Stddev	.0014204	.013122	.08211	.0039601	.014018	.006137	.008165
%RSD	.5527449	.5329903	.3153010	.4097482	.5649780	.4858770	.1584696
#1	.2565559	2.465959	25.98485	.9687748	2.483938	1.264321	5.146180
#2	.2585518	2.447255	26.13503	.9687248	2.465975	1.256499	5.148997
#3	.2558031	2.472550	26.00241	.9618909	2.493599	1.268602	5.161518

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.572244**	**24.80999**	**2.486178**	**1.284916**	**24.57227**	**2.562872**	**2.581289**
Stddev	.011048	.06080	.014211	.004054	.04437	.008511	.010749
%RSD	.4295062	.2450708	.5716087	.3154972	.1805493	.3320874	.4164380
#1	2.564406	24.75147	2.491141	1.284018	24.58115	2.562195	2.577256
#2	2.584880	24.80564	2.470150	1.289343	24.61153	2.571701	2.593472
#3	2.567447	24.87284	2.497241	1.281386	24.52414	2.554719	2.573140

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.84841**	**5.166863**	**5.241326**	**4.999842**	**5.254931**	**5.046844**	**4.776803**
Stddev	.02248	.031885	.028879	.036383	.019536	.044678	.017195
%RSD	.0869566	.6171008	.5509899	.7276741	.3717719	.8852629	.3599759
#1	25.82325	5.161252	5.242075	5.006863	5.248105	4.995394	4.776169
#2	25.86653	5.201181	5.212080	4.960460	5.276964	5.075850	4.759934
#3	25.85544	5.138156	5.269824	5.032202	5.239723	5.069289	4.794307

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: CCV07 Acquired: 8/4/2025 17:58:04 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV07 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.983798**	**4.979217**	**5.318714**
Stddev	.046037	.012482	.026097
%RSD	.9237243	.2506840	.4906636
#1	4.976446	4.979340	5.291894
#2	4.941880	4.991637	5.320227
#3	5.033069	4.966674	5.344022

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5486.677**	**94057.46**	**8004.828**	**4600.312**	**6536.840**
Stddev	17.107	269.64	31.924	27.927	29.431
%RSD	.3117924	.2866786	.3988143	.6070693	.4502334
#1	5480.655	94360.19	8039.497	4631.920	6522.599
#2	5505.981	93843.06	7976.644	4578.976	6570.682
#3	5473.396	93969.13	7998.343	4590.039	6517.238

Reviewed By:jaswal
On:8/6/2025 7:45:51 AM
Inst Id :P4
LB :LB136697

Sample Name: CCB07 Acquired: 8/4/2025 18:02:15 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal 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	**.0003154**	**-.002479**	**-.000834**	**-.003447**	**-.000736**	**-.009617**	**-.000774**
Stddev	.0006361	.000783	.000542	.001676	.000642	.006835	.000981
%RSD	201.6825	31.57573	64.96223	48.62870	87.26483	71.07513	126.7226
#1	.0000245	-.001783	-.000271	-.002763	-.001199	-.011558	-.000256
#2	-.000123	-.003327	-.000879	-.002221	-.001005	-.015272	-.000161
#3	.001045	-.002328	-.001352	-.005357	-.000003	-.002021	-.001906

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000054**	**.0000113**	**.0044678**	**-.001335**	**-.000004**	**-.000138**	**-.008404**
Stddev	.000082	.0000438	.0002733	.000198	.000061	.000245	.001995
%RSD	152.9065	388.6179	6.117116	14.81870	1511.276	177.7802	23.74360
#1	-.000033	-.000001	.0041566	-.001421	.000035	-.000314	-.010443
#2	.000016	.000060	.0045783	-.001475	.000027	.000142	-.006456
#3	-.000144	-.000025	.0046686	-.001109	-.000074	-.000241	-.008312

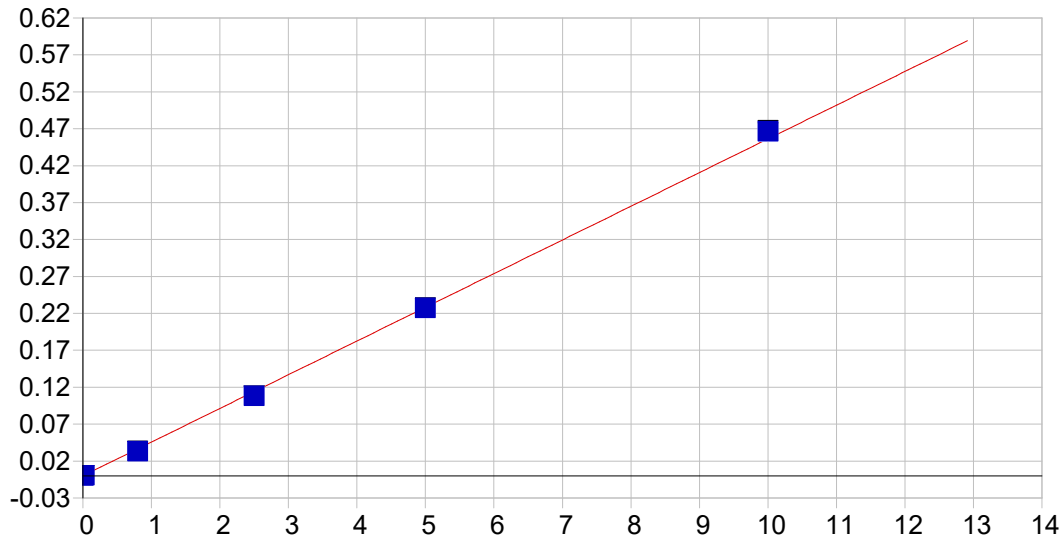
Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001592**	**.0137549**	**-.000004**	**.0011277**	**.1957975**	**-.000641**	**-.001413**
Stddev	.000016	.0065219	.000416	.0002933	.0046831	.001393	.000232
%RSD	1.030069	47.41536	11772.67	26.00754	2.391801	217.3655	16.41956
#1	-.001602	.0062634	-.000478	.0008234	.1921041	-.002126	-.001150
#2	-.001600	.0181670	.000297	.0011513	.2010648	-.000434	-.001590
#3	-.001573	.0168343	.000170	.0014085	.1942236	.000637	-.001498

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3810149**	**-.000114**	**.0006969**	**-.001076**	**.0006125**	**.0023695**	**.0030818**
Stddev	.0327118	.001236	.0001739	.000486	.0014604	.0154246	.0023761
%RSD	8.585433	1079.514	24.95673	45.20890	238.4421	650.9647	77.09959
#1	.3608147	-.000112	.0006954	-.001576	.0022216	-.006727	.0023761
#2	.4187559	-.001352	.0008716	-.000605	-.000629	.020179	.0057308
#3	.3634739	.001120	.0005238	-.001047	.000245	-.006343	.0011386

Sample Name: CCB07 Acquired: 8/4/2025 18:02:15 Type: Unk
Method: 6010-200.7 NEW(v81) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB07 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0001190	-.006649	-.000090
Stddev	.0010541	.002446	.000082
%RSD	886.1925	36.78502	90.12106
#1	.0008696	-.004955	.000004
#2	.0005734	-.005540	-.000139
#3	-.001086	-.009454	-.000136

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5697.260	98863.27	7984.403	4836.340	7346.968
Stddev	11.429	238.71	84.235	4.279	9.936
%RSD	.2006033	.2414544	1.054993	.0884861	.1352434
#1	5689.385	98589.03	7983.503	4839.701	7337.028
#2	5710.369	98976.36	7900.622	4837.797	7356.900
#3	5692.027	99024.42	8069.084	4831.522	7346.978

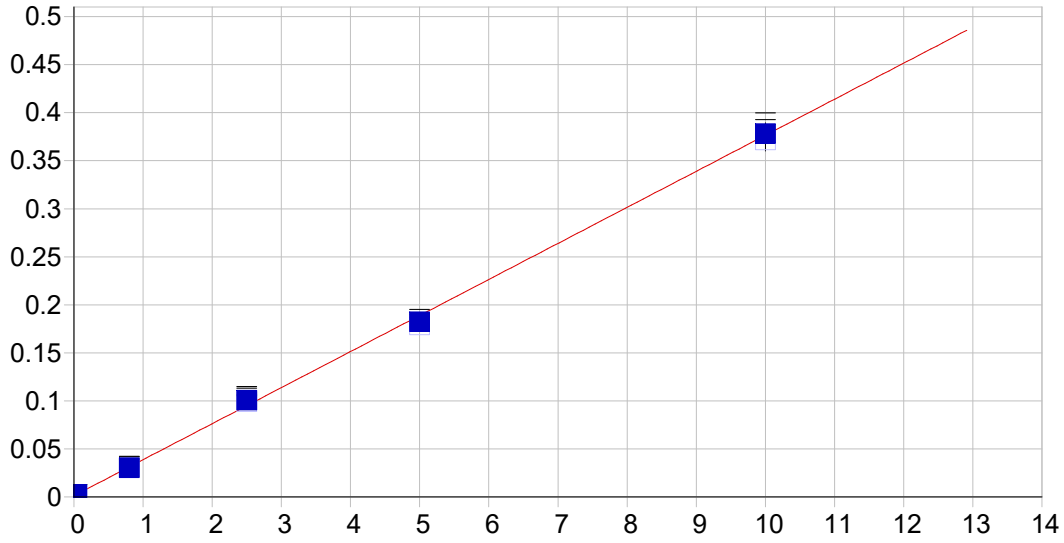


As 189.042 {479}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000009	Re-Slope:	1.000000
A1 (Gain):	0.045627	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999494	Status:	OK.
Std Error of Est:	0.000034		
Predicted MDL:	0.002519		
Predicted MQL:	0.008396		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00001	.000	1
S1	.02000	.01812	-.002	-9.39	.00083	.000	1
S3	2.5000	2.3721	-.128	-5.11	.10812	.000	1
S4	5.0000	4.9810	-.019	-.381	.22703	.000	1
S5	10.000	10.222	.222	2.22	.46594	.001	1
S2	.80000	.72629	-.074	-9.21	.03311	.000	1

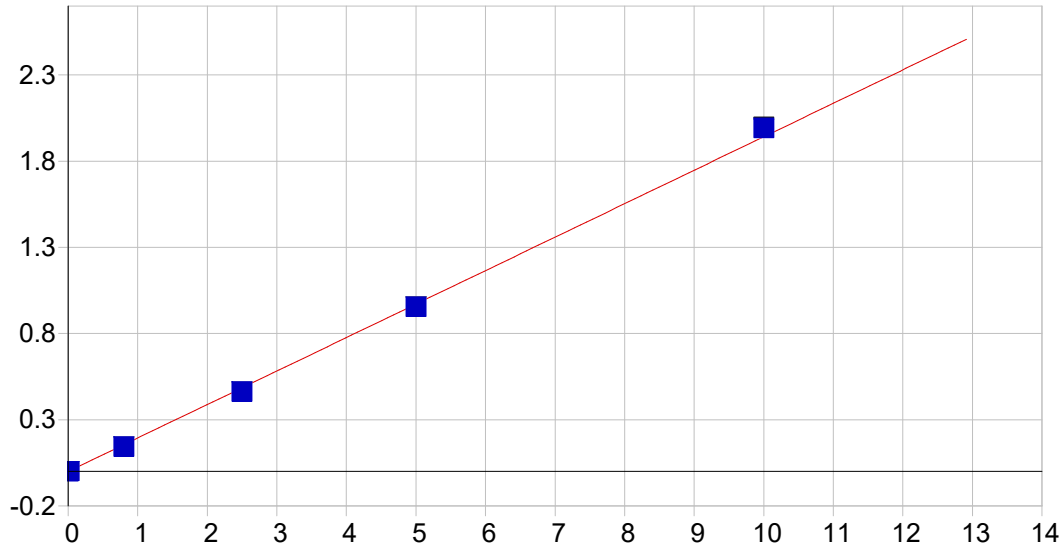


Tl 190.856 {477}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001211	Re-Slope:	1.000000
A1 (Gain):	0.037530	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999538	Status:	OK.
Std Error of Est:	0.000037		
Predicted MDL:	0.003344		
Predicted MQL:	0.011148		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00121	.000	1
S1	.04000	.03614	-.004	-9.65	.00247	.000	1
S3	2.5000	2.6524	.152	6.10	.09904	.004	1
S4	5.0000	4.8277	-.172	-3.45	.17897	.003	1
S5	10.000	10.045	.045	.446	.37134	.011	1
S2	.80000	.77892	-.021	-2.63	.02990	.002	1

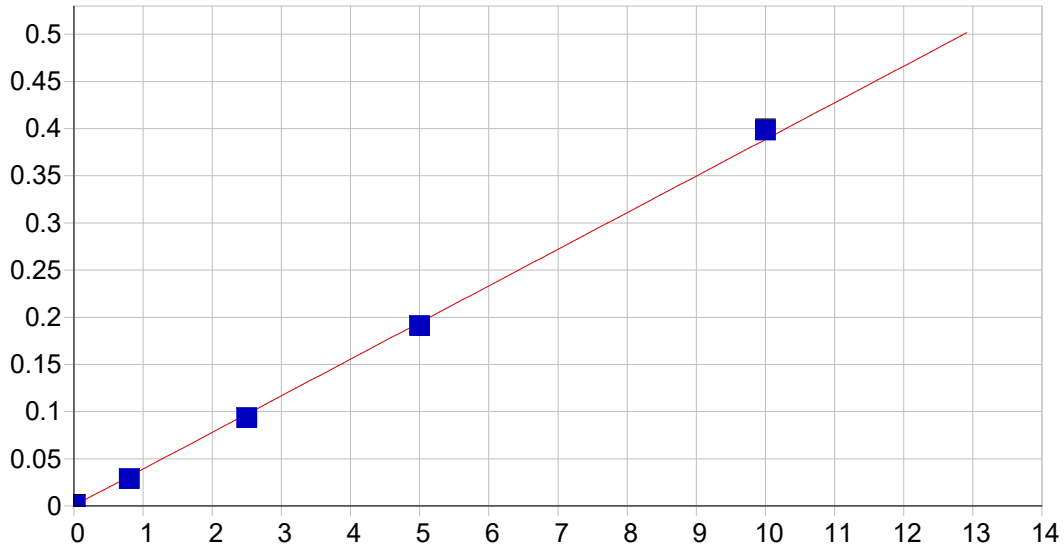


Pb 220.353 {453}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000137	Re-Slope:	1.000000
A1 (Gain):	0.194146	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999475	Status:	OK.
Std Error of Est:	0.000114		
Predicted MDL:	0.001472		
Predicted MQL:	0.004908		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00014	.000	1
S1	.01200	.01142	-.001	-4.82	.00231	.000	1
S3	2.5000	2.3813	-.119	-4.75	.46195	.001	1
S4	5.0000	4.9210	-.079	-1.58	.95453	.001	1
S5	10.000	10.264	.264	2.64	1.9908	.005	1
S2	.80000	.73465	-.065	-8.17	.14261	.000	1

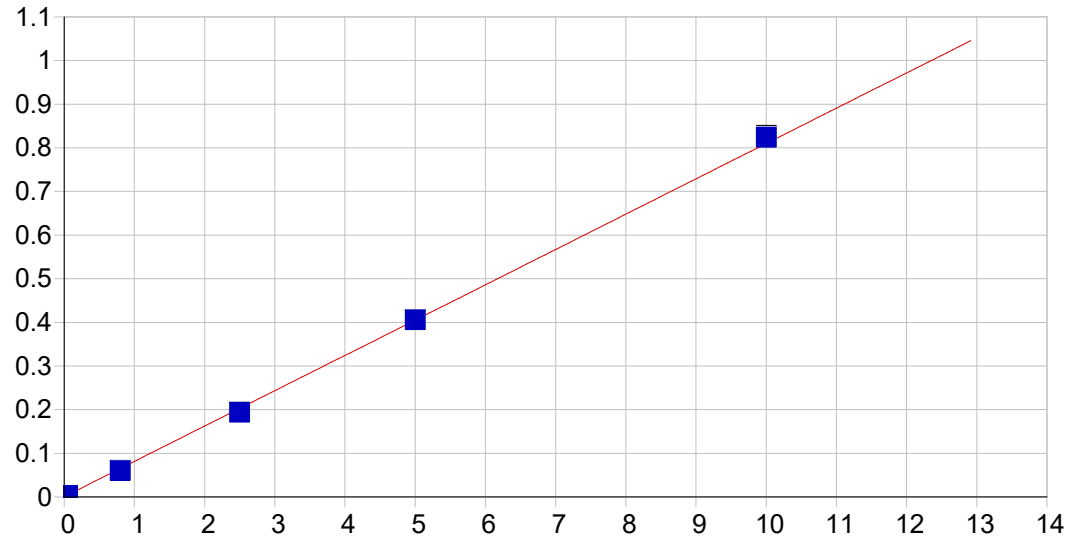


Se 196.090 {472}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000300	Re-Slope:	1.000000
A1 (Gain):	0.038827	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999513	Status:	OK.
Std Error of Est:	0.000028		
Predicted MDL:	0.003689		
Predicted MQL:	0.012295		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00030	.000	1
S1	.02000	.02247	.002	12.4	.00117	.000	1
S3	2.5000	2.3992	-.101	-4.03	.09343	.000	1
S4	5.0000	4.9126	-.087	-1.75	.19099	.000	1
S5	10.000	10.252	.252	2.52	.39827	.001	1
S2	.80000	.73330	-.067	-8.34	.02876	.000	1

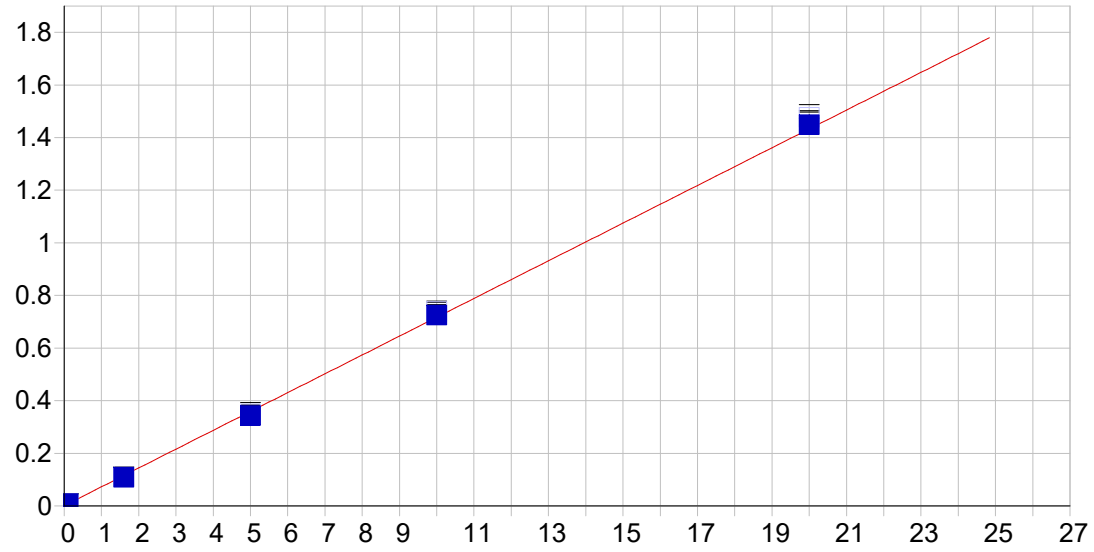


Sb 206.833 {463}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000509	Re-Slope:	1.000000
A1 (Gain):	0.080925	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999652	Status:	OK.
Std Error of Est:	0.000079		
Predicted MDL:	0.002293		
Predicted MQL:	0.007645		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00051	.000	1
S1	.05000	.04897	-.001	-2.06	.00448	.000	1
S3	2.5000	2.3848	-.115	-4.61	.19405	.000	1
S4	5.0000	5.0016	.002	.033	.40636	.000	1
S5	10.000	10.174	.174	1.74	.82607	.002	1
S2	.80000	.74011	-.060	-7.49	.06058	.000	1

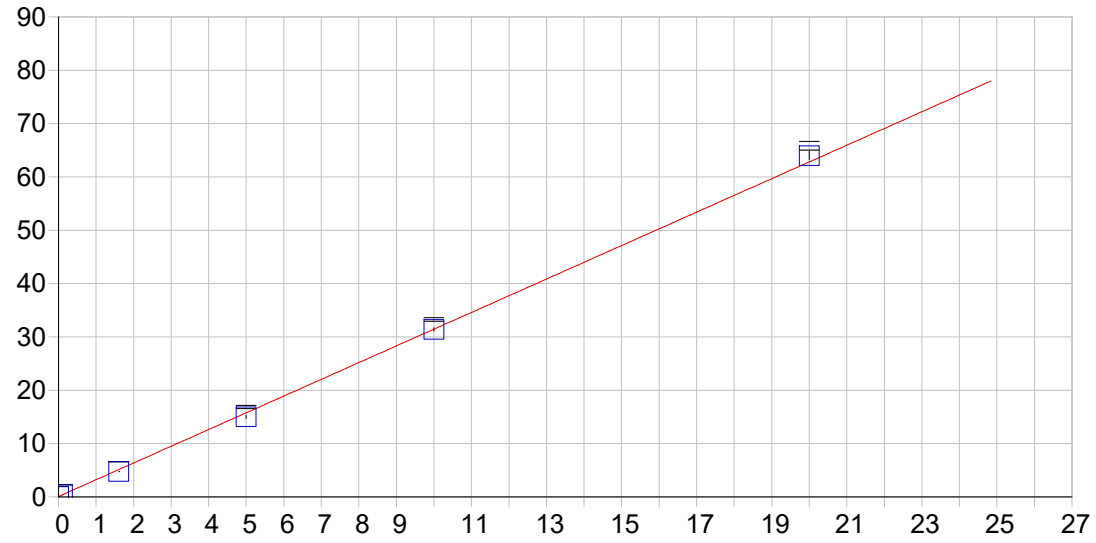


Al 396.152 { 85}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000969	Re-Slope:	1.000000
A1 (Gain):	0.071598	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999741	Status:	OK.
Std Error of Est:	0.000123		
Predicted MDL:	0.014618		
Predicted MQL:	0.048728		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00097	.001	1
S1	.10000	.09866	-.001	-1.34	.00859	.000	1
S3	5.0000	4.7726	-.227	-4.55	.34963	.005	1
S4	10.000	10.107	.107	1.07	.73850	.002	1
S5	20.000	20.219	.219	1.10	1.4764	.012	1
S2	1.6000	1.5028	-.097	-6.07	.11079	.002	1

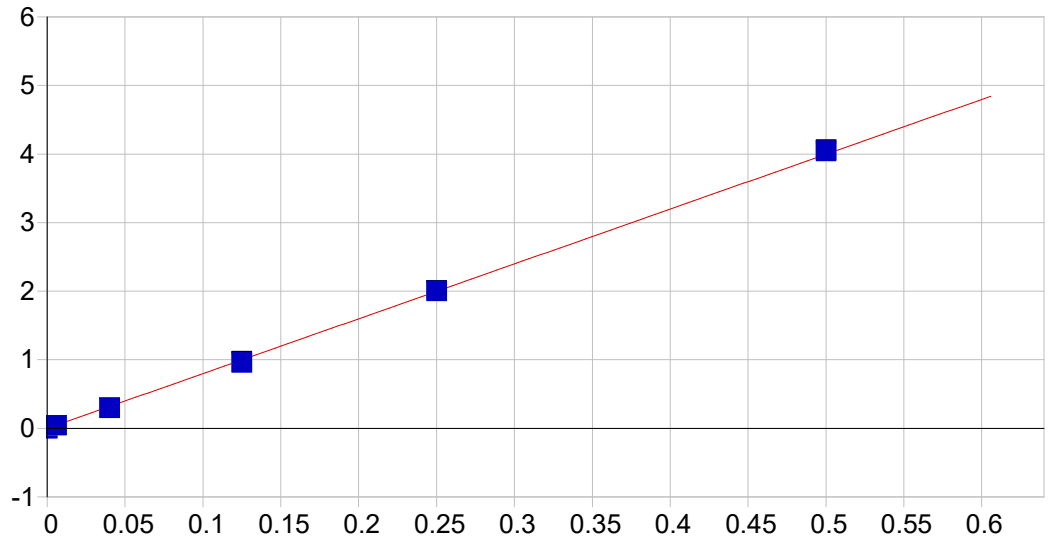


Ba 493.409 { 68}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.086671	Re-Slope:	1.000000
A1 (Gain):	3.135895	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999628	Status:	OK.
Std Error of Est:	0.006347		
Predicted MDL:	0.000871		
Predicted MQL:	0.002904		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.08670	.004	1
S1	.10000	.10049	.000	.493	.40181	.004	1
S3	5.0000	4.7582	-.242	-4.84	15.008	.319	1
S4	10.000	9.9811	-.019	-.189	31.386	.324	1
S5	20.000	20.377	.377	1.88	63.986	.835	1
S2	1.6000	1.4833	-.117	-7.29	4.7381	.019	1

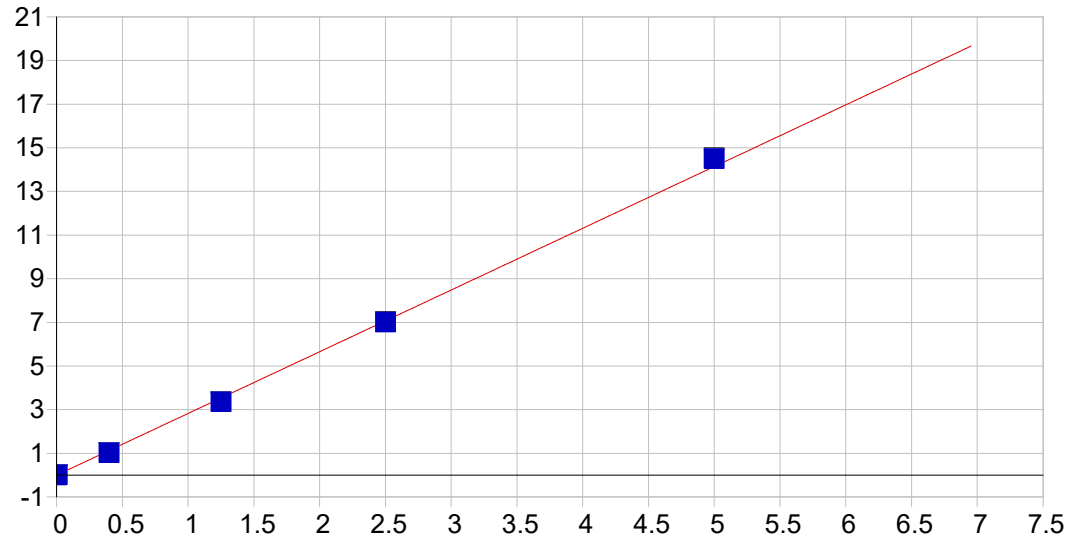


Be 234.861 {144}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001455	Re-Slope:	1.000000
A1 (Gain):	7.996752	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999761	Status:	OK.
Std Error of Est:	0.000500		
Predicted MDL:	0.000079		
Predicted MQL:	0.000262		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00145	.001	1
S1	.00600	.00593	-.000	-1.17	.04561	.001	1
S3	.12500	.12023	-.005	-3.82	.95548	.020	1
S4	.25000	.25067	.001	.267	1.9941	.008	1
S5	.50000	.50671	.007	1.34	4.0327	.015	1
S2	.04000	.03747	-.003	-6.34	.29671	.003	1

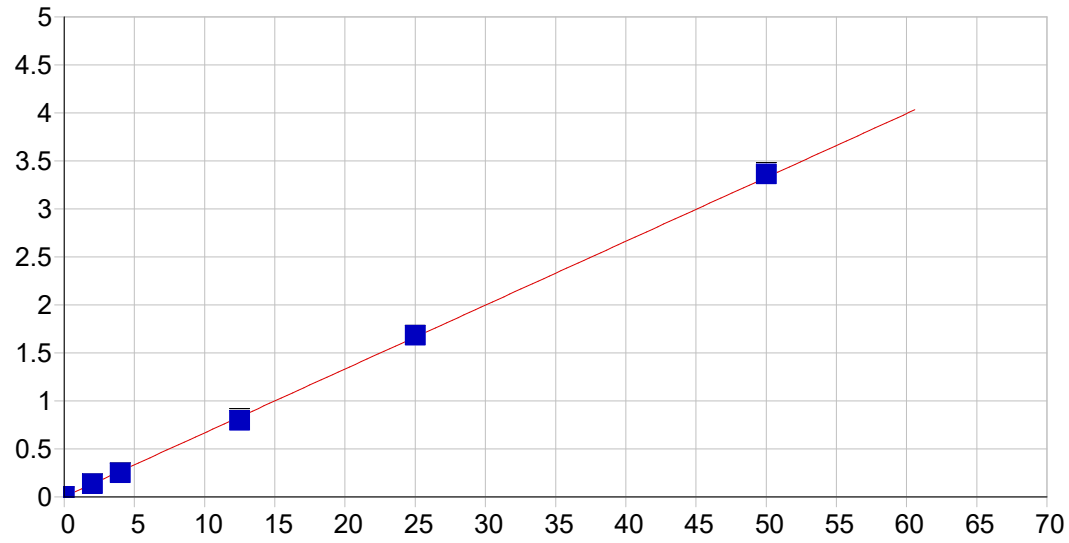


Cd 226.502 {449}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000314	Re-Slope:	1.000000
A1 (Gain):	2.827641	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999415	Status:	OK.
Std Error of Est:	0.000878		
Predicted MDL:	0.000085		
Predicted MQL:	0.000283		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00031	.000	1
S1	.00600	.00551	-.000	-8.17	.01532	.000	1
S3	1.2500	1.1860	-.064	-5.12	3.3557	.007	1
S4	2.5000	2.4770	-.023	-.920	7.0084	.012	1
S5	5.0000	5.1273	.127	2.55	14.507	.029	1
S2	.40000	.36019	-.040	-9.95	1.0189	.001	1

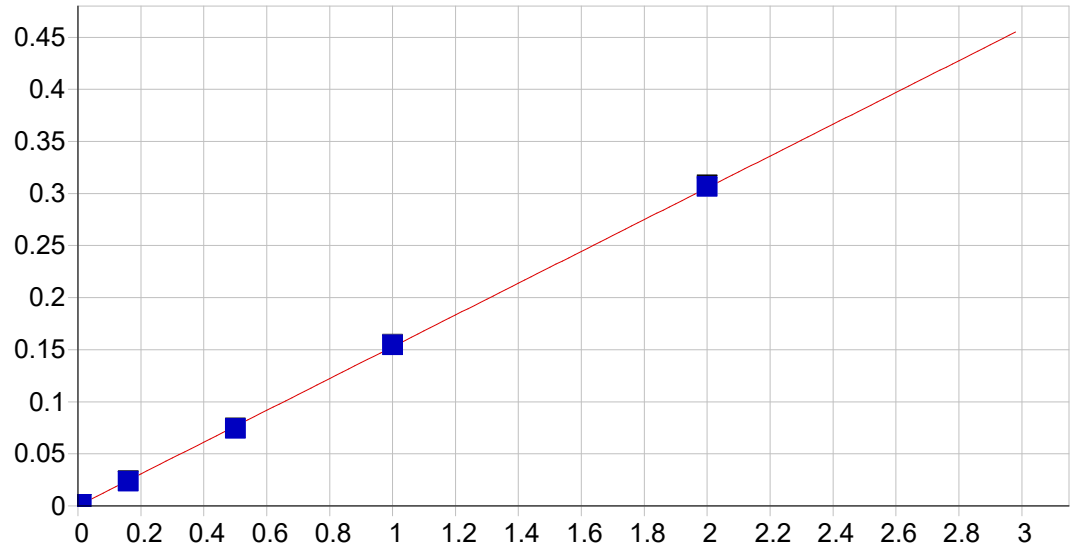


Ca 373.690 { 90}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001975	Re-Slope:	1.000000
A1 (Gain):	0.066511	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999734	Status:	OK.
Std Error of Est:	0.000812		
Predicted MDL:	0.013196		
Predicted MQL:	0.043986		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00015	.000	.000	.00199	.002	1
S2	4.0000	3.7303	-.270	-6.74	.25008	.002	1
S3	12.500	11.962	-.538	-4.30	.79761	.019	1
S4	25.000	25.262	.262	1.05	1.6822	.003	1
S5	50.000	50.516	.516	1.03	3.3618	.019	1
S1	2.0000	2.0291	.029	1.45	.13693	.001	1

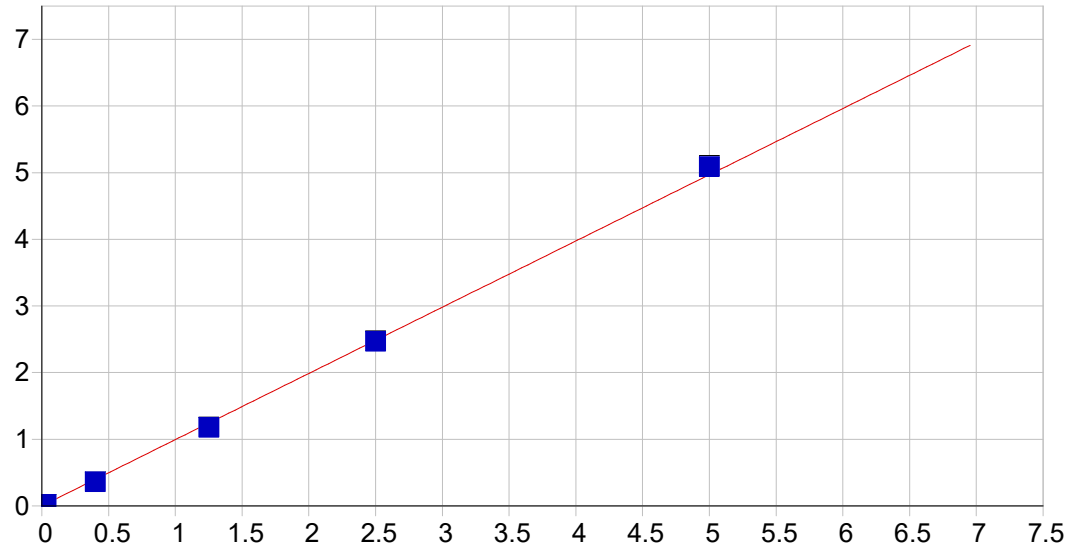


Cr 267.716 {126}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000175	Re-Slope:	1.000000
A1 (Gain):	0.152637	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999903	Status:	OK.
Std Error of Est:	0.000016		
Predicted MDL:	0.000438		
Predicted MQL:	0.001459		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00018	.000	1
S1	.01000	.00966	-.000	-3.37	.00165	.000	1
S3	.50000	.48660	-.013	-2.68	.07448	.000	1
S4	1.0000	1.0111	.011	1.11	.15457	.001	1
S5	2.0000	2.0081	.008	.405	.30681	.001	1
S2	.16000	.15452	-.005	-3.43	.02377	.000	1

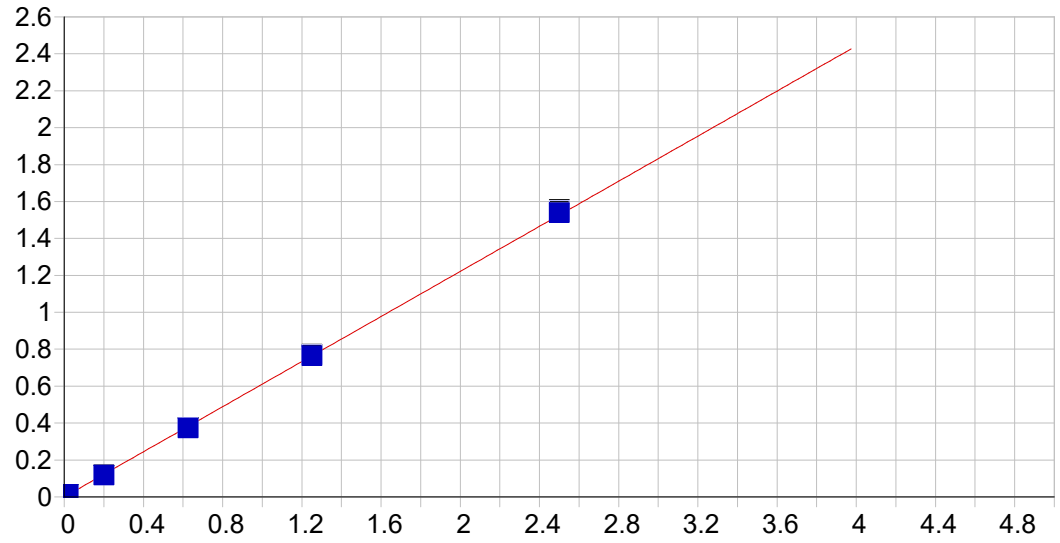


Co 228.616 {448}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000376	Re-Slope:	1.000000
A1 (Gain):	0.993744	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999474	Status:	OK.
Std Error of Est:	0.000656		
Predicted MDL:	0.000218		
Predicted MQL:	0.000728		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00038	.000	1
S1	.03000	.02880	-.001	-3.99	.02887	.000	1
S3	1.2500	1.1842	-.066	-5.26	1.1793	.002	1
S4	2.5000	2.4836	-.016	-.658	2.4726	.004	1
S5	5.0000	5.1194	.119	2.39	5.0962	.014	1
S2	.40000	.36407	-.036	-8.98	.36284	.001	1

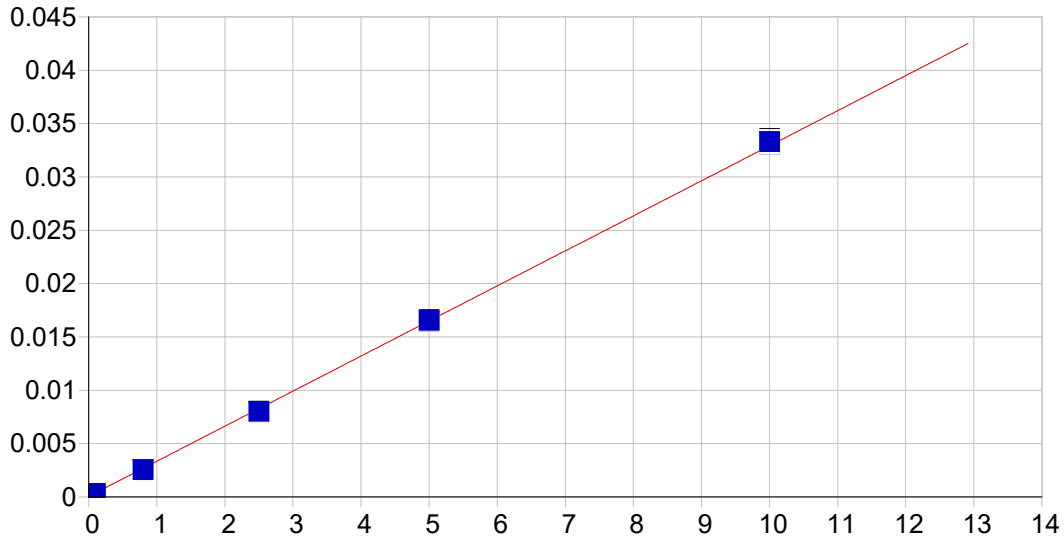


Cu 224.700 {450}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000376	Re-Slope:	1.000000
A1 (Gain):	0.610597	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999901	Status:	OK.
Std Error of Est:	0.000102		
Predicted MDL:	0.000467		
Predicted MQL:	0.001558		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00038	.000	1
S1	.02000	.02106	.001	5.29	.01337	.000	1
S3	.62500	.61030	-.015	-2.35	.37620	.001	1
S4	1.2500	1.2526	.003	.212	.77160	.001	1
S5	2.5000	2.5196	.020	.782	1.5515	.005	1
S2	.20000	.19143	-.009	-4.28	.11828	.000	1

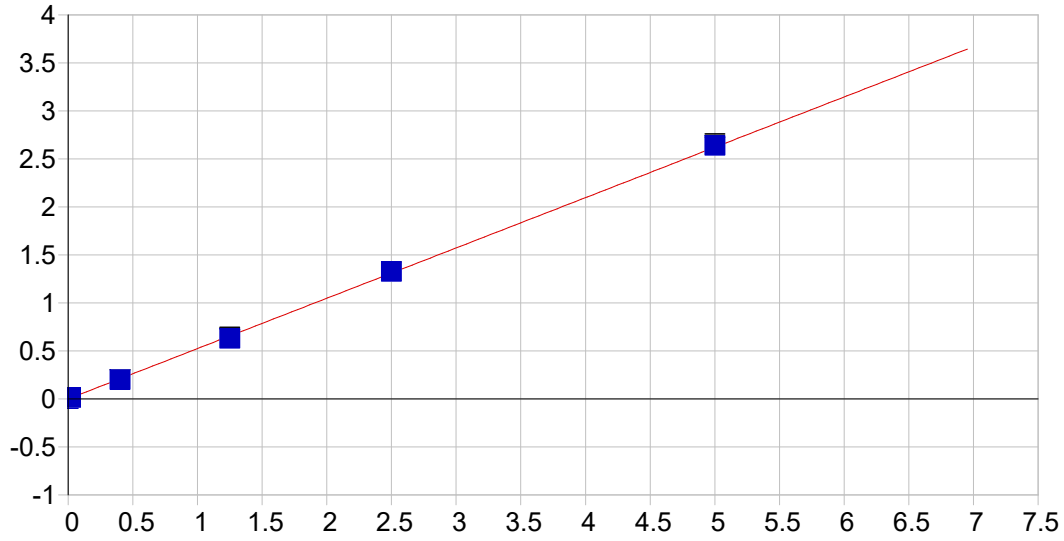


Fe 240.488 {140}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000057	Re-Slope:	1.000000
A1 (Gain):	0.003287	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999829	Status:	OK.
Std Error of Est:	0.000003		
Predicted MDL:	0.007299		
Predicted MQL:	0.024330		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00006	.000	1
S1	.10000	.09467	-.005	-5.33	.00036	.000	1
S3	2.5000	2.4198	-.080	-3.21	.00794	.000	1
S4	5.0000	5.0155	.015	.310	.01640	.000	1
S5	10.000	10.111	.111	1.11	.03301	.000	1
S2	.80000	.75928	-.041	-5.09	.00253	.000	1

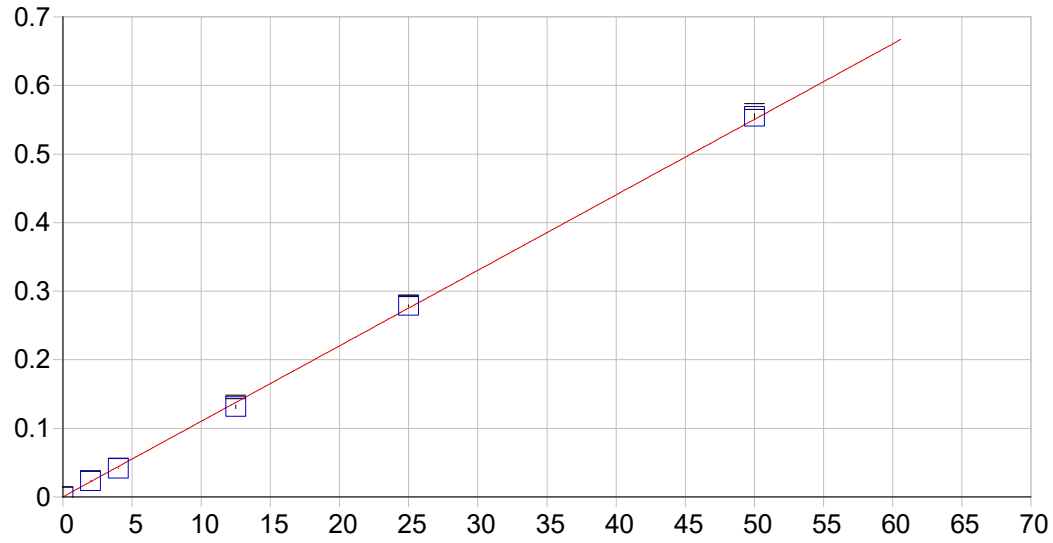


Mn 257.610 {131}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000260	Re-Slope:	1.000000
A1 (Gain):	0.524105	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999789	Status:	OK.
Std Error of Est:	0.000179		
Predicted MDL:	0.000623		
Predicted MQL:	0.002076		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00026	.000	1
S1	.02000	.02331	.003	16.5	.01248	.000	1
S3	1.2500	1.2030	-.047	-3.76	.63088	.012	1
S4	2.5000	2.5278	.028	1.11	1.3253	.001	1
S5	5.0000	5.0359	.036	.717	2.6401	.018	1
S2	.40000	.38009	-.020	-4.98	.19951	.001	1

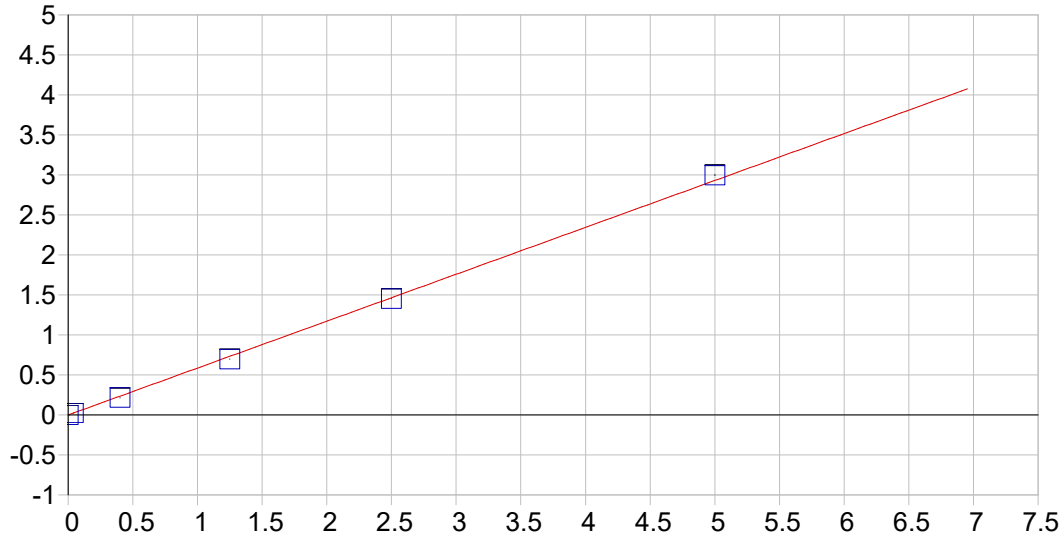


Mg 279.079 {121}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000217	Re-Slope:	1.000000
A1 (Gain):	0.011007	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999714	Status:	OK.
Std Error of Est:	0.000139		
Predicted MDL:	0.033538		
Predicted MQL:	0.111794		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00007	.000	.000	.00022	.000	1
S2	4.0000	3.7617	-.238	-5.96	.04162	.000	1
S3	12.500	11.922	-.578	-4.62	.13144	.003	1
S4	25.000	25.320	.320	1.28	.27890	.001	1
S5	50.000	50.392	.392	.784	.55487	.004	1
S1	2.0000	2.1039	.104	5.19	.02337	.000	1

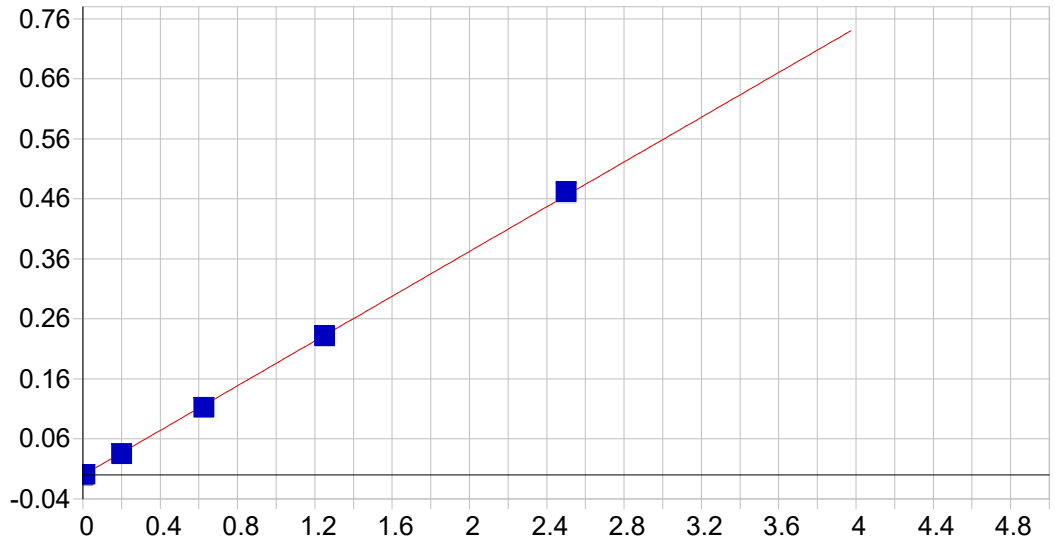


Ni 231.604 {446}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000536	Re-Slope:	1.000000
A1 (Gain):	0.586183	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999543	Status:	OK.
Std Error of Est:	0.000416		
Predicted MDL:	0.000394		
Predicted MQL:	0.001313		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00053	.000	1
S1	.04000	.03853	-.001	-3.67	.02205	.000	1
S3	1.2500	1.1904	-.060	-4.77	.69728	.001	1
S4	2.5000	2.4811	-.019	-.758	1.4538	.003	1
S5	5.0000	5.1134	.113	2.27	2.9969	.006	1
S2	.40000	.36652	-.033	-8.37	.21431	.001	1

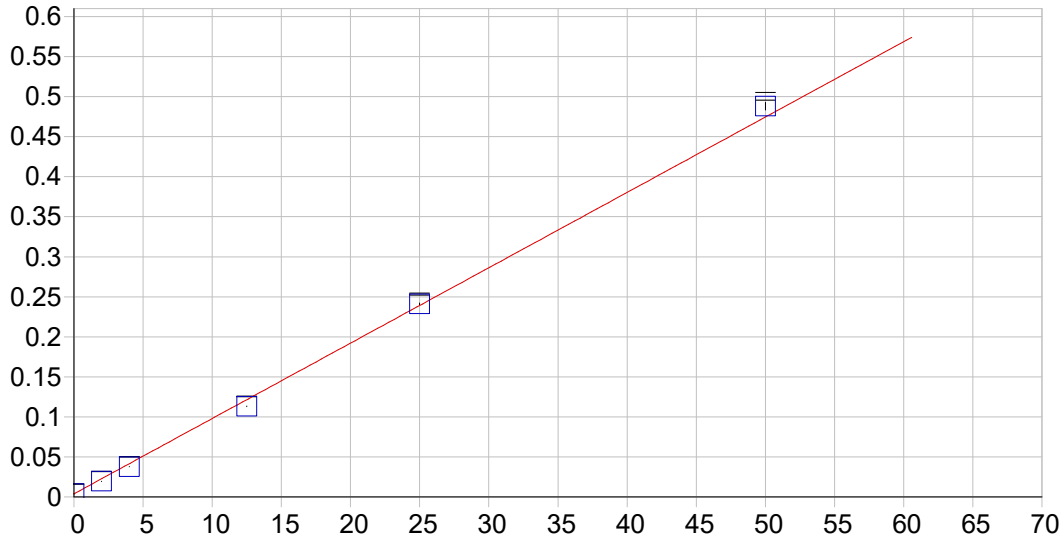


Ag 328.068 {103}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000495	Re-Slope:	1.000000
A1 (Gain):	0.186379	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999834	Status:	OK.
Std Error of Est:	0.000028		
Predicted MDL:	0.000619		
Predicted MQL:	0.002065		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00049	.000	1
S1	.01000	.00959	-.000	-4.09	.00128	.000	1
S3	.62500	.60567	-.019	-3.09	.11182	.000	1
S4	1.2500	1.2458	-.004	-.333	.23057	.000	1
S5	2.5000	2.5333	.033	1.33	.46939	.000	1
S2	.20000	.19064	-.009	-4.68	.03486	.000	1

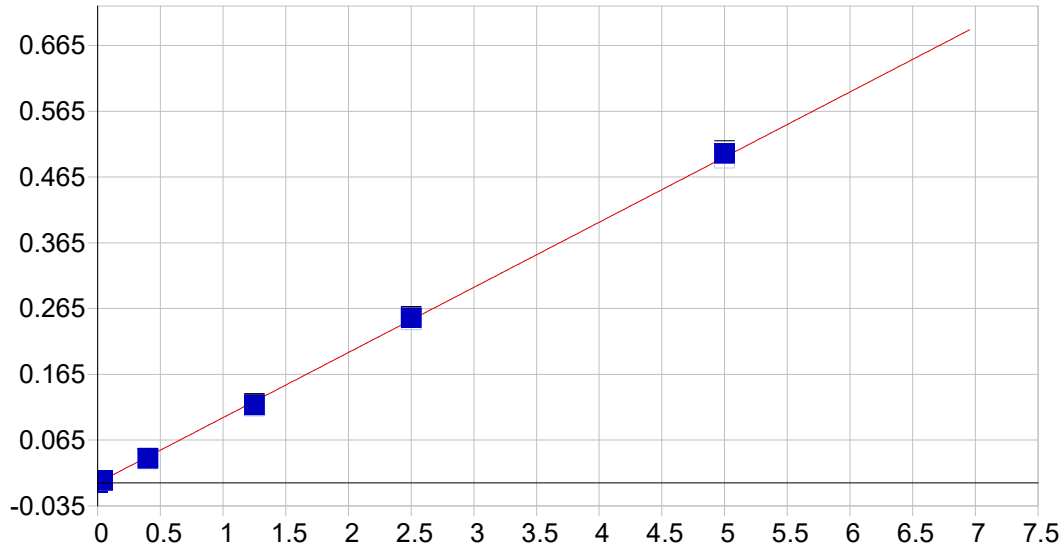


Na 589.592 { 57}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003846	Re-Slope:	1.000000
A1 (Gain):	0.009413	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998881	Status:	OK.
Std Error of Est:	0.000236		
Predicted MDL:	0.016290		
Predicted MQL:	0.054300		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00062	.001	.000	.00385	.000	1
S2	4.0000	3.5894	-.411	-10.3	.03763	.000	1
S3	12.500	11.616	-.884	-7.07	.11319	.001	1
S4	25.000	25.189	.189	.754	.24095	.001	1
S5	50.000	51.455	1.46	2.91	.48820	.005	1
S1	2.0000	1.6511	-.349	-17.4	.01939	.000	1

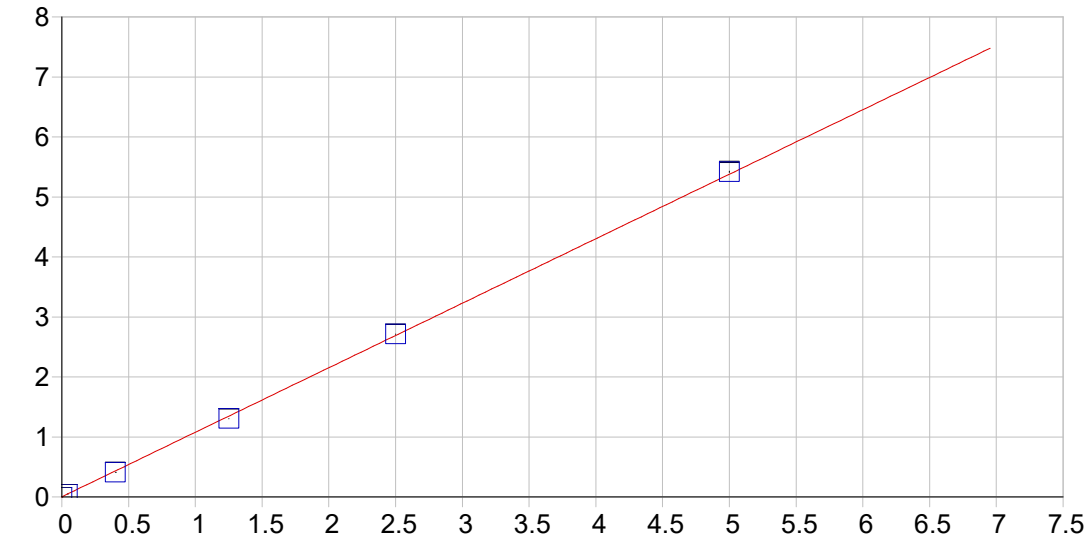


V 292.402 {115}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000039	Re-Slope:	1.000000
A1 (Gain):	0.099074	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999645	Status:	OK.
Std Error of Est:	0.000061		
Predicted MDL:	0.004088		
Predicted MQL:	0.013628		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00004	.000	1
S1	.04000	.03499	-.005	-12.5	.00336	.000	1
S3	1.2500	1.1942	-.056	-4.46	.11655	.002	1
S4	2.5000	2.5353	.035	1.41	.24761	.002	1
S5	5.0000	5.0545	.055	1.09	.49359	.004	1
S2	.40000	.37084	-.029	-7.29	.03620	.001	1

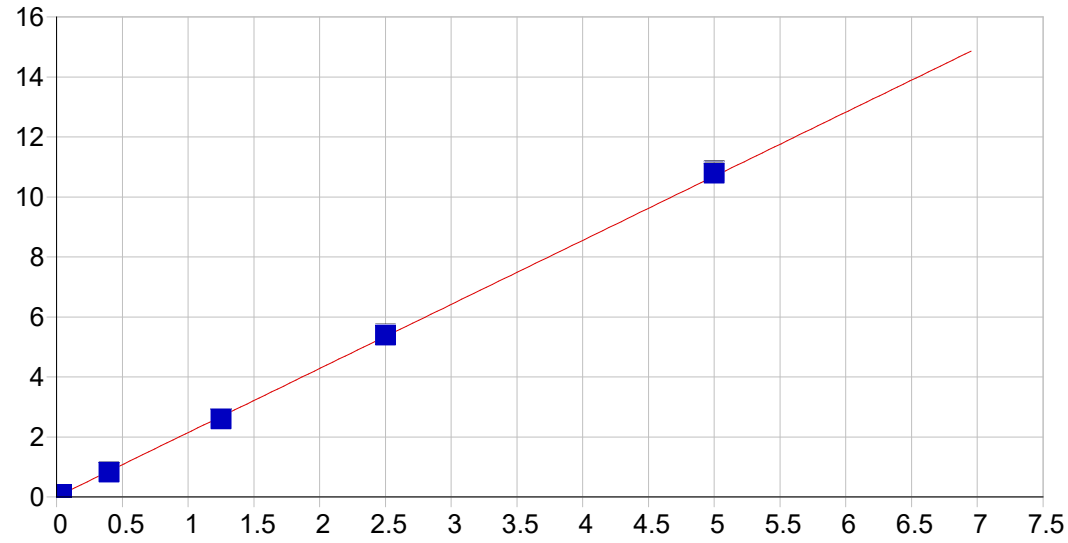


Zn 206.200 {464}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002263	Re-Slope:	1.000000
A1 (Gain):	1.075144	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999850	Status:	OK.
Std Error of Est:	0.000436		
Predicted MDL:	0.000156		
Predicted MQL:	0.000522		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00226	.000	1
S1	.04000	.04095	.001	2.36	.04628	.000	1
S3	1.2500	1.2109	-.039	-3.13	1.3041	.002	1
S4	2.5000	2.5210	.021	.842	2.7128	.003	1
S5	5.0000	5.0376	.038	.751	5.4184	.010	1
S2	.40000	.37958	-.020	-5.10	.41037	.000	1

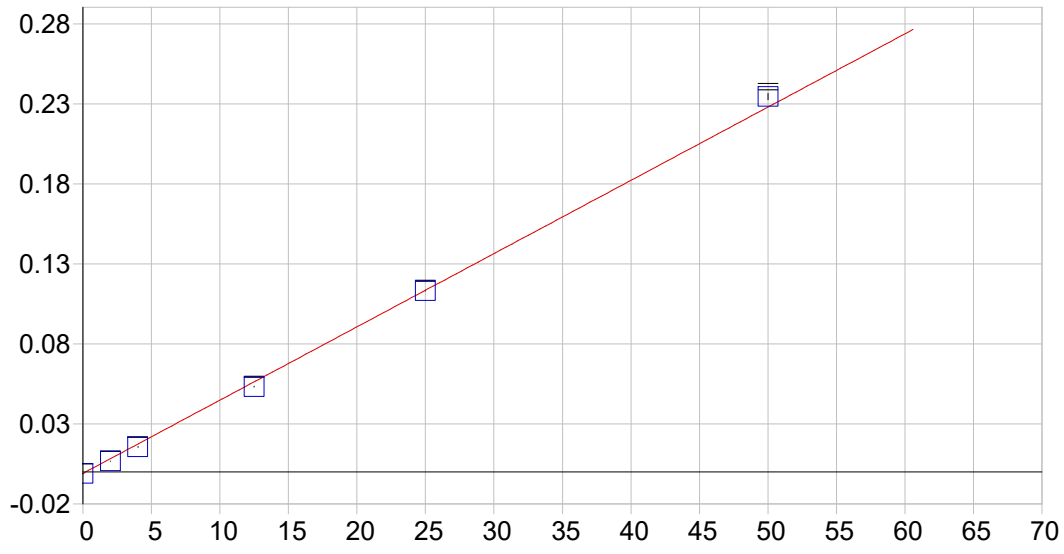


Zn 213.856 {158}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.007422	Re-Slope:	1.000000
A1 (Gain):	2.136156	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999847	Status:	OK.
Std Error of Est:	0.000882		
Predicted MDL:	0.000264		
Predicted MQL:	0.000879		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00743	.001	1
S1	.04000	.03997	-.000	-.068	.09341	.001	1
S3	1.2500	1.2106	-.039	-3.15	2.6120	.005	1
S4	2.5000	2.5159	.016	.638	5.4190	.012	1
S5	5.0000	5.0445	.044	.890	10.858	.014	1
S2	.40000	.37901	-.021	-5.25	.82300	.003	1

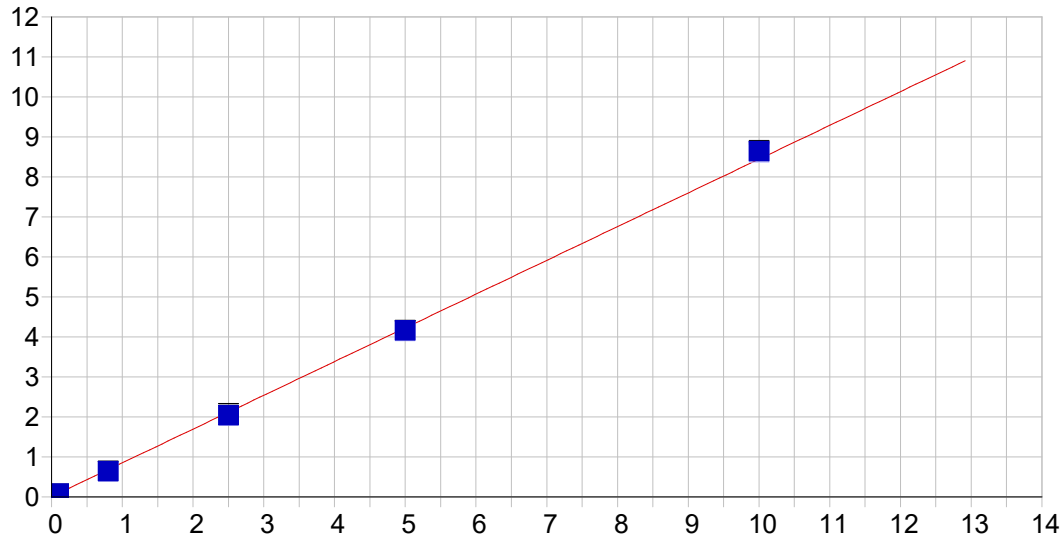


K 766.490 { 44}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000946	Re-Slope:	1.000000
A1 (Gain):	0.004578	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999105	Status:	OK.
Std Error of Est:	0.000103		
Predicted MDL:	0.043721		
Predicted MQL:	0.145738		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00057	.001	.000	-.00094	.000	1
S2	4.0000	3.6135	-.387	-9.66	.01559	.000	1
S3	12.500	11.841	-.659	-5.27	.05326	.000	1
S4	25.000	24.934	-.066	-.265	.11319	.000	1
S5	50.000	51.439	1.44	2.88	.23452	.002	1
S1	2.0000	1.6726	-.327	-16.4	.00671	.000	1

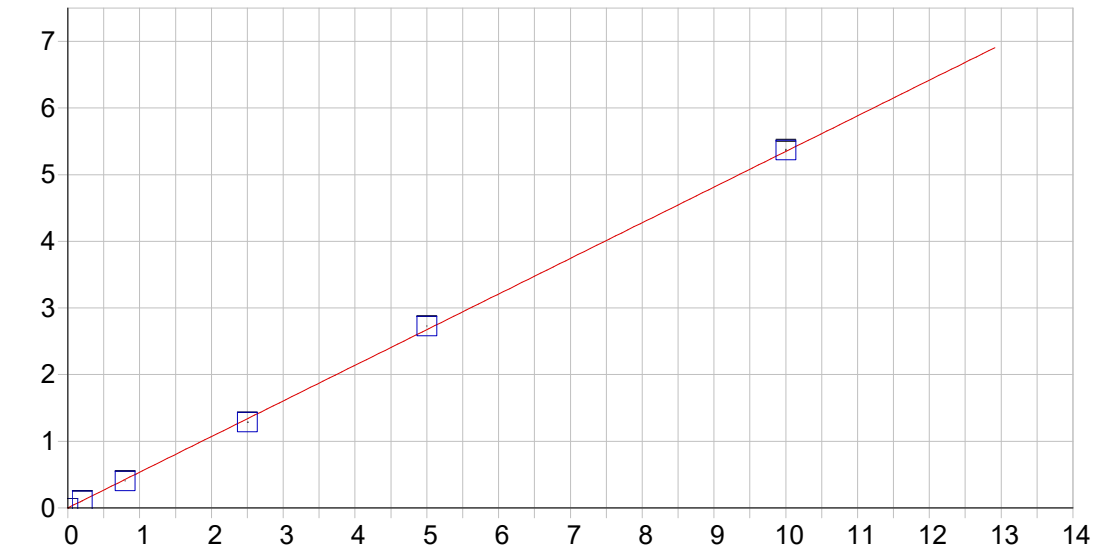


B 249.678 {135}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.007755	Re-Slope:	1.000000
A1 (Gain):	0.843655	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999623	Status:	OK.
Std Error of Est:	0.001212		
Predicted MDL:	0.000826		
Predicted MQL:	0.002752		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	.00777	.001	1
S1	.10000	.09027	-.010	-9.73	.08341	.000	1
S3	2.5000	2.4113	-.089	-3.55	2.0344	.044	1
S4	5.0000	4.9227	-.077	-1.55	4.1456	.011	1
S5	10.000	10.227	.227	2.27	8.6057	.028	1
S2	.80000	.74848	-.052	-6.44	.63678	.006	1

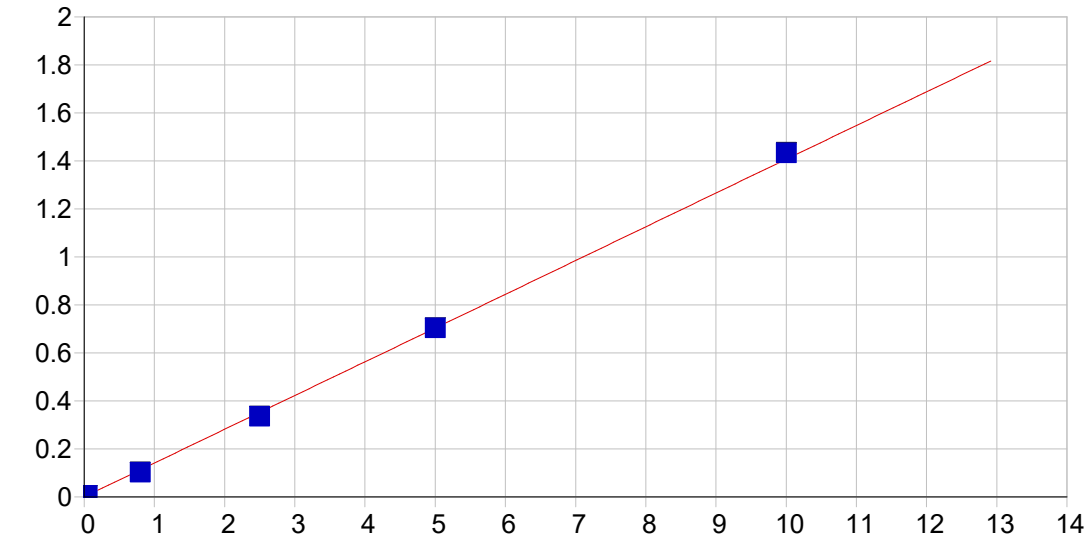


Mo 202.030 {467}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000770	Re-Slope:	1.000000
A1 (Gain):	0.534770	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999777	Status:	OK.
Std Error of Est:	0.000841		
Predicted MDL:	0.000318		
Predicted MQL:	0.001059		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00078	.000	1
S1	.20000	.20054	.001	.272	.10801	.000	1
S3	2.5000	2.4049	-.095	-3.80	1.2868	.002	1
S4	5.0000	5.1025	.103	2.05	2.7295	.002	1
S5	10.000	10.036	.036	.359	5.3677	.013	1
S2	.80000	.75610	-.044	-5.49	.40511	.001	1

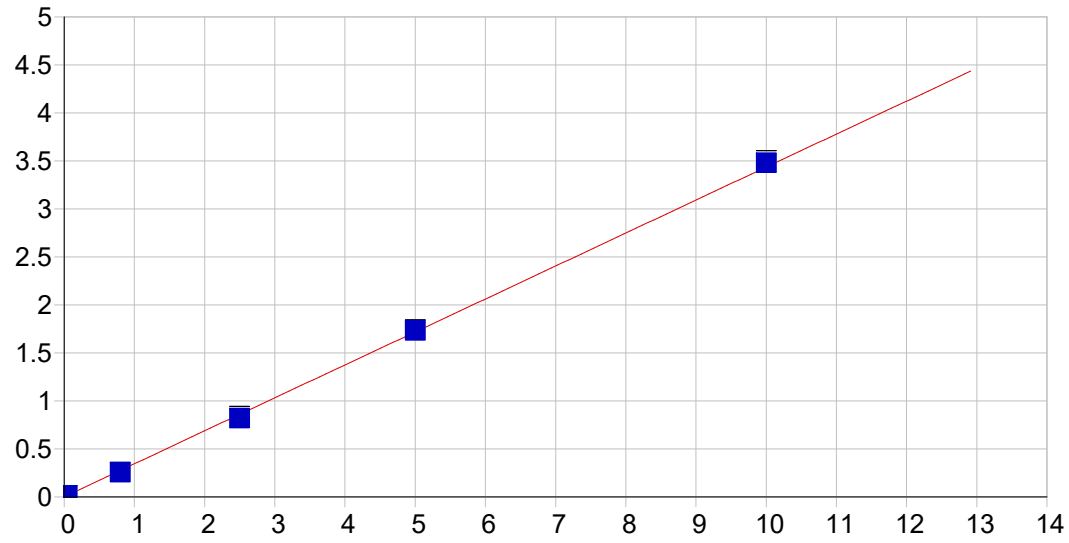


Sn 189.989 {478}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000352	Re-Slope:	1.000000
A1 (Gain):	0.140633	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999569	Status:	OK.
Std Error of Est:	0.000137		
Predicted MDL:	0.000718		
Predicted MQL:	0.002392		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00035	.000	1
S1	.04000	.03648	-.004	-8.80	.00548	.000	1
S3	2.5000	2.3828	-.117	-4.69	.33509	.001	1
S4	5.0000	5.0058	.006	.116	.70362	.002	1
S5	10.000	10.187	.187	1.87	1.4315	.003	1
S2	.80000	.72806	-.072	-8.99	.10263	.000	1

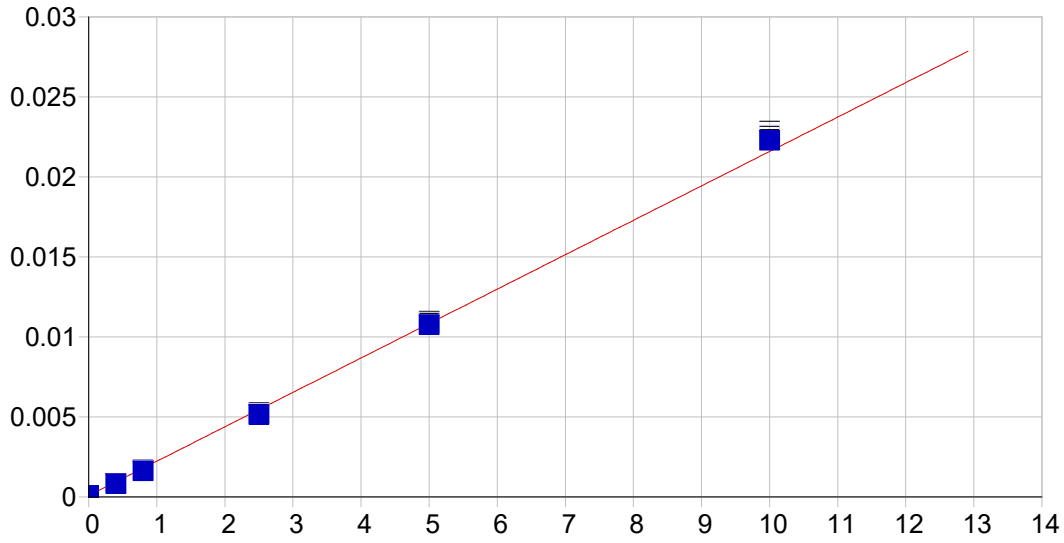


Ti 336.121 {100}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001283	Re-Slope:	1.000000
A1 (Gain):	0.343402	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999669	Status:	OK.
Std Error of Est:	0.000293		
Predicted MDL:	0.001847		
Predicted MQL:	0.006156		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00129	.000	1
S1	.04000	.03808	-.002	-4.79	.01435	.001	1
S3	2.5000	2.3820	-.118	-4.72	.81897	.020	1
S4	5.0000	5.0475	.047	.950	1.7340	.004	1
S5	10.000	10.131	.131	1.31	3.4791	.024	1
S2	.80000	.74120	-.059	-7.35	.25571	.002	1

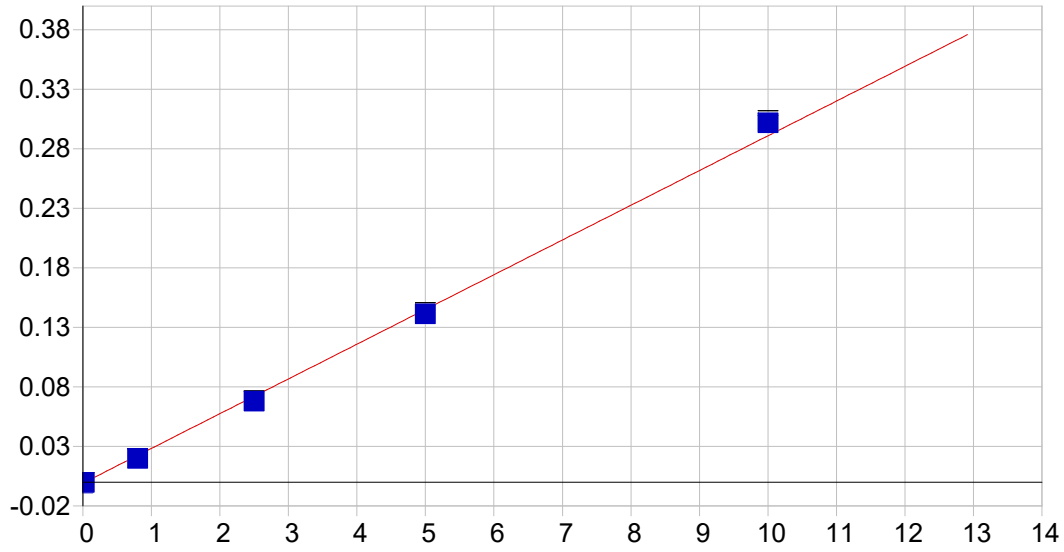


Si 288.158 {117}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000080	Re-Slope:	1.000000
A1 (Gain):	0.002151	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999076	Status:	OK.
Std Error of Est:	0.000010		
Predicted MDL:	0.017357		
Predicted MQL:	0.057858		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00011	.000	.000	.00008	.000	1
S1	.40000	.34228	-.058	-14.4	.00082	.000	1
S3	2.5000	2.3523	-.148	-5.91	.00522	.000	1
S4	5.0000	4.9667	-.033	-.666	.01092	.000	1
S5	10.000	10.319	.319	3.19	.02260	.000	1
S2	.80000	.71931	-.081	-10.1	.00165	.000	1

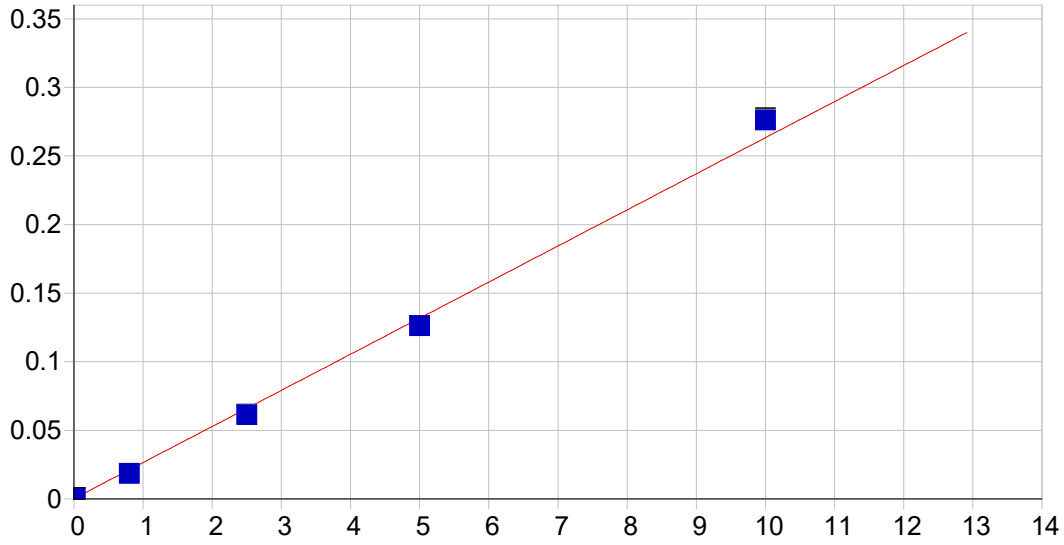


P 177.495 {490}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000858	Re-Slope:	1.000000
A1 (Gain):	0.029184	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999018	Status:	OK.
Std Error of Est:	0.000030		
Predicted MDL:	0.002656		
Predicted MQL:	0.008852		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00086	.000	1
S1	.02000	.01923	-.001	-3.84	-.00030	.000	1
S3	2.5000	2.3583	-.142	-5.67	.06796	.000	1
S4	5.0000	4.8676	-.132	-2.65	.14118	.001	1
S5	10.000	10.368	.368	3.68	.30169	.002	1
S2	.80000	.70665	-.093	-11.7	.01976	.000	1

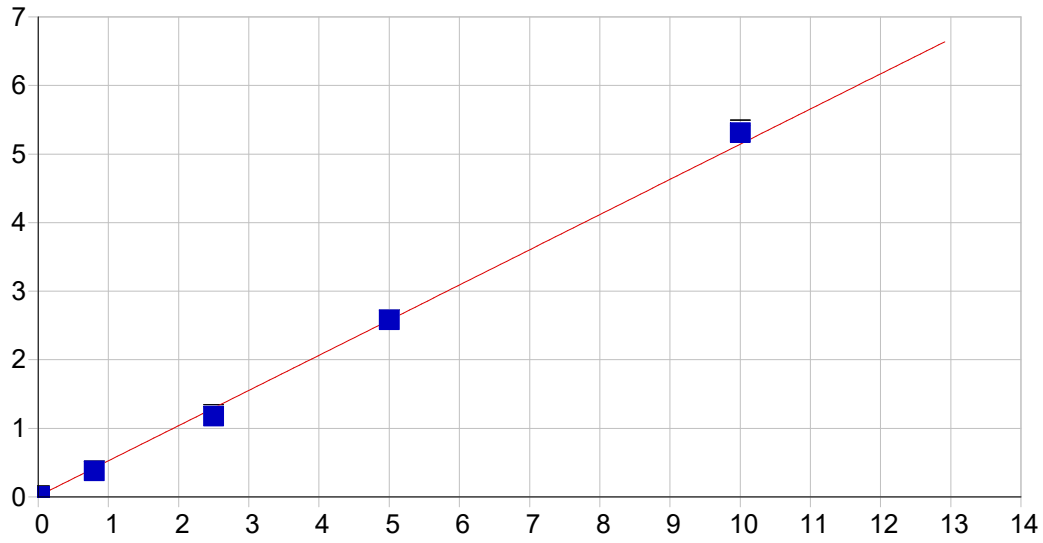


S 182.034 {485}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000214	Re-Slope:	1.000000
A1 (Gain):	0.026313	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998377	Status:	OK.
Std Error of Est:	0.000035		
Predicted MDL:	0.003453		
Predicted MQL:	0.011510		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00021	.000	1
S1	.02000	.02185	.002	9.27	.00077	.000	1
S3	2.5000	2.3271	-.173	-6.91	.06128	.000	1
S4	5.0000	4.7921	-.208	-4.16	.12597	.000	1
S5	10.000	10.488	.488	4.88	.27549	.002	1
S2	.80000	.69136	-.109	-13.6	.01835	.000	1

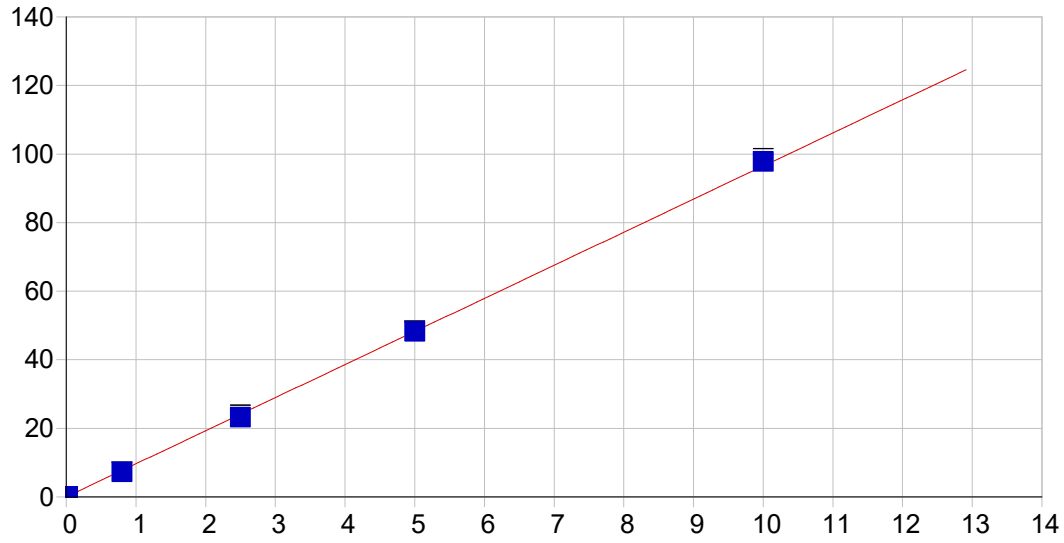


Li 670.784 { 50}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.012601	Re-Slope:	1.000000
A1 (Gain):	0.513044	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998569	Status:	OK.
Std Error of Est:	0.000644		
Predicted MDL:	0.004237		
Predicted MQL:	0.014124		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	.01261	.002	1
S5	10.000	10.324	.324	3.24	5.3135	.041	1
S4	5.0000	5.0092	.009	.183	2.5846	.003	1
S3	2.5000	2.2711	-.229	-9.16	1.1788	.020	1
S1	.02000	.00506	-.015	-74.7	.01538	.001	1
S2	.80000	.71078	-.089	-11.2	.37759	.001	1

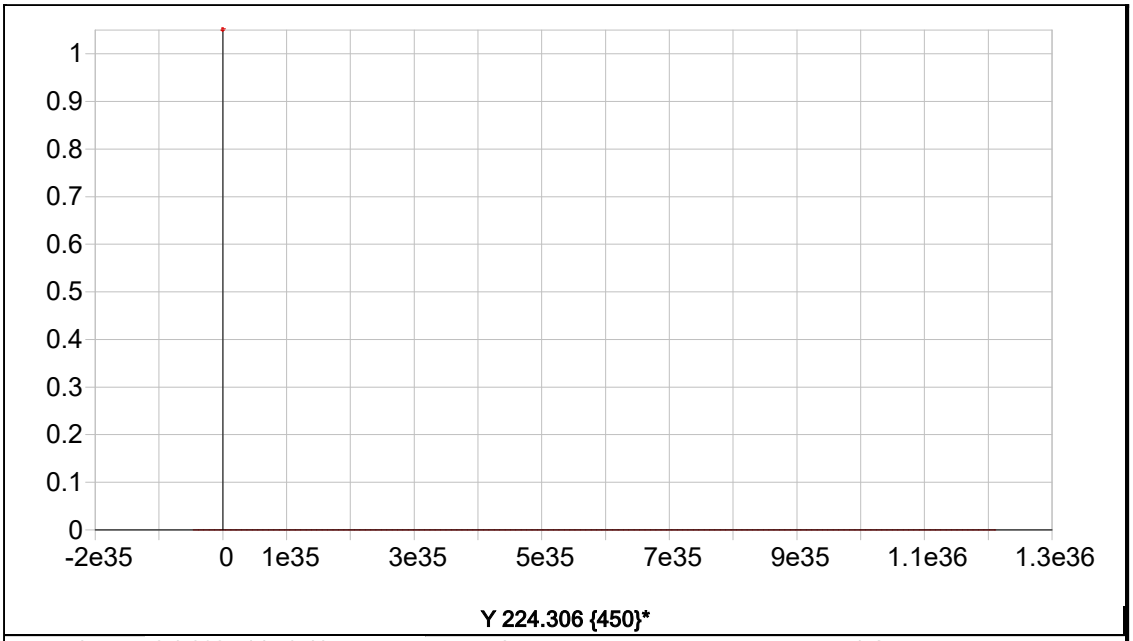


Sr 407.771 { 83}

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002283	Re-Slope:	1.000000
A1 (Gain):	9.649535	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999786	Status:	OK.
Std Error of Est:	0.004686		
Predicted MDL:	0.000116		
Predicted MQL:	0.000385		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00229	.001	1
S1	.02000	.02095	.001	4.73	.20532	.000	1
S3	2.5000	2.4088	-.091	-3.65	23.269	.614	1
S4	5.0000	5.0019	.002	.039	48.315	.189	1
S5	10.000	10.135	.135	1.35	97.890	.894	1
S2	.80000	.75371	-.046	-5.79	7.2826	.021	1

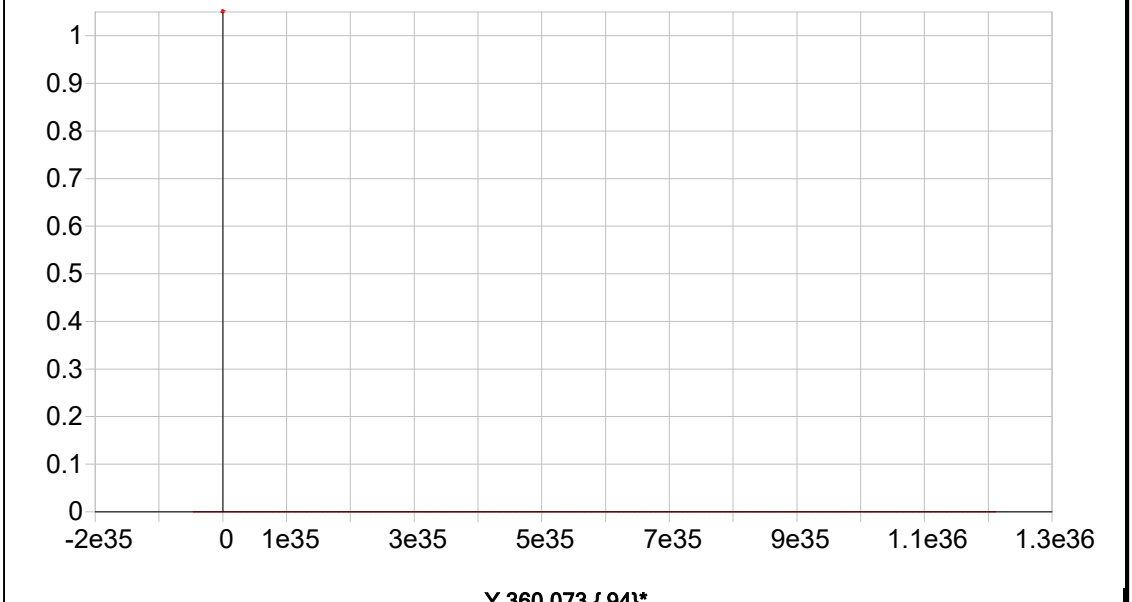


Y 224.306 {450}*

Date of Fit:	8/6/2025 14:53:46	Type of Fit:	Linear	Weighting:	1/Conc

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

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



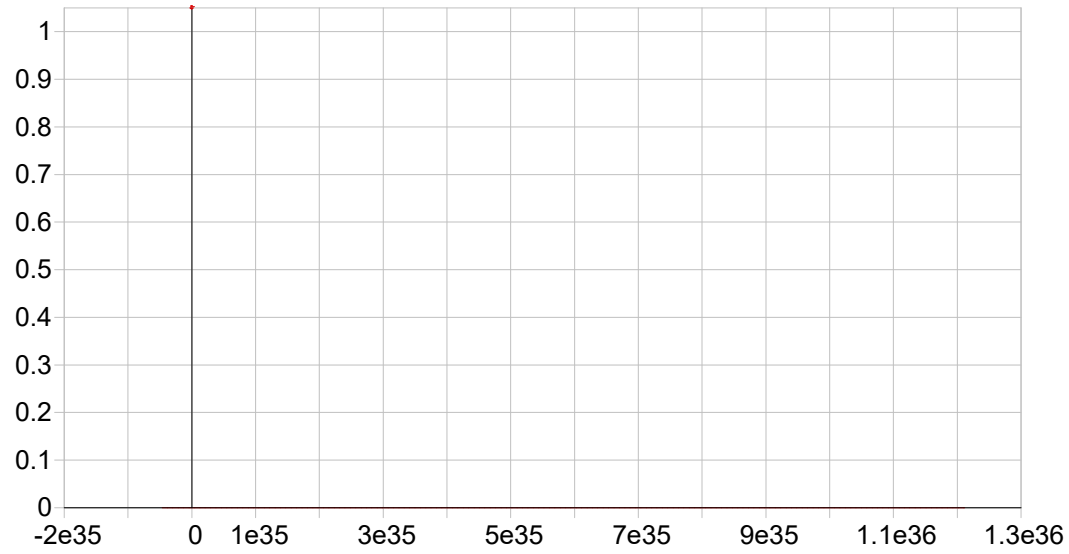
Y 360.073 { 94}*

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

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

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

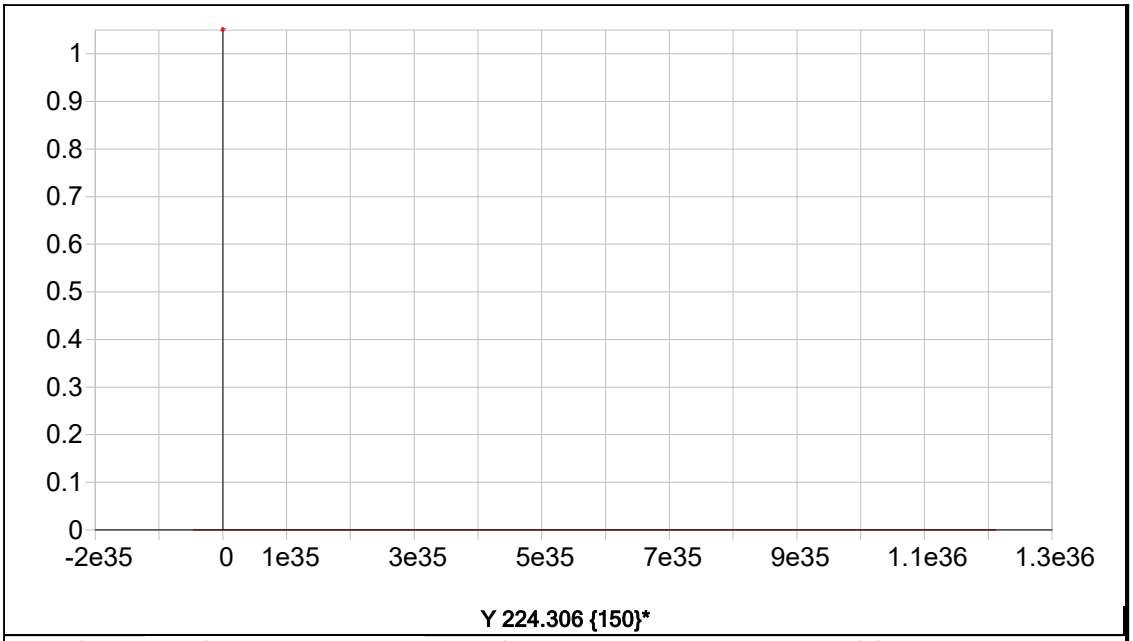
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



Y 371.030 { 91}*

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

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

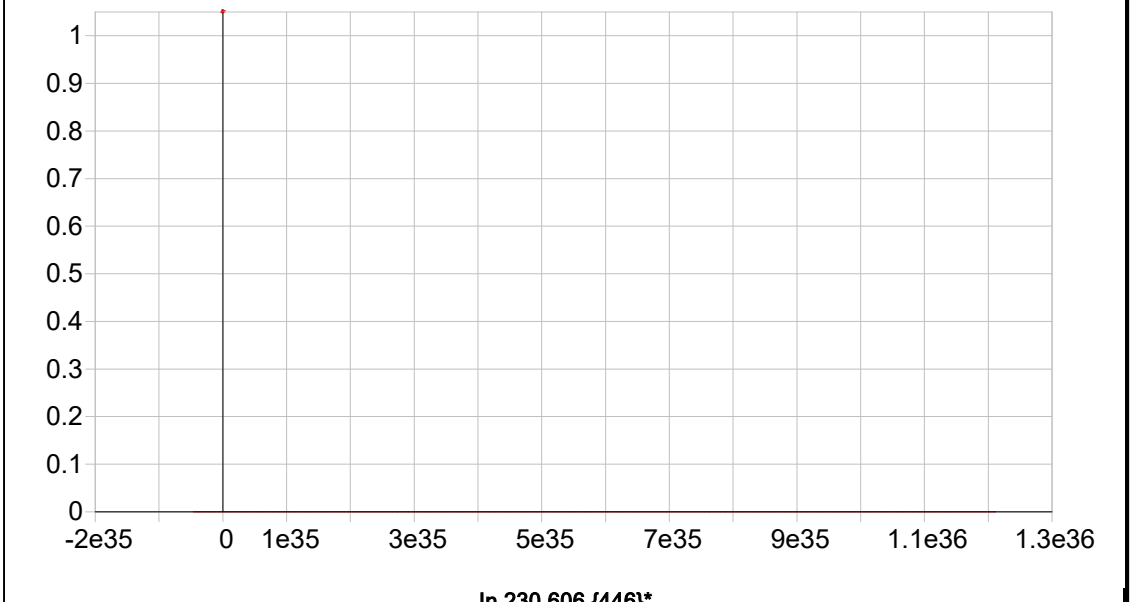


Y 224.306 {150}*

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

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

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



In 230.606 {446}*

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

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

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

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: S0 Acquired: 8/6/2025 11:30:52 Type: Cal
Method: 6010-200.7 NEW(v85) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00001**	**.00121**	**.00014**	**.00030**	**.00051**	**.00097**	**.08670**	**-.00145**
Stddev	.00006	.00003	.00029	.00005	.00023	.00078	.00383	.00095
%RSD	720.50	2.2202	213.12	16.404	45.852	80.400	4.4208	65.779
#1	.00008	.00124	-.00010	.00028	.00075	.00143	.08735	-.00248
#2	-.00005	.00119	.00046	.00026	.00029	.00007	.09017	-.00059
#3	-.00000	.00120	.00005	.00035	.00048	.00141	.08259	-.00128

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00031**	**.00199**	**.00018**	**.00038**	**.00038**	**.00006**	**.00026**	**.00022**
Stddev	.00012	.00180	.00008	.00027	.00021	.00001	.00044	.00015
%RSD	38.825	90.794	47.010	71.170	55.830	24.993	170.09	69.171
#1	-.00041	.00209	.00009	.00008	.00033	.00004	.00015	.00007
#2	-.00018	.00013	.00019	.00060	.00019	.00006	-.00012	.00037
#3	-.00034	.00373	.00025	.00046	.00060	.00007	.00074	.00022

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00053**	**-.00049**	**.00385**	**.00004**	**.00743**	**-.00094**	**.00777**	**.00078**
Stddev	.00015	.00004	.00017	.00030	.00062	.00022	.00063	.00035
%RSD	28.688	8.4797	4.4670	753.48	8.3538	23.809	8.1033	44.448
#1	-.00067	-.00052	.00365	-.00016	.00795	-.00075	.00738	.00103
#2	-.00056	-.00051	.00393	.00038	.00760	-.00119	.00744	.00092
#3	-.00037	-.00045	.00397	-.00010	.00674	-.00088	.00850	.00038

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00035**	**.00129**	**.00008**	**-.00086**	**.00021**	**.01261**	**.00229**
Stddev	.00008	.00002	.00004	.00003	.00001	.00204	.00063
%RSD	21.410	1.7668	44.964	2.9230	3.5033	16.162	27.713
#1	.00038	.00128	.00007	-.00084	.00021	.01286	.00272
#2	.00027	.00131	.00005	-.00085	.00021	.01046	.00259
#3	.00041	.00126	.00012	-.00089	.00022	.01451	.00156

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: S0 Acquired: 8/6/2025 11:30:52 Type: Cal
Method: 6010-200.7 NEW(v85) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5935.4**	**98528.**	**7916.4**	**5082.5**	**7072.9**
Stddev	1.4	232.	49.7	15.1	8.6
%RSD	.02338	.23592	.62730	.29638	.12227
#1	5934.6	98785.	7969.0	5090.5	7066.2
#2	5934.7	98333.	7870.3	5065.2	7069.8
#3	5937.0	98466.	7910.0	5091.9	7082.7

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: S1 Acquired: 8/6/2025 11:35:12 Type: Cal
Method: 6010-200.7 NEW(v85) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00083**	**.00247**	**.00231**	**.00117**	**.00448**	**.00859**	**.40181**	**.04561**
Stddev	.00004	.00005	.00019	.00012	.00020	.00041	.00351	.00090
%RSD	4.6066	2.1570	8.4121	10.132	4.3652	4.8069	.87386	1.9628
#1	.00080	.00241	.00217	.00110	.00429	.00885	.39790	.04628
#2	.00082	.00250	.00223	.00131	.00447	.00811	.40469	.04459
#3	.00087	.00251	.00253	.00111	.00468	.00880	.40283	.04595

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.01532**	**.13693**	**.00165**	**.02887**	**.01337**	**.00036**	**.01248**	**.02337**
Stddev	.00014	.00068	.00002	.00007	.00032	.00001	.00011	.00008
%RSD	.91456	.49814	1.5111	.22801	2.4182	1.7831	.90652	.35117
#1	.01548	.13771	.00165	.02880	.01328	.00036	.01249	.02347
#2	.01528	.13645	.00163	.02892	.01310	.00036	.01236	.02332
#3	.01521	.13664	.00168	.02891	.01373	.00037	.01258	.02333

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.02205**	**.00128**	**.01939**	**.00336**	**.09341**	**.00671**	**.08341**	**.10801**
Stddev	.00017	.00006	.00004	.00009	.00070	.00014	.00014	.00007
%RSD	.78437	4.5803	.22542	2.8203	.75186	2.1059	.17131	.06344
#1	.02210	.00132	.01940	.00341	.09298	.00685	.08352	.10796
#2	.02219	.00129	.01934	.00325	.09303	.00657	.08347	.10800
#3	.02186	.00121	.01942	.00341	.09422	.00671	.08325	.10809

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00548**	**.01435**	**.00082**	**-.00030**	**.00077**	**.01538**	**.20532**
Stddev	.00005	.00052	.00001	.00001	.00009	.00098	.00029
%RSD	.87405	3.6161	1.5652	4.5624	11.993	6.3593	.14071
#1	.00553	.01419	.00080	-.00028	.00082	.01449	.20499
#2	.00546	.01393	.00082	-.00029	.00082	.01643	.20552
#3	.00544	.01493	.00083	-.00031	.00066	.01522	.20545

Sample Name: S1 Acquired: 8/6/2025 11:35:12 Type: Cal
Method: 6010-200.7 NEW(v85) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6156.3**	**101830.**	**8119.0**	**5254.4**	**7396.4**
Stddev	11.1	67.	19.2	29.4	19.9
%RSD	.17983	.06543	.23602	.55927	.26869
#1	6144.2	101900.	8117.8	5220.6	7376.6
#2	6158.7	101830.	8100.5	5273.9	7396.3
#3	6165.9	101760.	8138.8	5268.7	7416.3

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: S2 Acquired: 8/6/2025 11:39:28 Type: Cal
Method: 6010-200.7 NEW(v85) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.03311**	**.02990**	**.14261**	**.02876**	**.06058**	**.11079**	**4.7381**	**.29671**
Stddev	.00004	.00152	.00015	.00007	.00021	.00167	.0194	.00286
%RSD	.12850	5.1003	.10470	.24512	.34399	1.5040	.41035	.96334
#1	.03311	.03120	.14249	.02884	.06039	.10891	4.7198	.29472
#2	.03306	.03027	.14256	.02873	.06054	.11209	4.7360	.29542
#3	.03315	.02822	.14277	.02871	.06080	.11137	4.7585	.29999

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.0189**	**.25008**	**.02377**	**.36284**	**.11828**	**.00253**	**.19951**	**.04162**
Stddev	.0011	.00232	.00011	.00107	.00036	.00002	.00090	.00019
%RSD	.10906	.92591	.46728	.29583	.30210	.84287	.44908	.46680
#1	1.0179	.24863	.02370	.36170	.11821	.00251	.19891	.04140
#2	1.0187	.24887	.02390	.36298	.11797	.00254	.19908	.04174
#3	1.0201	.25275	.02371	.36383	.11867	.00254	.20054	.04173

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.21431**	**.03486**	**.03763**	**.03620**	**.82300**	**.01559**	**.63678**	**.40511**
Stddev	.00056	.00019	.00022	.00056	.00338	.00008	.00585	.00077
%RSD	.25994	.53923	.57270	1.5578	.41009	.49025	.91902	.18994
#1	.21412	.03505	.03767	.03556	.81910	.01564	.63524	.40509
#2	.21388	.03467	.03783	.03641	.82505	.01564	.63185	.40589
#3	.21494	.03485	.03740	.03663	.82484	.01551	.64325	.40435

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.10263**	**.25571**	**.00165**	**.01976**	**.01835**	**.37759**	**7.2826**
Stddev	.00013	.00237	.00003	.00015	.00014	.00138	.0208
%RSD	.12246	.92628	1.5643	.78064	.78093	.36462	.28610
#1	.10268	.25383	.00167	.01994	.01852	.37615	7.2670
#2	.10272	.25494	.00167	.01965	.01825	.37890	7.2746
#3	.10248	.25837	.00162	.01969	.01828	.37772	7.3063

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: S2 Acquired: 8/6/2025 11:39:28 Type: Cal
Method: 6010-200.7 NEW(v85) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6080.3	100150.	8240.7	5210.2	7078.7
Stddev	18.3	446.	48.4	10.3	20.6
%RSD	.30155	.44562	.58712	.19825	.29070
#1	6089.6	99795.	8256.7	5198.3	7089.4
#2	6092.1	100010.	8279.0	5215.0	7091.8
#3	6059.2	100650.	8186.3	5217.2	7055.0

Sample Name: S3 Acquired: 8/6/2025 11:43:31 Type: Cal
Method: 6010-200.7 NEW(v85) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.10812	.09904	.46195	.09343	.19405	.34963	15.008	.95548
Stddev	.00040	.00402	.00114	.00017	.00043	.00544	.319	.01972
%RSD	.36585	4.0585	.24744	.18654	.22007	1.5554	2.1260	2.0634
#1	.10783	.10010	.46064	.09351	.19360	.35201	15.159	.96783
#2	.10857	.10243	.46273	.09355	.19409	.34340	14.642	.93275
#3	.10795	.09460	.46249	.09323	.19445	.35347	15.224	.96588

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.3557	.79761	.07448	1.1793	.37620	.00794	.63088	.13144
Stddev	.0071	.01926	.00022	.0018	.00062	.00001	.01214	.00272
%RSD	.21127	2.4148	.29836	.15365	.16470	.18593	1.9241	2.0700
#1	3.3480	.80925	.07444	1.1772	.37572	.00795	.63798	.13274
#2	3.3572	.77538	.07428	1.1800	.37598	.00795	.61686	.12832
#3	3.3619	.80821	.07472	1.1806	.37690	.00792	.63780	.13328

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.69728	.11182	.11319	.11655	2.6120	.05326	2.0344	1.2868
Stddev	.00122	.00007	.00051	.00235	.0046	.00036	.0440	.0023
%RSD	.17565	.06031	.45334	2.0164	.17701	.67408	2.1614	.18100
#1	.69640	.11178	.11261	.11827	2.6117	.05284	2.0623	1.2843
#2	.69675	.11190	.11337	.11387	2.6167	.05348	1.9837	1.2889
#3	.69868	.11179	.11359	.11750	2.6075	.05344	2.0573	1.2873

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.33509	.81897	.00522	.06796	.06128	1.1788	23.269
Stddev	.00090	.02017	.00003	.00043	.00042	.0201	.614
%RSD	.26826	2.4623	.65052	.63678	.68403	1.7060	2.6369
#1	.33438	.82999	.00518	.06831	.06123	1.1876	23.455
#2	.33610	.79569	.00524	.06808	.06172	1.1558	22.584
#3	.33480	.83122	.00524	.06748	.06088	1.1930	23.767

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: S3 Acquired: 8/6/2025 11:43:31 Type: Cal
Method: 6010-200.7 NEW(v85) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5814.8	96001.	7989.0	4952.6	6590.2
Stddev	7.4	156.	169.5	21.0	5.8
%RSD	.12683	.16261	2.1216	.42340	.08802
#1	5807.2	96166.	7882.1	4967.8	6583.6
#2	5821.9	95856.	8184.4	4928.7	6594.3
#3	5815.2	95980.	7900.5	4961.4	6592.8

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: S4 Acquired: 8/6/2025 11:47:36 Type: Cal
Method: 6010-200.7 NEW(v85) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.22703**	**.17897**	**.95453**	**.19099**	**.40636**	**.73850**	**31.386**	**1.9941**
Stddev	.00023	.00256	.00121	.00048	.00017	.00239	.324	.0078
%RSD	.10202	1.4282	.12644	.25097	.04135	.32334	1.0320	.39340
#1	.22718	.17607	.95552	.19053	.40650	.73748	31.238	1.9894
#2	.22714	.17995	.95319	.19148	.40641	.74123	31.163	1.9897
#3	.22676	.18089	.95489	.19095	.40618	.73679	31.758	2.0032

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7.0084**	**1.6822**	**.15457**	**2.4726**	**.77160**	**.01640**	**1.3253**	**.27890**
Stddev	.0122	.0028	.00066	.0040	.00062	.00009	.0008	.00131
%RSD	.17344	.16696	.42499	.15967	.08078	.54952	.06424	.46997
#1	7.0197	1.6824	.15532	2.4766	.77159	.01649	1.3261	.28032
#2	6.9956	1.6849	.15407	2.4687	.77098	.01641	1.3244	.27866
#3	7.0099	1.6793	.15433	2.4725	.77223	.01631	1.3254	.27773

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.4538**	**.23057**	**.24095**	**.24761**	**5.4190**	**.11319**	**4.1456**	**2.7295**
Stddev	.0026	.00023	.00119	.00173	.0120	.00031	.0107	.0019
%RSD	.17842	.09813	.49558	.69791	.22214	.27389	.25906	.06814
#1	1.4561	.23059	.24228	.24960	5.4320	.11354	4.1394	2.7288
#2	1.4510	.23034	.24061	.24681	5.4167	.11296	4.1394	2.7280
#3	1.4543	.23079	.23996	.24643	5.4083	.11307	4.1580	2.7316

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.70362**	**1.7340**	**.01092**	**.14118**	**.12597**	**2.5846**	**48.315**
Stddev	.00164	.0044	.00007	.00112	.00018	.0027	.189
%RSD	.23292	.25590	.60057	.79339	.14609	.10562	.39177
#1	.70518	1.7347	.01100	.14246	.12611	2.5864	48.106
#2	.70191	1.7380	.01088	.14068	.12576	2.5859	48.474
#3	.70376	1.7292	.01089	.14039	.12603	2.5814	48.365

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: S4 Acquired: 8/6/2025 11:47:36 Type: Cal
Method: 6010-200.7 NEW(v85) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5791.2	96417.	7841.2	4947.2	6506.0
Stddev	9.5	388.	11.5	22.1	20.0
%RSD	.16433	.40257	.14632	.44688	.30707
#1	5784.8	95980.	7828.2	4936.4	6488.9
#2	5802.1	96546.	7850.1	4932.5	6527.9
#3	5786.6	96724.	7845.3	4972.6	6501.1

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: S5 Acquired: 8/6/2025 11:51:47 Type: Cal
Method: 6010-200.7 NEW(v85) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.46594	.37134	1.9908	.39827	.82607	1.4764	63.986	4.0327
Stddev	.00141	.01119	.0049	.00117	.00237	.0116	.835	.0149
%RSD	.30267	3.0133	.24822	.29386	.28685	.78303	1.3048	.37038
#1	.46560	.38425	1.9911	.39847	.82427	1.4631	63.024	4.0394
#2	.46473	.36527	1.9857	.39701	.82520	1.4844	64.517	4.0431
#3	.46749	.36450	1.9956	.39932	.82876	1.4817	64.418	4.0156

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	14.507	3.3618	.30681	5.0962	1.5515	.03301	2.6401	.55487
Stddev	.029	.0187	.00129	.0136	.0048	.00030	.0179	.00436
%RSD	.19951	.55566	.42012	.26731	.30769	.91253	.67699	.78607
#1	14.508	3.3466	.30665	5.0970	1.5493	.03266	2.6204	.55000
#2	14.478	3.3827	.30816	5.0821	1.5483	.03316	2.6554	.55841
#3	14.535	3.3562	.30560	5.1093	1.5570	.03321	2.6445	.55619

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.9969	.46939	.48820	.49359	10.858	.23452	8.6057	5.3677
Stddev	.0061	.00041	.00483	.00449	.014	.00201	.0281	.0133
%RSD	.20440	.08815	.98960	.90891	.12759	.85525	.32646	.24858
#1	2.9952	.46964	.48269	.48855	10.850	.23223	8.6235	5.3668
#2	2.9918	.46891	.49019	.49715	10.849	.23538	8.6202	5.3548
#3	3.0037	.46961	.49171	.49506	10.874	.23595	8.5733	5.3814

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.4315	3.4791	.02260	.30169	.27549	5.3135	97.890
Stddev	.0032	.0243	.00026	.00206	.00159	.0407	.894
%RSD	.22549	.69919	1.1497	.68332	.57822	.76585	.91343
#1	1.4335	3.4545	.02231	.30407	.27664	5.2665	97.192
#2	1.4278	3.5032	.02267	.30054	.27367	5.3370	98.897
#3	1.4332	3.4797	.02281	.30045	.27616	5.3369	97.580

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: S5 Acquired: 8/6/2025 11:51:47 Type: Cal
Method: 6010-200.7 NEW(v85) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5566.7	94213.	7731.3	4803.4	6053.3
Stddev	18.7	164.	34.6	13.6	20.8
%RSD	.33565	.17402	.44759	.28218	.34318
#1	5558.0	94246.	7712.7	4799.0	6037.3
#2	5588.2	94035.	7709.9	4818.6	6076.8
#3	5554.0	94357.	7771.2	4792.5	6045.8

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: ICV01 Acquired: 8/6/2025 11:55:58 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.896889**	**3.972949**	**3.830070**	**3.939694**	**4.071215**	**7.939463**
Stddev	.029584	.062152	.026952	.028575	.031686	.020677
%RSD	.7591625	1.564387	.7036842	.7253091	.7782931	.2604333
#1	3.919663	3.954705	3.848435	3.956459	4.091589	7.959076
#2	3.907552	4.042182	3.842647	3.955924	4.087346	7.941447
#3	3.863452	3.921961	3.799129	3.906700	4.034709	7.917865

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.997037**	**.2055471**	**1.948287**	**19.97206**	**.8044131**	**1.980835**
Stddev	.020692	.0003660	.012211	.11466	.0016992	.013353
%RSD	.2587449	.1780815	.6267638	.5740785	.2112361	.6741163
#1	8.004885	.2053949	1.958912	20.09897	.8041159	1.992238
#2	8.012657	.2052818	1.951001	19.94128	.8062414	1.984122
#3	7.973569	.2059647	1.934947	19.87595	.8028822	1.966146

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.013113**	**4.004670**	**2.008490**	**20.02720**	**1.975759**	**1.015856**
Stddev	.006128	.024808	.008489	.06336	.013264	.001351
%RSD	.6048647	.6194794	.4226470	.3163621	.6713472	.1330189
#1	1.018469	4.031097	2.015299	20.09972	1.987022	1.017231
#2	1.014439	4.001030	2.011191	19.98257	1.979115	1.014530
#3	1.006430	3.981883	1.998979	19.99931	1.961139	1.015809

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.40868**	**2.028000**	**1.988186**	**19.58666**	F **.0152808**	F **.0021511**
Stddev	.11531	.003221	.002531	.06598	.0003872	.0003712
%RSD	.5941063	.1588454	.1272776	.3368742	2.533986	17.25499
#1	19.40402	2.031019	1.989788	19.64884	.0155526	.0025797
#2	19.52625	2.028372	1.985269	19.59371	.0154523	.0019398
#3	19.29577	2.024608	1.989501	19.51744	.0148374	.0019339

Sample Name: ICV01 Acquired: 8/6/2025 11:55:58 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .0008199	F -.004290	F -.026971	F .0061689	F .0171795	F .0014324
Stddev	.0006206	.000481	.005535	.0028976	.0016188	.0047701
%RSD	75.68571	11.21425	20.52118	46.97138	9.423007	333.0204
#1	.0015348	-.003780	-.027813	.0037371	.0159698	.0066094
#2	.0004204	-.004735	-.021064	.0093750	.0165503	-.002785
#3	.0005045	-.004356	-.032037	.0053946	.0190185	.000473

Elem	Sr4077
Units	ppm
Avg	F -.003035
Stddev	.000185
%RSD	6.095169
#1	-.002842
#2	-.003051
#3	-.003211

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5769.351	95561.75	7853.009	4950.396	6502.815
Stddev	33.910	401.18	17.616	9.426	42.136
%RSD	.5877553	.4198093	.2243209	.1904056	.6479656
#1	5744.157	95231.91	7838.083	4940.685	6467.675
#2	5755.990	95444.98	7848.503	4950.994	6491.243
#3	5807.906	96008.35	7872.440	4959.508	6549.528

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: LLICV01 Acquired: 8/6/2025 12:09:08 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0202200**	**.0438960**	**.0116563**	**.0178854**	**.0516475**	**.1048612**
Stddev	.0012189	.0015963	.0016305	.0037204	.0010914	.0071539
%RSD	6.028065	3.636534	13.98832	20.80134	2.113244	6.822253
#1	.0197429	.0434021	.0108731	.0143164	.0527952	.1069101
#2	.0216053	.0426049	.0135307	.0175990	.0515245	.1107672
#3	.0193119	.0456808	.0105652	.0217407	.0506227	.0969065

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1037392**	**.0064816**	**.0058221**	**2.100338**	**.0105552**	**.0299430**
Stddev	.0004305	.0000653	.0000554	.012246	.0000409	.0002591
%RSD	.4149532	1.007056	.9514285	.5830364	.3876180	.8652130
#1	.1042265	.0065074	.0057592	2.109085	.0105993	.0296506
#2	.1034107	.0064074	.0058430	2.105586	.0105185	.0300342
#3	.1035804	.0065300	.0058639	2.086343	.0105479	.0301441

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0213359**	**.1078928**	**.0227420**	**2.229825**	**.0410743**	**.0104542**
Stddev	.0002705	.0048935	.0007009	.042401	.0000598	.0008395
%RSD	1.267716	4.535493	3.082045	1.901561	.1455569	8.030232
#1	.0216412	.1066097	.0232828	2.232553	.0410103	.0108255
#2	.0211263	.1037687	.0219501	2.270796	.0410838	.0094930
#3	.0212402	.1133000	.0229931	2.186125	.0411287	.0110440

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.832929**	**.0386945**	**.0414106**	**1.836581**	**.1106650**	**.2064541**
Stddev	.013335	.0013451	.0001177	.025314	.0004638	.0016333
%RSD	.7275211	3.476176	.2842019	1.378312	.4191403	.7911353
#1	1.833049	.0376166	.0412831	1.865725	.1108874	.2051506
#2	1.819535	.0382650	.0414337	1.820077	.1101318	.2059253
#3	1.846204	.0402018	.0415150	1.823940	.1109757	.2082863

Sample Name: LLICV01 Acquired: 8/6/2025 12:09:08 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0388096	.0398087	.3736837	.0196311	F .0246205	F .0132365
Stddev	.0006207	.0005527	.0121335	.0046916	.0007395	.0011110
%RSD	1.599285	1.388529	3.246997	23.89886	3.003814	8.393776
#1	.0388875	.0400428	.3604839	.0177033	.0238911	.0121244
#2	.0381536	.0391774	.3762160	.0162104	.0246005	.0143464
#3	.0393876	.0402057	.3843513	.0249795	.0253698	.0132387

Elem	Sr4077
Units	ppm
Avg	.0208708
Stddev	.0001343
%RSD	.6436335
#1	.0209419
#2	.0207159
#3	.0209548

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5949.272	98685.99	7952.034	5068.240	7023.261
Stddev	29.218	335.45	23.176	23.451	26.414
%RSD	.4911249	.3399163	.2914477	.4627124	.3760864
#1	5982.660	99021.79	7939.052	5087.185	7053.463
#2	5936.776	98685.29	7978.791	5075.524	7004.479
#3	5928.379	98350.89	7938.258	5042.011	7011.841

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: ICB01 Acquired: 8/6/2025 12:21:31 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001361**	**-.001074**	**.0008766**	**-.002538**	**.0012903**	**-.004791**	**.0017096**
Stddev	.000313	.001927	.0000735	.000765	.0017161	.012233	.0011584
%RSD	22.96577	179.4706	8.385253	30.15197	132.9997	255.3287	67.75956
#1	-.001603	-.001923	.0009399	-.003249	-.000033	.007279	.0003807
#2	-.001472	.001132	.0008940	-.001728	.003229	-.017182	.0022421
#3	-.001008	-.002431	.0007960	-.002638	.000675	-.004471	.0025062

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000683**	**.0000182**	**-.012107**	**-.000049**	**.0000972**	**.0000061**	**-.009142**
Stddev	.0000444	.0001085	.003829	.000097	.0000941	.0000995	.002930
%RSD	65.09923	598.0188	31.62775	198.1538	96.78705	1633.168	32.04695
#1	.0000303	.0000324	-.011056	.000063	.0000178	.0000010	-.012228
#2	.0001172	-.000097	-.008913	-.000108	.0002011	.0001080	-.008799
#3	.0000573	.000119	-.016352	-.000102	.0000727	-.000091	-.006399

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006302**	**.0000391**	**-.000008**	**.0000644**	**-.113643**	**-.004350**	**-.000721**
Stddev	.0005608	.0238975	.000399	.0004002	.010808	.005295	.000226
%RSD	88.99359	61066.32	5257.004	621.7612	9.510533	121.7226	31.33684
#1	.0011734	-.017714	.000035	-.000188	-.101408	-.001152	-.000876
#2	.0006639	.027211	.000369	-.000145	-.121892	-.001436	-.000824
#3	.0000533	-.009380	-.000427	.000526	-.117629	-.010462	-.000462

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.102255**	**-.000808**	**-.000454**	**-.000444**	**.0020660**	**-.009570**	**.0047842**
Stddev	.035489	.000742	.000049	.000199	.0004966	.010206	.0014206
%RSD	34.70663	91.86832	10.84808	44.73344	24.03378	106.6528	29.69334
#1	-.142879	-.000442	-.000469	-.000315	.0025107	.002171	.0035434
#2	-.077278	-.000320	-.000399	-.000344	.0021572	-.016325	.0044754
#3	-.086608	-.001662	-.000495	-.000673	.0015302	-.014555	.0063338

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: ICB01 Acquired: 8/6/2025 12:21:31 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0021945	-.008104	.0001124
Stddev	.0017325	.000344	.0001273
%RSD	78.94669	4.240838	113.2447
#1	.0031905	-.008488	.0001995
#2	.0031990	-.007823	.0001712
#3	.0001940	-.008003	-.000034

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5919.677	99620.09	7898.053	5074.532	7096.637
Stddev	7.569	564.23	24.820	16.499	20.671
%RSD	.1278701	.5663867	.3142549	.3251373	.2912759
#1	5915.314	99984.40	7878.809	5073.894	7097.728
#2	5915.299	98970.15	7926.068	5058.362	7075.443
#3	5928.417	99905.72	7889.282	5091.341	7116.741

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: CRI01 Acquired: 8/6/2025 12:26:09 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0184308**	**.0368037**	**.0111626**	**.0210367**	**.0470252**	**.0968692**
Stddev	.0024888	.0011427	.0011020	.0022773	.0032506	.0064487
%RSD	13.50373	3.104884	9.872039	10.82518	6.912546	6.657103
#1	.0211333	.0370051	.0119392	.0216824	.0473134	.1039085
#2	.0179261	.0355737	.0099013	.0185064	.0436401	.0912466
#3	.0162329	.0378323	.0116471	.0229215	.0501221	.0954526

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0964831**	**.0058797**	**.0054719**	**1.968514**	**.0096544**	**.0281764**
Stddev	.0011614	.0000916	.0000334	.029716	.0004704	.0003799
%RSD	1.203705	1.557435	.6095781	1.509580	4.871927	1.348281
#1	.0952306	.0057793	.0054662	1.934581	.0094999	.0281116
#2	.0975243	.0059585	.0054418	1.989890	.0101826	.0278331
#3	.0966944	.0059014	.0055078	1.981072	.0092807	.0285845

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0201149**	**.0978702**	**.0227622**	**2.073633**	**.0380312**	**.0099823**
Stddev	.0004743	.0008683	.0005296	.008501	.0004763	.0004684
%RSD	2.357754	.8871537	2.326637	.4099359	1.252361	4.692214
#1	.0204039	.0985453	.0232695	2.063937	.0376062	.0104093
#2	.0195675	.0968907	.0228043	2.077161	.0379415	.0094813
#3	.0203732	.0981745	.0222128	2.079802	.0385460	.0100563

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.616428**	**.0357119**	**.0385821**	**1.656623**	**.0909983**	**.1934648**
Stddev	.038522	.0008729	.0002251	.037897	.0015636	.0025977
%RSD	2.383186	2.444168	.5835373	2.287632	1.718268	1.342738
#1	1.642948	.0359359	.0383671	1.612900	.0892555	.1926671
#2	1.634096	.0347488	.0385630	1.676930	.0914613	.1913594
#3	1.572241	.0364509	.0388162	1.680040	.0922780	.1963678

Sample Name: CRI01 Acquired: 8/6/2025 12:26:09 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0354190	.0378026	.3361011	.0198461	.0242220	F .0077140
Stddev	.0006666	.0011665	.0153935	.0004345	.0021166	.0067529
%RSD	1.881892	3.085624	4.580023	2.189157	8.738460	87.54111
#1	.0348310	.0373988	.3389123	.0198303	.0227015	.0136014
#2	.0352830	.0391173	.3498952	.0194198	.0233251	.0003425
#3	.0361431	.0368917	.3194957	.0202883	.0266394	.0091982

Elem	Sr4077
Units	ppm
Avg	.0199448
Stddev	.0000919
%RSD	.4605707
#1	.0198936
#2	.0200509
#3	.0198901

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6242.749	104667.2	8263.750	5356.343	7437.948
Stddev	59.167	267.5	102.041	17.271	68.891
%RSD	.9477664	.2555846	1.234805	.3224311	.9262132
#1	6258.379	104465.2	8371.748	5359.605	7452.963
#2	6292.532	104970.6	8250.551	5371.750	7498.094
#3	6177.337	104565.8	8168.951	5337.674	7362.788

Sample Name: ICSA01 Acquired: 8/6/2025 12:31:05 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0075004**	**.0136162**	**-.009523**	**-.001745**	**-.004816**	**252.0311**	**.0062925**
Stddev	.0009107	.0038592	.001908	.006346	.001096	.1791	.0011393
%RSD	12.14201	28.34246	20.03145	363.7368	22.76459	.0710556	18.10480
#1	.0066027	.0180665	-.011692	.005392	-.004654	252.2313	.0053334
#2	.0074748	.0115900	-.008105	-.003874	-.003809	251.8861	.0075518
#3	.0084236	.0111922	-.008773	-.006752	-.005984	251.9759	.0059923

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0017662**	**-.000199**	**237.1098**	**.0586978**	**.0017984**	**-.000476**	**101.5245**
Stddev	.0000381	.000056	.1776	.0002622	.0002432	.000672	.5475
%RSD	2.158158	28.02856	.0749191	.4466178	13.52118	141.0109	.5392828
#1	.0017979	-.000154	237.2581	.0589747	.0017171	-.000662	101.8240
#2	.0017239	-.000261	236.9129	.0586652	.0016064	-.001036	101.8569
#3	.0017768	-.000180	237.1582	.0584534	.0020719	.000269	100.8925

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0090333**	**251.8681**	**.0059577**	**.0016313**	**-.027239**	**.0009173**	**.0006274**
Stddev	.0002269	.1276	.0003854	.0006027	.004950	.0009638	.0000665
%RSD	2.511222	.0506490	6.469284	36.94910	18.17090	105.0672	10.59540
#1	.0088734	251.7563	.0055233	.0017684	-.024982	-.000185	.0005713
#2	.0092929	251.8409	.0060908	.0021537	-.023820	.001601	.0006100
#3	.0089336	252.0070	.0062589	.0009718	-.032915	.001336	.0007008

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0050896**	**.0372257**	**.0001964**	**-.002713**	**-.004619**	**.0273934**	**.0073211**
Stddev	.0249669	.0028094	.0003773	.000168	.001803	.0054786	.0033884
%RSD	490.5475	7.546914	192.0833	6.198067	39.03292	19.99959	46.28297
#1	-.000407	.0399347	-.000151	-.002740	-.006533	.0210867	.0067377
#2	.032347	.0374168	.000598	-.002533	-.004372	.0309760	.0109634
#3	-.016671	.0343257	.000143	-.002865	-.002952	.0301175	.0042623

Sample Name: ICSA01 Acquired: 8/6/2025 12:31:05 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**-.000914**	**.0199609**	**.0014257**
Stddev	.004437	.0010271	.0004738
%RSD	485.4264	5.145709	33.23194
#1	-.003585	.0210305	.0014842
#2	.004208	.0198700	.0009253
#3	-.003366	.0189823	.0018674

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5313.500**	**86759.61**	**7687.392**	**4509.910**	**5750.692**
Stddev	11.728	193.60	38.679	19.224	8.729
%RSD	.2207276	.2231469	.5031513	.4262700	.1517853
#1	5319.556	86536.41	7697.794	4526.468	5752.223
#2	5320.963	86860.31	7719.806	4514.436	5758.554
#3	5299.982	86882.10	7644.575	4488.827	5741.299

Sample Name: ICSAB01 Acquired: 8/6/2025 12:35:16 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1029924	.1225276	.0382926	.0448228	.5885495	252.3578
Stddev	.0034423	.0013752	.0019372	.0049007	.0047371	.5464
%RSD	3.342310	1.122349	5.058833	10.93345	.8048713	.2165093
#1	.1062842	.1214095	.0372598	.0490898	.5878374	252.9732
#2	.1032761	.1240631	.0370908	.0459081	.5936023	252.1703
#3	.0994171	.1221102	.0405273	.0394704	.5842088	251.9299

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4981202	.4909438	.9598069	237.6144	.5497369	.4872453
Stddev	.0005533	.0011050	.0034636	.8728	.0024177	.0018858
%RSD	.1110755	.2250686	.3608637	.3673098	.4397963	.3870363
#1	.4987454	.4916066	.9624546	236.7882	.5517479	.4889596
#2	.4976938	.4915565	.9610791	237.5278	.5470544	.4875508
#3	.4979214	.4896682	.9558872	238.5273	.5504084	.4852253

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4720504	101.0445	.4925325	252.7098	.9642706	.2132125
Stddev	.0025669	.2716	.0019607	.4273	.0026158	.0003385
%RSD	.5437755	.2687962	.3980956	.1690877	.2712703	.1587519
#1	.4734970	100.7823	.4933053	253.1602	.9664779	.2128303
#2	.4735674	101.0264	.4939890	252.3101	.9649524	.2134743
#3	.4690866	101.3247	.4903031	252.6591	.9613814	.2133329

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.107053	.4805007	1.015832	-.141978	F .0354556	F .0001210
Stddev	.007526	.0049143	.002171	.037183	.0031453	.0004581
%RSD	7.029972	1.022735	.2136852	26.18931	8.871184	378.7138
#1	-.115674	.4801600	1.016836	-.173585	.0333353	-.000021
#2	-.101797	.4855764	1.017319	-.101009	.0339622	.000633
#3	-.103688	.4757656	1.013341	-.151340	.0390695	-.000250

Sample Name: ICSAB01 Acquired: 8/6/2025 12:35:16 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.002572	F -.006777	F .0181970	F .0097381	F -.002722	F .0109621
Stddev	.001547	.001160	.0181739	.0053606	.005533	.0033970
%RSD	60.14379	17.11915	99.87275	55.04749	203.3114	30.98881
#1	-.001013	-.005441	.0310346	.0159255	.000732	.0080480
#2	-.002596	-.007525	.0261550	.0064920	-.009104	.0146931
#3	-.004106	-.007365	-.002598	.0067970	.000207	.0101451

Elem	Sr4077
Units	ppm
Avg	F .0019679
Stddev	.0001258
%RSD	6.390568
#1	.0019461
#2	.0018545
#3	.0021031

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5414.125	88207.32	7775.224	4572.767	5865.678
Stddev	22.482	298.73	8.249	21.634	21.531
%RSD	.4152414	.3386639	.1060989	.4731118	.3670744
#1	5401.277	88500.43	7771.231	4596.505	5849.084
#2	5401.014	88218.24	7784.710	4567.638	5857.940
#3	5440.084	87903.28	7769.730	4554.158	5890.008

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: ICSADLX20 Acquired: 8/6/2025 12:39:21 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000273**	**-.003625**	**-.000390**	**-.000096**	**-.000393**	**11.94705**	**-.000575**
Stddev	.000423	.000836	.000847	.003339	.001801	.05096	.000778
%RSD	155.1235	23.06986	217.1080	3464.545	458.5476	.4265262	135.1748
#1	-.000177	-.004572	-.001247	.003286	-.002203	11.89061	-.000750
#2	.000095	-.002987	.000446	-.003390	-.000373	11.96087	.000275
#3	-.000735	-.003317	-.000370	-.000185	.001398	11.98968	-.001251

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002572**	**.0003982**	**11.86145**	**.0026924**	**.0002384**	**.0005255**	**4.700134**
Stddev	.0000748	.0001621	.05603	.0000564	.0003607	.0002488	.024063
%RSD	29.07138	40.69878	.4723638	2.093782	151.2860	47.34545	.5119618
#1	.0003382	.0002119	11.86337	.0027398	-.000161	.0004391	4.725520
#2	.0001907	.0004758	11.91649	.0026301	.000336	.0008061	4.677659
#3	.0002427	.0005068	11.80448	.0027072	.000540	.0003315	4.697224

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0013269**	**12.41410**	**.0007991**	**-.000138**	**-.179523**	**-.001839**	**-.000864**
Stddev	.0000440	.04640	.0002005	.000224	.004733	.001394	.000091
%RSD	3.315711	.3738006	25.09543	162.9923	2.636230	75.77196	10.54931
#1	.0013066	12.38868	.0007811	-.000384	-.177484	-.000422	-.000861
#2	.0012967	12.38596	.0006081	-.000085	-.176153	-.001889	-.000956
#3	.0013774	12.46766	.0010080	.000055	-.184934	-.003208	-.000774

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.160475**	**-.003856**	**-.000639**	**-.001191**	**.0012273**	**.0092111**	**.0017039**
Stddev	.032272	.000363	.000301	.000982	.0008084	.0189496	.0004380
%RSD	20.11037	9.414678	47.17096	82.41769	65.86630	205.7249	25.70702
#1	-.172187	-.004252	-.000905	-.002145	.0002942	-.000504	.0020478
#2	-.185255	-.003778	-.000700	-.001245	.0016738	-.002911	.0012107
#3	-.123982	-.003539	-.000312	-.000184	.0017140	.031048	.0018530

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: ICSADLX20 Acquired: 8/6/2025 12:39:21 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0024459	-.008718	.0005291
Stddev	.0020497	.001462	.0001230
%RSD	83.80193	16.76681	23.25006
#1	.0045222	-.007107	.0004866
#2	.0023914	-.009959	.0006678
#3	.0004239	-.009088	.0004330

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5959.742	99528.65	8047.602	5107.649	6931.087
Stddev	6.988	115.11	53.956	16.920	14.772
%RSD	.1172547	.1156523	.6704655	.3312602	.2131333
#1	5965.171	99446.84	8104.458	5124.347	6942.341
#2	5951.857	99660.28	7997.110	5108.084	6914.359
#3	5962.197	99478.84	8041.239	5090.516	6936.560

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: ICSABDLX20 Acquired: 8/6/2025 12:43:37 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0038463**	**.0054754**	**.0015534**	**.0039677**	**.0303110**	**12.48811**	**.0246797**
Stddev	.0001533	.0014692	.0015095	.0012265	.0001175	.03864	.0005962
%RSD	3.986851	26.83279	97.16873	30.91276	.3876813	.3094487	2.415872
#1	.0039202	.0071008	.0031151	.0047228	.0302668	12.47386	.0251364
#2	.0039487	.0042419	.0014430	.0046278	.0302220	12.53186	.0240052
#3	.0036700	.0050836	.0001022	.0025525	.0304442	12.45862	.0248976

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0253796**	**.0466198**	**12.37335**	**.0278667**	**.0237892**	**.0250694**	**4.965799**
Stddev	.0002393	.0002340	.06656	.0003662	.0001418	.0003221	.009212
%RSD	.9430413	.5019267	.5379462	1.314125	.5959273	1.284694	.1855040
#1	.0252219	.0467884	12.30033	.0276478	.0238899	.0247141	4.967902
#2	.0256550	.0463527	12.38908	.0282894	.0238506	.0253423	4.955717
#3	.0252619	.0467184	12.43064	.0276627	.0236271	.0251518	4.973777

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0260268**	**13.01138**	**.0478819**	**.0099625**	**-.195011**	**.0246722**	**.0490408**
Stddev	.0007033	.02488	.0004805	.0003410	.011930	.0024852	.0003233
%RSD	2.702062	.1912280	1.003545	3.422501	6.117627	10.07275	.6593297
#1	.0252343	13.00071	.0484349	.0101011	-.202174	.0243148	.0489534
#2	.0265763	13.03982	.0475656	.0095741	-.181239	.0223850	.0493989
#3	.0262698	12.99362	.0476453	.0102124	-.201621	.0273166	.0487702

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.208908**	**-.003592**	**-.000889**	**-.001563**	**.0007711**	**.0089835**	**.0027515**
Stddev	.034569	.000304	.000141	.000781	.0023894	.0070312	.0014908
%RSD	16.54745	8.462820	15.87280	49.98925	309.8854	78.26762	54.17975
#1	-.248794	-.003472	-.001043	-.000667	.0004224	.0044778	.0044496
#2	-.190335	-.003367	-.000859	-.001921	-.001425	.0170854	.0016581
#3	-.187596	-.003938	-.000766	-.002101	.003316	.0053873	.0021468

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: ICSABDLX20 Acquired: 8/6/2025 12:43:37 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0032099	-.007897	.0001984
Stddev	.0013759	.001921	.0001071
%RSD	42.86380	24.32238	53.99327
#1	.0017130	-.009243	.0000753
#2	.0034973	-.005698	.0002498
#3	.0044194	-.008751	.0002701

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5881.580	97056.07	7935.370	4974.091	6897.223
Stddev	14.146	234.63	41.378	21.040	20.679
%RSD	.2405142	.2417497	.5214395	.4229904	.2998184
#1	5868.913	96808.60	7976.150	4950.239	6882.018
#2	5896.845	97084.32	7893.419	4990.015	6920.770
#3	5878.984	97275.31	7936.542	4982.020	6888.881

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: CCV01 Acquired: 8/6/2025 12:47:49 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.941512**	**5.217044**	**4.879912**	**4.985585**	**4.945562**	**9.858621**	**9.883724**
Stddev	.020674	.111348	.005355	.024324	.011404	.036944	.101869
%RSD	.4183682	2.134306	.1097412	.4878875	.2305980	.3747429	1.030671
#1	4.954020	5.341576	4.873968	5.008728	4.956948	9.901265	9.983346
#2	4.917650	5.182476	4.881405	4.960231	4.934139	9.838280	9.779748
#3	4.952868	5.127080	4.884362	4.987795	4.945599	9.836316	9.888078

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2493176**	**2.458000**	**24.78089**	**.9873939**	**2.449818**	**1.238327**	**4.992039**
Stddev	.0027426	.001812	.08418	.0012822	.002313	.001643	.023072
%RSD	1.100037	.0737235	.3396984	.1298539	.0944248	.1327145	.4621700
#1	.2521066	2.455967	24.86538	.9871684	2.447960	1.238372	4.982186
#2	.2466240	2.458589	24.69702	.9862394	2.449085	1.236661	5.018401
#3	.2492222	2.459445	24.78028	.9887738	2.452409	1.239947	4.975530

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.480083**	**24.60897**	**2.453987**	**1.241979**	**24.59614**	**2.475160**	**2.493770**
Stddev	.007051	.02753	.001811	.002504	.19048	.013508	.001990
%RSD	.2842933	.1118851	.0738107	.2016253	.7744210	.5457237	.0797898
#1	2.488153	24.58850	2.453232	1.243959	24.46856	2.490718	2.495797
#2	2.475112	24.59814	2.452675	1.242815	24.81509	2.466424	2.493694
#3	2.476985	24.64027	2.456053	1.239164	24.50476	2.468337	2.491820

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.56052**	**5.015485**	**4.941707**	**4.906986**	**4.948296**	**4.886813**	**4.977613**
Stddev	.21663	.044888	.010085	.003105	.020224	.059219	.020404
%RSD	.8820111	.8949902	.2040788	.0632684	.4087004	1.211808	.4099082
#1	24.41894	5.058066	4.949043	4.906160	4.970040	4.825396	5.000031
#2	24.80990	4.968600	4.930207	4.910420	4.930049	4.943557	4.972677
#3	24.45272	5.019791	4.945872	4.904378	4.944799	4.891486	4.960130

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: CCV01 Acquired: 8/6/2025 12:47:49 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.916924**	**4.817027**	**5.018314**
Stddev	.009478	.019386	.066059
%RSD	.1927613	.4024545	1.316352
#1	4.920869	4.838160	5.027192
#2	4.923792	4.812852	4.948266
#3	4.906110	4.800068	5.079485

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5741.698**	**95893.32**	**7924.165**	**4961.137**	**6399.570**
Stddev	8.708	96.57	85.314	12.832	18.886
%RSD	.1516607	.1007105	1.076630	.2586421	.2951177
#1	5751.257	95812.45	7837.822	4947.665	6418.379
#2	5734.216	95867.27	8008.412	4962.531	6380.607
#3	5739.621	96000.25	7926.262	4973.215	6399.724

Sample Name: CCB01 Acquired: 8/6/2025 12:52:00 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003949**	**.0015049**	**.0025275**	**.0019073**	**.0014743**	**.0237282**	**.0086143**
Stddev	.0018590	.0008601	.0019874	.0021659	.0015443	.0137142	.0002275
%RSD	470.7683	57.15187	78.63224	113.5620	104.7518	57.79726	2.641044
#1	-.001584	.0024392	.0045560	.0040079	-.000232	.0395595	.0083747
#2	.000663	.0007462	.0024426	.0020323	.001879	.0161425	.0088274
#3	.002105	.0013293	.0005839	-.000318	.002776	.0154826	.0086407

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001583**	**.0009252**	**.0095475**	**.0003892**	**.0008070**	**.0005673**	**.0005904**
Stddev	.0000299	.0001873	.0142798	.0001542	.0001673	.0007586	.0062746
%RSD	18.88863	20.24789	149.5657	39.61462	20.73431	133.7341	1062.868
#1	.0001918	.0011008	.0214166	.0002500	.0009244	.0002825	.0058150
#2	.0001341	.0009470	.0135256	.0005549	.0008812	-.000008	-.006369
#3	.0001492	.0007280	-.006300	.0003626	.0006154	.001427	.002325

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0019080**	**.0105239**	**.0009890**	**.0003429**	**-.253093**	**-.002865**	**.0009588**
Stddev	.0003888	.0534522	.0003740	.0005093	.002443	.001611	.0001100
%RSD	20.37936	507.9147	37.81650	148.5477	.9652066	56.23693	11.46852
#1	.0018760	.0533311	.0006489	.0008291	-.254245	-.002715	.0010847
#2	.0023119	.0276272	.0013895	-.000187	-.250287	-.001334	.0009101
#3	.0015362	-.049387	.0009286	.000386	-.254746	-.004546	.0008816

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.157027**	**.0046067**	**.0023660**	**.0028427**	**.0026261**	**.0091694**	**.0071066**
Stddev	.012317	.0002813	.0002789	.0002593	.0015030	.0032789	.0007237
%RSD	7.844044	6.106769	11.78708	9.120558	57.23552	35.75903	10.18310
#1	-.157469	.0048749	.0026146	.0030760	.0035447	.0072236	.0070890
#2	-.144495	.0043139	.0024189	.0028884	.0034420	.0129550	.0063919
#3	-.169118	.0046314	.0020644	.0025636	.0008915	.0073295	.0078390

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: CCB01 Acquired: 8/6/2025 12:52:00 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0078245	-.009294	.0031746
Stddev	.0034278	.004296	.0005514
%RSD	43.80859	46.22573	17.36904
#1	.0051468	-.004567	.0037616
#2	.0116877	-.012961	.0030944
#3	.0066391	-.010353	.0026676

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6060.087	102036.4	8105.329	5170.485	7237.618
Stddev	35.379	82.5	31.471	6.932	38.889
%RSD	.5838105	.0808839	.3882809	.1340629	.5373171
#1	6050.374	102042.5	8076.545	5176.231	7226.356
#2	6030.579	102115.7	8138.932	5172.437	7205.602
#3	6099.309	101951.0	8100.509	5162.786	7280.895

Sample Name: PB169098BL Acquired: 8/6/2025 12:57:15 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.002148**	**-.001549**	**.0013630**	**.0030796**	**-.000200**	**-.003897**	**.0013159**
Stddev	.001712	.001381	.0006682	.0032269	.003035	.008880	.0004532
%RSD	79.71067	89.14635	49.02412	104.7823	1519.674	227.8798	34.43855
#1	-.002782	-.000092	.0009138	-.000432	-.002323	-.012367	.0013868
#2	-.000209	-.002838	.0021308	.005914	-.001553	-.004667	.0017295
#3	-.003453	-.001717	.0010443	.003758	.003277	.005344	.0008315

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000394**	**.0000068**	**-.006400**	**-.000063**	**-.000184**	**.0000164**	**-.000775**
Stddev	.0000067	.0000287	.008081	.000374	.000326	.0004986	.005590
%RSD	17.04295	422.5929	126.2771	596.8772	176.8829	3048.936	721.0813
#1	.0000445	.0000397	.000040	-.000422	.000162	.0000162	-.007182
#2	.0000318	-.000013	-.015468	.000324	-.000231	.0005151	.001754
#3	.0000418	-.000006	-.003771	-.000090	-.000484	-.000482	.003103

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005447**	**.0015353**	**.0001607**	**-.000045**	**-.218021**	**-.002331**	**-.000366**
Stddev	.0005632	.0144084	.0000341	.000373	.012244	.002171	.000054
%RSD	103.3857	938.4807	21.19939	834.1610	5.616141	93.12426	14.81989
#1	.0009189	.0181196	.0001998	-.000400	-.223115	-.004455	-.000399
#2	-.000103	-.005607	.0001373	.000343	-.226895	-.002422	-.000303
#3	.000818	-.007907	.0001450	-.000077	-.204052	-.000116	-.000396

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.164101**	**.0003327**	**-.000277**	**-.000005**	**.0012965**	**-.009306**	**.0049206**
Stddev	.021265	.0004895	.000259	.000577	.0004704	.010124	.0010595
%RSD	12.95853	147.1528	93.36039	10934.35	36.28321	108.7913	21.53191
#1	-.174010	.0000460	-.000037	.000206	.0018072	-.014625	.0048620
#2	-.139690	.0008979	-.000244	.000436	.0008808	.002369	.0060081
#3	-.178604	.0000541	-.000551	-.000658	.0012016	-.015663	.0038916

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: PB169098BL Acquired: 8/6/2025 12:57:15 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0032163	-.008056	.0002073
Stddev	.0004272	.001917	.0000775
%RSD	13.28139	23.79350	37.36442
#1	.0027294	-.008919	.0001922
#2	.0033918	-.005859	.0002912
#3	.0035278	-.009390	.0001385

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5999.764	99925.84	7884.386	5073.669	7271.997
Stddev	7.359	559.90	27.368	6.514	7.309
%RSD	.1226593	.5603168	.3471153	.1283953	.1005150
#1	6004.902	99730.30	7915.013	5069.579	7279.554
#2	5991.333	100557.3	7875.814	5081.181	7264.963
#3	6003.056	99489.9	7862.330	5070.247	7271.473

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: PB169098BS Acquired: 8/6/2025 13:01:35 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7934019**	**2.175173**	**.9796129**	**2.027352**	**.8210579**	**2.088364**
Stddev	.0024341	.016448	.0031007	.006354	.0017759	.033163
%RSD	.3067878	.7561703	.3165272	.3134290	.2162993	1.588002
#1	.7938624	2.172550	.9831516	2.020106	.8195659	2.113420
#2	.7955729	2.192775	.9783155	2.029975	.8230223	2.050757
#3	.7907705	2.160194	.9773715	2.031974	.8205853	2.100915

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2101933**	**.2153066**	**.1948700**	**1.075029**	**.4121077**	**.2011043**
Stddev	.0007212	.0002132	.0004803	.007182	.0006130	.0001610
%RSD	.3431077	.0990210	.2464715	.6680431	.1487507	.0800728
#1	.2101145	.2155284	.1954176	1.066737	.4120698	.2012461
#2	.2109506	.2151032	.1946728	1.079143	.4115145	.2009292
#3	.2095147	.2152881	.1945198	1.079209	.4127388	.2011374

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3166184**	**3.106766**	**.2140641**	**2.104313**	**.5037922**	**.0776085**
Stddev	.0004745	.002105	.0008171	.011412	.0005169	.0000982
%RSD	.1498737	.0677694	.3817327	.5423031	.1025996	.1265433
#1	.3166316	3.109180	.2133930	2.117295	.5043883	.0777199
#2	.3170861	3.105804	.2149741	2.099780	.5035193	.0775346
#3	.3161374	3.105313	.2138252	2.095865	.5034690	.0775709

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.781347**	**.3105333**	**.2128440**	**9.808191**	**.3171269**	**.4125492**
Stddev	.012113	.0014242	.0005909	.092825	.0013693	.0007843
%RSD	.4355174	.4586381	.2776405	.9464032	.4317693	.1901120
#1	2.787035	.3120147	.2134419	9.744414	.3156974	.4134535
#2	2.789571	.3091742	.2128297	9.914684	.3184266	.4120541
#3	2.767437	.3104110	.2122603	9.765475	.3172566	.4121400

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: PB169098BS Acquired: 8/6/2025 13:01:35 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6880070	.2051340	.8725682	5.790149	F .0011556	.1938542
Stddev	.0018005	.0017837	.0067065	.055229	.0029024	.0005558
%RSD	.2616983	.8695475	.7685906	.9538505	251.1534	.2867325
#1	.6900494	.2030748	.8684445	5.840490	.0033098	.1940540
#2	.6873217	.2061992	.8689536	5.798886	.0023019	.1942825
#3	.6866496	.2061281	.8803066	5.731072	-.002145	.1932261

Elem	Sr4077
Units	ppm
Avg	.2059197
Stddev	.0003983
%RSD	.1934170
#1	.2059687
#2	.2062912
#3	.2054992

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5978.275	99322.29	7935.998	5076.149	7052.816
Stddev	18.681	111.08	21.938	18.227	23.992
%RSD	.3124794	.1118365	.2764416	.3590675	.3401827
#1	5956.839	99346.75	7932.692	5055.153	7025.127
#2	5986.913	99419.10	7959.402	5087.906	7067.450
#3	5991.074	99201.01	7915.900	5085.388	7065.871

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2756-01 Acquired: 8/6/2025 13:05:36 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0079542**	**.0047260**	**.0429603**	**-.000195**	**.0009693**	**.2312390**	**.1221913**
Stddev	.0037108	.0044507	.0014424	.004280	.0012640	.0126981	.0008346
%RSD	46.65144	94.17466	3.357596	2199.725	130.4104	5.491331	.6830033
#1	.0045034	.0098499	.0446257	.001917	-.000255	.2434250	.1219657
#2	.0074800	.0018203	.0421054	.002619	.002270	.2180843	.1214926
#3	.0118793	.0025079	.0421498	-.005120	.000892	.2322076	.1231154

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000150**	**-.000059**	**72.35147**	**.0025072**	**.0073129**	**.0053995**	**11.76346**
Stddev	.000056	.000119	.35503	.0002431	.0001444	.0006879	.00902
%RSD	37.41592	203.3745	.4907056	9.693945	1.974377	12.73939	.0767068
#1	-.000089	-.000157	72.41718	.0022830	.0071510	.0049689	11.75335
#2	-.000200	.000074	71.96818	.0024731	.0073592	.0050368	11.76634
#3	-.000160	-.000093	72.66906	.0027655	.0074284	.0061928	11.77070

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.460773**	**9.917278**	**.0234869**	**.0001099**	**110.9671**	**-.000006**	**.2492127**
Stddev	.012904	.031688	.0005015	.0000269	.4425	.002747	.0007369
%RSD	.3728602	.3195200	2.135053	24.47846	.3988114	48310.43	.2957083
#1	3.475029	9.881711	.0231465	.0001323	111.3231	.000024	.2491070
#2	3.449892	9.942502	.0240628	.0001173	111.1065	-.002768	.2499968
#3	3.457399	9.927620	.0232515	.0000801	110.4716	.002727	.2485343

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**37.29840**	**.1130302**	**.0111347**	**-.001190**	**.0042596**	**9.455992**	**.5917301**
Stddev	.05797	.0006717	.0002105	.000484	.0017525	.012867	.0081550
%RSD	.1554329	.5942970	1.890431	40.64703	41.14312	.1360683	1.378161
#1	37.36414	.1123523	.0113285	-.001631	.0022453	9.441205	.5986010
#2	37.25461	.1130428	.0111650	-.000673	.0050984	9.464635	.5938711
#3	37.27644	.1136956	.0109107	-.001266	.0054351	9.462136	.5827182

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2756-01 Acquired: 8/6/2025 13:05:36 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**3.511590**	**-.001339**	**.7356930**
Stddev	.019465	.000441	.0028402
%RSD	.5542959	32.95202	.3860647
#1	3.522871	-.001640	.7384714
#2	3.522786	-.001545	.7327947
#3	3.489115	-.000833	.7358130

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5620.824**	**93530.80**	**7778.320**	**4779.139**	**6318.806**
Stddev	38.381	302.10	12.524	29.095	49.890
%RSD	.6828439	.3229918	.1610103	.6087927	.7895536
#1	5592.010	93879.37	7784.576	4803.565	6289.527
#2	5606.070	93368.24	7786.483	4786.903	6290.479
#3	5664.394	93344.79	7763.901	4746.950	6376.412

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2756-01DUP Acquired: 8/6/2025 13:14:14 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0054793**	**.0009818**	**.0431997**	**.0018259**	**.0013424**	**.2257871**	**.1222735**
Stddev	.0043632	.0036169	.0005146	.0016755	.0017880	.0159345	.0010633
%RSD	79.62958	368.3851	1.191329	91.76585	133.1890	7.057306	.8696443
#1	.0077364	-.001678	.0431215	.0003572	.0000516	.2251170	.1210852
#2	.0082516	.005100	.0427285	.0036509	.0033832	.2101982	.1225999
#3	.0004500	-.000476	.0437489	.0014695	.0005924	.2420460	.1231354

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000036**	**-.000037**	**71.59018**	**.0026917**	**.0072387**	**.0055532**	**11.63908**
Stddev	.000062	.000047	.47637	.0004557	.0003330	.0002957	.07072
%RSD	173.8751	127.4282	.6654178	16.92893	4.600680	5.324874	.6076124
#1	.000019	-.000090	71.21285	.0030886	.0068787	.0052620	11.55917
#2	-.000023	-.000022	71.43222	.0027924	.0073016	.0055444	11.69361
#3	-.000104	.000001	72.12547	.0021941	.0075358	.0058532	11.66444

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.441628**	**9.929338**	**.0238027**	**.0003400**	**110.4267**	**.0030337**	**.2495901**
Stddev	.004546	.035403	.0002448	.0001540	.3006	.0021707	.0009684
%RSD	.1320797	.3565512	1.028238	45.31010	.2722606	71.55349	.3879941
#1	3.440327	9.943663	.0236979	.0003228	110.4317	.0030775	.2500647
#2	3.437875	9.955334	.0236278	.0005019	110.7248	.0008414	.2484760
#3	3.446682	9.889017	.0240824	.0001952	110.1235	.0051821	.2502297

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**37.14216**	**.1111640**	**.0115736**	**-.000740**	**.0042134**	**9.403795**	**.6004659**
Stddev	.09133	.0003923	.0002671	.001073	.0007353	.019575	.0061680
%RSD	.2459056	.3529411	2.307860	145.0349	17.45151	.2081585	1.027196
#1	37.03678	.1107259	.0117975	-.000055	.0050211	9.414247	.6066660
#2	37.19126	.1114829	.0116455	-.001977	.0035829	9.415926	.5943306
#3	37.19846	.1112833	.0112780	-.000188	.0040361	9.381213	.6004010

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2756-01DUP Acquired: 8/6/2025 13:14:14 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	3.507947	-.000222	.7356826
Stddev	.008627	.002070	.0015994
%RSD	.2459234	934.5233	.2173997
#1	3.508208	-.001805	.7346512
#2	3.499192	-.000981	.7348716
#3	3.516440	.002121	.7375250

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5677.448	94863.25	7876.567	4831.328	6399.478
Stddev	14.617	212.32	28.784	5.403	16.474
%RSD	.2574652	.2238118	.3654332	.1118317	.2574331
#1	5661.083	95017.94	7867.362	4825.625	6380.800
#2	5689.211	94950.62	7908.827	4836.370	6411.941
#3	5682.049	94621.19	7853.512	4831.989	6405.691

Sample Name: Q2756-01LX5 Acquired: 8/6/2025 13:18:25 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012088**	**-.006366**	**.0085652**	**.0008175**	**.0011038**	**.0380832**	**.0219530**
Stddev	.0011286	.002113	.0016576	.0018848	.0011646	.0115305	.0003079
%RSD	93.36786	33.19672	19.35269	230.5635	105.5094	30.27718	1.402414
#1	.0014230	-.004192	.0094857	.0026560	.0010791	.0501540	.0222808
#2	.0022149	-.006492	.0066516	-.001110	-.000048	.0271822	.0216700
#3	-.000012	-.008413	.0095583	.000907	.002281	.0369133	.0219080

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000042**	**-.000070**	**13.37874**	**.0003345**	**.0013157**	**.0008968**	**2.113585**
Stddev	.000035	.000053	.05644	.0002832	.0001406	.0000489	.013565
%RSD	82.86583	75.98439	.4218791	84.66256	10.68428	5.451988	.6418121
#1	-.000003	-.000130	13.42594	.0004076	.0013774	.0009533	2.114915
#2	-.000055	-.000028	13.31622	.0000219	.0011549	.0008679	2.126437
#3	-.000069	-.000052	13.39406	.0005740	.0014149	.0008693	2.099404

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6426822**	**1.808584**	**.0044504**	**-.000243**	**18.92943**	**-.003240**	**.0439532**
Stddev	.0009579	.023794	.0000651	.000364	.13930	.000861	.0004075
%RSD	.1490392	1.315637	1.462858	149.7401	.7358656	26.56010	.9270354
#1	.6433703	1.823601	.0044341	-.000633	18.95214	-.002670	.0442584
#2	.6430881	1.781149	.0043949	-.000183	19.05597	-.004230	.0434905
#3	.6415883	1.821001	.0045220	.000087	18.78017	-.002821	.0441107

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.565594**	**.0189165**	**.0011597**	**-.001318**	**.0025738**	**1.674311**	**.1090941**
Stddev	.041755	.0006970	.0001007	.000755	.0006092	.011463	.0006601
%RSD	.6359698	3.684433	8.684623	57.24770	23.66753	.6846123	.6050381
#1	6.561127	.0197202	.0011038	-.002106	.0032762	1.676052	.1083620
#2	6.609404	.0185499	.0010993	-.001246	.0022553	1.684803	.1092765
#3	6.526253	.0184793	.0012760	-.000602	.0021900	1.662077	.1096437

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2756-01LX5 Acquired: 8/6/2025 13:18:25 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.6422701	-.003590	.1356261
Stddev	.0012706	.003366	.0001808
%RSD	.1978292	93.75300	.1333346
#1	.6419598	-.000319	.1358333
#2	.6436670	-.003409	.1355001
#3	.6411833	-.007043	.1355448

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5878.376	98743.50	8041.279	5004.121	6812.245
Stddev	5.597	160.78	58.935	12.788	10.812
%RSD	.0952165	.1628227	.7329020	.2555468	.1587110
#1	5872.527	98566.70	8026.389	4991.624	6799.770
#2	5883.681	98880.94	8106.230	5003.558	6818.070
#3	5878.921	98782.86	7991.217	5017.181	6818.896

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2756-01MS Acquired: 8/6/2025 13:22:41 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7521456**	**1.932020**	**.9216894**	**1.864413**	**.7557432**	**2.099329**	**.2997741**
Stddev	.0016923	.018943	.0065033	.009475	.0033568	.026977	.0009141
%RSD	.2249898	.9804892	.7055888	.5082173	.4441702	1.285029	.3049455
#1	.7516168	1.938904	.9262571	1.872673	.7581232	2.124442	.3008259
#2	.7540391	1.946559	.9245676	1.866497	.7572027	2.070811	.2993259
#3	.7507809	1.910597	.9142436	1.854069	.7519037	2.102734	.2991706

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1894331**	**.1815500**	**66.50875**	**.3816987**	**.1931534**	**.2853242**	**13.49141**
Stddev	.0015316	.0012049	.11351	.0029783	.0012694	.0019156	.12183
%RSD	.8085114	.6636762	.1706636	.7802775	.6571778	.6713741	.9030559
#1	.1891302	.1823249	66.62669	.3849829	.1940414	.2862887	13.55861
#2	.1880756	.1821633	66.40028	.3809400	.1937194	.2865658	13.56484
#3	.1910935	.1801619	66.49928	.3791731	.1916995	.2831180	13.35077

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.331042**	**10.90650**	**.4860673**	**.0483690**	**103.1573**	**.2911350**	**.4243048**
Stddev	.005026	.05443	.0036603	.0006513	1.1598	.0041758	.0009539
%RSD	.1508927	.4990305	.7530492	1.346593	1.124347	1.434319	.2248195
#1	3.332975	10.94074	.4881168	.0490817	104.1421	.2954163	.4233216
#2	3.334814	10.84375	.4882438	.0478046	103.4509	.2909153	.4243664
#3	3.325336	10.93502	.4818413	.0482208	101.8788	.2870734	.4252265

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**43.69105**	**.3608580**	**.4148938**	**.6447059**	**.1901518**	**9.373609**	**6.112959**
Stddev	.39895	.0025952	.0022449	.0036364	.0015702	.101317	.078052
%RSD	.9131250	.7191876	.5410856	.5640366	.8257414	1.080879	1.276833
#1	44.01720	.3597727	.4161067	.6467871	.1919649	9.440559	6.177466
#2	43.80972	.3589816	.4162714	.6468235	.1892427	9.423221	6.135216
#3	43.24622	.3638197	.4123033	.6405070	.1892479	9.257047	6.026196

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2756-01MS Acquired: 8/6/2025 13:22:41 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	3.148732	.1783243	.8596931
Stddev	.025569	.0026411	.0029649
%RSD	.8120280	1.481056	.3448772
#1	3.167473	.1769754	.8630186
#2	3.159117	.1813674	.8573260
#3	3.119604	.1766299	.8587346

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6096.669	100365.0	8306.299	5112.671	6866.891
Stddev	39.824	517.4	58.203	15.914	49.068
%RSD	.6532108	.5154736	.7007056	.3112607	.7145563
#1	6067.436	99771.9	8299.834	5115.986	6833.924
#2	6080.544	100600.1	8367.464	5095.361	6843.467
#3	6142.027	100723.1	8251.598	5126.666	6923.281

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2756-01MSD Acquired: 8/6/2025 13:29:44 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8207751**	**2.034967**	**1.003596**	**2.026581**	**.8230765**	**2.091585**	**.2965469**
Stddev	.0061505	.043940	.005780	.007305	.0033014	.035065	.0052770
%RSD	.7493568	2.159231	.5759376	.3604704	.4011062	1.676479	1.779483
#1	.8268032	1.994646	1.008822	2.034985	.8267226	2.113281	.2992961
#2	.8210132	2.028457	1.004577	2.023003	.8222171	2.110343	.2998817
#3	.8145090	2.081799	.997387	2.021755	.8202898	2.051131	.2904629

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1883708**	**.1978325**	**65.51158**	**.4035959**	**.2105356**	**.3098241**	**14.14548**
Stddev	.0024734	.0009998	1.02860	.0209872	.0010409	.0015415	.55338
%RSD	1.313065	.5053718	1.570103	5.200054	.4943925	.4975445	3.912091
#1	.1882041	.1986742	66.41481	.3793935	.2115263	.3114872	13.50659
#2	.1909234	.1980960	65.72791	.4167678	.2106296	.3095419	14.47480
#3	.1859850	.1967274	64.39202	.4146264	.2094509	.3084431	14.45505

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.291861**	**10.77651**	**.5290899**	**.0561045**	**108.7929**	**.2854486**	**.4487354**
Stddev	.054212	.18473	.0021803	.0068894	4.5517	.0054215	.0228682
%RSD	1.646849	1.714166	.4120833	12.27962	4.183774	1.899295	5.096143
#1	3.330289	10.92948	.5314026	.0481941	103.5885	.2874254	.4223523
#2	3.315442	10.82877	.5287949	.0607896	112.0298	.2896044	.4628789
#3	3.229852	10.57128	.5270721	.0593299	110.7605	.2793161	.4609749

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**45.77777**	**.3604558**	**.4530263**	**.7064118**	**.1880455**	**9.855163**	**6.761929**
Stddev	1.85249	.0041867	.0019944	.0035891	.0033111	.396944	.076219
%RSD	4.046709	1.161493	.4402320	.5080712	1.760796	4.027781	1.127184
#1	43.64289	.3607050	.4552250	.7099961	.1900218	9.404205	6.836832
#2	46.96108	.3645122	.4525199	.7064215	.1898919	10.15165	6.764498
#3	46.72936	.3561501	.4513339	.7028180	.1842230	10.00963	6.684458

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2756-01MSD Acquired: 8/6/2025 13:29:44 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**3.420971**	**.1807868**	**.8470997**
Stddev	.015679	.0079329	.0166142
%RSD	.4583262	4.387990	1.961303
#1	3.422747	.1871559	.8591098
#2	3.435686	.1833038	.8540503
#3	3.404479	.1719008	.8281390

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5670.266**	**96208.86**	**8449.699**	**4920.983**	**6372.594**
Stddev	14.627	4173.48	138.546	221.847	19.951
%RSD	.2579655	4.337935	1.639653	4.508176	.3130806
#1	5656.248	101020.9	8370.243	5176.650	6357.234
#2	5669.115	93576.7	8369.178	4779.304	6365.405
#3	5685.434	94029.0	8609.677	4806.995	6395.144

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2756-01A Acquired: 8/6/2025 13:33:41 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8361268**	**2.166626**	**1.018975**	**2.075386**	**.8327843**	**2.303994**	**.3234192**
Stddev	.0033545	.150517	.004389	.005563	.0038293	.006225	.0008579
%RSD	.4011988	6.947051	.4307357	.2680669	.4598231	.2702035	.2652518
#1	.8367279	2.220449	1.018606	2.081046	.8370872	2.300286	.3233214
#2	.8391401	2.282832	1.023537	2.075188	.8297509	2.311181	.3243217
#3	.8325123	1.996597	1.014782	2.069924	.8315149	2.300514	.3226144

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2078478**	**.2008870**	**71.09775**	**.4219391**	**.2128568**	**.3146091**	**14.54863**
Stddev	.0006136	.0003267	.54343	.0056752	.0002701	.0003511	.23085
%RSD	.2952103	.1626476	.7643490	1.345017	.1269117	.1116077	1.586728
#1	.2083734	.2011777	70.47030	.4284894	.2129318	.3142234	14.81279
#2	.2071735	.2009500	71.40398	.4188279	.2130815	.3146940	14.38564
#3	.2079965	.2005334	71.41897	.4184998	.2125571	.3149101	14.44745

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.548405**	**11.75748**	**.5371786**	**.0585455**	**111.6239**	**.3144679**	**.4631261**
Stddev	.007974	.13491	.0011491	.0011432	2.1300	.0024858	.0073904
%RSD	.2247111	1.147458	.2139153	1.952702	1.908174	.7904632	1.595770
#1	3.551443	11.89448	.5385053	.0590941	114.0834	.3118313	.4715178
#2	3.539359	11.62476	.5364979	.0593111	110.3908	.3167686	.4575873
#3	3.554412	11.75319	.5365326	.0572314	110.3975	.3148040	.4602732

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**46.79405**	**.3943551**	**.4498338**	**.7293528**	**.2072517**	**10.11756**	**6.852238**
Stddev	.63361	.0027060	.0012984	.0029515	.0008757	.21238	.078046
%RSD	1.354033	.6861894	.2886417	.4046764	.4225466	2.099077	1.138985
#1	47.52476	.3974255	.4512934	.7320684	.2062463	10.36116	6.921932
#2	46.39693	.3923176	.4494006	.7297785	.2076599	9.97129	6.866870
#3	46.46046	.3933223	.4488074	.7262116	.2078487	10.02024	6.767911

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2756-01A Acquired: 8/6/2025 13:33:41 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**3.485924**	**.1994643**	**.9153856**
Stddev	.040746	.0032722	.0002851
%RSD	1.168876	1.640515	.0311416
#1	3.505259	.2027945	.9153379
#2	3.513403	.1962533	.9156916
#3	3.439110	.1993452	.9151274

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5629.663**	**93075.60**	**7740.589**	**4783.821**	**6294.883**
Stddev	12.030	1081.21	43.283	53.821	17.849
%RSD	.2136858	1.161652	.5591672	1.125058	.2835426
#1	5617.893	91878.85	7779.717	4725.121	6278.756
#2	5629.160	93981.97	7747.954	4830.846	6291.833
#3	5641.936	93365.99	7694.096	4795.495	6314.060

Sample Name: CCV02 Acquired: 8/6/2025 13:37:38 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.882201**	**5.036119**	**4.830445**	**4.935945**	**4.895992**	**9.775378**	**9.833287**
Stddev	.028102	.070999	.022054	.025707	.014165	.016649	.066821
%RSD	.5756041	1.409806	.4565599	.5208199	.2893158	.1703150	.6795357
#1	4.906278	5.115603	4.850737	4.961686	4.908785	9.794452	9.855290
#2	4.889002	5.013778	4.833625	4.935877	4.898421	9.763762	9.886333
#3	4.851322	4.978978	4.806974	4.910271	4.880769	9.767919	9.758240

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2470363**	**2.425191**	**24.69469**	**.9693398**	**2.421388**	**1.223074**	**4.939450**
Stddev	.0010231	.011185	.03285	.0030499	.009554	.004538	.020902
%RSD	.4141366	.4611919	.1330226	.3146351	.3945505	.3710001	.4231679
#1	.2470423	2.433852	24.72340	.9669376	2.428445	1.227111	4.938206
#2	.2480564	2.429157	24.65886	.9683108	2.425204	1.223949	4.919198
#3	.2460103	2.412564	24.70180	.9727711	2.410517	1.218163	4.960947

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.461310**	**24.45423**	**2.424688**	**1.231116**	**24.07350**	**2.455633**	**2.453356**
Stddev	.001379	.08415	.010407	.003451	.05765	.005795	.004874
%RSD	.0560404	.3441107	.4292222	.2802981	.2394947	.2359987	.1986539
#1	2.460074	24.53951	2.433590	1.232658	24.13277	2.456050	2.454311
#2	2.461057	24.37125	2.427229	1.233527	24.01761	2.449641	2.457682
#3	2.462798	24.45192	2.413246	1.227163	24.07011	2.461209	2.448076

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.46601**	**4.973880**	**4.881195**	**4.847313**	**4.921373**	**4.842158**	**4.978643**
Stddev	.10077	.013440	.020278	.022637	.012012	.031718	.036333
%RSD	.4118708	.2702078	.4154220	.4670035	.2440819	.6550312	.7297752
#1	24.40000	4.975832	4.899061	4.865220	4.923401	4.878213	5.011781
#2	24.41603	4.986237	4.885368	4.854850	4.908476	4.818560	4.984355
#3	24.58200	4.959570	4.859155	4.821869	4.932242	4.829701	4.939792

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: CCV02 Acquired: 8/6/2025 13:37:38 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.869844**	**4.779567**	**4.967494**
Stddev	.032476	.012543	.050442
%RSD	.6668734	.2624396	1.015432
#1	4.905207	4.791842	5.023129
#2	4.862968	4.780088	4.924746
#3	4.841356	4.766772	4.954607

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5782.509**	**96307.53**	**7919.523**	**4918.233**	**6450.170**
Stddev	9.023	86.02	20.801	23.306	10.949
%RSD	.1560458	.0893131	.2626515	.4738673	.1697551
#1	5775.168	96225.06	7905.806	4893.192	6440.208
#2	5779.777	96396.70	7909.306	4922.214	6448.408
#3	5792.583	96300.82	7943.456	4939.291	6461.894

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: CCB02 Acquired: 8/6/2025 13:52:24 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000234**	**.0007126**	**.0011722**	**.0040855**	**.0009842**	**.0036086**	**.0017120**
Stddev	.002795	.0013690	.0007732	.0011910	.0017350	.0036622	.0003660
%RSD	1193.581	192.1244	65.96122	29.15245	176.2965	101.4838	21.37795
#1	.002198	-.000857	.0003826	.0034558	.0008123	.0024147	.0013147
#2	-.003288	.001661	.0012061	.0054592	-.000659	.0006924	.0020353
#3	.000387	.001334	.0019278	.0033416	.002799	.0077187	.0017859

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000927**	**.0005804**	**.0076432**	**.0000697**	**.0002320**	**.0003204**	**-.011459**
Stddev	.0000362	.0002264	.0084887	.0001580	.0003208	.0003643	.001990
%RSD	39.05146	39.00380	111.0616	226.8363	138.2760	113.6796	17.36888
#1	.0000701	.0003701	.0112170	-.000083	-.000045	.0006279	-.009840
#2	.0000735	.0005510	-.002048	.000233	.000158	-.000082	-.013681
#3	.0001344	.0008199	.013761	.000059	.000583	.000415	-.010856

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005973**	**.0083565**	**.0008457**	**.0002355**	**-.035140**	**-.004880**	**-.000951**
Stddev	.0003723	.0163274	.0001600	.0002609	.004708	.003682	.000185
%RSD	62.33956	195.3861	18.92185	110.7672	13.39802	75.44581	19.48730
#1	.0009524	.0270328	.0006614	.0005362	-.040222	-.008780	-.000771
#2	.0006296	-.003214	.0009500	.0001001	-.034273	-.001465	-.000942
#3	.0002098	.001251	.0009255	.0000702	-.030926	-.004394	-.001141

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0339699**	**-.002031**	**.0009688**	**.0007760**	**-.000278**	**-.002779**	**.0059453**
Stddev	.0419039	.000335	.0003343	.0008984	.001784	.015595	.0017207
%RSD	123.3559	16.48249	34.50126	115.7653	641.5130	561.1282	28.94275
#1	-.008788	-.001760	.0006968	.0002137	-.002279	-.020773	.0079014
#2	.074964	-.002405	.0008678	.0003023	.001147	.005590	.0052690
#3	.035733	-.001929	.0013420	.0018121	.000297	.006844	.0046654

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: CCB02 Acquired: 8/6/2025 13:52:24 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0060968	-.004698	.0004483
Stddev	.0026910	.003286	.0000612
%RSD	44.13721	69.94198	13.65786
#1	.0034826	-.003923	.0004910
#2	.0059495	-.001869	.0003782
#3	.0088584	-.008302	.0004758

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6000.496	99394.47	7859.172	5038.850	7230.862
Stddev	9.361	1208.83	32.856	47.407	20.587
%RSD	.1560014	1.216195	.4180616	.9408321	.2847138
#1	5995.059	100663.8	7862.371	5092.292	7226.152
#2	5995.123	98257.0	7824.834	5001.863	7213.037
#3	6011.305	99262.6	7890.312	5022.395	7253.396

Sample Name: PB169124BL Acquired: 8/6/2025 13:58:56 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001101**	**-.000795**	**.0000564**	**-.002593**	**.0013887**	**.0068794**
Stddev	.0018962	.002707	.0005699	.003348	.0005461	.0016407
%RSD	1722.267	340.5001	1010.708	129.1108	39.32514	23.84989
#1	-.001207	-.003748	.0006067	.000278	.0008739	.0075724
#2	.002283	-.000207	-.000531	-.006271	.0019615	.0050059
#3	-.000746	.001570	.000094	-.001787	.0013308	.0080600

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0017702**	**.0000233**	**.0000212**	**.0028351**	**.0000783**	**-.000023**
Stddev	.0006268	.0000131	.0000726	.0043868	.0003409	.000071
%RSD	35.40792	56.17842	342.4922	154.7301	435.5152	306.2253
#1	.0019806	.0000325	.0001016	-.001871	.0004685	.000001
#2	.0022648	.0000083	.0000016	.006810	-.000072	-.000103
#3	.0010653	.0000292	-.000040	.003566	-.000162	.000032

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000579**	**.0434785**	**.0029314**	**-.029927**	**.0002407**	**.0000744**
Stddev	.0003398	.0012384	.0002599	.016177	.0002765	.0006845
%RSD	586.7233	2.848225	8.866245	54.05541	114.8830	919.8723
#1	-.000334	.0435818	.0030805	-.014612	.0000037	.0008569
#2	.000237	.0421918	.0030824	-.046847	.0001739	-.000413
#3	.000271	.0446620	.0026313	-.028322	.0005444	-.000220

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.102577**	**.0000392**	**-.000989**	**-.050402**	**-.003255**	**-.000435**
Stddev	.002803	.0073270	.000266	.033181	.000712	.000086
%RSD	2.732930	18669.54	26.91697	65.83320	21.87554	19.80379
#1	-.099534	-.008412	-.000858	-.084286	-.002599	-.000519
#2	-.103143	.003916	-.001295	-.048948	-.004012	-.000347
#3	-.105054	.004613	-.000814	-.017971	-.003155	-.000440

Sample Name: PB169124BL Acquired: 8/6/2025 13:58:56 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000155	.0013392	.0025056	.0028758	.0062978	F -.010557
Stddev	.000977	.0022414	.0156292	.0023659	.0008990	.003476
%RSD	632.0346	167.3679	623.7806	82.27023	14.27497	32.92745
#1	-.001053	.0016563	-.008976	.0003421	.0072423	-.013600
#2	.000885	-.001044	.020305	.0050274	.0054525	-.011303
#3	-.000296	.003405	-.003812	.0032580	.0061986	-.006769

Elem	Sr4077
Units	ppm
Avg	.0003094
Stddev	.0002995
%RSD	96.81048
#1	.0006514
#2	.0001826
#3	.0000941

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6067.746	100185.6	7939.404	5118.928	7337.194
Stddev	11.813	341.0	30.117	9.464	9.882
%RSD	.1946883	.3404022	.3793358	.1848772	.1346773
#1	6065.876	100338.1	7966.591	5118.098	7340.573
#2	6080.382	100423.8	7944.592	5109.906	7344.943
#3	6056.979	99794.9	7907.030	5128.779	7326.066

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: PB169124BS Acquired: 8/6/2025 14:03:16 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7789911**	**2.154414**	**.9600520**	**1.988532**	**.8031002**	**2.058940**
Stddev	.0011148	.059339	.0049743	.001655	.0006580	.018998
%RSD	.1431128	2.754304	.5181262	.0832176	.0819388	.9226896
#1	.7780539	2.086132	.9650558	1.986649	.8038580	2.080714
#2	.7786955	2.193482	.9599925	1.989755	.8027696	2.045746
#3	.7802240	2.183627	.9551077	1.989191	.8026730	2.050359

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2079174**	**.2125830**	**.1914737**	**1.072270**	**.4101953**	**.1973916**
Stddev	.0007593	.0014221	.0008980	.010398	.0055232	.0007505
%RSD	.3651714	.6689431	.4690020	.9697641	1.346478	.3802015
#1	.2083427	.2117565	.1922308	1.065440	.4061037	.1980544
#2	.2083687	.2142250	.1917087	1.084237	.4164778	.1975436
#3	.2070408	.2117674	.1904815	1.067133	.4080044	.1965767

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3095525**	**3.058244**	**.2125154**	**2.061082**	**.4943465**	**.0773050**
Stddev	.0008952	.017736	.0014418	.025704	.0022206	.0005891
%RSD	.2891929	.5799290	.6784367	1.247097	.4492027	.7620075
#1	.3105120	3.056149	.2138653	2.090168	.4964164	.0769773
#2	.3094060	3.076934	.2126844	2.051657	.4946223	.0779851
#3	.3087397	3.041649	.2109966	2.041421	.4920009	.0769526

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.837213**	**.3035630**	**.2106720**	**9.771813**	**.3114256**	**.4045972**
Stddev	.025322	.0049525	.0025032	.105264	.0029488	.0003422
%RSD	.8924844	1.631467	1.188195	1.077224	.9468635	.0845882
#1	2.841592	.3091646	.2088977	9.750078	.3107652	.4048322
#2	2.860059	.3017590	.2135352	9.886248	.3146485	.4047549
#3	2.809987	.2997653	.2095829	9.679112	.3088630	.4042046

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: PB169124BS Acquired: 8/6/2025 14:03:16 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6761033**	**.2024253**	**.8640193**	**5.718818**	F **.0026225**	**.1923763**
Stddev	.0026463	.0008286	.0133183	.060029	.0027563	.0019410
%RSD	.3913976	.4093210	1.541438	1.049671	105.1027	1.008970
#1	.6759324	.2033475	.8732181	5.779868	-.000511	.1941412
#2	.6788308	.2021849	.8700930	5.716720	.004672	.1926903
#3	.6735466	.2017436	.8487469	5.659866	.003706	.1902974

Elem	Sr4077
Units	ppm
Avg	**.2035710**
Stddev	.0013698
%RSD	.6728928
#1	.2043341
#2	.2043893
#3	.2019896

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6096.896**	**99859.68**	**7980.613**	**5110.437**	**7192.508**
Stddev	29.536	1153.72	50.850	50.346	39.790
%RSD	.4844437	1.155344	.6371677	.9851625	.5532081
#1	6063.769	100935.7	8030.451	5161.726	7148.645
#2	6106.438	98641.4	7928.808	5061.090	7202.598
#3	6120.482	100001.9	7982.580	5108.496	7226.281

Sample Name: Q2760-01 Acquired: 8/6/2025 14:07:18 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0462051**	**-.018884**	**.1718925**	**.0005058**	**-.009048**	**28.87448**	**.1941043**
Stddev	.0021353	.004505	.0013949	.0034750	.001621	.37849	.0036196
%RSD	4.621247	23.85438	.8114801	687.0234	17.91068	1.310816	1.864783
#1	.0486658	-.020170	.1734699	-.002570	-.009290	28.45678	.1902164
#2	.0451084	-.013876	.1713860	-.000188	-.007320	29.19468	.1973767
#3	.0448410	-.022605	.1708216	.004275	-.010533	28.97199	.1947199

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0046919**	**-.000329**	**31.41467**	**.1229627**	**.0294033**	**.1438977**	**150.4303**
Stddev	.0001291	.000130	.49535	.0003267	.0003915	.0022366	.1530
%RSD	2.752323	39.46004	1.576796	.2656886	1.331579	1.554325	.1017394
#1	.0045505	-.000223	30.92273	.1227272	.0298448	.1464565	150.5721
#2	.0047216	-.000291	31.91335	.1233356	.0290985	.1429216	150.2680
#3	.0048036	-.000474	31.40792	.1228251	.0292664	.1423151	150.4507

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7216145**	**19.41946**	**.0589460**	**.0043803**	**1.420838**	**.2068603**	**.2177548**
Stddev	.0109649	.28131	.0006403	.0002580	.021889	.0075593	.0007831
%RSD	1.519493	1.448615	1.086301	5.890522	1.540552	3.654320	.3596041
#1	.7105654	19.11873	.0596227	.0043798	1.435039	.2006802	.2183063
#2	.7324932	19.67617	.0588655	.0041226	1.395631	.2152887	.2168585
#3	.7217849	19.46347	.0583497	.0046386	1.431845	.2046120	.2180996

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.557748**	**.3386597**	**.0063740**	**.0228349**	**1.709201**	**2.172195**	**2.226957**
Stddev	.023928	.0007686	.0001308	.0007068	.023426	.034014	.031122
%RSD	.5249908	.2269614	2.052751	3.095369	1.370559	1.565872	1.397496
#1	4.530557	.3385600	.0063043	.0226683	1.684701	2.164978	2.261961
#2	4.575589	.3379457	.0062929	.0236101	1.731379	2.142369	2.216499
#3	4.567099	.3394733	.0065250	.0222262	1.711525	2.209239	2.202412

Sample Name: Q2760-01 Acquired: 8/6/2025 14:07:18 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**9.965502**	**.0351257**	**-.068402**
Stddev	.119103	.0003840	.001098
%RSD	1.195154	1.093280	1.605290
#1	10.09353	.0349841	-.069615
#2	9.85799	.0355604	-.067475
#3	9.94499	.0348326	-.068118

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6189.104**	**102791.6**	**8566.129**	**5244.732**	**6921.664**
Stddev	38.350	179.9	120.597	34.855	41.399
%RSD	.6196345	.1750596	1.407836	.6645629	.5981036
#1	6145.489	102654.6	8693.081	5217.890	6874.483
#2	6217.546	102995.4	8453.094	5284.123	6951.910
#3	6204.276	102724.9	8552.211	5232.183	6938.600

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2760-01DUP Acquired: 8/6/2025 14:11:21 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0332465**	**-.015792**	**.1766298**	**-.003663**	**-.007453**	**27.88912**	**.2122186**
Stddev	.0024555	.002547	.0016248	.002367	.000771	.91512	.0071740
%RSD	7.385701	16.13063	.9199053	64.63746	10.34001	3.281286	3.380483
#1	.0359364	-.015107	.1775679	-.001441	-.008236	28.46109	.2159963
#2	.0311251	-.018612	.1775679	-.006153	-.006695	28.37260	.2167143
#3	.0326779	-.013658	.1747536	-.003393	-.007427	26.83366	.2039451

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0041588**	**.0001486**	**67.80700**	**.1070921**	**.0255435**	**.7979071**	**117.4295**
Stddev	.0001822	.0002475	1.86199	.0017239	.0001311	.0043348	3.2018
%RSD	4.382015	166.5841	2.746014	1.609731	.5132721	.5432714	2.726571
#1	.0042833	.0001600	69.05541	.1079206	.0254441	.8015868	119.1734
#2	.0042434	-.000104	68.69874	.1082454	.0254942	.7990060	119.3808
#3	.0039496	.000390	65.66684	.1051104	.0256921	.7931287	113.7343

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8050323**	**36.46928**	**.0530955**	**.0037718**	**.8014594**	**.1433734**	**.2351959**
Stddev	.0266437	1.07962	.0003165	.0008605	.0338872	.0077804	.0049815
%RSD	3.309638	2.960361	.5960415	22.81530	4.228187	5.426652	2.118036
#1	.8244430	37.07505	.0530518	.0044481	.8097355	.1429778	.2381773
#2	.8159984	37.10998	.0534315	.0040641	.8304420	.1513440	.2379654
#3	.7746557	35.22280	.0528031	.0028032	.7642008	.1357984	.2294451

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.750882**	**.1581938**	**.0053807**	**.0184066**	**1.438325**	**2.339666**	**1.767717**
Stddev	.088192	.0059225	.0002292	.0005749	.040251	.068027	.023910
%RSD	2.351226	3.743797	4.260584	3.123366	2.798477	2.907557	1.352603
#1	3.805905	.1601222	.0051531	.0184204	1.464494	2.364683	1.786254
#2	3.797581	.1629116	.0056116	.0178249	1.458506	2.391642	1.776166
#3	3.649160	.1515475	.0053775	.0189745	1.391976	2.262672	1.740729

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2760-01DUP Acquired: 8/6/2025 14:11:21 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	9.396526	.0321033	.0073030
Stddev	.116043	.0049081	.0010280
%RSD	1.234959	15.28861	14.07672
#1	9.486736	.0333816	.0084443
#2	9.437226	.0362457	.0070148
#3	9.265615	.0266824	.0064498

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6166.866	100447.6	8330.976	5089.883	6898.421
Stddev	38.472	1741.8	170.306	95.575	43.870
%RSD	.6238567	1.733998	2.044245	1.877735	.6359430
#1	6129.787	99450.2	8219.933	5035.050	6860.511
#2	6164.216	99433.9	8245.941	5034.357	6888.277
#3	6206.595	102458.8	8527.054	5200.242	6946.474

Sample Name: Q2760-01LX5 Acquired: 8/6/2025 14:15:26 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0087014**	**-.007532**	**.0324649**	**-.002037**	**-.001240**	**5.851152**	**.0381879**
Stddev	.0014287	.001362	.0011915	.001010	.000984	.105849	.0005601
%RSD	16.41903	18.07669	3.670073	49.56997	79.34293	1.809034	1.466752
#1	.0101971	-.008441	.0319408	-.000949	-.001639	5.818586	.0381418
#2	.0073508	-.008188	.0338286	-.002218	-.001961	5.969457	.0387696
#3	.0085562	-.005967	.0316254	-.002945	-.000119	5.765411	.0376522

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010208**	**-.000187**	**6.425337**	**.0237479**	**.0053566**	**.0293138**	**29.06583**
Stddev	.0000370	.000068	.106962	.0001878	.0000872	.0005034	.33288
%RSD	3.629751	36.45994	1.664687	.7907376	1.628444	1.717233	1.145268
#1	.0010581	-.000265	6.389941	.0239506	.0053377	.0296960	29.36953
#2	.0010203	-.000156	6.545510	.0235798	.0052803	.0295019	29.11804
#3	.0009840	-.000140	6.340559	.0237133	.0054517	.0287434	28.70993

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1464777**	**3.993548**	**.0108402**	**.0004329**	**.1263662**	**.0392580**	**.0412470**
Stddev	.0026301	.058757	.0001974	.0006147	.0146471	.0016944	.0005661
%RSD	1.795533	1.471300	1.820698	142.0031	11.59098	4.316036	1.372465
#1	.1460616	3.968055	.0107689	.0000096	.1346762	.0385725	.0418202
#2	.1492910	4.060746	.0110633	.0001511	.1349683	.0411877	.0412324
#3	.1440805	3.951843	.0106883	.0011379	.1094541	.0380138	.0406883

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7886691**	**.0618173**	**.0003021**	**.0030859**	**.3409470**	**.4117023**	**.4177830**
Stddev	.0150667	.0007321	.0002069	.0006769	.0048471	.0131371	.0057741
%RSD	1.910392	1.184355	68.46870	21.93646	1.421665	3.190912	1.382083
#1	.7733652	.0626367	.0005366	.0035703	.3373903	.4239377	.4200722
#2	.8034867	.0615878	.0002242	.0023124	.3464679	.4133501	.4220615
#3	.7891553	.0612275	.0001456	.0033749	.3389827	.3978191	.4112153

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2760-01LX5 Acquired: 8/6/2025 14:15:26 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.834405	-.000529	-.012614
Stddev	.023614	.002757	.000409
%RSD	1.287298	521.6450	3.240240
#1	1.854425	.002637	-.013057
#2	1.840427	-.002409	-.012251
#3	1.808363	-.001814	-.012535

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6279.871	103286.2	8153.841	5285.171	7393.864
Stddev	55.385	836.7	104.462	34.239	60.595
%RSD	.8819415	.8100566	1.281144	.6478388	.8195357
#1	6255.367	102334.9	8219.721	5246.634	7357.355
#2	6240.965	103616.1	8033.396	5296.792	7360.426
#3	6343.281	103907.7	8208.407	5312.088	7463.811

Sample Name: Q2760-01MS Acquired: 8/6/2025 14:19:38 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6666253**	**1.912200**	**1.003313**	**1.571338**	**.4361432**	**37.97898**	**.3708343**
Stddev	.0025984	.040458	.007251	.008693	.0043977	.42474	.0058859
%RSD	.3897804	2.115764	.7227514	.5531948	1.008304	1.118352	1.587214
#1	.6696048	1.879633	1.011600	1.579525	.4411953	37.98959	.3705453
#2	.6648299	1.957490	.998131	1.572273	.4331741	37.54903	.3650981
#3	.6654412	1.899477	1.000209	1.562216	.4340602	38.39831	.3768594

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1796562**	**.1704779**	**23.70415**	**.4544705**	**.1976129**	**.3729223**	**109.2453**
Stddev	.0017704	.0013811	.38939	.0009245	.0016565	.0034869	.3372
%RSD	.9854199	.8101283	1.642691	.2034166	.8382726	.9350221	.3086439
#1	.1788885	.1720709	23.61316	.4555044	.1995087	.3768976	109.4354
#2	.1783992	.1697453	23.36832	.4537235	.1968856	.3714885	108.8560
#3	.1816808	.1696174	24.13098	.4541835	.1964444	.3703809	109.4446

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7942525**	**15.28185**	**.4784610**	**.0695845**	**3.289434**	**.4109105**	**.3749200**
Stddev	.0104489	.18307	.0034635	.0004126	.014477	.0091951	.0016759
%RSD	1.315561	1.197930	.7238868	.5929520	.4400920	2.237745	.4469985
#1	.7912172	15.30295	.4824368	.0700592	3.305713	.4102574	.3741302
#2	.7856573	15.08915	.4768474	.0693114	3.278006	.4020594	.3768448
#3	.8058829	15.45345	.4760986	.0693831	3.284583	.4204148	.3737849

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**12.50527**	**.3409200**	**.3500999**	**.6013507**	**1.631892**	**2.210168**	**6.638115**
Stddev	.03502	.0014666	.0022279	.0041121	.024056	.009759	.092220
%RSD	.2800512	.4301912	.6363697	.6838052	1.474110	.4415706	1.389251
#1	12.54557	.3395343	.3525246	.6059341	1.624054	2.221331	6.742797
#2	12.48807	.3407697	.3496320	.5979849	1.612733	2.203251	6.602681
#3	12.48217	.3424560	.3481431	.6001331	1.658889	2.205921	6.568867

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2760-01MS Acquired: 8/6/2025 14:19:38 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**8.499370**	**.2028717**	**.1403382**
Stddev	.080074	.0016572	.0026054
%RSD	.9421166	.8168779	1.856489
#1	8.584021	.2047814	.1394469
#2	8.489257	.2020229	.1382954
#3	8.424833	.2018108	.1432722

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6296.738**	**104823.9**	**8408.775**	**5341.280**	**7086.270**
Stddev	28.876	72.2	96.053	39.262	46.760
%RSD	.4585840	.0688573	1.142296	.7350614	.6598688
#1	6263.766	104780.8	8452.405	5346.297	7034.338
#2	6317.519	104783.7	8475.270	5299.751	7125.035
#3	6308.929	104907.3	8298.651	5377.792	7099.437

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2760-01MSD Acquired: 8/6/2025 14:23:36 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7308187**	**1.946787**	**1.078750**	**1.702865**	**.4888838**	**44.05925**	**.4563454**
Stddev	.0035127	.083297	.007003	.012990	.0024879	.12355	.0005410
%RSD	.4806453	4.278676	.6492153	.7628316	.5088955	.2804115	.1185386
#1	.7348648	2.015535	1.085947	1.716235	.4903084	44.11345	.4563115
#2	.7285495	1.970667	1.078346	1.702066	.4903319	44.14643	.4569026
#3	.7290419	1.854158	1.071957	1.690292	.4860111	43.91787	.4558223

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1915430**	**.1897096**	**51.73212**	**.4858386**	**.2372135**	**1.090196**	**132.8486**
Stddev	.0015520	.0014341	.13173	.0014076	.0013786	.004535	1.3004
%RSD	.8102611	.7559266	.2546357	.2897332	.5811767	.4159923	.9788720
#1	.1898842	.1908306	51.85127	.4862525	.2382743	1.093541	134.0630
#2	.1929598	.1902046	51.75442	.4842704	.2377110	1.092013	131.4765
#3	.1917850	.1880936	51.59066	.4869929	.2356551	1.085034	133.0061

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.146900**	**21.46216**	**.5661102**	**.0743311**	**3.847709**	**.4642467**	**.4019316**
Stddev	.003562	.14116	.0045632	.0009053	.057914	.0039354	.0027169
%RSD	.3106112	.6576941	.8060532	1.217987	1.505153	.8476974	.6759525
#1	1.149734	21.41846	.5699886	.0747355	3.896705	.4608637	.4034560
#2	1.148065	21.61999	.5672599	.0732941	3.783796	.4685657	.3987948
#3	1.142901	21.34802	.5610822	.0749638	3.862627	.4633107	.4035440

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**17.78710**	**.3776617**	**.3795268**	**.6710674**	**2.545285**	**2.520259**	**9.136598**
Stddev	.22624	.0023595	.0020399	.0052487	.007413	.009637	.120859
%RSD	1.271960	.6247715	.5374930	.7821365	.2912413	.3823721	1.322797
#1	18.01558	.3792332	.3816424	.6746245	2.553589	2.519526	9.239132
#2	17.56316	.3749485	.3793659	.6735385	2.542930	2.511009	9.167318
#3	17.78256	.3788034	.3775721	.6650393	2.539335	2.530241	9.003344

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2760-01MSD Acquired: 8/6/2025 14:23:36 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	13.55186	.2223807	.1395165
Stddev	.14907	.0021970	.0011900
%RSD	1.100017	.9879420	.8529146
#1	13.67687	.2213229	.1392232
#2	13.59182	.2249065	.1408258
#3	13.38688	.2209128	.1385007

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6146.423	101380.7	8381.668	5183.508	6630.714
Stddev	25.483	562.4	50.878	34.614	37.998
%RSD	.4145938	.5547182	.6070208	.6677758	.5730534
#1	6125.807	100811.0	8406.793	5147.260	6599.949
#2	6138.548	101935.5	8323.114	5216.217	6619.006
#3	6174.913	101395.4	8415.096	5187.047	6673.188

Sample Name: Q2760-01A Acquired: 8/6/2025 14:27:32 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7582327**	**1.959197**	**1.049087**	**1.769999**	**.5237194**	**30.43003**	**.3791698**
Stddev	.0035644	.042599	.002901	.009504	.0020013	.11814	.0009258
%RSD	.4700916	2.174324	.2764904	.5369385	.3821364	.3882511	.2441567
#1	.7607787	1.957520	1.052369	1.774760	.5260272	30.55110	.3798275
#2	.7597603	2.002610	1.048029	1.776181	.5224622	30.42394	.3795708
#3	.7541591	1.917461	1.046865	1.759055	.5226686	30.31505	.3781112

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1912545**	**.1787733**	**32.16614**	**.4907735**	**.2130949**	**.4137821**	**148.3578**
Stddev	.0004431	.0003759	.12849	.0039727	.0004061	.0014889	.8484
%RSD	.2317009	.2102691	.3994700	.8094713	.1905578	.3598318	.5718817
#1	.1912228	.1791346	32.07120	.4951605	.2134909	.4140888	149.2122
#2	.1908280	.1788010	32.31236	.4897411	.2131143	.4150938	148.3457
#3	.1917126	.1783843	32.11487	.4874190	.2126794	.4121637	147.5154

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9068436**	**21.13305**	**.5181006**	**.0731263**	**4.111973**	**.4926208**	**.4001164**
Stddev	.0015364	.04210	.0012247	.0004132	.044921	.0042154	.0029992
%RSD	.1694249	.1992365	.2363773	.5650271	1.092455	.8557105	.7495809
#1	.9069152	21.18074	.5194746	.0733308	4.149093	.4974864	.4034708
#2	.9083429	21.10103	.5177033	.0733972	4.124790	.4903047	.3976935
#3	.9052726	21.11739	.5171239	.0726507	4.062036	.4900712	.3991848

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**13.60281**	**.5987796**	**.2811348**	**.4874395**	**1.835148**	**2.825334**	**7.455115**
Stddev	.07031	.0024990	.0013226	.0005599	.002199	.031758	.071800
%RSD	.5168945	.4173417	.4704579	.1148745	.1198377	1.124041	.9630943
#1	13.66860	.5999147	.2820132	.4871867	1.832739	2.848904	7.517693
#2	13.61112	.6005096	.2817775	.4870504	1.835655	2.837879	7.470924
#3	13.52872	.5959146	.2796136	.4880812	1.837049	2.789220	7.376728

Sample Name: Q2760-01A Acquired: 8/6/2025 14:27:32 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	9.650011	.2117335	.1190265
Stddev	.062267	.0027043	.0001265
%RSD	.6452540	1.277209	.1062456
#1	9.690237	.2145109	.1189964
#2	9.681508	.2115810	.1191652
#3	9.578288	.2091088	.1189177

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6249.926	103361.3	8370.704	5292.821	6981.146
Stddev	21.381	569.0	7.515	28.774	21.434
%RSD	.3421003	.5504805	.0897812	.5436338	.3070235
#1	6236.860	102734.0	8379.363	5259.601	6964.322
#2	6238.317	103505.8	8366.878	5309.936	6973.838
#3	6274.600	103844.1	8365.871	5308.925	7005.278

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2759-01 Acquired: 8/6/2025 14:31:28 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0803565**	**-.004026**	**43.16078**	**.0048521**	**.0404578**	**40.92657**
Stddev	.0018385	.001741	.04586	.0058787	.0018529	.05527
%RSD	2.287880	43.22987	.1062598	121.1562	4.579875	.1350522
#1	.0784606	-.002758	43.21364	-.001807	.0393313	40.88878
#2	.0804775	-.003310	43.13154	.007040	.0425964	40.90093
#3	.0821315	-.006011	43.13717	.009323	.0394458	40.99001

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.07863**	**.0071756**	**.0592949**	**323.0208**	**.7150552**	**.1848595**
Stddev	.11208	.0000798	.0001211	1.2692	.0017915	.0003421
%RSD	.7961114	1.112525	.2043078	.3929104	.2505354	.1850638
#1	13.97698	.0070938	.0592907	322.3346	.7137252	.1851967
#2	14.06009	.0071798	.0591759	324.4854	.7170923	.1845127
#3	14.19883	.0072533	.0594181	322.2425	.7143480	.1848691

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.413077**	**129.0281**	**1.973371**	**71.48620**	**.1091361**	**.0059989**
Stddev	.000777	.2990	.004740	.06002	.0003275	.0001198
%RSD	.0549749	.2317027	.2401761	.0839560	.3000437	1.996628
#1	1.413692	129.3728	1.968762	71.54301	.1092771	.0061339
#2	1.413335	128.8392	1.978231	71.42342	.1087618	.0059573
#3	1.412204	128.8723	1.973119	71.49217	.1093694	.0059054

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**18.52876**	**.2169482**	F **37.44794**	**13.52459**	**.1585034**	**.0074590**
Stddev	.07856	.0017432	.45360	.03380	.0023591	.0000636
%RSD	.4240097	.8035289	1.211279	.2498878	1.488327	.8530758
#1	18.60489	.2162883	37.94766	13.56177	.1610912	.0075299
#2	18.44797	.2156312	37.06221	13.49573	.1579460	.0074403
#3	18.53343	.2189251	37.33395	13.51626	.1564729	.0074068

Sample Name: Q2759-01 Acquired: 8/6/2025 14:31:28 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0861518	.7480422	1.848902	F 20.95196	F 82.87557	.1194947
Stddev	.0001509	.0048606	.007977	.07290	.42512	.0063107
%RSD	.1751074	.6497746	.4314504	.3479357	.5129598	5.281175
#1	.0862370	.7465912	1.851335	21.02897	82.39530	.1175362
#2	.0862408	.7534631	1.839992	20.94289	83.20363	.1143954
#3	.0859776	.7440723	1.855379	20.88402	83.02779	.1265525

Elem	Sr4077
Units	ppm
Avg	1.366169
Stddev	.003276
%RSD	.2398157
#1	1.365045
#2	1.369860
#3	1.363603

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5919.300	99687.41	8640.213	5083.477	6060.195
Stddev	8.717	209.01	23.311	25.218	12.069
%RSD	.1472630	.2096623	.2697968	.4960854	.1991491
#1	5909.297	99581.61	8666.494	5063.308	6046.520
#2	5923.330	99928.17	8632.109	5111.751	6064.705
#3	5925.273	99552.47	8622.035	5075.370	6069.359

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: Q2763-01 Acquired: 8/6/2025 14:35:55 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1187316**	**-.014276**	**5.208861**	**-.006206**	**-.000057**	**111.9450**
Stddev	.0053336	.001044	.154356	.000808	.001789	.2380
%RSD	4.492135	7.311216	2.963340	13.01956	3118.378	.2126133
#1	.1139030	-.015124	5.068706	-.005447	.000222	111.6944
#2	.1178354	-.014593	5.183581	-.006117	.001575	111.9725
#3	.1244566	-.013111	5.374297	-.007055	-.001969	112.1681

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.118359**	**.0157925**	**.0292918**	**156.3118**	**.5991848**	**.2196049**
Stddev	.005003	.0001219	.0016104	.4243	.0071126	.0068777
%RSD	.1604492	.7720925	5.497640	.2714495	1.187055	3.131866
#1	3.114216	.0158229	.0278868	155.8901	.5959143	.2137111
#2	3.116944	.0158963	.0289395	156.7387	.6073445	.2179419
#3	3.123918	.0156582	.0310492	156.3066	.5942957	.2271616

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.027987**	**268.8617**	**6.375135**	**99.74457**	**1.400670**	**.0171510**
Stddev	.223632	.8781	.013101	.31300	.042466	.0005449
%RSD	2.477095	.3265826	.2055041	.3138062	3.031811	3.176895
#1	8.830181	269.1780	6.360622	99.38326	1.362690	.0175248
#2	8.983133	269.5378	6.378695	99.93315	1.392802	.0165258
#3	9.270646	267.8693	6.386088	99.91731	1.446520	.0174024

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.00328**	**.7613971**	**4.591959**	**9.176481**	**.1379399**	**.0222859**
Stddev	.07631	.0022641	.038150	.054786	.0045691	.0006563
%RSD	.3052172	.2973642	.8308032	.5970302	3.312371	2.944831
#1	25.06085	.7615822	4.574153	9.231755	.1408583	.0216318
#2	25.03228	.7590461	4.635757	9.175491	.1326743	.0222814
#3	24.91672	.7635630	4.565968	9.122195	.1402870	.0229444

Sample Name: Q2763-01 Acquired: 8/6/2025 14:35:55 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3658974	3.817469	4.137085	10.12130	F 23.30740	.1739455
Stddev	.0115170	.005233	.023876	.23539	.66408	.0013415
%RSD	3.147593	.1370694	.5771186	2.325642	2.849231	.7712143
#1	.3550495	3.817668	4.130893	9.91410	22.70460	.1750580
#2	.3646593	3.822598	4.163447	10.07255	23.19835	.1724557
#3	.3779834	3.812139	4.116916	10.37724	24.01927	.1743227

Elem	Sr4077
Units	ppm
Avg	.3835608
Stddev	.0014575
%RSD	.3799912
#1	.3822530
#2	.3832973
#3	.3851320

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7083.892	120043.1	10308.10	6158.563	6219.834
Stddev	142.798	723.4	58.79	12.814	159.418
%RSD	2.015815	.6025779	.5702948	.2080687	2.563054
#1	7215.579	120160.9	10367.35	6162.962	6366.177
#2	7103.987	119268.2	10249.79	6144.128	6243.365
#3	6932.111	120700.4	10307.18	6168.598	6049.958

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: CCV03 Acquired: 8/6/2025 14:49:32 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.939227**	**5.309498**	**4.877919**	**5.017628**	**4.998035**	**10.02020**	**10.14437**
Stddev	.008584	.167011	.012047	.018180	.011407	.06598	.05225
%RSD	.1737951	3.145508	.2469788	.3623203	.2282384	.6584868	.5150782
#1	4.947902	5.498613	4.888185	5.038067	5.009169	10.08498	10.19800
#2	4.939042	5.182242	4.864656	5.003262	4.998563	10.02254	10.09362
#3	4.930737	5.247639	4.880916	5.011555	4.986372	9.95308	10.14150

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2519590**	**2.440516**	**25.56379**	**.9888853**	**2.453152**	**1.242178**	**5.272807**
Stddev	.0006787	.005081	.07847	.0004580	.004172	.001024	.014087
%RSD	.2693902	.2082108	.3069491	.0463131	.1700564	.0824635	.2671542
#1	.2525066	2.445800	25.64039	.9888973	2.457004	1.242823	5.287325
#2	.2521707	2.435665	25.48358	.9893371	2.448721	1.240997	5.271900
#3	.2511996	2.440083	25.56739	.9884214	2.453730	1.242713	5.259195

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.533289**	**24.91052**	**2.448800**	**1.263742**	**24.77848**	**2.507685**	**2.529231**
Stddev	.006235	.01635	.004122	.001768	.01530	.013384	.003472
%RSD	.2461339	.0656289	.1683439	.1399160	.0617465	.5337209	.1372687
#1	2.540367	24.92039	2.453055	1.265740	24.79360	2.521908	2.531731
#2	2.528608	24.91953	2.444825	1.262377	24.77885	2.505807	2.530695
#3	2.530892	24.89165	2.448520	1.263110	24.76300	2.495338	2.525267

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.21649**	**5.100212**	**5.014207**	**4.891010**	**5.079782**	**5.032830**	**5.040789**
Stddev	.07199	.010400	.007895	.014236	.005108	.014456	.039760
%RSD	.2854721	.2039067	.1574591	.2910557	.1005622	.2872397	.7887620
#1	25.18345	5.111612	5.022901	4.905718	5.085211	5.017383	5.084317
#2	25.16695	5.097779	5.007483	4.877299	5.075070	5.046033	5.031666
#3	25.29906	5.091244	5.012238	4.890012	5.079063	5.035075	5.006384

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: CCV03 Acquired: 8/6/2025 14:49:32 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.893857**	**4.820351**	**5.050505**
Stddev	.036840	.016368	.016890
%RSD	.7527832	.3395703	.3344298
#1	4.936286	4.832537	5.066205
#2	4.869988	4.826770	5.052676
#3	4.875298	4.801746	5.032634

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5807.273**	**95468.02**	**7912.338**	**4838.212**	**6541.384**
Stddev	2.538	390.14	35.830	23.660	6.504
%RSD	.0437106	.4086601	.4528400	.4890220	.0994270
#1	5808.571	95028.07	7871.522	4810.908	6535.062
#2	5808.900	95771.90	7926.883	4851.065	6548.056
#3	5804.348	95604.10	7938.608	4852.664	6541.033

Reviewed By:jaswal
On:8/8/2025 3:03:18 AM
Inst Id :P4
LB :LB136729

Sample Name: CCB03 Acquired: 8/6/2025 14:53:50 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000932**	**.0009220**	**-.000520**	**-.001105**	**.0010009**	**.0111677**
Stddev	.002043	.0028785	.000547	.002562	.0020836	.0041644
%RSD	219.2892	312.1900	105.1890	231.7676	208.1706	37.28986
#1	.001348	.0027938	.000046	-.000570	.0008977	.0127328
#2	-.001547	.0023648	-.000561	.001147	-.001029	.0143228
#3	-.002597	-.002393	-.001046	-.003893	.003134	.0064475

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0043440**	**.0000692**	**.0002619**	**.0110818**	**-.000025**	**-.000040**
Stddev	.0006859	.0000455	.0000563	.0096059	.000362	.000090
%RSD	15.79036	65.66865	21.48520	86.68168	1436.499	225.2743
#1	.0051252	.0001171	.0003259	.0150287	.000392	-.000048
#2	.0038401	.0000641	.0002203	.0180856	-.000219	.000054
#3	.0040668	.0000266	.0002395	.0001312	-.000249	-.000126

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001072**	**.0100552**	**.0011175**	**-.008331**	**.0001307**	**.0000739**
Stddev	.0001855	.0043055	.0003366	.015196	.0002385	.0003524
%RSD	172.9961	42.81865	30.12116	182.4081	182.5015	476.9102
#1	.0000554	.0063343	.0007288	-.023773	.0000923	.0004786
#2	.0003132	.0090602	.0013148	.006606	-.000086	-.000165
#3	-.000047	.0147711	.0013089	-.007825	.000386	-.000092

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.132852**	**-.001715**	**.0013539**	**.0135265**	**.0054210**	**.0010415**
Stddev	.009856	.002867	.0001176	.0290345	.0003715	.0002789
%RSD	7.418624	167.1710	8.684779	214.6499	6.852324	26.77536
#1	-.136156	-.004576	.0014482	.0435516	.0053734	.0013630
#2	-.140631	.001157	.0013913	.0114318	.0050756	.0008972
#3	-.121769	-.001726	.0012221	-.014404	.0058140	.0008644

Sample Name: CCB03 Acquired: 8/6/2025 14:53:50 Type: Unk
Method: 6010-200.7 NEW(v85) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016229	.0010845	.0087040	.0034504	F .0101708	F -.010192
Stddev	.0005412	.0011088	.0077368	.0009893	.0013365	.003365
%RSD	33.35083	102.2470	88.88778	28.67272	13.14060	33.01948
#1	.0019788	.0010758	.0000942	.0029453	.0105383	-.010239
#2	.0018899	.0021975	.0150732	.0045903	.0112851	-.006803
#3	.0010000	-.000020	.0109447	.0028155	.0086890	-.013534

Elem	Sr4077
Units	ppm
Avg	.0007366
Stddev	.0000992
%RSD	13.46114
#1	.0007828
#2	.0008042
#3	.0006228

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5916.668	99086.09	7820.278	5037.080	7021.495
Stddev	51.068	283.58	23.848	11.040	48.868
%RSD	.8631239	.2861928	.3049513	.2191803	.6959778
#1	5909.988	99332.90	7843.327	5049.761	7016.637
#2	5869.268	98776.32	7821.803	5031.869	6975.238
#3	5970.747	99149.03	7795.704	5029.609	7072.611

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB169098

SOP ID : M3010A-Digestion-17

SDG No : N/A

Matrix : WATER

Pippete ID: ICP A

Balance ID : N/A

Filter paper ID : N/A

pH Strip ID : M6069

Hood ID : #3

Block ID: 1. HOT BLOCK #1 2. N/A

Start Digest Date: 08/04/2025 **Time :** 10:10 **Temp :** 96 °C

End Digest Date: 08/04/2025 **Time :** 13:12 **Temp :** 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: SJ

Supervisor Signature:

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# CELL#50 96C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
08/04/25 13:12	SJ Metdig	SD (Metals Lab)
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB169098

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
PB169098BL	PBS098	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	1
PB169098BS	LCS098	<2	50	25	Colorless	Colorless	Clear	Clear	MP6007,MP6015	2
Q2745-01	RW8-SP100-20250731	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	6
Q2745-02	RW8-SP303-20250731	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	7
Q2756-01	71725	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	8
Q2756-01MS	71725MS	<2	50	25	Colorless	Colorless	Clear	Clear	MP6007,MP6015	10
Q2756-01MSD	71725MSD	<2	50	25	Colorless	Colorless	Clear	Clear	MP6007,MP6015	11
Q2756-01DUP	71725DUP	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	9

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB169098 **WorkList ID :** 191087 **Department :** Digestion **Date :** 08-04-2025 09:33:49

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2745-01	RW8-SP100-20250731	Water	Metals Group4	1:1 HNO3 to pH < 2	TETR06	O41	07/31/2025	6010D
Q2745-02	RW8-SP303-20250731	Water	Metals Group4	1:1 HNO3 to pH < 2	TETR06	O41	07/31/2025	6010D
Q2756-01	71725	Water	Metals ICP-TAL	1:1 HNO3 to pH < 2	PSEG03	D41	08/01/2025	6010D

Date/Time 08/04/25 09:40
Raw Sample Received by: SKS mofdi
Raw Sample Relinquished by: CP Cruz

Date/Time 08/04/25 10:40
Raw Sample Received by: CP Cruz
Raw Sample Relinquished by: SKS mofdi

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB136697

Review By	Janvi	Review On	8/5/2025 10:04:40 AM
Supervise By	jaswal	Supervise On	8/6/2025 7:45:51 AM

STD. NAME	STD REF.#
ICAL Standard	MP86452,MP86453,MP86454,MP86455,MP86456,MP86458
ICV Standard	MP86459
CCV Standard	MP86462
ICSA Standard	MP86460,MP86461
CRI Standard	MP86458
LCS Standard	
Chk Standard	MP86463,MP86464

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	08/04/25 11:15		Jaswal	OK
2	S1	S1	CAL2	08/04/25 11:20		Jaswal	OK
3	S2	S2	CAL3	08/04/25 11:24		Jaswal	OK
4	S3	S3	CAL4	08/04/25 11:28		Jaswal	OK
5	S4	S4	CAL5	08/04/25 11:32		Jaswal	OK
6	S5	S5	CAL6	08/04/25 11:36		Jaswal	OK
7	ICV01	ICV01	ICV	08/04/25 11:41		Jaswal	OK
8	LLICV01	LLICV01	LLICV	08/04/25 11:45		Jaswal	OK
9	ICB01	ICB01	ICB	08/04/25 11:52		Jaswal	OK
10	CRI01	CRI01	CRDL	08/04/25 11:57		Jaswal	OK
11	ICSA01	ICSA01	ICSA	08/04/25 12:01		Jaswal	OK
12	ICSAB01	ICSAB01	ICSAB	08/04/25 12:05		Jaswal	OK
13	ICSADL	ICSADL	ICSA	08/04/25 12:09		Jaswal	OK
14	ICSABDL	ICSABDL	ICSAB	08/04/25 12:14		Jaswal	OK
15	CCV01	CCV01	CCV	08/04/25 12:25		Jaswal	OK
16	CCB01	CCB01	CCB	08/04/25 12:29		Jaswal	OK
17	PB169076BL	PB169076BL	MB	08/04/25 12:55		Jaswal	OK
18	PB169076BS	PB169076BS	LCS	08/04/25 13:00		Jaswal	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB136697

Review By	Janvi	Review On	8/5/2025 10:04:40 AM
Supervise By	jaswal	Supervise On	8/6/2025 7:45:51 AM

STD. NAME	STD REF.#
ICAL Standard	MP86452,MP86453,MP86454,MP86455,MP86456,MP86458
ICV Standard	MP86459
CCV Standard	MP86462
ICSA Standard	MP86460,MP86461
CRI Standard	MP86458
LCS Standard	
Chk Standard	MP86463,MP86464

19	Q2725-02DL	CompDL	SAM	08/04/25 13:04	Straight 5x dilution for all elements	Jaswal	OK
20	Q2725-02DUPDL	CompDUPDL	DUP	08/04/25 13:08	Straight 5x dilution for all elements	Jaswal	OK
21	Q2725-02LDL	CompLDL	SD	08/04/25 13:12	Straight 25x dilution for all elements	Jaswal	OK
22	Q2725-02MSDL	CompMSDL	MS	08/04/25 13:16	Straight 5x dilution for all elements	Jaswal	OK
23	Q2725-02MSDDL	CompMSDDL	MSD	08/04/25 13:20	Straight 5x dilution for all elements	Jaswal	OK
24	Q2725-02ADL	CompADL	PS	08/04/25 13:24	Straight 5x dilution for all elements (0.1ml m6004,m6013-10ml sample before dilution)	Jaswal	OK
25	PB169078BL	PB169078BL	MB	08/04/25 13:29		Jaswal	OK
26	PB169078BS	PB169078BS	LCS	08/04/25 13:33		Jaswal	OK
27	CCV02	CCV02	CCV	08/04/25 13:37		Jaswal	OK
28	CCB02	CCB02	CCB	08/04/25 13:41		Jaswal	OK
29	Q2733-01	TW-WTS-12	SAM	08/04/25 13:45		Jaswal	OK
30	Q2733-01DUP	TW-WTS-12DUP	DUP	08/04/25 13:50		Jaswal	OK
31	Q2733-01L	TW-WTS-12L	SD	08/04/25 13:54		Jaswal	OK
32	Q2733-01MS	TW-WTS-12MS	MS	08/04/25 13:59		Jaswal	OK
33	Q2733-01MSD	TW-WTS-12MSD	MSD	08/04/25 14:03		Jaswal	OK
34	Q2733-01A	TW-WTS-12A	PS	08/04/25 14:07	0.1ml m6004,m6013-10ml sample	Jaswal	OK
35	Q2742-01	9 Banker	SAM	08/04/25 14:12		Jaswal	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB136697

Review By	Janvi	Review On	8/5/2025 10:04:40 AM
Supervise By	jaswal	Supervise On	8/6/2025 7:45:51 AM

STD. NAME	STD REF.#
ICAL Standard	MP86452,MP86453,MP86454,MP86455,MP86456,MP86458
ICV Standard	MP86459
CCV Standard	MP86462
ICSA Standard	MP86460,MP86461
CRI Standard	MP86458
LCS Standard	
Chk Standard	MP86463,MP86464

36	Q2734-01	VNJ-253	SAM	08/04/25 14:17		Jaswal	OK
37	Q2741-01	TR-05-07312025	SAM	08/04/25 14:21		Jaswal	OK
38	Q2743-01	WC1	SAM	08/04/25 14:25		Jaswal	OK
39	CCV03	CCV03	CCV	08/04/25 14:43		Jaswal	OK
40	CCB03	CCB03	CCB	08/04/25 14:54		Jaswal	OK
41	Q2753-01	289	SAM	08/04/25 14:58		Jaswal	OK
42	Q2758-01	WASTE	SAM	08/04/25 15:03	%soil missing	Jaswal	OK
43	PB169096BL	PB169096BL	MB	08/04/25 15:07		Jaswal	OK
44	Q2740-01	OR-02-07312025	SAM	08/04/25 15:15		Jaswal	OK
45	Q2740-01DUP	OR-02-07312025DUP	DUP	08/04/25 15:19		Jaswal	OK
46	Q2740-01L	OR-02-07312025L	SD	08/04/25 15:23		Jaswal	OK
47	Q2740-01MS	OR-02-07312025MS	MS	08/04/25 15:27		Jaswal	OK
48	Q2740-01MSD	OR-02-07312025MSD	MSD	08/04/25 15:31		Jaswal	OK
49	Q2740-01A	OR-02-07312025A	PS	08/04/25 15:35	0.1ml m6004,m6013-10ml sample	Jaswal	OK
50	PB169096BS	PB169096BS	LCS	08/04/25 15:39		Jaswal	OK
51	CCV04	CCV04	CCV	08/04/25 15:48		Jaswal	OK
52	CCB04	CCB04	CCB	08/04/25 15:53		Jaswal	OK
53	Q2734-02	VNJ-253	SAM	08/04/25 16:08		Jaswal	OK
54	Q2703-05	TP-4	SAM	08/04/25 16:12		Jaswal	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB136697

Review By	Janvi	Review On	8/5/2025 10:04:40 AM
Supervise By	jaswal	Supervise On	8/6/2025 7:45:51 AM

STD. NAME	STD REF.#
ICAL Standard	MP86452,MP86453,MP86454,MP86455,MP86456,MP86458
ICV Standard	MP86459
CCV Standard	MP86462
ICSA Standard	MP86460,MP86461
CRI Standard	MP86458
LCS Standard	
Chk Standard	MP86463,MP86464

55	Q2743-02	WC1	SAM	08/04/25 16:16		Jaswal	OK
56	Q2753-02	289	SAM	08/04/25 16:21		Jaswal	OK
57	Q2753-02DUP	289DUP	DUP	08/04/25 16:25		Jaswal	OK
58	Q2753-02L	289L	SD	08/04/25 16:30		Jaswal	OK
59	Q2753-02MS	289MS	MS	08/04/25 16:34		Jaswal	OK
60	Q2753-02MSD	289MSD	MSD	08/04/25 16:38		Jaswal	OK
61	Q2753-02A	289A	PS	08/04/25 16:42	0.1ml m6004,m6013-10ml sample	Jaswal	OK
62	PB169079TB	PB169079TB	MB	08/04/25 16:46		Jaswal	OK
63	CCV05	CCV05	CCV	08/04/25 16:51		Jaswal	OK
64	CCB05	CCB05	CCB	08/04/25 16:55		Jaswal	OK
65	PB169101BL	PB169101BL	MB	08/04/25 16:59		Jaswal	OK
66	PB169101BS	PB169101BS	LCS	08/04/25 17:04		Jaswal	OK
67	Q2745-01	RW8-SP100-2025073	SAM	08/04/25 17:08		Jaswal	OK
68	Q2745-02	RW8-SP303-2025073	SAM	08/04/25 17:12		Jaswal	OK
69	Q2756-01	71725	SAM	08/04/25 17:16	CCV fail for Tl	Jaswal	Not Ok
70	Q2756-01DUP	71725DUP	DUP	08/04/25 17:20	CCV fail for Tl	Jaswal	Not Ok
71	Q2756-01L	71725L	SD	08/04/25 17:25	CCV fail for Tl	Jaswal	Not Ok
72	Q2756-01MS	71725MS	MS	08/04/25 17:29	CCV fail for Tl	Jaswal	Not Ok
73	Q2756-01MSD	71725MSD	MSD	08/04/25 17:33	CCV fail for Tl	Jaswal	Not Ok

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB136697

Review By	Janvi	Review On	8/5/2025 10:04:40 AM
Supervise By	jaswal	Supervise On	8/6/2025 7:45:51 AM

STD. NAME	STD REF.#
ICAL Standard	MP86452,MP86453,MP86454,MP86455,MP86456,MP86458
ICV Standard	MP86459
CCV Standard	MP86462
ICSA Standard	MP86460,MP86461
CRI Standard	MP86458
LCS Standard	
Chk Standard	MP86463,MP86464

74	Q2756-01A	71725A	PS	08/04/25 17:37	CCV fail for Tl	Jaswal	Not Ok
75	CCV06	CCV06	CCV	08/04/25 17:41	CCV fail for Tl	Jaswal	OK
76	CCB06	CCB06	CCB	08/04/25 17:45		Jaswal	OK
77	PB169098BL	PB169098BL	MB	08/04/25 17:49	CCV fail for Tl	Jaswal	Not Ok
78	PB169098BS	PB169098BS	LCS	08/04/25 17:54	CCV fail for Tl	Jaswal	Not Ok
79	CCV07	CCV07	CCV	08/04/25 17:58		Jaswal	OK
80	CCB07	CCB07	CCB	08/04/25 18:02		Jaswal	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB136729

Review By	Janvi	Review On	8/7/2025 1:17:59 PM
Supervise By	jaswal	Supervise On	8/8/2025 3:03:18 AM

STD. NAME	STD REF.#
ICAL Standard	MP86452,MP86453,MP86454,MP86455,MP86456,MP86458
ICV Standard	MP86459
CCV Standard	MP86462
ICSA Standard	MP86460,MP86461
CRI Standard	MP86457
LCS Standard	
Chk Standard	MP86463,MP86464

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	08/06/25 11:30		Jaswal	OK
2	S1	S1	CAL2	08/06/25 11:35		Jaswal	OK
3	S2	S2	CAL3	08/06/25 11:39		Jaswal	OK
4	S3	S3	CAL4	08/06/25 11:43		Jaswal	OK
5	S4	S4	CAL5	08/06/25 11:47		Jaswal	OK
6	S5	S5	CAL6	08/06/25 11:51		Jaswal	OK
7	ICV01	ICV01	ICV	08/06/25 11:55		Jaswal	OK
8	LLICV01	LLICV01	LLICV	08/06/25 12:09		Jaswal	OK
9	ICB01	ICB01	ICB	08/06/25 12:21		Jaswal	OK
10	CRI01	CRI01	CRDL	08/06/25 12:26		Jaswal	OK
11	ICSA01	ICSA01	ICSA	08/06/25 12:31		Jaswal	OK
12	ICSAB01	ICSAB01	ICSAB	08/06/25 12:35		Jaswal	OK
13	ICSADL	ICSADL	ICSA	08/06/25 12:39		Jaswal	OK
14	ICSABDL	ICSABDL	ICSAB	08/06/25 12:43		Jaswal	OK
15	CCV01	CCV01	CCV	08/06/25 12:47		Jaswal	OK
16	CCB01	CCB01	CCB	08/06/25 12:52		Jaswal	OK
17	PB169098BL	PB169098BL	MB	08/06/25 12:57		Jaswal	OK
18	PB169098BS	PB169098BS	LCS	08/06/25 13:01		Jaswal	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB136729

Review By	Janvi	Review On	8/7/2025 1:17:59 PM
Supervise By	jaswal	Supervise On	8/8/2025 3:03:18 AM

STD. NAME	STD REF.#
ICAL Standard	MP86452,MP86453,MP86454,MP86455,MP86456,MP86458
ICV Standard	MP86459
CCV Standard	MP86462
ICSA Standard	MP86460,MP86461
CRI Standard	MP86457
LCS Standard	
Chk Standard	MP86463,MP86464

19	Q2756-01	71725	SAM	08/06/25 13:05		Jaswal	OK
20	Q2756-01DUP	71725DUP	DUP	08/06/25 13:14		Jaswal	OK
21	Q2756-01L	71725L	SD	08/06/25 13:18		Jaswal	OK
22	Q2756-01MS	71725MS	MS	08/06/25 13:22		Jaswal	OK
23	Q2756-01MSD	71725MSD	MSD	08/06/25 13:29		Jaswal	OK
24	Q2756-01A	71725A	PS	08/06/25 13:33	0.1ml m6004,m6017-10ml sample	Jaswal	OK
25	CCV02	CCV02	CCV	08/06/25 13:37		Jaswal	OK
26	CCB02	CCB02	CCB	08/06/25 13:52		Jaswal	OK
27	PB169124BL	PB169124BL	MB	08/06/25 13:58		Jaswal	OK
28	PB169124BS	PB169124BS	LCS	08/06/25 14:03		Jaswal	OK
29	Q2760-01	NB-07-08042025	SAM	08/06/25 14:07		Jaswal	OK
30	Q2760-01DUP	NB-07-08042025DUP	DUP	08/06/25 14:11		Jaswal	OK
31	Q2760-01L	NB-07-08042025L	SD	08/06/25 14:15		Jaswal	OK
32	Q2760-01MS	NB-07-08042025MS	MS	08/06/25 14:19		Jaswal	OK
33	Q2760-01MSD	NB-07-08042025MSD	MSD	08/06/25 14:23		Jaswal	OK
34	Q2760-01A	NB-07-08042025A	PS	08/06/25 14:27	0.1ml m6004,m6017-10ml sample	Jaswal	OK
35	Q2759-01	SOLID-DRUMS	SAM	08/06/25 14:31	Zn high	Jaswal	Dilution
36	Q2763-01	TP-2	SAM	08/06/25 14:35		Jaswal	OK
37	CCV03	CCV03	CCV	08/06/25 14:49		Jaswal	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB136729

Review By	Janvi	Review On	8/7/2025 1:17:59 PM
Supervise By	jaswal	Supervise On	8/8/2025 3:03:18 AM

STD. NAME	STD REF.#
ICAL Standard	MP86452,MP86453,MP86454,MP86455,MP86456,MP86458
ICV Standard	MP86459
CCV Standard	MP86462
ICSA Standard	MP86460,MP86461
CRI Standard	MP86457
LCS Standard	
Chk Standard	MP86463,MP86464

38	CCB03	CCB03	CCB	08/06/25 14:53		Jaswal	OK

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

Prep Standard - Chemical Standard Summary

Order ID : Q2745

Test : Metals Group4

Prepbatch ID : PB169098,

Sequence ID/Qc Batch ID: LB136697,LB136697,LB136729,LB136729,

Standard ID :
MP85156,MP86452,MP86453,MP86454,MP86455,MP86456,MP86457,MP86458,MP86459,MP86460,MP86461,MP86462,MP86463,MP86464,

Chemical ID :
M5467,M5470,M5499,M5658,M5747,M5748,M5751,M5798,M5799,M5800,M5801,M5811,M5814,M5816,M5820,M5942,M5962,M5970,M5984,M5985,M5996,M5997,M6007,M6015,M6021,M6023,M6028,M6030,M6032,M6077,M6127,M6128,M6137,M6142,M6144,M6145,M6146,M6151,M6152,M6155,M6158,M6159,M6162,M6163,M6164,M6165,W3112,

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
170	1:1HCL	MP85156	04/07/2025	09/06/2025	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
902	ICP AES CAL BLK (SO/ICB/CCB)	MP86452	07/18/2025	08/08/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/23/2025

FROM 125.00000ml of M6151 + 2350.00000ml of W3112 + 25.00000ml of M6162 = Final Quantity: 2500.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
907	ICP AES STD S (S5)	MP86453	07/18/2025	08/08/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/23/2025

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 M6077 + 5.00000ml of M6146 + 455.00000ml of MP86452 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
910	ICP AES STD S4	MP86454	07/18/2025	08/08/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/23/2025

FROM 50.00000ml of MP86452 + 50.00000ml of MP86453 = Final Quantity: 100.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
909	ICP AES STD S3	MP86455	07/18/2025	08/08/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/23/2025

FROM 25.00000ml of MP86453 + 75.00000ml of MP86452 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3913	ICP AES STD S2	MP86456	07/18/2025	08/08/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/23/2025

FROM 16.00000ml of MP86453 + 184.00000ml of MP86452 = Final Quantity: 200.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2950	ICP AES S1/CRI STOCK STD	MP86457	07/18/2025	08/08/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/23/2025

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 M5470 + 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 MP86452 = 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	MP86458	07/18/2025	08/08/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/23/2025

FROM 2.00000ml of MP86457 + 98.00000ml of MP86452 = Final Quantity: 100.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4163	NEW ICV-060925	MP86459	07/18/2025	08/08/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/23/2025

FROM 0.40000ml of M6163 + 0.40000ml of M6164 + 0.40000ml of M6165 + 48.80000ml of MP86452 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
904	ICP AES ICSA SOLN	MP86460	07/18/2025	08/08/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/23/2025

FROM 25.00000ml of M6152 + 225.00000ml of MP86452 = Final Quantity: 250.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3494	ICP AES ICSAB SOLN-1	MP86461	07/18/2025	08/08/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/23/2025

FROM 10.00000ml of M6152 + 10.00000ml of M6155 + 80.00000ml of MP86452 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
911	ICP AES CCV SOLN	MP86462	07/18/2025	08/08/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/23/2025

FROM 50.00000ml of MP86452 + 50.00000ml of MP86453 = Final Quantity: 100.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
919	ICP AES INTERNAL STD	MP86463	07/18/2025	08/08/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/23/2025

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	MP86464	07/18/2025	08/08/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 07/23/2025

FROM 200.00000ml of M6162 + 9800.00000ml of W3112 = Final Quantity: 10000.000 ml

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	071723	07/17/2026	10/01/2024 / Jaswal	08/25/2023 / jaswal	M5751

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57004 / Be, 1000 PPM, 125 ml	102523	10/25/2026	02/09/2024 / bin	02/09/2024 / bin	M5798

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57050 / Sn, 1000 PPM, 125 ml	071123	07/11/2026	02/09/2024 / bin	02/09/2024 / bin	M5799

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57005 / B, 1000 PPM, 125 ml	071123	07/11/2026	03/26/2024 / Sohil	01/03/2024 / jaswal	M5814

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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 #
Inorganic Ventures	CGTI1-1 / TITANIUM 125mL 1000ug/mL	T2-TI719972	06/17/2027	06/18/2024 / Jaswal	02/22/2024 / Jaswal	M5942

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57034 / Se, 1000 PPM, 125 ml	060624	06/06/2027	07/02/2024 / Jaswal	06/14/2024 / Jaswal	M5962

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57003 / Li, 1000 PPM, 125 ml	061224	06/21/2027	07/01/2024 / Jaswal	07/01/2024 / Jaswal	M5970

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	Z9651Q / CHEM-CLP-4/.25L	V2-MEB746762	09/06/2029	01/23/2025 / kareem	09/19/2024 / kareem	M6077

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	112124	11/21/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6127

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58025 / Mn, 1000 PPM, 500 ml	101124	10/11/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6128

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGSI1-1 / SILICON 125mL 1000ug/mL	V2-SI744713	07/10/2029	01/14/2025 / Jaswal	10/03/2024 / Jaswal	M6137

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58119 / K, 10000 PPM, 500 ml	103024	10/30/2027	05/06/2025 / JANVI	01/13/2025 / Jaswal	M6142

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58111 / Na, 10000 PPM, 500 ml	072424	07/24/2027	01/23/2025 / kareem	01/13/2025 / Jaswal	M6144

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58030 / Zinc, Zn, 500 ml, 1000 PPM	121724	12/17/2027	02/04/2025 / jaswal	01/13/2025 / Jaswal	M6145

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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	08/17/2025	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

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	08/24/2025	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	09/09/2025	03/10/2025 / Eman	02/02/2025 / Sagar	M6158

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / Al, 10000 PPM, 500 ml	011325	03/18/2026	03/18/2025 / kareem	02/09/2025 / kareem	M6159

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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	06/08/2026	06/09/2025 / jaswal	06/06/2025 / jaswal	M6163

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	QCP-CICV-2-125ML / EPA CLP ICP Verification Standard2	U2-MEB733713	06/08/2026	06/09/2025 / jaswal	06/09/2025 / jaswal	M6164

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	QCP-CICV-3-125ML / EPA CLP ICP Verification Standard3	V2-MEB749572	06/08/2026	06/09/2025 / jaswal	06/09/2025 / jaswal	M6165

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6032

R: 8/5/24

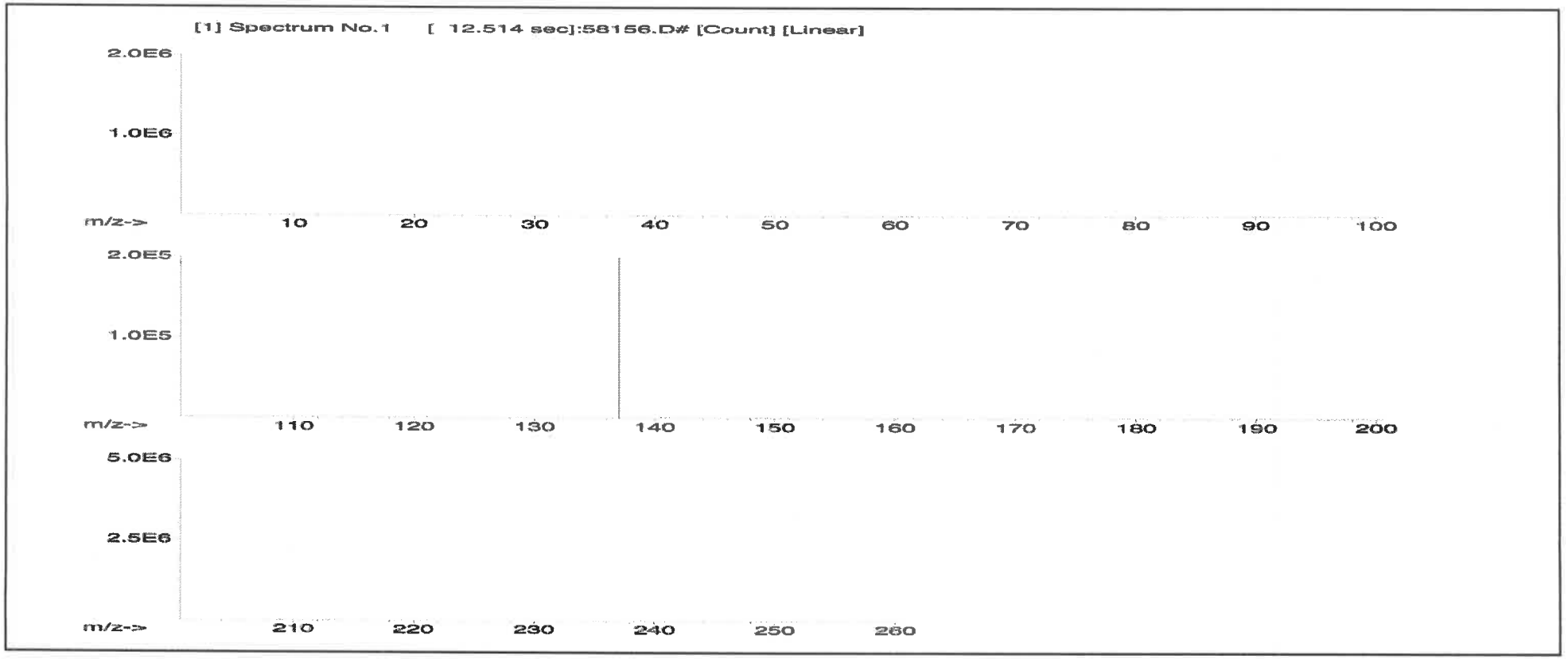
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6028

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

R 8/15/24

CERTIFIED WEIGHT REPORT:

Part Number: 57048
Lot Number: 070124
Description: Cadmium (Cd)

Expiration Date: 070127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 2000.07 0.100 Flask Uncertainty

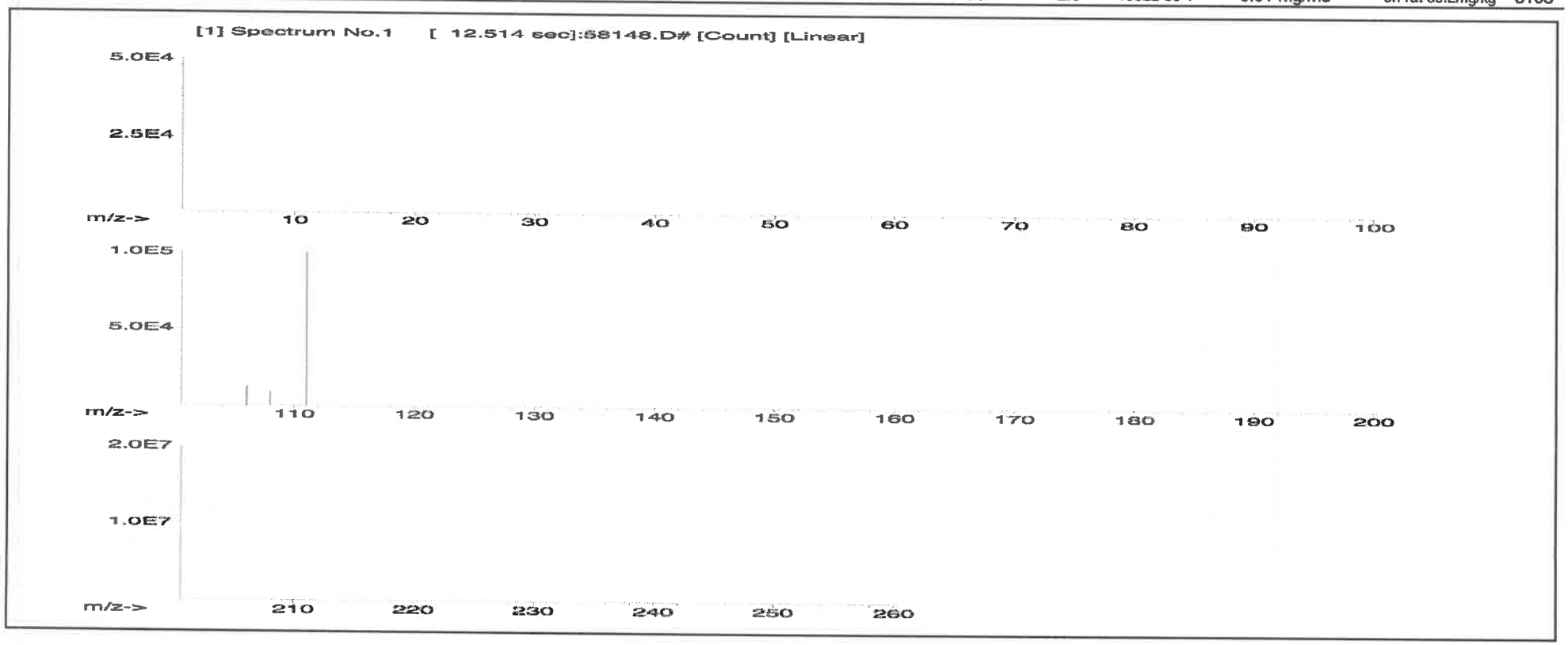
		Lot #	
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Aleah O'Brady
Formulated By: Aleah O'Brady 070124

Pedro Rentas
Reviewed By: Pedro L. Rentas 070124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cadmium nitrate tetrahydrate (Cd)	IN024	CDM092021A1	1000	99.999	0.10	36.5	5.4797	5.4804	**1000.1**	**2.0**	10022-68-1	0.01 mg/m3	orl-rat 60.2mg/kg	3108



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	T	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R : 01/03/24. M5810, M5811

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58126
Lot Number: 051523
Description: Iron (Fe)

Expiration Date: 051526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 5000.1

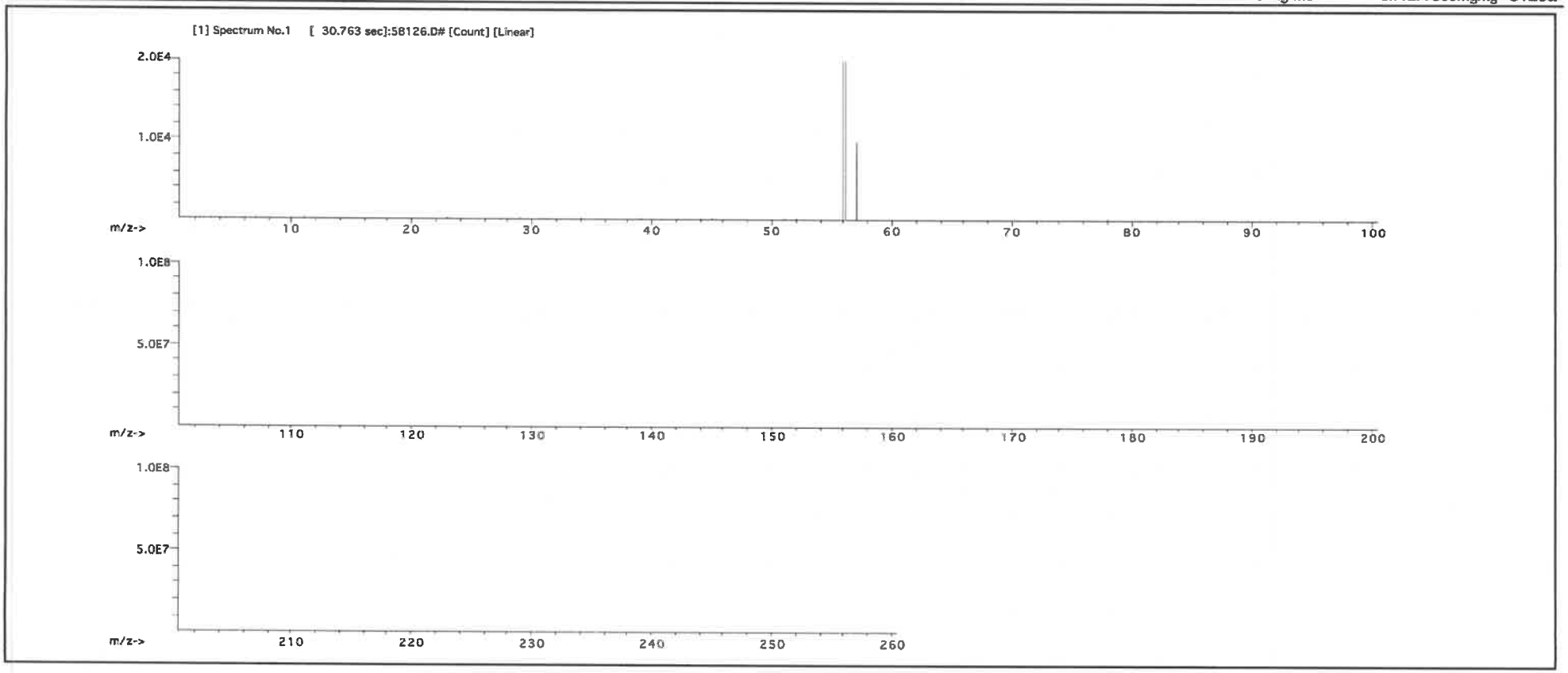
	Lot #		
Solvent:	21110221	Nitric Acid	
5.0%	250.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.12 Flask Uncertainty

Giovanni Esposito
Formulated By: Giovanni Esposito 051523

Pedro Rentas
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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.10	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.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES

Refine your results. Redefine your industry.

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 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

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 17, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- March 17, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5467 R: 03/01/23 (LA)

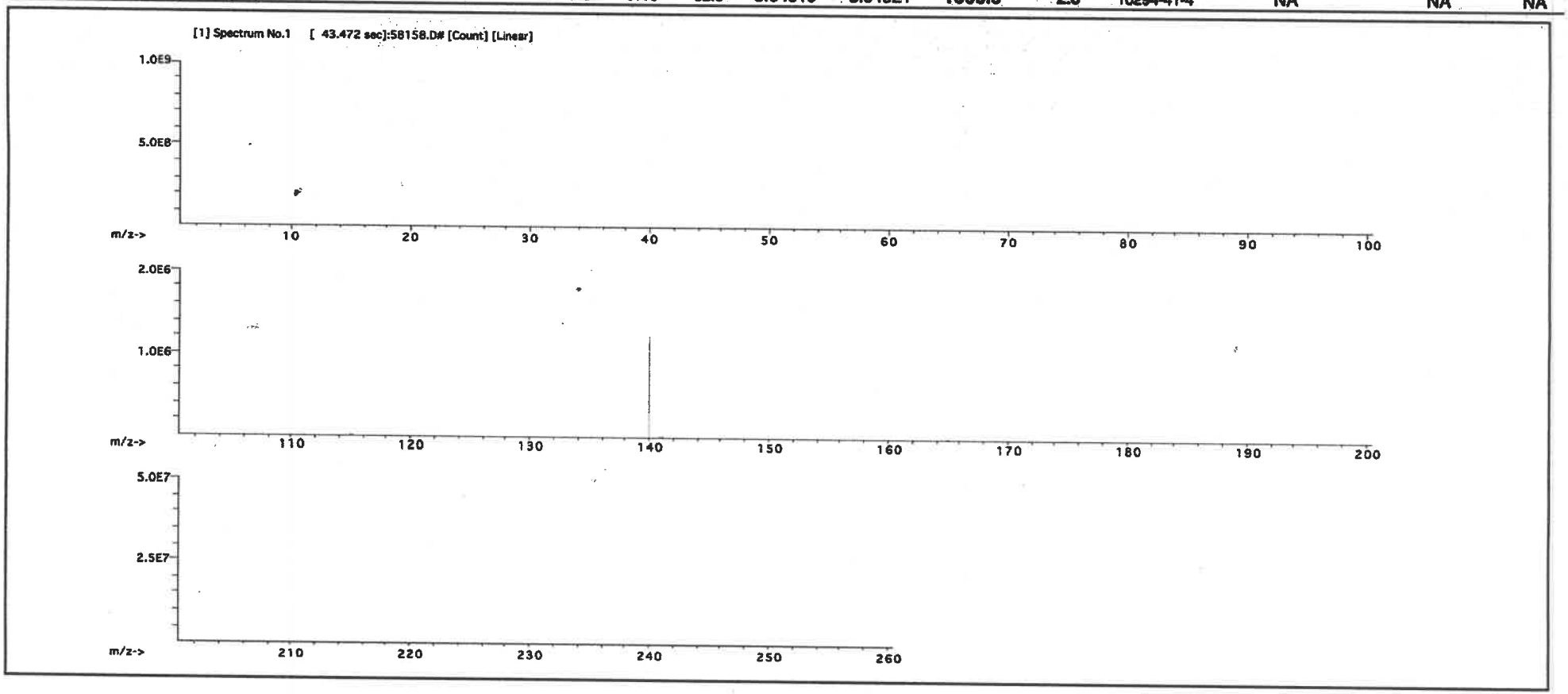
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	57058		**Lot #**	
Lot Number:	020623	**Solvent:**	21110221	Nitric Acid
Description:	Cerium (Ce)	2%	20.0 (mL)	Nitric Acid
Expiration Date:	020626			
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):	1000.12	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	020623
Reviewed By:	Pedro L. Rentas	020623

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cerium nitrate hexahydrate (Ce)	IN146	Z512CEB1	1000	99.999	0.10	32.8	3.04919	3.04921	**1000.0**	**2.0**	10294-41-4	NA	NA	NA



22215-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	T	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* 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

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5658 R ! 8/25/23

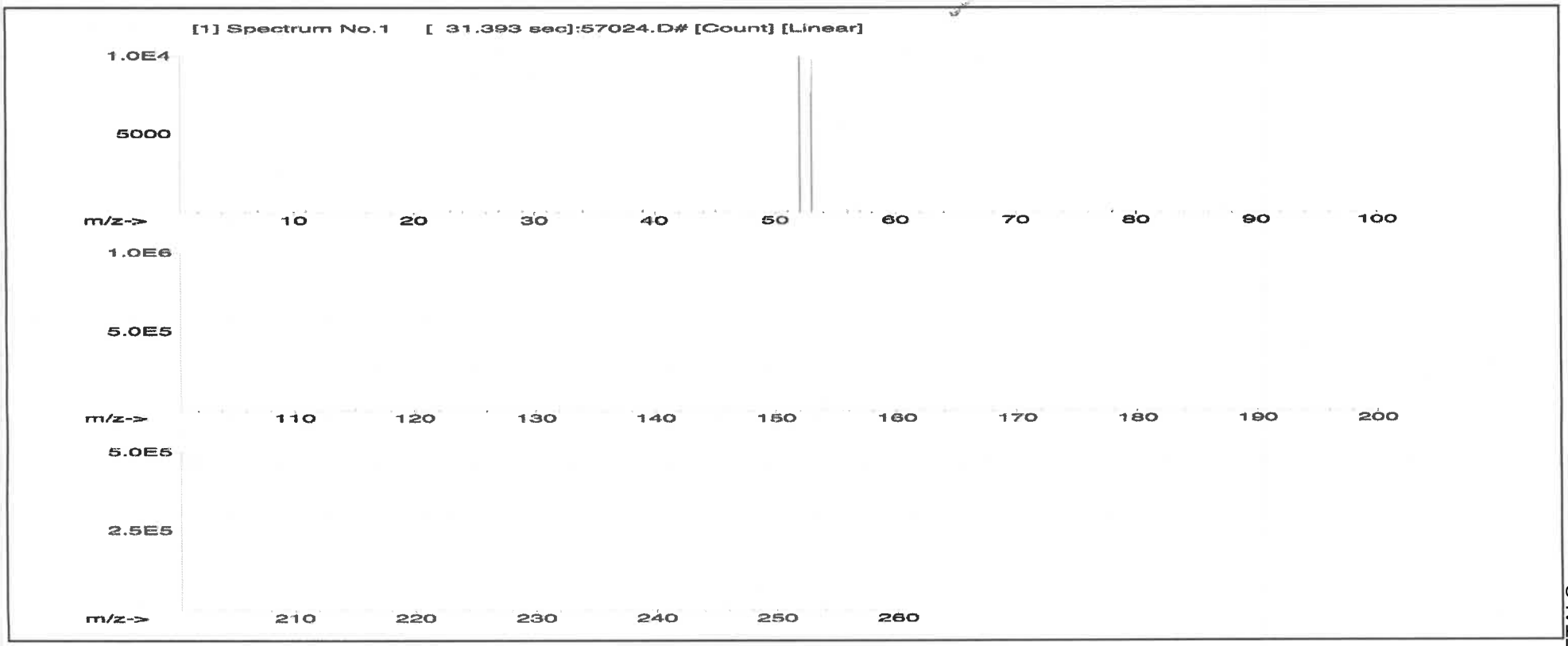
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	T	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 12/20/23 M5747

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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

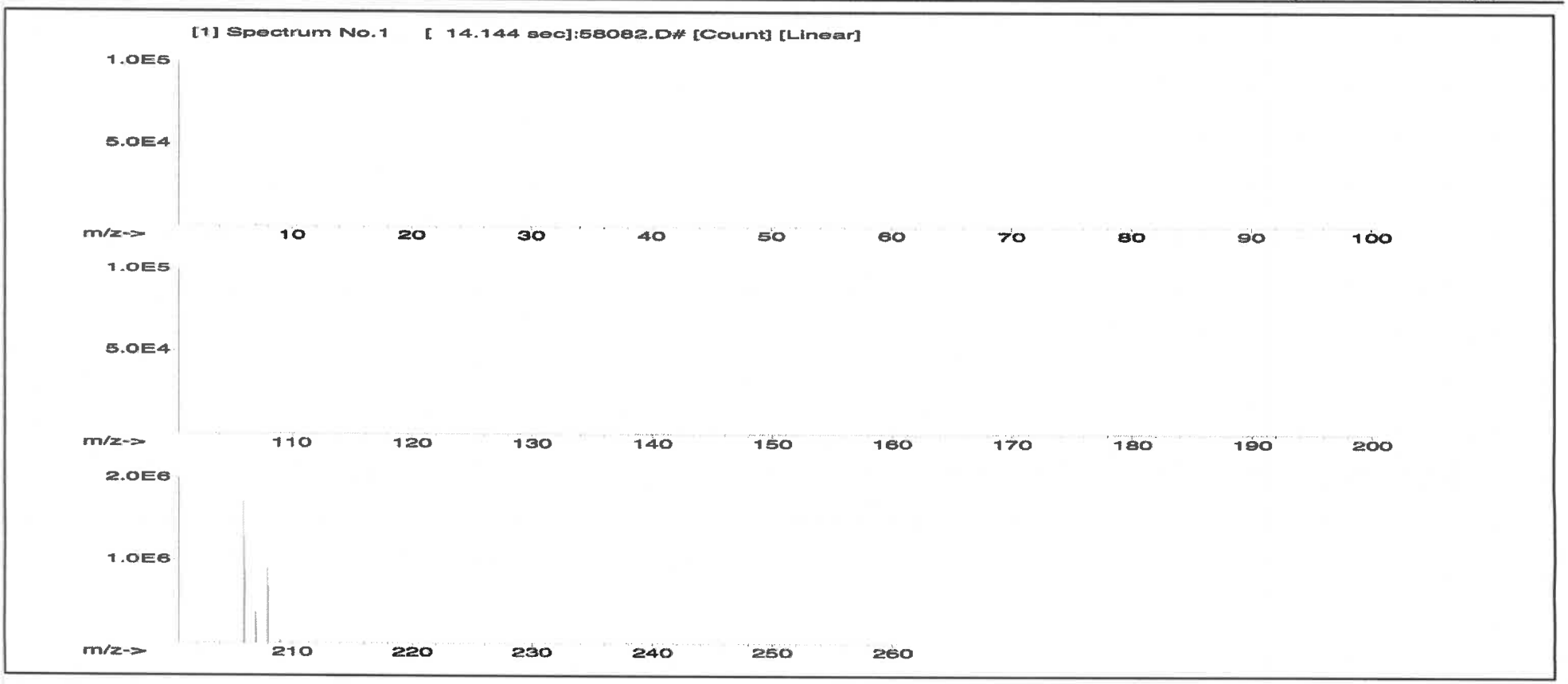
Weight shown below was diluted to (mL): 3000.41 ± 0.06 Flask Uncertainty

	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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	T	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 12/20/23 M5748

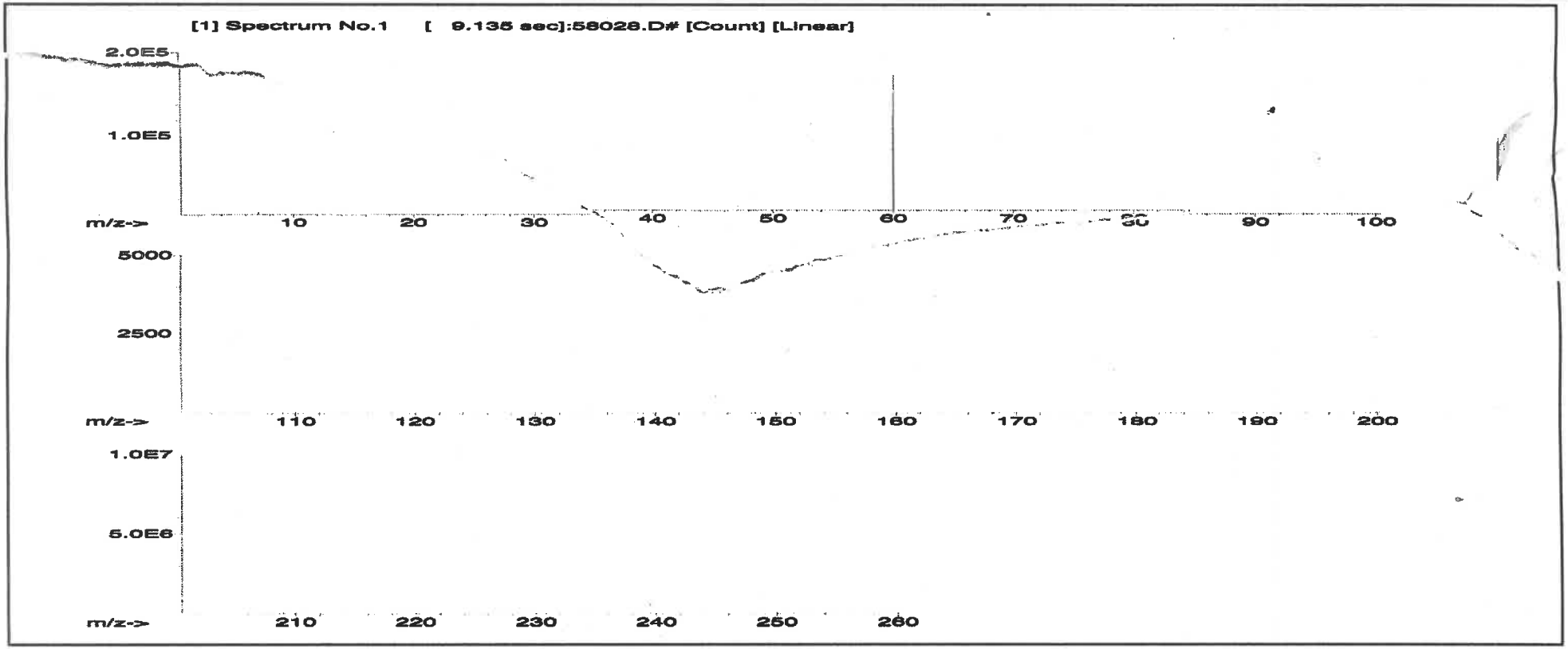
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	T	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 8/25/23 M5751

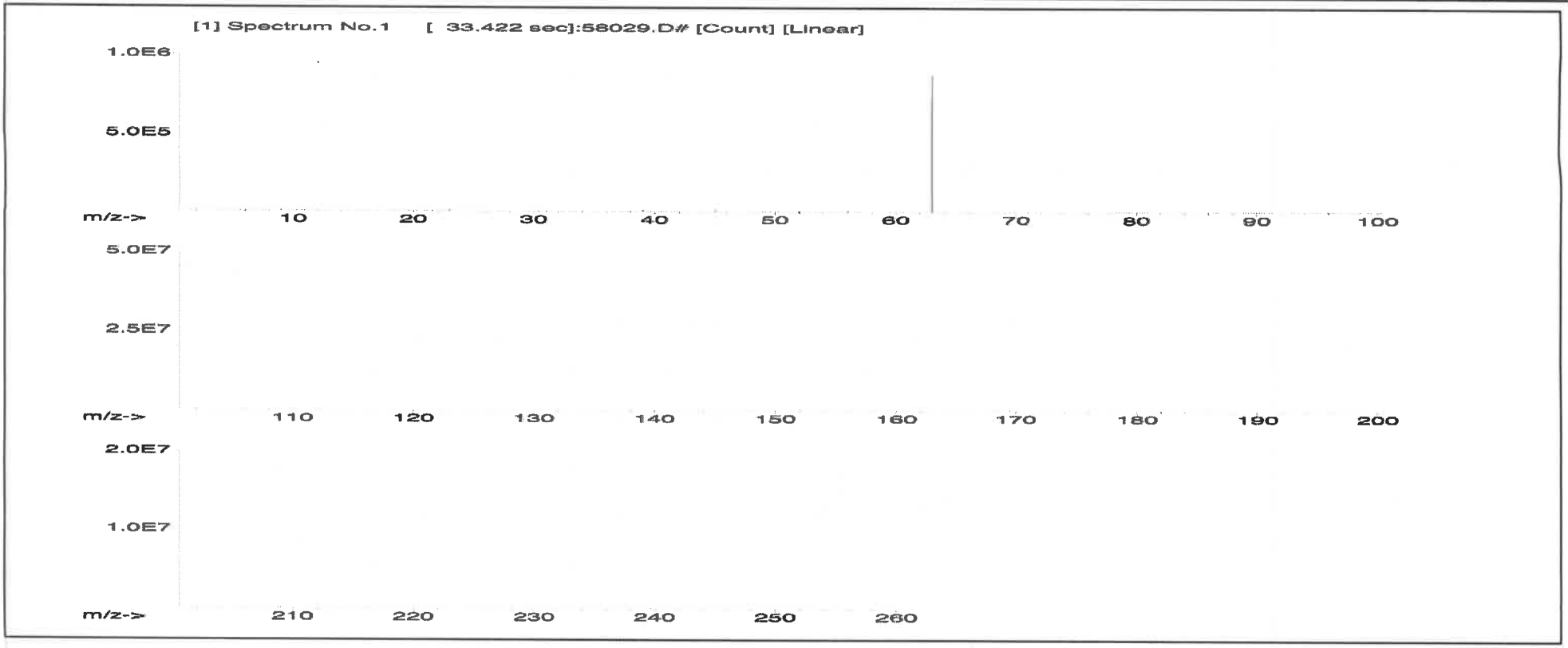
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* 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: 02/09/24 M5798

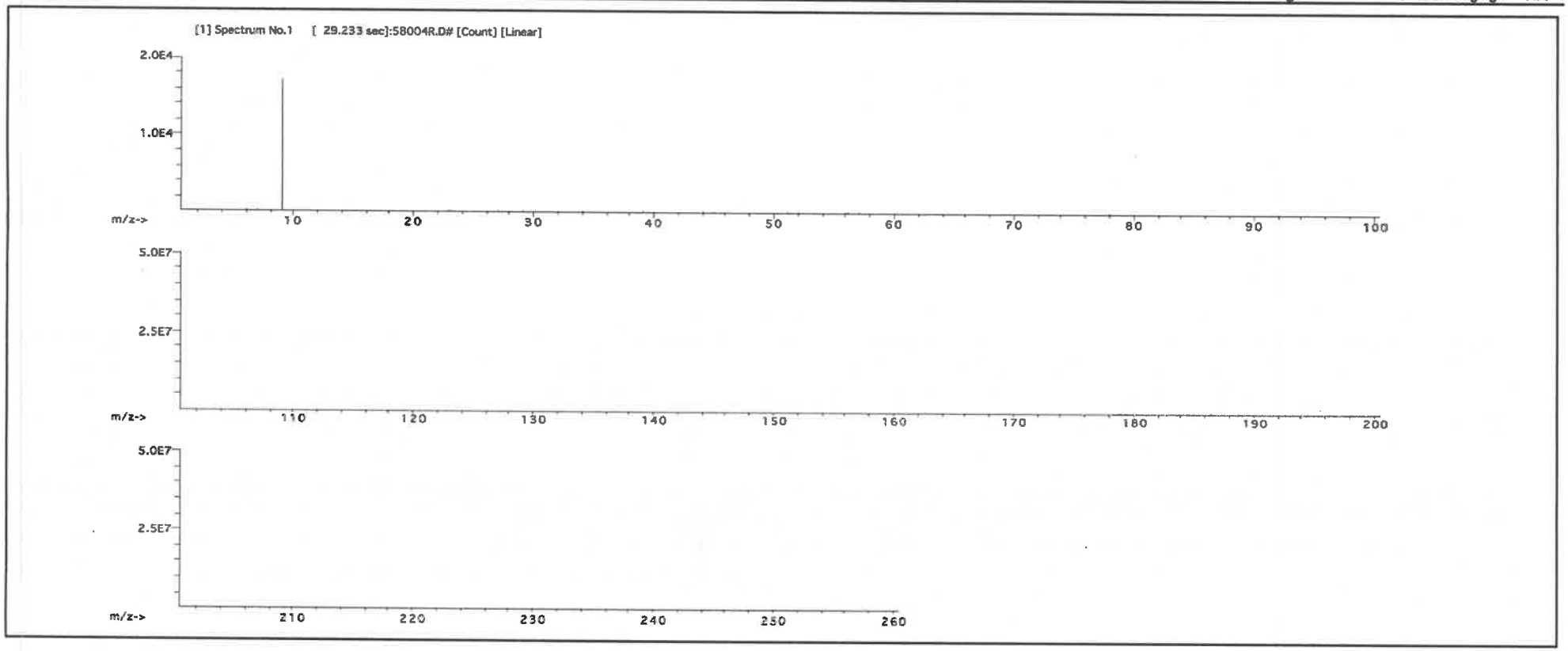
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	T	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* 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? 02/09/24 IV15799

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

BA

CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

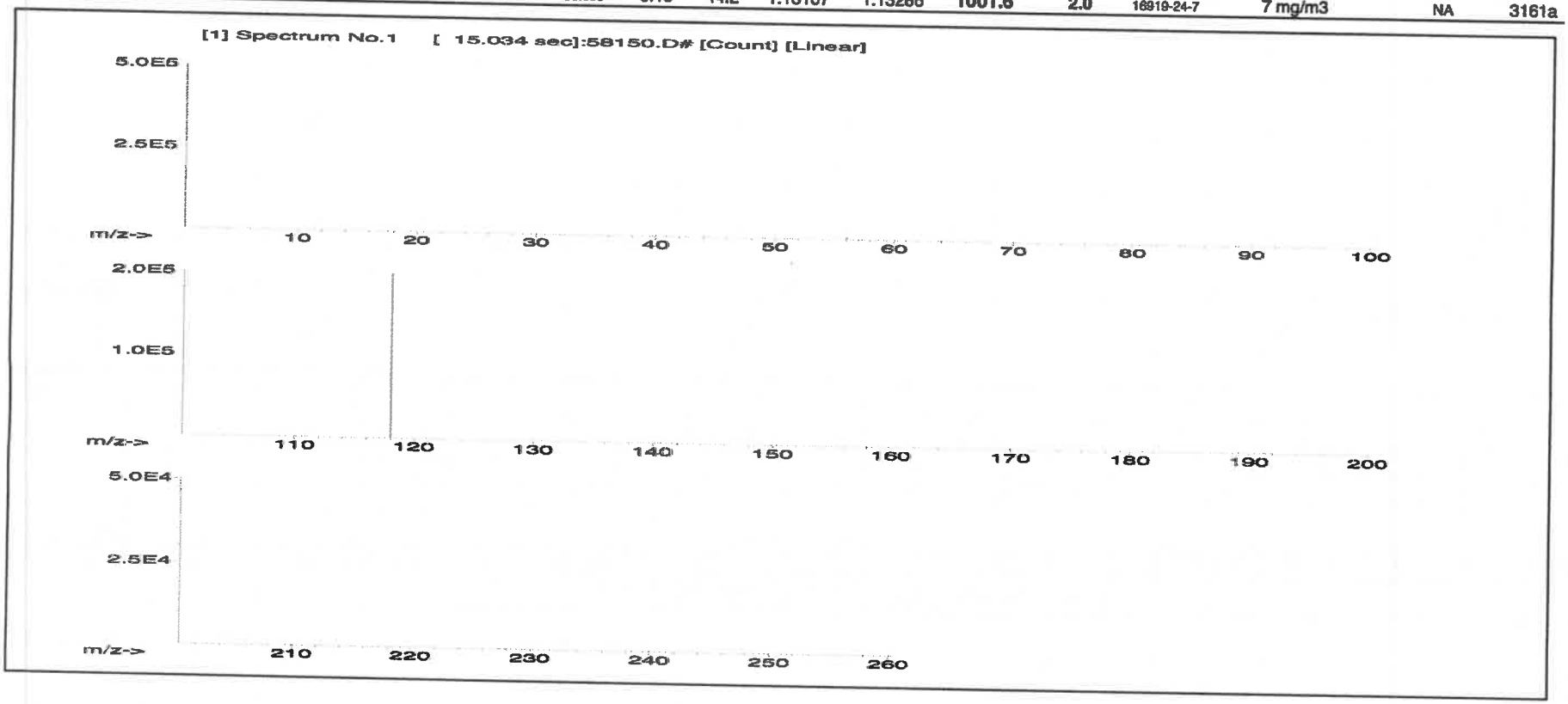
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<500	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	T	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* 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: 02/09/24 IM5800 BH

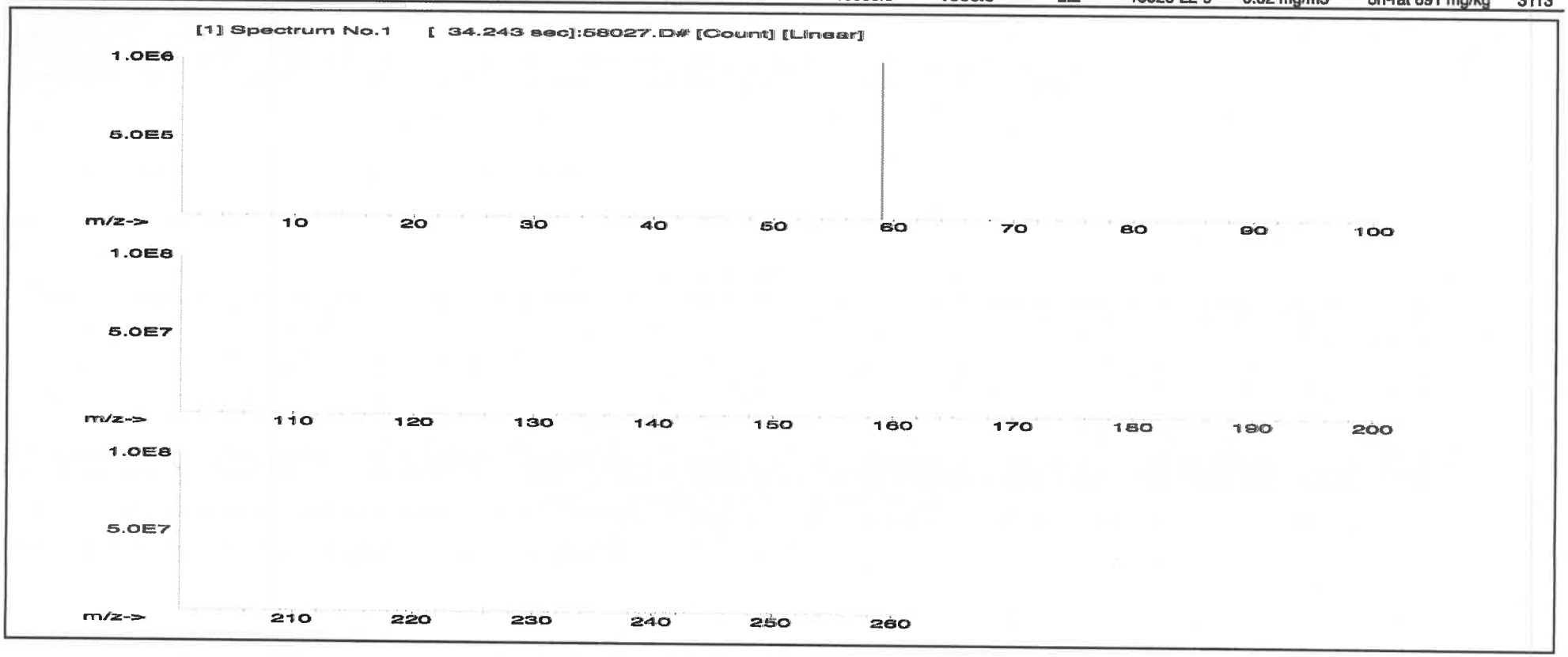
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:
Part Number:	**57027**		
Lot Number:	**091923**	24002546	Nitric Acid
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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	T	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M5801 BH

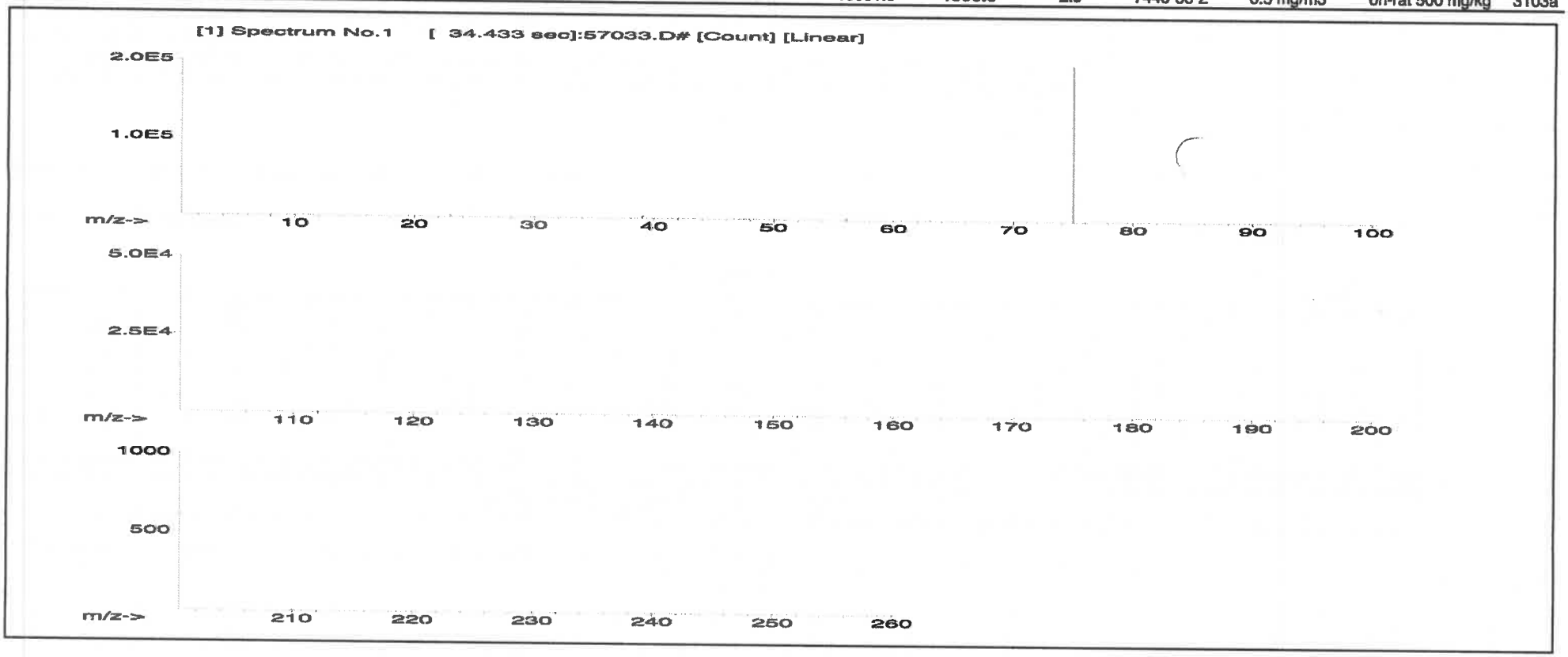
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED **WEIGHT** REPORT:

		Lot #	Solvent:		
Part Number:	**57033**				
Lot Number:	**111323**	24002546	Nitric Acid		
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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	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.

* 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

A: 02/09/24 M.5814

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57005
Lot Number: 071123
Description: Boron (B)

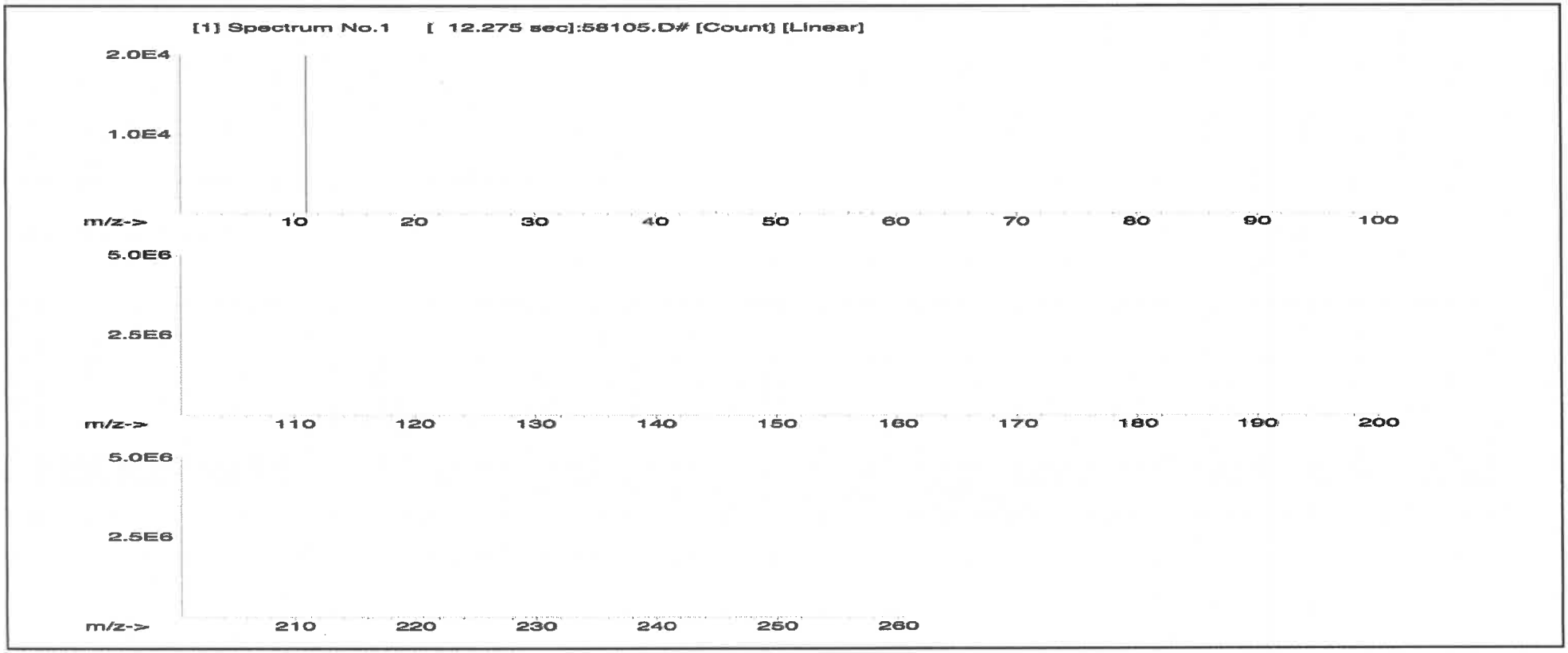
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 1999.48 0.058 Flask Uncertainty

	Lot #			
Solvent:	MKBQ8597V	Ammonium hydroxide		
	2.0%	40.0 (mL)	Ammonium hydroxide	
		5E-05	Balance 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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<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:

* 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: 02/09/24 M5816

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57016
Lot Number: 122923
Description: Sulfur (S)

Expiration Date: 122926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

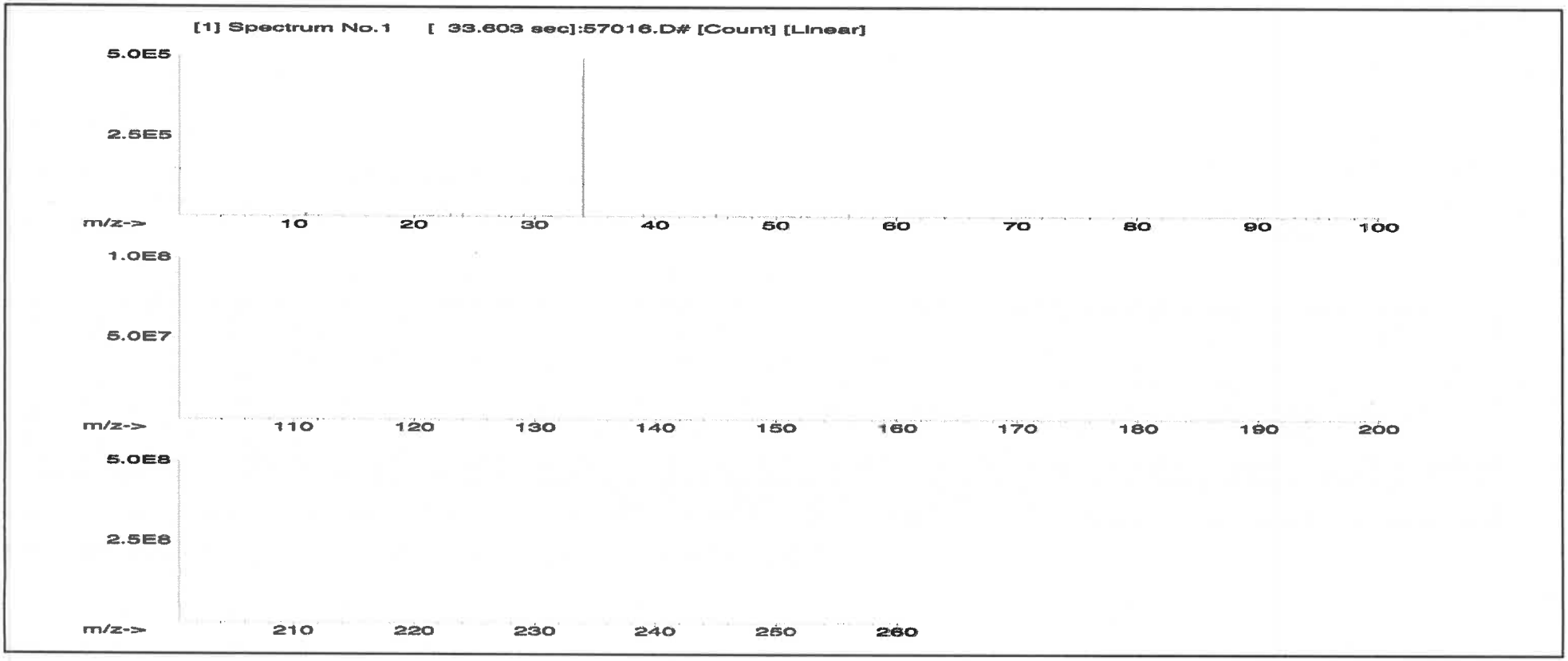
Weight shown below was diluted to (mL): 4000.0 ± 0.06 Flask Uncertainty

	Lot #	
Solvent:	122923	ASTM Type 1 Water

5E-05 Balance 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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<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:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M5820

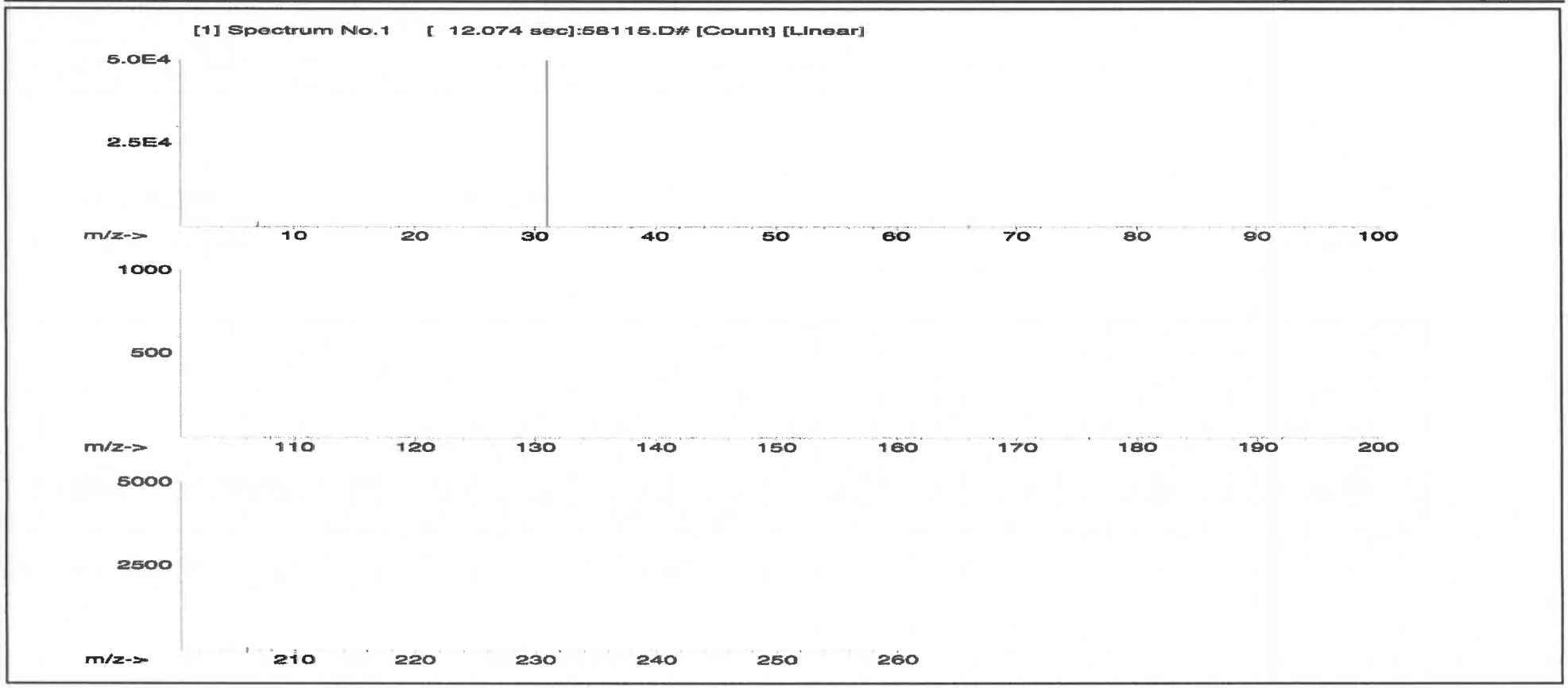
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57015**		**Solvent:**	24002546	Nitric Acid
Lot Number:	**091123**				
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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<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.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES™
Refine your results. Redefine your industry.

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) HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Titanium
Starting Material:	Ti Metal
Starting Material Lot#:	2094
Starting Material Purity:	99.9975%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 5 µg/mL

Density: 1.012 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **1002 ± 4 µg/mL**
ICP Assay NIST SRM 3162a Lot Number: 130925

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000536	M	Eu	<	0.000268	O	Na	<	0.032670	M	Se		0.001204	O	Zn	<	0.003267
O	Al		0.000872	O	Fe		0.003225	O	Nb	<	0.043560	O	Si		0.004735	O	Zr	<	0.043560
M	As	<	0.008586	M	Ga	<	0.000268	M	Nd	<	0.000268	M	Sm	<	0.000268				
M	Au	<	0.004577	M	Gd	<	0.000268	O	Ni	<	0.010890	M	Sn		0.000096				
O	B	<	0.008929	M	Ge	<	0.002146	M	Os	<	0.000269	O	Sr		0.000096				
M	Ba	<	0.002683	M	Hf		0.002161	O	P	<	0.054450	M	Ta		0.010560				
M	Be	<	0.005366	M	Hg	<	0.003231	M	Pb	<	0.001073	M	Tb	<	0.000268				
M	Bi	<	0.001609	M	Ho	<	0.000268	M	Pd	<	0.000268	M	Te	<	0.001341				
O	Ca		0.000676	M	In	<	0.002683	M	Pr	<	0.000268	M	Th	<	0.053663				
M	Cd	<	0.000268	M	Ir	<	0.000269	M	Pt	<	0.000536	s	Ti	<					
M	Ce	<	0.000268	M	K		0.001172	M	Rb	<	0.000268	M	Tl	<	0.000268				
M	Co	<	0.004293	M	La	<	0.000268	M	Re	<	0.000268	M	Tm	<	0.000268				
M	Cr		0.000752	O	Li	<	0.027225	M	Rh	<	0.000268	M	U	<	0.000268				
M	Cs	<	0.000268	M	Lu	<	0.000268	M	Ru	<	0.000269	M	V	<	0.019855				
O	Cu	<	0.010890	O	Mg	<	0.005445	i	S	<		M	W		0.000473				
M	Dy	<	0.000268	O	Mn	<	0.003267	M	Sb	<	0.006976	M	Y	<	0.002146				
M	Er	<	0.000268	M	Mo		0.000774	O	Sc	<	0.004900	M	Yb	<	0.000536				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 47.87 +4 6 Ti(F)6-2

Chemical Compatibility - Soluble in concentrated HCl, HF, H3PO4 H2SO4 and HNO3. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths or high levels of transition elements unless they are fluorinated). Stable with most inorganic anions with a tendency to hydrolyze forming the hydrated oxide in all dilute acids except HF.

Stability - 2-100 ppb levels stable (Alone or mixed with all other metals) as the Ti(F)6-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the Ti(F)6-2 chemically stable for years in 2-5% HNO3 / trace HF in an LDPE container.

Ti Containing Samples (Preparation and Solution) - Metal (Soluble in H2O / HF caution -powder reacts violently); Oxide - low temperature history anatase or rutile (Dissolved by heating in 1:1:1 H2O / HF / H2SO4); Oxide - high temperature history (~800EC) brookite (fuse in Pt0 with K2S2O7); Ores (fuse in Pt0 with KF + K2S2O7 - no KF if silica not present); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve by heating with 1:1:1 H2O / HF / H2SO4 or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite crystalline form).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 48 amu	14 ppt	N/A	32S16O, 32S14N, 14N16O18O, 14N17N2, 36Ar12C, 48Ca, [96X=2 (where X = Zr, Mo, Ru)]
ICP-OES 323.452 nm	0.0054 / 0.00092 µg/mL	1	Ce, Ar, Ni
ICP-OES 334.941 nm	0.0038 / 0.000028 µg/mL	1	Nb, Ta, Cr, U
ICP-OES 336.121 nm	0.0053 / 0.000034 µg/mL	1	W, Mo, Co

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 17, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5962 R! 06/14/24.

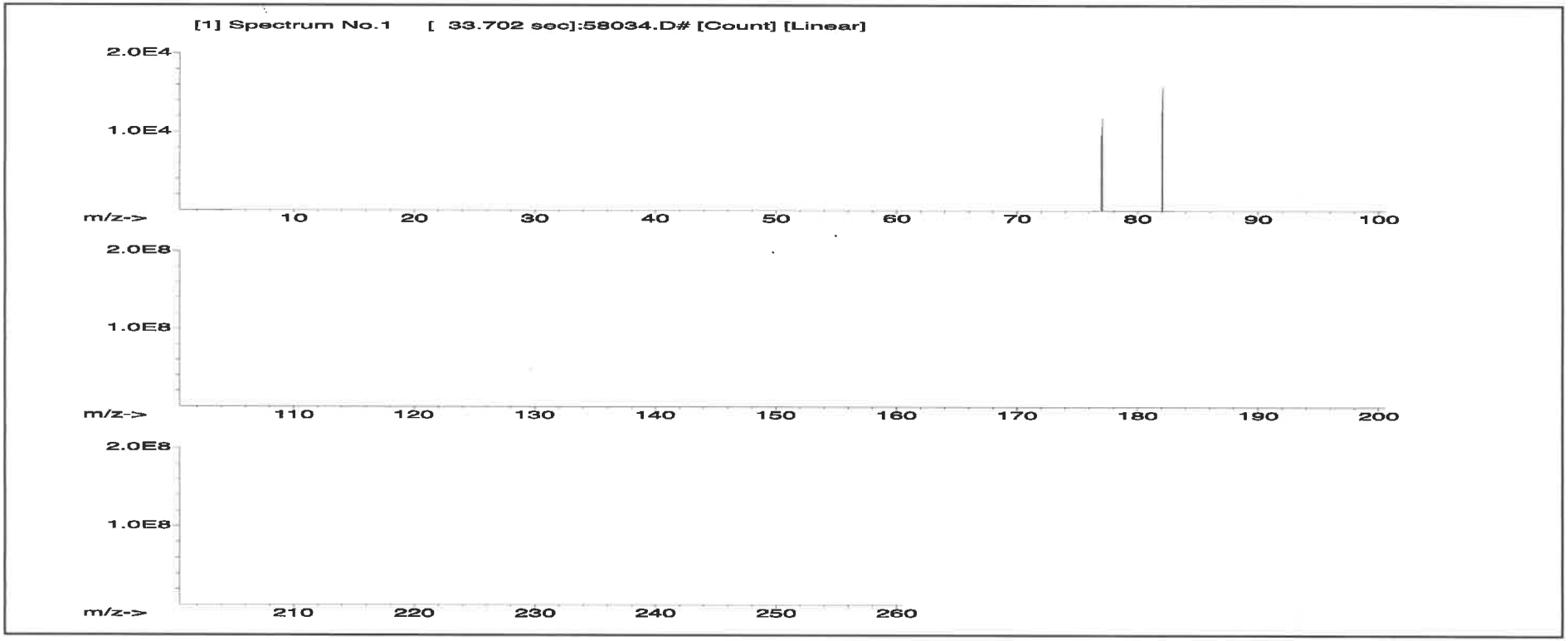
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57034**	24002546	Nitric Acid	
Lot Number:	**060624**			
Description:	**Selenium (Se)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060627			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty	

Formulated By:	Benson Chan	060624
Reviewed By:	Pedro L. Rentas	060624

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Selenium (Se)	58134	071223	0.1000	200.0	0.084	1000	10002.5	**1000.0**	**2.2**	7782-49-2	0.2 mg/m3	orl-rat 6700 mg/kg	3149



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	T	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5970, M5971 R: 7/01/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57003
Lot Number: 062124
Description: Lithium (Li)
Expiration Date: 062127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 250.11

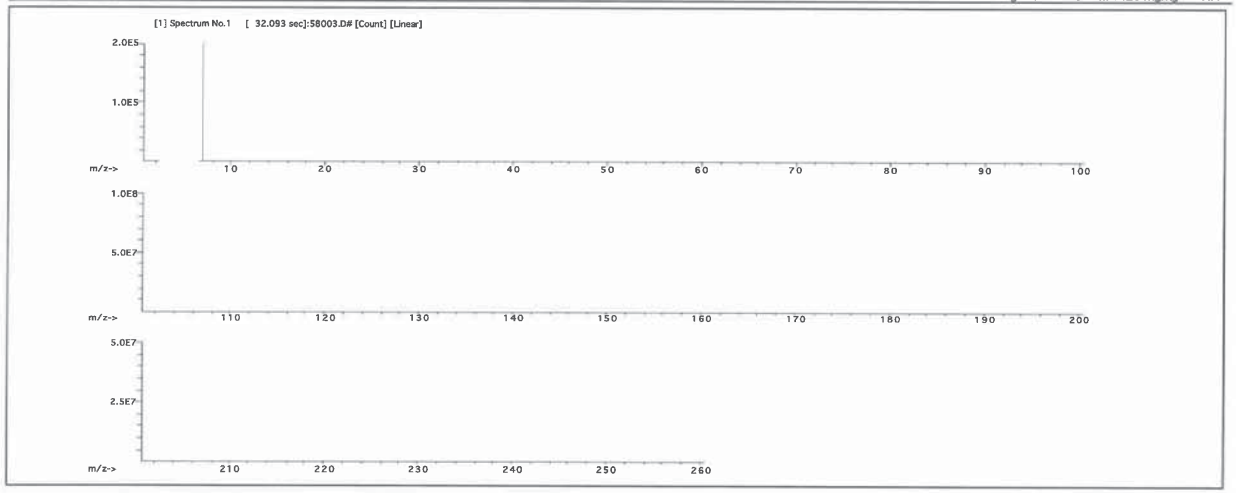
Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	5.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.016 Flask Uncertainty

Giovanni Esposito
Formulated By: Giovanni Esposito 062124

Pedro Rentas
Reviewed By: Pedro L. Rentas 062124

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lithium nitrate (Li)	58103	070622	0.1000	25.0	0.004	1000	10000.4	**1000.0**	**2.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/kg	NA



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	T	Ni	<0.02	Pr	<0.02	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

MS984
R:6/14/24

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGY10
Lot Number:	V2-Y740548
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Yttrium
Starting Material:	Yttrium Oxide
Starting Material Lot#:	2661 and 06230520YL
Starting Material Purity:	99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10000 ± 30 µg/mL

Density: 1.032 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10011 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #2	**9997 ± 50 µg/mL** ICP Assay NIST SRM 3167a Lot Number: 190730
Assay Method #3	**9984 ± 31 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.004600	M	Eu		0.009037	M	Na		0.086360	M	Se	<	0.005200	M	Zn		0.030125
M	Al		0.014862	O	Fe		0.002410	M	Nb	<	0.000570	O	Si		0.024100	O	Zr	<	0.002600
M	As	<	0.003500	M	Ga	<	0.000570	M	Nd		0.000923	M	Sm		0.000461				
M	Au	<	0.001700	M	Gd	<	0.003500	M	Ni	<	0.005700	M	Sn	<	0.002300				
O	B		0.002209	M	Ge	<	0.005200	M	Os	<	0.001200	M	Sr	<	0.004600				
O	Ba	<	0.002500	M	Hf	<	0.000570	n	P	<		M	Ta	<	0.000570				
O	Be	<	0.001400	M	Hg	<	0.000570	M	Pb		0.005020	M	Tb		0.001044				
M	Bi	<	0.003500	M	Ho		0.009037	M	Pd	<	0.005100	M	Te	<	0.002300				
O	Ca		0.009841	M	In	<	0.002300	M	Pr	<	0.002300	M	Th	<	0.000570				
M	Cd	<	0.000570	M	Ir	<	0.000570	M	Pt	<	0.000570	M	Ti	<	0.003500				
M	Ce	<	0.002300	O	K		0.018677	M	Rb	<	0.000570	M	Tl	<	0.000570				
M	Co	<	0.000570	M	La		0.000461	M	Re	<	0.000570	M	Tm	<	0.003500				
M	Cr	<	0.004000	O	Li	<	0.009300	M	Rh	<	0.008000	M	U	<	0.000570				
M	Cs	<	0.000570	M	Lu		0.000582	M	Ru	<	0.000570	M	V		0.001265				
M	Cu		0.002610	O	Mg		0.001486	n	S	<		M	W	<	0.002300				
M	Dy		0.003815	M	Mn		0.000582	M	Sb		0.005422	s	Y	<					
M	Er		0.003615	M	Mo	<	0.005700	M	Sc	<	0.001200	M	Yb		0.001827				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 88.91 +3 6 Y(OH)(H2O)x+2

Chemical Compatibility -Soluble in HCl, H2SO4 and HNO3. Avoid HF, H3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming an insoluble carbonate, oxide, oxalate, and fluoride. Avoid mixing with elements / solutions containing moderate amounts of fluoride.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

Y Containing Samples (Preparation and Solution) - Metal (Soluble in acids); Oxide (Dissolve by heating in H2O/ HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolve in 1:1 H2O / HCl or HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 89 amu	0.8 ppt	N/A	73Ge16O, 178Hf+2
ICP-OES 360.073 nm	0.005 / 0.000036 µg/mL	1	Ce, Th
ICP-OES 371.030 nm	0.004 / 0.00007 µg/mL	1	Ce
ICP-OES 377.433 nm	0.005 / 0.0009 µg/mL	1	Ta, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 20, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- February 20, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor

Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

MS985
R: 6/14/24

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGIN10
Lot Number:	U2-IN729349
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Indium
Starting Material:	Indium Metal
Starting Material Lot#:	2511
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.044 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 — **10021 ± 56 µg/mL**
ICP Assay NIST SRM 3124a Lot Number: 110516

Assay Method #2 — **10035 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 — **10001 ± 33 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000760	M	Eu	<	0.000760	O	Na		0.012771	M	Se	<	0.023000	M	Zn	<	0.006100
M	Al		0.003385	O	Fe		0.004462	M	Nb	<	0.000760	O	Si		0.024619	M	Zr	<	0.000760
M	As	<	0.004600	M	Ga	<	0.000760	M	Nd	<	0.000760	M	Sm	<	0.000760				
M	Au	<	0.002300	M	Gd	<	0.000760	O	Ni	<	0.005100	M	Sn	<	0.000760				
O	B		0.003692	M	Ge	<	0.001600	M	Os	<	0.000760	O	Sr	<	0.000610				
M	Ba	<	0.001600	M	Hf	<	0.000760	n	P	<		M	Ta	<	0.000760				
O	Be	<	0.000130	M	Hg	<	0.003100	M	Pb		0.001400	M	Tb	<	0.000760				
M	Bi	<	0.000760	M	Ho	<	0.000760	M	Pd	<	0.001600	M	Te	<	0.000760				
O	Ca		0.004616	s	In	<		M	Pr	<	0.000760	M	Th	<	0.000760				
M	Cd	<	0.000760	M	Ir	<	0.000760	M	Pt	<	0.000760	O	Ti	<	0.001100				
M	Ce	<	0.000760	O	K		0.007078	M	Rb	<	0.000760	M	Tl	<	0.000760				
M	Co	<	0.000760	M	La	<	0.000760	M	Re	<	0.000760	M	Tm	<	0.000760				
O	Cr	<	0.001300	O	Li	<	0.000130	M	Rh	<	0.000760	M	U	<	0.000760				
M	Cs	<	0.000760	M	Lu	<	0.000760	M	Ru	<	0.000760	M	V	<	0.001600				
M	Cu	<	0.003800	O	Mg		0.000707	n	S	<		M	W	<	0.001600				
M	Dy	<	0.000760	O	Mn		0.000149	M	Sb	<	0.000760	M	Y	<	0.000760				
M	Er	<	0.000760	M	Mo	<	0.002300	M	Sc	<	0.000760	M	Yb	<	0.000760				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 114.82 +3 6 In(H2O)6+3

Chemical Compatibility -Soluble in HCl, HNO3, and H2SO4. Avoid neutral and basic media. Stable with most metals and inorganic anions. The oxalate, sulfide, carbonate, hydroxide and phosphate are insoluble in water.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

In Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); Oxide (Soluble in mineral acids); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 115 amu	1 ppt	n/a	115Sn, 99Ru16O
ICP-OES 158.583 nm	0.05 / 0.002 µg/mL	1	
ICP-OES 230.606 nm	0.1 / 0.03 µg/mL	1	Ni, Os
ICP-OES 325.609 nm	0.2 / 0.05 µg/mL	1	Mn, Mo, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 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
inorganicventures.com

R: 2/22/24
M5996

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	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 (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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**

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

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

R: 2/22/24
MS-997

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-CAL-3
Lot Number:	T2-MEB727800
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Arsenic, Lead, Selenium, Thallium, 500 µg/mL ea: Cadmium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Arsenic, As	1 000 ± 7 µg/mL	Cadmium, Cd	500.0 ± 2.2 µg/mL
Lead, Pb	1 000 ± 4 µg/mL	Selenium, Se	1 000 ± 6 µg/mL
Thallium, Tl	1 000 ± 7 µg/mL		

Density: 1.042 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	ICP Assay	3103a	100818
As	Calculated		See Sec. 4.2
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Tl	ICP Assay	3158	151215

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i}^2) / (\Sigma(1/(u_{char\ i}^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i}^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

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

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

M6074
M6075
M6076
M6077

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

EXP.: 9/6/2029

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CHEM-CLP-4
Lot Number:	V2-MEB746762
Matrix:	3% (v/v) HNO3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	1 000 ± 5 µg/mL	Molybdenum, Mo	1 000 ± 5 µg/mL
Silicon, Si	1 000 ± 7 µg/mL	Tin, Sn	1 000 ± 5 µg/mL
Titanium, Ti	1 000 ± 6 µg/mL		

Density: 1.033 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	190605
B	Calculated		See Sec. 4.2
Mo	ICP Assay	traceable to 3134	U2-MO739068
Si	ICP Assay	Traceable to 3150	S2-SI702546
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	traceable to 3162a	T2-TI725816

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 06, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- September 06, 2029

- The date after which this CRM/RM should not be used.

- 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:

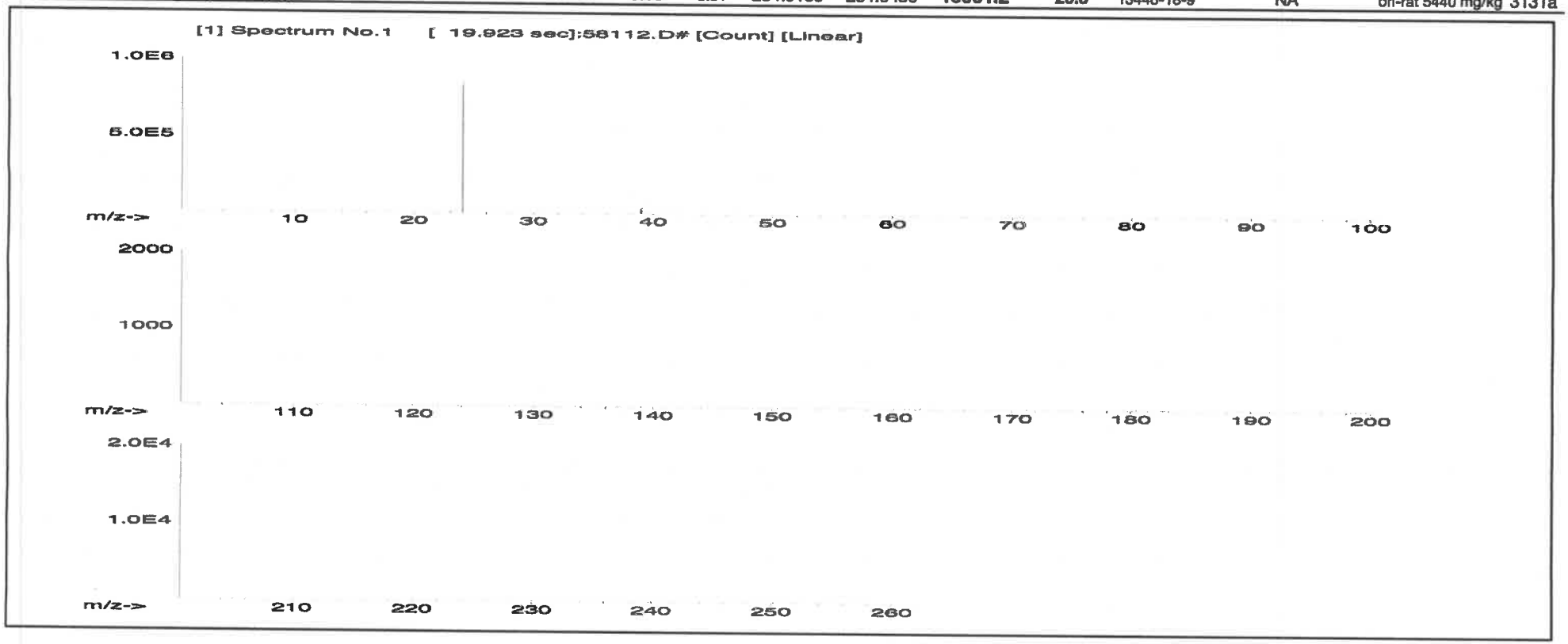
R -> 1/13/25
M 6127

Part Number:	**58112**		**Lot #**	
Lot Number:	**112124**	**Solvent:**	24012496	Nitric Acid
Description:	**Magnesium (Mg)**	2%	40.0 (mL)	Nitric Acid
Expiration Date:	112127			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**10000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty	

Giovanni Esposito

Formulated By:	Giovanni Esposito	112124
Reviewed By:	Pedro L. Rentas	112124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Magnesium nitrate hexahydrate (Mg)	IN030	MGD052023A1	10000	99.999	0.10	8.51	234.9183	234.9459	**10001.2**	**20.0**	13446-18-9	NA	orl-rat 5440 mg/kg	3131a



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	T	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

R->1/13/25

M6128

Part Number: 58025
Lot Number: 101124
Description: Manganese (Mn)
Expiration Date: 101127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

		Lot #	
Solvent:	24002546	Nitric Acid	
	2%	80.0 (mL)	Nitric Acid

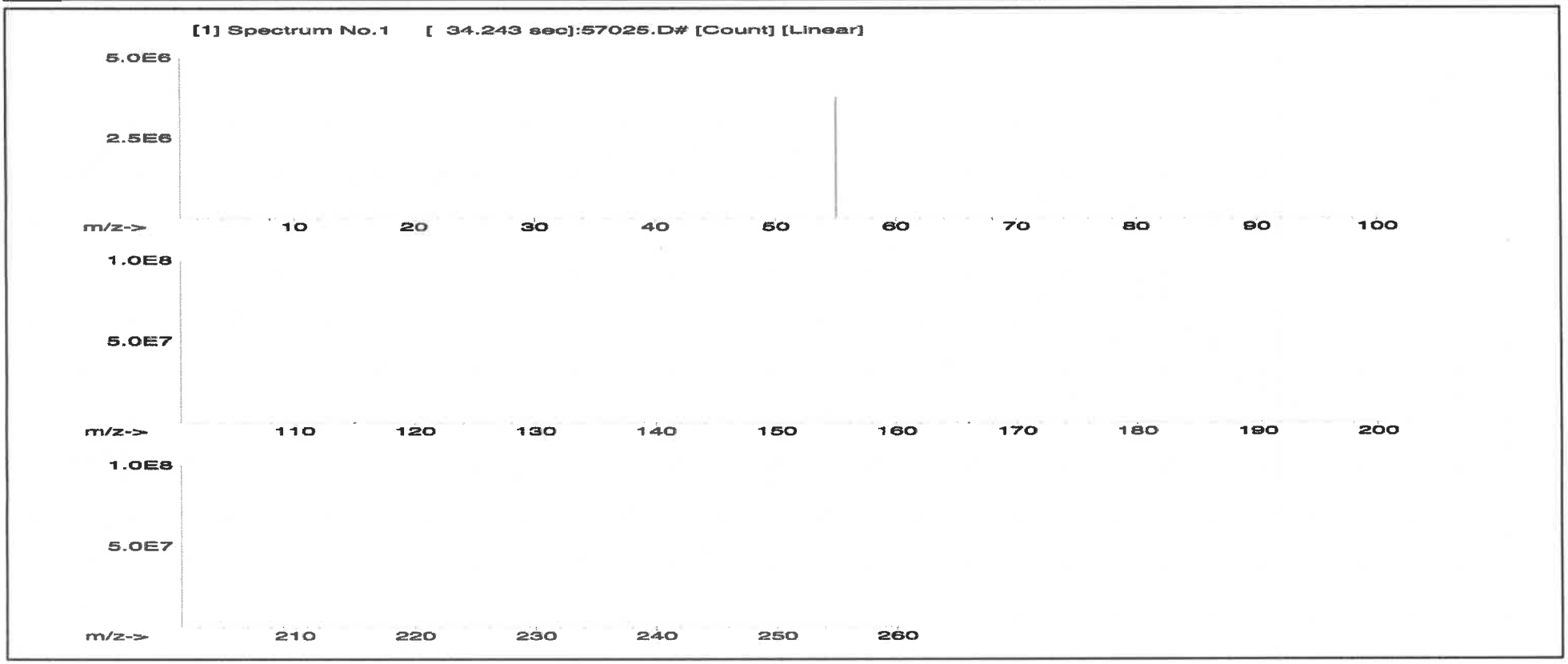
5E-05 Balance Uncertainty

Weight shown below was diluted to (mL): 4000.2 0.10 Flask Uncertainty

Giovanni Esposito

Formulated By:	Giovanni Esposito	101124
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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	T	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

M6137 R→10/3/24

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSI1
Lot Number:	V2-SI744713
Matrix:	tr. HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Silicon
Starting Material:	Silica
Starting Material Lot#:	1771
Starting Material Purity:	99.9981%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 6 µg/mL

Density: 1.003 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**999 ± 5 µg/mL** ICP Assay NIST SRM Traceable to 3150 Lot Number: S2-SI702546
Assay Method #2	**1000 ± 7 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2 (u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000310	M	Eu	<	0.000310	O	Na		0.001656	M	Se	<	0.022000	M	Zn	<	0.002500
M	Al		0.010787	M	Fe	<	0.027000	M	Nb	<	0.001300	s	Si	<		O	Zr	<	0.001900
M	As	<	0.001900	M	Ga	<	0.001300	M	Nd	<	0.000310	M	Sm	<	0.000310				
M	Au	<	0.000910	M	Gd	<	0.000310	M	Ni	<	0.005500	M	Sn		0.000096				
M	B		0.016180	M	Ge	<	0.001900	M	Os	<	0.000610	O	Sr		0.000092				
M	Ba		0.000096	M	Hf		0.000423	i	P	<		M	Ta		0.002542				
O	Be	<	0.000570	M	Hg	<	0.000610	M	Pb	<	0.000310	M	Tb	<	0.000310				
M	Bi	<	0.000310	M	Ho	<	0.000610	M	Pd	<	0.000610	M	Te	<	0.000910				
O	Ca		0.011557	M	In	<	0.000310	M	Pr	<	0.000310	M	Th	<	0.001900				
M	Cd	<	0.000310	M	Ir	<	0.000310	M	Pt	<	0.000310	M	Ti		0.001078				
M	Ce	<	0.000610	O	K		0.000577	M	Rb	<	0.009100	M	Tl	<	0.000310				
M	Co	<	0.001600	M	La	<	0.000310	M	Re	<	0.000310	M	Tm	<	0.000310				
M	Cr	<	0.010000	O	Li	<	0.000460	M	Rh	<	0.000310	M	U	<	0.000310				
M	Cs	<	0.000310	M	Lu	<	0.000310	M	Ru	<	0.000310	O	V	<	0.001300				
M	Cu	<	0.002500	O	Mg		0.001348	O	S	<	0.570000	M	W	<	0.001900				
M	Dy	<	0.000310	M	Mn	<	0.002500	M	Sb	<	0.000310	M	Y	<	0.000310				
M	Er	<	0.000310	M	Mo	<	0.000310	O	Sc	<	0.000590	M	Yb	<	0.000310				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 28.09 +4 6 Si(OH)x(F)y2-

Chemical Compatibility -Soluble in HCl, HF, H3PO4 H2SO4 and HNO3 as the Si(OH)x(F)y2-. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths, or high levels of transition elements unless they are fluorinated. Stable with most inorganic anions with a tendency to hydrolyze forming silicic acid (silicic acid is soluble up to ∼100 ppm in water) in all dilute acids except HF.

Stability - 2-100 ppb levels - stability unknown - (alone or mixed with all other metals) as the Si(OH)x(F)y2-. 1-10,000 ppm single element solutions as the Si(OH)x(F)y2- chemically stable for years in 2-5 % HNO3 / trace HF in a LDPE container.

Si Containing Samples (Preparation and Solution) -Metal (Soluble in 1:1:1 H2O / HF / HNO3); Oxide - SiO2, amorphic (dissolve by heating in 1:1:1 H2O / HF / HNO3); Oxide - quartz (fuse in Pt0 with Na2CO3); Geological Samples(fuse in Pt0with Na2CO3 followed by HCl solution of the fuseate); Organic Matrices containing silicates and non volatile silicon compounds (dry ash at 4500C in Pt0 and dissolve by gently warming with 1:1:1 H2O / HF / H2SO4 or fuse / ash with Na2CO3 and dissolve fuseate with HCl / H2O); Silicone Oils - dimethyl silicones depolymerize to form volatile monomer units when heated (Measure directly in alcoholic KOH / xylene mixture where sample is treated first with the KOH at 60-1000C to "unzip" the Si- O-Si polymeric structure or digest with conc. H2SO4 / H2O2 followed by cooling and dissolution of the dehydrated silica with HF.) Note that the direct analysis of silicone oils in an organic solvent will result in false high results due to high vapor pressure of volatile monomer units like hexamethylcyclotrisiloxane. The KOH forms the K2+Si(CH3)2O= salt which is not volatile at room temperature.

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 28 amu	4000 - 8000 ppt	N/A	N2, 12C16O
ICP-OES 212.412 nm	0.02/0.01 µg/mL	1	Hf, Os, Mo, Ta
ICP-OES 251.611 nm	0.012/0.003 µg/mL	1	Ta, U, Zn, Th
ICP-OES 288.158 nm	0.03/0.004 µg/mL	1	Ta, Ce, Cr, Cd, Th

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 10, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 10, 2029**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor

Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

R-> 1/13/25

Part Number: 57119
Lot Number: 103024
Description: Potassium (K)

M6141
M6142
M6143

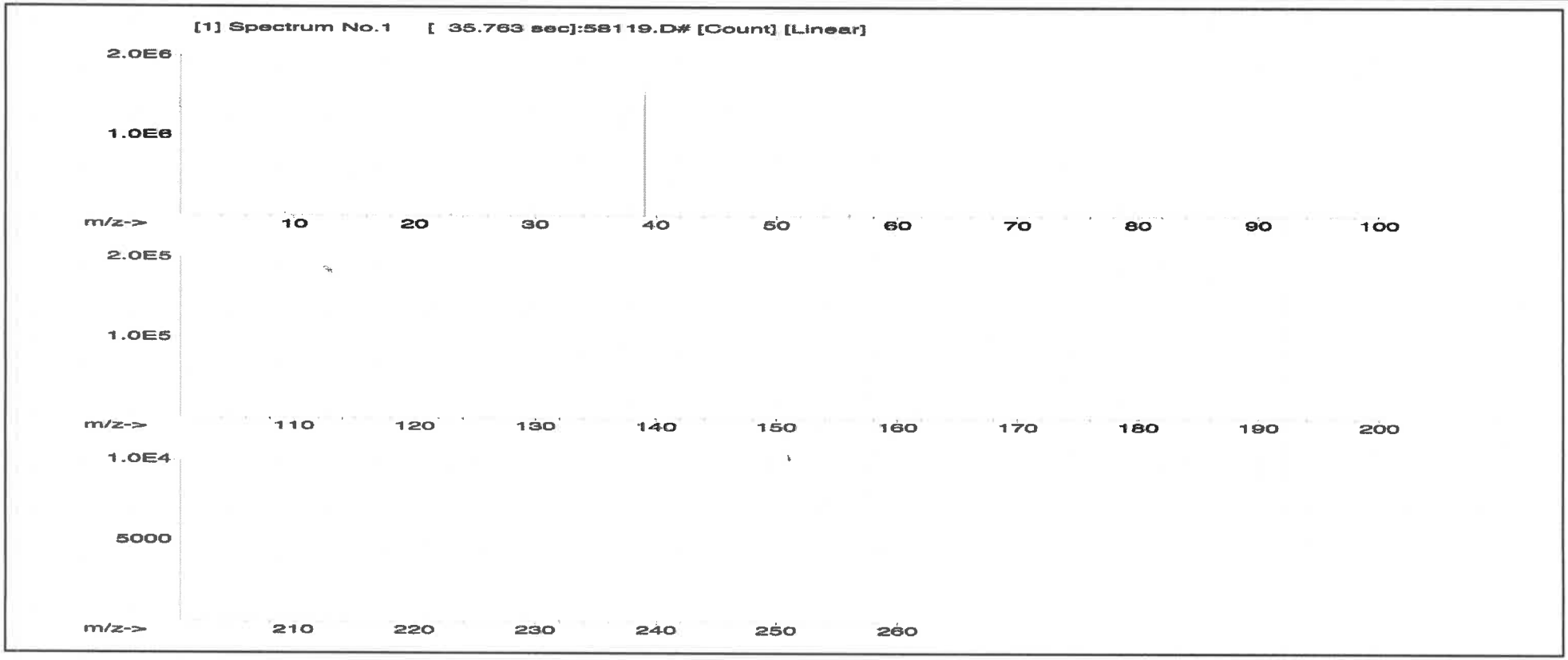
Expiration Date: 103027
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 4000.1

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	80.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.15 Flask Uncertainty

Giovanni Esposito		
Formulated By:	Giovanni Esposito	103024
Pedro Rentas		
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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	T	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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:

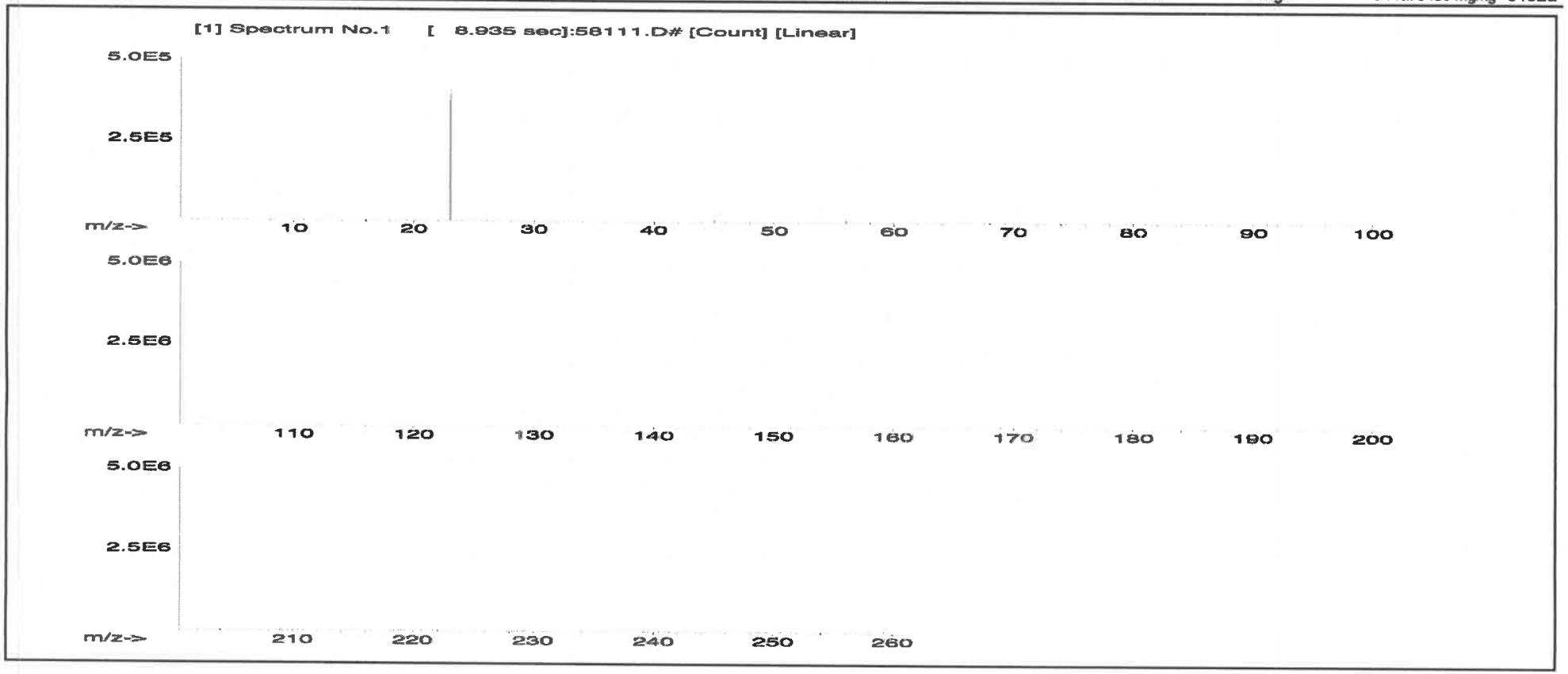
R->1/13/25

MG144

Part Number:	**58111**		**Lot #**		
Lot Number:	**072424**	**Solvent:**	24002546	Nitric Acid	
Description:	**Sodium (Na)**				
		2%	80.0 (mL)	Nitric Acid	
Expiration Date:	072427				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	4000.2	0.10	Flask Uncertainty		

Formulated By:	Benson Chan	072424
Reviewed By:	Pedro L. Rentas	072424

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Sodium nitrate (Na)	IN036	NAV012015I1	10000	99.999	0.10	26.9	148.7096	######	**10000.0**	**20.0**	7631-99-4	5 mg/m3	orl-rat 3430 mg/kg	3152a



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	T	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58030
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

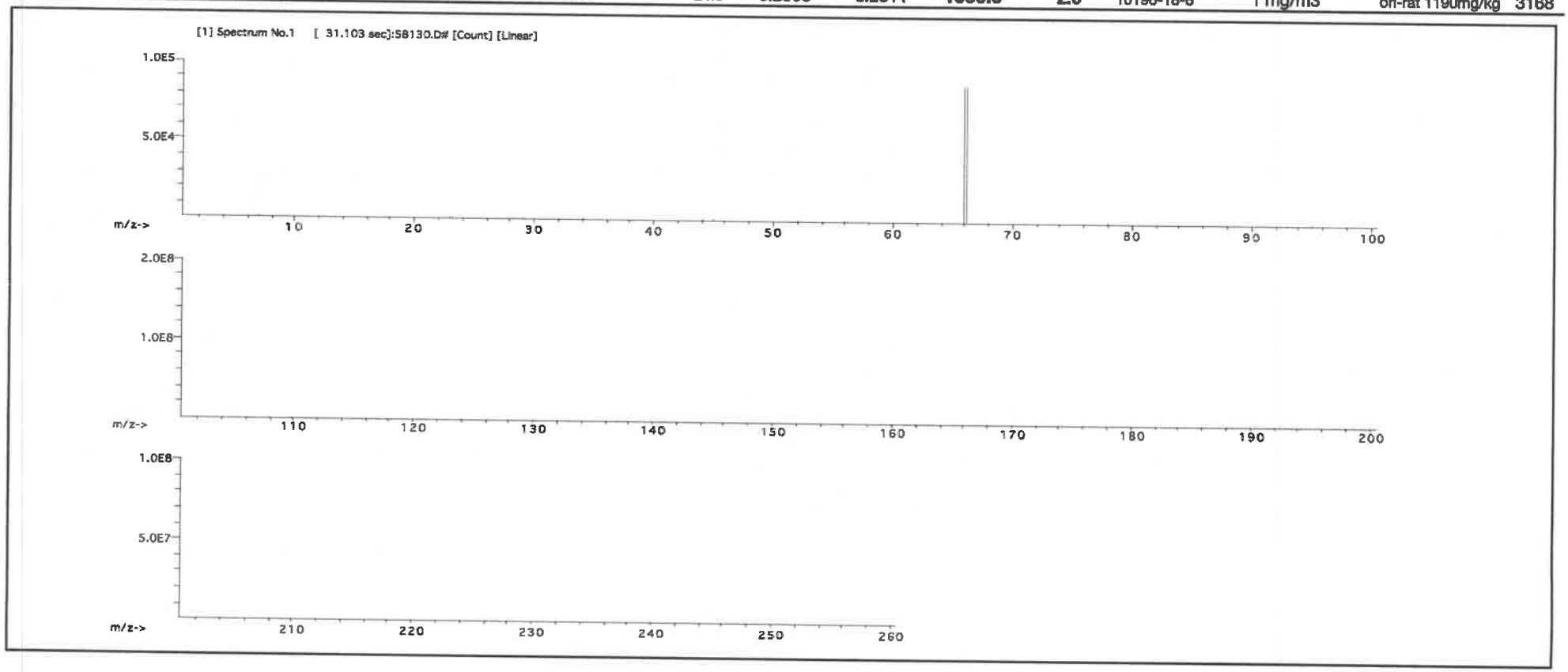
		Lot #	
Solvent:	24012496	Nitric Acid	
	2%	40.0 (mL)	Nitric Acid

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	T
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

M6151

R→ 1/15/25

Material No.: 9530-33
Batch No.: 22G2862015
Manufactured Date: 2022-06-15
Retest Date: 2027-06-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl_2)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO_4)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO_3)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH_4)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
Trace Impurities – Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities – Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	2.9 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities – Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities – Niobium (Nb)	≤ 1.0 ppb	0.8 ppb
Trace Impurities – Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	0.5 ppb
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	2.3 ppb
Trace Impurities – Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Tantalum (Ta)	≤ 1.0 ppb	1.6 ppb
Trace Impurities – Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	4.0 ppb
Trace Impurities – Titanium (Ti)	≤ 1.0 ppb	1.5 ppb
Trace Impurities – Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities – Zirconium (Zr)	≤ 1.0 ppb	0.3 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result

For Laboratory,Research,or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

Nitric Acid 69%
CMOS

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 >>>

For questions on this Certificate of Analysis please contact Technical Services at 855 282 6867 or +1 610 386 1700

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24H0162012

Test	Specification	Result
Trace Impurities - Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities - Potassium (K)	≤ 50 ppb	< 1 ppb
Trace Impurities - Silicon (Si)	≤ 50 ppb	1 ppb
Trace Impurities - Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Sodium (Na)	≤ 150.0 ppb	< 1.0 ppb
Trace Impurities - Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Tantalum (Ta)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Thallium (Tl)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Tin (Sn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count - 0.5 µm and greater	≤ 60 par/ml	13 par/ml
Particle Count - 1.0 µm and greater	≤ 10 par/ml	5 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24H0162012

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	QCP-CICV-1
Lot Number:	V2-MEB744107
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	2 500 µg/mL ea: Calcium, Potassium, Magnesium, Sodium, 1 000 µg/mL ea: Aluminum, Barium, 500 µg/mL ea: Iron, 250 µg/mL ea: Nickel, Vanadium, Zinc, Cobalt, Manganese, 125 µg/mL ea: Silver, Copper, 100 µg/mL ea: Chromium, 25 µg/mL ea: Beryllium

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	1 000 ± 4 µg/mL	Barium, Ba	1 000 ± 6 µg/mL
Beryllium, Be	24.98 ± 0.12 µg/mL	Calcium, Ca	2 500 ± 8 µg/mL
Chromium, Cr	99.9 ± 0.6 µg/mL	Cobalt, Co	250.2 ± 1.2 µg/mL
Copper, Cu	125.0 ± 0.5 µg/mL	Iron, Fe	500.0 ± 2.2 µg/mL
Magnesium, Mg	2 500 ± 11 µg/mL	Manganese, Mn	249.9 ± 1.1 µg/mL
Nickel, Ni	250.0 ± 1.2 µg/mL	Potassium, K	2 500 ± 11 µg/mL
Silver, Ag	125.0 ± 0.6 µg/mL	Sodium, Na	2 500 ± 11 µg/mL
Vanadium, V	250.0 ± 1.1 µg/mL	Zinc, Zn	249.9 ± 1.1 µg/mL

Density: 1.081 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	120618
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	200413
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information (https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver)

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 22, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 22, 2029**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

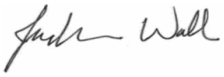
12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Justin Dirico
Stock Processing Supervisor

Certificate Approved By:

Jodie Wall
Stock VSM Coordinator



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	QCP-CICV-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

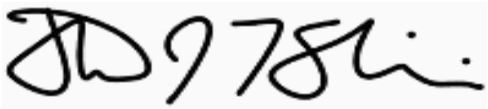
- Sealed TCT Bag Open Date: _____

- 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

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	QCP-CICV-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.

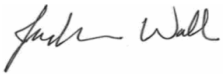
12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

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 Number: 122823
Description: Silver (Ag)

Expiration Date: 122826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

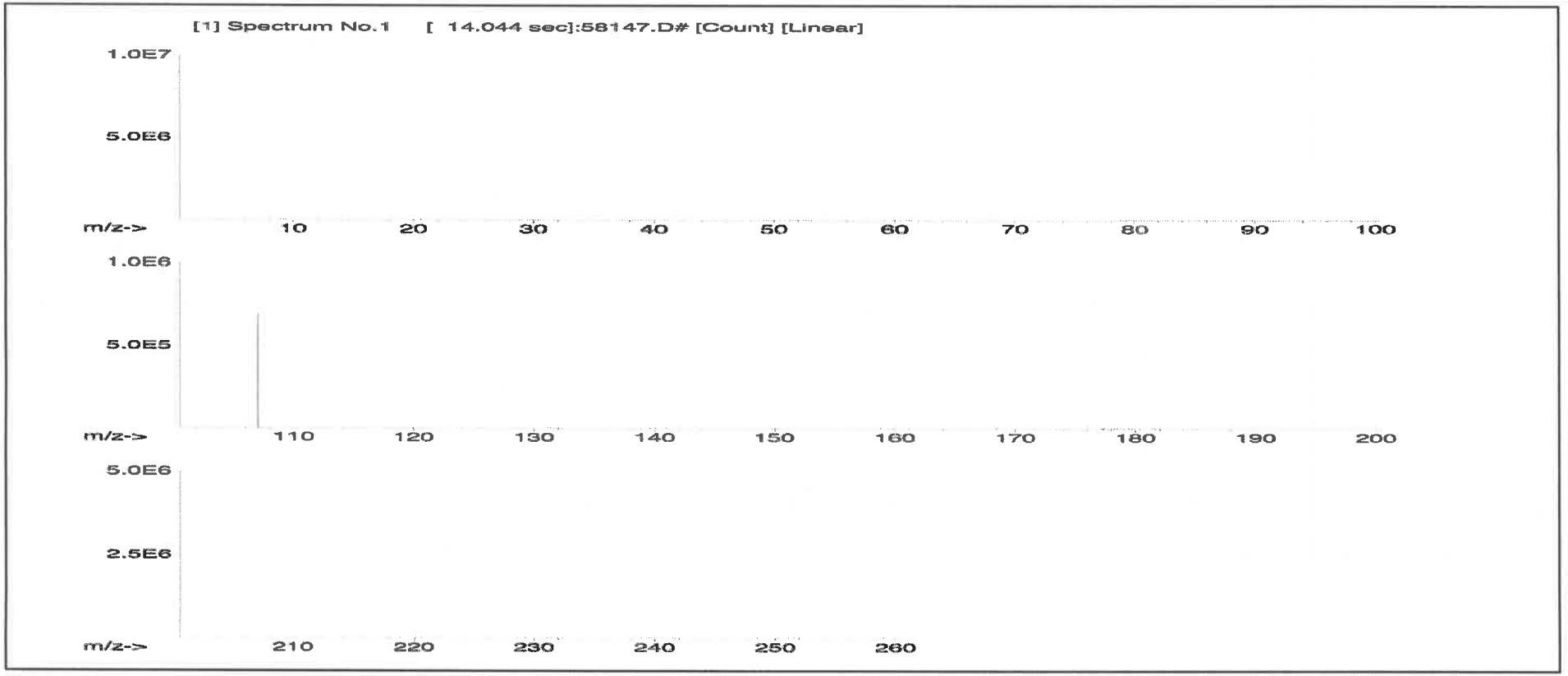
Weight shown below was diluted to (mL): 4000.30 0.058 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	80.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Benson Chan	122823
Reviewed By:	Pedro L. Rentas	122823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Silver nitrate (Ag)	IN035	J0612AGA1	1000.0	99.9999	0.10	63.7	6.27992	6.27998	**1000.0**	**2.0**	7761-88-8	10 ug/m3	NA	3151



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	T	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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

Part Number: 57051
Lot Number: 071724
Description: Antimony (Sb)
Expiration Date: 071727
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 2000.26

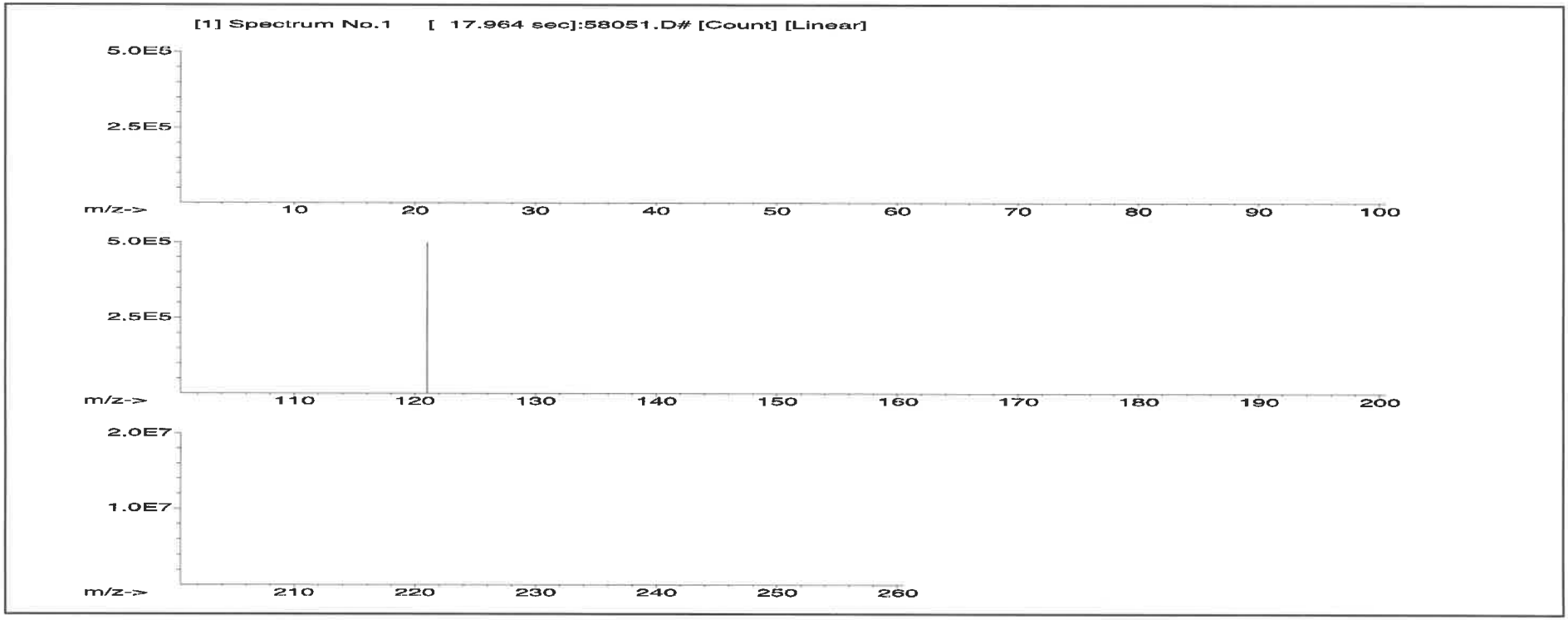
Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Giovanni Esposito

Formulated By:	Giovanni Esposito	071724
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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	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
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

R: 8/5/24 M6019

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 885.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSR1
Lot Number:	U2-SR730227
Matrix:	0.1% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Strontium
Starting Material:	SrCO3
Starting Material Lot#:	M2-2192
Starting Material Purity:	99.9993%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1001 ± 3 µg/mL

Density: 1.000 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **998 ± 4 µg/mL**
ICP Assay NIST SRM Traceable to 3153a Lot Number: K2-SR650985

Assay Method #2 **1001 ± 3 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **1001 ± 2 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001980	M	Eu	<	0.000495	O	Na		0.000200	M	Se	<	0.013862	O	Zn		0.000143
O	Al		0.000370	O	Fe		0.000410	M	Nb	<	0.000495	i	Si	<		M	Zr	<	0.000495
M	As	<	0.000495	M	Ga	<	0.000495	M	Nd	<	0.000495	M	Sm	<	0.000495				
M	Au	<	0.000989	M	Gd	<	0.000495	O	Ni	<	0.007631	M	Sn	<	0.000990				
M	B	<	0.039606	M	Ge	<	0.000495	M	Os	<	0.000494	s	Sr	<					
M	Ba		0.006486	M	Hf	<	0.000495	i	P	<		M	Ta	<	0.000495				
M	Be	<	0.000990	M	Hg	<	0.000989	M	Pb	<	0.002970	M	Tb	<	0.000495				
M	Bi	<	0.000495	M	Ho	<	0.000495	M	Pd	<	0.003957	M	Te	<	0.027724				
O	Ca		0.004255	M	In	<	0.000495	M	Pr	<	0.000495	M	Th	<	0.000990				
M	Cd		0.001339	M	Ir	<	0.000494	M	Pt	<	0.002970	M	Ti	<	0.005940				
M	Ce	<	0.004950	O	K	<	0.008184	M	Rb	<	0.002970	M	Tl	<	0.000495				
M	Co	<	0.000495	M	La	<	0.000495	M	Re	<	0.000495	M	Tm	<	0.000495				
O	Cr	<	0.003207	O	Li	<	0.000884	O	Rh	<	0.012829	M	U	<	0.001485				
M	Cs	<	0.000990	M	Lu	<	0.002970	M	Ru	<	0.000989	M	V	<	0.001980				
M	Cu		0.000099	O	Mg		0.000064	i	S	<		M	W	<	0.003960				
M	Dy	<	0.000495	O	Mn		0.000066	M	Sb	<	0.014852	O	Y	<	0.000995				
M	Er	<	0.000495	M	Mo	<	0.001980	M	Sc	<	0.001980	M	Yb	<	0.000495				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 87.62 +2 6 $Sr(H_2O)_{6}^{+2}$

Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1 - 3.5% HNO_3 / LDPE container.

Sr Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO_3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 88 amu	1200 ppt	N/A	72Ge16O, 176Yb+2, 176Lu+2 , 176Hf+2
ICP-OES 407.771 nm	0.0004 / 0.00006 µg/mL	1	U, Ce
ICP-OES 421.552 nm	0.0008 / 0.00004 µg/mL	1	Rb
ICP-OES 460.733 nm	0.07 / 0.003 µg/mL	1	Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 03, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 03, 2028**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6023

R ! 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

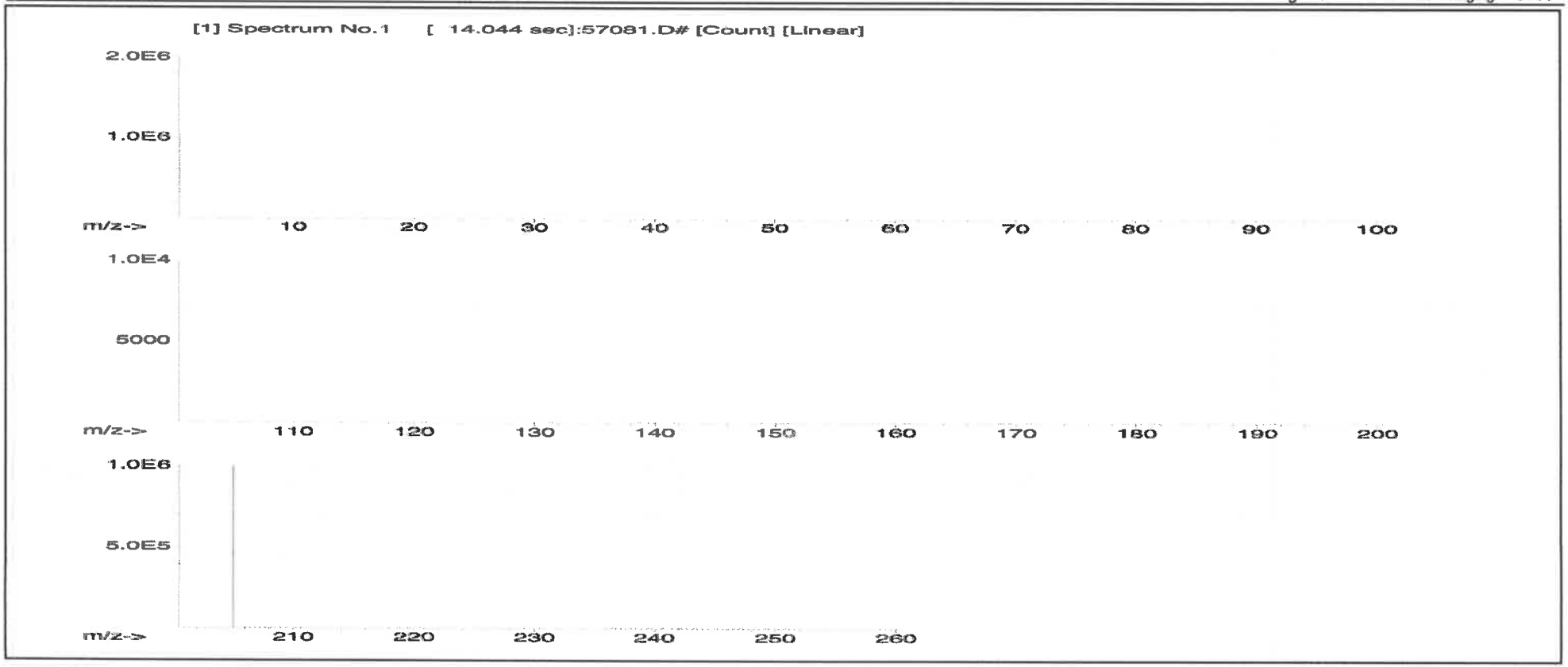
CERTIFIED WEIGHT REPORT:

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
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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	T	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6021

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Bc. 8/5/24

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57023**	24002546	Nitric Acid	
Lot Number:	**062424**			
Description:	**Vanadium (V)**	2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	062427			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.3	0.06	Flask Uncertainty	

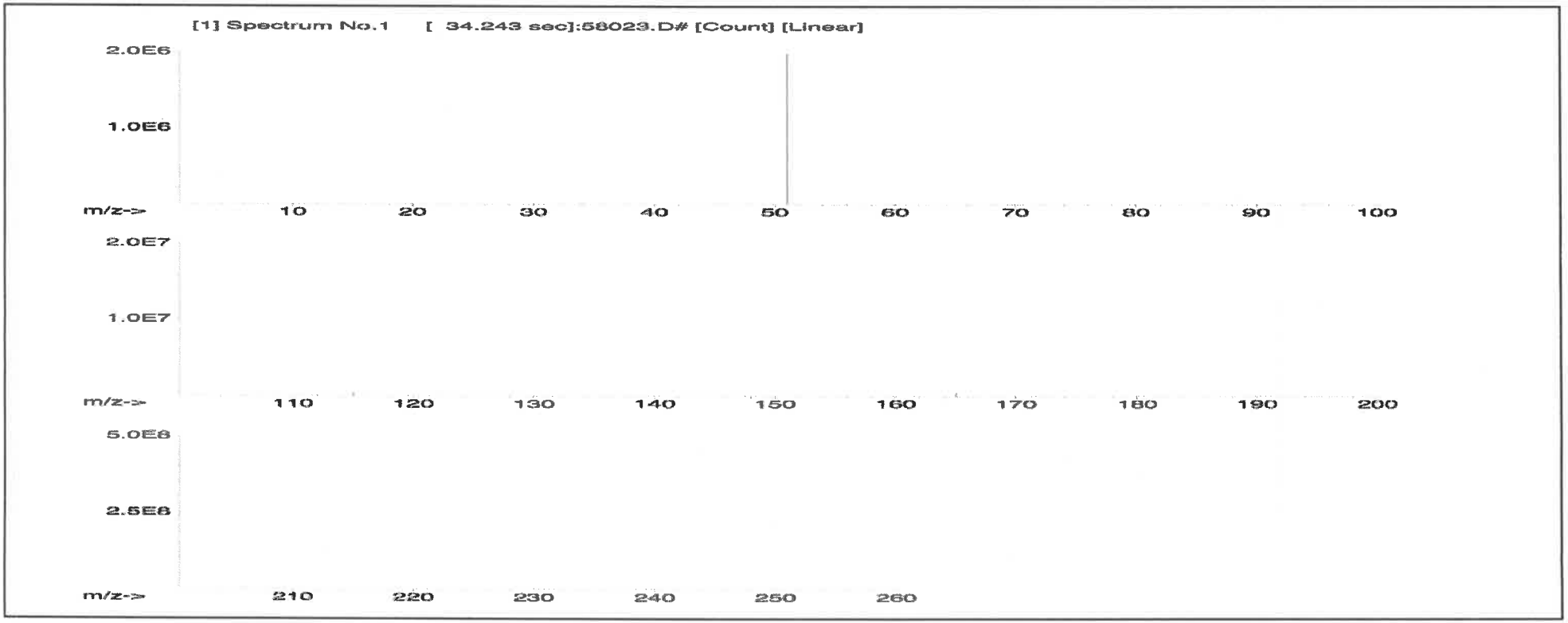
Aleah O'Brady

Formulated By:	Aleah O'Brady	062424

Pedro Rentas

Reviewed By:	Pedro L. Rentas	062424

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium metavanadate (V)	58123	021224	0.1000	200.0	0.084	1000	10000.3	**1000.0**	**2.2**	7803-55-6	0.05 mg/m3	orl-rat 58.1mg/kg	3165



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	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.
* 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).

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax: (908) 78-8922
www.chemtech.net

Chemtech Project Number: Q 2745
COC Number:

CLIENT INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
COMPANY: Tetra Tech	PROJECT NAME: NWIRP Bethpage	BILL TO: PO#
ADDRESS: 4433 Corporation Ln, Suite 300	PROJECT #: 112G08005-WE13 LOCATION: RW8	ADDRESS:
CITY: Virginia Beach STATE: VA ZIP: 23462	PROJECT MANAGER: Ernie Wu	CITY: STATE: ZIP:
ATTENTION: Ernie Wu	E-MAIL: ernie,wu@tetratech.com	ATTENTION: PHONE:
PHONE: 757-466-4901 FAX: 757-461-4148	PHONE: 757-466-4901 FAX: 757-461-4148	

DATA TURNAROUND INFORMATION

FAX: 10 DAYS*
HARD COPY: 10 DAYS*
EDD 10 DAYS*
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ RESELTS ONLY
- ☐ RESULTS + QC
- ☐ New Jersey REDUCED
- ☐ New Jersey CLP
- ☐ USEPA CLP
- ☐ New York State ASP "B"
- ☐ New York State ASP "A"
- ☐ Other
- ☐ EDD Format

ANALYSIS

1	2	3	4	5	6	7	8	9
1,4-Dioxane SW846 8270 SIM	Iron, Total	TSS	TDS					

CHEMTECH 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
									B								<-- Specify Preservatives A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-Other
1.	RW8-SP100-20250731	GW		x	7/31/25	13:05	2	x	x								
2.	RW8-SP303-20250731	GW		x	7/31/25	13:13	4	x	x	x	x						
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSSESSION INCLUDING COURIER DELIVERY

	DATE/TIME		
RELINQUISHED BY SAMPLER 1.	7/31 1416	RECEIVED BY 1.	Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 1.9°C
RELINQUISHED BY 2. FedEx	DATE/TIME 8-1-25 1005	RECEIVED BY 2.	MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler?: Y
RELINQUISHED BY 3.	DATE/TIME	RECEIVED FOR LAB BY 3.	Comments:

Page ____ of ____

SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight
CHEMTECH: ☐ Picked Up ☐ Overnight

Shipment Complete ☐ YES ☐ NO

WHITE - CHEMTECH COPYFOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488