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DATA PACKAGE

METALS

PROJECT NAME : NWIRP BETHPAGE 112G08005-WE13

TETRA TECH NUS, INC.

661 Andersen Drive

Suite 200

Pittsburgh, PA - 15220-2745

Phone No: 412-921-7090

ORDER ID : Q2253

ATTENTION : Ernie Wu

Laboratory Certification ID # 20012

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Cover Page

Order ID : Q2253

Project ID : NWIRP Bethpage 112G08005-WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number	Client Sample Number
Q2253-01	RW8-SP100-20250605
Q2253-02	RW8-SP303-20250605

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 4:09 pm, Jun 17, 2025

Date: 6/16/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Tetra Tech NUS, Inc.
Project Name: NWIRP Bethpage 112G08005-WE13
Project Manager : Ernie Wu
Order ID # Q2253
Test Name: Metals Group4

A. Number of Samples and Date of Receipt:
2 Water samples were received on 06/05/2025.

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 samples.
The Duplicate analysis met criteria for all samples.
The Matrix Spike analysis met criteria for all samples.
The Matrix Spike Duplicate analysis met criteria for all samples.
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 

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

DATA REPORTING QUALIFIERS- INORGANIC

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

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

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

ORDER ID: Q2253 MATRIX: Water

METHOD: 6010D

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

ADDITIONAL COMMENTS:

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 11:34 am, Jun 17, 2025

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2253

	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:** 06/16/2025

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LAB CHRONICLE

OrderID:	Q2253	**OrderDate:**	6/5/2025 4:32:00 PM
Client:	Tetra Tech NUS, Inc.	**Project:**	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	**Location:**	D21

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2253-01	**RW8-SP100-20250605**	**Water**			**06/05/25**			**06/05/25**
			Metals Group4	6010D		06/10/25	06/10/25	
Q2253-02	**RW8-SP303-20250605**	**Water**			**06/05/25**			**06/05/25**
			Metals Group4	6010D		06/10/25	06/10/25	

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Hit Summary Sheet
SW-846

SDG No.: Q2253 **Order ID:** Q2253

Client: Tetra Tech NUS, Inc. **Project ID:** NWIRP Bethpage 112G08005-WE13

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : RW8-SP100-20250605									
Q2253-01	RW8-SP100-20250605	Water	Iron	1380		11.7	40.0	50.0	ug/L
Client ID : RW8-SP303-20250605									
Q2253-02	RW8-SP303-20250605	Water	Iron	51.5		11.7	40.0	50.0	ug/L

SAMPLE DATA

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	06/05/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	06/05/25
Client Sample ID:	RW8-SP100-20250605	SDG No.:	Q2253
Lab Sample ID:	Q2253-01	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	1380		1	11.7	40.0	50.0	ug/L	06/10/25 10:05	06/10/25 23:49	6010D	SW3010

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

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

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

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	06/05/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	06/05/25
Client Sample ID:	RW8-SP303-20250605	SDG No.:	Q2253
Lab Sample ID:	Q2253-02	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	51.5		1	11.7	40.0	50.0	ug/L	06/10/25 10:05	06/10/25 23:53	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

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

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	3770	4000	94	90 - 110	P	06/10/2025	14:37	LB136097

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

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	06/10/2025	14:41	LB136097

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

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	06/10/2025	15:30	LB136097
CCV02	Iron	4930	5000	99	90 - 110	P	06/10/2025	16:28	LB136097
CCV03	Iron	5390	5000	108	90 - 110	P	06/10/2025	17:36	LB136097
CCV04	Iron	5420	5000	108	90 - 110	P	06/10/2025	18:28	LB136097
CCV05	Iron	5340	5000	107	90 - 110	P	06/10/2025	19:18	LB136097
CCV06	Iron	5150	5000	103	90 - 110	P	06/10/2025	20:09	LB136097
CCV07	Iron	5190	5000	104	90 - 110	P	06/10/2025	21:04	LB136097
CCV08	Iron	5140	5000	103	90 - 110	P	06/10/2025	22:04	LB136097
CCV09	Iron	5160	5000	103	90 - 110	P	06/10/2025	22:56	LB136097
CCV10	Iron	5200	5000	104	90 - 110	P	06/10/2025	23:57	LB136097
CCV11	Iron	5060	5000	101	90 - 110	P	06/11/2025	01:35	LB136097
CCV12	Iron	4930	5000	99	90 - 110	P	06/11/2025	02:21	LB136097

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Metals

- 2b -
CRDL STANDARD FOR AA & ICP

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

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	06/10/2025	14:50	LB136097

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

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	06/10/2025	14:45	LB136097

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

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	06/10/2025	15:35	LB136097
CCB02	Iron	23.4	+/-50	U	80.0	100	P	06/10/2025	16:32	LB136097
CCB03	Iron	23.4	+/-50	U	80.0	100	P	06/10/2025	17:40	LB136097
CCB04	Iron	23.4	+/-50	U	80.0	100	P	06/10/2025	18:32	LB136097
CCB05	Iron	23.4	+/-50	U	80.0	100	P	06/10/2025	19:22	LB136097
CCB06	Iron	23.4	+/-50	U	80.0	100	P	06/10/2025	20:14	LB136097
CCB07	Iron	23.4	+/-50	U	80.0	100	P	06/10/2025	21:08	LB136097
CCB08	Iron	23.4	+/-50	U	80.0	100	P	06/10/2025	22:08	LB136097
CCB09	Iron	23.4	+/-50	U	80.0	100	P	06/10/2025	23:01	LB136097
CCB10	Iron	23.4	+/-50	U	80.0	100	P	06/11/2025	00:02	LB136097
CCB11	Iron	23.4	+/-50	U	80.0	100	P	06/11/2025	01:39	LB136097
CCB12	Iron	23.4	+/-50	U	80.0	100	P	06/11/2025	02:25	LB136097

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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB168384BL		**WATER**		**Batch Number:**		**PB168384**		**Prep Date:**	**06/10/2025**	
	Iron	11.7	<25	U	40.0	50.0	P	06/10/2025	23:41	LB136097

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Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

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	97000	101000	96	85600	116500	06/10/2025	14:54	LB136097
ICSAB01	Iron	99000	99300	100	84400	114500	06/10/2025	15:18	LB136097

METAL QC DATA

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metals
- 5a -
MATRIX SPIKE SUMMARY

client: Tetra Tech NUS, Inc. **level:** low **sdg no.:** Q2253

contract: TETR06 **lab code:** CHEM **case no.:** Q2253 **sas no.:** Q2253

matrix: Water **sample id:** Q2253-02 **client id:** RW8-SP303-20250605MS

Percent Solids for Sample: NA **Spiked ID:** Q2253-02MS **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	1490		51.5		1500	96		P

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metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: Tetra Tech NUS, Inc. **level:** low **sdg no.:** Q2253

contract: TETR06 **lab code:** CHEM **case no.:** Q2253 **sas no.:** Q2253

matrix: Water **sample id:** Q2253-02 **client id:** RW8-SP303-20250605MSD

Percent Solids for Sample: NA **Spiked ID:** Q2253-02MSD **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	1490		51.5		1500	96		P

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Metals
- 5b -

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

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

Sample ID: **Spiked ID:**

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

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **Level:** LOW **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

Matrix: Water **Sample ID:** Q2253-02 **Client ID:** RW8-SP303-20250605DUP

Percent Solids for Sample: NA **Duplicate ID** Q2253-02DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	51.5		55.7		8		P

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

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **Level:** LOW **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

Matrix: Water **Sample ID:** Q2253-02MS **Client ID:** RW8-SP303-20250605MSD

Percent Solids for Sample: NA **Duplicate ID** Q2253-02MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	1490		1490		0		P

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

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB168384BS							
Iron	ug/L	1500	1620		108	87 - 115	P

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Metals

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ICP SERIAL DILUTIONS

SAMPLE NO.

RW8-SP303-20250605L

Lab Name: Chemtech Consulting Group **Contract:** TETR06

Lab Code: CHEM **Lb No.:** lb136097 **Lab Sample ID :** Q2253-02L **SDG No.:** Q2253

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	51.5		250	U	100.0		P

METAL PREPARATION & INSTRUMENT DATA

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Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

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

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Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

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

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

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

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Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

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

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Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

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

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Fax : 908 789 8922

Metals
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SAMPLE PREPARATION SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Method:**

Case No.: Q2253 **SAS No.:** Q2253

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB168384**						
PB168384BL	PB168384BL	MB	WATER	06/10/2025	50.0	25.0	
PB168384BS	PB168384BS	LCS	WATER	06/10/2025	50.0	25.0	
Q2253-01	RW8-SP100-20250605	SAM	WATER	06/10/2025	50.0	25.0	
Q2253-02	RW8-SP303-20250605	SAM	WATER	06/10/2025	50.0	25.0	
Q2253-02DUP	RW8-SP303-20250605DUP	DUP	WATER	06/10/2025	50.0	25.0	
Q2253-02MS	RW8-SP303-20250605MS	MS	WATER	06/10/2025	50.0	25.0	
Q2253-02MSD	RW8-SP303-20250605MSD	MSD	WATER	06/10/2025	50.0	25.0	

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metals
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ANALYSIS RUN LOG

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

Lab code: CHEM **Case no.:** Q2253 **Sas no.:** Q2253 **Sdg no.:** Q2253

Instrument id number: **Method:** **Run number:** LB136097

Start date: 06/10/2025 **End date:** 06/11/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1401	Fe
S1	S1	1	1405	Fe
S2	S2	1	1409	Fe
S3	S3	1	1414	Fe
S4	S4	1	1418	Fe
S5	S5	1	1422	Fe
ICV01	ICV01	1	1437	Fe
LLICV01	LLICV01	1	1441	Fe
ICB01	ICB01	1	1445	Fe
CRI01	CRI01	1	1450	Fe
ICSA01	ICSA01	1	1454	Fe
ICSAB01	ICSAB01	1	1518	Fe
CCV01	CCV01	1	1530	Fe
CCB01	CCB01	1	1535	Fe
CCV02	CCV02	1	1628	Fe
CCB02	CCB02	1	1632	Fe
CCV03	CCV03	1	1736	Fe
CCB03	CCB03	1	1740	Fe
CCV04	CCV04	1	1828	Fe
CCB04	CCB04	1	1832	Fe
CCV05	CCV05	1	1918	Fe
CCB05	CCB05	1	1922	Fe
CCV06	CCV06	1	2009	Fe
CCB06	CCB06	1	2014	Fe
CCV07	CCV07	1	2104	Fe
CCB07	CCB07	1	2108	Fe
CCV08	CCV08	1	2204	Fe
CCB08	CCB08	1	2208	Fe
CCV09	CCV09	1	2256	Fe
CCB09	CCB09	1	2301	Fe
PB168384BL	PB168384BL	1	2341	Fe
PB168384BS	PB168384BS	1	2345	Fe
Q2253-01	RW8-SP100-20250605	1	2349	Fe
Q2253-02	RW8-SP303-20250605	1	2353	Fe
CCV10	CCV10	1	2357	Fe
CCB10	CCB10	1	0002	Fe
Q2253-02DUP	RW8-SP303-20250605DUP	1	0006	Fe
Q2253-02L	RW8-SP303-20250605L	5	0010	Fe
Q2253-02MS	RW8-SP303-20250605MS	1	0015	Fe
Q2253-02MSD	RW8-SP303-20250605MSD	1	0019	Fe
CCV11	CCV11	1	0135	Fe

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metals
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ANALYSIS RUN LOG

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

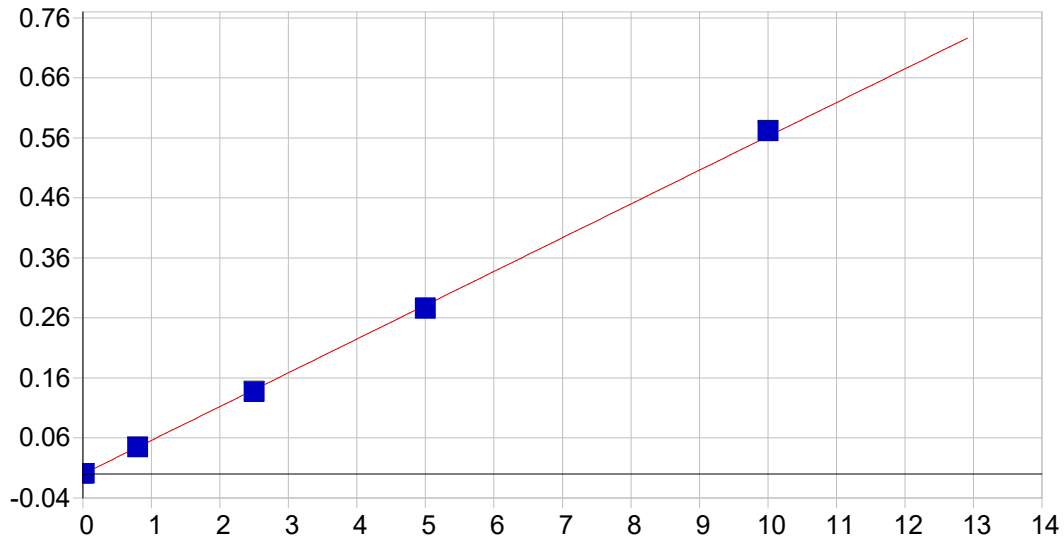
Lab code: CHEM **Case no.:** Q2253 **Sas no.:** Q2253 **Sdg no.:** Q2253

Instrument id number: **Method:** **Run number:** LB136097

Start date: 06/10/2025 **End date:** 06/11/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
CCB11	CCB11	1	0139	Fe
CCV12	CCV12	1	0221	Fe
CCB12	CCB12	1	0225	Fe

METAL
RAW DATA

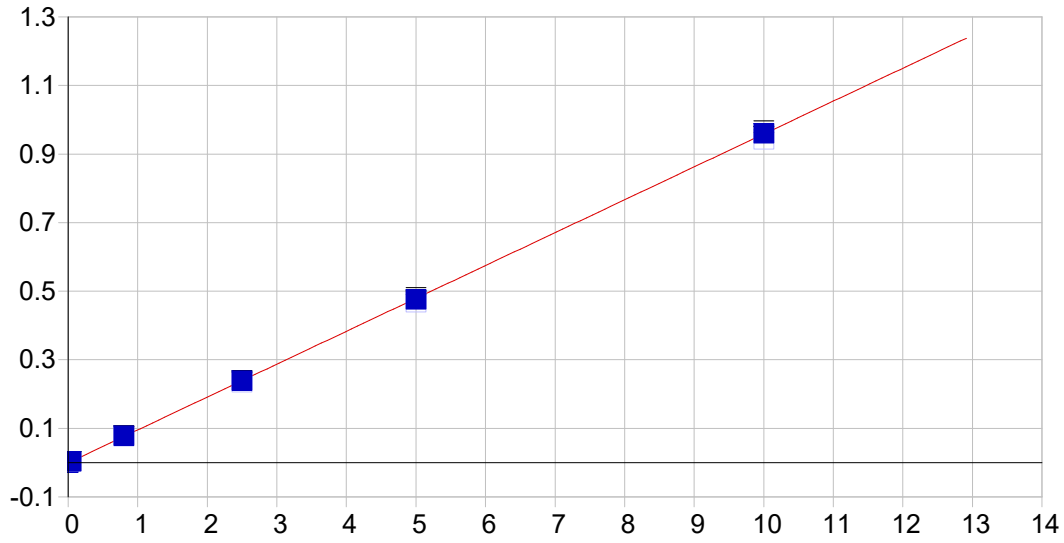


As 189.042 {479}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000192	Re-Slope:	1.000000
A1 (Gain):	0.056276	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999834	Status:	OK.
Std Error of Est:	0.000024		
Predicted MDL:	0.002312		
Predicted MQL:	0.007708		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00019	.000	1
S1	.02000	.02207	.002	10.3	.00104	.000	1
S3	2.5000	2.4395	-.060	-2.42	.13694	.001	1
S4	5.0000	4.9028	-.097	-1.94	.27541	.001	1
S5	10.000	10.158	.158	1.58	.57085	.001	1
S2	.80000	.79760	-.002	-.300	.04464	.000	1

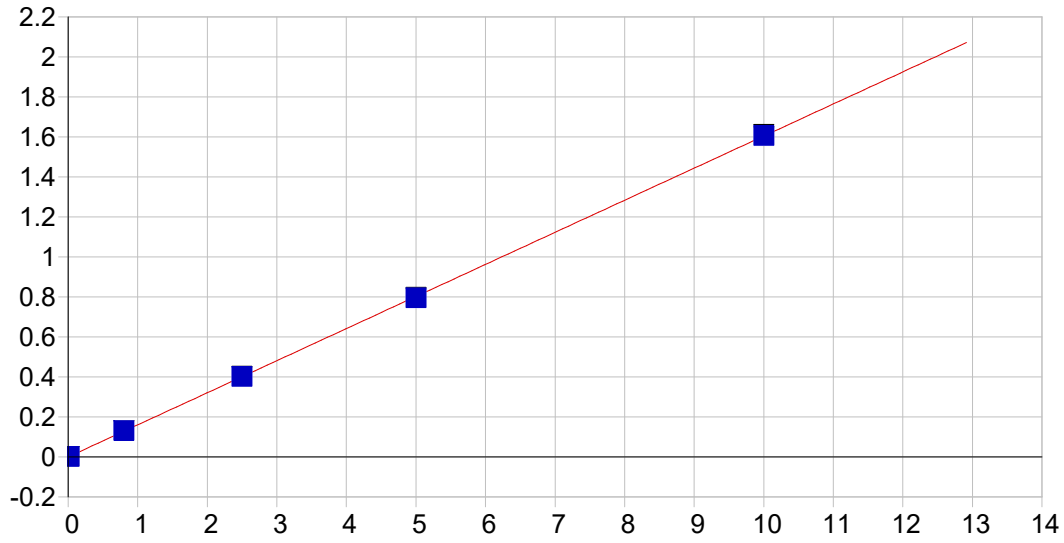


Tl 190.856 {477}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000528	Re-Slope:	1.000000
A1 (Gain):	0.095900	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999984	Status:	OK.
Std Error of Est:	0.000018		
Predicted MDL:	0.001727		
Predicted MQL:	0.005755		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00053	.000	1
S1	.04000	.04102	.001	2.54	.00316	.000	1
S3	2.5000	2.4967	-.003	-.133	.23450	.001	1
S4	5.0000	4.9713	-.029	-.573	.46741	.005	1
S5	10.000	10.014	.014	.141	.94220	.008	1
S2	.80000	.81696	.017	2.12	.07641	.001	1

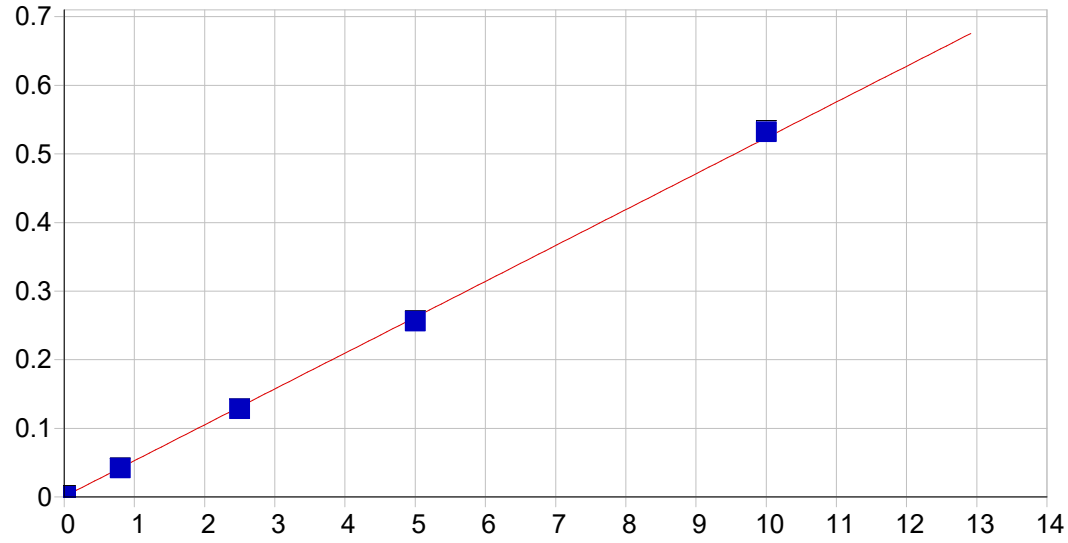


Pb 220.353 {453}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000109	Re-Slope:	1.000000
A1 (Gain):	0.160435	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999968	Status:	OK.
Std Error of Est:	0.000023		
Predicted MDL:	0.001740		
Predicted MQL:	0.005800		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00011	.000	1
S1	.01200	.01335	.001	11.2	.00200	.000	1
S3	2.5000	2.5085	.009	.342	.40194	.002	1
S4	5.0000	4.9540	-.046	-.919	.79387	.003	1
S5	10.000	10.015	.015	.154	1.6051	.006	1
S2	.80000	.82068	.021	2.59	.13143	.000	1

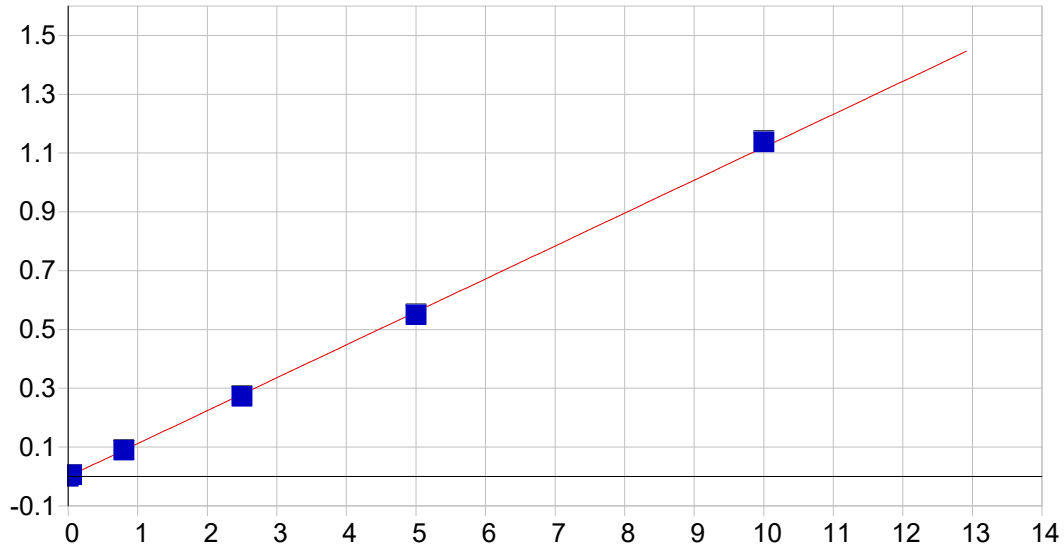


Se 196.090 {472}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000511	Re-Slope:	1.000000
A1 (Gain):	0.052279	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999823	Status:	OK.
Std Error of Est:	0.000023		
Predicted MDL:	0.004552		
Predicted MQL:	0.015172		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00051	.000	1
S1	.02000	.01976	-.000	-1.21	.00154	.000	1
S3	2.5000	2.4455	-.055	-2.18	.12831	.000	1
S4	5.0000	4.8922	-.108	-2.16	.25617	.001	1
S5	10.000	10.170	.170	1.70	.53200	.002	1
S2	.80000	.79232	-.008	-.960	.04192	.000	1

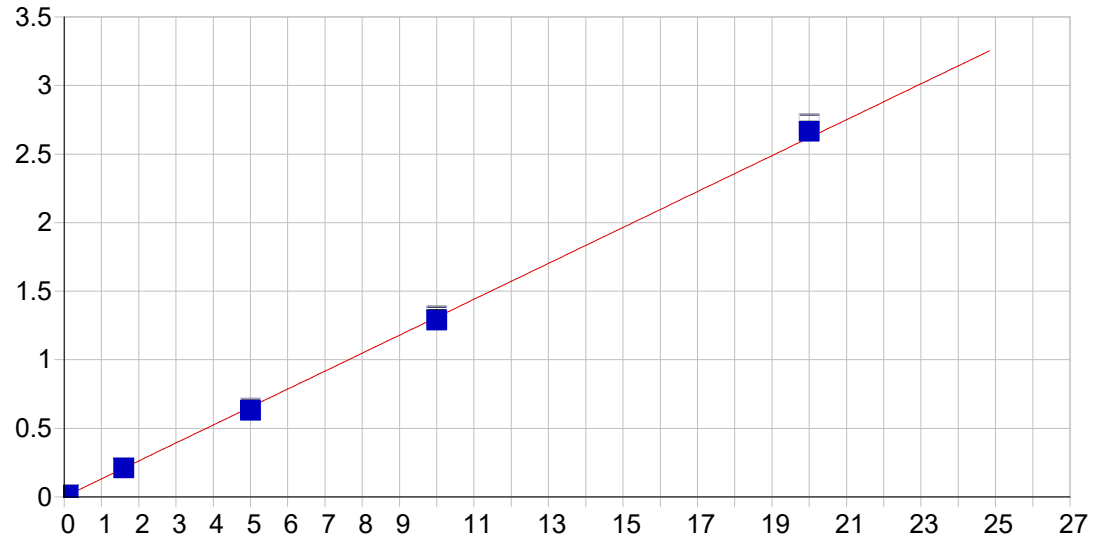


Sb 206.833 {463}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000045	Re-Slope:	1.000000
A1 (Gain):	0.111991	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999836	Status:	OK.
Std Error of Est:	0.000075		
Predicted MDL:	0.001998		
Predicted MQL:	0.006661		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00005	.000	1
S1	.05000	.05352	.004	7.05	.00596	.000	1
S3	2.5000	2.4337	-.066	-2.65	.27327	.001	1
S4	5.0000	4.9094	-.091	-1.81	.55128	.001	1
S5	10.000	10.155	.155	1.55	1.1402	.003	1
S2	.80000	.79872	-.001	-.161	.08965	.000	1

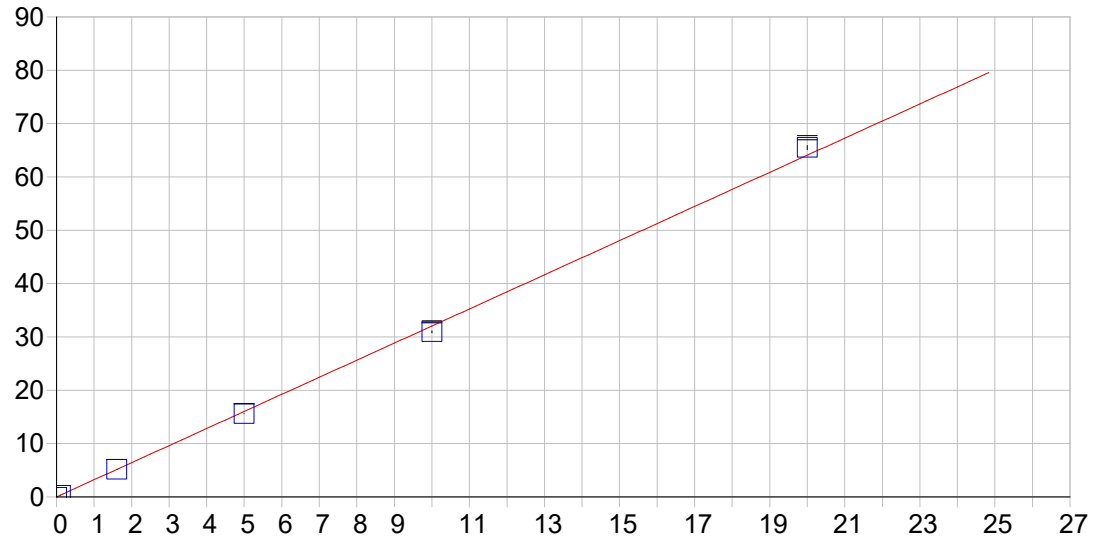


Al 396.152 { 85}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000504	Re-Slope:	1.000000
A1 (Gain):	0.130942	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999785	Status:	OK.
Std Error of Est:	0.000205		
Predicted MDL:	0.005452		
Predicted MQL:	0.018174		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00050	.000	1
S1	.10000	.11075	.011	10.8	.01602	.001	1
S3	5.0000	4.8163	-.184	-3.67	.64386	.002	1
S4	10.000	9.8357	-.164	-1.64	1.3138	.004	1
S5	20.000	20.341	.341	1.70	2.7147	.004	1
S2	1.6000	1.5961	-.004	-.246	.21356	.000	1

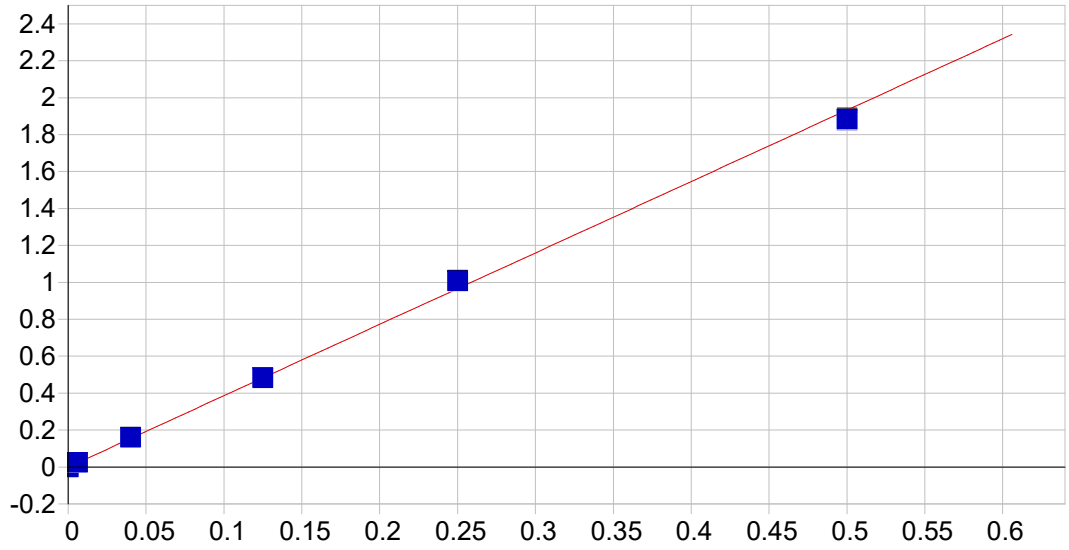


Ba 493.409 { 68}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.015641	Re-Slope:	1.000000
A1 (Gain):	3.202524	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999664	Status:	OK.
Std Error of Est:	0.006160		
Predicted MDL:	0.000679		
Predicted MQL:	0.002265		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.01566	.002	1
S1	.10000	.09809	-.002	-1.91	.32978	.004	1
S3	5.0000	4.8747	-.125	-2.51	15.627	.016	1
S4	10.000	9.6646	-.335	-3.35	30.967	.176	1
S5	20.000	20.451	.451	2.26	65.512	.382	1
S2	1.6000	1.6112	.011	.698	5.1755	.006	1

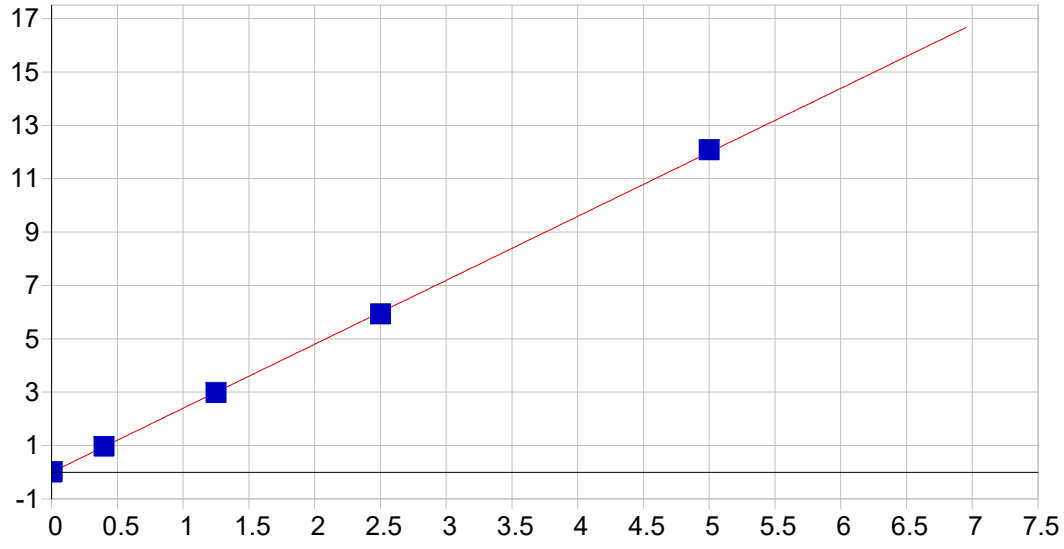


Be 234.861 {144}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000672	Re-Slope:	1.000000
A1 (Gain):	3.866285	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999494	Status:	OK.
Std Error of Est:	0.000352		
Predicted MDL:	0.000078		
Predicted MQL:	0.000260		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00068	.000	1
S1	.00600	.00653	.001	8.77	.02439	.000	1
S3	.12500	.12497	-.000	-.027	.48032	.001	1
S4	.25000	.26087	.011	4.35	1.0036	.004	1
S5	.50000	.48700	-.013	-2.60	1.8735	.007	1
S2	.04000	.04164	.002	4.10	.15962	.001	1

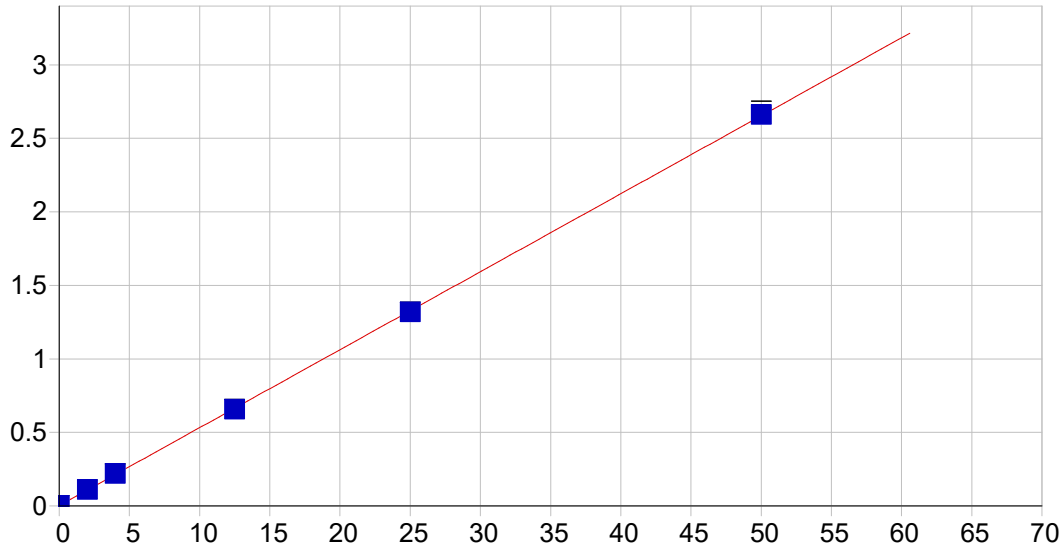


Cd 226.502 {449}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000039	Re-Slope:	1.000000
A1 (Gain):	2.397726	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999965	Status:	OK.
Std Error of Est:	0.000182		
Predicted MDL:	0.000101		
Predicted MQL:	0.000337		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00004	.000	1
S1	.00600	.00611	.000	1.84	.01475	.000	1
S3	1.2500	1.2425	-.007	-.599	2.9816	.010	1
S4	2.5000	2.4708	-.029	-1.17	5.9290	.017	1
S5	5.0000	5.0331	.033	.662	12.077	.024	1
S2	.40000	.40347	.003	.868	.96820	.001	1

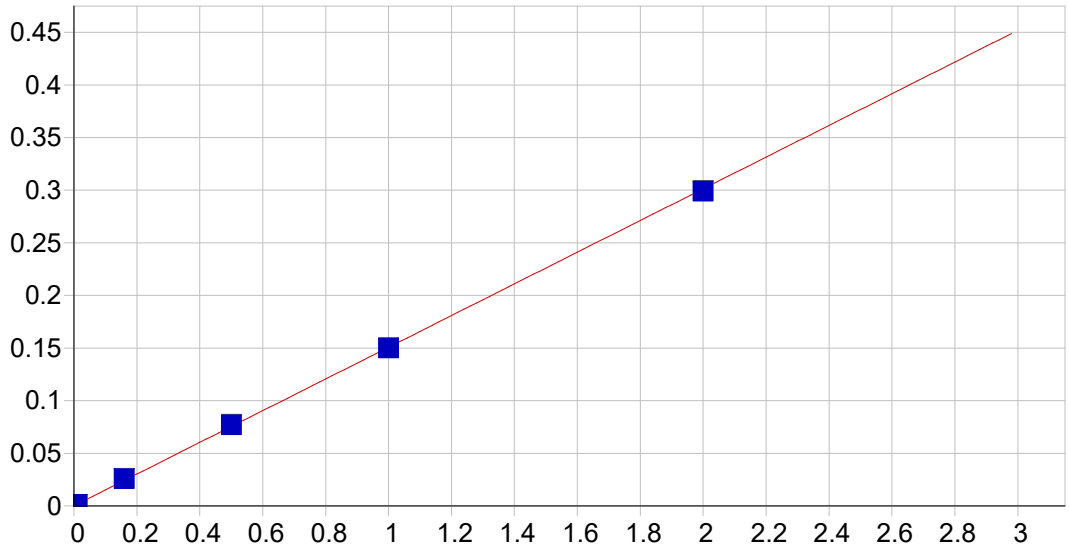


Ca 373.690 { 90}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001683	Re-Slope:	1.000000
A1 (Gain):	0.053042	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999963	Status:	OK.
Std Error of Est:	0.000240		
Predicted MDL:	0.009047		
Predicted MQL:	0.030156		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00006	-.000	.000	.00168	.000	1
S2	4.0000	4.0982	.098	2.46	.21906	.001	1
S3	12.500	12.356	-.144	-1.15	.65709	.001	1
S4	25.000	24.826	-.174	-.696	1.3185	.001	1
S5	50.000	50.176	.176	.353	2.6632	.023	1
S1	2.0000	2.0431	.043	2.15	.11005	.000	1

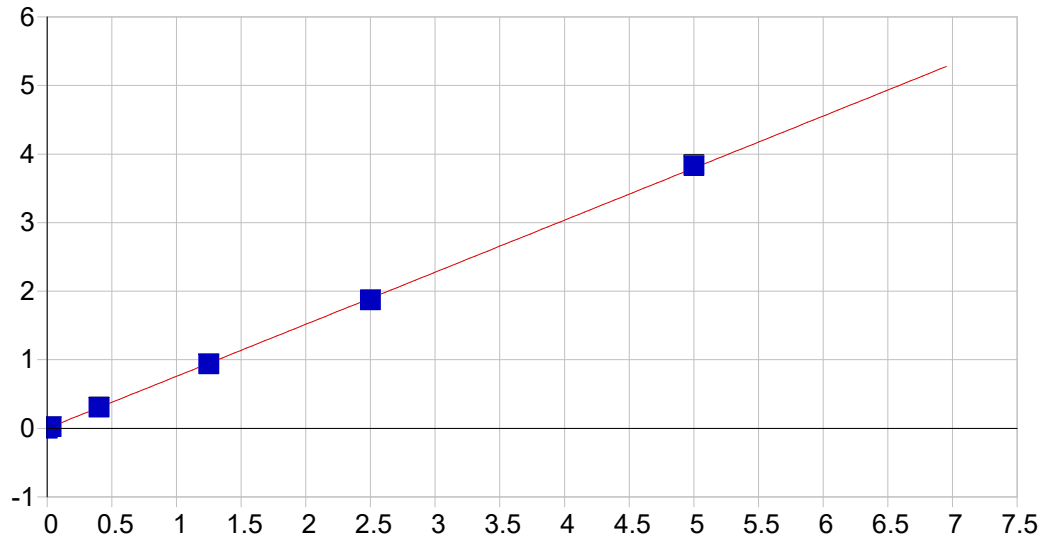


Cr 267.716 {126}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000167	Re-Slope:	1.000000
A1 (Gain):	0.150594	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999841	Status:	OK.
Std Error of Est:	0.000020		
Predicted MDL:	0.000399		
Predicted MQL:	0.001331		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00017	.000	1
S1	.01000	.01035	.000	3.53	.00173	.000	1
S3	.50000	.50980	.010	1.96	.07700	.000	1
S4	1.0000	.99474	-.005	-.526	.15009	.000	1
S5	2.0000	1.9838	-.016	-.811	.29915	.001	1
S2	.16000	.17134	.011	7.08	.02599	.000	1

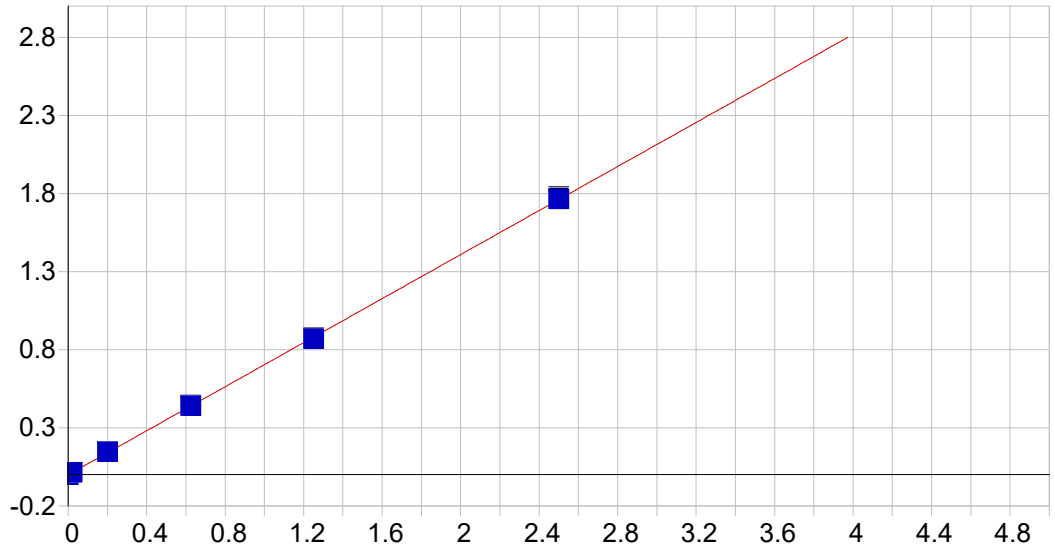


Co 228.616 {448}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000059	Re-Slope:	1.000000
A1 (Gain):	0.758989	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999940	Status:	OK.
Std Error of Est:	0.000169		
Predicted MDL:	0.000271		
Predicted MQL:	0.000902		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00006	.000	1
S1	.03000	.03050	.000	1.66	.02299	.000	1
S3	1.2500	1.2362	-.014	-1.11	.93980	.004	1
S4	2.5000	2.4647	-.035	-1.41	1.8738	.005	1
S5	5.0000	5.0449	.045	.898	3.8354	.009	1
S2	.40000	.40373	.004	.932	.30688	.000	1

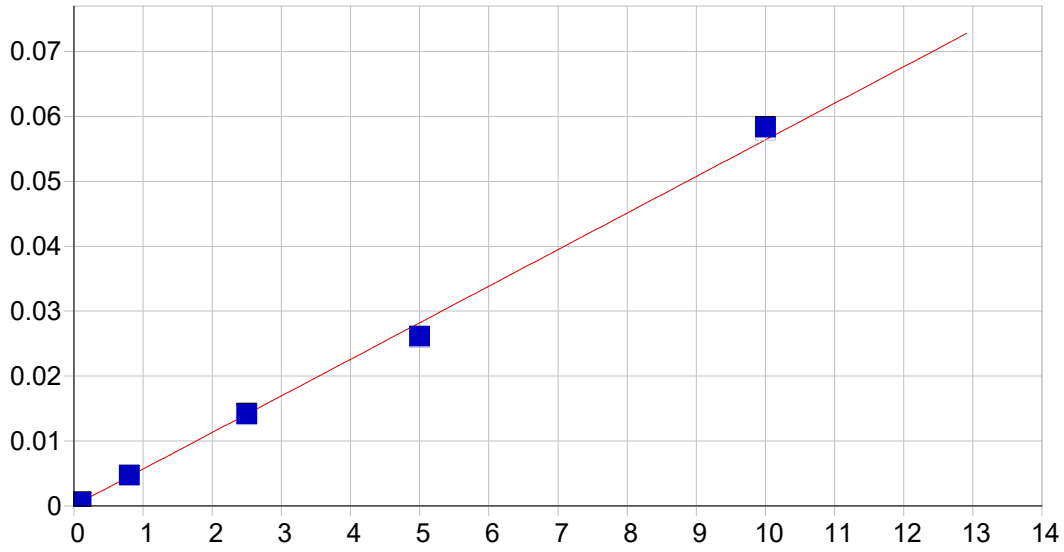


Cu 224.700 {450}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000726	Re-Slope:	1.000000
A1 (Gain):	0.704794	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999903	Status:	OK.
Std Error of Est:	0.000116		
Predicted MDL:	0.000387		
Predicted MQL:	0.001289		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00073	.000	1
S1	.02000	.02218	.002	10.9	.01505	.000	1
S3	.62500	.62592	.001	.147	.44363	.002	1
S4	1.2500	1.2336	-.016	-1.31	.87512	.002	1
S5	2.5000	2.5039	.004	.154	1.7768	.005	1
S2	.20000	.20945	.009	4.73	.14792	.001	1

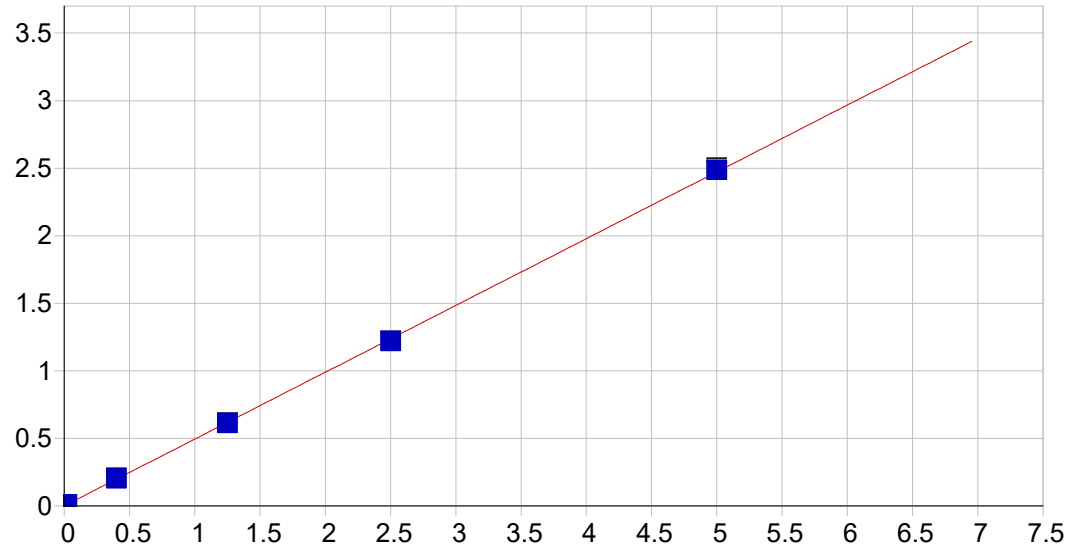


Fe 240.488 {140}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000046	Re-Slope:	1.000000
A1 (Gain):	0.005633	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998881	Status:	OK.
Std Error of Est:	0.000014		
Predicted MDL:	0.003769		
Predicted MQL:	0.012563		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00005	.000	1
S1	.10000	.09687	-.003	-3.13	.00058	.000	1
S3	2.5000	2.4994	-.001	-.023	.01401	.000	1
S4	5.0000	4.6294	-.371	-7.41	.02588	.000	1
S5	10.000	10.345	.345	3.45	.05784	.000	1
S2	.80000	.82884	.029	3.61	.00468	.000	1

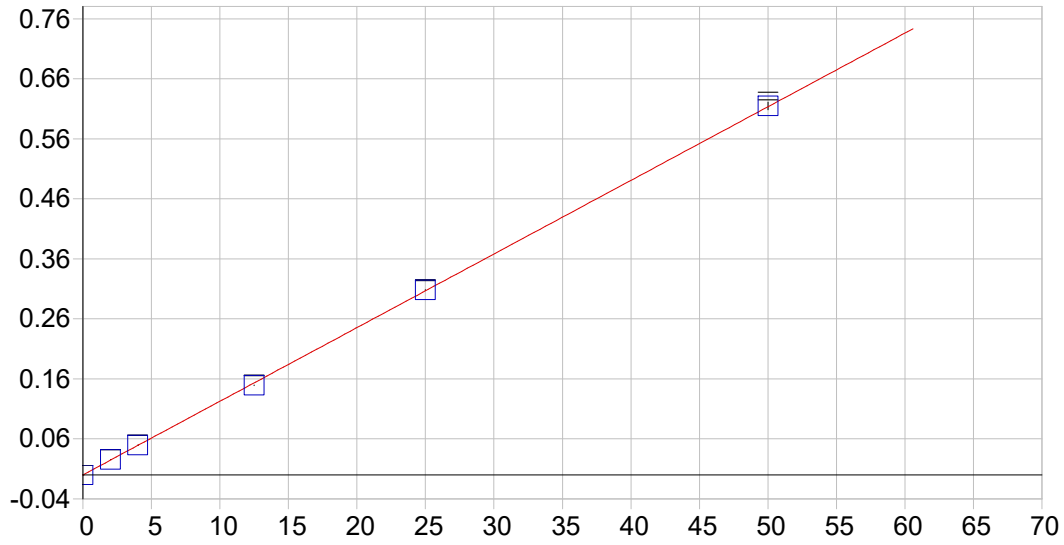


Mn 257.610 {131}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000273	Re-Slope:	1.000000
A1 (Gain):	0.494458	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999941	Status:	OK.
Std Error of Est:	0.000089		
Predicted MDL:	0.000370		
Predicted MQL:	0.001233		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00027	.000	1
S1	.02000	.02093	.001	4.64	.01063	.000	1
S3	1.2500	1.2404	-.010	-.771	.61370	.001	1
S4	2.5000	2.4686	-.031	-1.26	1.2211	.004	1
S5	5.0000	5.0273	.027	.547	2.4866	.015	1
S2	.40000	.41283	.013	3.21	.20444	.001	1

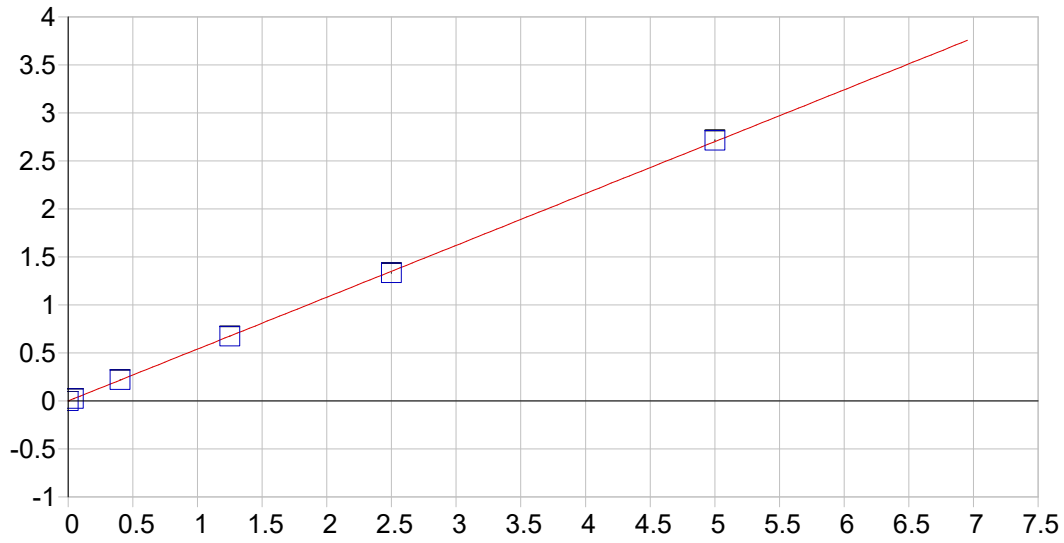


Mg 279.079 {121}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000027	Re-Slope:	1.000000
A1 (Gain):	0.012270	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999927	Status:	OK.
Std Error of Est:	0.000078		
Predicted MDL:	0.019435		
Predicted MQL:	0.064784		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00006	-.000	.000	.00003	.000	1
S2	4.0000	4.0335	.033	.836	.04952	.000	1
S3	12.500	12.167	-.333	-2.67	.14931	.001	1
S4	25.000	25.097	.097	.390	.30798	.001	1
S5	50.000	50.116	.116	.232	.61496	.006	1
S1	2.0000	2.0865	.086	4.32	.02563	.000	1

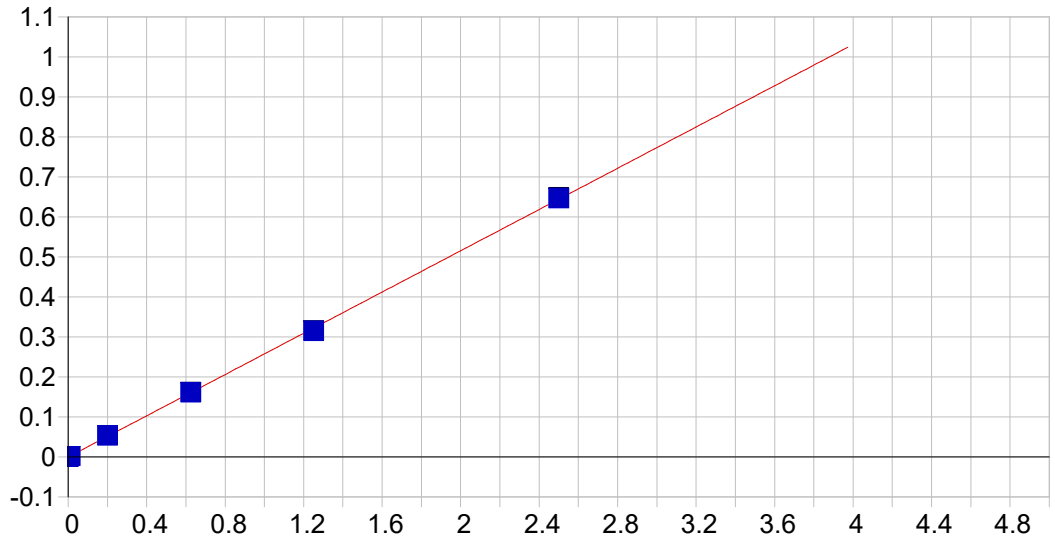


Ni 231.604 {446}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000028	Re-Slope:	1.000000
A1 (Gain):	0.540110	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999958	Status:	OK.
Std Error of Est:	0.000116		
Predicted MDL:	0.000347		
Predicted MQL:	0.001157		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00003	.000	1
S1	.04000	.04121	.001	3.03	.02223	.000	1
S3	1.2500	1.2465	-.004	-.282	.67320	.003	1
S4	2.5000	2.4678	-.032	-1.29	1.3328	.004	1
S5	5.0000	5.0266	.027	.531	2.7149	.006	1
S2	.40000	.40799	.008	2.00	.22033	.000	1

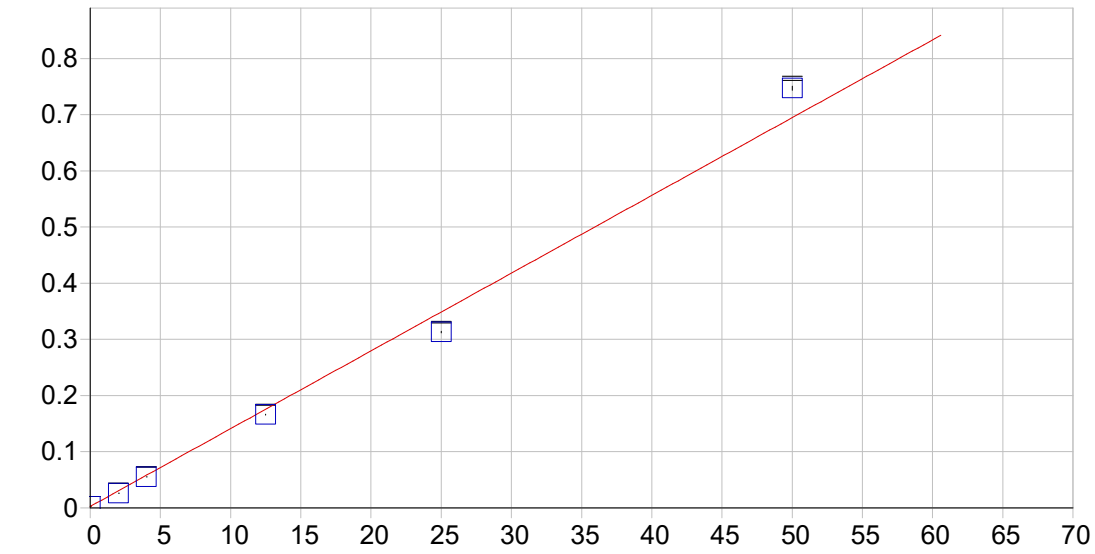


Ag 328.068 {103}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000349	Re-Slope:	1.000000
A1 (Gain):	0.257843	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999876	Status:	OK.
Std Error of Est:	0.000033		
Predicted MDL:	0.000382		
Predicted MQL:	0.001273		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00035	.000	1
S1	.01000	.01052	.001	5.20	.00234	.000	1
S3	.62500	.62655	.002	.248	.16049	.000	1
S4	1.2500	1.2253	-.025	-1.98	.31415	.001	1
S5	2.5000	2.5122	.012	.488	.64453	.002	1
S2	.20000	.21044	.010	5.22	.05368	.000	1

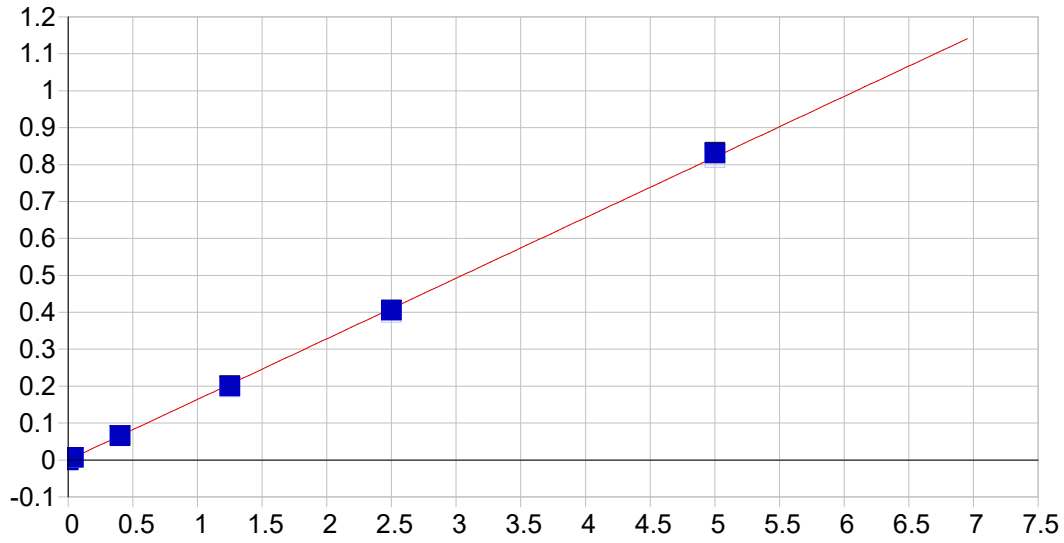


Na 589.592 { 57}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002696	Re-Slope:	1.000000
A1 (Gain):	0.013844	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.996535	Status:	OK.
Std Error of Est:	0.000611		
Predicted MDL:	0.012651		
Predicted MQL:	0.042169		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00058	.001	.000	.00270	.000	1
S2	4.0000	3.7894	-.211	-5.27	.05516	.000	1
S3	12.500	11.816	-.684	-5.47	.16628	.001	1
S4	25.000	22.423	-2.58	-10.3	.31312	.001	1
S5	50.000	53.787	3.79	7.57	.74733	.004	1
S1	2.0000	1.6849	-.315	-15.8	.02602	.000	1

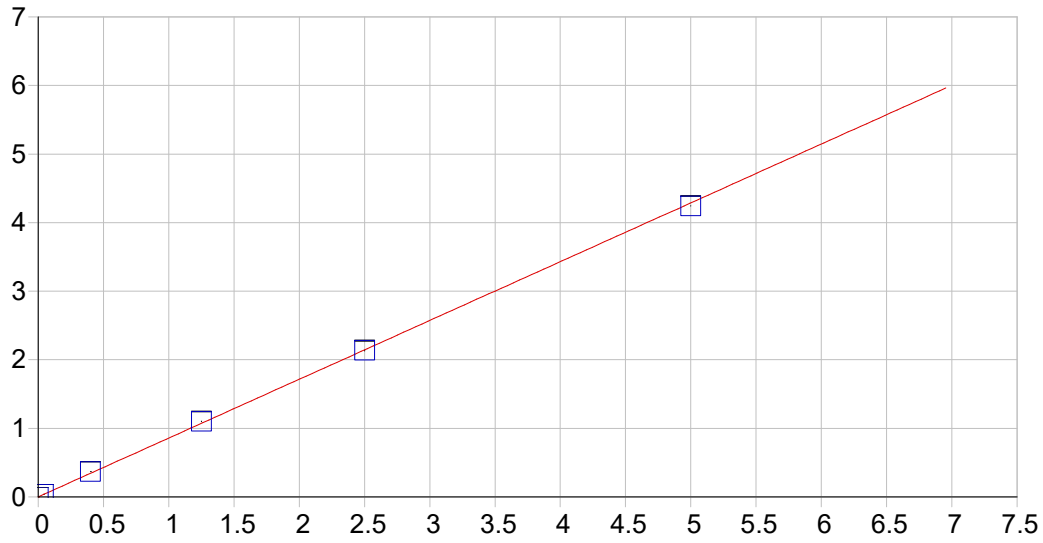


V 292.402 {115}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000048	Re-Slope:	1.000000
A1 (Gain):	0.164084	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999893	Status:	OK.
Std Error of Est:	0.000056		
Predicted MDL:	0.001690		
Predicted MQL:	0.005632		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00005	.000	1
S1	.04000	.03910	-.001	-2.25	.00622	.000	1
S3	1.2500	1.2192	-.031	-2.46	.19711	.000	1
S4	2.5000	2.4693	-.031	-1.23	.39924	.001	1
S5	5.0000	5.0614	.061	1.23	.81858	.003	1
S2	.40000	.40090	.001	.224	.06487	.000	1

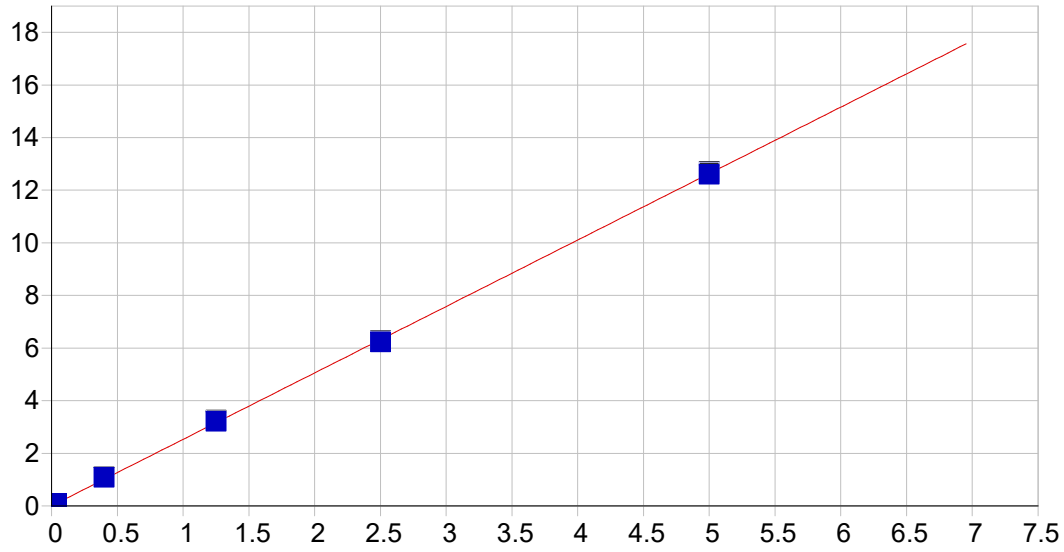


Zn 206.200 {464}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000774	Re-Slope:	1.000000
A1 (Gain):	0.857438	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999811	Status:	OK.
Std Error of Est:	0.000391		
Predicted MDL:	0.000241		
Predicted MQL:	0.000802		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00077	.000	1
S1	.04000	.04282	.003	7.04	.03749	.000	1
S3	1.2500	1.2820	.032	2.56	1.1000	.005	1
S4	2.5000	2.4903	-.010	-.388	2.1360	.007	1
S5	5.0000	4.9476	-.052	-1.05	4.2430	.002	1
S2	.40000	.42728	.027	6.82	.36714	.001	1

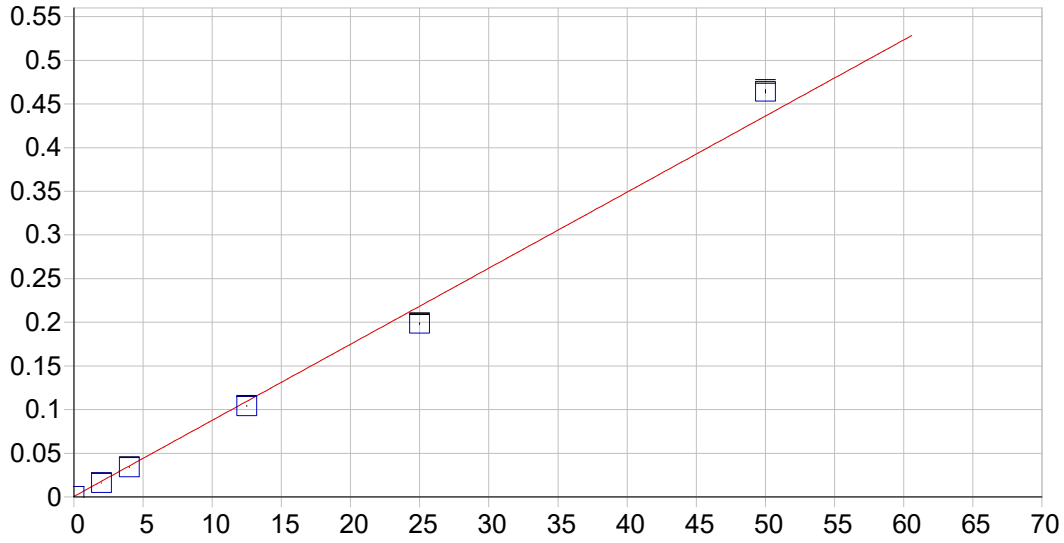


Zn 213.856 {158}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003703	Re-Slope:	1.000000
A1 (Gain):	2.525880	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999836	Status:	OK.
Std Error of Est:	0.001081		
Predicted MDL:	0.000291		
Predicted MQL:	0.000971		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00369	.001	1
S1	.04000	.04208	.002	5.20	.11070	.001	1
S3	1.2500	1.2706	.021	1.65	3.2350	.024	1
S4	2.5000	2.4622	-.038	-1.51	6.2668	.008	1
S5	5.0000	4.9869	-.013	-.263	12.688	.028	1
S2	.40000	.42832	.028	7.08	1.0926	.004	1

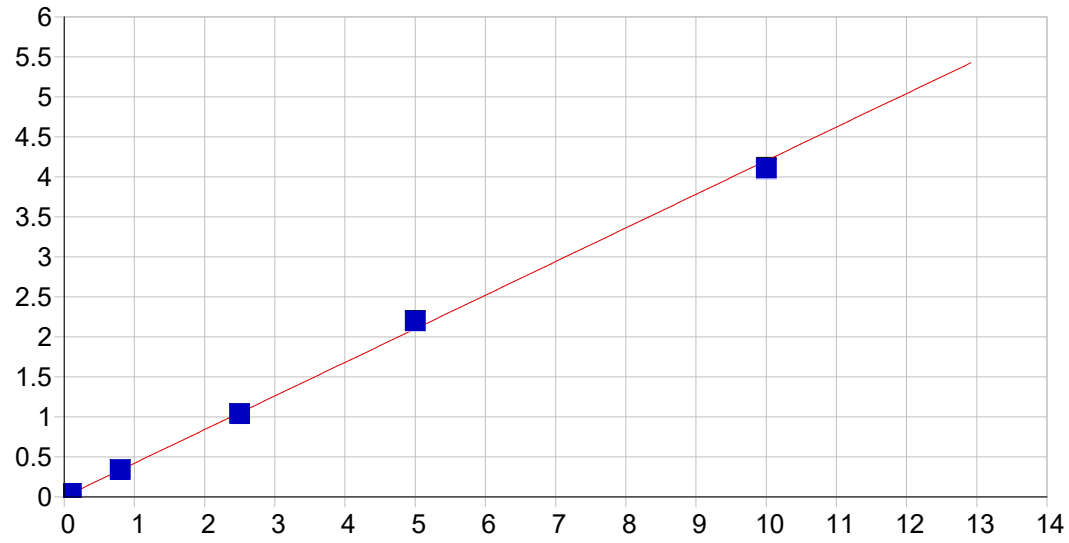


K 766.490 { 44}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000554	Re-Slope:	1.000000
A1 (Gain):	0.008712	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.997456	Status:	OK.
Std Error of Est:	0.000329		
Predicted MDL:	0.025478		
Predicted MQL:	0.084928		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00045	.000	.000	.00056	.000	1
S2	4.0000	3.8623	-.138	-3.44	.03420	.000	1
S3	12.500	11.898	-.602	-4.82	.10421	.000	1
S4	25.000	22.728	-2.27	-9.09	.19857	.001	1
S5	50.000	53.243	3.24	6.49	.46441	.002	1
S1	2.0000	1.7688	-.231	-11.6	.01596	.000	1

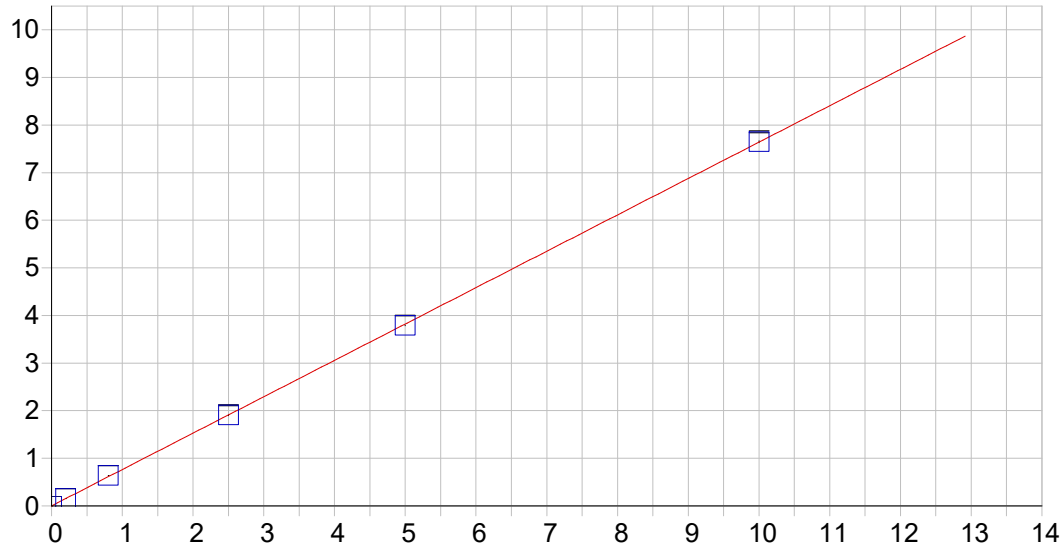


B 249.678 {135}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000671	Re-Slope:	1.000000
A1 (Gain):	0.420140	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999536	Status:	OK.
Std Error of Est:	0.000670		
Predicted MDL:	0.000755		
Predicted MQL:	0.002518		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00067	.000	1
S1	.10000	.10587	.006	5.87	.04490	.000	1
S3	2.5000	2.4733	-.027	-1.07	1.0360	.002	1
S4	5.0000	5.2350	.235	4.70	2.1925	.005	1
S5	10.000	9.7739	-.226	-2.26	4.0920	.013	1
S2	.80000	.81192	.012	1.49	.34058	.001	1

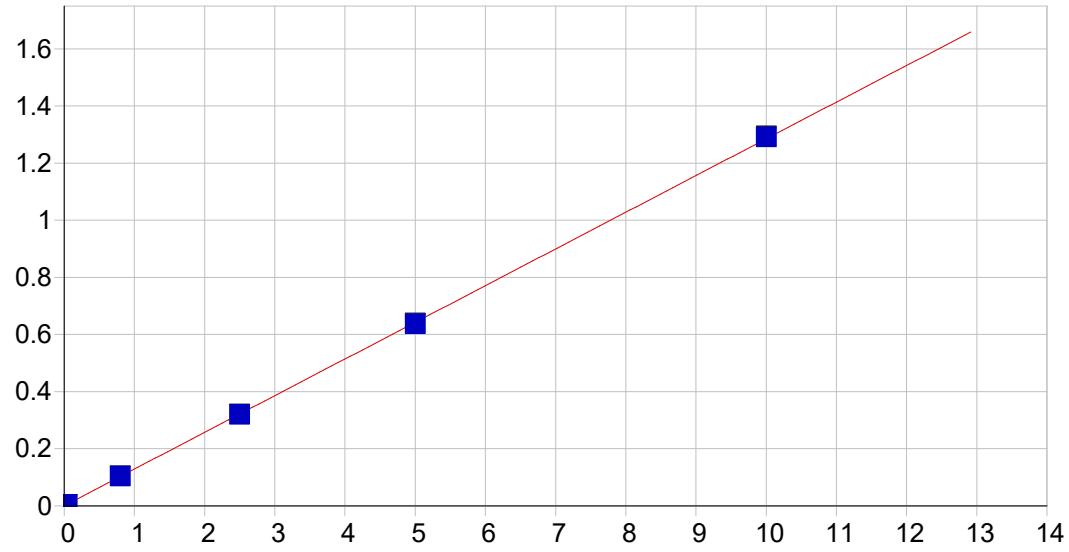


Mo 202.030 {467}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000385	Re-Slope:	1.000000
A1 (Gain):	0.764152	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999957	Status:	OK.
Std Error of Est:	0.000528		
Predicted MDL:	0.000239		
Predicted MQL:	0.000795		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00038	.000	1
S1	.20000	.20150	.002	.752	.15436	.000	1
S3	2.5000	2.4934	-.007	-.264	1.9057	.009	1
S4	5.0000	4.9625	-.037	-.750	3.7925	.008	1
S5	10.000	10.011	.011	.107	7.6501	.019	1
S2	.80000	.83188	.032	3.99	.63607	.001	1

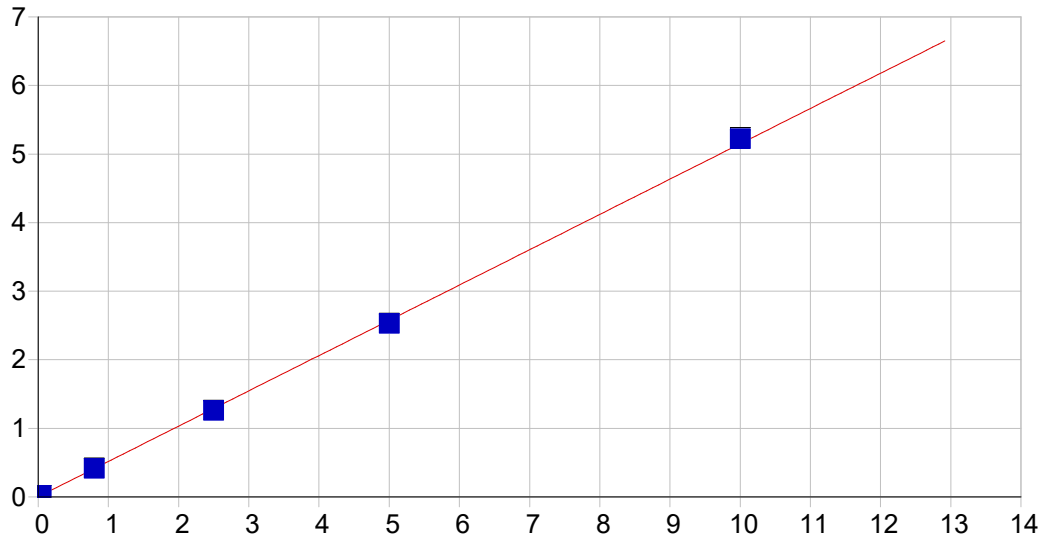


Sn 189.989 {478}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000570	Re-Slope:	1.000000
A1 (Gain):	0.128446	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999979	Status:	OK.
Std Error of Est:	0.000028		
Predicted MDL:	0.000878		
Predicted MQL:	0.002928		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00057	.000	1
S1	.04000	.03996	-.000	-.091	.00570	.000	1
S3	2.5000	2.4867	-.013	-.533	.31964	.001	1
S4	5.0000	4.9562	-.044	-.877	.63651	.003	1
S5	10.000	10.050	.050	.499	1.2901	.004	1
S2	.80000	.80733	.007	.917	.10416	.000	1

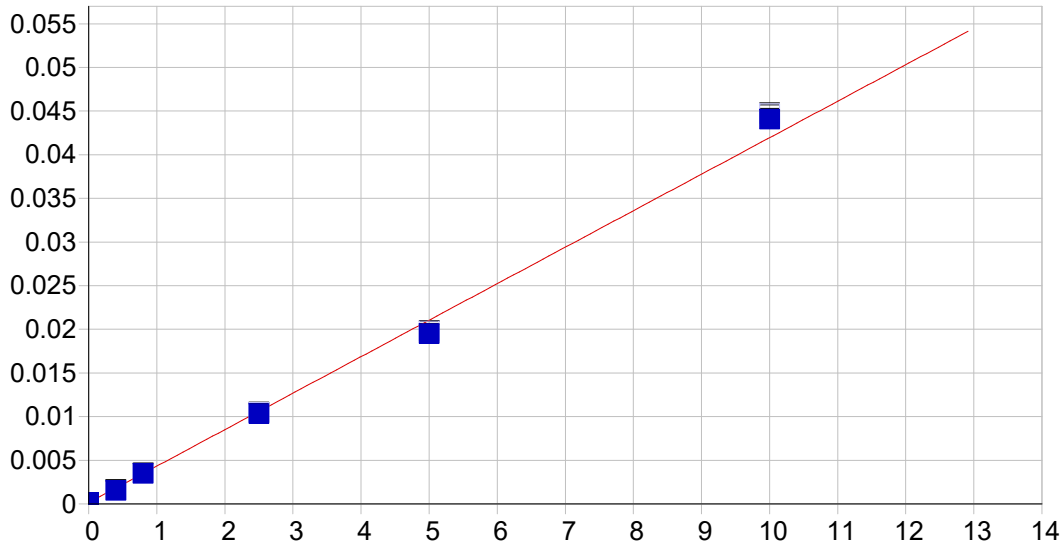


Ti 336.121 {100}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002154	Re-Slope:	1.000000
A1 (Gain):	0.514688	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999856	Status:	OK.
Std Error of Est:	0.000290		
Predicted MDL:	0.000737		
Predicted MQL:	0.002458		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00215	.000	1
S1	.04000	.03898	-.001	-2.56	.02220	.000	1
S3	2.5000	2.4428	-.057	-2.29	1.2590	.003	1
S4	5.0000	4.9059	-.094	-1.88	2.5262	.005	1
S5	10.000	10.146	.146	1.46	5.2221	.018	1
S2	.80000	.80678	.007	.847	.41724	.001	1

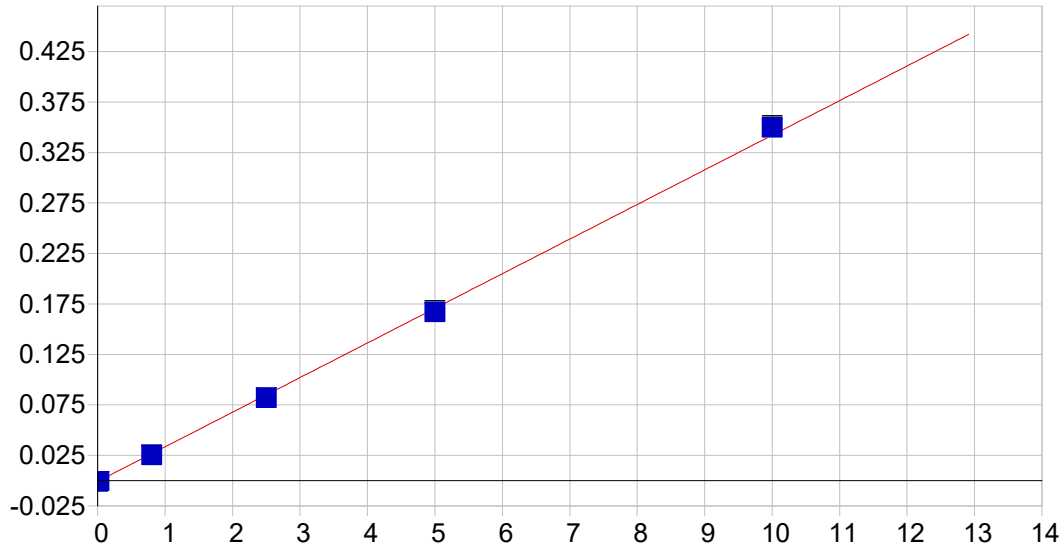


Si 288.158 {117}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000146	Re-Slope:	1.000000
A1 (Gain):	0.004180	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998300	Status:	OK.
Std Error of Est:	0.000026		
Predicted MDL:	0.010074		
Predicted MQL:	0.033580		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00009	.000	.000	.00015	.000	1
S1	.40000	.33362	-.066	-16.6	.00154	.000	1
S3	2.5000	2.4381	-.062	-2.47	.01050	.000	1
S4	5.0000	4.6280	-.372	-7.44	.01981	.000	1
S5	10.000	10.503	.503	5.03	.04468	.000	1
S2	.80000	.79612	-.004	-.484	.00352	.000	1

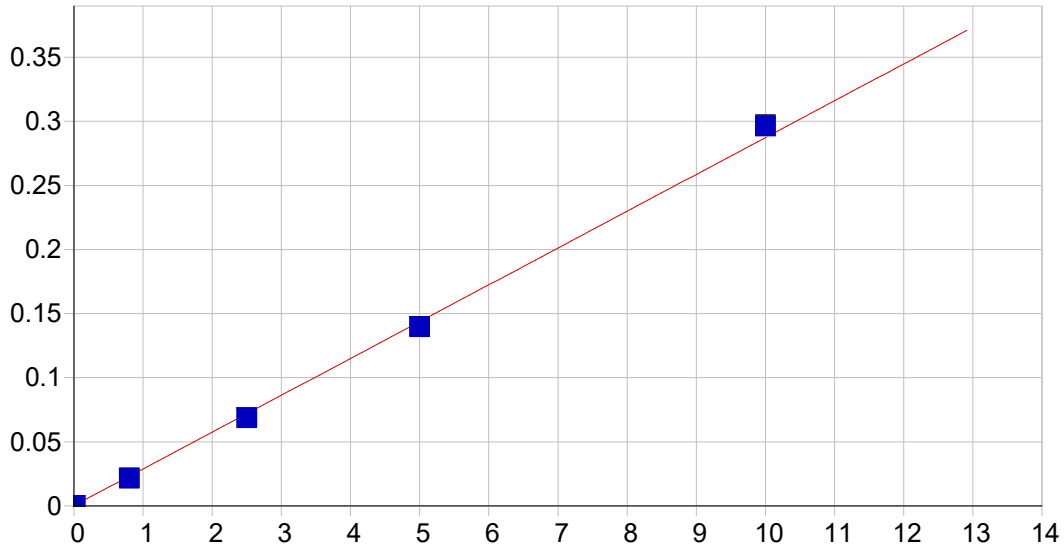


P 177.495 {490}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000787	Re-Slope:	1.000000
A1 (Gain):	0.034286	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999672	Status:	OK.
Std Error of Est:	0.000021		
Predicted MDL:	0.002749		
Predicted MQL:	0.009163		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00079	.000	1
S1	.02000	.01712	-.003	-14.4	-.00020	.000	1
S3	2.5000	2.4213	-.079	-3.15	.08222	.000	1
S4	5.0000	4.8989	-.101	-2.02	.16715	.001	1
S5	10.000	10.224	.224	2.24	.34968	.002	1
S2	.80000	.75917	-.041	-5.10	.02524	.000	1

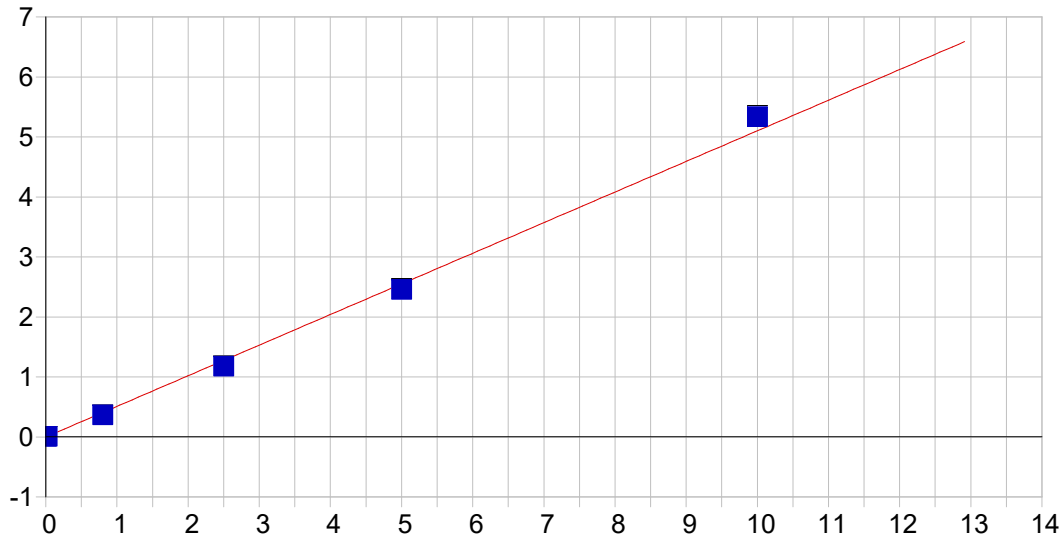


S 182.034 {485}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000175	Re-Slope:	1.000000
A1 (Gain):	0.028720	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999369	Status:	OK.
Std Error of Est:	0.000024		
Predicted MDL:	0.003666		
Predicted MQL:	0.012219		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00017	.000	1
S1	.02000	.01925	-.001	-3.73	.00070	.000	1
S3	2.5000	2.3822	-.118	-4.71	.06840	.000	1
S4	5.0000	4.8621	-.138	-2.76	.13944	.000	1
S5	10.000	10.312	.312	3.12	.29559	.001	1
S2	.80000	.74428	-.056	-6.96	.02149	.000	1

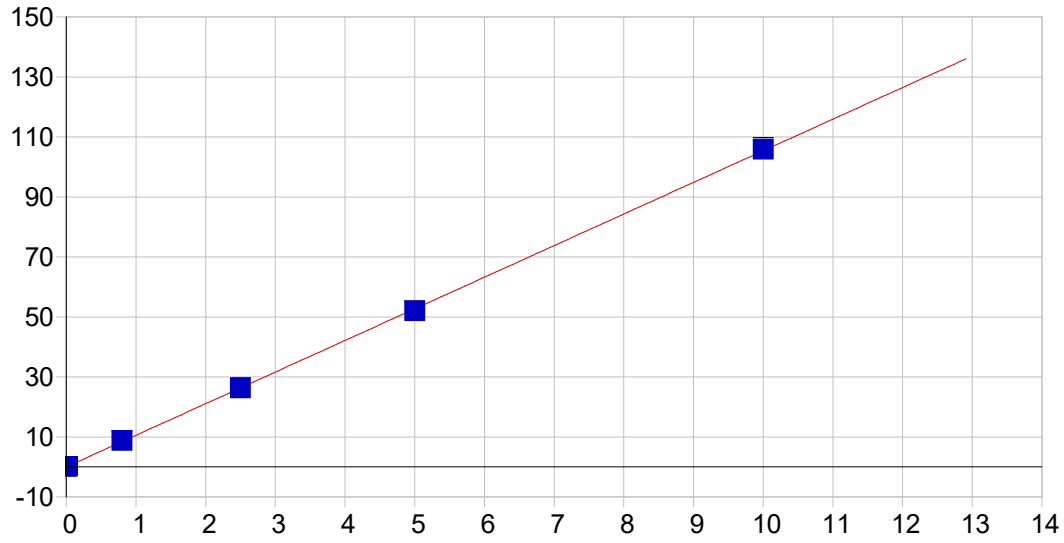


Li 670.784 { 50}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001267	Re-Slope:	1.000000
A1 (Gain):	0.510286	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998595	Status:	OK.
Std Error of Est:	0.000635		
Predicted MDL:	0.002085		
Predicted MQL:	0.006949		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00126	.000	1
S5	10.000	10.460	.460	4.60	5.3388	.017	1
S4	5.0000	4.8167	-.183	-3.67	2.4579	.013	1
S3	2.5000	2.3113	-.189	-7.55	1.1788	.006	1
S1	.02000	.01654	-.003	-17.3	.00734	.000	1
S2	.80000	.71557	-.084	-10.6	.36408	.000	1

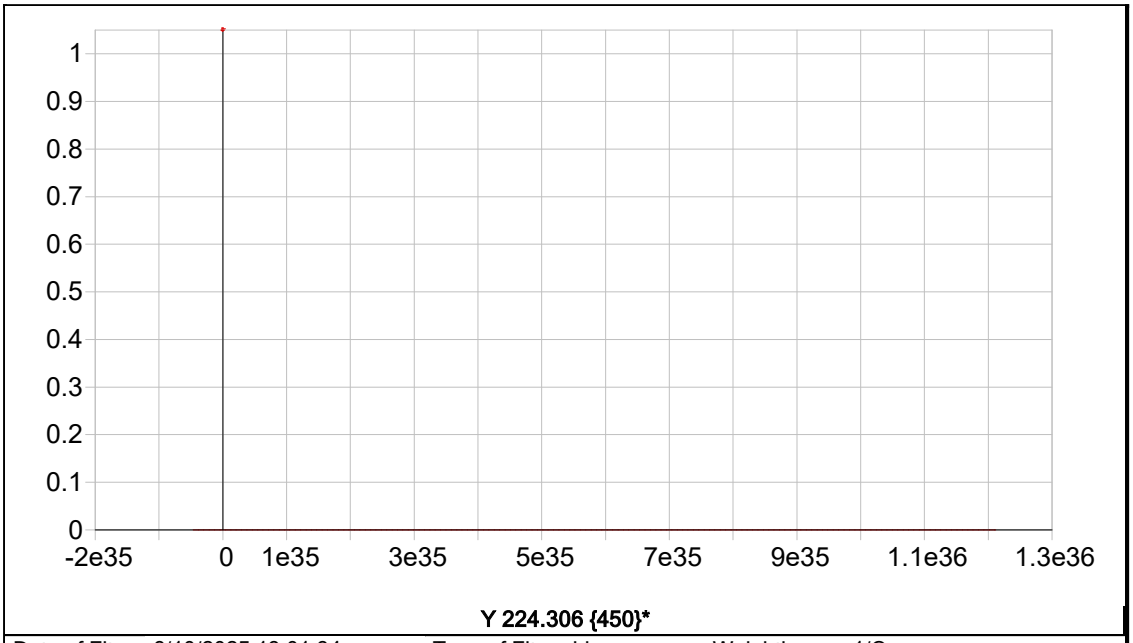


Sr 407.771 { 83}

Date of Fit:	6/10/2025 14:26:39	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000072	Re-Slope:	1.000000
A1 (Gain):	10.537903	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999929	Status:	OK.
Std Error of Est:	0.002948		
Predicted MDL:	0.000060		
Predicted MQL:	0.000199		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00009	.000	1
S1	.02000	.02116	.001	5.82	.22396	.001	1
S3	2.5000	2.4936	-.006	-.257	26.302	.208	1
S4	5.0000	4.9276	-.072	-1.45	51.977	.198	1
S5	10.000	10.046	.046	.459	105.96	.480	1
S2	.80000	.83185	.032	3.98	8.7739	.006	1

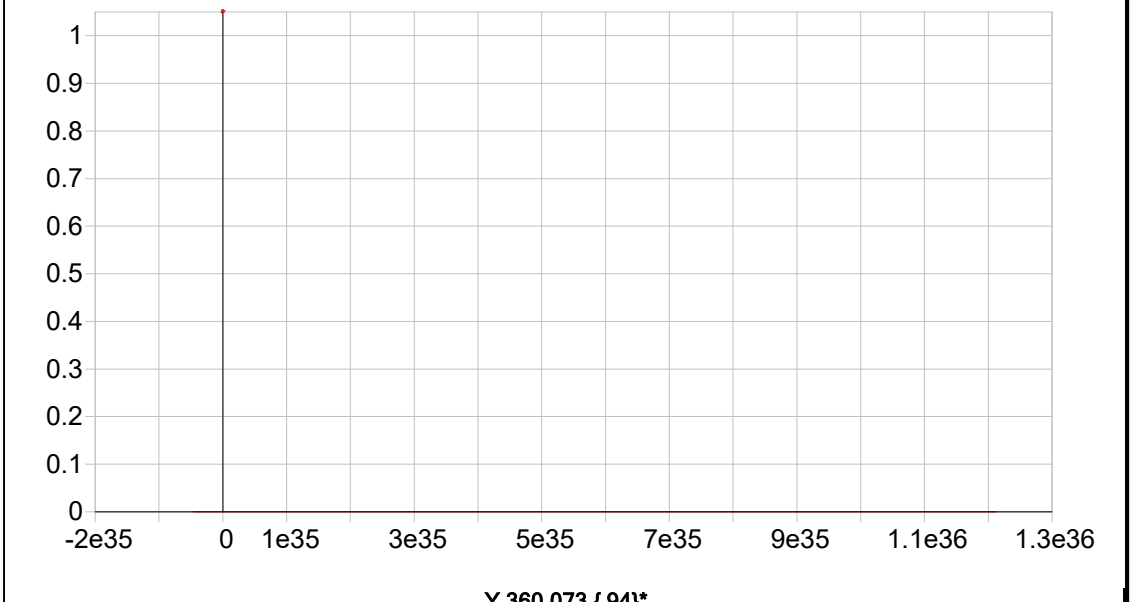


Y 224.306 {450}*

Date of Fit:	6/10/2025 13:01:34	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



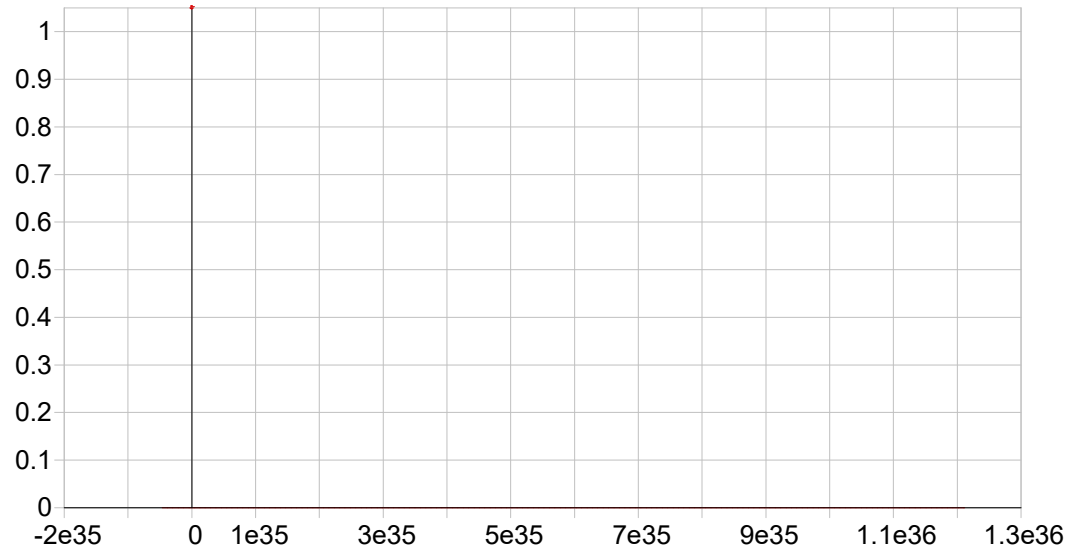
Y 360.073 { 94}*

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					

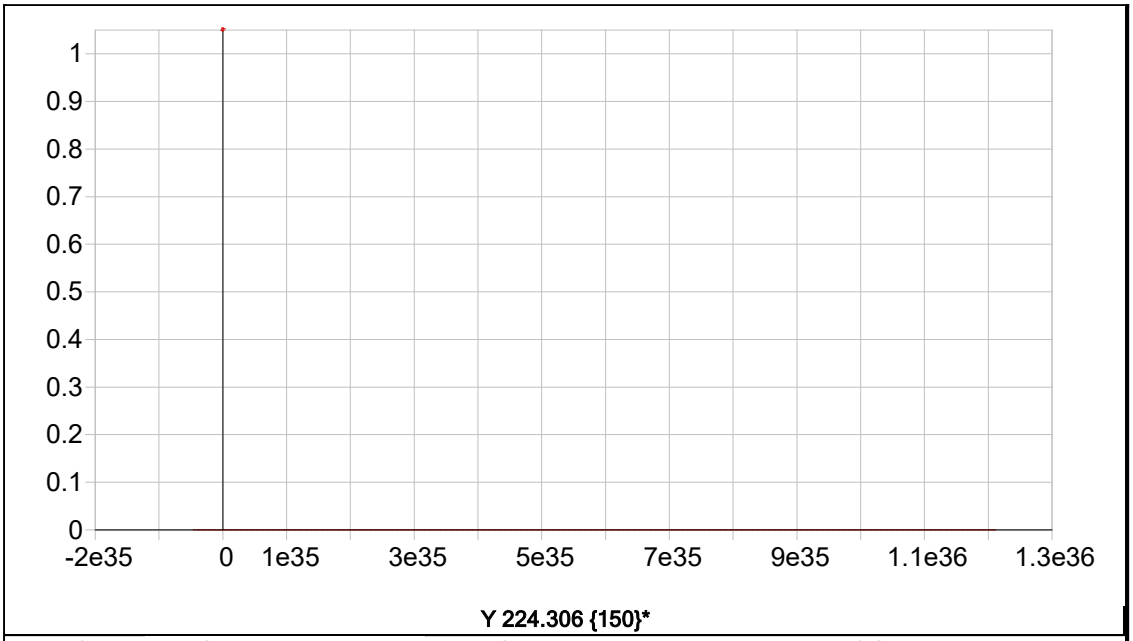
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



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

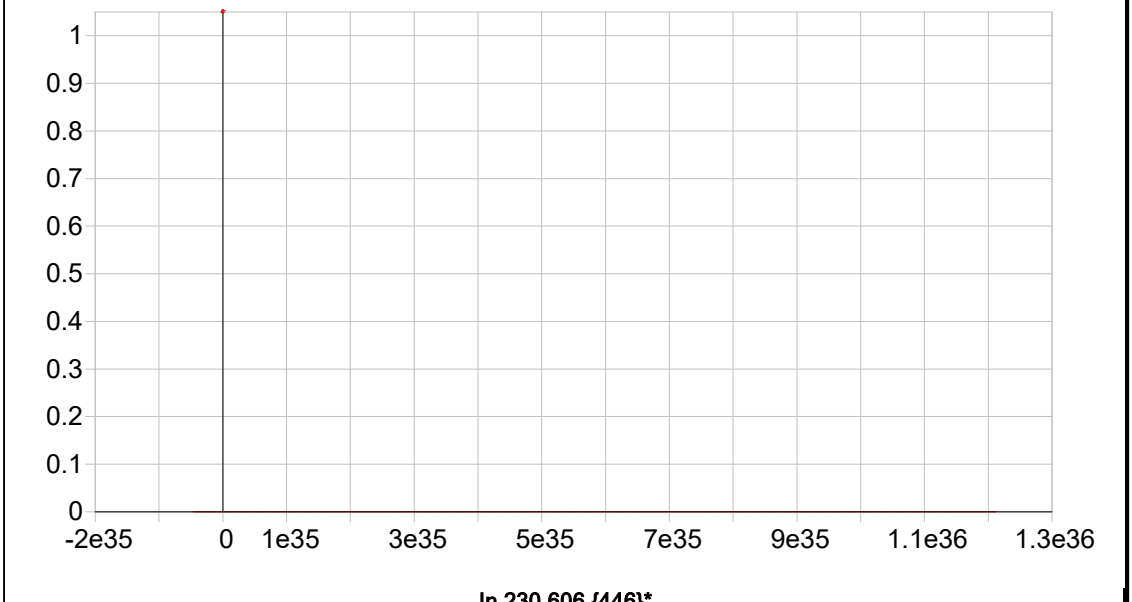


Y 224.306 {150}*

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:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: S0 Acquired: 6/10/2025 14:01:02 Type: Cal
Method: 6010-200.7 NEW(v2) 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	**-.00019**	**-.00053**	**-.00011**	**.00051**	**-.00005**	**.00050**	**.01566**	**-.00068**
Stddev	.00006	.00005	.00019	.00014	.00019	.00049	.00212	.00041
%RSD	31.360	9.8112	172.71	26.569	422.21	97.644	13.561	61.023
#1	-.00018	-.00057	.00008	.00064	-.00003	.00094	.01326	-.00105
#2	-.00026	-.00054	-.00029	.00053	.00014	.00060	.01730	-.00074
#3	-.00014	-.00047	-.00012	.00037	-.00025	-.00003	.01641	-.00024

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	**.00004**	**.00168**	**.00017**	**-.00006**	**-.00073**	**.00005**	**.00027**	**.00003**
Stddev	.00017	.00021	.00002	.00007	.00012	.00001	.00015	.00023
%RSD	430.67	12.567	14.320	120.51	15.988	26.260	56.527	889.58
#1	-.00015	.00166	.00019	-.00011	-.00062	.00004	.00034	.00021
#2	.00011	.00148	.00017	-.00009	-.00072	.00006	.00038	-.00023
#3	.00015	.00190	.00014	.00002	-.00085	.00003	.00010	.00010

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	**-.00003**	**-.00035**	**.00270**	**.00005**	**.00369**	**.00056**	**.00067**	**.00038**
Stddev	.00012	.00002	.00010	.00013	.00056	.00006	.00015	.00010
%RSD	401.07	7.1096	3.6729	279.58	15.039	10.787	23.165	26.227
#1	.00008	-.00034	.00260	.00003	.00432	.00050	.00057	.00040
#2	-.00001	-.00033	.00280	.00019	.00329	.00062	.00059	.00047
#3	-.00015	-.00038	.00272	-.00008	.00346	.00056	.00085	.00027

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	**.00057**	**.00215**	**.00015**	**-.00079**	**.00017**	**-.00126**	**-.00009**
Stddev	.00006	.00015	.00003	.00002	.00003	.00046	.00017
%RSD	10.221	6.7838	20.240	2.8131	18.638	36.462	184.04
#1	.00051	.00199	.00013	-.00079	.00018	-.00140	-.00025
#2	.00058	.00220	.00013	-.00081	.00014	-.00075	-.00011
#3	.00062	.00227	.00018	-.00076	.00020	-.00164	.00008

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: S0 Acquired: 6/10/2025 14:01:02 Type: Cal
Method: 6010-200.7 NEW(v2) 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	3320.6	76049.	11474.	2489.1	4686.1
Stddev	16.6	194.	24.	7.8	22.3
%RSD	.50082	.25556	.20732	.31444	.47650
#1	3338.6	75865.	11492.	2485.0	4711.8
#2	3317.4	76028.	11482.	2484.2	4675.0
#3	3305.8	76252.	11447.	2498.2	4671.4

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: S1 Acquired: 6/10/2025 14:05:28 Type: Cal
Method: 6010-200.7 NEW(v2) 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	**.00104**	**.00316**	**.00200**	**.00154**	**.00596**	**.01602**	**.32978**	**.02439**
Stddev	.00009	.00011	.00018	.00016	.00009	.00057	.00361	.00040
%RSD	8.3323	3.5548	8.8282	10.062	1.5875	3.5385	1.0941	1.6399
#1	.00100	.00318	.00208	.00168	.00600	.01626	.33293	.02406
#2	.00115	.00304	.00212	.00137	.00585	.01537	.32584	.02427
#3	.00099	.00326	.00179	.00158	.00603	.01643	.33056	.02483

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	**.01475**	**.11005**	**.00173**	**.02299**	**.01505**	**.00058**	**.01063**	**.02563**
Stddev	.00018	.00046	.00000	.00022	.00024	.00003	.00010	.00001
%RSD	1.2062	.41355	.28134	.95167	1.6064	4.3736	.97781	.05472
#1	.01485	.11042	.00173	.02295	.01513	.00059	.01073	.02561
#2	.01455	.10954	.00172	.02323	.01477	.00056	.01063	.02563
#3	.01486	.11019	.00173	.02280	.01524	.00061	.01052	.02564

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	**.02223**	**.00234**	**.02602**	**.00622**	**.11070**	**.01596**	**.04490**	**.15436**
Stddev	.00024	.00006	.00010	.00006	.00097	.00019	.00034	.00024
%RSD	1.0846	2.7652	.36705	.97412	.87247	1.1760	.75864	.15831
#1	.02219	.00230	.02611	.00629	.11034	.01601	.04511	.15422
#2	.02249	.00232	.02604	.00619	.10997	.01613	.04451	.15422
#3	.02201	.00242	.02592	.00617	.11180	.01576	.04509	.15465

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	**.00570**	**.02220**	**.00154**	**-.00020**	**.00070**	**.00734**	**.22396**
Stddev	.00006	.00005	.00007	.00004	.00008	.00046	.00086
%RSD	1.0625	.22731	4.3588	19.121	11.037	6.2565	.38235
#1	.00565	.02222	.00149	-.00016	.00077	.00757	.22490
#2	.00568	.02223	.00162	-.00023	.00071	.00681	.22324
#3	.00577	.02214	.00153	-.00021	.00062	.00764	.22373

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: S1 Acquired: 6/10/2025 14:05:28 Type: Cal
Method: 6010-200.7 NEW(v2) 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	3359.3	80016.	11962.	2513.3	4746.9
Stddev	4.4	127.	54.	5.6	3.7
%RSD	.12977	.15924	.45426	.22169	.07887
#1	3363.3	80147.	11929.	2517.7	4751.2
#2	3359.9	80008.	12025.	2515.2	4745.2
#3	3354.6	79893.	11933.	2507.1	4744.2

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: S2 Acquired: 6/10/2025 14:09:52 Type: Cal
Method: 6010-200.7 NEW(v2) 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	**.04464**	**.07641**	**.13143**	**.04192**	**.08965**	**.21356**	**5.1755**	**.15962**
Stddev	.00028	.00063	.00019	.00005	.00036	.00034	.0063	.00071
%RSD	.62007	.82261	.14608	.11479	.40234	.16022	.12155	.44217
#1	.04434	.07712	.13160	.04192	.08924	.21393	5.1696	.15938
#2	.04487	.07615	.13122	.04196	.08994	.21325	5.1746	.16042
#3	.04473	.07595	.13146	.04187	.08976	.21350	5.1821	.15907

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	**.96820**	**.21906**	**.02599**	**.30688**	**.14792**	**.00468**	**.20444**	**.04952**
Stddev	.00098	.00059	.00007	.00047	.00054	.00001	.00062	.00004
%RSD	.10092	.26867	.25028	.15447	.36574	.30245	.30394	.08820
#1	.96797	.21942	.02594	.30653	.14735	.00469	.20408	.04948
#2	.96736	.21838	.02597	.30669	.14842	.00466	.20408	.04951
#3	.96927	.21938	.02606	.30742	.14800	.00468	.20516	.04957

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	**.22033**	**.05368**	**.05516**	**.06487**	**1.0926**	**.03420**	**.34058**	**.63607**
Stddev	.00030	.00007	.00015	.00040	.0044	.00036	.00092	.00065
%RSD	.13391	.13619	.27661	.61611	.40366	1.0537	.26914	.10209
#1	.22013	.05376	.05506	.06508	1.0921	.03422	.34011	.63532
#2	.22019	.05368	.05533	.06441	1.0972	.03455	.33999	.63651
#3	.22067	.05361	.05508	.06513	1.0884	.03383	.34163	.63638

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	**.10416**	**.41724**	**.00352**	**.02524**	**.02149**	**.36408**	**8.7739**
Stddev	.00039	.00116	.00003	.00011	.00014	.00043	.0060
%RSD	.37763	.27790	.71736	.41922	.64975	.11801	.06890
#1	.10384	.41708	.00355	.02535	.02150	.36361	8.7691
#2	.10405	.41617	.00350	.02522	.02135	.36419	8.7720
#3	.10460	.41847	.00353	.02514	.02162	.36445	8.7807

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: S2 Acquired: 6/10/2025 14:09:52 Type: Cal
Method: 6010-200.7 NEW(v2) 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	**3374.2**	**75519.**	**12188.**	**2489.9**	**4677.4**
Stddev	11.7	126.	25.	18.6	10.8
%RSD	.34608	.16674	.20248	.74881	.23157
#1	3385.5	75527.	12187.	2485.9	4688.9
#2	3362.2	75389.	12214.	2473.6	4667.4
#3	3374.7	75640.	12165.	2510.2	4675.9

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: S3 Acquired: 6/10/2025 14:14:02 Type: Cal
Method: 6010-200.7 NEW(v2) 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	**.13694**	**.23450**	**.40194**	**.12831**	**.27327**	**.64386**	**15.627**	**.48032**
Stddev	.00085	.00080	.00158	.00045	.00124	.00230	.016	.00051
%RSD	.62178	.34218	.39388	.34698	.45322	.35755	.10341	.10693
#1	.13645	.23380	.40156	.12800	.27245	.64629	15.633	.47986
#2	.13646	.23537	.40058	.12810	.27267	.64172	15.609	.48087
#3	.13793	.23432	.40368	.12882	.27469	.64357	15.640	.48022

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.9816**	**.65709**	**.07700**	**.93980**	**.44363**	**.01401**	**.61370**	**.14931**
Stddev	.0100	.00096	.00040	.00357	.00242	.00017	.00127	.00055
%RSD	.33395	.14621	.51445	.37938	.54487	1.2402	.20745	.37159
#1	2.9797	.65766	.07702	.93832	.44141	.01416	.61501	.14881
#2	2.9727	.65764	.07739	.93721	.44328	.01404	.61364	.14991
#3	2.9923	.65598	.07659	.94387	.44620	.01382	.61247	.14923

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	**.67320**	**.16049**	**.16628**	**.19711**	**3.2350**	**.10421**	**1.0360**	**1.9057**
Stddev	.00281	.00045	.00085	.00034	.0238	.00045	.0022	.0090
%RSD	.41734	.27759	.51100	.16995	.73696	.42938	.21573	.47191
#1	.67233	.16049	.16710	.19676	3.2503	.10462	1.0349	1.8993
#2	.67094	.16093	.16633	.19715	3.2471	.10428	1.0386	1.9019
#3	.67635	.16004	.16540	.19743	3.2075	.10373	1.0346	1.9160

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	**.31964**	**1.2590**	**.01050**	**.08222**	**.06840**	**1.1788**	**26.302**
Stddev	.00104	.0031	.00001	.00018	.00024	.0064	.208
%RSD	.32575	.24459	.09043	.21508	.35615	.54108	.78961
#1	.31924	1.2623	.01048	.08202	.06824	1.1861	26.083
#2	.31886	1.2583	.01050	.08227	.06829	1.1741	26.496
#3	.32082	1.2563	.01050	.08236	.06868	1.1763	26.327

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: S3 Acquired: 6/10/2025 14:14:02 Type: Cal
Method: 6010-200.7 NEW(v2) 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	**3293.5**	**74498.**	**12022.**	**2438.2**	**4433.5**
Stddev	15.2	318.	19.	25.5	14.8
%RSD	.46166	.42648	.15610	1.0469	.33324
#1	3304.8	74253.	12001.	2414.6	4441.8
#2	3299.4	74385.	12037.	2434.5	4442.4
#3	3276.2	74857.	12029.	2465.3	4416.5

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: S4 Acquired: 6/10/2025 14:18:17 Type: Cal
Method: 6010-200.7 NEW(v2) 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	.27541	.46741	.79387	.25617	.55128	1.3138	30.967	1.0036
Stddev	.00098	.00534	.00308	.00068	.00136	.0037	.176	.0036
%RSD	.35470	1.1422	.38762	.26633	.24748	.27764	.56925	.35825
#1	.27546	.46780	.79723	.25604	.55046	1.3109	30.928	1.0074
#2	.27441	.46189	.79120	.25556	.55053	1.3126	30.813	1.0003
#3	.27636	.47255	.79317	.25691	.55286	1.3179	31.159	1.0030

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	5.9290	1.3185	.15009	1.8738	.87512	.02588	1.2211	.30798
Stddev	.0167	.0012	.00027	.0049	.00221	.00001	.0037	.00088
%RSD	.28086	.09176	.17944	.25912	.25238	.03725	.30100	.28627
#1	5.9471	1.3199	.15040	1.8788	.87280	.02589	1.2249	.30873
#2	5.9142	1.3180	.14992	1.8691	.87536	.02587	1.2176	.30820
#3	5.9257	1.3176	.14995	1.8736	.87720	.02589	1.2209	.30701

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	1.3328	.31415	.31312	.39924	6.2668	.19857	2.1925	3.7925
Stddev	.0039	.00056	.00127	.00116	.0084	.00099	.0054	.0083
%RSD	.29225	.17668	.40643	.29073	.13377	.49753	.24689	.21928
#1	1.3370	.31384	.31274	.40005	6.2627	.19790	2.1981	3.7885
#2	1.3293	.31479	.31208	.39791	6.2764	.19810	2.1873	3.7870
#3	1.3321	.31382	.31454	.39976	6.2612	.19970	2.1922	3.8021

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	.63651	2.5262	.01981	.16715	.13944	2.4579	51.977
Stddev	.00271	.0050	.00005	.00106	.00028	.0133	.198
%RSD	.42565	.19744	.27264	.63633	.19851	.54271	.38175
#1	.63885	2.5261	.01981	.16804	.13945	2.4624	51.748
#2	.63354	2.5213	.01986	.16597	.13916	2.4429	52.103
#3	.63714	2.5313	.01975	.16744	.13971	2.4684	52.079

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: S4 Acquired: 6/10/2025 14:18:17 Type: Cal
Method: 6010-200.7 NEW(v2) 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	**3212.9**	**75009.**	**11210.**	**2413.4**	**4274.7**
Stddev	9.9	91.	17.	12.3	7.0
%RSD	.30929	.12177	.15514	.51011	.16352
#1	3223.4	75114.	11192.	2427.5	4277.7
#2	3211.5	74949.	11226.	2407.1	4279.7
#3	3203.7	74964.	11212.	2405.4	4266.7

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: S5 Acquired: 6/10/2025 14:22:28 Type: Cal
Method: 6010-200.7 NEW(v2) 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	**.57085**	**.94220**	**1.6051**	**.53200**	**1.1402**	**2.7147**	**65.512**	**1.8735**
Stddev	.00143	.00828	.0057	.00214	.0030	.0037	.382	.0073
%RSD	.25054	.87930	.35723	.40225	.26299	.13533	.58313	.39185
#1	.56952	.93562	1.6007	.52966	1.1375	2.7182	65.755	1.8810
#2	.57066	.93946	1.6030	.53247	1.1398	2.7108	65.071	1.8663
#3	.57237	.95150	1.6116	.53387	1.1434	2.7152	65.709	1.8734

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	**12.077**	**2.6632**	**.29915**	**3.8354**	**1.7768**	**.05784**	**2.4866**	**.61496**
Stddev	.024	.0227	.00052	.0092	.0047	.00015	.0149	.00631
%RSD	.20210	.85266	.17229	.24116	.26312	.25674	.59807	1.0256
#1	12.065	2.6894	.29938	3.8307	1.7723	.05801	2.5037	.62225
#2	12.062	2.6499	.29856	3.8294	1.7765	.05781	2.4780	.61143
#3	12.106	2.6502	.29951	3.8461	1.7817	.05772	2.4779	.61122

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	**2.7149**	**.64453**	**.74733**	**.81858**	**12.688**	**.46441**	**4.0920**	**7.6501**
Stddev	.0064	.00171	.00365	.00320	.028	.00207	.0130	.0191
%RSD	.23486	.26540	.48890	.39042	.21885	.44538	.31727	.24953
#1	2.7136	.64256	.74312	.82218	12.661	.46215	4.1064	7.6292
#2	2.7092	.64563	.74946	.81749	12.717	.46620	4.0813	7.6544
#3	2.7218	.64541	.74943	.81608	12.685	.46488	4.0882	7.6666

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	**1.2901**	**5.2221**	**.04468**	**.34968**	**.29559**	**5.3388**	**105.96**
Stddev	.0043	.0179	.00011	.00171	.00106	.0165	.48
%RSD	.33023	.34354	.23504	.49016	.36010	.30945	.45280
#1	1.2896	5.2424	.04456	.34884	.29472	5.3208	106.04
#2	1.2862	5.2155	.04471	.34855	.29527	5.3533	105.45
#3	1.2946	5.2084	.04477	.35166	.29678	5.3424	106.40

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: S5 Acquired: 6/10/2025 14:22:28 Type: Cal
Method: 6010-200.7 NEW(v2) 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	3039.9	71400.	11763.	2259.1	3976.8
Stddev	6.2	134.	39.	11.4	11.2
%RSD	.20275	.18764	.32925	.50529	.28113
#1	3046.4	71548.	11718.	2266.5	3983.0
#2	3039.2	71288.	11784.	2245.9	3983.5
#3	3034.2	71363.	11786.	2264.8	3963.9

Sample Name: ICV01 Acquired: 6/10/2025 14:37:32 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**3.847446**	**3.742897**	**3.800360**	**3.879960**	**4.018746**	**7.519796**
Stddev	.015157	.034741	.014526	.008117	.009087	.015506
%RSD	.3939515	.9281785	.3822371	.2092060	.2261159	.2062037
#1	3.842235	3.764652	3.793404	3.880769	4.023570	7.524753
#2	3.835582	3.702831	3.790620	3.871469	4.008265	7.532217
#3	3.864521	3.761209	3.817057	3.887643	4.024405	7.502417

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.447499**	**.1978503**	**1.917935**	**18.48348**	**.7939206**	**1.935888**
Stddev	.038763	.0002846	.005709	.05346	.0024817	.005701
%RSD	.5204832	.1438531	.2976687	.2892272	.3125935	.2944995
#1	7.492118	.1976200	1.916721	18.44322	.7928632	1.934338
#2	7.422127	.1981685	1.912931	18.46308	.7921426	1.931123
#3	7.428251	.1977625	1.924154	18.54413	.7967559	1.942204

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9940204**	**3.765695**	**1.857517**	**18.67115**	**1.932694**	**.9776200**
Stddev	.0022293	.012477	.005030	.04138	.006341	.0011274
%RSD	.2242746	.3313369	.2707970	.2216520	.3280991	.1153244
#1	.9928567	3.760499	1.852356	18.63469	1.929127	.9777165
#2	.9926138	3.756656	1.857791	18.66263	1.928940	.9764474
#3	.9965908	3.779931	1.862405	18.71613	1.940015	.9786961

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**21.85752**	**1.900139**	**1.981174**	**21.77699**	F **.0032236**	F **-.000229**
Stddev	.02761	.002431	.005517	.06006	.0000779	.000197
%RSD	.1263243	.1279487	.2784563	.2757755	2.415485	86.18112
#1	21.88080	1.900521	1.979850	21.71126	.0031431	-.000049
#2	21.86476	1.897540	1.976440	21.79073	.0032986	-.000198
#3	21.82702	1.902358	1.987233	21.82898	.0032289	-.000440

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: ICV01 Acquired: 6/10/2025 14:37:32 Type: Unk
Method: 6010-200.7 NEW(v2) 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 -.000998	F -.002279	F -.033838	F .0043324	F .0103372	F .0031267
Stddev	.001124	.000337	.006329	.0022444	.0027968	.0009325
%RSD	112.6486	14.77932	18.70461	51.80522	27.05605	29.82494
#1	-.002076	-.002157	-.040227	.0018879	.0096106	.0040540
#2	-.001085	-.002659	-.033715	.0063001	.0079754	.0021890
#3	.000167	-.002019	-.027571	.0048092	.0134257	.0031372

Elem	Sr4077
Units	ppm
Avg	F -.003402
Stddev	.000064
%RSD	1.880641
#1	-.003445
#2	-.003328
#3	-.003432

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3226.182	73880.58	11937.65	2391.538	4371.314
Stddev	6.684	137.59	5.10	9.202	12.680
%RSD	.2071953	.1862318	.0427469	.3847602	.2900678
#1	3231.606	73925.66	11941.57	2392.509	4378.460
#2	3228.224	73989.98	11931.88	2400.215	4378.807
#3	3218.714	73726.11	11939.49	2381.889	4356.674

Sample Name: LLICV01 Acquired: 6/10/2025 14:41:42 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0211558**	**.0413196**	**.0128074**	**.0196840**	**.0549896**	**.1096157**	**.1006274**
Stddev	.0012015	.0011687	.0010942	.0033727	.0004966	.0036955	.0004951
%RSD	5.679278	2.828539	8.543763	17.13412	.9029947	3.371323	.4920171
#1	.0203513	.0403906	.0127153	.0179441	.0554437	.1132926	.1011606
#2	.0205792	.0409364	.0139448	.0175366	.0550657	.1096525	.1001821
#3	.0225369	.0426319	.0117622	.0235714	.0544594	.1059019	.1005396

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0062303**	**.0063097**	**2.043250**	**.0107801**	**.0305363**	**.0225551**	**.1083439**
Stddev	.0000355	.0000837	.006691	.0002468	.0000494	.0002521	.0016442
%RSD	.5693019	1.326908	.3274624	2.289189	.1618310	1.117901	1.517534
#1	.0061927	.0064060	2.050892	.0105336	.0305255	.0225926	.1100990
#2	.0062350	.0062685	2.040414	.0107795	.0304932	.0227864	.1080931
#3	.0062632	.0062545	2.038444	.0110271	.0305902	.0222863	.1068395

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0211023**	**2.034436**	**.0415672**	**.0105254**	**1.917340**	**.0386884**	**.0437437**
Stddev	.0004426	.013840	.0002559	.0001113	.012204	.0006452	.0001410
%RSD	2.097399	.6802855	.6156788	1.057443	.6365107	1.667786	.3223695
#1	.0212250	2.044965	.0412789	.0106259	1.918714	.0394210	.0438657
#2	.0206113	2.018760	.0417674	.0105445	1.928799	.0384396	.0435893
#3	.0214706	2.039584	.0416552	.0104058	1.904507	.0382046	.0437760

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.964150**	**.1042191**	**.2034675**	**.0400432**	**.0385389**	**.3795923**	**.0164205**
Stddev	.029729	.0002075	.0009062	.0007317	.0005856	.0054598	.0009639
%RSD	1.513578	.1991375	.4453922	1.827344	1.519521	1.438337	5.869790
#1	1.930024	.1039810	.2026139	.0398065	.0389696	.3743299	.0153889
#2	1.984435	.1043613	.2033701	.0408639	.0378721	.3852301	.0165746
#3	1.977990	.1043150	.2044185	.0394591	.0387749	.3792168	.0172980

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: LLICV01 Acquired: 6/10/2025 14:41:42 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0204096	.0174523	.0215761
Stddev	.0015713	.0018664	.0000220
%RSD	7.698912	10.69446	.1021190
#1	.0194352	.0154100	.0215954
#2	.0222223	.0190696	.0215808
#3	.0195713	.0178772	.0215521

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3325.776	76172.04	12618.48	2474.063	4684.051
Stddev	14.027	151.37	36.00	9.056	10.424
%RSD	.4217746	.1987185	.2852903	.3660457	.2225322
#1	3338.391	75998.73	12584.27	2464.010	4692.862
#2	3328.266	76278.32	12615.13	2481.582	4686.747
#3	3310.670	76239.06	12656.04	2476.599	4672.545

Sample Name: ICB01 Acquired: 6/10/2025 14:45:59 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0001272**	**-.001293**	**-.001652**	**.0004080**	**.0013510**	**.0036334**	**-.002035**
Stddev	.0005388	.001159	.000479	.0042203	.0015471	.0049747	.000119
%RSD	423.5258	89.61267	29.01647	1034.411	114.5165	136.9162	5.855710
#1	-.000338	.000022	-.002198	.0050053	.0002428	-.000049	-.002085
#2	.000718	-.002165	-.001461	-.003290	.0006916	.009293	-.002120
#3	.000001	-.001737	-.001298	-.000491	.0031185	.001657	-.001899

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000562**	**.0000495**	**.0058617**	**.0002110**	**-.000027**	**-.000146**	**-.000696**
Stddev	.0000683	.0001415	.0013251	.0000994	.000242	.000122	.000234
%RSD	121.5343	285.4967	22.60521	47.09817	881.3026	83.74588	33.62915
#1	.0000482	.0000133	.0047641	.0002375	-.000154	-.000153	-.000586
#2	-.000008	-.000070	.0073337	.0001011	-.000180	-.000264	-.000965
#3	.000128	.000206	.0054874	.0002945	.000252	-.000020	-.000538

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000297**	**.0078515**	**-.000078**	**.0000493**	**-.080610**	**-.000482**	**-.000163**
Stddev	.0001667	.0052995	.000066	.0003032	.003535	.001324	.000147
%RSD	560.9660	67.49728	84.69481	614.6364	4.385841	274.4214	90.36700
#1	.0000689	.0132507	-.000142	.0003478	-.076641	.000852	-.000215
#2	.0001733	.0026576	-.000010	.0000587	-.083423	-.000504	-.000277
#3	-.000153	.0076462	-.000083	-.000258	-.081767	-.001795	.000003

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.017844**	**.0030508**	**-.000061**	**-.000281**	**.0001314**	**.0051061**	**-.001220**
Stddev	.016485	.0006859	.000229	.000160	.0002785	.0087525	.002621
%RSD	92.38225	22.48347	372.6323	56.96393	211.9883	171.4146	214.8514
#1	-.036773	.0038429	.000192	-.000345	.0003555	-.003731	-.003543
#2	-.006647	.0026553	-.000252	-.000099	.0002190	.013772	-.001739
#3	-.010112	.0026543	-.000124	-.000398	-.000180	.005278	.001622

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: ICB01 Acquired: 6/10/2025 14:45:59 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.000544**	**-.001181**	**.0000114**
Stddev	.001172	.001112	.0000350
%RSD	215.5479	94.17074	308.7987
#1	-.000853	-.000109	.0000367
#2	-.001530	-.001105	.0000259
#3	.000752	-.002329	-.000029

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3315.416**	**77083.35**	**12163.57**	**2453.981**	**4744.298**
Stddev	15.121	236.47	22.18	12.795	12.798
%RSD	.4560820	.3067763	.1823437	.5214084	.2697583
#1	3321.237	76926.06	12138.35	2450.758	4747.156
#2	3326.761	76968.70	12172.30	2443.106	4755.425
#3	3298.249	77355.30	12180.05	2468.080	4730.312

Sample Name: CRI01 Acquired: 6/10/2025 14:50:18 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0228906**	**.0408249**	**.0134118**	**.0195496**	**.0533342**	**.1051896**	**.0987248**
Stddev	.0016962	.0020811	.0019842	.0019130	.0008885	.0022447	.0007079
%RSD	7.410061	5.097638	14.79463	9.785566	1.665814	2.133989	.7170301
#1	.0213172	.0429996	.0153549	.0176006	.0523187	.1064204	.0986587
#2	.0246874	.0388521	.0134917	.0214246	.0537154	.1025987	.0980523
#3	.0226672	.0406230	.0113889	.0196237	.0539684	.1065498	.0994635

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0062175**	**.0060720**	**2.032542**	**.0107354**	**.0304390**	**.0227199**	**.1114096**
Stddev	.0000773	.0000640	.012691	.0001056	.0002141	.0004078	.0056365
%RSD	1.243941	1.054046	.6243718	.9836071	.7034496	1.795015	5.059284
#1	.0061286	.0061401	2.030712	.0106239	.0306843	.0224796	.1086018
#2	.0062552	.0060132	2.020866	.0107483	.0303433	.0224894	.1178985
#3	.0062688	.0060625	2.046049	.0108339	.0302894	.0231908	.1077284

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0210026**	**2.036671**	**.0407874**	**.0106331**	**1.894631**	**.0390947**	**.0441034**
Stddev	.0002801	.030427	.0003866	.0002594	.007905	.0008455	.0004596
%RSD	1.333448	1.493948	.9478401	2.439328	.4172134	2.162670	1.042155
#1	.0213259	2.071464	.0411616	.0104696	1.903576	.0390245	.0435727
#2	.0208471	2.023498	.0403895	.0104975	1.888587	.0399731	.0443773
#3	.0208348	2.015050	.0408110	.0109321	1.891730	.0382866	.0443601

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.986417**	**.1023203**	**.2041835**	**.0395025**	**.0386649**	**.3815861**	**.0174513**
Stddev	.006511	.0012506	.0007480	.0003744	.0001111	.0055074	.0012817
%RSD	.3277590	1.222250	.3663149	.9478974	.2873743	1.443281	7.344502
#1	1.993649	.1015054	.2040005	.0390803	.0386451	.3865531	.0173421
#2	1.981022	.1016953	.2035441	.0396331	.0385651	.3825418	.0187842
#3	1.984580	.1037602	.2050061	.0397942	.0387846	.3756635	.0162278

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CRI01 Acquired: 6/10/2025 14:50:18 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0189758	.0158123	.0215268
Stddev	.0022942	.0006419	.0001056
%RSD	12.09007	4.059339	.4905976
#1	.0185455	.0165148	.0215039
#2	.0169272	.0152564	.0214345
#3	.0214547	.0156658	.0216420

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3321.994	75609.40	12690.74	2417.704	4735.947
Stddev	11.613	107.03	60.50	9.042	15.794
%RSD	.3495767	.1415622	.4767105	.3739944	.3334963
#1	3328.979	75637.42	12671.28	2420.084	4736.236
#2	3328.414	75491.15	12758.57	2407.710	4751.594
#3	3308.588	75699.64	12642.37	2425.318	4720.010

Sample Name: ICSA01 Acquired: 6/10/2025 14:54:36 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0083370**	**-.008114**	**-.003620**	**-.003787**	**-.002432**	**256.1661**
Stddev	.0007707	.002314	.002119	.004810	.002701	.9930
%RSD	9.244934	28.52164	58.54471	127.0186	111.0415	.3876264
#1	.0078302	-.008879	-.002099	-.007498	-.004794	257.2431
#2	.0092240	-.009949	-.006040	-.005510	.000512	255.2870
#3	.0079569	-.005514	-.002720	.001647	-.003014	255.9680

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0028422**	**.0011049**	**.0042001**	**238.6715**	**.0473812**	**.0015352**
Stddev	.0001655	.0001550	.0002361	.4579	.0001738	.0003036
%RSD	5.821057	14.02872	5.622257	.1918500	.3668380	19.77618
#1	.0026677	.0009518	.0043135	239.1495	.0475700	.0012365
#2	.0028624	.0012618	.0039286	238.6283	.0472278	.0015256
#3	.0029967	.0011009	.0043581	238.2367	.0473458	.0018434

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0033605**	**96.97658**	**.0003675**	**261.0645**	**.0025683**	**-.002858**
Stddev	.0008022	.47757	.0006033	.7332	.0002723	.000311
%RSD	23.87118	.4924545	164.1900	.2808353	10.60167	10.88167
#1	.0039665	96.49168	.0010607	261.8586	.0028818	-.003090
#2	.0024508	96.99161	.0000806	260.9216	.0023914	-.002504
#3	.0036642	97.44646	-.000039	260.4134	.0024316	-.002979

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.038167**	**.0026026**	**.0063232**	**-.007549**	**-.068408**	**-.000237**
Stddev	.008345	.0019879	.0002437	.008405	.001533	.000274
%RSD	21.86557	76.38141	3.854358	111.3468	2.240336	115.4423
#1	-.034695	.0009691	.0061641	-.003106	-.069823	.000057
#2	-.032118	.0048159	.0066038	-.017243	-.068621	-.000285
#3	-.047688	.0020228	.0062018	-.002297	-.066780	-.000483

Sample Name: ICSA01 Acquired: 6/10/2025 14:54:36 Type: Unk
Method: 6010-200.7 NEW(v2) 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	-.003071	-.002357	.0307502	.0000856	-.002919	F .0776468
Stddev	.001596	.001050	.0105269	.0041039	.005593	.0008352
%RSD	51.97026	44.53771	34.23365	4792.297	191.6382	1.075570
#1	-.004856	-.003053	.0186041	-.004387	-.002053	.0766833
#2	-.001781	-.002869	.0372364	.000965	-.008894	.0781642
#3	-.002577	-.001150	.0364101	.003678	.002191	.0780929

Elem	Sr4077
Units	ppm
Avg	.0079300
Stddev	.0004564
%RSD	5.754655
#1	.0084557
#2	.0076353
#3	.0076991

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2873.009	67289.49	11255.03	2149.103	3706.265
Stddev	1.435	181.88	36.88	17.834	5.215
%RSD	.0499416	.2702956	.3276402	.8298209	.1406999
#1	2871.548	67462.36	11213.55	2169.686	3704.874
#2	2873.061	67306.34	11284.11	2138.261	3701.886
#3	2874.417	67099.77	11267.42	2139.361	3712.034

Sample Name: ICSAB01 Acquired: 6/10/2025 15:18:03 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.1120719**	**.0925140**	**.0436707**	**.0558137**	**.6328976**	**244.9601**
Stddev	.0048168	.0009987	.0010996	.0064094	.0022442	1.2309
%RSD	4.297969	1.079538	2.517981	11.48348	.3545902	.5024722
#1	.1080830	.0936160	.0424317	.0599130	.6332564	245.6426
#2	.1174232	.0922573	.0445308	.0591004	.6304956	245.6985
#3	.1107096	.0916687	.0440497	.0484277	.6349407	243.5391

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5104575**	**.4845740**	**1.011448**	**230.2915**	**.5491767**	**.5081889**
Stddev	.0004273	.0002113	.006059	.3256	.0013824	.0036367
%RSD	.0836990	.0436063	.5989956	.1413789	.2517296	.7156135
#1	.5108769	.4848146	1.010517	230.6291	.5495125	.5070461
#2	.5104727	.4844186	1.005909	230.2660	.5503602	.5052608
#3	.5100229	.4844888	1.017918	229.9794	.5476572	.5122596

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4963417**	**99.04019**	**.4854668**	**248.3444**	**.9992288**	**.1925285**
Stddev	.0031609	.16392	.0004024	.4334	.0070989	.0004273
%RSD	.6368339	.1655041	.0828803	.1745348	.7104423	.2219203
#1	.4941271	99.12083	.4859142	248.7424	.9967679	.1922366
#2	.4949364	99.14816	.4853516	248.4083	.9936879	.1923301
#3	.4999615	98.85157	.4851346	247.8826	1.007231	.1930189

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.049894**	**.4886238**	**1.068945**	**-.008471**	F **-.033838**	F **.0001429**
Stddev	.008017	.0019419	.003979	.008565	.002093	.0002517
%RSD	16.06821	.3974290	.3722138	101.1096	6.185262	176.0639
#1	-.055282	.4885586	1.072197	-.001247	-.033941	.0004000
#2	-.053719	.4867152	1.064509	-.006233	-.031696	-.000103
#3	-.040681	.4905974	1.070131	-.017932	-.035878	.000132

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: ICSAB01 Acquired: 6/10/2025 15:18:03 Type: Unk
Method: 6010-200.7 NEW(v2) 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 -.004951	F -.003847	F .0161976	F .0074562	F -.005281	F .0774033
Stddev	.001323	.000481	.0132779	.0016043	.006088	.0012241
%RSD	26.72699	12.50601	81.97457	21.51628	115.2708	1.581453
#1	-.005063	-.004173	.0103060	.0056769	-.011521	.0760201
#2	-.003575	-.003295	.0314017	.0087924	.000642	.0778433
#3	-.006214	-.004074	.0068849	.0078993	-.004965	.0783467

Elem	Sr4077
Units	ppm
Avg	F .0034977
Stddev	.0002008
%RSD	5.741324
#1	.0037145
#2	.0033181
#3	.0034605

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2890.627	67832.65	12018.99	2153.697	3745.170
Stddev	26.485	135.51	30.68	6.766	29.497
%RSD	.9162485	.1997655	.2552529	.3141731	.7875969
#1	2914.377	67828.96	12000.22	2146.699	3765.892
#2	2895.438	67699.02	12002.35	2154.188	3758.218
#3	2862.066	67969.96	12054.39	2160.205	3711.399

Sample Name: ICSADLX20 Acquired: 6/10/2025 15:22:17 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSADLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007166	-.000777	-.000217	.0005261	.0000921	12.19066	-.000954
Stddev	.0010759	.000699	.001783	.0017429	.0020138	.01002	.000707
%RSD	150.1450	90.01160	823.1517	331.3118	2187.135	.0821644	74.05329
#1	.0011737	-.001370	-.001520	-.001480	-.001902	12.17939	-.000471
#2	.0014884	-.000006	.001815	.001390	.002125	12.19403	-.001765
#3	-.000512	-.000954	-.000945	.001669	.000053	12.19856	-.000626

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001434	.0001855	11.99808	.0022946	.0002785	.0004883	4.794396
Stddev	.0000420	.0000505	.04371	.0001309	.0000753	.0001069	.023150
%RSD	29.26001	27.19822	.3643202	5.703732	27.02596	21.88703	.4828513
#1	.0001325	.0001278	12.04842	.0021486	.0002478	.0006104	4.809230
#2	.0001080	.0002212	11.97605	.0024014	.0003643	.0004429	4.806238
#3	.0001897	.0002075	11.96977	.0023337	.0002234	.0004116	4.767721

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001422	12.39894	.0002371	.0011396	-.121335	-.001466	.0004828
Stddev	.0001479	.03510	.0003253	.0001189	.014924	.001102	.0001175
%RSD	104.0330	.2830793	137.1918	10.42989	12.29973	75.20335	24.33605
#1	.0001697	12.43603	.0003217	.0011488	-.128276	-.000382	.0005393
#2	.0002744	12.36625	.0005117	.0010165	-.104205	-.002585	.0003477
#3	-.000018	12.39453	-.000122	.0012537	-.131525	-.001430	.0005613

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.034683	-.003246	-.000031	-.000865	-.000189	.0081805	.0010367
Stddev	.032217	.000664	.000229	.000442	.000487	.0015923	.0012527
%RSD	92.88899	20.46095	742.6647	51.10721	257.9903	19.46449	120.8354
#1	-.004699	-.002865	.000232	-.000609	.000027	.0080369	.0003974
#2	-.068745	-.002859	-.000189	-.000610	.000153	.0098397	.0002326
#3	-.030606	-.004012	-.000136	-.001375	-.000746	.0066648	.0024800

Sample Name: ICSADLX20 Acquired: 6/10/2025 15:22:17 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSADLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.001470	.0004126	.0003952
Stddev	.002147	.0012593	.0000594
%RSD	146.0749	305.1812	15.02284
#1	.000852	-.001010	.0003299
#2	-.003384	.000862	.0004098
#3	-.001878	.001386	.0004459

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3315.588	76751.37	12161.65	2455.080	4610.917
Stddev	16.576	191.36	15.60	12.888	19.026
%RSD	.4999341	.2493182	.1282883	.5249698	.4126215
#1	3327.573	76597.88	12144.83	2444.746	4623.665
#2	3322.520	76690.45	12175.65	2450.973	4620.037
#3	3296.672	76965.76	12164.47	2469.521	4589.048

Sample Name: ICSABDLX20 Acquired: 6/10/2025 15:26:34 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSABDLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0066608	.0034685	.0017133	.0006756	.0322021	12.60608	.0256540
Stddev	.0005138	.0004523	.0018659	.0039552	.0007234	.02759	.0003934
%RSD	7.714347	13.04037	108.9071	585.4285	2.246395	.2188490	1.533484
#1	.0072438	.0036336	.0000757	.0010930	.0330374	12.63794	.0258199
#2	.0064645	.0038150	.0037447	-.003472	.0317892	12.59007	.0252048
#3	.0062740	.0029568	.0013196	.004406	.0317797	12.59023	.0259372

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0268683	.0536643	12.53056	.0300131	.0265453	.0280165	5.160137
Stddev	.0001792	.0002773	.03840	.0001487	.0003160	.0000921	.009943
%RSD	.6669771	.5168232	.3064772	.4955048	1.190328	.3288918	.1926841
#1	.0270437	.0534253	12.57234	.0299512	.0262293	.0279846	5.151999
#2	.0268757	.0535993	12.52254	.0299054	.0265454	.0281204	5.157192
#3	.0266855	.0539684	12.49680	.0301828	.0268612	.0279446	5.171220

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0265740	12.84965	.0532133	.0134290	-.122194	.0258798	.0566781
Stddev	.0005531	.02857	.0001890	.0001224	.003683	.0008448	.0001657
%RSD	2.081167	.2223072	.3550895	.9117371	3.013722	3.264301	.2922805
#1	.0272125	12.84959	.0530034	.0132998	-.119255	.0265773	.0565008
#2	.0262649	12.87824	.0533698	.0135433	-.126325	.0261218	.0567048
#3	.0262446	12.82111	.0532667	.0134439	-.121001	.0249405	.0568289

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.054632	.0475317	.0522605	.0492907	.0497306	.0537315	-.000716
Stddev	.007963	.0003805	.0002339	.0002154	.0005691	.0043879	.003183
%RSD	14.57660	.8006017	.4474873	.4370294	1.144334	8.166247	444.3832
#1	-.062374	.0471430	.0520494	.0490811	.0500287	.0524621	-.003990
#2	-.046465	.0475485	.0525119	.0492795	.0490744	.0501183	-.000524
#3	-.055057	.0479036	.0522202	.0495115	.0500888	.0586141	.002366

Sample Name: ICSABDLX20 Acquired: 6/10/2025 15:26:34 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSABDLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**-.000542**	**.0025225**	**.0002856**
Stddev	.003328	.0007180	.0000519
%RSD	614.2954	28.46504	18.15605
#1	-.003772	.0025980	.0003029
#2	.002875	.0031999	.0003267
#3	-.000728	.0017697	.0002274

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3279.594**	**75714.34**	**12372.54**	**2438.736**	**4534.743**
Stddev	5.605	145.72	32.42	6.976	3.043
%RSD	.1709139	.1924599	.2620663	.2860470	.0671078
#1	3273.152	75824.47	12337.54	2446.752	4532.521
#2	3282.274	75769.43	12378.54	2434.041	4538.212
#3	3283.356	75549.10	12401.55	2435.415	4533.497

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCV01 Acquired: 6/10/2025 15:30:50 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**5.048884**	**5.104134**	**5.027261**	**5.083329**	**5.063690**	**10.09828**	**9.840418**
Stddev	.039671	.062645	.010523	.040435	.036930	.02923	.041509
%RSD	.7857386	1.227334	.2093136	.7954369	.7293053	.2894966	.4218167
#1	5.017012	5.036370	5.022098	5.053128	5.037344	10.13200	9.885814
#2	5.036326	5.116098	5.020316	5.067594	5.047824	10.08011	9.804402
#3	5.093314	5.159934	5.039368	5.129266	5.105901	10.08273	9.831038

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2621390**	**2.508076**	**24.86969**	**1.029668**	**2.502080**	**1.266830**	**4.861657**
Stddev	.0010169	.004747	.06496	.001231	.005400	.006101	.004632
%RSD	.3879091	.1892537	.2611864	.1195246	.2158170	.4815568	.0952817
#1	.2633094	2.505623	24.94469	1.028259	2.498317	1.261483	4.858874
#2	.2616360	2.505058	24.83144	1.030217	2.499656	1.265532	4.859092
#3	.2614718	2.513547	24.83294	1.030529	2.508267	1.273475	4.867004

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.475092**	**24.95644**	**2.507389**	**1.268054**	**24.07185**	**2.509873**	**2.563091**
Stddev	.008024	.08555	.004822	.002066	.06405	.004744	.002905
%RSD	.3241795	.3427892	.1923124	.1629256	.2660752	.1890089	.1133306
#1	2.484128	25.02861	2.508065	1.265781	24.05190	2.513555	2.562968
#2	2.472343	24.86194	2.502264	1.268563	24.02015	2.504520	2.560250
#3	2.468803	24.97876	2.511836	1.269818	24.14350	2.511544	2.566056

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.24231**	**5.153914**	**5.112010**	**5.045340**	**4.979667**	**4.809499**	**5.007241**
Stddev	.09092	.013504	.032569	.008281	.010974	.054089	.017499
%RSD	.3750639	.2620151	.6371162	.1641353	.2203720	1.124620	.3494754
#1	24.16917	5.162763	5.085802	5.043614	4.992183	4.754318	4.992627
#2	24.21365	5.160609	5.101754	5.038058	4.975123	4.811752	5.002463
#3	24.34411	5.138371	5.148472	5.054348	4.971695	4.862425	5.026633

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCV01 Acquired: 6/10/2025 15:30:50 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**4.941350**	**4.919671**	**5.002026**
Stddev	.017635	.044948	.024846
%RSD	.3568891	.9136327	.4967180
#1	4.921004	4.971418	5.021606
#2	4.950799	4.897254	5.010396
#3	4.952247	4.890340	4.974076

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3171.379**	**73299.38**	**11419.09**	**2346.070**	**4250.290**
Stddev	18.467	170.25	54.20	2.531	11.150
%RSD	.5822990	.2322734	.4746636	.1078757	.2623435
#1	3187.206	73444.37	11358.27	2343.149	4259.056
#2	3175.840	73341.86	11436.69	2347.451	4254.073
#3	3151.090	73111.91	11462.30	2347.610	4237.740

Sample Name: CCB01 Acquired: 6/10/2025 15:35:02 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.000710**	**.0005116**	**-.000036**	**.0002801**	**.0021906**	**.0040115**	**-.001836**
Stddev	.001929	.0010418	.000870	.0017611	.0015174	.0035994	.000546
%RSD	271.4921	203.6438	2429.468	628.7395	69.26894	89.72784	29.74933
#1	.000324	.0014551	-.000607	.0010607	.0037152	.0020397	-.002361
#2	-.002936	.0006861	-.000466	-.001736	.0006806	.0018288	-.001875
#3	.000480	-.000606	.000965	.001516	.0021760	.0081660	-.001271

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000253**	**.0000043**	**-.001396**	**.0002029**	**.0001028**	**-.000157**	**.0016329**
Stddev	.0000223	.0000346	.009984	.0004122	.0001321	.000250	.0026232
%RSD	87.97354	808.7590	715.0133	203.1496	128.4542	158.8288	160.6512
#1	.0000451	.0000423	.008105	-.000246	.0002242	-.000272	-.000889
#2	.0000012	-.000004	-.000492	.000565	-.000038	.000129	.001440
#3	.0000296	-.000025	-.011801	.000290	.000122	-.000329	.004347

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000002**	**-.005512**	**-.000064**	**.0003701**	**-.137997**	**-.000077**	**-.000279**
Stddev	.000379	.013816	.000239	.0004522	.008162	.000641	.000257
%RSD	21879.42	250.6407	374.2340	122.1918	5.914620	833.4675	92.32625
#1	.000433	-.017075	.000199	.0005609	-.140539	.000497	-.000296
#2	-.000261	.009788	-.000267	-.000146	-.144586	-.000769	-.000526
#3	-.000178	-.009250	-.000124	.000696	-.128867	.000041	-.000013

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.053333**	**.0052552**	**.0004690**	**.0004882**	**.0003663**	**.0042553**	**-.000759**
Stddev	.038241	.0004182	.0002224	.0003689	.0011685	.0049927	.001523
%RSD	71.70311	7.957950	47.41348	75.55418	318.9765	117.3280	200.6813
#1	-.097112	.0052581	.0007256	.0006978	.0016692	.0068240	-.002103
#2	-.026454	.0048356	.0003300	.0000623	.0000187	.0074407	.000896
#3	-.036432	.0056720	.0003516	.0007046	-.000589	-.001499	-.001070

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCB01 Acquired: 6/10/2025 15:35:02 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0016992	-.003281	.0001103
Stddev	.0003221	.000998	.0000157
%RSD	18.95527	30.42447	14.25633
#1	.0015975	-.002230	.0000924
#2	.0014402	-.004216	.0001167
#3	.0020598	-.003397	.0001218

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3310.021	76287.60	12410.49	2412.000	4734.480
Stddev	8.487	272.98	21.16	20.580	13.824
%RSD	.2564174	.3578280	.1704885	.8532256	.2919897
#1	3319.337	75972.87	12434.92	2389.979	4750.419
#2	3307.996	76459.99	12398.22	2430.745	4727.268
#3	3302.729	76429.94	12398.32	2415.277	4725.754

Sample Name: Q2242-04 Acquired: 6/10/2025 15:39:22 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0014455	-.000815	.0045691	-.002299	.0005438	.1580816	.1516321
Stddev	.0010707	.000691	.0018581	.004039	.0024565	.0019474	.0002581
%RSD	74.06940	84.74900	40.66557	175.6683	451.7311	1.231877	.1702394
#1	.0013999	-.000196	.0039790	-.001545	-.001633	.1581716	.1518869
#2	.0003983	-.001560	.0030778	-.006662	.000057	.1599825	.1516387
#3	.0025382	-.000690	.0066506	.001310	.003207	.1560908	.1513707

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001266	-.000006	2.024691	-.000543	.0057504	.0106925	.1181316
Stddev	.0000418	.000067	.006942	.000520	.0001505	.0000822	.0016618
%RSD	33.00058	1167.885	.3428460	95.75385	2.617513	.7683519	1.406722
#1	.0001453	-.000036	2.030523	-.000672	.0059106	.0106370	.1199299
#2	.0001556	.000071	2.026536	-.000986	.0057286	.0107869	.1178121
#3	.0000787	-.000052	2.017013	.000029	.0056119	.0106536	.1166527

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2034438	1.281836	.0026879	.0000261	205.3493	.0001650	.0469854
Stddev	.0004784	.019432	.0000447	.0002963	1.3932	.0010373	.0001165
%RSD	.2351265	1.515968	1.663397	1133.401	.6784551	628.7780	.2478962
#1	.2039873	1.292219	.0026468	.0000780	206.9486	-.000747	.0470131
#2	.2030865	1.259418	.0027355	.0002931	204.3986	-.000051	.0470856
#3	.2032578	1.293872	.0026814	-.000293	204.7008	.001293	.0468576

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8056949	.0264620	.0000181	-.003408	-.000112	.2231886	.0026764
Stddev	.0366811	.0002294	.0001481	.000530	.000299	.0159888	.0027457
%RSD	4.552733	.8667796	818.0575	15.55727	266.3378	7.163798	102.5895
#1	.8469116	.0261999	-.000028	-.004016	-.000184	.2380894	.0029729
#2	.7766371	.0265601	-.000102	-.003040	-.000369	.2062981	.0052618
#3	.7935360	.0266261	.000184	-.003169	.000216	.2251782	-.000206

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2242-04 Acquired: 6/10/2025 15:39:22 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.7897255	-.001167	.0173041
Stddev	.0083291	.000567	.0000485
%RSD	1.054687	48.55276	.2803547
#1	.7873123	-.001049	.0173425
#2	.7828694	-.001783	.0172496
#3	.7989947	-.000668	.0173201

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3153.693	73520.13	13168.13	2349.390	4179.340
Stddev	15.914	42.60	11.87	5.149	16.961
%RSD	.5046294	.0579473	.0901316	.2191583	.4058252
#1	3171.865	73538.42	13154.70	2347.477	4195.374
#2	3146.971	73471.44	13177.21	2345.472	4181.061
#3	3142.241	73550.54	13172.49	2355.222	4161.584

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2242-04DUP Acquired: 6/10/2025 15:43:49 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0002827**	**-.000387**	**.0054507**	**.0021086**	**.0010815**	**.1749673**	**.1598358**
Stddev	.0011064	.001527	.0003322	.0035924	.0014120	.0056659	.0001802
%RSD	391.3413	394.8732	6.095270	170.3674	130.5592	3.238245	.1127618
#1	.0013905	-.000453	.0052327	-.001758	-.000048	.1796355	.1598797
#2	.0002799	-.001879	.0052863	.005343	.002665	.1766028	.1596377
#3	-.000822	.001172	.0058330	.002741	.000627	.1686636	.1599900

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001454**	**.0000766**	**2.231759**	**-.001013**	**.0062921**	**.0040357**	**.0022490**
Stddev	.0000378	.0001142	.013410	.000437	.0000281	.0000851	.0010352
%RSD	25.98783	149.1363	.6008765	43.16361	.4457266	2.109263	46.02968
#1	.0001018	.0000350	2.247076	-.000658	.0062641	.0039441	.0012304
#2	.0001682	.0002057	2.226074	-.001501	.0063202	.0040507	.0033001
#3	.0001661	-.000011	2.222129	-.000879	.0062921	.0041124	.0022166

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2202425**	**1.464140**	**.0018057**	**-.000287**	**202.6959**	**-.000990**	**.0511961**
Stddev	.0006623	.029364	.0003918	.000238	.9970	.000660	.0000208
%RSD	.3007189	2.005562	21.69951	82.96546	.4918620	66.64438	.0406918
#1	.2206703	1.489754	.0013723	-.000517	201.7909	-.001657	.0511805
#2	.2205776	1.470573	.0019102	-.000042	202.5322	-.000338	.0511881
#3	.2194796	1.432092	.0021348	-.000303	203.7646	-.000974	.0512198

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8213786**	**.0314170**	**-.000131**	**-.002974**	**-.000006**	**.2334548**	**.0036347**
Stddev	.0213489	.0001327	.000163	.000514	.000535	.0061407	.0013930
%RSD	2.599158	.4223318	124.5361	17.27904	9184.172	2.630378	38.32398
#1	.8294131	.0314011	-.000084	-.003537	.000285	.2395227	.0035107
#2	.8375446	.0312930	-.000313	-.002853	.000320	.2272437	.0050855
#3	.7971782	.0315569	.000004	-.002531	-.000623	.2335982	.0023079

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2242-04DUP Acquired: 6/10/2025 15:43:49 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.8600315	-.000525	.0188852
Stddev	.0049144	.001707	.0000116
%RSD	.5714172	324.9608	.0613605
#1	.8554900	-.002489	.0188727
#2	.8593558	.000599	.0188872
#3	.8652488	.000314	.0188955

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3107.174	71892.92	11667.63	2303.630	4087.669
Stddev	2.078	169.06	32.08	2.571	3.235
%RSD	.0668860	.2351572	.2749514	.1116029	.0791434
#1	3105.152	71978.91	11634.47	2305.348	4088.388
#2	3107.065	72001.70	11669.91	2304.868	4090.484
#3	3109.305	71698.15	11698.50	2300.675	4084.135

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2242-04LX5 Acquired: 6/10/2025 15:48:16 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.000549**	**-.001001**	**.0016428**	**-.002426**	**-.000811**	**.0349121**	**.0298336**
Stddev	.003047	.000493	.0008230	.000655	.001364	.0032861	.0005177
%RSD	554.6417	49.21359	50.09787	27.00748	168.1112	9.412478	1.735422
#1	-.002935	-.000433	.0021931	-.002667	.000585	.0321384	.0298058
#2	.002883	-.001261	.0020386	-.002927	-.000879	.0385414	.0303647
#3	-.001596	-.001309	.0006967	-.001685	-.002140	.0340566	.0293303

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000551**	**.0000371**	**.4266899**	**-.000868**	**.0011474**	**.0010239**	**-.002886**
Stddev	.0000666	.0000620	.0081821	.000171	.0000963	.0004886	.001303
%RSD	120.7742	167.0291	1.917577	19.73890	8.391834	47.71883	45.14028
#1	.0001316	-.000034	.4344961	-.000776	.0011056	.0005030	-.001437
#2	.0000098	.000082	.4273960	-.000763	.0012575	.0014720	-.003960
#3	.0000241	.000063	.4181776	-.001066	.0010791	.0010967	-.003261

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0412264**	**.2635777**	**-.000112**	**.0002236**	**36.11474**	**.0010343**	**.0090334**
Stddev	.0003067	.0089476	.000120	.0002195	.10872	.0014668	.0002056
%RSD	.7439122	3.394682	106.9465	98.19017	.3010516	141.8180	2.276460
#1	.0411292	.2560432	-.000165	.0003701	36.23862	-.000654	.0090103
#2	.0415700	.2734673	.000025	-.000029	36.03512	.001761	.0088403
#3	.0409802	.2612226	-.000196	.000329	36.07050	.001996	.0092496

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0838655**	**.0070264**	**-.000182**	**-.002871**	**-.000253**	**.0401092**	**-.001903**
Stddev	.0258505	.0003240	.000305	.000224	.000418	.0083511	.000585
%RSD	30.82378	4.611570	167.5645	7.801836	165.3619	20.82079	30.71974
#1	.0587661	.0071814	-.000290	-.002697	.000094	.0489788	-.002574
#2	.0824237	.0066540	.000162	-.002792	-.000717	.0323975	-.001505
#3	.1104067	.0072438	-.000417	-.003123	-.000135	.0389513	-.001630

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2242-04LX5 Acquired: 6/10/2025 15:48:16 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.1450005	-.001080	.0035356
Stddev	.0023080	.001339	.0000598
%RSD	1.591733	123.9439	1.690779
#1	.1467763	.000422	.0035865
#2	.1423916	-.001514	.0035506
#3	.1458336	-.002148	.0034698

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3245.852	75659.10	11808.25	2407.541	4507.459
Stddev	3.713	94.48	3.01	13.083	5.790
%RSD	.1144060	.1248794	.0255031	.5434137	.1284497
#1	3241.585	75731.21	11806.51	2421.923	4509.973
#2	3248.350	75693.94	11811.73	2396.347	4511.567
#3	3247.622	75552.14	11806.51	2404.353	4500.837

Sample Name: Q2242-04MS Acquired: 6/10/2025 15:52:35 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8040561**	**1.952525**	**.9772823**	**1.991165**	**.7971857**	**2.123984**	**.4188361**
Stddev	.0008781	.033756	.0055875	.001496	.0012803	.008729	.0013330
%RSD	.1092140	1.728839	.5717418	.0751359	.1606024	.4109671	.3182505
#1	.8050700	1.973527	.9811618	1.992652	.7971593	2.115703	.4180222
#2	.8035614	1.970461	.9708779	1.989660	.7959187	2.123149	.4181118
#3	.8035369	1.913587	.9798071	1.991182	.7984789	2.133101	.4203744

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1824736**	**.2032336**	**3.950892**	**.3956927**	**.2105581**	**.2958877**	**3.150494**
Stddev	.0014785	.0009947	.023368	.0005491	.0008867	.0003986	.009852
%RSD	.8102677	.4894474	.5914725	.1387605	.4211125	.1347100	.3127154
#1	.1816802	.2043381	3.924241	.3951447	.2113720	.2962283	3.160603
#2	.1815611	.2024082	3.960564	.3956907	.2096132	.2959855	3.140921
#3	.1841795	.2029546	3.967872	.3962428	.2106891	.2954493	3.149956

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4771094**	**3.706706**	**.5068197**	**.0759397**	**307.2678**	**.2902233**	**.2779049**
Stddev	.0016713	.038254	.0016667	.0007154	.1221	.0012346	.0006072
%RSD	.3502901	1.032033	.3288578	.9421232	.0397460	.4254007	.2184767
#1	.4777449	3.705901	.5086131	.0764820	307.3991	.2888117	.2779471
#2	.4752136	3.668861	.5053183	.0762082	307.1576	.2911020	.2772778
#3	.4783697	3.745357	.5065277	.0751288	307.2466	.2907561	.2784899

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**12.91374**	**.2945620**	**.4032651**	**.6935105**	**.1891626**	**1.258728**	**6.144868**
Stddev	.02097	.0013167	.0005251	.0033417	.0012618	.014596	.031701
%RSD	.1623742	.4469946	.1302048	.4818553	.6670569	1.159551	.5158988
#1	12.93030	.2938047	.4027151	.6971530	.1882076	1.270338	6.174179
#2	12.92075	.2937989	.4037610	.6905864	.1886871	1.263501	6.149203
#3	12.89016	.2960823	.4033192	.6927922	.1905930	1.242343	6.111223

Sample Name: Q2242-04MS Acquired: 6/10/2025 15:52:35 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.9439724	.1852419	.2181034
Stddev	.0070025	.0015294	.0004975
%RSD	.7418157	.8256437	.2280972
#1	.9517775	.1866506	.2176745
#2	.9418991	.1836152	.2179869
#3	.9382406	.1854600	.2186488

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3130.337	72530.29	12929.91	2320.895	4050.665
Stddev	12.632	135.31	53.13	16.948	7.956
%RSD	.4035470	.1865520	.4108985	.7302207	.1964192
#1	3144.910	72389.75	12979.81	2302.419	4058.733
#2	3122.517	72659.68	12935.88	2324.548	4050.434
#3	3123.582	72541.45	12874.05	2335.718	4042.826

Sample Name: Q2242-04MSD Acquired: 6/10/2025 15:56:44 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8302876**	**1.985731**	**1.004021**	**2.055591**	**.8255292**	**2.310325**	**.4121868**
Stddev	.0038330	.016466	.001688	.003234	.0008592	.010567	.0004985
%RSD	.4616454	.8292271	.1680945	.1573161	.1040805	.4573950	.1209278
#1	.8294235	1.966776	1.005744	2.053139	.8247066	2.305641	.4117313
#2	.8344789	1.993921	1.003948	2.054378	.8264209	2.302910	.4121098
#3	.8269605	1.996496	1.002371	2.059256	.8254602	2.322425	.4127193

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1944364**	**.2087148**	**3.954961**	**.4017826**	**.2158463**	**.3052100**	**3.108545**
Stddev	.0006869	.0004194	.026777	.0007892	.0003155	.0008800	.014140
%RSD	.3532749	.2009656	.6770381	.1964227	.1461616	.2883366	.4548627
#1	.1937877	.2082432	3.930090	.4021821	.2157478	.3043776	3.119732
#2	.1943656	.2090462	3.951489	.4022921	.2161992	.3051214	3.113252
#3	.1951560	.2088550	3.983304	.4008735	.2155918	.3061310	3.092653

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4745034**	**3.803660**	**.5199979**	**.0771224**	**289.8576**	**.2947801**	**.2804828**
Stddev	.0004809	.016093	.0009240	.0003998	1.3380	.0021276	.0006733
%RSD	.1013437	.4230913	.1776974	.5184350	.4616073	.7217510	.2400406
#1	.4739768	3.819761	.5194446	.0772194	291.3113	.2959503	.2810110
#2	.4746143	3.787575	.5210647	.0774649	288.6777	.2923243	.2807128
#3	.4749192	3.803644	.5194845	.0766831	289.5836	.2960658	.2797247

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**12.63356**	**.3124591**	**.4178792**	**.7231325**	**.1952221**	**1.243521**	**6.299985**
Stddev	.01212	.0015230	.0004365	.0028861	.0004252	.008724	.016387
%RSD	.0959045	.4874290	.1044479	.3991127	.2177903	.7015419	.2601100
#1	12.64197	.3107299	.4174240	.7198665	.1957103	1.234665	6.285778
#2	12.61967	.3130463	.4179195	.7241915	.1950231	1.252107	6.317912
#3	12.63904	.3136011	.4182942	.7253396	.1949329	1.243791	6.296265

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2242-04MSD Acquired: 6/10/2025 15:56:44 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.9354831	.1858622	.2197285
Stddev	.0034435	.0008050	.0004459
%RSD	.3680976	.4330886	.2029487
#1	.9355594	.1855478	.2196124
#2	.9320021	.1852619	.2193521
#3	.9388878	.1867769	.2202210

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3090.002	71680.13	12266.00	2298.002	3995.909
Stddev	6.575	108.52	28.02	4.510	5.129
%RSD	.2127918	.1513990	.2284346	.1962553	.1283447
#1	3093.977	71554.93	12286.92	2292.819	3998.878
#2	3093.617	71738.05	12276.90	2300.147	3998.861
#3	3082.413	71747.39	12234.16	2301.038	3989.987

Sample Name: Q2242-04A Acquired: 6/10/2025 16:00:52 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8242627**	**1.996333**	**.9894165**	**2.050707**	**.8317373**	**2.112234**	**.3512958**
Stddev	.0017794	.009050	.0049993	.004346	.0030297	.004156	.0018575
%RSD	.2158802	.4533122	.5052754	.2119453	.3642681	.1967720	.5287446
#1	.8247317	1.986175	.9880207	2.053528	.8292427	2.116666	.3532642
#2	.8222958	1.999293	.9852636	2.045702	.8308603	2.108424	.3510494
#3	.8257607	2.003533	.9949654	2.052892	.8351088	2.111613	.3495739

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1968232**	**.2048314**	**3.188210**	**.3994833**	**.2106604**	**.3069652**	**2.990399**
Stddev	.0013513	.0006931	.022932	.0019331	.0008707	.0010118	.002040
%RSD	.6865733	.3383912	.7192903	.4839014	.4133181	.3296258	.0682105
#1	.1980952	.2049659	3.213803	.4000685	.2106582	.3071750	2.991961
#2	.1954045	.2040808	3.169527	.3973252	.2097908	.3058650	2.988092
#3	.1969698	.2054474	3.181301	.4010561	.2115322	.3078558	2.991145

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4102545**	**3.304011**	**.5128529**	**.0755609**	**205.0176**	**.2973419**	**.2609037**
Stddev	.0026771	.017405	.0013604	.0003314	1.7725	.0011788	.0018602
%RSD	.6525376	.5267838	.2652648	.4385956	.8645576	.3964347	.7129625
#1	.4133019	3.319066	.5121898	.0759223	207.0247	.2981077	.2588747
#2	.4091799	3.284953	.5119513	.0752712	203.6671	.2979333	.2613079
#3	.4082818	3.308013	.5144178	.0754892	204.3608	.2959845	.2625285

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.56518**	**.3095248**	**.4217981**	**.7175154**	**.1967102**	**1.126107**	**6.137917**
Stddev	.02716	.0006921	.0018123	.0027749	.0012011	.005196	.008902
%RSD	.2348533	.2236124	.4296522	.3867350	.6105825	.4613841	.1450357
#1	11.56402	.3103219	.4208829	.7161544	.1978377	1.131909	6.131305
#2	11.53862	.3091762	.4206259	.7156838	.1954470	1.121883	6.134407
#3	11.59290	.3090763	.4238855	.7207080	.1968460	1.124530	6.148039

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2242-04A Acquired: 6/10/2025 16:00:52 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.8190968	.1824692	.2125638
Stddev	.0015754	.0005148	.0006812
%RSD	.1923332	.2821553	.3204719
#1	.8178460	.1820576	.2133382
#2	.8185783	.1823034	.2122960
#3	.8208661	.1830465	.2120571

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3122.975	74106.77	12159.54	2334.574	4115.434
Stddev	13.794	44.60	45.01	13.043	17.641
%RSD	.4417041	.0601872	.3701679	.5586786	.4286592
#1	3131.803	74105.26	12107.57	2344.745	4130.653
#2	3130.043	74152.11	12185.80	2339.108	4119.550
#3	3107.079	74062.95	12185.25	2319.869	4096.099

Sample Name: Q2197-01 Acquired: 6/10/2025 16:05:01 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.000125**	**-.008702**	**.0016665**	**.0097754**	**.0053551**	**.1678408**
Stddev	.000650	.002697	.0012745	.0059302	.0016759	.0110515
%RSD	520.5664	30.98906	76.47762	60.66457	31.29585	6.584541
#1	.000576	-.006988	.0027989	.0033186	.0068642	.1788763
#2	-.000242	-.007307	.0002862	.0110290	.0056497	.1678726
#3	-.000708	-.011810	.0019145	.0149787	.0035514	.1567733

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1851310**	**-.000212**	**.0001337**	**118.0589**	**.0052191**	**.0000612**
Stddev	.0010334	.000083	.0000365	.1960	.0001853	.0001675
%RSD	.5581877	39.00885	27.28674	.1660370	3.550330	273.5857
#1	.1855966	-.000122	.0001234	118.0597	.0054207	-.000040
#2	.1839467	-.000229	.0001035	117.8625	.0051806	.000255
#3	.1858496	-.000285	.0001743	118.2546	.0050562	-.000031

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0178532**	**.6162940**	**.6109883**	**31.11940**	**.0264427**	**.0001336**
Stddev	.0002190	.0109848	.0007627	.06459	.0002264	.0003235
%RSD	1.226895	1.782395	.1248279	.2075445	.8562219	242.1442
#1	.0176046	.6040322	.6118681	31.15348	.0262261	.0000231
#2	.0180181	.6196138	.6105820	31.04491	.0264242	.0004978
#3	.0179368	.6252360	.6105147	31.15981	.0266778	-.000120

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**293.6207**	**.0032248**	**.1530020**	**25.25019**	**.3173154**	**.0051809**
Stddev	5.6343	.0006522	.0004162	.40037	.0085170	.0001466
%RSD	1.918895	20.22474	.2719946	1.585611	2.684087	2.829804
#1	287.1258	.0031479	.1528767	24.79509	.3267380	.0052640
#2	296.5403	.0026145	.1534665	25.40732	.3150434	.0050117
#3	297.1959	.0039121	.1526630	25.54815	.3101648	.0052671

Sample Name: Q2197-01 Acquired: 6/10/2025 16:05:01 Type: Unk
Method: 6010-200.7 NEW(v2) 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	-.003949	.0010964	F 16.59710	8.286670	F 76.87896	.0326007
Stddev	.000277	.0010697	.29772	.050542	.49045	.0008246
%RSD	7.023750	97.56539	1.793803	.6099207	.6379532	2.529451
#1	-.004012	-.000028	16.27046	8.324243	77.28002	.0327249
#2	-.003645	.002102	16.66759	8.306560	77.02470	.0333562
#3	-.004189	.001215	16.85325	8.229209	76.33216	.0317210

Elem	Sr4077
Units	ppm
Avg	.6208712
Stddev	.0011799
%RSD	.1900444
#1	.6222315
#2	.6201236
#3	.6202587

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2927.196	69254.87	11509.18	2219.211	3901.559
Stddev	13.854	1184.94	13.96	91.610	5.643
%RSD	.4732936	1.710991	.1212950	4.128045	.1446376
#1	2942.452	70595.00	11493.54	2322.922	3906.868
#2	2923.738	68823.82	11520.36	2185.397	3902.176
#3	2915.398	68345.78	11513.65	2149.315	3895.632

Sample Name: Q2197-03 Acquired: 6/10/2025 16:15:10 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0033799**	**-.008974**	**.0035652**	**.0018012**	**.0115117**	**.2794894**
Stddev	.0041617	.001798	.0011494	.0024028	.0019400	.0009841
%RSD	123.1327	20.03153	32.24078	133.4027	16.85229	.3521066
#1	-.001333	-.009934	.0023035	.0044950	.0132448	.2794010
#2	.006551	-.006900	.0038392	.0010294	.0118744	.2785524
#3	.004921	-.010087	.0045528	-.000121	.0094160	.2805147

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3307437**	**-.000148**	**.0003376**	**231.2344**	**.0072134**	**-.000174**
Stddev	.0029501	.000069	.0000282	.7700	.0003919	.000161
%RSD	.8919594	46.28513	8.338354	.3330086	5.432803	92.87093
#1	.3340188	-.000074	.0003682	230.3475	.0069121	-.000175
#2	.3299177	-.000210	.0003130	231.6239	.0070715	-.000334
#3	.3282947	-.000161	.0003315	231.7319	.0076564	-.000012

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0155695**	**.8656301**	**.4950277**	**55.55835**	**.0293296**	**-.000229**
Stddev	.0005493	.0102656	.0013119	.33998	.0000792	.000519
%RSD	3.528082	1.185912	.2650202	.6119269	.2701388	226.6450
#1	.0161795	.8544859	.4935380	55.22230	.0294124	-.000799
#2	.0154153	.8677038	.4955340	55.55063	.0293221	.000217
#3	.0151138	.8747005	.4960110	55.90213	.0292545	-.000105

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**554.4235**	**.0067915**	**.2629900**	**43.13899**	**.4562448**	**.0106484**
Stddev	2.1486	.0009703	.0008285	.41031	.0089893	.0000858
%RSD	.3875315	14.28710	.3150183	.9511330	1.970286	.8055032
#1	553.7851	.0073562	.2632114	42.74862	.4665762	.0105558
#2	556.8189	.0073472	.2636853	43.56669	.4502100	.0107252
#3	552.6665	.0056711	.2620734	43.10167	.4519484	.0106642

Sample Name: Q2197-03 Acquired: 6/10/2025 16:15:10 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0056195	-.003091	F 35.61367	13.34577	F 236.9056	.0613326
Stddev	.0014179	.000787	.53917	.06377	.8122	.0011268
%RSD	25.23219	25.46795	1.513928	.4777992	.3428193	1.837226
#1	.0069220	-.002916	34.99850	13.41395	237.7535	.0626233
#2	.0058273	-.002406	36.00418	13.33575	236.8288	.0608296
#3	.0041091	-.003951	35.83832	13.28760	236.1346	.0605449

Elem	Sr4077
Units	ppm
Avg	1.154883
Stddev	.009126
%RSD	.7902348
#1	1.162084
#2	1.157946
#3	1.144619

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2830.041	67477.82	11975.33	2178.734	3666.231
Stddev	31.921	763.97	47.29	52.313	29.731
%RSD	1.127943	1.132185	.3948849	2.401064	.8109372
#1	2858.365	68276.07	11936.32	2237.150	3692.686
#2	2795.451	66753.49	11961.74	2136.210	3634.056
#3	2836.307	67403.89	12027.92	2162.843	3671.953

Sample Name: Q2197-05 Acquired: 6/10/2025 16:19:38 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.002751**	**-.008083**	**-.001331**	**.0022119**	**.0047766**	**.1058286**
Stddev	.002825	.000741	.000308	.0041803	.0010144	.0091459
%RSD	102.6833	9.172899	23.14395	188.9949	21.23623	8.642235
#1	-.000692	-.007289	-.000989	.0061473	.0038439	.0982672
#2	-.005972	-.008201	-.001418	-.002177	.0046293	.1159942
#3	-.001590	-.008757	-.001586	.002665	.0058565	.1032243

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1713575**	**-.000157**	**.0001603**	**115.6106**	**.0039913**	**-.000317**
Stddev	.0001081	.000007	.0000453	.3913	.0004072	.000204
%RSD	.0630714	4.363736	28.28039	.3384830	10.20300	64.32489
#1	.1714793	-.000161	.0002118	116.0022	.0035279	-.000105
#2	.1713201	-.000160	.0001264	115.6101	.0041537	-.000334
#3	.1712731	-.000149	.0001427	115.2196	.0042922	-.000511

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0102967**	**.2932165**	**.2975328**	**30.27415**	**.0202713**	**-.000157**
Stddev	.0005354	.0025922	.0020774	.16473	.0000888	.000135
%RSD	5.199420	.8840569	.6982047	.5441316	.4382671	86.24768
#1	.0098568	.2911851	.2998931	30.44793	.0202178	-.000310
#2	.0108928	.2961360	.2967232	30.25424	.0202222	-.000103
#3	.0101404	.2923283	.2959821	30.12028	.0203738	-.000057

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**303.8089**	**.0011790**	**.1469245**	**27.43402**	**.2794527**	**.0055490**
Stddev	3.0045	.0006953	.0007061	.18085	.0024327	.0001203
%RSD	.9889469	58.97388	.4806077	.6592250	.8705118	2.167083
#1	300.8473	.0014751	.1461093	27.22638	.2819482	.0056830
#2	306.8545	.0016772	.1473451	27.51855	.2793218	.0055133
#3	303.7248	.0003847	.1473191	27.55712	.2770882	.0054506

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2197-05 Acquired: 6/10/2025 16:19:38 Type: Unk
Method: 6010-200.7 NEW(v2) 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	-.004567	-.001780	F 17.33657	6.786283	F 73.61300	.0303215
Stddev	.000560	.000577	.10621	.026546	.13175	.0005554
%RSD	12.25801	32.42030	.6126174	.3911777	.1789745	1.831865
#1	-.005212	-.001304	17.21435	6.786598	73.66269	.0303219
#2	-.004285	-.001613	17.40637	6.812671	73.71268	.0297658
#3	-.004205	-.002421	17.38901	6.759581	73.46363	.0308767

Elem	Sr4077
Units	ppm
Avg	.6042521
Stddev	.0009700
%RSD	.1605237
#1	.6049325
#2	.6046824
#3	.6031414

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2896.107	69159.18	12378.88	2168.306	3893.750
Stddev	6.295	493.49	14.62	28.019	10.284
%RSD	.2173757	.7135551	.1180668	1.292193	.2641203
#1	2891.927	69727.41	12364.66	2200.486	3882.591
#2	2893.047	68912.07	12378.11	2149.321	3895.813
#3	2903.348	68838.07	12393.86	2155.111	3902.846

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2210-01 Acquired: 6/10/2025 16:23:59 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0330129	-.014198	.1860468	-.004498	.0097044	89.50039
Stddev	.0042000	.000786	.0043176	.005702	.0016140	.38790
%RSD	12.72234	5.538485	2.320686	126.7492	16.63131	.4334077
#1	.0292389	-.013893	.1815297	-.009535	.0109704	89.34252
#2	.0322621	-.015091	.1901325	.001692	.0078870	89.94234
#3	.0375376	-.013610	.1864783	-.005652	.0102557	89.21632

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.116788	.0039784	.0047666	489.8714	.1158434	.0328036
Stddev	.011084	.0000921	.0001819	.7918	.0004826	.0000845
%RSD	.9924722	2.314437	3.816032	.1616331	.4165582	.2576199
#1	1.116936	.0040815	.0049501	488.9577	.1162798	.0328696
#2	1.127797	.0039492	.0045864	490.2988	.1153251	.0327084
#3	1.105631	.0039044	.0047634	490.3576	.1159253	.0328329

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0802070	88.25148	5.076393	168.3976	.0953180	-.000109
Stddev	.0004862	.45418	.017041	1.1433	.0008577	.000571
%RSD	.6061719	.5146423	.3356849	.6789097	.8998031	521.5933
#1	.0796551	87.73343	5.056770	167.6888	.0943743	-.000754
#2	.0805720	88.58122	5.084947	167.7875	.0960500	.000097
#3	.0803939	88.43978	5.087462	169.7165	.0955296	.000329

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	578.2934	.1661120	.5127417	71.53623	.5893476	.1269524
Stddev	12.7658	.0028064	.0030679	.73304	.0017049	.0001313
%RSD	2.207492	1.689431	.5983319	1.024713	.2892935	.1034243
#1	577.9583	.1641777	.5118175	71.50041	.5892384	.1268846
#2	591.2234	.1648276	.5161654	72.28652	.5876999	.1271037
#3	565.6984	.1693307	.5102421	70.82175	.5911045	.1268688

Sample Name: Q2210-01 Acquired: 6/10/2025 16:23:59 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0071523	1.224263	F 102.0325	4.149872	F 79.06029	.2832194
Stddev	.0009812	.005083	.6319	.031061	.41450	.0016259
%RSD	13.71869	.4151906	.6193082	.7484705	.5242806	.5740727
#1	.0064247	1.220886	101.3627	4.119597	78.58361	.2815085
#2	.0082682	1.230109	102.6181	4.148355	79.26134	.2847442
#3	.0067639	1.221793	102.1168	4.181663	79.33593	.2834055

Elem	Sr4077
Units	ppm
Avg	2.487205
Stddev	.048593
%RSD	1.953720
#1	2.515747
#2	2.514769
#3	2.431097

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2815.995	67961.41	12580.13	2096.886	3398.932
Stddev	37.632	540.84	58.65	42.028	32.033
%RSD	1.336355	.7958031	.4662060	2.004283	.9424481
#1	2772.548	68026.27	12579.60	2091.366	3362.565
#2	2837.062	67391.06	12521.75	2057.892	3411.263
#3	2838.374	68466.89	12639.05	2141.401	3422.966

Sample Name: CCV02 Acquired: 6/10/2025 16:28:33 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**5.065240**	**5.065594**	**5.070840**	**5.099450**	**5.044409**	**10.02170**	**9.825012**
Stddev	.020050	.064263	.015475	.020880	.015244	.02756	.085378
%RSD	.3958284	1.268623	.3051668	.4094571	.3021914	.2749588	.8689830
#1	5.086556	5.136266	5.071042	5.121157	5.061907	10.04191	9.915484
#2	5.046759	5.049850	5.055266	5.097685	5.037311	9.99031	9.813696
#3	5.062406	5.010665	5.086213	5.079509	5.034008	10.03288	9.745857

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2609694**	**2.541207**	**24.88481**	**1.034054**	**2.525125**	**1.275172**	**4.927896**
Stddev	.0009888	.011127	.12023	.001247	.009826	.003831	.027848
%RSD	.3789078	.4378792	.4831427	.1205658	.3891365	.3004112	.5651068
#1	.2621001	2.538461	24.98730	1.033879	2.523451	1.278669	4.956055
#2	.2602665	2.531710	24.75247	1.035379	2.516244	1.271078	4.900370
#3	.2605415	2.553450	24.91466	1.032904	2.535681	1.275770	4.927262

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.462481**	**24.97487**	**2.535842**	**1.270918**	**24.35991**	**2.505307**	**2.566965**
Stddev	.011083	.16199	.009877	.002280	.02096	.012571	.011492
%RSD	.4500852	.6486174	.3894776	.1794348	.0860381	.5017708	.4476977
#1	2.474175	25.12370	2.533441	1.271065	24.36141	2.517792	2.553762
#2	2.452131	24.80233	2.527387	1.273122	24.38007	2.492652	2.574717
#3	2.461138	24.99858	2.546697	1.268568	24.33824	2.505477	2.572417

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.49087**	**5.119820**	**5.102186**	**5.086885**	**4.959819**	**5.127214**	**5.098056**
Stddev	.02483	.021785	.014366	.024717	.026168	.011880	.016821
%RSD	.1014016	.4254992	.2815641	.4858979	.5276087	.2316960	.3299523
#1	24.47546	5.144951	5.117623	5.099513	4.982803	5.116656	5.093921
#2	24.47763	5.106298	5.089208	5.058405	4.931339	5.140078	5.083688
#3	24.51951	5.108212	5.099728	5.102738	4.965313	5.124909	5.116559

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCV02 Acquired: 6/10/2025 16:28:33 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**5.018337**	**4.840992**	**4.989310**
Stddev	.012044	.024198	.034128
%RSD	.2400092	.4998560	.6840130
#1	5.027344	4.865992	5.028639
#2	5.004656	4.817685	4.971787
#3	5.023012	4.839299	4.967503

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3165.057**	**73127.18**	**11553.30**	**2349.901**	**4218.431**
Stddev	9.250	87.86	42.12	15.189	5.299
%RSD	.2922465	.1201476	.3645787	.6463470	.1256182
#1	3154.669	73189.45	11506.72	2365.306	4215.366
#2	3168.104	73026.68	11588.70	2349.458	4224.550
#3	3172.400	73165.42	11564.48	2334.938	4215.377

Sample Name: CCB02 Acquired: 6/10/2025 16:32:44 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0014171**	**.0001235**	**.0002778**	**-.002378**	**.0030632**	**.0013516**	**.0001786**
Stddev	.0018999	.0011901	.0023646	.003709	.0011884	.0029906	.0002357
%RSD	134.0649	963.7530	851.2712	155.9745	38.79637	221.2692	131.9974
#1	.0031650	-.000494	-.000100	-.006622	.0035545	.0046500	.0003929
#2	-.000605	-.000631	-.001875	-.000751	.0039271	-.001183	-.000074
#3	.001691	.001495	.002809	.000240	.0017079	.000588	.000217

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000758**	**.0001125**	**.0030345**	**.0001678**	**.0000253**	**.0002290**	**.0007501**
Stddev	.0000265	.0000386	.0068556	.0001204	.0000452	.0002241	.0013380
%RSD	34.93840	34.33182	225.9236	71.76982	178.5114	97.87847	178.3782
#1	.0000553	.0001174	.0028564	.0002411	.0000679	-.000028	.0010069
#2	.0000663	.0000717	-.003730	.0002334	.0000302	.000328	.0019410
#3	.0001057	.0001485	.009977	.0000288	-.000022	.000387	-.000698

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000118**	**.0015353**	**-.000270**	**-.000022**	**.0685850**	**-.000388**	**-.000082**
Stddev	.0001859	.0148869	.000234	.000379	.0063169	.001127	.000077
%RSD	1569.113	969.6291	86.60704	1701.576	9.210311	290.4312	93.51676
#1	-.000203	-.010671	-.000081	-.000398	.0640943	.000885	-.000065
#2	.000115	.018121	-.000531	.000360	.0758081	-.001255	-.000015
#3	.000123	-.002843	-.000197	-.000029	.0658527	-.000794	-.000166

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0251885**	**.0066953**	**.0005551**	**.0001332**	**.0003729**	**.0161088**	**-.000787**
Stddev	.0085938	.0003212	.0001754	.0006837	.0005841	.0108966	.000513
%RSD	34.11780	4.797795	31.60073	513.3553	156.6338	67.64381	65.16989
#1	.0350203	.0070649	.0007362	.0008437	.0003708	.0043969	-.000839
#2	.0191089	.0064836	.0003859	-.000520	-.000210	.0179823	-.001271
#3	.0214364	.0065374	.0005433	.000076	.000958	.0259471	-.000250

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCB02 Acquired: 6/10/2025 16:32:44 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0069249	.0025289	.0001872
Stddev	.0029357	.0007725	.0000461
%RSD	42.39325	30.54482	24.64808
#1	.0085510	.0031578	.0002247
#2	.0035360	.0027623	.0002013
#3	.0086877	.0016667	.0001357

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3369.648	77772.71	12487.02	2505.873	4799.062
Stddev	6.273	109.64	29.29	5.877	2.557
%RSD	.1861489	.1409776	.2345418	.2345301	.0532835
#1	3370.583	77815.92	12471.93	2500.279	4801.482
#2	3362.961	77648.04	12520.77	2505.343	4796.387
#3	3375.401	77854.16	12468.35	2511.997	4799.317

Sample Name: Q2243-01 Acquired: 6/10/2025 16:37:04 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.005924**	**-.011513**	**-.002905**	**.0105900**	**.0039774**	**21.48010**	**.0016144**
Stddev	.001813	.002506	.001872	.0040025	.0012827	.07893	.0028120
%RSD	30.60365	21.76248	64.44096	37.79495	32.25011	.3674453	174.1798
#1	-.007186	-.009679	-.001051	.0112612	.0037508	21.39258	.0007926
#2	-.003846	-.010493	-.002871	.0062943	.0028231	21.54587	.0047457
#3	-.006738	-.014368	-.004795	.0142144	.0053584	21.50185	-.000695

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000161**	**.0000199**	**10.98953**	**.0332642**	**-.000097**	**.0149152**	**.3083315**
Stddev	.000069	.0001981	.18318	.0010715	.000114	.0004724	.0028338
%RSD	42.47643	997.2242	1.666834	3.221303	117.2452	3.167362	.9190813
#1	-.000174	.0002084	10.96796	.0327146	.000023	.0144060	.3111942
#2	-.000223	-.000187	11.18254	.0325790	-.000110	.0153392	.3055275
#3	-.000087	.000038	10.81809	.0344991	-.000203	.0150005	.3082726

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0118422**	**2.298172**	**.0141730**	**-.000226**	**1492.112**	**.0010559**	**.3798681**
Stddev	.0004016	.081098	.0003467	.000226	15.404	.0017087	.0020317
%RSD	3.390896	3.528812	2.445978	99.98826	1.032391	161.8270	.5348358
#1	.0116030	2.286729	.0140912	.000035	1475.722	.0001892	.3775561
#2	.0123058	2.384384	.0145533	-.000360	1494.321	.0030242	.3806795
#3	.0116177	2.223403	.0138746	-.000353	1506.293	-.000046	.3813687

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**194.0218**	**4.063777**	**.0210876**	**.0076269**	**-.000475**	**1.482599**	**3.283894**
Stddev	3.2692	.095951	.0001783	.0006170	.000539	.032599	.026502
%RSD	1.684940	2.361134	.8455368	8.090227	113.4696	2.198756	.8070297
#1	194.8727	3.961688	.0211981	.0073375	-.000405	1.505735	3.280343
#2	190.4113	4.152104	.0208819	.0072078	.000026	1.445317	3.311992
#3	196.7814	4.077539	.0211828	.0083355	-.001046	1.496745	3.259346

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2243-01 Acquired: 6/10/2025 16:37:04 Type: Unk
Method: 6010-200.7 NEW(v2) 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	^ *****	.0061364	.0480205
Stddev	-----	.0021710	.0001514
%RSD	-----	35.37832	.3152031
#1	^ -----	.0064500	.0478529
#2	^ -----	.0081335	.0480614
#3	754.5474	.0038257	.0481472

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2733.068	61124.08	11834.37	1975.223	3430.601
Stddev	59.415	163.11	323.79	72.073	51.003
%RSD	2.173918	.2668587	2.736049	3.648878	1.486711
#1	2716.631	61284.21	12021.26	1953.203	3415.454
#2	2798.970	61129.89	11460.48	1916.729	3487.461
#3	2683.602	60958.14	12021.37	2055.738	3388.887

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2241-01 Acquired: 6/10/2025 16:41:26 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0912183	-.001682	.1164233	.0010077	-.008138	111.2097
Stddev	.0026598	.000404	.0017751	.0081724	.001782	1.1030
%RSD	2.915830	24.01267	1.524656	811.0154	21.89119	.9918583
#1	.0884068	-.002140	.1145865	.0034329	-.006642	112.2600
#2	.0915535	-.001374	.1181294	-.008103	-.010109	110.0606
#3	.0936946	-.001533	.1165541	.007693	-.007665	111.3084

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.448661	.0085086	.0135772	16.67973	.1971397	.0763747
Stddev	.009136	.0000566	.0003447	.18551	.0009268	.0000324
%RSD	.6306616	.6648112	2.538843	1.112171	.4701144	.0423593
#1	1.458611	.0084944	.0136554	16.83796	.1969977	.0763803
#2	1.440651	.0084604	.0138760	16.47557	.1962921	.0764039
#3	1.446720	.0085709	.0132000	16.72567	.1981293	.0763399

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0826954	283.7260	2.262165	16.38818	.1346144	.0002207
Stddev	.0008861	1.3284	.020573	.18574	.0001641	.0004699
%RSD	1.071480	.4682143	.9094437	1.133363	.1219170	212.9072
#1	.0835183	284.5575	2.280272	16.50308	.1346137	.0007444
#2	.0828104	282.1939	2.239794	16.17390	.1347789	-.000164
#3	.0817574	284.4266	2.266429	16.48757	.1344507	.000082

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.995388	.4013215	.2793611	4.864419	-.047030	.0016664
Stddev	.034260	.0060648	.0010032	.015779	.003150	.0003581
%RSD	.4897507	1.511212	.3590944	.3243840	6.696908	21.49103
#1	7.024741	.4066775	.2789451	4.881344	-.048601	.0014731
#2	7.003679	.3947362	.2805053	4.850112	-.043404	.0020797
#3	6.957743	.4025510	.2786328	4.861802	-.049084	.0014465

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2241-01 Acquired: 6/10/2025 16:41:26 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0068897**	**1.840421**	F **19.45665**	**2.662335**	**.4132507**	**.1921305**
Stddev	.0009698	.015161	.08322	.007998	.0014068	.0001682
%RSD	14.07631	.8238019	.4277114	.3003987	.3404158	.0875508
#1	.0075675	1.855419	19.50574	2.664694	.4137946	.1919809
#2	.0057788	1.825101	19.36056	2.668888	.4143042	.1923126
#3	.0073228	1.840744	19.50364	2.653424	.4116531	.1920981

Elem	Sr4077
Units	ppm
Avg	**-.181243**
Stddev	.000756
%RSD	.4168511
#1	-.181266
#2	-.180477
#3	-.181988

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3838.894**	**89685.05**	**16071.19**	**2785.858**	**4234.275**
Stddev	2.770	189.87	126.97	21.490	1.098
%RSD	.0721483	.2117064	.7900235	.7713943	.0259219
#1	3836.376	89468.50	15938.82	2768.008	4234.295
#2	3841.861	89822.98	16191.96	2779.855	4233.168
#3	3838.444	89763.67	16082.78	2809.712	4235.363

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2241-05 Acquired: 6/10/2025 16:45:33 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0319586**	**-.008234**	**.1346121**	**-.004965**	**-.006458**	**92.78414**
Stddev	.0023598	.002451	.0010370	.000664	.001606	.12163
%RSD	7.383960	29.76923	.7703355	13.37537	24.86761	.1310945
#1	.0317693	-.005894	.1341300	-.005305	-.007945	92.65433
#2	.0296991	-.008026	.1339040	-.004199	-.006674	92.80261
#3	.0344073	-.010783	.1358024	-.005389	-.004755	92.89548

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4016568**	**.0069133**	**.0085263**	**18.81585**	**.1178768**	**.0771917**
Stddev	.0006075	.0000756	.0002347	.20980	.0001236	.0005357
%RSD	.1512495	1.093768	2.752132	1.115006	.1048515	.6940424
#1	.4009640	.0069474	.0082730	19.05810	.1177662	.0770943
#2	.4019080	.0068267	.0087363	18.69311	.1178539	.0767114
#3	.4020985	.0069659	.0085695	18.69634	.1180102	.0777695

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1093176**	**186.3393**	**4.154481**	**21.26001**	**.1361031**	**-.004765**
Stddev	.0011348	1.5251	.045515	.31848	.0006206	.000644
%RSD	1.038117	.8184513	1.095553	1.498035	.4560080	13.51199
#1	.1083462	188.0979	4.207035	21.62196	.1356373	-.004158
#2	.1090415	185.3803	4.128561	21.02267	.1358643	-.005440
#3	.1105650	185.5396	4.127847	21.13540	.1368077	-.004697

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.653697**	**.1992422**	**.3099101**	**7.249437**	**-.132746**	**.0000057**
Stddev	.080109	.0014729	.0024647	.049528	.001704	.0000783
%RSD	.8298275	.7392472	.7953080	.6831925	1.283892	1381.848
#1	9.561329	.2007322	.3070732	7.198011	-.131234	-.000038
#2	9.704200	.1992073	.3111312	7.253484	-.132412	-.000041
#3	9.695561	.1977871	.3115259	7.296818	-.134593	.000096

Sample Name: Q2241-05 Acquired: 6/10/2025 16:45:33 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0041717	1.882731	F 15.79225	3.983294	.5367901	.1498588
Stddev	.0011524	.005758	.03147	.021213	.0041862	.0009852
%RSD	27.62401	.3058367	.1992794	.5325507	.7798534	.6574480
#1	.0037748	1.889379	15.76780	3.969316	.5333288	.1498839
#2	.0032703	1.879329	15.78119	3.972864	.5355986	.1488612
#3	.0054701	1.879485	15.82775	4.007703	.5414428	.1508312

Elem	Sr4077
Units	ppm
Avg	-.048428
Stddev	.001643
%RSD	3.391882
#1	-.050283
#2	-.047157
#3	-.047845

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3576.855	84152.53	13475.94	2680.878	4243.826
Stddev	5.508	367.14	27.96	15.779	1.979
%RSD	.1539967	.4362763	.2074989	.5885923	.0466245
#1	3575.733	84525.74	13448.23	2697.569	4241.738
#2	3571.994	84140.05	13504.15	2678.863	4245.673
#3	3582.838	83791.79	13475.43	2666.203	4244.067

Sample Name: Q2248-01 Acquired: 6/10/2025 16:49:40 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0876903**	**-.009979**	**.2223701**	**-.005177**	**-.005187**	**133.4685**	**.4412858**
Stddev	.0019646	.000766	.0020874	.009853	.000878	.2688	.0022469
%RSD	2.240356	7.673018	.9387188	190.3263	16.92429	.2013806	.5091619
#1	.0859735	-.009172	.2247783	-.013897	-.004407	133.7147	.4430305
#2	.0898328	-.010069	.2212536	-.007145	-.005017	133.1818	.4420765
#3	.0872645	-.010695	.2210783	.005512	-.006138	133.5089	.4387505

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0093767**	**.0114663**	**76.20025**	**.2002185**	**.1278920**	**.2656047**	**234.5433**
Stddev	.0008411	.0014088	.31953	.0120076	.0003630	.0028248	8.8012
%RSD	8.969852	12.28659	.4193262	5.997228	.2838094	1.063529	3.752489
#1	.0103477	.0130318	75.90656	.2140580	.1281510	.2688429	224.3929
#2	.0089074	.0110665	76.15368	.1925679	.1280478	.2636467	240.0519
#3	.0088749	.0103006	76.54051	.1940298	.1274771	.2643244	239.1851

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.154787**	**44.83093**	**.2205378**	**-.004037**	**2.652773**	**.3382045**	**.5886863**
Stddev	.002312	.25181	.0012167	.003026	.087871	.0019352	.0040454
%RSD	.0732751	.5616924	.5516993	74.97446	3.312432	.5721975	.6871963
#1	3.153154	44.61966	.2218488	-.007531	2.559378	.3362185	.5846352
#2	3.153774	44.76356	.2203198	-.002262	2.733812	.3383107	.5927260
#3	3.157432	45.10958	.2194449	-.002316	2.665128	.3400845	.5886977

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.88456**	**-.092319**	**.0260037**	**.0091427**	**2.693877**	**4.266748**	**5.845362**
Stddev	.38759	.047308	.0006636	.0004331	.004705	.166469	.014563
%RSD	3.261309	51.24431	2.552108	4.736948	.1746659	3.901540	.2491399
#1	11.44194	-.146943	.0262086	.0092337	2.699304	4.074527	5.861733
#2	12.16323	-.064477	.0252618	.0086713	2.691378	4.363330	5.840505
#3	12.04851	-.065538	.0265409	.0095230	2.690948	4.362387	5.833848

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2248-01 Acquired: 6/10/2025 16:49:40 Type: Unk
Method: 6010-200.7 NEW(v2) 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	2.909940	.2519563	.0508129
Stddev	.011601	.0019855	.0094074
%RSD	.3986528	.7880477	18.51376
#1	2.914311	.2497912	.0616691
#2	2.918720	.2536920	.0457106
#3	2.896789	.2523857	.0450590

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3549.182	83814.43	14017.18	2737.598	4136.298
Stddev	28.337	2925.06	6.26	251.693	24.435
%RSD	.7984144	3.489922	.0446925	9.193926	.5907367
#1	3580.624	87188.11	14011.22	3028.082	4157.908
#2	3525.615	81987.38	14023.71	2584.407	4109.783
#3	3541.308	82267.80	14016.59	2600.304	4141.201

Sample Name: Q2197-05DUP Acquired: 6/10/2025 16:53:45 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.000417**	**-.008124**	**-.001045**	**.0026623**	**.0060748**	**.1085212**
Stddev	.001985	.002489	.000260	.0022277	.0013977	.0050504
%RSD	476.3000	30.64264	24.91452	83.67432	23.00815	4.653877
#1	-.001339	-.006148	-.000751	.0000901	.0052989	.1049127
#2	-.001773	-.007304	-.001248	.0039637	.0076883	.1142930
#3	.001862	-.010920	-.001135	.0039331	.0052372	.1063580

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1699813**	**-.000153**	**.0000676**	**113.6089**	**.0040298**	**-.000093**
Stddev	.0004287	.000002	.0000273	1.3732	.0003916	.000127
%RSD	.2521955	1.111862	40.31517	1.208705	9.717428	136.2012
#1	.1696917	-.000155	.0000486	114.8399	.0043465	.000006
#2	.1704738	-.000153	.0000554	113.8590	.0035919	-.000236
#3	.1697784	-.000152	.0000988	112.1279	.0041509	-.000049

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0104730**	**.3206359**	**.4875009**	**29.60226**	**.0217788**	**-.000047**
Stddev	.0002834	.0019774	.0043062	.37642	.0000783	.000061
%RSD	2.705742	.6167192	.8833181	1.271590	.3593615	130.9534
#1	.0102744	.3191451	.4894951	29.94380	.0218671	-.000104
#2	.0107975	.3228791	.4904484	29.66429	.0217179	.000018
#3	.0103470	.3198834	.4825591	29.19867	.0217515	-.000056

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**303.9631**	**.0030823**	**.1490495**	**27.22928**	**.2726054**	**.0047856**
Stddev	1.3605	.0012797	.0007328	.13195	.0017142	.0000765
%RSD	.4475839	41.51567	.4916444	.4845777	.6288318	1.599152
#1	302.7888	.0040882	.1484753	27.11824	.2732115	.0048353
#2	303.6464	.0035168	.1487984	27.19445	.2739341	.0048239
#3	305.4540	.0016420	.1498749	27.37515	.2706704	.0046974

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2197-05DUP Acquired: 6/10/2025 16:53:45 Type: Unk
Method: 6010-200.7 NEW(v2) 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	-.002935	-.002227	F 17.20313	6.780309	F 74.49721	.0298909
Stddev	.000665	.000170	.03629	.043360	.25910	.0012650
%RSD	22.66760	7.635459	.2109336	.6394976	.3477945	4.231914
#1	-.002418	-.002074	17.24004	6.787934	74.73825	.0284303
#2	-.003686	-.002410	17.20184	6.819350	74.53017	.0306261
#3	-.002703	-.002196	17.16750	6.733642	74.22321	.0306163

Elem	Sr4077
Units	ppm
Avg	.5982813
Stddev	.0008262
%RSD	.1380908
#1	.5973337
#2	.5988506
#3	.5986596

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2956.728	68991.23	12515.22	2162.590	3927.290
Stddev	8.266	140.91	27.89	5.153	9.287
%RSD	.2795710	.2042439	.2228252	.2382880	.2364646
#1	2953.376	69134.63	12503.41	2164.595	3920.586
#2	2950.664	68986.09	12495.18	2166.440	3923.394
#3	2966.144	68852.95	12547.07	2156.736	3937.890

Sample Name: Q2197-05LX5 Acquired: 6/10/2025 16:58:05 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.000105**	**-.002169**	**-.001598**	**.0048005**	**.0013125**	**.0217168**	**.0360352**
Stddev	.002065	.001557	.000382	.0028298	.0022442	.0006953	.0008093
%RSD	1975.138	71.78465	23.88401	58.94762	170.9878	3.201770	2.245907
#1	-.000593	-.001801	-.001956	.0075628	.0032412	.0209780	.0355564
#2	-.001882	-.003877	-.001640	.0049311	-.001151	.0223584	.0369696
#3	.002161	-.000829	-.001196	.0019077	.001847	.0218140	.0355797

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000548**	**.0000866**	**24.94610**	**.0000151**	**-.000098**	**.0052302**	**.1327566**
Stddev	.0000741	.0000258	.11837	.0002478	.000127	.0002811	.0077548
%RSD	135.1668	29.76071	.4745179	1638.452	129.5236	5.374777	5.841385
#1	-.000022	.0001163	24.80944	-.000061	-.000066	.0055366	.1416079
#2	.000060	.0000721	25.01704	.000292	-.000238	.0049843	.1295046
#3	.000126	.0000713	25.01180	-.000185	.000010	.0051697	.1271571

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0645227**	**6.489415**	**.0051748**	**.0000503**	**59.53527**	**.0003758**	**.0290727**
Stddev	.0001548	.044841	.0006300	.0003196	.40160	.0001615	.0001136
%RSD	.2399507	.6909923	12.17406	635.4328	.6745560	42.97088	.3907117
#1	.0646998	6.438444	.0058838	.0002387	59.98315	.0003058	.0291604
#2	.0644130	6.507016	.0046793	-.000319	59.20726	.0002611	.0289444
#3	.0644552	6.522786	.0049612	.000231	59.41539	.0005604	.0291134

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.918820**	**.0658525**	**.0011447**	**-.003417**	**-.000429**	**3.424601**	**1.386672**
Stddev	.005507	.0004292	.0000904	.000393	.000319	.013822	.015601
%RSD	.1119615	.6517271	7.892421	11.49727	74.52533	.4036197	1.125045
#1	4.922019	.0659743	.0012104	-.003808	-.000114	3.408896	1.403091
#2	4.912461	.0653756	.0011822	-.003022	-.000752	3.429990	1.384882
#3	4.921980	.0662076	.0010417	-.003422	-.000420	3.434918	1.372045

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2197-05LX5 Acquired: 6/10/2025 16:58:05 Type: Unk
Method: 6010-200.7 NEW(v2) 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	15.23034	.0092341	.1276606
Stddev	.17173	.0009500	.0001391
%RSD	1.127537	10.28750	.1089707
#1	15.41831	.0082191	.1278101
#2	15.19103	.0101017	.1276368
#3	15.08167	.0093815	.1275350

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3211.778	76016.49	12725.26	2382.289	4388.672
Stddev	21.965	198.22	40.65	16.023	27.920
%RSD	.6838882	.2607597	.3194528	.6725950	.6361790
#1	3195.064	76088.93	12767.72	2380.471	4363.366
#2	3203.614	76168.31	12721.35	2399.143	4384.028
#3	3236.656	75792.24	12686.70	2367.252	4418.623

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2197-05MS Acquired: 6/10/2025 17:02:21 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8676821**	**1.841161**	**.9599197**	**2.106026**	**.8664549**	**2.120475**
Stddev	.0012779	.018210	.0031793	.010175	.0049473	.008893
%RSD	.1472770	.9890452	.3312010	.4831216	.5709823	.4194000
#1	.8678057	1.845135	.9623096	2.100211	.8644947	2.129909
#2	.8688936	1.857055	.9611381	2.100092	.8627881	2.112245
#3	.8663468	1.821292	.9563115	2.117774	.8720819	2.119271

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3672098**	**.2028224**	**.2039725**	**117.2775**	**.4166698**	**.2057105**
Stddev	.0014592	.0004339	.0003084	.3360	.0023389	.0002450
%RSD	.3973651	.2139434	.1511788	.2865195	.5613359	.1191080
#1	.3675697	.2031495	.2040959	117.2071	.4151025	.2055034
#2	.3656044	.2023301	.2042001	116.9823	.4155487	.2059810
#3	.3684553	.2029875	.2036216	117.6432	.4193582	.2056471

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3176887**	**3.308186**	**.4922338**	**32.80490**	**.5316032**	**.0689572**
Stddev	.0004609	.019749	.0028862	.10229	.0010009	.0002321
%RSD	.1450627	.5969765	.5863479	.3118253	.1882768	.3365884
#1	.3178509	3.296211	.4917760	32.80698	.5327111	.0691829
#2	.3171687	3.297367	.4896039	32.70157	.5313341	.0687192
#3	.3180465	3.330980	.4953216	32.90613	.5307643	.0689694

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**285.7895**	**.3071244**	**.3637700**	**36.85195**	**.5726412**	**.4423754**
Stddev	2.0362	.0011386	.0006203	.04694	.0023883	.0005643
%RSD	.7124956	.3707220	.1705076	.1273698	.4170614	.1275577
#1	287.7304	.3073106	.3631027	36.81150	.5720768	.4425802
#2	285.9685	.3059042	.3643289	36.84094	.5705857	.4417373
#3	283.6697	.3081584	.3638784	36.90342	.5752611	.4428086

Sample Name: Q2197-05MS Acquired: 6/10/2025 17:02:21 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.6873796	.1970168	F 17.31502	13.21708	F 75.50786	.2245900
Stddev	.0027812	.0008508	.05824	.03241	.26418	.0008636
%RSD	.4046084	.4318595	.3363488	.2452089	.3498692	.3845050
#1	.6893547	.1969389	17.32703	13.19874	75.62331	.2242827
#2	.6885850	.1962076	17.25171	13.25450	75.69467	.2255652
#3	.6841991	.1979039	17.36632	13.19800	75.20561	.2239222

Elem	Sr4077
Units	ppm
Avg	.8145841
Stddev	.0010957
%RSD	.1345166
#1	.8147511
#2	.8134144
#3	.8155867

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2912.226	69817.97	11553.39	2173.226	3877.835
Stddev	10.837	128.40	17.77	4.928	4.479
%RSD	.3721254	.1839122	.1538241	.2267738	.1154924
#1	2913.088	69790.40	11538.24	2169.591	3875.365
#2	2922.606	69957.91	11572.95	2178.836	3883.004
#3	2900.983	69705.58	11548.96	2171.252	3875.134

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2197-05MSD Acquired: 6/10/2025 17:06:27 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.9018296**	**1.874949**	**.9856563**	**2.177311**	**.9088711**	**2.221389**
Stddev	.0004583	.020505	.0082204	.004229	.0078474	.002171
%RSD	.0508193	1.093619	.8340028	.1942304	.8634232	.0977378
#1	.9017341	1.897325	.9779075	2.181481	.9138791	2.221444
#2	.9014266	1.857059	.9847828	2.177426	.9129071	2.223532
#3	.9023282	1.870462	.9942785	2.173025	.8998271	2.219191

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3923714**	**.2034126**	**.2095217**	**123.1548**	**.4314548**	**.2117440**
Stddev	.0004348	.0008707	.0013332	.3478	.0014863	.0008120
%RSD	.1108139	.4280523	.6362868	.2823700	.3444910	.3834928
#1	.3921309	.2024494	.2088086	123.2106	.4299305	.2112667
#2	.3928733	.2041439	.2086966	123.4713	.4329000	.2112837
#3	.3921100	.2036444	.2110597	122.7826	.4315339	.2126816

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3279612**	**3.580686**	**.5190847**	**34.06511**	**.5462583**	**.0737882**
Stddev	.0013682	.009421	.0016691	.12583	.0030280	.0005900
%RSD	.4171929	.2631127	.3215554	.3693847	.5543187	.7996116
#1	.3287463	3.580047	.5188098	34.10517	.5442417	.0744412
#2	.3287559	3.590410	.5208743	34.16603	.5447930	.0736297
#3	.3263813	3.571600	.5175701	33.92412	.5497403	.0732936

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**316.3422**	**.3209261**	**.3833486**	**40.47296**	**.5837781**	**.4616914**
Stddev	.8902	.0008870	.0013201	.16473	.0013023	.0015745
%RSD	.2814037	.2763859	.3443699	.4070148	.2230772	.3410287
#1	317.3596	.3216637	.3848727	40.62966	.5827779	.4621199
#2	315.7064	.3199419	.3826108	40.48798	.5833058	.4630074
#3	315.9606	.3211728	.3825622	40.30123	.5852507	.4599471

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2197-05MSD Acquired: 6/10/2025 17:06:27 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.7045486	.2071390	F 18.88929	13.54781	F 77.41614	.2406826
Stddev	.0045068	.0006907	.07324	.06165	.30912	.0027274
%RSD	.6396774	.3334493	.3877521	.4550250	.3993006	1.133209
#1	.7001074	.2079213	18.93701	13.56528	77.32129	.2419451
#2	.7044202	.2066135	18.92589	13.47931	77.16556	.2375527
#3	.7091183	.2068821	18.80496	13.59883	77.76158	.2425501

Elem	Sr4077
Units	ppm
Avg	.8633720
Stddev	.0005688
%RSD	.0658841
#1	.8636838
#2	.8637167
#3	.8627154

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2937.016	69904.14	12019.65	2165.773	3929.709
Stddev	46.182	189.31	20.28	12.943	38.969
%RSD	1.572398	.2708204	.1687141	.5976341	.9916569
#1	2907.124	69820.92	12035.43	2154.914	3908.659
#2	2913.719	69770.69	11996.78	2162.308	3905.792
#3	2990.206	70120.81	12026.75	2180.096	3974.676

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2197-05A Acquired: 6/10/2025 17:28:07 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8200031**	**1.719598**	**.8990161**	**1.974079**	**.8599938**	**2.011525**
Stddev	.0019826	.011762	.0032150	.007709	.0024991	.005479
%RSD	.2417790	.6839692	.3576124	.3905301	.2905893	.2723869
#1	.8195438	1.728688	.9027284	1.980617	.8594049	2.012010
#2	.8221750	1.706314	.8971784	1.965578	.8578418	2.005820
#3	.8182904	1.723792	.8971415	1.976042	.8627347	2.016746

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3567721**	**.1885766**	**.1905510**	**113.9539**	**.3960966**	**.1930120**
Stddev	.0010143	.0005124	.0005546	.2922	.0009866	.0004362
%RSD	.2843105	.2717177	.2910353	.2564512	.2490828	.2259717
#1	.3566132	.1887943	.1911062	114.2826	.3951463	.1931349
#2	.3558466	.1879913	.1899971	113.7233	.3960275	.1925276
#3	.3578566	.1889443	.1905498	113.8558	.3971159	.1933736

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3300275**	**3.596481**	**.5759732**	**31.53722**	**.5029203**	**.0656320**
Stddev	.0007533	.003744	.0026052	.08407	.0005891	.0007211
%RSD	.2282502	.1041148	.4523143	.2665621	.1171426	1.098707
#1	.3305231	3.597603	.5752666	31.63010	.5035979	.0662531
#2	.3291606	3.599535	.5737942	31.51522	.5025292	.0658019
#3	.3303987	3.592303	.5788588	31.46635	.5026339	.0648412

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**287.3743**	**.2919718**	**.3541178**	**36.65121**	**.5414793**	**.4408047**
Stddev	.7344	.0019925	.0009403	.07991	.0012106	.0013144
%RSD	.2555416	.6824360	.2655467	.2180343	.2235719	.2981762
#1	287.3872	.2940089	.3547018	36.60053	.5421491	.4409889
#2	288.1021	.2900270	.3530330	36.60976	.5400818	.4394080
#3	286.6335	.2918795	.3546184	36.74333	.5422069	.4420173

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2197-05A Acquired: 6/10/2025 17:28:07 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.6958551	.1974210	F 17.26421	12.37133	F 71.34471	.2153161
Stddev	.0031035	.0008547	.04191	.03142	.21680	.0039821
%RSD	.4459973	.4329459	.2427802	.2539762	.3038723	1.849407
#1	.6990472	.1982392	17.28438	12.39991	71.57925	.2134707
#2	.6928485	.1965339	17.29223	12.33769	71.15165	.2125914
#3	.6956696	.1974899	17.21602	12.37640	71.30324	.2198861

Elem	Sr4077
Units	ppm
Avg	.7912042
Stddev	.0033282
%RSD	.4206453
#1	.7910813
#2	.7879392
#3	.7945921

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2931.295	69358.91	11797.00	2165.284	3933.054
Stddev	7.663	85.30	38.13	8.485	7.854
%RSD	.2614286	.1229784	.3232561	.3918616	.1996897
#1	2933.646	69276.17	11758.14	2156.867	3928.317
#2	2937.507	69354.01	11834.36	2165.148	3942.120
#3	2922.732	69446.56	11798.51	2173.836	3928.725

Sample Name: Q2137-05 Acquired: 6/10/2025 17:32:15 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.000602**	**-.005478**	**-.000958**	**.0061936**	**.0065913**	**.0826551**	**.2260140**
Stddev	.002745	.001704	.000916	.0020260	.0014937	.0042002	.0014636
%RSD	455.8119	31.09824	95.57333	32.71190	22.66153	5.081558	.6475924
#1	-.001616	-.003625	.000097	.0049862	.0056683	.0819040	.2275792
#2	.002505	-.006976	-.001544	.0085326	.0083146	.0788812	.2246792
#3	-.002696	-.005834	-.001428	.0050619	.0057909	.0871802	.2257836

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000138**	**.0003244**	**12.08978**	**.0016704**	**.0009526**	**.0030475**	**2.212550**
Stddev	.000033	.0000499	.03599	.0004438	.0002498	.0002488	.013819
%RSD	23.79034	15.38544	.2976548	26.57007	26.22460	8.162621	.6245519
#1	-.000119	.0002938	12.06375	.0012563	.0011976	.0027623	2.213228
#2	-.000120	.0002974	12.13084	.0021390	.0006982	.0031599	2.226018
#3	-.000177	.0003820	12.07473	.0016159	.0009620	.0032202	2.198406

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0896852**	**1.533767**	**.0050119**	**.0001764**	**274.9284**	**-.000452**	**.9302506**
Stddev	.0000751	.022680	.0002473	.0002131	.8686	.001337	.0011757
%RSD	.0836944	1.478728	4.934915	120.8574	.3159427	295.8503	.1263857
#1	.0897013	1.510112	.0052716	.0003195	275.9245	.000878	.9291829
#2	.0896034	1.555328	.0049848	.0002782	274.3288	-.000439	.9315106
#3	.0897509	1.535861	.0047792	-.000069	274.5319	-.001795	.9300582

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.336404**	**.5293214**	**.0054993**	**-.001882**	**-.000043**	**.3480027**	**.9010613**
Stddev	.012002	.0017234	.0001542	.001206	.000475	.0062352	.0012217
%RSD	.8980806	.3255945	2.803290	64.05261	1113.391	1.791711	.1355823
#1	1.326774	.5284742	.0053345	-.002366	-.000367	.3551427	.9008179
#2	1.332589	.5281855	.0056399	-.002771	.000503	.3436309	.8999797
#3	1.349850	.5313044	.0055237	-.000510	-.000264	.3452344	.9023864

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2137-05 Acquired: 6/10/2025 17:32:15 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**1.398444**	**.1171389**	**.0630527**
Stddev	.000970	.0007168	.0001297
%RSD	.0693492	.6119326	.2057247
#1	1.399490	.1172109	.0632014
#2	1.398266	.1163888	.0629625
#3	1.397575	.1178169	.0629942

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3049.807**	**71763.41**	**12144.34**	**2272.858**	**4133.600**
Stddev	36.861	385.53	24.98	14.155	27.793
%RSD	1.208639	.5372217	.2056644	.6227823	.6723605
#1	3088.530	71399.47	12115.55	2259.028	4162.990
#2	3015.144	71723.37	12157.25	2272.231	4107.743
#3	3045.748	72167.40	12160.22	2287.317	4130.066

Sample Name: CCV03 Acquired: 6/10/2025 17:36:39 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.132312**	**4.989639**	**5.081555**	**5.143826**	**5.108172**	**9.931139**	**10.21163**
Stddev	.011403	.042586	.010105	.009355	.012083	.047212	.03164
%RSD	.2221722	.8534979	.1988567	.1818616	.2365442	.4753968	.3098195
#1	5.123534	4.982196	5.087276	5.135496	5.100737	9.945604	10.24141
#2	5.128203	4.951265	5.069888	5.142037	5.101665	9.969426	10.21508
#3	5.145200	5.035456	5.087501	5.153946	5.122114	9.878386	10.17842

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2426612**	**2.537134**	**25.03908**	**1.034166**	**2.526566**	**1.278050**	**5.391537**
Stddev	.0016094	.006271	.17236	.002287	.006473	.002926	.012937
%RSD	.6632480	.2471720	.6883692	.2211378	.2562064	.2289739	.2399449
#1	.2442151	2.541910	25.21640	1.035271	2.530161	1.276823	5.400704
#2	.2427669	2.530032	25.02868	1.031537	2.519093	1.275937	5.376739
#3	.2410015	2.539459	24.87215	1.035691	2.530443	1.281391	5.397168

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.496807**	**24.66460**	**2.537761**	**1.282703**	**26.66983**	**2.535320**	**2.579813**
Stddev	.010279	.25624	.004909	.002179	.17646	.013100	.004905
%RSD	.4116886	1.038909	.1934506	.1699041	.6616454	.5166904	.1901438
#1	2.504678	24.95450	2.540980	1.283164	26.46641	2.547245	2.574149
#2	2.500566	24.57092	2.532110	1.280330	26.78165	2.537417	2.582553
#3	2.485178	24.46839	2.540193	1.284615	26.76143	2.521299	2.582735

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.36233**	**4.779378**	**5.117221**	**5.100455**	**5.077556**	**5.337998**	**5.152774**
Stddev	.13558	.026224	.012023	.014092	.019325	.015507	.014046
%RSD	.5143119	.5486886	.2349544	.2762800	.3806017	.2904975	.2725855
#1	26.21464	4.804626	5.109888	5.100131	5.083487	5.321717	5.162772
#2	26.39121	4.781231	5.110678	5.086529	5.093220	5.339684	5.136715
#3	26.48115	4.752277	5.131096	5.114706	5.055960	5.352592	5.158833

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCV03 Acquired: 6/10/2025 17:36:39 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**5.022136**	**4.909148**	**5.124249**
Stddev	.016610	.039507	.021285
%RSD	.3307454	.8047623	.4153759
#1	5.023962	4.872233	5.116889
#2	5.004688	4.950817	5.148237
#3	5.037758	4.904395	5.107621

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3182.572**	**73115.45**	**12463.01**	**2343.858**	**4243.154**
Stddev	4.668	171.82	52.93	16.389	6.546
%RSD	.1466663	.2349988	.4246636	.6992303	.1542789
#1	3185.805	73297.84	12429.90	2362.451	4240.565
#2	3184.689	73091.87	12435.07	2331.507	4250.599
#3	3177.220	72956.64	12524.05	2337.616	4238.298

Sample Name: CCB03 Acquired: 6/10/2025 17:40:50 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0009983**	**-.000237**	**-.000318**	**-.000191**	**.0014281**	**.0026423**	**-.001767**
Stddev	.0017385	.000424	.000630	.002207	.0013545	.0034146	.000130
%RSD	174.1403	178.9505	197.8418	1155.891	94.85087	129.2255	7.382657
#1	.0009347	-.000722	-.000100	.000374	.0024340	-.000119	-.001873
#2	-.000707	-.000050	-.001028	.001678	.0019623	.006460	-.001621
#3	.002768	.000061	.000173	-.002625	-.000112	.001586	-.001807

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000377**	**.0000161**	**.0042082**	**.0002904**	**.0000076**	**-.000037**	**.0026840**
Stddev	.0000350	.0000269	.0067403	.0000667	.0001771	.000238	.0020078
%RSD	92.89346	167.6910	160.1711	22.95189	2338.552	637.5572	74.80843
#1	.0000698	.0000097	.0115081	.0003300	.0000862	.000168	.0023120
#2	.0000431	.0000456	-.001779	.0003278	.0001317	-.000298	.0008881
#3	.0000003	-.000007	.002896	.0002135	-.000195	.000018	.0048517

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003684**	**.0014635**	**-.000050**	**-.000090**	**.0950593**	**.0001611**	**-.000209**
Stddev	.0002164	.0231253	.000161	.000237	.0057658	.0001219	.000163
%RSD	58.74022	1580.147	320.2982	264.8143	6.065437	75.64199	77.95799
#1	.0006183	.0007805	-.000233	.000027	.0996719	.0000899	-.000059
#2	.0002431	.0249228	.000067	-.000362	.0969108	.0003018	-.000185
#3	.0002438	-.021313	.000016	.000067	.0885953	.0000916	-.000382

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0399405**	**.0055664**	**.0005846**	**.0004228**	**-.000085**	**.0105829**	**-.000015**
Stddev	.0154716	.0000957	.0002142	.0002502	.000443	.0065391	.002499
%RSD	38.73651	1.719110	36.63436	59.16824	521.8439	61.78992	16804.09
#1	.0238948	.0055188	.0006166	.0002225	.000328	.0127457	.002780
#2	.0411611	.0055038	.0007809	.0003427	-.000029	.0157666	-.000790
#3	.0547657	.0056765	.0003562	.0007032	-.000554	.0032363	-.002035

Sample Name: CCB03 Acquired: 6/10/2025 17:40:50 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0054147	.0060908	.0001129
Stddev	.0030257	.0020938	.0000172
%RSD	55.87976	34.37645	15.26541
#1	.0078336	.0039832	.0000958
#2	.0063885	.0061188	.0001127
#3	.0020220	.0081705	.0001302

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3303.032	77268.93	13032.05	2451.894	4726.258
Stddev	10.552	15.89	31.65	5.642	6.078
%RSD	.3194505	.0205607	.2428830	.2301232	.1285905
#1	3307.948	77277.92	13001.22	2449.517	4730.089
#2	3290.920	77250.59	13030.47	2458.336	4719.251
#3	3310.229	77278.30	13064.47	2447.830	4729.435

Sample Name: Q2240-01 Acquired: 6/10/2025 17:45:02 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.1591058**	**-.028704**	**4.843320**	**-.069170**	**-.000145**	**133.3422**
Stddev	.0015472	.003782	.013419	.006530	.001474	.0247
%RSD	.9724259	13.17546	.2770636	9.439836	1017.250	.0185280
#1	.1597844	-.032181	4.857253	-.063138	.001313	133.3555
#2	.1573353	-.029253	4.842225	-.068269	-.000113	133.3137
#3	.1601978	-.024677	4.830482	-.076104	-.001635	133.3575

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.164421**	**.0155581**	**.0284555**	**48.76255**	**.2686722**	**.1518358**
Stddev	.002309	.0000545	.0001439	.21335	.0004626	.0005931
%RSD	.1066699	.3501081	.5057295	.4375182	.1721770	.3906111
#1	2.162196	.0156148	.0284639	48.96907	.2681770	.1520316
#2	2.166805	.0155062	.0283076	48.77560	.2690933	.1511696
#3	2.164262	.0155531	.0285951	48.54297	.2687462	.1523062

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.159891**	**281.2708**	**4.842742**	**80.25553**	**.3279086**	**-.004639**
Stddev	.000742	1.7245	.018979	.38214	.0007273	.000401
%RSD	.0639460	.6131218	.3918993	.4761552	.2218044	8.644129
#1	1.160454	281.8089	4.856839	80.62102	.3286519	-.004393
#2	1.159050	282.6621	4.850225	80.28689	.3278753	-.004422
#3	1.160167	279.3413	4.821163	79.85867	.3271985	-.005102

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.099152**	**.6380790**	**4.124322**	**34.10851**	**-.176745**	**.0069573**
Stddev	.039553	.0022614	.015476	.16944	.010117	.0002614
%RSD	.5571482	.3544126	.3752427	.4967573	5.723815	3.756910
#1	7.058020	.6406158	4.106827	33.93457	-.172772	.0067908
#2	7.136909	.6373469	4.136224	34.27305	-.169217	.0068224
#3	7.102529	.6362743	4.129914	34.11790	-.188244	.0072585

Sample Name: Q2240-01 Acquired: 6/10/2025 17:45:02 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.1388487	7.280909	F 14.32538	8.657659	9.581630	.3549884
Stddev	.0007007	.012914	.09132	.057849	.034135	.0015072
%RSD	.5046251	.1773670	.6374954	.6681803	.3562495	.4245702
#1	.1393446	7.285360	14.32318	8.724180	9.620743	.3546927
#2	.1391543	7.291008	14.41779	8.619134	9.566287	.3566215
#3	.1380471	7.266358	14.23519	8.629663	9.557859	.3536509

Elem	Sr4077
Units	ppm
Avg	.1081249
Stddev	.0016170
%RSD	1.495527
#1	.1071537
#2	.1072293
#3	.1099916

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3761.504	90982.41	14778.29	2816.978	4006.650
Stddev	7.230	168.10	24.73	8.683	7.285
%RSD	.1922003	.1847650	.1673487	.3082309	.1818262
#1	3769.354	91128.57	14761.18	2825.633	4011.205
#2	3755.119	90798.71	14806.64	2808.268	3998.247
#3	3760.038	91019.94	14767.04	2817.031	4010.496

Sample Name: Q2240-05 Acquired: 6/10/2025 17:49:04 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.3285499	-.014417	19.72409	-.076502	.0239549	87.91336
Stddev	.0032243	.002025	.12214	.002101	.0012513	.19909
%RSD	.9813657	14.04502	.6192193	2.746868	5.223557	.2264632
#1	.3250230	-.012408	19.68839	-.074160	.0236277	87.77061
#2	.3292806	-.016457	19.62378	-.077121	.0228998	87.82868
#3	.3313461	-.014386	19.86009	-.078224	.0253374	88.14080

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.004301	.0124804	.0426422	351.7386	.4310057	.2467214
Stddev	.021723	.0000750	.0002912	2.5600	.0005709	.0012893
%RSD	.2713975	.6007523	.6828923	.7278206	.1324576	.5225731
#1	7.990214	.0125566	.0423736	353.2771	.4303506	.2469842
#2	8.029319	.0124779	.0426013	353.1553	.4313975	.2453210
#3	7.993370	.0124067	.0429517	348.7833	.4312688	.2478591

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.403359	336.0091	4.135030	89.91383	.7025342	.0009910
Stddev	.013407	.4714	.001709	.19891	.0038503	.0004748
%RSD	.3044772	.1403041	.0413222	.2212191	.5480569	47.90996
#1	4.389812	335.5912	4.134081	90.14338	.7012409	.0005247
#2	4.403645	336.5202	4.137002	89.79234	.6994970	.0014739
#3	4.416622	335.9160	4.134006	89.80578	.7068646	.0009745

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	29.56370	.6374653	15.12791	12.09179	-.056239	.0397897
Stddev	.12217	.0020458	.10152	.03844	.003792	.0002525
%RSD	.4132472	.3209257	.6710907	.3179048	6.743299	.6346857
#1	29.42694	.6352378	15.21406	12.05805	-.055476	.0400073
#2	29.60214	.6392602	15.01598	12.08368	-.052885	.0398492
#3	29.66203	.6378978	15.15369	12.13364	-.060354	.0395128

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2240-05 Acquired: 6/10/2025 17:49:04 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.021810	4.411472	9.960694	14.41853	F 42.17300	.3175015
Stddev	.005975	.005424	.012902	.07309	.20934	.0007395
%RSD	.5847816	.1229506	.1295305	.5068951	.4963918	.2329081
#1	1.020522	4.405475	9.950985	14.37757	42.08031	.3167586
#2	1.016584	4.412905	9.975335	14.37512	42.02601	.3182376
#3	1.028324	4.416035	9.955762	14.50292	42.41269	.3175083

Elem	Sr4077
Units	ppm
Avg	.7295917
Stddev	.0027023
%RSD	.3703842
#1	.7265514
#2	.7305037
#3	.7317200

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3301.932	80064.83	13831.04	2492.205	3662.561
Stddev	11.045	32.88	10.78	2.185	6.878
%RSD	.3344937	.0410625	.0779233	.0876541	.1877834
#1	3312.410	80102.68	13832.11	2494.649	3670.142
#2	3290.396	80043.33	13841.23	2491.524	3660.822
#3	3302.989	80048.48	13819.76	2490.442	3656.720

Sample Name: Q2240-09 Acquired: 6/10/2025 17:53:32 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.1873518**	**-.013718**	**7.442325**	**-.030009**	**.0102002**	**68.65932**
Stddev	.0008053	.000527	.031987	.004976	.0021993	.23191
%RSD	.4298372	3.840005	.4297962	16.58191	21.56131	.3377719
#1	.1868215	-.013308	7.426392	-.026604	.0083036	68.92104
#2	.1882785	-.013535	7.421433	-.035720	.0126111	68.57753
#3	.1869555	-.014312	7.479149	-.027703	.0096860	68.47938

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.216473**	**.0103275**	**.0246369**	**254.4792**	**.3323983**	**.1104213**
Stddev	.048323	.0002037	.0001765	1.8024	.0012015	.0003914
%RSD	1.146052	1.972356	.7164675	.7082663	.3614736	.3544249
#1	4.253625	.0105627	.0244370	255.4511	.3337753	.1105013
#2	4.233950	.0102126	.0247028	252.3994	.3315630	.1099961
#3	4.161843	.0102072	.0247711	255.5870	.3318566	.1107664

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.345515**	**233.1309**	**1.903906**	**36.80698**	**.3155365**	**.0036675**
Stddev	.006376	.5262	.008677	.03446	.0011918	.0004127
%RSD	.4738395	.2257002	.4557434	.0936293	.3777085	11.25180
#1	1.338646	233.6220	1.913912	36.78486	.3146789	.0031926
#2	1.346658	232.5755	1.898447	36.78939	.3150333	.0038720
#3	1.351243	233.1953	1.899360	36.84669	.3168974	.0039380

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.03197**	**.4083703**	**6.933038**	**8.111336**	**.1460993**	**.0369380**
Stddev	.08416	.0017515	.040966	.029062	.0021779	.0002994
%RSD	.8389267	.4289011	.5908846	.3582935	1.490722	.8105643
#1	10.12596	.4103624	6.979934	8.144754	.1469620	.0365939
#2	9.96360	.4070718	6.904225	8.091976	.1436222	.0371392
#3	10.00634	.4076767	6.914955	8.097277	.1477138	.0370809

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2240-09 Acquired: 6/10/2025 17:53:32 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.3568143	4.239826	7.203286	11.39967	F 53.55279	.2250302
Stddev	.0004069	.021184	.022629	.04814	.20640	.0013220
%RSD	.1140339	.4996329	.3141487	.4222656	.3854171	.5874687
#1	.3568593	4.264011	7.222632	11.42768	53.53351	.2242921
#2	.3563868	4.224564	7.208825	11.34409	53.35671	.2265564
#3	.3571969	4.230903	7.178402	11.42725	53.76816	.2242420

Elem	Sr4077
Units	ppm
Avg	1.295226
Stddev	.012065
%RSD	.9314945
#1	1.308335
#2	1.292754
#3	1.284588

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3264.698	78466.04	14036.59	2445.803	3939.683
Stddev	16.804	46.53	31.09	11.301	15.955
%RSD	.5147034	.0592932	.2214570	.4620711	.4049934
#1	3283.052	78412.61	14000.72	2434.666	3954.524
#2	3260.971	78487.93	14055.76	2457.262	3941.715
#3	3250.071	78497.59	14053.29	2445.482	3922.808

Sample Name: Q2244-01 Acquired: 6/10/2025 17:58:00 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0484854**	**-.011096**	**.1751659**	**-.065859**	**-.008351**	**115.5278**	**1.625082**
Stddev	.0004066	.003711	.0006358	.003299	.000064	.2927	.009933
%RSD	.8386170	33.44971	.3629785	5.009818	.7694199	.2533223	.6112045
#1	.0484824	-.014824	.1748113	-.069628	-.008279	115.5089	1.632020
#2	.0488935	-.007402	.1747864	-.064459	-.008403	115.2451	1.613704
#3	.0480803	-.011061	.1758999	-.063491	-.008372	115.8295	1.629523

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0116201**	**.0153216**	**123.4449**	**.2035167**	**.1954492**	**.3052376**	**305.6316**
Stddev	.0000391	.0004630	.1099	.0007878	.0006432	.0019363	1.3781
%RSD	.3361384	3.021882	.0890255	.3871168	.3290944	.6343496	.4509026
#1	.0115778	.0157465	123.4618	.2034323	.1959672	.3069182	304.0403
#2	.0116278	.0153901	123.5454	.2027744	.1956512	.3056744	306.4323
#3	.0116547	.0148282	123.3275	.2043433	.1947292	.3031203	306.4221

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.386556**	**65.15612**	**.3391380**	**-.002397**	**9.186141**	**.3315691**	**.7429931**
Stddev	.025822	.13550	.0003631	.000217	.047757	.0027092	.0051568
%RSD	.2750969	.2079571	.1070610	9.035739	.5198829	.8170977	.6940628
#1	9.414377	65.16399	.3393431	-.002184	9.186892	.3329774	.7373320
#2	9.363357	65.28751	.3387188	-.002617	9.138013	.3284458	.7474227
#3	9.381933	65.01685	.3393521	-.002389	9.233519	.3332842	.7442247

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**20.69412**	**-.030630**	**.0040295**	**.0088984**	**3.362878**	**3.158385**	**6.773937**
Stddev	.11022	.006440	.0001590	.0017268	.011603	.041501	.013697
%RSD	.5326281	21.02529	3.945916	19.40546	.3450434	1.313999	.2022051
#1	20.58603	-.037563	.0038520	.0090860	3.374114	3.113455	6.774329
#2	20.68997	-.024835	.0040777	.0105238	3.350939	3.195283	6.787434
#3	20.80636	-.029492	.0041589	.0070855	3.363582	3.166418	6.760048

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2244-01 Acquired: 6/10/2025 17:58:00 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.4496523	.4649147	.0273397
Stddev	.0045570	.0030186	.0028537
%RSD	1.013451	.6492849	10.43776
#1	.4527244	.4652941	.0301739
#2	.4444165	.4617243	.0244670
#3	.4518160	.4677257	.0273783

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3579.364	84254.35	14765.67	2669.211	3976.260
Stddev	30.465	505.36	23.79	25.672	23.256
%RSD	.8511241	.5998046	.1610965	.9617874	.5848639
#1	3558.000	84836.26	14761.40	2698.542	3961.932
#2	3565.843	84001.18	14791.30	2650.827	3963.756
#3	3614.249	83925.61	14744.31	2658.265	4003.093

Sample Name: Q2242-01 Acquired: 6/10/2025 18:02:06 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0610807**	**-.018179**	**.2276052**	**-.091275**	**-.014737**	**219.6651**	**.8842109**
Stddev	.0002156	.001163	.0020324	.003000	.000999	.9809	.0024248
%RSD	.3529686	6.399209	.8929354	3.287296	6.776565	.4465366	.2742318
#1	.0612853	-.017642	.2279362	-.094717	-.013664	219.7954	.8833167
#2	.0608556	-.017381	.2294517	-.089896	-.015639	218.6256	.8869558
#3	.0611012	-.019514	.2254276	-.089212	-.014908	220.5743	.8823601

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0155906**	**.0428809**	**8.844447**	**.2675499**	**.5265458**	**.2580498**	**405.5160**
Stddev	.0000856	.0005206	.040623	.0008283	.0022488	.0006279	3.2809
%RSD	.5492294	1.214126	.4593056	.3095781	.4270822	.2433103	.8090764
#1	.0156862	.0425839	8.857219	.2666134	.5277844	.2581710	408.3284
#2	.0155649	.0425767	8.877149	.2678500	.5279030	.2573702	406.3082
#3	.0155208	.0434820	8.798973	.2681863	.5239501	.2586083	401.9115

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.85044**	**20.71584**	**.3901063**	**-.005039**	**3.065918**	**.4617893**	**.4680629**
Stddev	.06901	.12709	.0021321	.001065	.012397	.0025658	.0007783
%RSD	.5823323	.6134737	.5465514	21.14158	.4043392	.5556197	.1662884
#1	11.90909	20.85626	.3919012	-.004183	3.076493	.4636981	.4675893
#2	11.86783	20.68257	.3906682	-.004702	3.068985	.4627973	.4689612
#3	11.77440	20.60870	.3877495	-.006233	3.052276	.4588726	.4676381

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.82317**	**-.113960**	**.0006719**	**.0138663**	**3.325747**	**9.078024**	**6.415916**
Stddev	.06881	.008582	.0003980	.0013737	.008438	.051995	.038765
%RSD	.5819757	7.531025	59.23779	9.906546	.2537128	.5727582	.6042069
#1	11.83573	-.108249	.0010151	.0126303	3.331622	9.122152	6.454705
#2	11.88483	-.109801	.0007650	.0153453	3.329541	9.091215	6.415868
#3	11.74894	-.123829	.0002356	.0136234	3.316078	9.020703	6.377175

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2242-01 Acquired: 6/10/2025 18:02:06 Type: Unk
Method: 6010-200.7 NEW(v2) 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	1.055518	.3090059	-.316706
Stddev	.013090	.0024188	.003075
%RSD	1.240138	.7827826	.9708821
#1	1.069814	.3101778	-.319428
#2	1.052620	.3106156	-.317319
#3	1.044120	.3062243	-.313370

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4785.400	110689.1	19388.17	3531.818	4137.578
Stddev	51.369	374.3	10.34	18.839	25.769
%RSD	1.073459	.3381821	.0533072	.5334212	.6227963
#1	4810.133	110369.6	19377.91	3524.997	4150.208
#2	4819.725	110596.6	19388.00	3517.339	4154.595
#3	4726.343	111101.0	19398.58	3553.118	4107.931

Sample Name: Q2238-01DUP Acquired: 6/10/2025 18:06:26 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0575316	-.042497	.3685497	-.105296	.0052085	155.8103	1.155210
Stddev	.0025083	.002119	.0034742	.008939	.0024000	.2841	.001782
%RSD	4.359886	4.985072	.9426743	8.489001	46.07804	.1823201	.1542612
#1	.0553325	-.040096	.3664106	-.095336	.0068354	155.5475	1.155982
#2	.0569986	-.043291	.3666802	-.112620	.0063380	155.7718	1.153172
#3	.0602635	-.044104	.3725584	-.107933	.0024522	156.1117	1.156476

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0074986	.0956618	659.1155	.2828352	.2174892	1.071422	345.2190
Stddev	.0001129	.0007346	2.1717	.0003682	.0008760	.002369	.5510
%RSD	1.506157	.7679304	.3294818	.1301691	.4027934	.2211137	.1596128
#1	.0074341	.0961667	658.5892	.2830106	.2184233	1.073325	345.1048
#2	.0074326	.0959996	657.2554	.2830827	.2166859	1.072173	344.7340
#3	.0076290	.0948190	661.5019	.2824121	.2173585	1.068769	345.8181

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.810177	281.6500	.4215395	.0139191	10.10816	.6538019	4.691286
Stddev	.032432	1.3289	.0020451	.0003715	.05169	.0044092	.015246
%RSD	.4762255	.4718418	.4851439	2.668855	.5113653	.6743897	.3249772
#1	6.783437	280.5468	.4235182	.0140973	10.16736	.6529886	4.702334
#2	6.800842	281.2777	.4216663	.0134921	10.08516	.6498560	4.697632
#3	6.846253	283.1253	.4194340	.0141680	10.07197	.6585611	4.673893

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.99104	.3348600	.0128375	.0323406	9.954679	12.99824	9.789380
Stddev	.06804	.0065509	.0006706	.0006430	.024535	.02460	.017064
%RSD	.3781705	1.956306	5.224166	1.988185	.2464694	.1892559	.1743153
#1	18.06683	.3273026	.0127721	.0321950	9.930635	13.02379	9.804294
#2	17.97103	.3383593	.0122020	.0330439	9.953724	12.99622	9.793075
#3	17.93524	.3389182	.0135385	.0317829	9.979678	12.97472	9.770770

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2238-01DUP Acquired: 6/10/2025 18:06:26 Type: Unk
Method: 6010-200.7 NEW(v2) 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	11.26938	.4309751	1.166460
Stddev	.02916	.0011290	.001397
%RSD	.2587431	.2619727	.1197499
#1	11.26829	.4298882	1.165471
#2	11.29907	.4321420	1.168058
#3	11.24079	.4308951	1.165850

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3080.347	74599.24	13197.56	2271.583	3417.098
Stddev	7.108	221.55	21.88	5.964	11.902
%RSD	.2307399	.2969864	.1657689	.2625645	.3483160
#1	3080.056	74350.15	13208.86	2264.799	3415.252
#2	3073.390	74673.31	13211.48	2276.004	3406.226
#3	3087.596	74774.27	13172.35	2273.945	3429.815

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2238-01LX5 Acquired: 6/10/2025 18:11:30 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0099449**	**-.007475**	**.1037434**	**-.019560**	**.0022642**	**31.34601**	**.2949887**
Stddev	.0017220	.000526	.0027468	.003843	.0006569	.02987	.0012330
%RSD	17.31554	7.040264	2.647662	19.64608	29.01299	.0952867	.4179644
#1	.0086439	-.008045	.1059136	-.018075	.0019850	31.37892	.2958620
#2	.0118977	-.007007	.1046613	-.023924	.0030145	31.33847	.2955259
#3	.0092932	-.007374	.1006552	-.016682	.0017930	31.32063	.2935783

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0017676**	**.0172151**	**87.43977**	**.0632551**	**.0377919**	**.4681138**	**82.15859**
Stddev	.0000886	.0005778	.77161	.0002792	.0008872	.0072759	.29963
%RSD	5.011399	3.356228	.8824432	.4414569	2.347680	1.554299	.3646912
#1	.0017734	.0177975	88.30858	.0635766	.0387051	.4751372	82.31817
#2	.0016763	.0172059	86.83433	.0630731	.0377376	.4685947	82.34465
#3	.0018532	.0166421	87.17641	.0631157	.0369331	.4606093	81.81295

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.400298**	**30.42628**	**.0872919**	**-.000947**	**1.561948**	**.1449352**	**1.877709**
Stddev	.008415	.30481	.0013489	.000098	.026739	.0004638	.007996
%RSD	.6009146	1.001804	1.545263	10.36108	1.711922	.3200328	.4258610
#1	1.409958	30.75702	.0886276	-.000834	1.538722	.1450575	1.874718
#2	1.396375	30.15667	.0873181	-.001007	1.591179	.1444224	1.886770
#3	1.394561	30.36515	.0859302	-.001001	1.555942	.1453256	1.871639

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.164236**	**.0604751**	**.0025865**	**.0033076**	**2.375467**	**2.878094**	**1.710114**
Stddev	.041524	.0009420	.0002009	.0007421	.013563	.016439	.026211
%RSD	1.312307	1.557651	7.767477	22.43591	.5709434	.5711769	1.532720
#1	3.119071	.0611725	.0026797	.0040520	2.390135	2.872729	1.733465
#2	3.200761	.0594035	.0027238	.0033029	2.372884	2.896546	1.715114
#3	3.172876	.0608493	.0023559	.0025679	2.363381	2.865008	1.681763

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2238-01LX5 Acquired: 6/10/2025 18:11:30 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**2.292272**	**.0757819**	**.1995638**
Stddev	.035887	.0014461	.0006437
%RSD	1.565567	1.908203	.3225706
#1	2.328871	.0765625	.2002463
#2	2.290803	.0766699	.1994775
#3	2.257142	.0741133	.1989676

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3274.149**	**76164.25**	**12416.34**	**2438.002**	**4300.314**
Stddev	11.603	706.27	11.48	42.775	8.489
%RSD	.3543863	.9272970	.0924686	1.754521	.1974079
#1	3286.505	76930.56	12420.83	2484.637	4305.775
#2	3263.485	75539.46	12424.91	2400.591	4290.534
#3	3272.458	76022.72	12403.30	2428.777	4304.633

Sample Name: Q2238-01MS Acquired: 6/10/2025 18:15:41 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8037923**	**1.695155**	**1.399728**	**1.719395**	**.2713745**	**160.3446**
Stddev	.0025231	.009041	.001589	.004918	.0008121	.0302
%RSD	.3138973	.5333379	.1135102	.2860561	.2992726	.0188274
#1	.8061820	1.685159	1.398396	1.723470	.2706856	160.3263
#2	.8011542	1.697547	1.401487	1.720783	.2722700	160.3794
#3	.8040408	1.702760	1.399302	1.713932	.2711679	160.3280

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.554858**	**.1790331**	**.2900704**	**538.6972**	**.7264017**	**.3893621**
Stddev	.005526	.0004949	.0005110	2.0152	.0021651	.0010338
%RSD	.3554064	.2764238	.1761503	.3740821	.2980528	.2655199
#1	1.561044	.1788916	.2899046	540.9773	.7287104	.3900363
#2	1.553123	.1795833	.2906436	537.9594	.7260778	.3898780
#3	1.550409	.1786243	.2896629	537.1549	.7244168	.3881718

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.276815**	**326.2914**	**6.385596**	**168.6252**	**.9158795**	**.0665914**
Stddev	.001855	.1580	.007935	.6615	.0021781	.0001080
%RSD	.1452843	.0484081	.1242618	.3923091	.2378137	.1622279
#1	1.277729	326.1685	6.379060	167.8735	.9158710	.0664700
#2	1.278035	326.2363	6.394424	169.1188	.9180618	.0666275
#3	1.274680	326.4696	6.383303	168.8833	.9137057	.0666768

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**13.10376**	**.9137832**	**5.548624**	**28.09377**	**.6211049**	**.3690474**
Stddev	.10024	.0050568	.020858	.12529	.0035105	.0003213
%RSD	.7649650	.5533872	.3759181	.4459747	.5652038	.0870563
#1	13.21898	.9082922	5.572591	28.23583	.6228738	.3688295
#2	13.03661	.9148091	5.538703	27.99904	.6170619	.3694164
#3	13.05569	.9182484	5.534579	28.04643	.6233791	.3688964

Sample Name: Q2238-01MS Acquired: 6/10/2025 18:15:41 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.6784396	11.12378	F 21.42458	15.47994	11.98901	.5581889
Stddev	.0021401	.01443	.07437	.04705	.02442	.0014682
%RSD	.3154484	.1296953	.3471379	.3039195	.2037150	.2630198
#1	.6772624	11.11925	21.34537	15.43806	11.97298	.5571413
#2	.6809099	11.13993	21.43546	15.53085	12.01712	.5598670
#3	.6771465	11.11216	21.49292	15.47091	11.97693	.5575583

Elem	Sr4077
Units	ppm
Avg	1.416659
Stddev	.008792
%RSD	.6206414
#1	1.406599
#2	1.420512
#3	1.422868

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3107.371	76005.92	13260.26	2315.619	3517.048
Stddev	5.887	132.52	15.33	12.934	7.362
%RSD	.1894412	.1743570	.1156326	.5585334	.2093234
#1	3111.943	75852.93	13272.05	2300.752	3523.892
#2	3109.441	76079.88	13242.93	2324.280	3517.993
#3	3100.729	76084.96	13265.80	2321.825	3509.259

Sample Name: Q2238-01MSD Acquired: 6/10/2025 18:19:56 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8073139**	**1.848372**	**1.168053**	**1.862411**	**.4182610**	**84.11262**
Stddev	.0034362	.016216	.005834	.002056	.0016976	.96285
%RSD	.4256337	.8772906	.4994351	.1104011	.4058804	1.144711
#1	.8110884	1.834741	1.172749	1.864366	.4163826	84.91420
#2	.8043671	1.844070	1.169888	1.860267	.4187148	84.37905
#3	.8064863	1.866304	1.161523	1.862599	.4196857	83.04461

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9293252**	**.1935537**	**.2335883**	**266.1481**	**.5606377**	**.2820354**
Stddev	.0054423	.0012451	.0016467	2.6019	.0011972	.0034492
%RSD	.5856221	.6432857	.7049769	.9775949	.2135473	1.222970
#1	.9334253	.1921537	.2354895	267.9346	.5616323	.2860013
#2	.9313997	.1939705	.2326609	267.3468	.5593089	.2803692
#3	.9231507	.1945370	.2326142	263.1630	.5609720	.2797356

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8235321**	**177.7480**	**3.505247**	**94.04330**	**.6864350**	**.0739329**
Stddev	.0139633	1.8411	.025628	.97043	.0070878	.0003343
%RSD	1.695535	1.035812	.7311263	1.031894	1.032545	.4521977
#1	.8378183	179.5894	3.522488	94.50137	.6943810	.0735898
#2	.8228623	177.7475	3.517456	94.69989	.6841597	.0742577
#3	.8099158	175.9071	3.475797	92.92862	.6807644	.0739512

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.669898**	**.6182762**	**3.097503**	**18.27748**	**.4602084**	**.3923263**
Stddev	.047807	.0042467	.031003	.05321	.0020987	.0008112
%RSD	.6233013	.6868598	1.000887	.2911226	.4560313	.2067652
#1	7.722675	.6218443	3.129012	18.33856	.4602908	.3916717
#2	7.657524	.6194053	3.096464	18.24119	.4580697	.3920734
#3	7.629494	.6135791	3.067034	18.25268	.4622646	.3932338

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2238-01MSD Acquired: 6/10/2025 18:19:56 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.6866872	6.140278	F 15.71721	10.06971	4.945829	.3666105
Stddev	.0033442	.054194	.07792	.12980	.162788	.0006306
%RSD	.4870039	.8825905	.4957470	1.289043	3.291425	.1720020
#1	.6857756	6.184001	15.80166	10.20792	5.112051	.3667261
#2	.6838934	6.157187	15.70188	10.05080	4.938729	.3659302
#3	.6903927	6.079646	15.64811	9.95039	4.786707	.3671754

Elem	Sr4077
Units	ppm
Avg	.7565638
Stddev	.0061280
%RSD	.8099821
#1	.7612389
#2	.7588263
#3	.7496262

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3106.427	73453.52	12321.19	2311.202	3875.307
Stddev	8.639	126.52	32.14	7.453	21.687
%RSD	.2781020	.1722486	.2608170	.3224557	.5596146
#1	3098.938	73307.79	12349.73	2305.178	3851.313
#2	3104.464	73535.29	12286.38	2308.893	3881.096
#3	3115.878	73517.49	12327.45	2319.536	3893.512

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2238-01A Acquired: 6/10/2025 18:23:53 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.7923342**	**1.735103**	**1.377652**	**1.743205**	**.7655505**	**137.1751**
Stddev	.0021952	.015238	.001049	.002256	.0031744	.2859
%RSD	.2770530	.8781931	.0761077	.1293994	.4146554	.2083840
#1	.7918572	1.727849	1.376526	1.741904	.7619161	136.8503
#2	.7904167	1.724849	1.377828	1.741901	.7669552	137.2868
#3	.7947286	1.752613	1.378601	1.745809	.7677803	137.3882

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.485712**	**.1730468**	**.2833314**	**358.5800**	**.5982290**	**.3738718**
Stddev	.004962	.0004905	.0013088	.7026	.0008963	.0010186
%RSD	.3339735	.2834293	.4619132	.1959315	.1498291	.2724509
#1	1.482015	.1729110	.2839561	357.9630	.5981821	.3747040
#2	1.491351	.1726386	.2818273	358.4325	.5973571	.3727358
#3	1.483771	.1735909	.2842107	359.3447	.5991479	.3741755

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.171469**	**355.3484**	**5.812586**	**127.4155**	**.8850776**	**.0690173**
Stddev	.005875	.3912	.008612	.2027	.0040475	.0003786
%RSD	.2705426	.1100776	.1481694	.1591181	.4573102	.5485519
#1	2.177199	355.6267	5.802968	127.2628	.8885009	.0686471
#2	2.165460	355.5174	5.819584	127.3383	.8806104	.0694038
#3	2.171748	354.9012	5.815207	127.6456	.8861216	.0690012

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.26213**	**.8538691**	**7.569401**	**26.37279**	**.5233022**	**.3812751**
Stddev	.06528	.0039999	.010058	.10642	.0045338	.0014134
%RSD	.5796859	.4684399	.1328755	.4035264	.8663901	.3706950
#1	11.24142	.8497401	7.580755	26.32503	.5265243	.3822134
#2	11.33526	.8541411	7.561608	26.49473	.5181177	.3796496
#3	11.20971	.8577259	7.565840	26.29863	.5252645	.3819624

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2238-01A Acquired: 6/10/2025 18:23:53 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.7190268	10.12362	F 14.62908	14.44877	11.31397	.5130031
Stddev	.0012153	.01196	.02905	.07610	.05099	.0018694
%RSD	.1690203	.1181533	.1986021	.5266893	.4506914	.3643931
#1	.7204297	10.10994	14.61018	14.48070	11.32421	.5112110
#2	.7182931	10.12881	14.66253	14.36191	11.25864	.5149412
#3	.7183578	10.13211	14.61453	14.50371	11.35907	.5128570

Elem	Sr4077
Units	ppm
Avg	1.022061
Stddev	.002588
%RSD	.2531738
#1	1.019595
#2	1.021832
#3	1.024755

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3170.515	75958.77	13568.55	2344.278	3667.585
Stddev	6.626	91.89	19.03	6.173	11.474
%RSD	.2089942	.1209692	.1402275	.2633271	.3128391
#1	3166.582	75995.62	13586.06	2337.158	3661.649
#2	3178.165	75854.18	13571.29	2347.550	3680.811
#3	3166.798	76026.52	13548.30	2348.128	3660.296

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCV04 Acquired: 6/10/2025 18:28:05 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.198455**	**5.110007**	**5.159216**	**5.223855**	**5.129640**	**9.913589**	**10.26272**
Stddev	.024017	.054561	.006929	.020700	.018258	.016858	.12196
%RSD	.4620113	1.067724	.1342988	.3962517	.3559278	.1700451	1.188424
#1	5.205494	5.163104	5.166077	5.236004	5.146398	9.932900	10.40270
#2	5.171704	5.054092	5.152222	5.199954	5.110183	9.906053	10.20612
#3	5.218165	5.112826	5.159348	5.235607	5.132340	9.901814	10.17933

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2464002**	**2.582618**	**25.15167**	**1.046386**	**2.558487**	**1.285909**	**5.417530**
Stddev	.0017157	.003761	.02510	.009889	.004142	.002159	.009227
%RSD	.6962884	.1456185	.0997930	.9450909	.1619001	.1679177	.1703230
#1	.2483624	2.585694	25.17394	1.057372	2.562658	1.287253	5.427871
#2	.2456551	2.578425	25.15658	1.043590	2.554374	1.283418	5.410137
#3	.2451831	2.583735	25.12447	1.038196	2.558429	1.287054	5.414581

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.509277**	**24.78770**	**2.570272**	**1.292883**	**25.95961**	**2.547242**	**2.535249**
Stddev	.005015	.01801	.004946	.006852	.15615	.007047	.010009
%RSD	.1998391	.0726522	.1924244	.5300106	.6015279	.2766594	.3947849
#1	2.515060	24.77774	2.575968	1.300787	26.13938	2.551944	2.545839
#2	2.506637	24.77687	2.567066	1.289260	25.88178	2.550644	2.525946
#3	2.506134	24.80849	2.567781	1.288603	25.85767	2.539140	2.533962

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.91660**	**4.826073**	**5.151693**	**5.185708**	**5.085742**	**5.438056**	**5.300399**
Stddev	.10059	.015623	.014214	.008423	.005429	.003901	.006239
%RSD	.3881212	.3237235	.2759183	.1624324	.1067454	.0717326	.1177003
#1	26.02151	4.844028	5.161853	5.194878	5.091332	5.442552	5.307563
#2	25.90731	4.818606	5.135449	5.178315	5.085403	5.435569	5.297472
#3	25.82098	4.815583	5.157777	5.183932	5.080490	5.436047	5.296162

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCV04 Acquired: 6/10/2025 18:28:05 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**5.138392**	**4.792990**	**5.099050**
Stddev	.007304	.023063	.027175
%RSD	.1421466	.4811772	.5329498
#1	5.143010	4.818710	5.128698
#2	5.129971	4.786108	5.093131
#3	5.142196	4.774151	5.075323

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3193.595**	**72970.05**	**12395.68**	**2362.356**	**4238.684**
Stddev	5.611	311.59	31.14	4.798	4.257
%RSD	.1757065	.4270154	.2511998	.2031001	.1004346
#1	3190.833	72616.39	12360.30	2363.848	4235.923
#2	3200.052	73089.58	12407.83	2366.232	4243.586
#3	3189.900	73204.18	12418.91	2356.990	4236.542

Sample Name: CCB04 Acquired: 6/10/2025 18:32:17 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0002698**	**.0004101**	**.0001316**	**-.002264**	**.0023777**	**.0013929**	**-.001594**
Stddev	.0014921	.0009268	.0015559	.003148	.0019017	.0023945	.000264
%RSD	553.0150	225.9807	1181.946	139.0155	79.98127	171.9065	16.53009
#1	.0017645	.0007778	-.000009	.000304	.0044887	-.001104	-.001804
#2	-.001220	.0010967	-.001349	-.001321	.0007985	.003670	-.001681
#3	.000265	-.000644	.001753	-.005775	.0018459	.001613	-.001298

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000184**	**.0000938**	**.0087960**	**.0003128**	**.0001720**	**.0001990**	**.0055781**
Stddev	.0000607	.0000872	.0049420	.0002301	.0000967	.0001670	.0033616
%RSD	329.4802	92.96290	56.18452	73.57908	56.21025	83.91768	60.26407
#1	.0000303	.0001917	.0096504	.0004295	.0000701	.0000065	.0017262
#2	.0000724	.0000242	.0034825	.0000477	.0002625	.0002853	.0079195
#3	-.000047	.0000657	.0132550	.0004612	.0001834	.0003053	.0070887

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000091**	**.0027330**	**.0000281**	**.0000592**	**-.062034**	**.0005790**	**-.000012**
Stddev	.0001910	.0059533	.0001648	.0002606	.010278	.0010222	.000147
%RSD	2095.193	217.8351	586.2203	440.4420	16.56887	176.5438	1185.893
#1	.0001803	-.004121	.0000886	-.000099	-.068649	.0002079	-.000182
#2	-.000197	.006622	-.000158	.000360	-.067261	.0017349	.000065
#3	.000044	.005697	.000154	-.000084	-.050193	-.000206	.000080

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.012171**	**.0062423**	**.0006740**	**.0003423**	**.0002528**	**.0143992**	**-.001240**
Stddev	.010866	.0003849	.0001334	.0004701	.0006214	.0010036	.001127
%RSD	89.27921	6.166245	19.78991	137.3416	245.8602	6.969818	90.89896
#1	-.022210	.0064834	.0007042	.0007631	-.000390	.0148089	-.001958
#2	-.013670	.0064452	.0005281	-.000165	.000297	.0132556	.000059
#3	-.000633	.0057984	.0007897	.000429	.000851	.0151332	-.001821

Sample Name: CCB04 Acquired: 6/10/2025 18:32:17 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0033983	-.000894	.0001566
Stddev	.0023347	.000746	.0000120
%RSD	68.70292	83.47607	7.648586
#1	.0060252	-.001340	.0001429
#2	.0026097	-.001310	.0001650
#3	.0015600	-.000032	.0001618

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3375.991	76634.58	12654.50	2485.587	4798.860
Stddev	24.333	155.84	40.73	15.406	20.860
%RSD	.7207607	.2033579	.3218451	.6198166	.4346847
#1	3353.873	76483.26	12652.65	2467.835	4783.778
#2	3402.056	76625.90	12696.13	2493.455	4822.666
#3	3372.045	76794.58	12614.73	2495.470	4790.137

Sample Name: PB168309BL Acquired: 6/10/2025 18:36:37 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0000014**	**-.000409**	**-.000567**	**-.000998**	**.0008699**	**.0067801**
Stddev	.0005689	.002192	.001506	.003495	.0007512	.0030380
%RSD	41341.85	535.7071	265.4451	350.3883	86.35924	44.80726
#1	.0001067	.001587	.001122	-.004415	.0015413	.0099963
#2	-.000613	-.000059	-.001771	.002570	.0010098	.0063848
#3	.000510	-.002755	-.001053	-.001147	.0000585	.0039591

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001166**	**.0000361**	**.0000473**	**.0014962**	**.0001279**	**.0000956**
Stddev	.000588	.0000285	.0000798	.0058885	.0002791	.0000413
%RSD	50.46289	78.89522	168.8703	393.5649	218.2690	43.20325
#1	-.000696	.0000541	.0000226	.0034122	.0003887	.0000904
#2	-.000976	.0000508	-.000017	.0061881	-.000166	.0001393
#3	-.001826	.0000033	.000136	-.005112	.000161	.0000572

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006981**	F **.4454135**	**.0007367**	**-.013613**	**-.000168**	**-.000129**
Stddev	.0004407	.0040740	.0002588	.013742	.000085	.000137
%RSD	63.13640	.9146458	35.12958	100.9469	50.42701	106.7863
#1	.0011724	.4500809	.0008753	-.019291	-.000259	-.000223
#2	.0003013	.4425715	.0008968	.002058	-.000153	.000029
#3	.0006205	.4435881	.0004382	-.023608	-.000092	-.000193

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.084944**	**-.001085**	**.0028908**	**-.012902**	**.0032257**	**.0001347**
Stddev	.006318	.000946	.0002689	.026167	.0004612	.0001731
%RSD	7.438356	87.18000	9.302293	202.8237	14.29674	128.5184
#1	-.087471	-.000258	.0026620	-.043046	.0028247	.0003023
#2	-.077753	-.000880	.0028234	.000377	.0037296	-.000043
#3	-.089607	-.002117	.0031870	.003964	.0031228	.000145

Sample Name: PB168309BL Acquired: 6/10/2025 18:36:37 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.001706**	**.0003530**	**.0021456**	**-.000397**	**.0042969**	**-.002309**
Stddev	.000471	.0005193	.0024179	.003086	.0012259	.000352
%RSD	27.60142	147.1073	112.6900	776.8236	28.53044	15.23133
#1	-.001402	-.000177	.0026612	-.003956	.0028855	-.001903
#2	-.001467	.000860	.0042641	.001218	.0049090	-.002509
#3	-.002248	.000376	-.000489	.001546	.0050964	-.002515

Elem	Sr4077
Units	ppm
Avg	**-.000338**
Stddev	.000026
%RSD	7.584140
#1	-.000351
#2	-.000309
#3	-.000356

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3353.559**	**77522.88**	**12436.85**	**2518.191**	**4795.733**
Stddev	8.530	320.51	23.52	8.764	3.594
%RSD	.2543626	.4134404	.1891536	.3480243	.0749345
#1	3344.417	77585.52	12464.01	2517.753	4792.248
#2	3361.306	77175.68	12423.29	2509.655	4799.427
#3	3354.953	77807.45	12423.25	2527.166	4795.523

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: PB168309BS Acquired: 6/10/2025 18:40:57 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8823206**	**2.255999**	**1.099633**	**2.228571**	**.9169879**	**2.163830**
Stddev	.0048752	.011026	.001977	.004086	.0020446	.005057
%RSD	.5525480	.4887343	.1797887	.1833589	.2229750	.2336832
#1	.8780548	2.268016	1.099324	2.225032	.9146270	2.167768
#2	.8812722	2.246349	1.097829	2.227639	.9181568	2.165595
#3	.8876348	2.253632	1.101747	2.233043	.9181799	2.158128

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2199167**	**.2226656**	**.2216258**	**1.124868**	**.4598787**	**.2233526**
Stddev	.0011045	.0016619	.0007827	.012129	.0022596	.0010847
%RSD	.5022226	.7463536	.3531485	1.078271	.4913443	.4856380
#1	.2190796	.2209571	.2210465	1.114710	.4572845	.2225310
#2	.2211685	.2242766	.2213147	1.138297	.4614170	.2229446
#3	.2195020	.2227632	.2225162	1.121598	.4609347	.2245821

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3505893**	**3.469879**	**.2264087**	**2.147283**	**.5591174**	**.0847275**
Stddev	.0002162	.020999	.0013621	.018428	.0017194	.0007629
%RSD	.0616626	.6051711	.6015882	.8582092	.3075279	.9004045
#1	.3503942	3.445889	.2257622	2.126444	.5577861	.0842814
#2	.3508217	3.484925	.2279737	2.153973	.5585073	.0842928
#3	.3505521	3.478822	.2254904	2.161432	.5610587	.0856084

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.063524**	**.3366969**	**.2330071**	**10.58947**	**.3277219**	**.4685115**
Stddev	.003797	.0016403	.0004815	.02408	.0018368	.0008746
%RSD	.1239331	.4871673	.2066261	.2273918	.5604787	.1866747
#1	3.059984	.3348160	.2331992	10.56923	.3262047	.4680713
#2	3.067534	.3378305	.2324593	10.58307	.3297641	.4679444
#3	3.063053	.3374441	.2333629	10.61610	.3271970	.4695187

Sample Name: PB168309BS Acquired: 6/10/2025 18:40:57 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.7836128**	**.2238890**	**.9968969**	**6.393225**	F **-.000032**	**.1922964**
Stddev	.0029768	.0007186	.0043821	.018723	.001872	.0023549
%RSD	.3798840	.3209602	.4395727	.2928516	5886.197	1.224625
#1	.7803711	.2232877	.9918935	6.390547	-.001749	.1906616
#2	.7842436	.2246848	1.000052	6.375985	-.000311	.1949956
#3	.7862236	.2236946	.998745	6.413142	.001964	.1912321

Elem	Sr4077
Units	ppm
Avg	**.2228697**
Stddev	.0006937
%RSD	.3112619
#1	.2220704
#2	.2233149
#3	.2232237

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3342.540**	**76845.81**	**12520.03**	**2497.312**	**4696.144**
Stddev	4.541	219.24	49.26	8.291	4.700
%RSD	.1358593	.2852926	.3934401	.3320057	.1000774
#1	3346.157	77007.61	12575.03	2493.381	4701.284
#2	3337.444	76933.51	12479.97	2506.838	4695.083
#3	3344.018	76596.30	12505.08	2491.718	4692.065

Sample Name: PB168284BL Acquired: 6/10/2025 18:44:57 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0019469**	**-.000552**	**-.001356**	**-.002896**	**.0010508**	**-.001893**	**-.002462**
Stddev	.0026237	.000653	.001050	.000899	.0014148	.003961	.000662
%RSD	134.7667	118.1771	77.47690	31.05147	134.6446	209.2022	26.90666
#1	.0015994	-.000009	-.002258	-.003081	.0002684	.001192	-.003121
#2	-.000486	-.000372	-.001606	-.003688	.0001999	-.006360	-.002467
#3	.004727	-.001276	-.000203	-.001918	.0026840	-.000512	-.001797

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000318**	**.0000373**	**-.009284**	**-.000209**	**-.000056**	**.0002406**	**-.003640**
Stddev	.0000307	.0000483	.009328	.000167	.000287	.0001457	.000459
%RSD	96.49243	129.3872	100.4789	79.84029	511.4653	60.57448	12.59788
#1	.0000661	.0000635	-.006996	-.000016	-.000063	.0003470	-.003115
#2	.0000069	-.000018	-.001312	-.000307	-.000340	.0000745	-.003960
#3	.0000225	.000067	-.019544	-.000303	.000234	.0003004	-.003846

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004840**	**-.016047**	**-.000106**	**.0001199**	**-.105929**	**-.000490**	**.0004052**
Stddev	.0004717	.002318	.000161	.0001691	.006322	.001121	.0001626
%RSD	97.46129	14.44416	153.0038	141.0802	5.968350	229.0126	40.12965
#1	.0008839	-.013387	-.000023	-.000020	-.098889	.000598	.0004771
#2	.0006043	-.017121	-.000291	.000071	-.107773	-.000425	.0005195
#3	-.000036	-.017633	-.000002	.000308	-.111124	-.001641	.0002191

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.037995**	**.0015493**	**-.000027**	**-.001840**	**-.000432**	**.0033399**	**-.001113**
Stddev	.007503	.0003008	.000068	.000672	.000709	.0035173	.000823
%RSD	19.74656	19.41351	252.1231	36.49595	164.1594	105.3130	73.91107
#1	-.042599	.0012796	.000048	-.001557	.000262	.0001571	-.000586
#2	-.029338	.0018736	-.000086	-.002607	-.001155	.0027464	-.000692
#3	-.042049	.0014947	-.000042	-.001357	-.000403	.0071161	-.002061

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: PB168284BL Acquired: 6/10/2025 18:44:57 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0003922	-.001987	.0000272
Stddev	.0037541	.002214	.0000229
%RSD	957.2502	111.4403	84.23560
#1	-.003921	-.003652	.0000267
#2	.002170	.000526	.0000504
#3	.002927	-.002834	.0000046

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3338.895	79360.93	12141.49	2536.794	4790.579
Stddev	6.248	79.36	25.89	12.009	3.120
%RSD	.1871174	.1000037	.2132503	.4734010	.0651232
#1	3345.743	79271.86	12171.27	2526.615	4791.260
#2	3333.505	79386.80	12128.90	2533.727	4787.175
#3	3337.439	79424.13	12124.30	2550.039	4793.302

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: PB168284BS Acquired: 6/10/2025 18:49:16 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8666307**	**2.216438**	**1.091179**	**2.182449**	**.8785968**	**2.105751**
Stddev	.0009058	.026579	.000674	.015651	.0035938	.004164
%RSD	.1045199	1.199167	.0617743	.7171184	.4090335	.1977673
#1	.8658717	2.186894	1.091766	2.172480	.8781156	2.101742
#2	.8676334	2.224011	1.091328	2.174380	.8752678	2.105456
#3	.8663869	2.238408	1.090443	2.200488	.8824069	2.110056

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2129068**	**.2216515**	**.2213709**	**1.116353**	**.4493476**	**.2200444**
Stddev	.0004394	.0017096	.0004125	.023988	.0008691	.0005137
%RSD	.2063791	.7713167	.1863537	2.148787	.1934188	.2334360
#1	.2133394	.2233756	.2217883	1.131130	.4503117	.2195916
#2	.2129202	.2199567	.2209635	1.129253	.4486242	.2199389
#3	.2124609	.2216223	.2213608	1.088675	.4491069	.2206025

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3405912**	**3.346536**	**.2220880**	**2.131327**	**.5544084**	**.0831153**
Stddev	.0018388	.053814	.0028698	.033227	.0007321	.0002433
%RSD	.5398784	1.608038	1.292192	1.559005	.1320586	.2927440
#1	.3385325	3.363452	.2244096	2.157689	.5540227	.0830520
#2	.3411709	3.389859	.2229749	2.142288	.5539497	.0833840
#3	.3420703	3.286297	.2188794	2.094003	.5552527	.0829099

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.933002**	**.3257667**	**.2286785**	**10.17729**	**.3231691**	**.4488149**
Stddev	.047755	.0035908	.0004214	.07349	.0025599	.0015127
%RSD	1.628205	1.102245	.1842683	.7221214	.7921181	.3370441
#1	2.878247	.3286455	.2282170	10.09422	.3260476	.4474123
#2	2.954731	.3269114	.2287759	10.23385	.3211480	.4486145
#3	2.966029	.3217431	.2290427	10.20380	.3223116	.4504178

Sample Name: PB168284BS Acquired: 6/10/2025 18:49:16 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.7730718**	**.2163395**	**.9493330**	**6.379228**	F **-.000522**	**.1841717**
Stddev	.0015175	.0009171	.0149721	.019234	.000618	.0030050
%RSD	.1962913	.4239378	1.577119	.3015148	118.4196	1.631643
#1	.7720217	.2173287	.9559638	6.361433	.000188	.1813047
#2	.7748116	.2155175	.9598447	6.376617	-.000939	.1839125
#3	.7723821	.2161723	.9321905	6.399635	-.000815	.1872979

Elem	Sr4077
Units	ppm
Avg	**.2157308**
Stddev	.0014731
%RSD	.6828608
#1	.2146841
#2	.2150930
#3	.2174154

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3429.877**	**77268.89**	**12475.90**	**2512.423**	**4740.573**
Stddev	21.915	481.61	9.20	33.180	22.524
%RSD	.6389500	.6232878	.0737332	1.320621	.4751395
#1	3453.803	77668.68	12474.77	2537.184	4766.207
#2	3425.051	76734.23	12467.31	2474.723	4731.565
#3	3410.776	77403.77	12485.61	2525.360	4723.947

Sample Name: PB168310BL Acquired: 6/10/2025 18:53:15 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.000694**	**.0009597**	**-.000557**	**.0019813**	**.0010999**	**-.000578**	**-.001868**
Stddev	.001185	.0006284	.002244	.0019748	.0009146	.002572	.000382
%RSD	170.6101	65.48136	403.2234	99.67119	83.15322	445.1412	20.44681
#1	-.001781	.0003416	-.003110	-.000296	.0013075	.001845	-.002291
#2	.000569	.0015979	.000336	.003016	.0000994	-.003277	-.001548
#3	-.000871	.0009395	.001104	.003224	.0018929	-.000302	-.001764

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000008**	**.0000328**	**-.021658**	**-.000597**	**-.000255**	**.0001385**	**-.004774**
Stddev	.000023	.0000767	.003210	.000336	.000122	.0001424	.002503
%RSD	305.0912	233.8815	14.81985	56.23346	47.86892	102.7942	52.44448
#1	.000019	.0000525	-.019450	-.000447	-.000390	.0000528	-.002046
#2	-.000018	-.000052	-.020184	-.000363	-.000224	.0003029	-.006967
#3	-.000023	.000098	-.025340	-.000982	-.000152	.0000599	-.005308

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000200**	**-.029766**	**-.000501**	**.0001026**	**-.113319**	**-.001188**	**-.000317**
Stddev	.000062	.010144	.000237	.0003306	.012950	.000322	.000375
%RSD	30.93867	34.07773	47.19824	322.2908	11.42788	27.14009	118.5501
#1	-.000129	-.037377	-.000230	.0000612	-.125638	-.001518	-.000103
#2	-.000226	-.033670	-.000667	-.000205	-.099819	-.000874	-.000097
#3	-.000244	-.018250	-.000606	.000452	-.114498	-.001171	-.000750

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.049524**	**.0009491**	**-.000148**	**-.002231**	**-.000428**	**-.007569**	**-.001378**
Stddev	.027278	.0004643	.000304	.000516	.000190	.004689	.002087
%RSD	55.08118	48.92146	204.9422	23.10693	44.35112	61.94699	151.4082
#1	-.025248	.0012705	.000189	-.002669	-.000379	-.011969	-.000327
#2	-.079043	.0011599	-.000400	-.001663	-.000267	-.002637	-.003782
#3	-.044281	.0004168	-.000234	-.002362	-.000637	-.008102	-.000026

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: PB168310BL Acquired: 6/10/2025 18:53:15 Type: Unk
Method: 6010-200.7 NEW(v2) 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	-.000976	-.003053	-.000010
Stddev	.000703	.002092	.000053
%RSD	72.01447	68.52523	545.6365
#1	-.000709	-.002219	-.000010
#2	-.000446	-.005434	-.000063
#3	-.001774	-.001507	.000044

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3405.560	81167.74	12319.29	2572.835	4920.034
Stddev	20.082	31.75	26.40	10.527	16.856
%RSD	.5896864	.0391134	.2143115	.4091471	.3426044
#1	3417.817	81188.43	12344.91	2564.367	4929.169
#2	3382.384	81131.19	12320.78	2569.517	4900.582
#3	3416.479	81183.62	12292.17	2584.621	4930.352

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: PB168310BS Acquired: 6/10/2025 18:57:36 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8267264**	**2.126413**	**1.037651**	**2.075248**	**.8251942**	**2.029528**
Stddev	.0038412	.018011	.007876	.005679	.0048637	.001719
%RSD	.4646238	.8470048	.7589906	.2736467	.5893996	.0846926
#1	.8237085	2.143673	1.043592	2.070025	.8215302	2.029063
#2	.8254204	2.127829	1.040643	2.074425	.8233402	2.028090
#3	.8310503	2.107735	1.028717	2.081293	.8307123	2.031432

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1999828**	**.2215629**	**.2106164**	**1.054022**	**.4349324**	**.2097144**
Stddev	.0001513	.0008293	.0021762	.004933	.0006804	.0011567
%RSD	.0756739	.3743191	1.033272	.4680557	.1564445	.5515604
#1	.1998232	.2212424	.2123305	1.053008	.4341719	.2109826
#2	.2001242	.2209416	.2113507	1.049674	.4354836	.2094430
#3	.2000009	.2225047	.2081680	1.059383	.4351417	.2087174

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3243109**	**3.107130**	**.2112525**	**2.031910**	**.5275891**	**.0796535**
Stddev	.0017501	.004472	.0001473	.003834	.0030308	.0006191
%RSD	.5396245	.1439371	.0697197	.1886878	.5744616	.7772476
#1	.3230450	3.104145	.2111174	2.030973	.5301442	.0789808
#2	.3235797	3.112272	.2112304	2.028631	.5283825	.0797806
#3	.3263079	3.104972	.2114095	2.036125	.5242405	.0801993

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.679789**	**.3107606**	**.2221208**	**9.555733**	**.3202681**	**.4206134**
Stddev	.022100	.0021253	.0006338	.058551	.0023020	.0009905
%RSD	.8246823	.6839096	.2853306	.6127331	.7187566	.2354885
#1	2.658099	.3131216	.2224687	9.576807	.3192445	.4200185
#2	2.702277	.3090001	.2213893	9.600830	.3186555	.4200649
#3	2.678990	.3101602	.2225044	9.489562	.3229044	.4217569

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: PB168310BS Acquired: 6/10/2025 18:57:36 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.7224158	.2029592	.8796480	6.112972	F .0009352	.1742438
Stddev	.0049838	.0021638	.0068513	.039539	.0020043	.0020495
%RSD	.6898856	1.066118	.7788715	.6468117	214.3071	1.176233
#1	.7254287	.2012785	.8862701	6.144331	-.001326	.1720770
#2	.7251556	.2021985	.8800854	6.126031	.001640	.1745031
#3	.7166631	.2054006	.8725884	6.068556	.002492	.1761513

Elem	Sr4077
Units	ppm
Avg	.2049240
Stddev	.0002808
%RSD	.1369996
#1	.2050885
#2	.2045998
#3	.2050837

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3433.480	76475.91	12011.17	2507.774	4752.087
Stddev	54.089	223.03	18.64	16.985	42.921
%RSD	1.575354	.2916386	.1551747	.6772827	.9032081
#1	3468.934	76540.92	12015.66	2498.701	4775.602
#2	3460.284	76227.60	12027.14	2497.253	4778.112
#3	3371.223	76659.22	11990.69	2527.369	4702.547

Sample Name: Q2246-01 Acquired: 6/10/2025 19:01:36 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0244527**	**-.003371**	**.0647082**	**-.016205**	**-.001768**	**25.34923**	**.1432387**
Stddev	.0017150	.002585	.0005378	.004951	.000729	.08894	.0011695
%RSD	7.013470	76.68957	.8311099	30.55412	41.20583	.3508472	.8164440
#1	.0231790	-.004668	.0644752	-.011587	-.002542	25.41375	.1441988
#2	.0264027	-.005051	.0653232	-.015594	-.001095	25.38617	.1435810
#3	.0237762	-.000394	.0643262	-.021433	-.001668	25.24778	.1419362

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0021020**	**.0011179**	**48.98143**	**.0874628**	**.0098743**	**.0401701**	**80.16552**
Stddev	.0000332	.0001189	.05342	.0003632	.0001132	.0004648	.28827
%RSD	1.578783	10.63780	.1090645	.4152380	1.146711	1.157081	.3595933
#1	.0021383	.0012482	49.00844	.0872752	.0097775	.0401221	79.84145
#2	.0020733	.0010151	49.01596	.0872318	.0099988	.0397312	80.39340
#3	.0020945	.0010905	48.91990	.0878814	.0098466	.0406570	80.26170

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3059746**	**5.085709**	**.0171026**	**-.000621**	**.5836812**	**.1082573**	**.0872514**
Stddev	.0012519	.015436	.0001554	.000127	.0077124	.0016902	.0004729
%RSD	.4091340	.3035257	.9084203	20.51717	1.321331	1.561296	.5419782
#1	.3053324	5.083908	.0170190	-.000477	.5911987	.1094344	.0873069
#2	.3074172	5.101966	.0172819	-.000719	.5757878	.1090170	.0876940
#3	.3051741	5.071251	.0170070	-.000668	.5840572	.1063206	.0867532

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.038200**	**-.036447**	**.0052133**	**.0057952**	**.8022063**	**4.936129**	**1.000639**
Stddev	.020878	.001383	.0002482	.0003959	.0041869	.030820	.001262
%RSD	1.024352	3.795571	4.761005	6.832107	.5219269	.6243666	.1261288
#1	2.014417	-.036634	.0054791	.0054814	.8034462	4.904399	1.000724
#2	2.046671	-.037728	.0049875	.0056642	.8056332	4.965949	.999337
#3	2.053511	-.034980	.0051734	.0062400	.7975395	4.938040	1.001857

Sample Name: Q2246-01 Acquired: 6/10/2025 19:01:36 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**3.339427**	**.0477048**	**.1824270**
Stddev	.009187	.0005416	.0017346
%RSD	.2751013	1.135226	.9508496
#1	3.347571	.0471156	.1839339
#2	3.341242	.0481808	.1828163
#3	3.329468	.0478180	.1805309

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3288.656**	**76937.21**	**12444.89**	**2454.165**	**4465.379**
Stddev	10.919	403.19	40.52	13.845	15.319
%RSD	.3320327	.5240548	.3256180	.5641631	.3430528
#1	3276.795	77330.96	12438.64	2464.105	4449.497
#2	3298.291	76525.20	12407.86	2438.351	4480.065
#3	3290.881	76955.47	12488.18	2460.039	4466.576

Sample Name: Q2259-03 Acquired: 6/10/2025 19:05:49 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0285310**	**-.014593**	**.0170512**	**-.123918**	**-.015611**	**140.3954**	**.2402879**
Stddev	.0003061	.002956	.0015256	.006962	.002811	.3788	.0007087
%RSD	1.072844	20.25874	8.946991	5.618454	18.00723	.2698226	.2949403
#1	.0288707	-.017707	.0164366	-.116600	-.012671	140.7339	.2410805
#2	.0284459	-.011825	.0159287	-.130460	-.015890	139.9862	.2400681
#3	.0282765	-.014246	.0187881	-.124695	-.018272	140.4661	.2397151

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0063444**	**.0340240**	**129.2697**	**-.028825**	**.2984742**	**.7650415**	**473.5599**
Stddev	.0001207	.0002519	.4064	.000089	.0004872	.0010898	.6186
%RSD	1.902349	.7404133	.3144081	.3075163	.1632346	.1424455	.1306332
#1	.0064819	.0343091	129.6371	-.028839	.2987185	.7644671	473.4291
#2	.0062562	.0339314	128.8331	-.028731	.2987910	.7662984	473.0171
#3	.0062951	.0338315	129.3389	-.028906	.2979132	.7643591	474.2334

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.717561**	**98.40070**	**.1493454**	**-.012631**	**19.57997**	**1.289382**	**.5644947**
Stddev	.011726	.22887	.0007273	.000033	.01392	.004378	.0023597
%RSD	.3154218	.2325866	.4869814	.2586532	.0710775	.3395169	.4180259
#1	3.730791	98.43612	.1488387	-.012598	19.56503	1.293856	.5633907
#2	3.708449	98.15619	.1501788	-.012631	19.59257	1.285107	.5628894
#3	3.713444	98.60979	.1490188	-.012663	19.58229	1.289183	.5672041

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.789768**	**1.217307**	**.0027871**	**.0229756**	**5.554572**	**2.993553**	**9.938435**
Stddev	.015634	.007980	.0001693	.0016255	.014519	.028579	.029575
%RSD	.8735163	.6555829	6.075125	7.075016	.2613965	.9546774	.2975782
#1	1.787166	1.223753	.0026734	.0234514	5.571191	2.980758	9.966692
#2	1.775598	1.208381	.0027062	.0211653	5.544343	3.026294	9.940916
#3	1.806539	1.219786	.0029817	.0243101	5.548184	2.973607	9.907699

Sample Name: Q2259-03 Acquired: 6/10/2025 19:05:49 Type: Unk
Method: 6010-200.7 NEW(v2) 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	6.365864	.2910173	-.068982
Stddev	.017453	.0000857	.001285
%RSD	.2741700	.0294521	1.863153
#1	6.359704	.2909297	-.067674
#2	6.385562	.2911010	-.069028
#3	6.352326	.2910211	-.070244

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3627.633	85199.03	14577.37	2658.696	3910.815
Stddev	12.584	118.15	43.33	13.801	9.499
%RSD	.3468918	.1386778	.2972650	.5190742	.2428977
#1	3641.132	85206.16	14528.09	2655.155	3918.855
#2	3616.226	85313.46	14609.53	2673.922	3900.333
#3	3625.542	85077.48	14594.48	2647.011	3913.257

Sample Name: Q2259-05 Acquired: 6/10/2025 19:10:02 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.4017573	-.075077	.4790706	-.096908	-.003039	256.6682
Stddev	.0030573	.002629	.0011709	.004769	.002196	.4154
%RSD	.7609794	3.501188	.2444188	4.921494	72.27018	.1618400
#1	.4015803	-.076031	.4786675	-.091837	-.003998	256.5493
#2	.4048993	-.077096	.4781545	-.101303	-.004593	256.3252
#3	.3987924	-.072105	.4803899	-.097583	-.000526	257.1300

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.701918	.0162587	.0444315	63.17671	.3269161	.2725856
Stddev	.006977	.0001434	.0006624	.04342	.0006937	.0005056
%RSD	.4099752	.8817479	1.490807	.0687313	.2121914	.1854778
#1	1.697408	.0161637	.0451961	63.22638	.3276577	.2722864
#2	1.709955	.0161889	.0440666	63.15780	.3262831	.2731694
#3	1.698392	.0164236	.0440318	63.14595	.3268075	.2723012

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7076689	391.4736	7.529725	88.37474	.4570540	-.008219
Stddev	.0018005	1.7523	.013286	.27159	.0019726	.000741
%RSD	.2544230	.4476113	.1764451	.3073215	.4315928	9.015723
#1	.7093507	389.4692	7.518830	88.67600	.4563527	-.008939
#2	.7057695	392.7154	7.544526	88.29959	.4592814	-.007459
#3	.7078865	392.2360	7.525820	88.14864	.4555279	-.008260

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.842092	.5736163	1.315348	85.42708	-.203651	.0196638
Stddev	.020073	.0025150	.005511	.13316	.008198	.0004210
%RSD	.7062845	.4384417	.4189630	.1558808	4.025418	2.140883
#1	2.821841	.5762193	1.314313	85.29263	-.212343	.0201119
#2	2.861983	.5711997	1.321303	85.55892	-.202552	.0192765
#3	2.842451	.5734297	1.310428	85.42968	-.196058	.0196031

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2259-05 Acquired: 6/10/2025 19:10:02 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0310023	15.79227	3.691422	F 18.34884	13.59304	.5843576
Stddev	.0005458	.01257	.012759	.08136	.05230	.0039080
%RSD	1.760545	.0796163	.3456283	.4434078	.3847707	.6687611
#1	.0305835	15.78603	3.705631	18.32846	13.56124	.5802816
#2	.0316196	15.80674	3.680947	18.43845	13.65340	.5880724
#3	.0308038	15.78402	3.687690	18.27961	13.56447	.5847188

Elem	Sr4077
Units	ppm
Avg	-.069265
Stddev	.001081
%RSD	1.560278
#1	-.068132
#2	-.069378
#3	-.070284

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3827.145	92113.63	15835.46	2837.971	3764.427
Stddev	30.586	94.22	20.29	6.982	20.833
%RSD	.7991873	.1022826	.1281342	.2460117	.5534276
#1	3795.505	92172.99	15858.31	2842.480	3741.435
#2	3856.555	92162.91	15819.55	2829.929	3782.051
#3	3829.376	92004.99	15828.52	2841.504	3769.795

Sample Name: Q2259-06 Acquired: 6/10/2025 19:14:22 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.4395023**	**-.070155**	**.4590271**	**-.098070**	**-.006402**	**251.9928**	**1.603931**
Stddev	.0002342	.000665	.0013116	.003318	.001291	2.7694	.010225
%RSD	.0532858	.9475764	.2857324	3.382989	20.16792	1.098992	.6374733
#1	.4395190	-.069678	.4592593	-.100170	-.007892	254.2545	1.614133
#2	.4392602	-.070914	.4576149	-.099795	-.005649	252.8197	1.603975
#3	.4397277	-.069873	.4602071	-.094245	-.005663	248.9041	1.593684

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0163575**	**.0442987**	**51.05555**	**.3241163**	**.2578652**	**.7242082**	**376.7340**
Stddev	.0003210	.0004299	.11334	.0018323	.0008852	.0014464	2.0145
%RSD	1.962458	.9705142	.2219973	.5653196	.3432653	.1997166	.5347251
#1	.0167265	.0441340	51.16322	.3259843	.2573303	.7243395	377.4965
#2	.0162031	.0447866	51.06614	.3240427	.2588869	.7255845	374.4496
#3	.0161428	.0439755	50.93728	.3223219	.2573784	.7227007	378.2559

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.577157**	**86.89693**	**.4447243**	**-.011252**	**2.433693**	**.5534643**	**1.223877**
Stddev	.029914	.28048	.0017559	.001159	.010948	.0002277	.005872
%RSD	.4548232	.3227788	.3948185	10.30271	.4498444	.0411344	.4798215
#1	6.596590	87.22077	.4436307	-.011801	2.445726	.5532727	1.222499
#2	6.592171	86.73917	.4467496	-.012035	2.424322	.5537159	1.230316
#3	6.542709	86.73085	.4437925	-.009920	2.431030	.5534042	1.218817

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**78.08590**	**-.297504**	**.0216651**	**.0290596**	**15.37197**	**2.869621**	**17.00859**
Stddev	.06262	.012569	.0004769	.0024844	.06458	.050426	.06673
%RSD	.0801994	4.224975	2.201083	8.549357	.4201086	1.757229	.3923404
#1	78.13241	-.301880	.0222003	.0288593	15.43860	2.838167	16.96702
#2	78.01470	-.307301	.0215097	.0316381	15.36766	2.842912	17.08556
#3	78.11060	-.283332	.0212853	.0266814	15.30965	2.927783	16.97319

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2259-06 Acquired: 6/10/2025 19:14:22 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**12.81181**	**.5676870**	**-.110145**
Stddev	.04586	.0042325	.002862
%RSD	.3579223	.7455686	2.598535
#1	12.79987	.5718076	-.109655
#2	12.86245	.5679025	-.107561
#3	12.77310	.5633508	-.113221

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3873.015**	**92952.61**	**15343.48**	**2872.211**	**3808.992**
Stddev	8.230	103.36	64.09	7.733	5.826
%RSD	.2125002	.1111956	.4177060	.2692481	.1529527
#1	3863.511	92921.89	15282.04	2879.088	3809.296
#2	3877.740	93067.85	15338.47	2863.839	3803.020
#3	3877.792	92868.10	15409.93	2873.707	3814.660

Sample Name: CCV05 Acquired: 6/10/2025 19:18:42 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.165244**	**5.000360**	**5.092650**	**5.194087**	**5.118488**	**9.844503**	**10.18716**
Stddev	.004209	.025304	.005852	.008779	.009567	.020459	.10217
%RSD	.0814820	.5060434	.1149163	.1690286	.1869176	.2078265	1.002884
#1	5.164828	4.998578	5.099006	5.199672	5.128151	9.848926	10.23930
#2	5.169645	5.026508	5.091461	5.198621	5.109020	9.822194	10.06945
#3	5.161259	4.975994	5.087484	5.183967	5.118294	9.862389	10.25274

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2427783**	**2.545792**	**24.89201**	**1.032132**	**2.528967**	**1.272854**	**5.339670**
Stddev	.0010513	.006379	.06636	.002443	.004384	.001514	.049136
%RSD	.4330272	.2505511	.2666078	.2366919	.1733344	.1189340	.9202058
#1	.2421336	2.552329	24.81558	1.029311	2.533979	1.274598	5.321129
#2	.2422099	2.545463	24.92542	1.033566	2.527076	1.272091	5.395378
#3	.2439914	2.539584	24.93504	1.033519	2.525847	1.271874	5.302501

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.489352**	**24.44774**	**2.537320**	**1.260847**	**25.24566**	**2.542864**	**2.508574**
Stddev	.004137	.11106	.004952	.002905	.10268	.001344	.006963
%RSD	.1661907	.4542693	.1951765	.2303795	.4067075	.0528576	.2775652
#1	2.484666	24.33870	2.542591	1.258004	25.25597	2.543114	2.501123
#2	2.492499	24.44380	2.536602	1.263810	25.34279	2.544066	2.514916
#3	2.490893	24.56071	2.532765	1.260728	25.13822	2.541413	2.509684

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.17612**	**4.746884**	**5.135198**	**5.147499**	**5.084260**	**5.248713**	**5.220304**
Stddev	.06485	.013717	.010183	.008622	.001510	.014910	.003517
%RSD	.2575833	.2889681	.1983049	.1674991	.0297030	.2840788	.0673751
#1	25.17496	4.736046	5.144720	5.157339	5.082517	5.241599	5.222674
#2	25.24154	4.742300	5.136412	5.143886	5.085138	5.265848	5.221976
#3	25.11186	4.762306	5.124462	5.141271	5.085126	5.238692	5.216263

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCV05 Acquired: 6/10/2025 19:18:42 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**5.047670**	**4.753830**	**5.089800**
Stddev	.013622	.006920	.036578
%RSD	.2698741	.1455602	.7186562
#1	5.062500	4.757784	5.058957
#2	5.044796	4.757865	5.080233
#3	5.035714	4.745840	5.130211

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3215.458**	**76030.94**	**12648.42**	**2430.157**	**4274.124**
Stddev	2.235	94.14	36.13	7.641	2.207
%RSD	.0695106	.1238139	.2856425	.3144057	.0516291
#1	3213.288	76024.70	12651.84	2438.962	4273.228
#2	3217.753	75940.08	12682.71	2425.282	4276.638
#3	3215.332	76128.05	12610.70	2426.225	4272.507

Sample Name: CCB05 Acquired: 6/10/2025 19:22:53 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.000027**	**.0000862**	**-.001563**	**-.000564**	**.0035780**	**.0044817**	**-.002558**
Stddev	.001085	.0003267	.001699	.000387	.0013845	.0036377	.000288
%RSD	4056.807	378.8740	108.6771	68.55842	38.69472	81.16846	11.24338
#1	-.000463	.0002158	-.003521	-.000396	.0038662	.0078547	-.002629
#2	.001208	-.000285	-.000494	-.000290	.0020721	.0049631	-.002241
#3	-.000825	.000328	-.000674	-.001007	.0047958	.0006272	-.002803

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000227**	**.0000890**	**-.003195**	**.0005581**	**.0001925**	**.0002153**	**.0044308**
Stddev	.0000384	.0000307	.006321	.0002730	.0000803	.0000715	.0021823
%RSD	169.4618	34.44244	197.8692	48.91762	41.70212	33.19407	49.25306
#1	.0000620	.0000796	-.009138	.0002440	.0002836	.0002975	.0067817
#2	.0000206	.0000642	-.003893	.0007386	.0001325	.0001803	.0024697
#3	-.000015	.0001233	.003447	.0006917	.0001613	.0001680	.0040409

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000683**	**.0062290**	**-.000073**	**.0000435**	**-.100953**	**.0012461**	**-.000127**
Stddev	.0000835	.0037259	.000158	.0000801	.008422	.0002365	.000204
%RSD	122.3401	59.81587	216.1999	184.0431	8.342914	18.97561	161.3064
#1	.0001538	.0080215	-.000236	-.000018	-.105549	.0013634	.000078
#2	.0000642	.0087198	.000079	.000015	-.091232	.0009739	-.000127
#3	-.000013	.0019456	-.000062	.000134	-.106077	.0014009	-.000331

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.005454**	**.0061536**	**.0006025**	**.0002520**	**.0003605**	**.0110174**	**-.001256**
Stddev	.014155	.0003494	.0001269	.0010621	.0006581	.0028528	.001346
%RSD	259.5270	5.677262	21.06829	421.4750	182.5884	25.89317	107.1847
#1	-.005945	.0064811	.0007440	.0010543	.0001900	.0088585	-.002777
#2	.008940	.0057859	.0004987	.0006542	.0010870	.0099421	-.000773
#3	-.019357	.0061937	.0005648	-.000952	-.000196	.0142515	-.000218

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCB05 Acquired: 6/10/2025 19:22:53 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0032434	-.002102	.0000642
Stddev	.0024538	.000699	.0000877
%RSD	75.65650	33.27237	136.4589
#1	.0009233	-.002883	.0001515
#2	.0029948	-.001888	-.000024
#3	.0058120	-.001535	.000065

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3406.214	77250.42	12300.16	2531.361	4838.315
Stddev	4.687	218.91	40.18	9.203	9.068
%RSD	.1376055	.2833745	.3266585	.3635564	.1874114
#1	3401.050	76998.74	12346.20	2520.992	4829.402
#2	3407.393	77396.56	12282.07	2534.528	4847.530
#3	3410.199	77355.97	12272.20	2538.562	4838.014

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2265-01 Acquired: 6/10/2025 19:27:13 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0637915**	**-.007625**	**.1565113**	**-.064069**	**-.010672**	**194.2471**	**.8447696**
Stddev	.0029436	.000961	.0031985	.003092	.001900	.4488	.0058919
%RSD	4.614372	12.60731	2.043596	4.826442	17.80393	.2310547	.6974551
#1	.0624309	-.006542	.1538495	-.067590	-.012863	194.5878	.8503291
#2	.0617743	-.007957	.1556249	-.061794	-.009660	193.7385	.8453859
#3	.0671693	-.008377	.1600594	-.062823	-.009491	194.4150	.8385938

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0157128**	**.0215116**	**7.648182**	**.1446933**	**.2483209**	**.2234642**	**320.1035**
Stddev	.0002107	.0002578	.017822	.0009417	.0007321	.0009891	.7401
%RSD	1.340889	1.198214	.2330253	.6508251	.2948021	.4426371	.2312211
#1	.0158640	.0214051	7.668367	.1456316	.2491593	.2225540	320.7937
#2	.0158022	.0213242	7.641565	.1447000	.2478082	.2233217	320.1948
#3	.0154721	.0218056	7.634615	.1437483	.2479953	.2245168	319.3219

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.271452**	**16.96956**	**.2466274**	**-.004051**	**4.762887**	**.3671220**	**.4358838**
Stddev	.027143	.16749	.0008544	.000125	.022698	.0017714	.0016732
%RSD	.5149119	.9869860	.3464300	3.087351	.4765548	.4824986	.3838650
#1	5.296948	17.04483	.2475998	-.004195	4.788413	.3691025	.4377640
#2	5.242917	16.77764	.2459972	-.003976	4.755271	.3656892	.4353290
#3	5.274492	17.08620	.2462852	-.003981	4.744976	.3665742	.4345585

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.198907**	**-.154385**	**.0015042**	**.0855343**	**2.130759**	**3.777671**	**5.033500**
Stddev	.032836	.001889	.0001301	.0004175	.008415	.019020	.033824
%RSD	.3569582	1.223577	8.647035	.4880797	.3949386	.5034799	.6719737
#1	9.213472	-.156337	.0013674	.0854653	2.140236	3.762307	5.071866
#2	9.221942	-.154253	.0016263	.0851555	2.127881	3.771762	5.020649
#3	9.161308	-.152566	.0015189	.0859819	2.124161	3.798944	5.007986

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2265-01 Acquired: 6/10/2025 19:27:13 Type: Unk
Method: 6010-200.7 NEW(v2) 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	1.054131	.2480273	-.245178
Stddev	.006289	.0028812	.000345
%RSD	.5966423	1.161652	.1408430
#1	1.060653	.2493599	-.245436
#2	1.053636	.2500010	-.245314
#3	1.048104	.2447210	-.244786

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4236.595	96593.87	16247.57	3158.507	4253.790
Stddev	48.758	91.42	48.24	9.099	33.601
%RSD	1.150886	.0946483	.2968964	.2880771	.7899101
#1	4290.604	96688.53	16194.18	3166.107	4288.964
#2	4223.363	96506.06	16260.54	3148.424	4250.385
#3	4195.819	96587.03	16288.01	3160.988	4222.021

Sample Name: Q2266-01 Acquired: 6/10/2025 19:31:35 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0777903**	**-.011913**	**.1553102**	**-.065305**	**-.004307**	**76.43687**	**1.526772**
Stddev	.0010563	.001181	.0017266	.005131	.001726	.07329	.006484
%RSD	1.357903	9.913536	1.111684	7.857413	40.06690	.0958821	.4246931
#1	.0768440	-.013268	.1536861	-.063202	-.002316	76.38451	1.533770
#2	.0789299	-.011368	.1551210	-.061560	-.005367	76.40547	1.520967
#3	.0775968	-.011103	.1571236	-.071154	-.005238	76.52063	1.525580

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0125325**	**.0178361**	**268.0842**	**.1846788**	**.1546960**	**.2005831**	**248.4691**
Stddev	.0000901	.0003284	1.0567	.0004402	.0004008	.0018671	.3298
%RSD	.7191290	1.841484	.3941802	.2383808	.2590686	.9308236	.1327452
#1	.0124773	.0176017	267.0863	.1851863	.1542850	.1988675	248.5477
#2	.0124837	.0176950	267.9752	.1844507	.1547173	.2003101	248.1071
#3	.0126365	.0182115	269.1913	.1843995	.1550857	.2025716	248.7526

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.774617**	**76.79924**	**.3295724**	**-.008747**	**2.160205**	**.2979087**	**.6434853**
Stddev	.016833	.40241	.0004418	.000488	.010938	.0020987	.0027770
%RSD	.2165168	.5239764	.1340392	5.573995	.5063452	.7044855	.4315584
#1	7.774366	76.51372	.3300204	-.009031	2.172249	.2973837	.6464606
#2	7.757910	76.62454	.3295597	-.009026	2.157478	.2961223	.6409621
#3	7.791574	77.25948	.3291372	-.008184	2.150889	.3002201	.6430330

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**20.78357**	**-.169745**	**.0038860**	**.0118835**	**2.885598**	**2.579510**	**10.41257**
Stddev	.14113	.002288	.0004544	.0004476	.003416	.005746	.03043
%RSD	.6790289	1.347755	11.69261	3.766629	.1183862	.2227664	.2922218
#1	20.94049	-.167129	.0037020	.0113704	2.886379	2.572888	10.44543
#2	20.74316	-.170737	.0035525	.0120859	2.881858	2.583187	10.40691
#3	20.66706	-.171370	.0044035	.0121942	2.888555	2.582455	10.38536

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2266-01 Acquired: 6/10/2025 19:31:35 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.6779178	.3821575	.5488651
Stddev	.0100692	.0005667	.0029530
%RSD	1.485305	.1482758	.5380172
#1	.6858509	.3828092	.5520030
#2	.6665901	.3818820	.5461405
#3	.6813126	.3817813	.5484516

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3592.341	83471.57	13423.14	2657.126	3903.007
Stddev	47.276	125.48	24.71	8.381	37.751
%RSD	1.316009	.1503283	.1840987	.3154255	.9672368
#1	3630.151	83460.73	13450.82	2653.378	3933.283
#2	3607.534	83351.86	13415.32	2651.273	3915.029
#3	3539.336	83602.12	13403.29	2666.727	3860.709

Sample Name: Q2266-05 Acquired: 6/10/2025 19:35:50 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0816361**	**-.014959**	**.1831493**	**-.064352**	**-.008427**	**86.38721**	**2.877754**
Stddev	.0036365	.001548	.0016214	.001372	.001469	.84021	.018526
%RSD	4.454498	10.34628	.8852997	2.131242	17.43425	.9726132	.6437646
#1	.0833400	-.013176	.1836476	-.065787	-.008524	86.74509	2.887118
#2	.0841077	-.015752	.1844630	-.064214	-.009846	86.98923	2.889729
#3	.0774605	-.015950	.1813372	-.063055	-.006912	85.42731	2.856415

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0135166**	**.0218098**	**42.77861**	**.2410230**	**.1775833**	**.1323751**	**280.3388**
Stddev	.0000543	.0003218	.37242	.0023786	.0007365	.0006584	1.9239
%RSD	.4019389	1.475293	.8705802	.9868969	.4147481	.4974005	.6862699
#1	.0135793	.0221811	42.89659	.2390161	.1784277	.1330984	278.4221
#2	.0134828	.0216120	43.07776	.2404026	.1770735	.1318106	280.3245
#3	.0134877	.0216363	42.36149	.2436504	.1772487	.1322163	282.2698

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.44798**	**65.10813**	**.4545449**	**-.004252**	**1.970212**	**.3048399**	**.6945220**
Stddev	.06935	.63543	.0022070	.000488	.017613	.0014871	.0027503
%RSD	.6637227	.9759613	.4855464	11.46847	.8939393	.4878172	.3960065
#1	10.47060	65.14195	.4570724	-.004174	1.961228	.3063717	.6916281
#2	10.50318	65.72598	.4529992	-.003808	1.958903	.3047460	.6948358
#3	10.37014	64.45647	.4535629	-.004774	1.990504	.3034020	.6971019

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**18.68436**	**-.081177**	**.0037736**	**.0078655**	**3.027274**	**2.269556**	**10.20211**
Stddev	.14243	.007834	.0003060	.0007481	.023183	.018969	.03907
%RSD	.7623035	9.651044	8.110061	9.511410	.7657921	.8357816	.3829226
#1	18.58042	-.086592	.0041184	.0072173	3.036737	2.264141	10.21486
#2	18.62595	-.084746	.0036681	.0086842	3.044229	2.253884	10.15826
#3	18.84671	-.072194	.0035342	.0076951	3.000857	2.290643	10.23320

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2266-05 Acquired: 6/10/2025 19:35:50 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.3963662	.3834240	-.074026
Stddev	.0032704	.0005004	.003086
%RSD	.8250903	.1305065	4.169021
#1	.3973349	.3840017	-.071578
#2	.3927209	.3831440	-.073007
#3	.3990428	.3831263	-.077493

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4063.106	95459.60	16276.26	3030.610	4073.641
Stddev	22.045	760.27	102.72	17.429	18.397
%RSD	.5425718	.7964364	.6311271	.5750919	.4516185
#1	4037.660	96170.05	16238.40	3048.099	4052.500
#2	4076.452	95550.98	16197.84	3030.490	4086.017
#3	4075.205	94657.76	16392.54	3013.242	4082.406

Sample Name: Q2260-01 Acquired: 6/10/2025 19:39:56 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.1432867**	**.0035621**	**.2264294**	**-.130565**	**-.019892**	**170.2780**	**.5404556**
Stddev	.0027738	.0016167	.0042142	.002878	.001087	1.9215	.0033828
%RSD	1.935815	45.38682	1.861147	2.203959	5.464081	1.128427	.6259089
#1	.1430768	.0053509	.2253381	-.131867	-.020556	172.1132	.5435182
#2	.1461595	.0022053	.2310818	-.132560	-.020482	168.2805	.5368247
#3	.1406238	.0031299	.2228681	-.127266	-.018638	170.4402	.5410240

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0239987**	**.0319972**	**19.50008**	**.2025926**	**.2646198**	**.4577985**	**587.7493**
Stddev	.0002884	.0006410	.09800	.0013209	.0013052	.0010580	4.2811
%RSD	1.201604	2.003308	.5025799	.6520183	.4932377	.2311157	.7283953
#1	.0243249	.0327120	19.55547	.2041156	.2655785	.4590192	583.4169
#2	.0237778	.0314733	19.38692	.2019029	.2631333	.4571442	591.9773
#3	.0238933	.0318065	19.55785	.2017592	.2651476	.4572322	587.8538

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.856160**	**14.38697**	**.3225076**	**-.005763**	**14.61445**	**.5820487**	**.6835739**
Stddev	.021728	.02416	.0007025	.001198	.04625	.0020387	.0025881
%RSD	.3710242	.1679364	.2178245	20.78620	.3164517	.3502664	.3786118
#1	5.874216	14.41021	.3221866	-.006522	14.57632	.5839064	.6861363
#2	5.832046	14.38873	.3220229	-.004382	14.60113	.5823720	.6836246
#3	5.862218	14.36198	.3233132	-.006385	14.66590	.5798676	.6809609

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.586561**	**^ *****	**.0017312**	**.0831622**	**2.924985**	**3.075397**	**9.646929**
Stddev	.043145	-----	.0001606	.0010254	.017938	.012437	.026515
%RSD	.5024755	-----	9.279284	1.232981	.6132832	.4043901	.2748538
#1	8.537844	^ -----	.0018393	.0833684	2.944255	3.076342	9.667130
#2	8.601890	^ -----	.0018077	.0840689	2.908770	3.087334	9.616904
#3	8.619948	^ -----	.0015466	.0820494	2.921931	3.062514	9.656752

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2260-01 Acquired: 6/10/2025 19:39:56 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**1.247403**	**.3404554**	**-.444531**
Stddev	.002914	.0021945	.004961
%RSD	.2335879	.6445872	1.116005
#1	1.250339	.3379742	-.439569
#2	1.247358	.3421420	-.449491
#3	1.244512	.3412499	-.444533

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3845.450**	**90046.06**	**15615.83**	**2839.568**	**4197.436**
Stddev	5.629	308.74	79.43	14.083	5.046
%RSD	.1463898	.3428710	.5086627	.4959562	.1202242
#1	3851.582	90374.33	15546.36	2855.061	4201.682
#2	3844.251	90002.32	15702.43	2836.102	4198.768
#3	3840.516	89761.51	15598.70	2827.542	4191.857

Sample Name: Q2260-01DUP Acquired: 6/10/2025 19:44:17 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.1414622**	**.0026948**	**.2421999**	**-.130770**	**-.018930**	**173.7739**	**.5439766**
Stddev	.0023502	.0028717	.0014638	.002471	.001561	.5859	.0025424
%RSD	1.661396	106.5667	.6043664	1.889372	8.247156	.3371612	.4673772
#1	.1405096	-.000465	.2420016	-.133622	-.017969	174.2892	.5469082
#2	.1441391	.003403	.2408453	-.129400	-.020732	173.1366	.5426470
#3	.1397377	.005146	.2437527	-.129288	-.018090	173.8958	.5423748

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0246383**	**.0308063**	**19.34717**	**.2009743**	**.2624855**	**.4975243**	**574.4743**
Stddev	.0001377	.0008502	.05985	.0007599	.0009853	.0012513	4.5747
%RSD	.5587083	2.759936	.3093491	.3781296	.3753879	.2515008	.7963235
#1	.0247271	.0316685	19.38473	.2018301	.2628587	.4988521	570.1872
#2	.0247079	.0307820	19.27815	.2003783	.2613681	.4973536	573.9452
#3	.0244797	.0299685	19.37863	.2007146	.2632297	.4963671	579.2905

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.697514**	**14.60826**	**.3298626**	**-.009139**	**14.57588**	**.5803543**	**.7185091**
Stddev	.026127	.11547	.0011104	.001380	.04165	.0027764	.0047622
%RSD	.4585766	.7904514	.3366264	15.09955	.2857779	.4783977	.6627851
#1	5.715506	14.65196	.3293449	-.010626	14.62309	.5780572	.7168676
#2	5.667545	14.47731	.3291056	-.008891	14.54431	.5795661	.7147849
#3	5.709491	14.69550	.3311373	-.007900	14.56024	.5834396	.7238749

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.734903**	**^ *****	**.0020171**	**.0488929**	**2.952573**	**2.939921**	**9.692407**
Stddev	.021618	-----	.0001726	.0004468	.010574	.015001	.058327
%RSD	.2474863	-----	8.558392	.9138911	.3581282	.5102674	.6017778
#1	8.718325	^ -----	.0019646	.0485896	2.963694	2.930512	9.721273
#2	8.759354	^ -----	.0022099	.0486832	2.942648	2.957221	9.625276
#3	8.727030	^ -----	.0018769	.0494061	2.951376	2.932031	9.730672

Sample Name: Q2260-01DUP Acquired: 6/10/2025 19:44:17 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**1.273289**	**.3403136**	**-.433581**
Stddev	.009642	.0010165	.004637
%RSD	.7572766	.2986828	1.069411
#1	1.274213	.3401910	-.429112
#2	1.263218	.3413857	-.433263
#3	1.282436	.3393639	-.438369

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3763.773**	**87462.68**	**14964.07**	**2826.805**	**4114.932**
Stddev	19.328	229.57	32.14	28.525	13.034
%RSD	.5135268	.2624744	.2147913	1.009092	.3167589
#1	3757.041	87611.87	14946.32	2855.776	4107.045
#2	3748.712	87577.85	15001.17	2825.892	4107.774
#3	3785.567	87198.33	14944.72	2798.748	4129.977

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2260-01LX5 Acquired: 6/10/2025 19:48:38 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0375363**	**-.000135**	**.0382674**	**-.032624**	**-.004289**	**38.88456**	**.1222723**
Stddev	.0027758	.001727	.0026656	.001088	.002944	.04869	.0006147
%RSD	7.394959	1275.033	6.965653	3.334601	68.64079	.1252133	.5027557
#1	.0368144	-.001871	.0383658	-.033444	-.005386	38.85113	.1220280
#2	.0406017	.001583	.0355540	-.031390	-.006528	38.94042	.1229716
#3	.0351928	-.000119	.0408824	-.033038	-.000954	38.86213	.1218172

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0065746**	**.0021603**	**4.828336**	**.0522911**	**.0568822**	**.0965953**	**146.3337**
Stddev	.0001218	.0002093	.014068	.0002969	.0001499	.0008180	.5429
%RSD	1.853190	9.690826	.2913570	.5677995	.2634593	.8468235	.3710248
#1	.0065788	.0023789	4.816323	.0525785	.0569375	.0973899	145.7825
#2	.0066944	.0019617	4.843812	.0523092	.0569967	.0957558	146.8680
#3	.0064508	.0021402	4.824872	.0519855	.0567126	.0966403	146.3505

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.561401**	**3.446713**	**.0661848**	**-.002243**	**3.017699**	**.1403756**	**.1506467**
Stddev	.008016	.007984	.0003665	.000485	.021655	.0004377	.0005366
%RSD	.5134117	.2316300	.5537488	21.61016	.7175849	.3118010	.3561894
#1	1.555763	3.448838	.0665984	-.002478	2.993785	.1398715	.1509987
#2	1.570578	3.453419	.0660556	-.002564	3.023328	.1405961	.1500291
#3	1.557861	3.437882	.0659004	-.001685	3.035982	.1406592	.1509122

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.723451**	**-.083593**	**-.000165**	**.0344298**	**.6918762**	**.9178680**	**2.082741**
Stddev	.020646	.000855	.000142	.0012448	.0051742	.0073146	.000245
%RSD	1.197919	1.022904	86.14184	3.615371	.7478550	.7969084	.0117657
#1	1.721550	-.084417	-.000170	.0342814	.6868035	.9094225	2.082464
#2	1.703822	-.083653	-.000020	.0357421	.6971463	.9220013	2.082928
#3	1.744981	-.082710	-.000303	.0332659	.6916788	.9221802	2.082832

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2260-01LX5 Acquired: 6/10/2025 19:48:38 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.2694465	.0789235	-.110143
Stddev	.0057931	.0014613	.000408
%RSD	2.149989	1.851542	.3707861
#1	.2761219	.0774802	-.109737
#2	.2664824	.0804022	-.110554
#3	.2657353	.0788882	-.110138

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3418.876	78867.10	12765.48	2573.467	4458.511
Stddev	10.810	149.63	29.10	7.232	11.600
%RSD	.3161941	.1897265	.2279200	.2810356	.2601709
#1	3406.422	79034.27	12785.86	2580.343	4445.482
#2	3424.370	78821.34	12732.16	2574.134	4462.335
#3	3425.835	78745.70	12778.41	2565.925	4467.716

Sample Name: Q2260-01MS Acquired: 6/10/2025 19:52:50 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8080637**	**1.778059**	**1.059158**	**1.410512**	**.3039364**	**179.0488**	**.6555588**
Stddev	.0029096	.039456	.002028	.007584	.0032491	.5135	.0009842
%RSD	.3600718	2.219063	.1914756	.5376509	1.069011	.2867850	.1501300
#1	.8095292	1.750377	1.057185	1.406118	.3025507	178.4802	.6558784
#2	.8047127	1.760562	1.059053	1.406149	.3016099	179.4787	.6544545
#3	.8099491	1.823238	1.061237	1.419269	.3076486	179.1875	.6563434

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1892363**	**.2290154**	**20.01482**	**.5244316**	**.4429239**	**.4935532**	**549.9767**
Stddev	.0003983	.0011063	.03094	.0015877	.0023225	.0008762	.3854
%RSD	.2104965	.4830495	.1545674	.3027479	.5243648	.1775309	.0700751
#1	.1889390	.2278590	19.99214	.5230461	.4404099	.4935040	549.7994
#2	.1896888	.2291237	20.00226	.5240846	.4433722	.4927026	549.7119
#3	.1890809	.2300636	20.05006	.5261642	.4449896	.4944529	550.4189

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.571426**	**14.94874**	**.7987259**	**.0509049**	**16.95089**	**.7922909**	**.6920900**
Stddev	.006160	.05089	.0028851	.0006053	.08426	.0018061	.0009743
%RSD	.1105567	.3404532	.3612108	1.189090	.4970937	.2279593	.1407797
#1	5.566440	14.93449	.7958589	.0508763	16.93514	.7930997	.6927045
#2	5.569526	15.00524	.7986901	.0515240	16.87562	.7902218	.6909666
#3	5.578312	14.90649	.8016287	.0503144	17.04192	.7935513	.6925989

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**15.90108**	**^ *****	**.3363193**	**.6949851**	**2.991886**	**2.959412**	**15.26235**
Stddev	.02251	-----	.0008000	.0033421	.002604	.006847	.10036
%RSD	.1415625	-----	.2378709	.4808948	.0870313	.2313695	.6575872
#1	15.88453	^ -----	.3367447	.6914037	2.990715	2.955213	15.20249
#2	15.89200	^ -----	.3353964	.6955307	2.990074	2.955710	15.20633
#3	15.92671	^ -----	.3368166	.6980208	2.994870	2.967313	15.37821

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2260-01MS Acquired: 6/10/2025 19:52:50 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**1.161525**	**.4701446**	**-.232808**
Stddev	.006362	.0027728	.000204
%RSD	.5477235	.5897754	.0874177
#1	1.155097	.4713694	-.232786
#2	1.161660	.4669703	-.233021
#3	1.167818	.4720940	-.232616

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3650.734**	**86273.81**	**14243.68**	**2753.729**	**4038.623**
Stddev	6.010	170.93	6.17	14.566	1.859
%RSD	.1646236	.1981229	.0433383	.5289673	.0460424
#1	3644.511	86411.77	14250.50	2747.884	4040.697
#2	3651.186	86327.06	14242.07	2770.309	4038.068
#3	3656.505	86082.60	14238.47	2742.992	4037.105

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2260-01MSD Acquired: 6/10/2025 19:57:05 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.7868812**	**1.753289**	**1.049947**	**1.350450**	**.2875600**	**194.3758**	**.6513086**
Stddev	.0036352	.007299	.008111	.007010	.0012669	.4422	.0013972
%RSD	.4619774	.4163098	.7724678	.5190632	.4405665	.2275214	.2145229
#1	.7859681	1.745035	1.041538	1.342363	.2864457	194.8330	.6521457
#2	.7837896	1.758893	1.050583	1.354788	.2889380	194.3444	.6520845
#3	.7908859	1.755938	1.057721	1.354198	.2872963	193.9501	.6496956

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1859718**	**.2299544**	**19.58672**	**.5155827**	**.4440537**	**.4866195**	**532.6648**
Stddev	.0011352	.0005439	.03125	.0011890	.0017862	.0007002	2.4652
%RSD	.6104144	.2365403	.1595320	.2306079	.4022476	.1438982	.4628100
#1	.1872113	.2298235	19.56567	.5164346	.4427517	.4873621	529.8825
#2	.1857212	.2294878	19.57187	.5160891	.4433194	.4859712	533.5349
#3	.1849828	.2305518	19.62262	.5142244	.4460900	.4865251	534.5770

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.365470**	**16.29063**	**.7981767**	**.0458224**	**17.31532**	**.7795612**	**.6998221**
Stddev	.006451	.04691	.0025287	.0004115	.03801	.0034806	.0011142
%RSD	.1202238	.2879801	.3168130	.8980752	.2195302	.4464833	.1592076
#1	5.358862	16.23687	.7961233	.0453540	17.27143	.7766332	.6988911
#2	5.365797	16.32328	.7974056	.0459876	17.33688	.7786409	.6995187
#3	5.371751	16.31175	.8010012	.0461257	17.33765	.7834094	.7010566

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**16.36209**	**^ *****	**.3252697**	**.7002747**	**2.990062**	**2.627925**	**15.02651**
Stddev	.06088	-----	.0006004	.0041314	.000739	.011282	.08293
%RSD	.3721034	-----	.1845736	.5899667	.0247091	.4293056	.5518751
#1	16.29309	^ -----	.3250228	.6956040	2.989317	2.614900	14.93078
#2	16.40827	^ -----	.3248321	.7034507	2.990073	2.634670	15.07229
#3	16.38492	^ -----	.3259541	.7017694	2.990794	2.634203	15.07645

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2260-01MSD Acquired: 6/10/2025 19:57:05 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**1.164619**	**.4742782**	**-.212803**
Stddev	.007915	.0031277	.002766
%RSD	.6796418	.6594640	1.299839
#1	1.156978	.4766688	-.209730
#2	1.164096	.4754274	-.213584
#3	1.172783	.4707385	-.215095

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3749.252**	**89406.12**	**14360.14**	**2823.516**	**4086.071**
Stddev	23.461	341.64	23.51	30.167	16.475
%RSD	.6257597	.3821175	.1637475	1.068417	.4031884
#1	3722.470	89789.05	14345.07	2857.976	4070.170
#2	3766.176	89296.78	14387.24	2810.691	4103.065
#3	3759.111	89132.54	14348.12	2801.880	4084.976

Sample Name: Q2260-01A Acquired: 6/10/2025 20:01:21 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.7767333**	**1.738951**	**1.095980**	**1.394820**	**.6098667**	**168.1108**	**.7020133**
Stddev	.0038123	.015749	.004288	.008263	.0023102	.4850	.0026063
%RSD	.4908144	.9056658	.3912070	.5923977	.3788090	.2885014	.3712642
#1	.7723341	1.726592	1.092082	1.399017	.6078010	167.9367	.7045292
#2	.7790706	1.733578	1.095284	1.400143	.6123613	167.7368	.7021856
#3	.7787952	1.756683	1.100573	1.385301	.6094377	168.6588	.6993251

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1717652**	**.2205789**	**20.44151**	**.5210422**	**.4576334**	**.6557006**	**588.1274**
Stddev	.0006550	.0002632	.07138	.0016272	.0016124	.0021001	1.2133
%RSD	.3813295	.1193472	.3492118	.3122965	.3523289	.3202816	.2063022
#1	.1712074	.2205327	20.49749	.5191731	.4573536	.6550049	587.0466
#2	.1724865	.2203418	20.46592	.5221430	.4561793	.6580603	587.8959
#3	.1716018	.2208622	20.36112	.5218105	.4593674	.6540367	589.4398

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.144266**	**15.53807**	**.7930226**	**.0545933**	**17.26036**	**.8168046**	**.8198680**
Stddev	.023524	.02842	.0018545	.0007131	.06159	.0038995	.0043077
%RSD	.3828536	.1829213	.2338541	1.306240	.3568537	.4774027	.5254151
#1	6.167646	15.50749	.7922738	.0545197	17.31403	.8192847	.8156408
#2	6.144550	15.54301	.7916595	.0539198	17.27394	.8188192	.8197114
#3	6.120601	15.56369	.7951344	.0553404	17.19311	.8123100	.8242519

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**16.71063**	**^ *****	**.3272201**	**.7610838**	**3.046154**	**3.828200**	**15.35826**
Stddev	.05562	-----	.0001778	.0045216	.005379	.012526	.05442
%RSD	.3328210	-----	.0543238	.5940992	.1765707	.3272117	.3543302
#1	16.74584	^ -----	.3270525	.7573760	3.051093	3.842035	15.31789
#2	16.73954	^ -----	.3272012	.7597542	3.046945	3.817628	15.33675
#3	16.64651	^ -----	.3274065	.7661211	3.040423	3.824936	15.42015

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2260-01A Acquired: 6/10/2025 20:01:21 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**1.289478**	**.4811211**	**-.279173**
Stddev	.012755	.0019846	.002020
%RSD	.9891671	.4124996	.7234124
#1	1.276008	.4832792	-.277422
#2	1.291052	.4807096	-.278714
#3	1.301372	.4793745	-.281382

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3794.702**	**89279.74**	**15409.23**	**2842.091**	**4136.647**
Stddev	18.924	55.97	26.98	4.953	13.542
%RSD	.4986978	.0626862	.1750979	.1742694	.3273718
#1	3780.125	89340.33	15408.47	2837.859	4121.810
#2	3787.892	89229.99	15382.64	2840.876	4139.792
#3	3816.089	89268.91	15436.59	2847.539	4148.341

Sample Name: PB168353BL Acquired: 6/10/2025 20:05:35 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0015955**	**.0000975**	**.0006098**	**-.001063**	**.0014954**	**.0113502**	**-.003457**
Stddev	.0017538	.0008957	.0003847	.002942	.0008703	.0015641	.000680
%RSD	109.9274	919.0321	63.09200	276.9160	58.19694	13.78047	19.68149
#1	.0024326	-.000343	.0010509	.000662	.0007622	.0106231	-.003372
#2	-.000420	.001128	.0004353	-.004460	.0024571	.0131455	-.004176
#3	.002774	-.000493	.0003432	.000610	.0012668	.0102820	-.002823

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000088**	**-.000020**	**-.011302**	**-.000583**	**.0001345**	**.0002757**	**.0307887**
Stddev	.0000578	.000034	.004462	.000231	.0001403	.0001884	.0030590
%RSD	657.3425	171.4382	39.48215	39.64310	104.3216	68.34778	9.935567
#1	.0000120	-.000030	-.016028	-.000320	-.000020	.0001903	.0283850
#2	.0000649	.000018	-.010717	-.000677	.000170	.0001450	.0342321
#3	-.000051	-.000047	-.007161	-.000753	.000253	.0004916	.0297490

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003967**	**-.011313**	**-.000355**	**.0001870**	**-.141436**	**-.000620**	**-.000247**
Stddev	.0003235	.017694	.000162	.0000965	.006882	.001875	.000168
%RSD	81.55615	156.4062	45.53183	51.61711	4.865629	302.5161	68.02567
#1	.0000413	.007239	-.000179	.0001891	-.145222	-.000681	-.000099
#2	.0006740	-.013176	-.000389	.0002825	-.133493	-.002463	-.000430
#3	.0004747	-.028002	-.000497	.0000894	-.145595	.001285	-.000212

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.051371**	**-.000090**	**-.000035**	**-.002983**	**-.000113**	**.0112616**	**-.000375**
Stddev	.024201	.000455	.000159	.000498	.000272	.0058440	.002244
%RSD	47.11007	508.1290	448.2994	16.69775	241.5139	51.89318	598.3828
#1	-.076565	-.000288	-.000189	-.003384	.000143	.0081415	-.001870
#2	-.049246	.000431	.000129	-.003140	-.000399	.0180034	-.001459
#3	-.028303	-.000411	-.000047	-.002426	-.000083	.0076399	.002205

Sample Name: PB168353BL Acquired: 6/10/2025 20:05:35 Type: Unk
Method: 6010-200.7 NEW(v2) 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	-.000584	-.002064	-.000061
Stddev	.001391	.001015	.000032
%RSD	238.1689	49.14805	52.21056
#1	-.000380	-.002673	-.000096
#2	.000694	-.000893	-.000034
#3	-.002067	-.002627	-.000052

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3405.517	77488.47	12927.96	2515.356	4894.633
Stddev	3.185	193.80	33.01	13.260	6.910
%RSD	.0935231	.2501025	.2553707	.5271699	.1411738
#1	3405.884	77499.20	12913.43	2502.481	4897.869
#2	3402.165	77289.52	12965.75	2514.617	4886.699
#3	3408.503	77676.68	12904.71	2528.970	4899.331

Sample Name: CCV06 Acquired: 6/10/2025 20:09:55 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.164694**	**5.005138**	**5.110442**	**5.193087**	**5.121218**	**10.05252**	**9.963835**
Stddev	.002659	.055834	.009947	.005803	.006392	.01906	.059325
%RSD	.0514843	1.115541	.1946407	.1117516	.1248079	.1895643	.5954048
#1	5.167308	5.049170	5.107897	5.199456	5.115808	10.03881	9.952911
#2	5.161992	5.023905	5.102015	5.188097	5.128270	10.04448	10.02786
#3	5.164782	4.942338	5.121415	5.191709	5.119575	10.07428	9.91073

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2617460**	**2.551816**	**25.08362**	**1.054015**	**2.536859**	**1.271490**	**5.145384**
Stddev	.0005229	.005905	.11729	.002544	.004733	.000756	.001500
%RSD	.1997620	.2313889	.4675930	.2413279	.1865775	.0594635	.0291603
#1	.2614503	2.552693	25.05338	1.055752	2.538890	1.270632	5.146665
#2	.2623497	2.545523	24.98441	1.055198	2.531450	1.271781	5.143733
#3	.2614381	2.557234	25.21307	1.051096	2.540239	1.272057	5.145752

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.503132**	**25.03170**	**2.545784**	**1.287944**	**23.77658**	**2.561600**	**2.567864**
Stddev	.008854	.07760	.004806	.004540	.01321	.008244	.001971
%RSD	.3537336	.3100107	.1887853	.3524720	.0555745	.3218334	.0767708
#1	2.501795	24.99770	2.546653	1.290782	23.77369	2.560814	2.566417
#2	2.495022	24.97691	2.540603	1.290341	23.79100	2.553778	2.567066
#3	2.512579	25.12050	2.550096	1.282708	23.76506	2.570210	2.570109

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.11137**	**5.082299**	**5.158580**	**5.155343**	**5.106475**	**5.129186**	**5.253950**
Stddev	.03571	.010711	.004814	.006072	.005613	.007671	.006460
%RSD	.1481191	.2107556	.0933132	.1177890	.1099235	.1495596	.1229479
#1	24.14436	5.069972	5.164071	5.153869	5.110360	5.125163	5.261354
#2	24.11629	5.089338	5.155087	5.150143	5.100039	5.124364	5.251030
#3	24.07345	5.087586	5.156581	5.162017	5.109025	5.138032	5.249466

Sample Name: CCV06 Acquired: 6/10/2025 20:09:55 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**5.014664**	**4.685640**	**5.110424**
Stddev	.005604	.000242	.035111
%RSD	.1117541	.0051694	.6870485
#1	5.020482	4.685436	5.071876
#2	5.009301	4.685576	5.140576
#3	5.014210	4.685908	5.118818

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3248.358**	**74055.17**	**11789.36**	**2374.767**	**4320.260**
Stddev	6.108	95.15	14.30	11.489	8.250
%RSD	.1880373	.1284900	.1212892	.4837765	.1909617
#1	3242.721	73948.69	11793.89	2369.229	4311.450
#2	3247.507	74084.94	11800.85	2387.976	4321.527
#3	3254.848	74131.88	11773.35	2367.097	4327.803

Sample Name: CCB06 Acquired: 6/10/2025 20:14:06 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0010764**	**.0003874**	**.0000883**	**-.001966**	**.0030012**	**.0010374**	**-.003836**
Stddev	.0016304	.0009273	.0005805	.006496	.0012112	.0022055	.000827
%RSD	151.4628	239.3667	657.2518	330.3718	40.35815	212.5996	21.57020
#1	.0011949	-.000552	-.000248	-.006176	.0016955	-.000539	-.003988
#2	-.000610	.001302	.000759	.005515	.0040881	.003558	-.002943
#3	.002644	.000412	-.000246	-.005238	.0032200	.000094	-.004578

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000359**	**.0000796**	**-.000899**	**.0003787**	**.0000249**	**-.000004**	**.0033850**
Stddev	.0000478	.0000336	.009738	.0001069	.0001081	.000244	.0005936
%RSD	132.9536	42.20499	1083.596	28.22449	434.3451	5726.799	17.53520
#1	.0000804	.0000843	.001874	.0002582	.0001081	-.000283	.0035365
#2	.0000419	.0000439	-.011723	.0004161	-.000097	.000097	.0038881
#3	-.000015	.0001106	.007153	.0004619	.000064	.000173	.0027303

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000956**	**-.000256**	**-.000001**	**.0002333**	**-.119951**	**.0002775**	**-.000199**
Stddev	.0003783	.025767	.000371	.0001238	.009217	.0009768	.000049
%RSD	395.4689	10072.91	55648.99	53.04156	7.684233	352.0290	24.65021
#1	.0005324	-.025563	.000396	.0002564	-.109342	.0013924	-.000197
#2	-.000131	.025947	-.000339	.0000996	-.124515	-.000133	-.000249
#3	-.000115	-.001151	-.000059	.0003439	-.125996	-.000427	-.000151

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.027685**	**.0059434**	**.0006841**	**.0002106**	**.0008101**	**.0016398**	**-.001148**
Stddev	.016867	.0003915	.0000669	.0002043	.0005404	.0068509	.001697
%RSD	60.92451	6.587512	9.772824	97.01677	66.71079	417.7812	147.7840
#1	-.013168	.0059035	.0006482	.0004447	.0012450	-.002384	.000593
#2	-.023699	.0055733	.0007612	.0001193	.0002051	.009550	-.002797
#3	-.046189	.0063533	.0006429	.0000679	.0009802	-.002247	-.001241

Sample Name: CCB06 Acquired: 6/10/2025 20:14:06 Type: Unk
Method: 6010-200.7 NEW(v2) 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	-.000061	-.001669	.0000878
Stddev	.003927	.000755	.0000110
%RSD	6446.105	45.22611	12.58349
#1	-.000611	-.001957	.0000986
#2	-.003684	-.002237	.0000883
#3	.004112	-.000812	.0000765

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3395.058	76935.47	11661.89	2467.641	4797.112
Stddev	33.066	177.69	33.41	11.160	27.862
%RSD	.9739306	.2309651	.2864817	.4522706	.5808114
#1	3429.187	76817.40	11649.06	2464.959	4826.970
#2	3363.170	76849.18	11636.80	2458.067	4771.806
#3	3392.815	77139.83	11699.82	2479.899	4792.561

Sample Name: PB168353BS Acquired: 6/10/2025 20:22:28 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.7825389	1.963531	.9766229	1.973432	.7990764	1.884054
Stddev	.0011068	.023510	.0051714	.002923	.0037453	.007408
%RSD	.1414324	1.197316	.5295190	.1481326	.4687037	.3932200
#1	.7818276	1.954480	.9743567	1.970136	.7957628	1.878945
#2	.7819751	1.945892	.9729715	1.975711	.7983265	1.892551
#3	.7838141	1.990221	.9825405	1.974449	.8031399	1.880666

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1929325	.1912720	.1971314	.9830965	.4067789	.1975036
Stddev	.0005970	.0001086	.0007125	.0082183	.0004289	.0009109
%RSD	.3094523	.0567778	.3614418	.8359620	.1054370	.4611867
#1	.1932561	.1913974	.1968206	.9792033	.4070915	.1973105
#2	.1932978	.1912081	.1966271	.9775483	.4062900	.1967048
#3	.1922435	.1912105	.1979465	.9925380	.4069552	.1984955

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3101091	3.110181	.1982366	1.852882	.4980155	.0751033
Stddev	.0009956	.012695	.0008590	.006980	.0012584	.0004997
%RSD	.3210606	.4081811	.4333439	.3767194	.2526907	.6653733
#1	.3093136	3.103885	.1980812	1.852595	.4971578	.0752958
#2	.3097881	3.101864	.1991627	1.846051	.4974284	.0754782
#3	.3112257	3.124794	.1974658	1.860002	.4994601	.0745360

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.685472	.2926856	.2088305	9.352621	.2786480	.4068950
Stddev	.013076	.0017577	.0004723	.037778	.0008155	.0018701
%RSD	.4868986	.6005297	.2261474	.4039303	.2926514	.4595930
#1	2.686952	.2906624	.2086198	9.340372	.2794372	.4064391
#2	2.697745	.2938367	.2093714	9.395004	.2778086	.4052950
#3	2.671720	.2935576	.2085002	9.322488	.2786983	.4089508

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: PB168353BS Acquired: 6/10/2025 20:22:28 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.6871924	.1945261	.8858994	5.705979	F -.004302	.1631503
Stddev	.0034152	.0006398	.0030377	.034142	.000313	.0002861
%RSD	.4969737	.3288779	.3428991	.5983592	7.277962	.1753364
#1	.6846439	.1950143	.8891980	5.689867	-.004390	.1628624
#2	.6858606	.1938019	.8852833	5.682874	-.003955	.1631540
#3	.6910729	.1947622	.8832170	5.745196	-.004562	.1634345

Elem	Sr4077
Units	ppm
Avg	.1958812
Stddev	.0006659
%RSD	.3399463
#1	.1959757
#2	.1964948
#3	.1951731

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3350.899	77948.07	13082.10	2512.236	4689.525
Stddev	2.395	139.91	21.31	13.619	5.946
%RSD	.0714687	.1794869	.1628662	.5421164	.1268001
#1	3351.268	77787.81	13074.97	2496.771	4694.529
#2	3353.088	78010.59	13106.06	2522.440	4691.095
#3	3348.341	78045.82	13065.27	2517.496	4682.952

Sample Name: Q2259-01 Acquired: 6/10/2025 20:26:29 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0331335	-.013139	.0191033	-.111470	-.015238	135.6016	.2599320
Stddev	.0029274	.001711	.0015709	.006038	.001550	.0419	.0011875
%RSD	8.835235	13.02183	8.223092	5.416831	10.17447	.0308903	.4568417
#1	.0303755	-.014027	.0178247	-.104613	-.016898	135.6226	.2606970
#2	.0328200	-.014224	.0208569	-.115990	-.013828	135.5534	.2585640
#3	.0362051	-.011167	.0186284	-.113807	-.014987	135.6289	.2605350

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0066742	.0345209	159.7284	-.032034	.3110622	.7414435	501.2186
Stddev	.0001221	.0005047	.0996	.000221	.0002300	.0013601	2.2499
%RSD	1.829448	1.461980	.0623801	.6898160	.0739300	.1834356	.4488912
#1	.0067038	.0351028	159.6167	-.031997	.3108093	.7424902	498.9771
#2	.0067788	.0342571	159.7603	-.032271	.3112589	.7399062	501.2019
#3	.0065400	.0342028	159.8081	-.031834	.3111184	.7419341	503.4769

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.189312	98.22827	.1458661	-.008431	18.16120	1.260582	.6905427
Stddev	.007554	.13123	.0001968	.000468	.09485	.000368	.0043593
%RSD	.1803206	.1336009	.1349226	5.554553	.5222914	.0292288	.6312893
#1	4.197577	98.07682	.1459758	-.008923	18.18642	1.260886	.6858188
#2	4.182763	98.29961	.1459836	-.007991	18.05628	1.260688	.6944104
#3	4.187598	98.30839	.1456389	-.008378	18.24089	1.260172	.6913987

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.726856	1.219403	.0029362	.0189344	5.751268	2.582774	10.01149
Stddev	.019010	.003690	.0001589	.0014801	.013379	.005672	.01351
%RSD	1.100858	.3026109	5.410599	7.817026	.2326284	.2196106	.1349138
#1	1.706675	1.216697	.0031169	.0184802	5.756008	2.588839	10.02395
#2	1.729469	1.217905	.0028186	.0177347	5.736164	2.577601	9.99713
#3	1.744425	1.223606	.0028729	.0205884	5.761631	2.581882	10.01338

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2259-01 Acquired: 6/10/2025 20:26:29 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**14.26196**	**.3047455**	**-.059262**
Stddev	.01460	.0019703	.003082
%RSD	.1023488	.6465538	5.201442
#1	14.25917	.3037564	-.055725
#2	14.24895	.3034656	-.060680
#3	14.27774	.3070144	-.061380

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3539.933**	**84965.38**	**14876.24**	**2667.208**	**3811.315**
Stddev	14.063	356.06	12.55	8.006	12.895
%RSD	.3972677	.4190685	.0843484	.3001641	.3383351
#1	3532.314	85345.12	14875.78	2676.406	3801.879
#2	3556.161	84912.00	14863.93	2661.806	3826.008
#3	3531.323	84639.02	14889.01	2663.413	3806.058

Sample Name: Q2238-01 Acquired: 6/10/2025 20:30:42 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0521694**	**-.034231**	**.4717461**	**-.091306**	**.0096075**	**136.5529**	**1.275281**
Stddev	.0020553	.002540	.0014993	.005911	.0024447	.2840	.004037
%RSD	3.939735	7.421480	.3178280	6.473698	25.44559	.2079869	.3165733
#1	.0502053	-.032138	.4732934	-.084526	.0070065	136.4128	1.278139
#2	.0519978	-.033498	.4716452	-.095376	.0118581	136.8798	1.277041
#3	.0543052	-.037058	.4702998	-.094017	.0099581	136.3662	1.270662

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0074163**	**.0977534**	**361.3873**	**.2628546**	**.1819514**	**1.943281**	**332.5668**
Stddev	.0001427	.0003709	1.5942	.0026293	.0007587	.005216	1.0771
%RSD	1.923421	.3794555	.4411249	1.000306	.4169592	.2684201	.3238660
#1	.0075805	.0979617	361.5119	.2645303	.1820394	1.949149	331.7415
#2	.0073457	.0973252	362.9156	.2642092	.1811526	1.941522	333.7852
#3	.0073227	.0979734	359.7345	.2598241	.1826622	1.939171	332.1737

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.693056**	**128.4923**	**.4095098**	**-.007918**	**7.170198**	**.6000526**	**7.510489**
Stddev	.002408	.2087	.0009892	.000375	.039733	.0017924	.006373
%RSD	.0423049	.1624370	.2415518	4.730113	.5541437	.2986998	.0848495
#1	5.691034	128.3230	.4106175	-.008146	7.179602	.5982262	7.517274
#2	5.692412	128.4284	.4087145	-.008123	7.204385	.6018088	7.509564
#3	5.695720	128.7255	.4091975	-.007486	7.126606	.6001229	7.504630

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.74652**	**.1455201**	**.0120751**	**.0383797**	**9.828192**	**12.13291**	**8.544332**
Stddev	.08647	.0093212	.0001931	.0020706	.017535	.05121	.025782
%RSD	.5864021	6.405405	1.599432	5.394987	.1784166	.4220950	.3017482
#1	14.73890	.1471187	.0122846	.0361152	9.832257	12.09109	8.519406
#2	14.83656	.1539386	.0119042	.0388478	9.843337	12.19003	8.570893
#3	14.66411	.1355031	.0120366	.0401762	9.808981	12.11760	8.542697

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2238-01 Acquired: 6/10/2025 20:30:42 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**11.39916**	**.3311734**	**.8706177**
Stddev	.00955	.0005189	.0032949
%RSD	.0837472	.1566904	.3784576
#1	11.39266	.3315943	.8679655
#2	11.41012	.3305936	.8695813
#3	11.39470	.3313322	.8743062

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3214.340**	**77254.65**	**12900.89**	**2399.130**	**3706.699**
Stddev	15.272	335.28	27.95	21.581	12.347
%RSD	.4751210	.4339955	.2166265	.8995519	.3330896
#1	3197.642	77547.50	12932.76	2424.028	3692.481
#2	3217.778	76888.92	12889.30	2385.771	3712.895
#3	3227.600	77327.51	12880.60	2387.590	3714.720

Sample Name: PB168245BL Acquired: 6/10/2025 20:35:01 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0002965**	**-.000229**	**-.000465**	**-.000175**	**.0012107**	**.0151468**	**-.003570**
Stddev	.0016480	.001354	.000632	.002277	.0011887	.0047445	.000772
%RSD	555.7577	590.0286	135.9921	1303.652	98.18356	31.32335	21.62911
#1	.0003932	-.001705	-.001195	-.002521	.0017831	.0105513	-.004020
#2	-.001398	.000955	-.000103	.002027	.0020050	.0200274	-.004012
#3	.001894	.000061	-.000096	-.000030	-.000156	.0148618	-.002679

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000008**	**.0000357**	**.0209816**	**.0002977**	**.0000243**	**.0002417**	**.0400627**
Stddev	.000036	.0000590	.0043482	.0002795	.0001323	.0000968	.0033855
%RSD	451.6364	165.1355	20.72376	93.87663	543.9037	40.04752	8.450446
#1	-.000034	.0000880	.0242249	.0000800	.0000425	.0002442	.0415130
#2	-.000022	-.000028	.0226791	.0006129	.0001466	.0003373	.0424814
#3	.000033	.000047	.0160407	.0002003	-.000116	.0001437	.0361937

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009055**	**.0108387**	**-.000131**	**-.000102**	**-.112892**	**-.001061**	**.0004230**
Stddev	.0001600	.0085058	.000195	.000205	.004585	.000396	.0004761
%RSD	17.66508	78.47673	149.0913	200.4783	4.060947	37.28220	112.5467
#1	.0008434	.0206327	-.000307	-.000111	-.109329	-.000816	.0004285
#2	.0007860	.0053036	.000079	.000107	-.111284	-.000849	.0008963
#3	.0010872	.0065797	-.000164	-.000303	-.118064	-.001517	-.000056

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.038787**	**.0025085**	**.0000481**	**-.000260**	**.0015593**	**.0067296**	**-.001208**
Stddev	.010027	.0005623	.0000688	.001422	.0002376	.0041994	.002447
%RSD	25.85216	22.41510	143.0731	546.0589	15.23801	62.40163	202.4942
#1	-.044964	.0031272	-.000001	-.001794	.0013546	.0107728	-.003904
#2	-.027218	.0023694	.000127	.001016	.0018199	.0023897	.000872
#3	-.044181	.0020288	.000018	-.000003	.0015035	.0070262	-.000593

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: PB168245BL Acquired: 6/10/2025 20:35:01 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0031301	-.001851	-.000008
Stddev	.0013123	.001775	.000022
%RSD	41.92664	95.90560	271.1706
#1	.0016909	-.002200	-.000033
#2	.0042606	.000073	.000010
#3	.0034387	-.003426	-.000001

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3421.076	77342.85	12709.40	2491.971	4941.983
Stddev	14.596	195.31	59.76	13.110	9.794
%RSD	.4266463	.2525302	.4702184	.5260870	.1981798
#1	3408.282	77568.17	12640.41	2505.729	4936.244
#2	3417.971	77238.65	12742.89	2490.560	4936.413
#3	3436.974	77221.73	12744.91	2479.624	4953.292

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: PB168245BS Acquired: 6/10/2025 20:39:22 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8284307**	**2.077119**	**1.029229**	**2.094528**	**.8348456**	**2.026404**
Stddev	.0016272	.010237	.004358	.007196	.0029016	.007717
%RSD	.1964233	.4928625	.4233865	.3435551	.3475628	.3808101
#1	.8271339	2.075411	1.024217	2.090566	.8363355	2.018191
#2	.8279016	2.067843	1.032120	2.102834	.8366996	2.027518
#3	.8302566	2.088103	1.031351	2.090185	.8315017	2.033504

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1925544**	**.2206548**	**.2081150**	**1.056061**	**.4301338**	**.2092495**
Stddev	.0004851	.0002294	.0009574	.011429	.0013638	.0006138
%RSD	.2519517	.1039578	.4600601	1.082237	.3170704	.2933284
#1	.1927671	.2205726	.2070123	1.044677	.4290682	.2087052
#2	.1928969	.2209139	.2087357	1.055974	.4296624	.2099148
#3	.1919993	.2204778	.2085970	1.067534	.4316708	.2091286

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3249148**	**2.988706**	**.2072259**	**2.028510**	**.5256697**	**.0788048**
Stddev	.0006999	.028917	.0009494	.006116	.0026673	.0005638
%RSD	.2154269	.9675287	.4581284	.3015010	.5074166	.7154505
#1	.3248555	2.955395	.2062732	2.026189	.5225903	.0787703
#2	.3256425	3.007354	.2081719	2.035447	.5272621	.0782590
#3	.3242463	3.003369	.2072326	2.023894	.5271567	.0793850

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.533640**	**.3077829**	**.2174942**	**9.075448**	**.3221647**	**.4241925**
Stddev	.011736	.0019151	.0006117	.003943	.0024292	.0006259
%RSD	.4632211	.6222351	.2812705	.0434424	.7540195	.1475584
#1	2.520133	.3056469	.2167891	9.071243	.3197608	.4243862
#2	2.541351	.3083547	.2178112	9.079061	.3246185	.4246986
#3	2.539436	.3093469	.2178825	9.076038	.3221148	.4234925

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: PB168245BS Acquired: 6/10/2025 20:39:22 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.7207124	.2020412	.8874307	5.972148	F .0001267	.1655924
Stddev	.0032097	.0026487	.0095380	.009884	.0016916	.0010648
%RSD	.4453470	1.310954	1.074787	.1655047	1334.562	.6430171
#1	.7170073	.2001952	.8860821	5.965943	.0018131	.1660899
#2	.7224868	.2050760	.8975712	5.966954	.0001372	.1643699
#3	.7226432	.2008523	.8786388	5.983546	-.001570	.1663173

Elem	Sr4077
Units	ppm
Avg	.2017649
Stddev	.0002447
%RSD	.1212903
#1	.2016933
#2	.2020374
#3	.2015639

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3304.944	75572.26	11716.43	2436.401	4603.269
Stddev	25.322	168.61	28.60	14.009	20.303
%RSD	.7661862	.2231078	.2440616	.5749825	.4410667
#1	3280.537	75728.80	11748.85	2452.387	4583.503
#2	3303.203	75594.22	11694.82	2430.548	4602.235
#3	3331.092	75393.74	11705.62	2426.268	4624.070

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2176-01 Acquired: 6/10/2025 20:43:22 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0905496	.0411289	.1610321	-.239395	-.034106	40.73660
Stddev	.0015916	.0012778	.0035588	.002880	.002024	.12089
%RSD	1.757660	3.106898	2.209976	1.202945	5.933529	.2967592
#1	.0920739	.0421777	.1574830	-.239305	-.035861	40.60612
#2	.0888984	.0415033	.1610130	-.242319	-.034564	40.75889
#3	.0906764	.0397057	.1646004	-.236562	-.031892	40.84480

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1996462	.0172789	.0356347	13.16107	.0129931	.0586701
Stddev	.0004369	.0002330	.0019958	.07795	.0004641	.0006513
%RSD	.2188330	1.348340	5.600591	.5923138	3.572023	1.110133
#1	.1993932	.0172583	.0348525	13.07119	.0127261	.0582705
#2	.1993947	.0175214	.0341485	13.21033	.0127241	.0583181
#3	.2001507	.0170568	.0379031	13.20169	.0135290	.0594216

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2249873	1052.773	.3750503	3.666863	.0699539	-.024373
Stddev	.0033856	13.641	.0009362	.016511	.0004784	.003368
%RSD	1.504803	1.295707	.2496119	.4502884	.6838337	13.81955
#1	.2226749	1060.450	.3758440	3.649205	.0705038	-.021244
#2	.2234136	1060.845	.3752890	3.669466	.0697246	-.023936
#3	.2288733	1037.023	.3740179	3.681919	.0696334	-.027938

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.944253	.2628644	1.297498	3.777629	^ *****	-.009773
Stddev	.027747	.0015690	.011153	.023343	-----	.000109
%RSD	.9424012	.5968854	.8595934	.6179212	-----	1.113336
#1	2.930326	.2610530	1.288397	3.765846	^ -----	-.009897
#2	2.976205	.2637969	1.309940	3.804515	^ -----	-.009695
#3	2.926229	.2637434	1.294158	3.762528	^ -----	-.009727

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2176-01 Acquired: 6/10/2025 20:43:22 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0183186	.4651569	F 14.49814	2.704059	6.450309	.4513725
Stddev	.0018810	.0027468	.09521	.007986	.018327	.0046744
%RSD	10.26812	.5905176	.6567238	.2953381	.2841279	1.035593
#1	.0203915	.4620516	14.52129	2.711284	6.452963	.4538229
#2	.0167206	.4672690	14.57965	2.695484	6.430799	.4543123
#3	.0178436	.4661500	14.39349	2.705410	6.467164	.4459824

Elem	Sr4077
Units	ppm
Avg	-.913503
Stddev	.013371
%RSD	1.463719
#1	-.921249
#2	-.921196
#3	-.898063

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3340.437	79084.33	13822.96	2470.562	4202.090
Stddev	10.028	577.47	56.17	20.167	14.360
%RSD	.3002080	.7301994	.4063306	.8162778	.3417432
#1	3331.944	79363.72	13887.42	2481.237	4190.032
#2	3351.500	78420.30	13796.95	2447.302	4217.976
#3	3337.868	79468.97	13784.52	2483.148	4198.260

Sample Name: Q2176-02 Acquired: 6/10/2025 20:47:35 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.1496758**	**.0123657**	**.1482358**	**-.105708**	**-.013819**	**64.22140**
Stddev	.0008367	.0025116	.0039829	.000591	.001598	.15534
%RSD	.5589811	20.31121	2.686899	.5590834	11.56626	.2418834
#1	.1505969	.0150833	.1484872	-.105033	-.015587	64.07668
#2	.1489629	.0101297	.1520871	-.105962	-.013394	64.38554
#3	.1494675	.0118842	.1441331	-.106129	-.012477	64.20198

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2756352**	**.0120255**	**.0173485**	**156.2176**	**.1574175**	**.0315625**
Stddev	.0003971	.0001143	.0006547	.4986	.0009913	.0001021
%RSD	.1440617	.9501911	3.773951	.3191546	.6297342	.3233954
#1	.2751807	.0120491	.0179271	155.6439	.1567073	.0314837
#2	.2759148	.0119013	.0174806	156.4624	.1585500	.0315259
#3	.2758102	.0121261	.0166378	156.5464	.1569952	.0316778

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0805807**	**484.4353**	**.4347988**	**30.51835**	**.0563345**	**-.013935**
Stddev	.0027164	1.1825	.0014817	.12068	.0006604	.000995
%RSD	3.371068	.2441053	.3407795	.3954187	1.172275	7.143685
#1	.0819793	483.8055	.4345174	30.37992	.0564774	-.014802
#2	.0823129	483.7009	.4334780	30.57373	.0569118	-.014156
#3	.0774500	485.7994	.4364010	30.60139	.0556144	-.012848

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.092719**	**.3630126**	**.4963618**	**6.927914**	**-.328557**	**-.002110**
Stddev	.008064	.0005405	.0010461	.026644	.015583	.000345
%RSD	.3853311	.1488916	.2107609	.3845832	4.742738	16.34287
#1	2.101956	.3624613	.4972808	6.945072	-.310833	-.002176
#2	2.089117	.3635416	.4952234	6.897220	-.340104	-.001737
#3	2.087084	.3630348	.4965813	6.941450	-.334733	-.002417

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2176-02 Acquired: 6/10/2025 20:47:35 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0192968	1.256194	F 21.69267	5.029187	1.528909	.2343196
Stddev	.0011695	.001845	.04155	.040353	.016971	.0008784
%RSD	6.060513	.1468508	.1915237	.8023670	1.110015	.3748810
#1	.0191684	1.255203	21.72701	5.042007	1.532465	.2333061
#2	.0205251	1.258322	21.64649	5.061573	1.543820	.2348611
#3	.0181968	1.255055	21.70450	4.983982	1.510441	.2347916

Elem	Sr4077
Units	ppm
Avg	.2615313
Stddev	.0014039
%RSD	.5367897
#1	.2612630
#2	.2630500
#3	.2602810

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3217.860	75242.83	12623.61	2388.248	4087.827
Stddev	22.678	12.84	48.74	15.635	18.623
%RSD	.7047465	.0170713	.3861333	.6546729	.4555683
#1	3193.002	75257.01	12676.42	2371.516	4066.671
#2	3237.418	75231.97	12580.35	2402.486	4101.739
#3	3223.162	75239.51	12614.05	2390.744	4095.072

Sample Name: Q2176-03 Acquired: 6/10/2025 20:51:48 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0761910**	**-.004150**	**.2582266**	**-.046982**	**-.007846**	**115.5720**
Stddev	.0003878	.001657	.0010900	.001338	.000330	.1099
%RSD	.5090231	39.93052	.4221077	2.847204	4.206649	.0950531
#1	.0766046	-.005371	.2575977	-.046093	-.007972	115.6882
#2	.0761331	-.004815	.2575967	-.048520	-.008095	115.4698
#3	.0758354	-.002264	.2594852	-.046333	-.007472	115.5582

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3837888**	**.0101065**	**.0126409**	**8.755284**	**.1699170**	**.0551090**
Stddev	.0010312	.0001203	.0001736	.022669	.0003531	.0003218
%RSD	.2686798	1.190161	1.373596	.2589222	.2078002	.5838682
#1	.3838693	.0101440	.0128381	8.731619	.1695148	.0549749
#2	.3847774	.0099720	.0125110	8.757426	.1701759	.0548760
#3	.3827198	.0102036	.0125735	8.776806	.1700605	.0554761

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1400837**	**239.7116**	**.6371564**	**13.14546**	**.1076948**	**-.004535**
Stddev	.0004765	1.7771	.0024070	.03811	.0002827	.000100
%RSD	.3401227	.7413694	.3777684	.2899120	.2624839	2.210720
#1	.1405436	237.6897	.6343963	13.10225	.1076795	-.004650
#2	.1401153	241.0261	.6388186	13.15986	.1074200	-.004492
#3	.1395922	240.4191	.6382545	13.17427	.1079847	-.004464

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.142011**	**.3620679**	**.4300075**	**4.356318**	**-.222540**	**.0021144**
Stddev	.016710	.0007267	.0033496	.029339	.007808	.0001456
%RSD	.7800984	.2007141	.7789579	.6734752	3.508469	6.888268
#1	2.125626	.3621386	.4264369	4.325246	-.231461	.0019732
#2	2.159027	.3613084	.4305053	4.383544	-.216955	.0021059
#3	2.141381	.3627567	.4330804	4.360165	-.219203	.0022641

Sample Name: Q2176-03 Acquired: 6/10/2025 20:51:48 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0303413	2.207484	F 20.72691	3.587054	1.278812	.1651081
Stddev	.0009780	.001734	.13042	.014227	.008288	.0006695
%RSD	3.223381	.0785522	.6292138	.3966257	.6480810	.4054600
#1	.0311780	2.206685	20.57641	3.575656	1.272265	.1646132
#2	.0305798	2.206293	20.79747	3.582506	1.276040	.1648413
#3	.0292661	2.209474	20.80684	3.602999	1.288130	.1658698

Elem	Sr4077
Units	ppm
Avg	-.170371
Stddev	.001681
%RSD	.9867852
#1	-.168456
#2	-.171606
#3	-.171050

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3791.740	90035.59	14141.00	2859.257	4337.758
Stddev	12.180	488.36	15.01	23.626	6.895
%RSD	.3212220	.5424122	.1061410	.8262813	.1589573
#1	3781.112	90524.00	14123.90	2886.532	4332.569
#2	3789.077	89547.28	14147.09	2846.094	4335.124
#3	3805.031	90035.48	14152.01	2845.145	4345.582

Sample Name: Q2176-04 Acquired: 6/10/2025 20:55:54 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0739858**	**-.029910**	**1.140229**	**-.060609**	**.0049440**	**126.2712**
Stddev	.0016098	.000929	.005380	.004091	.0010303	.2426
%RSD	2.175767	3.104575	.4718496	6.750247	20.83936	.1921463
#1	.0740105	-.030215	1.145494	-.055917	.0039612	126.5093
#2	.0755830	-.028868	1.134741	-.062479	.0060160	126.0243
#3	.0723638	-.030648	1.140451	-.063431	.0048547	126.2800

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9354885**	**.0084923**	**.0181107**	**619.0527**	**.2706707**	**.1413669**
Stddev	.0027228	.0001354	.0000698	.8150	.0012832	.0003385
%RSD	.2910547	1.594415	.3854306	.1316497	.4740809	.2394141
#1	.9386098	.0083954	.0181800	619.0128	.2706235	.1417277
#2	.9336008	.0084344	.0181116	618.2585	.2694117	.1410565
#3	.9342550	.0086470	.0180404	619.8870	.2719768	.1413164

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6309448**	**227.8907**	**3.668576**	**116.1946**	**.3283194**	**-.005216**
Stddev	.0012360	1.0312	.009899	.4171	.0006674	.000302
%RSD	.1958960	.4524764	.2698395	.3589299	.2032907	5.781355
#1	.6319260	227.3324	3.658038	115.7183	.3290899	-.005229
#2	.6313517	229.0806	3.670010	116.3708	.3279525	-.004909
#3	.6295566	227.2591	3.677680	116.4946	.3279159	-.005511

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.434629**	**.5199193**	**1.186489**	**15.92563**	**.1043900**	**.0164930**
Stddev	.052250	.0028229	.008052	.11834	.0061527	.0004166
%RSD	.7027961	.5429537	.6786709	.7430775	5.893920	2.526114
#1	7.474514	.5176477	1.195115	16.01685	.1086291	.0166921
#2	7.453892	.5230796	1.185184	15.96814	.1072078	.0160142
#3	7.375482	.5190304	1.179169	15.79191	.0973330	.0167727

Sample Name: Q2176-04 Acquired: 6/10/2025 20:55:54 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0386156	6.856480	F 15.73306	7.044120	F 24.89765	.3523623
Stddev	.0010441	.004697	.06032	.013814	.07232	.0021237
%RSD	2.703943	.0684985	.3833915	.1961109	.2904494	.6027148
#1	.0393162	6.860486	15.76273	7.058947	24.98114	.3529167
#2	.0391151	6.851311	15.77281	7.031612	24.85455	.3541539
#3	.0374155	6.857644	15.66366	7.041800	24.85726	.3500164

Elem	Sr4077
Units	ppm
Avg	2.001829
Stddev	.004716
%RSD	.2356064
#1	1.998581
#2	1.999668
#3	2.007239

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3179.194	75100.77	12701.59	2376.389	3582.230
Stddev	24.948	331.76	11.55	33.434	15.850
%RSD	.7847203	.4417541	.0909610	1.406929	.4424747
#1	3204.610	74988.77	12708.27	2348.769	3598.176
#2	3154.742	74839.50	12708.25	2366.840	3566.477
#3	3178.231	75474.03	12688.25	2413.559	3582.038

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2176-05 Acquired: 6/10/2025 21:00:14 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0406706**	**-.002564**	**.1915634**	**-.055625**	**-.010339**	**113.4580**
Stddev	.0012262	.001830	.0006787	.005380	.001370	.4926
%RSD	3.014849	71.40009	.3542927	9.672696	13.24761	.4342086
#1	.0392976	-.004026	.1907813	-.061271	-.011486	113.5528
#2	.0416564	-.000511	.1919974	-.050556	-.010708	113.8964
#3	.0410578	-.003154	.1919115	-.055050	-.008822	112.9249

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4317994**	**.0100356**	**.0112084**	**4.072673**	**.0839703**	**.0715603**
Stddev	.0016112	.0000902	.0002195	.019944	.0004015	.0006658
%RSD	.3731306	.8988242	1.958220	.4896954	.4781303	.9304337
#1	.4321059	.0099329	.0112289	4.074250	.0838436	.0714785
#2	.4332352	.0100714	.0114170	4.091782	.0844199	.0722633
#3	.4300569	.0101023	.0109794	4.051988	.0836475	.0709392

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0614847**	**268.3295**	**1.666492**	**4.586068**	**.0713042**	**-.002667**
Stddev	.0006159	1.3828	.006018	.038501	.0008576	.000653
%RSD	1.001773	.5153397	.3611422	.8395234	1.202689	24.49361
#1	.0614103	269.9168	1.673295	4.630524	.0722194	-.002023
#2	.0609094	267.3856	1.664320	4.564001	.0705192	-.003329
#3	.0621345	267.6861	1.661861	4.563677	.0711740	-.002647

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.787984**	**.2477894**	**.2120811**	**2.318611**	**-.183848**	**-.001244**
Stddev	.012428	.0010314	.0001477	.007523	.006845	.000262
%RSD	.4457574	.4162600	.0696394	.3244631	3.723282	21.04122
#1	2.791831	.2489712	.2120454	2.318843	-.179072	-.001314
#2	2.798033	.2470707	.2122434	2.326016	-.191690	-.000955
#3	2.774088	.2473262	.2119545	2.310976	-.180781	-.001464

Sample Name: Q2176-05 Acquired: 6/10/2025 21:00:14 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0176367	2.530457	F 20.37210	2.575651	1.388528	.1310099
Stddev	.0006612	.009466	.08455	.009781	.011185	.0013007
%RSD	3.748991	.3740998	.4150146	.3797592	.8055163	.9927888
#1	.0183996	2.535462	20.46743	2.585728	1.395320	.1323365
#2	.0172284	2.536369	20.30621	2.566195	1.375619	.1297368
#3	.0172822	2.519538	20.34266	2.575030	1.394645	.1309564

Elem	Sr4077
Units	ppm
Avg	-.227977
Stddev	.001299
%RSD	.5697362
#1	-.229441
#2	-.226961
#3	-.227530

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3760.345	88125.43	14406.12	2821.704	4372.632
Stddev	8.270	276.22	65.20	34.941	8.596
%RSD	.2199160	.3134435	.4526051	1.238309	.1965825
#1	3752.075	87845.90	14360.22	2787.873	4365.566
#2	3760.346	88132.17	14377.39	2819.580	4370.129
#3	3768.614	88398.22	14480.76	2857.659	4382.202

Sample Name: CCV07 Acquired: 6/10/2025 21:04:20 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**5.225627**	**5.091428**	**5.206244**	**5.231881**	**5.156105**	**10.10192**	**10.10907**
Stddev	.005550	.028452	.014155	.021208	.014876	.11583	.16842
%RSD	.1062031	.5588247	.2718904	.4053536	.2885206	1.146611	1.666009
#1	5.223021	5.124125	5.208462	5.209632	5.147602	10.17619	10.18332
#2	5.221860	5.077853	5.219159	5.234147	5.147432	10.16110	10.22761
#3	5.232001	5.072305	5.191111	5.251865	5.173283	9.96845	9.91629

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2611297**	**2.600013**	**25.61400**	**1.053395**	**2.585074**	**1.273624**	**5.186848**
Stddev	.0030951	.010755	.20328	.001488	.004171	.004380	.021746
%RSD	1.185267	.4136541	.7936158	.1412911	.1613457	.3438708	.4192602
#1	.2631704	2.603239	25.76865	1.052875	2.588610	1.270738	5.182219
#2	.2626503	2.608786	25.68958	1.052237	2.586137	1.271470	5.167789
#3	.2575685	2.588014	25.38376	1.055074	2.580474	1.278663	5.210536

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.549310**	**25.41223**	**2.592514**	**1.281617**	**23.54572**	**2.593018**	**2.542837**
Stddev	.024343	.17832	.007344	.001768	.10866	.018299	.002354
%RSD	.9548823	.7016950	.2832793	.1379827	.4614849	.7057148	.0925541
#1	2.570288	25.54333	2.597166	1.283473	23.67106	2.605595	2.545039
#2	2.555023	25.48418	2.596329	1.279951	23.47809	2.601434	2.540357
#3	2.522619	25.20918	2.584048	1.281427	23.48801	2.572025	2.543115

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.61291**	**5.068904**	**5.211000**	**5.258800**	**5.177655**	**5.131388**	**5.340030**
Stddev	.00625	.060941	.013575	.017424	.053311	.043250	.008482
%RSD	.0264513	1.202250	.2605120	.3313283	1.029630	.8428423	.1588367
#1	23.61829	5.112850	5.204731	5.272028	5.220370	5.089918	5.337677
#2	23.60606	5.094526	5.201693	5.265314	5.194686	5.128025	5.349440
#3	23.61437	4.999335	5.226577	5.239057	5.117910	5.176220	5.332973

Sample Name: CCV07 Acquired: 6/10/2025 21:04:20 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**5.070731**	**4.649337**	**5.151090**
Stddev	.009834	.071422	.057205
%RSD	.1939426	1.536176	1.110547
#1	5.078886	4.716236	5.208126
#2	5.073499	4.657653	5.151427
#3	5.059810	4.574120	5.093717

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3283.943**	**75987.16**	**11932.51**	**2418.831**	**4344.245**
Stddev	28.264	128.92	120.72	12.459	23.630
%RSD	.8606711	.1696645	1.011656	.5151010	.5439301
#1	3291.709	76066.71	11854.20	2430.822	4344.337
#2	3307.512	76056.36	11871.80	2419.721	4367.828
#3	3252.608	75838.42	12071.53	2405.950	4320.569

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCB07 Acquired: 6/10/2025 21:08:31 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0015967**	**-.001079**	**-.000341**	**.0006459**	**.0009241**	**.0053663**	**-.002216**
Stddev	.0002475	.000861	.000343	.0009547	.0013473	.0007281	.000902
%RSD	15.49786	79.77531	100.4023	147.7995	145.7967	13.56851	40.70370
#1	.0014233	-.000878	-.000086	.0017091	.0024118	.0048732	-.002446
#2	.0018800	-.002023	-.000731	-.000138	.0005743	.0062026	-.002981
#3	.0014867	-.000337	-.000207	.000367	-.000214	.0050231	-.001222

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000202**	**.0000616**	**.0097049**	**.0002824**	**.0001483**	**-.000084**	**.0067231**
Stddev	.0000147	.0000779	.0009952	.0004822	.0000750	.000221	.0024445
%RSD	72.92322	126.2955	10.25489	170.7787	50.59932	264.3414	36.35974
#1	.0000036	-.000018	.0097631	-.000268	.0002345	-.000267	.0039258
#2	.0000254	.000137	.0086818	.000633	.0001129	.000162	.0077947
#3	.0000316	.000066	.0106697	.000481	.0000975	-.000145	.0084487

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003688**	**-.003490**	**.0000410**	**-.000172**	**-.127466**	**-.000499**	**-.000074**
Stddev	.0001097	.007189	.0002605	.000147	.005071	.000613	.000351
%RSD	29.75235	205.9922	634.8649	85.80799	3.978438	123.0109	473.2205
#1	.0003581	.004502	.0003087	-.000002	-.121643	-.000164	-.000314
#2	.0002648	-.005542	.0000262	-.000269	-.129846	-.001206	-.000238
#3	.0004834	-.009430	-.000212	-.000244	-.130910	-.000125	.000329

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.017857**	**.0061847**	**.0006950**	**.0005890**	**.0006194**	**.0070587**	**-.001083**
Stddev	.002490	.0004595	.0000474	.0005386	.0004131	.0020395	.002561
%RSD	13.94625	7.428940	6.819363	91.43677	66.69963	28.89343	236.4271
#1	-.015748	.0067095	.0007425	.0000900	.0010165	.0086210	-.003323
#2	-.017218	.0059896	.0006947	.0005171	.0001919	.0047514	.001709
#3	-.020604	.0058550	.0006478	.0011600	.0006498	.0078037	-.001635

Sample Name: CCB07 Acquired: 6/10/2025 21:08:31 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0005347	-.001624	.0002092
Stddev	.0013378	.001363	.0000236
%RSD	250.2032	83.93300	11.26976
#1	.0013078	-.000076	.0002254
#2	.0013063	-.002151	.0002201
#3	-.001010	-.002643	.0001822

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3488.435	79822.21	12122.34	2592.560	4978.521
Stddev	47.645	190.45	32.65	17.992	39.134
%RSD	1.365808	.2385875	.2693250	.6939995	.7860496
#1	3528.511	79726.00	12141.35	2592.392	5009.770
#2	3435.755	79699.06	12141.02	2574.651	4934.629
#3	3501.038	80041.57	12084.64	2610.635	4991.164

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2176-06 Acquired: 6/10/2025 21:12:51 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0327630**	**-.013387**	**.0694564**	**-.029060**	**-.005306**	**181.0907**
Stddev	.0025453	.001131	.0008707	.003539	.001566	.4581
%RSD	7.768781	8.448689	1.253576	12.17881	29.51999	.2529862
#1	.0356951	-.013436	.0691864	-.033142	-.005815	180.6682
#2	.0314718	-.014492	.0687527	-.026839	-.003548	181.0263
#3	.0311221	-.012232	.0704301	-.027200	-.006554	181.5777

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1793058**	**.0108402**	**.0076343**	**3.469552**	**.1142597**	**.0873343**
Stddev	.0007604	.0001519	.0002089	.020724	.0003128	.0000386
%RSD	.4241098	1.401027	2.736155	.5973150	.2738023	.0441764
#1	.1794114	.0108333	.0073944	3.467035	.1142374	.0873564
#2	.1784981	.0106918	.0077753	3.450202	.1139586	.0873568
#3	.1800080	.0109953	.0077333	3.491420	.1145831	.0872898

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0737731**	**176.4121**	**1.691088**	**6.858150**	**.1052284**	**-.003733**
Stddev	.0002078	.5393	.004640	.023765	.0009964	.000575
%RSD	.2816283	.3056964	.2744091	.3465206	.9469146	15.40349
#1	.0735353	177.0035	1.692104	6.885588	.1063717	-.003665
#2	.0738648	176.2855	1.686024	6.844824	.1047687	-.004339
#3	.0739193	175.9474	1.695137	6.844039	.1045449	-.003195

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.163248**	**.2323124**	**.2444780**	**2.316068**	**-.177976**	**.0004888**
Stddev	.010486	.0005057	.0008125	.019476	.004881	.0002816
%RSD	.4847313	.2176750	.3323362	.8408998	2.742745	57.60475
#1	2.172955	.2328421	.2440113	2.300049	-.174146	.0002040
#2	2.164661	.2318347	.2440065	2.337747	-.176311	.0004953
#3	2.152126	.2322604	.2454162	2.310407	-.183473	.0007670

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2176-06 Acquired: 6/10/2025 21:12:51 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0105461	3.083379	F 14.71907	2.912419	.4284511	.1083709
Stddev	.0004731	.002753	.04437	.011857	.0041762	.0002314
%RSD	4.486032	.0892896	.3014571	.4071152	.9747176	.2135266
#1	.0110348	3.083379	14.74851	2.923159	.4329299	.1081268
#2	.0100903	3.080626	14.74066	2.914402	.4246638	.1085871
#3	.0105132	3.086132	14.66803	2.899696	.4277596	.1083987

Elem	Sr4077
Units	ppm
Avg	-.154980
Stddev	.000517
%RSD	.3333310
#1	-.155528
#2	-.154910
#3	-.154502

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3535.735	81916.00	12802.88	2666.015	4293.566
Stddev	53.371	293.40	21.23	7.985	40.972
%RSD	1.509480	.3581748	.1658213	.2995151	.9542716
#1	3596.566	81840.93	12812.18	2664.659	4340.172
#2	3513.874	81667.42	12817.87	2658.794	4277.307
#3	3496.765	82239.64	12778.58	2674.591	4263.218

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2176-07 Acquired: 6/10/2025 21:16:57 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0569834	-.008811	.1134759	-.031230	-.007435	124.0577
Stddev	.0039776	.003123	.0027520	.002453	.000615	.3588
%RSD	6.980258	35.44246	2.425154	7.855529	8.266155	.2892069
#1	.0614106	-.006468	.1159070	-.029684	-.007366	124.1706
#2	.0558288	-.012356	.1104882	-.029948	-.008081	123.6561
#3	.0537109	-.007608	.1140324	-.034059	-.006857	124.3464

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4489195	.0090460	.0099113	6.605722	.1357941	.0574905
Stddev	.0027981	.0001220	.0000149	.029915	.0004428	.0003961
%RSD	.6233014	1.348292	.1504664	.4528634	.3260998	.6890611
#1	.4513672	.0089069	.0098964	6.575287	.1363006	.0576898
#2	.4458691	.0090962	.0099262	6.606791	.1356016	.0577473
#3	.4495220	.0091348	.0099114	6.635088	.1354801	.0570342

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0630054	201.0076	1.007059	9.513991	.0898135	-.000608
Stddev	.0009637	.8989	.006316	.123312	.0002781	.000156
%RSD	1.529581	.4471849	.6271648	1.296110	.3096330	25.71320
#1	.0640837	200.0270	1.000168	9.371736	.0901037	-.000716
#2	.0622283	201.7924	1.008436	9.590462	.0897873	-.000429
#3	.0627041	201.2035	1.012573	9.579774	.0895494	-.000680

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.30561	.3068659	.2338176	3.750111	-.113580	.0018270
Stddev	.08660	.0031365	.0008203	.027527	.002102	.0003853
%RSD	.7659616	1.022097	.3508260	.7340369	1.850322	21.09137
#1	11.39888	.3036902	.2333702	3.776710	-.113024	.0022697
#2	11.22776	.3069458	.2333182	3.721741	-.111812	.0015670
#3	11.29021	.3099616	.2347643	3.751881	-.115903	.0016443

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2176-07 Acquired: 6/10/2025 21:16:57 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0104653	2.088290	F 18.81541	2.922411	.2443679	.1365412
Stddev	.0010080	.006110	.02763	.024822	.0028374	.0006058
%RSD	9.632103	.2925926	.1468211	.8493835	1.161097	.4436638
#1	.0105380	2.087976	18.78408	2.938487	.2474892	.1371518
#2	.0094229	2.082344	18.83625	2.934924	.2436698	.1359403
#3	.0114351	2.094552	18.82591	2.893822	.2419448	.1365314

Elem	Sr4077
Units	ppm
Avg	-.113705
Stddev	.001109
%RSD	.9751936
#1	-.112576
#2	-.114793
#3	-.113747

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3926.818	92795.82	15471.23	2973.402	4326.045
Stddev	37.659	113.25	42.78	3.059	27.531
%RSD	.9590116	.1220375	.2765040	.1028933	.6363948
#1	3951.923	92710.00	15513.70	2974.271	4341.392
#2	3945.015	92753.27	15471.85	2975.934	4342.481
#3	3883.517	92924.17	15428.15	2970.003	4294.261

Sample Name: Q2176-08 Acquired: 6/10/2025 21:32:14 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0415097**	**-.006221**	**.3691787**	**-.027031**	**-.002533**	**75.65424**
Stddev	.0020083	.001307	.0015894	.001253	.001771	.15140
%RSD	4.838093	21.01702	.4305279	4.635202	69.92274	.2001157
#1	.0417560	-.007609	.3682871	-.027973	-.004346	75.82828
#2	.0433834	-.005012	.3710138	-.025609	-.000808	75.55298
#3	.0393896	-.006042	.3682353	-.027510	-.002444	75.58147

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4221080**	**.0096575**	**.0043207**	**66.69852**	**.1846551**	**.0406177**
Stddev	.0008087	.0000696	.0002020	.37028	.0000930	.0002695
%RSD	.1915894	.7204799	4.675035	.5551506	.0503937	.6634347
#1	.4213534	.0097320	.0045525	66.44199	.1845657	.0404221
#2	.4220090	.0096463	.0041822	66.53055	.1846481	.0409251
#3	.4229617	.0095942	.0042274	67.12301	.1847514	.0405060

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0931009**	**121.7148**	**.6091754**	**29.56890**	**.0647268**	**-.003351**
Stddev	.0004687	1.1696	.0051066	.25223	.0005764	.000448
%RSD	.5034809	.9609246	.8382771	.8530260	.8905625	13.37423
#1	.0935336	120.5393	.6047102	29.38408	.0641088	-.003851
#2	.0931662	121.7268	.6080729	29.46637	.0648219	-.002984
#3	.0926030	122.8784	.6147432	29.85625	.0652498	-.003219

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.104731**	**.3161440**	**.2476641**	**4.281281**	**-.087270**	**.0005292**
Stddev	.027801	.0010551	.0005110	.026491	.005955	.0003419
%RSD	.6773035	.3337482	.2063493	.6187745	6.823439	64.60841
#1	4.079100	.3170670	.2475181	4.250805	-.094144	.0001371
#2	4.134286	.3149938	.2482322	4.294246	-.083981	.0007652
#3	4.100805	.3163712	.2472419	4.298794	-.083686	.0006853

Sample Name: Q2176-08 Acquired: 6/10/2025 21:32:14 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0063244	1.594594	F 20.23074	2.592298	.8330462	.0867575
Stddev	.0000821	.005425	.11594	.008113	.0043169	.0026495
%RSD	1.297965	.3401912	.5730756	.3129723	.5182116	3.053908
#1	.0062589	1.588497	20.11158	2.583046	.8320411	.0839421
#2	.0062977	1.596396	20.23747	2.595650	.8377770	.0892020
#3	.0064164	1.598888	20.34316	2.598198	.8293204	.0871284

Elem	Sr4077
Units	ppm
Avg	.0631888
Stddev	.0012754
%RSD	2.018398
#1	.0641987
#2	.0636121
#3	.0617556

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3274.281	77023.82	12464.64	2430.287	4216.148
Stddev	38.882	244.33	36.21	12.083	41.187
%RSD	1.187486	.3172108	.2904748	.4971935	.9768957
#1	3229.538	77248.26	12445.83	2442.656	4168.789
#2	3299.869	77059.64	12506.38	2429.693	4243.597
#3	3293.436	76763.56	12441.70	2418.512	4236.060

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2177-02 Acquired: 6/10/2025 21:36:25 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0243893**	**-.058688**	**2.435932**	**-.064695**	**.0058178**	**165.8065**
Stddev	.0031045	.001053	.010948	.008852	.0005043	.2314
%RSD	12.72903	1.794641	.4494277	13.68276	8.667593	.1395899
#1	.0248388	-.059217	2.424206	-.059363	.0053054	165.5779
#2	.0210845	-.057476	2.437703	-.059810	.0063136	166.0407
#3	.0272445	-.059373	2.445886	-.074914	.0058345	165.8009

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.117016**	**.0096274**	**.0194848**	**129.9728**	**.3679003**	**.2193692**
Stddev	.001835	.0000200	.0002581	.7763	.0010601	.0006348
%RSD	.0866860	.2077256	1.324621	.5973054	.2881434	.2893685
#1	2.114949	.0096052	.0195675	130.8169	.3685436	.2188806
#2	2.117642	.0096439	.0196913	129.8123	.3666768	.2200867
#3	2.118456	.0096332	.0191954	129.2893	.3684805	.2191404

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5982475**	**311.3933**	**2.261480**	**100.1704**	**.4455972**	**-.004769**
Stddev	.0004489	2.1818	.014371	.6132	.0008574	.000249
%RSD	.0750400	.7006629	.6354836	.6122045	.1924075	5.214532
#1	.5987327	313.8766	2.277696	100.8473	.4452796	-.004535
#2	.5981628	310.5196	2.256421	100.0118	.4449440	-.004741
#3	.5978469	309.7838	2.250322	99.6520	.4465681	-.005030

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.398390**	**.4699153**	**1.568136**	**122.5766**	**-.260050**	**.0147430**
Stddev	.022733	.0031403	.006354	.0849	.005026	.0003822
%RSD	.3552935	.6682659	.4051692	.0693001	1.932819	2.592361
#1	6.373209	.4735239	1.561977	122.4980	-.255199	.0147081
#2	6.404557	.4684192	1.574668	122.6668	-.265235	.0143795
#3	6.417402	.4678029	1.567762	122.5650	-.259714	.0151415

Sample Name: Q2177-02 Acquired: 6/10/2025 21:36:25 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0725334	17.70927	F 15.38054	12.35517	19.62393	.4657616
Stddev	.0006971	.04286	.03789	.03493	.03714	.0022350
%RSD	.9611111	.2420065	.2463662	.2826985	.1892760	.4798666
#1	.0722046	17.74852	15.41200	12.32311	19.60643	.4676476
#2	.0733342	17.71576	15.39115	12.35003	19.66659	.4632930
#3	.0720615	17.66354	15.33847	12.39239	19.59878	.4663443

Elem	Sr4077
Units	ppm
Avg	.0870420
Stddev	.0022868
%RSD	2.627197
#1	.0844024
#2	.0883000
#3	.0884236

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3253.997	75843.08	12729.95	2362.215	3803.312
Stddev	20.707	129.86	18.61	17.269	17.083
%RSD	.6363652	.1712267	.1462200	.7310404	.4491536
#1	3232.131	75974.19	12743.91	2381.088	3783.755
#2	3256.551	75714.50	12708.82	2347.205	3810.859
#3	3273.309	75840.56	12737.12	2358.352	3815.321

Sample Name: Q2177-04 Acquired: 6/10/2025 21:40:28 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0133753**	**-.009230**	**.0596664**	**-.024033**	**-.002896**	**79.52309**
Stddev	.0007415	.002092	.0007009	.008170	.003132	.12143
%RSD	5.544134	22.66393	1.174711	33.99450	108.1498	.1527030
#1	.0127344	-.006837	.0590015	-.028083	.000422	79.62953
#2	.0141875	-.010707	.0595994	-.029387	-.003308	79.39082
#3	.0132041	-.010148	.0603984	-.014629	-.005802	79.54893

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0715617**	**.0038832**	**.0024779**	**5.682934**	**.1155293**	**.0458713**
Stddev	.0003571	.0000648	.0000995	.030514	.0008755	.0001591
%RSD	.4989667	1.669036	4.014513	.5369388	.7578453	.3468328
#1	.0713461	.0039382	.0024594	5.652328	.1164469	.0458892
#2	.0713652	.0038996	.0025853	5.713355	.1154382	.0457040
#3	.0719739	.0038117	.0023889	5.683120	.1147029	.0460206

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0913739**	**132.6007**	**.8775373**	**21.05585**	**.1111100**	**-.000705**
Stddev	.0006597	.8314	.0017023	.11638	.0004010	.000538
%RSD	.7220055	.6270113	.1939818	.5527362	.3608776	76.34959
#1	.0917825	131.6958	.8783749	20.93534	.1106481	-.001261
#2	.0906128	133.3308	.8786584	21.16762	.1113691	-.000186
#3	.0917264	132.7755	.8755785	21.06458	.1113128	-.000670

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.752283**	**.1314786**	**.2646149**	**4.738851**	**-.075673**	**.0014991**
Stddev	.016546	.0004738	.0013648	.019376	.002502	.0002955
%RSD	.3481779	.3603246	.5157552	.4088787	3.305844	19.70971
#1	4.744849	.1310904	.2659543	4.753778	-.077456	.0016186
#2	4.740757	.1313388	.2646643	4.745821	-.076750	.0017161
#3	4.771242	.1320065	.2632261	4.716954	-.072813	.0011626

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2177-04 Acquired: 6/10/2025 21:40:28 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0080141	3.103803	F 19.14272	1.453076	F 56.86080	.1471498
Stddev	.0002182	.000244	.07426	.001675	.19239	.0010601
%RSD	2.723010	.0078685	.3879506	.1152429	.3383455	.7204120
#1	.0082659	3.103605	19.05902	1.452821	56.65284	.1481223
#2	.0078792	3.103728	19.20072	1.451544	56.89715	.1473073
#3	.0078973	3.104075	19.16841	1.454864	57.03242	.1460198

Elem	Sr4077
Units	ppm
Avg	-.069609
Stddev	.000898
%RSD	1.290433
#1	-.068671
#2	-.070461
#3	-.069695

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3278.010	76656.54	12606.37	2449.972	4381.937
Stddev	11.129	129.91	18.29	7.283	8.245
%RSD	.3394954	.1694665	.1450715	.2972573	.1881681
#1	3266.816	76805.87	12585.54	2457.402	4374.589
#2	3289.073	76569.59	12619.78	2442.847	4390.855
#3	3278.142	76594.15	12613.80	2449.667	4380.368

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2177-04DUP Acquired: 6/10/2025 21:44:35 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0116934**	**-.008697**	**.0619875**	**-.020860**	**-.000590**	**81.54005**
Stddev	.0008138	.001573	.0025965	.001201	.001241	.12423
%RSD	6.959866	18.08947	4.188733	5.756319	210.4610	.1523578
#1	.0114130	-.010068	.0593467	-.019571	.000535	81.46676
#2	.0126103	-.009044	.0620786	-.021947	-.001921	81.68349
#3	.0110568	-.006980	.0645372	-.021061	-.000382	81.46990

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0803667**	**.0040039**	**.0027020**	**5.938490**	**.1190978**	**.0473543**
Stddev	.0002480	.0001298	.0001703	.043803	.0005330	.0000249
%RSD	.3085786	3.242074	6.302901	.7376146	.4475447	.0525605
#1	.0801498	.0038730	.0028540	5.891841	.1185430	.0473522
#2	.0803132	.0040059	.0025179	5.944885	.1191444	.0473801
#3	.0806371	.0041326	.0027341	5.978744	.1196060	.0473304

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0924682**	**132.9770**	**.8987611**	**21.81652**	**.1127881**	**-.001128**
Stddev	.0001288	.1802	.0054862	.17008	.0005334	.000379
%RSD	.1392495	.1355352	.6104136	.7795967	.4729113	33.61853
#1	.0925066	132.9530	.8925249	21.62405	.1122635	-.000964
#2	.0925734	132.8099	.9009149	21.87894	.1133299	-.000858
#3	.0923246	133.1679	.9028436	21.94657	.1127707	-.001561

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.768630**	**.1381016**	**.2695821**	**4.977769**	**-.084159**	**.0016989**
Stddev	.017966	.0011205	.0006785	.014878	.001801	.0002104
%RSD	.3767446	.8113338	.2516851	.2988853	2.140447	12.38609
#1	4.776662	.1368787	.2690726	4.989393	-.083791	.0018435
#2	4.781177	.1383473	.2693213	4.982913	-.082571	.0017958
#3	4.748049	.1390789	.2703523	4.961002	-.086117	.0014575

Sample Name: Q2177-04DUP Acquired: 6/10/2025 21:44:35 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0081361	3.237705	F 18.95408	1.504840	F 56.99226	.1507522
Stddev	.0011634	.013882	.03657	.005418	.24413	.0020175
%RSD	14.29915	.4287608	.1929320	.3600620	.4283488	1.338299
#1	.0068178	3.221920	18.99213	1.498748	56.73596	.1499987
#2	.0085716	3.243179	18.95090	1.506654	57.01876	.1530381
#3	.0090189	3.248015	18.91920	1.509119	57.22205	.1492199

Elem	Sr4077
Units	ppm
Avg	-.067704
Stddev	.000224
%RSD	.3309012
#1	-.067829
#2	-.067445
#3	-.067837

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3365.813	78412.82	12608.28	2511.284	4460.158
Stddev	40.478	183.89	55.39	12.376	37.818
%RSD	1.202624	.2345092	.4393503	.4928094	.8479027
#1	3319.874	78203.98	12671.33	2497.575	4416.994
#2	3396.244	78550.45	12586.12	2514.644	4487.473
#3	3381.322	78484.03	12567.41	2521.633	4476.006

Sample Name: Q2177-04LX5 Acquired: 6/10/2025 21:48:42 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0040408**	**-.002889**	**.0122148**	**-.005202**	**.0007465**	**15.61426**	**.0116157**
Stddev	.0007838	.002271	.0014833	.000973	.0005966	.02128	.0001642
%RSD	19.39831	78.58679	12.14311	18.70959	79.91764	.1363137	1.413656
#1	.0038425	-.004946	.0139272	-.004742	.0011846	15.63008	.0116150
#2	.0049047	-.000453	.0113295	-.004544	.0000670	15.62263	.0117803
#3	.0033751	-.003270	.0113878	-.006320	.0009879	15.59006	.0114519

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007382**	**.0000024**	**1.142610**	**.0234691**	**.0090314**	**.0185744**	**27.61907**
Stddev	.0000275	.0000311	.002779	.0001976	.0001706	.0003888	.07806
%RSD	3.721200	1274.253	.2432450	.8417413	1.888453	2.092974	.2826280
#1	.0007596	.0000097	1.145782	.0235171	.0089746	.0189859	27.53322
#2	.0007479	-.000032	1.140601	.0236383	.0092232	.0185240	27.63821
#3	.0007072	.000029	1.141447	.0232520	.0088966	.0182133	27.68577

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1789141**	**4.190349**	**.0214048**	**.0003532**	**.8685785**	**.0258531**	**.0526377**
Stddev	.0007641	.032840	.0002735	.0000916	.0144498	.0013533	.0005490
%RSD	.4270608	.7837167	1.277691	25.92941	1.663610	5.234727	1.043005
#1	.1791654	4.181818	.0211078	.0004541	.8751988	.0273708	.0532038
#2	.1795209	4.226614	.0216463	.0002754	.8520047	.0254166	.0521076
#3	.1780560	4.162616	.0214603	.0003301	.8785319	.0247718	.0526017

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9063765**	**-.009215**	**.0003031**	**.0005822**	**.6224190**	**3.844743**	**.2795630**
Stddev	.0097171	.000601	.0001597	.0003566	.0030213	.012498	.0045592
%RSD	1.072084	6.525800	52.68474	61.24659	.4854050	.3250640	1.630831
#1	.8952660	-.008897	.0002586	.0006751	.6234228	3.840619	.2749824
#2	.9105758	-.009908	.0001704	.0001884	.6248105	3.858781	.2796060
#3	.9132879	-.008839	.0004804	.0008832	.6190236	3.834828	.2841005

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2177-04LX5 Acquired: 6/10/2025 21:48:42 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**11.30319**	**.0299630**	**-.014812**
Stddev	.07439	.0007352	.000112
%RSD	.6581533	2.453751	.7594788
#1	11.22251	.0295702	-.014745
#2	11.31799	.0295076	-.014750
#3	11.36907	.0308112	-.014942

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3379.738**	**77308.25**	**13038.04**	**2489.725**	**4673.968**
Stddev	41.840	160.90	50.79	4.157	38.125
%RSD	1.237971	.2081241	.3895187	.1669693	.8156935
#1	3338.060	77492.59	13024.52	2493.978	4636.600
#2	3379.416	77236.15	12995.38	2489.526	4672.497
#3	3421.739	77196.02	13094.22	2485.670	4712.807

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2177-04MS Acquired: 6/10/2025 21:52:56 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.7792662**	**1.841790**	**1.014979**	**1.834443**	**.3298878**	**108.8177**
Stddev	.0059023	.019560	.003255	.002084	.0006974	.4402
%RSD	.7574213	1.062008	.3206958	.1135889	.2114182	.4045589
#1	.7730179	1.862326	1.013518	1.833913	.3305956	108.7272
#2	.7847477	1.839664	1.012711	1.836741	.3292012	109.2961
#3	.7800329	1.823380	1.018709	1.832676	.3298668	108.4297

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2790960**	**.2041696**	**.2042796**	**8.610725**	**.5333258**	**.2609673**
Stddev	.0009330	.0004917	.0003267	.036239	.0000460	.0011459
%RSD	.3342865	.2408068	.1599395	.4208614	.0086236	.4390995
#1	.2786602	.2036044	.2041244	8.638171	.5333179	.2598446
#2	.2801671	.2044058	.2040594	8.569646	.5333752	.2609222
#3	.2784606	.2044986	.2046550	8.624357	.5332842	.2621351

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3970167**	**154.1910**	**1.214078**	**28.45803**	**.6403091**	**.0708263**
Stddev	.0002765	.7834	.003445	.08938	.0014834	.0002721
%RSD	.0696341	.5080983	.2837233	.3140636	.2316722	.3841828
#1	.3970742	155.0687	1.212663	28.52651	.6400805	.0711404
#2	.3967161	153.5623	1.211567	28.49067	.6389532	.0706610
#3	.3972599	153.9421	1.218005	28.35693	.6418935	.0706776

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.412462**	**.4530343**	**.5212668**	**14.37928**	**.1390686**	**.3922452**
Stddev	.003286	.0013514	.0012586	.04571	.0034541	.0013624
%RSD	.0390623	.2983081	.2414463	.3178951	2.483727	.3473291
#1	8.415816	.4542971	.5215623	14.40355	.1425294	.3925090
#2	8.409248	.4516090	.5223513	14.40774	.1356213	.3934563
#3	8.412320	.4531968	.5198867	14.32656	.1390551	.3907702

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2177-04MS Acquired: 6/10/2025 21:52:56 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.6796738	3.744199	F 19.74944	7.489233	F 68.42767	.3591900
Stddev	.0011200	.005881	.08268	.004805	.08017	.0019004
%RSD	.1647904	.1570674	.4186437	.0641562	.1171564	.5290673
#1	.6791252	3.743082	19.82811	7.494278	68.51743	.3570950
#2	.6789338	3.750558	19.75693	7.488708	68.40240	.3596725
#3	.6809624	3.738957	19.66326	7.484711	68.36319	.3608027

Elem	Sr4077
Units	ppm
Avg	.1205735
Stddev	.0013792
%RSD	1.143898
#1	.1191397
#2	.1218908
#3	.1206900

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3324.634	76796.73	12213.10	2427.861	4319.831
Stddev	12.889	278.88	8.72	14.511	6.923
%RSD	.3876780	.3631369	.0714382	.5976947	.1602606
#1	3324.390	76482.85	12208.95	2411.111	4322.567
#2	3311.868	76891.37	12207.22	2435.835	4311.958
#3	3337.642	77015.97	12223.13	2436.637	4324.969

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2177-04MSD Acquired: 6/10/2025 21:56:54 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.7915896**	**1.856256**	**1.057211**	**1.860034**	**.2994908**	**132.0384**
Stddev	.0021906	.009842	.001478	.005553	.0036732	.2595
%RSD	.2767319	.5302308	.1397689	.2985580	1.226473	.1965379
#1	.7938835	1.856961	1.056026	1.853858	.2987636	131.7407
#2	.7913657	1.846080	1.058866	1.864615	.2962356	132.2166
#3	.7895195	1.865727	1.056740	1.861629	.3034732	132.1579

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3247663**	**.1962445**	**.2055433**	**11.88480**	**.5664297**	**.2747317**
Stddev	.0005260	.0012239	.0002922	.04636	.0022777	.0007321
%RSD	.1619683	.6236711	.1421438	.3900411	.4021169	.2664790
#1	.3242587	.1949145	.2058169	11.86874	.5638762	.2747614
#2	.3253090	.1973234	.2052356	11.93705	.5671607	.2754484
#3	.3247313	.1964957	.2055774	11.84861	.5682522	.2739851

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4265401**	**186.8246**	**1.344042**	**33.26189**	**.6764332**	**.0747728**
Stddev	.0002832	.9429	.003055	.14410	.0005759	.0004618
%RSD	.0663960	.5046837	.2273054	.4332334	.0851326	.6175465
#1	.4266217	187.4575	1.344044	33.31906	.6760385	.0750805
#2	.4267736	187.2752	1.347096	33.36863	.6770940	.0749961
#3	.4262250	185.7409	1.340986	33.09797	.6761671	.0742419

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.80398**	**.5096083**	**.5944579**	**17.12392**	**.1796681**	**.3935236**
Stddev	.00844	.0034070	.0046057	.05714	.0007159	.0006590
%RSD	.0781005	.6685549	.7747645	.3337027	.3984794	.1674520
#1	10.81182	.5112783	.5996738	17.18367	.1804300	.3939726
#2	10.80506	.5118581	.5927487	17.06979	.1790093	.3938311
#3	10.79505	.5056885	.5909511	17.11830	.1795651	.3927671

Sample Name: Q2177-04MSD Acquired: 6/10/2025 21:56:54 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.6883402	4.508759	F 23.11468	8.113497	F 72.89355	.4239040
Stddev	.0041738	.007216	.05943	.010993	.02370	.0016816
%RSD	.6063510	.1600437	.2571141	.1354951	.0325136	.3966963
#1	.6928555	4.503572	23.16974	8.120298	72.87277	.4231294
#2	.6875417	4.517000	23.12261	8.100815	72.91936	.4227493
#3	.6846233	4.505706	23.05168	8.119380	72.88851	.4258333

Elem	Sr4077
Units	ppm
Avg	.1240792
Stddev	.0012567
%RSD	1.012853
#1	.1230646
#2	.1236880
#3	.1254850

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3303.842	76475.44	12879.49	2437.898	4244.467
Stddev	2.628	133.86	16.07	16.104	.889
%RSD	.0795512	.1750424	.1247873	.6605598	.0209450
#1	3306.707	76327.25	12897.42	2419.425	4244.487
#2	3303.277	76511.45	12866.38	2445.295	4245.347
#3	3301.542	76587.61	12874.68	2448.975	4243.569

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2177-04A Acquired: 6/10/2025 22:00:50 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.7825240**	**1.850892**	**1.004508**	**1.857672**	**.7675574**	**81.10328**
Stddev	.0012467	.002999	.001280	.002398	.0019083	.18565
%RSD	.1593158	.1620295	.1274318	.1291038	.2486248	.2289051
#1	.7831957	1.850272	1.003920	1.859810	.7680066	81.19407
#2	.7832908	1.854153	1.003626	1.858128	.7654646	81.22606
#3	.7810855	1.848252	1.005976	1.855079	.7692011	80.88971

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2618072**	**.1979006**	**.1983052**	**6.588198**	**.5155372**	**.2445015**
Stddev	.0012224	.0007456	.0004015	.027661	.0009276	.0002763
%RSD	.4669291	.3767434	.2024898	.4198535	.1799265	.1130009
#1	.2620283	.1979336	.1984280	6.573100	.5164251	.2447834
#2	.2629040	.1986291	.1978566	6.620122	.5156121	.2442311
#3	.2604893	.1971391	.1986310	6.571371	.5145745	.2444900

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3789253**	**134.8808**	**1.060480**	**22.79082**	**.6052597**	**.0733321**
Stddev	.0011744	.2801	.006433	.10864	.0003315	.0005852
%RSD	.3099298	.2076555	.6066511	.4766743	.0547648	.7980229
#1	.3799858	134.6270	1.059257	22.72255	.6051002	.0729167
#2	.3791270	135.1813	1.067437	22.91610	.6056408	.0740013
#3	.3776631	134.8342	1.054745	22.73381	.6050382	.0730781

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.528488**	**.4203268**	**.4604314**	**14.18764**	**.2097353**	**.3994239**
Stddev	.019152	.0009129	.0021741	.02536	.0013600	.0009889
%RSD	.2543909	.2171780	.4721933	.1787503	.6484498	.2475897
#1	7.547358	.4197498	.4588920	14.21454	.2092288	.4004593
#2	7.509067	.4213793	.4629185	14.16417	.2112759	.3993233
#3	7.529038	.4198515	.4594837	14.18422	.2087012	.3984891

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2177-04A Acquired: 6/10/2025 22:00:50 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.6838111	3.341634	F 22.53252	7.214818	F 56.76235	.3085723
Stddev	.0015734	.015532	.05416	.008745	.06335	.0019830
%RSD	.2300871	.4647992	.2403720	.1212101	.1115988	.6426242
#1	.6844993	3.344606	22.51261	7.206246	56.78560	.3103916
#2	.6820109	3.355464	22.49114	7.214482	56.69067	.3088667
#3	.6849231	3.324830	22.59383	7.223726	56.81079	.3064586

Elem	Sr4077
Units	ppm
Avg	.1205582
Stddev	.0011796
%RSD	.9784629
#1	.1216121
#2	.1207785
#3	.1192839

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3303.259	76316.54	12583.32	2472.902	4369.233
Stddev	16.725	138.81	31.29	7.956	14.611
%RSD	.5063146	.1818849	.2486898	.3217435	.3344156
#1	3286.507	76197.86	12574.01	2476.333	4354.659
#2	3303.315	76469.17	12557.73	2478.567	4369.157
#3	3319.956	76282.58	12618.20	2463.805	4383.882

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCV08 Acquired: 6/10/2025 22:04:46 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV08 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.240537**	**5.011398**	**5.127015**	**5.284295**	**5.197287**	**10.14407**	**10.10315**
Stddev	.018107	.024961	.010222	.012818	.020402	.00566	.03864
%RSD	.3455158	.4980782	.1993765	.2425730	.3925423	.0558340	.3824355
#1	5.244038	5.015249	5.121147	5.281755	5.207531	10.14822	10.12436
#2	5.220935	5.034210	5.121079	5.272936	5.173793	10.13762	10.12654
#3	5.256637	4.984736	5.138818	5.298193	5.210536	10.14638	10.05855

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2622357**	**2.552500**	**25.35049**	**1.045718**	**2.558223**	**1.282322**	**5.137718**
Stddev	.0004686	.005794	.08463	.003028	.005092	.003225	.017507
%RSD	.1786986	.2269827	.3338547	.2895428	.1990487	.2514946	.3407641
#1	.2619597	2.547954	25.25286	1.045980	2.553866	1.283312	5.130556
#2	.2619705	2.550522	25.40298	1.042567	2.556981	1.278718	5.157671
#3	.2627767	2.559023	25.39564	1.048606	2.563821	1.284936	5.124928

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.538138**	**25.27506**	**2.564645**	**1.278770**	**23.37885**	**2.580751**	**2.552830**
Stddev	.009088	.07813	.006572	.001365	.08812	.008683	.006666
%RSD	.3580609	.3091184	.2562388	.1067461	.3769151	.3364686	.2611301
#1	2.529061	25.19130	2.560327	1.279581	23.47424	2.572518	2.556597
#2	2.547237	25.34596	2.561400	1.277194	23.36181	2.579912	2.545133
#3	2.538115	25.28793	2.572208	1.279535	23.30049	2.589824	2.556760

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.48868**	**5.122410**	**5.202241**	**5.162531**	**5.158428**	**5.153717**	**5.286738**
Stddev	.02398	.016951	.011178	.012076	.003770	.010701	.004231
%RSD	.1021080	.3309104	.2148773	.2339187	.0730751	.2076376	.0800250
#1	23.51637	5.107558	5.206659	5.148790	5.155422	5.141970	5.282959
#2	23.47457	5.118797	5.189528	5.167347	5.162657	5.156272	5.285947
#3	23.47509	5.140876	5.210535	5.171456	5.157206	5.162909	5.291309

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCV08 Acquired: 6/10/2025 22:04:46 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV08 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**5.028347**	**4.649817**	**5.155620**
Stddev	.017743	.004659	.026581
%RSD	.3528664	.1001978	.5155694
#1	5.012730	4.652293	5.142200
#2	5.024671	4.652715	5.186235
#3	5.047640	4.644442	5.138424

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3186.739**	**74896.98**	**11729.34**	**2386.977**	**4260.025**
Stddev	13.323	41.85	32.16	9.863	11.093
%RSD	.4180766	.0558745	.2741630	.4132062	.2604064
#1	3173.128	74890.71	11764.85	2387.415	4249.123
#2	3199.754	74941.61	11720.97	2396.613	4271.301
#3	3187.336	74858.62	11702.19	2376.902	4259.651

Sample Name: CCB08 Acquired: 6/10/2025 22:08:57 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB08 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001578**	**-.000416**	**.0004715**	**-.002326**	**.0001084**	**.0030933**	**-.003058**
Stddev	.001003	.001388	.0015387	.001984	.0009765	.0042984	.000370
%RSD	63.57632	333.4311	326.3520	85.31091	900.8008	138.9600	12.09424
#1	-.001295	-.002017	-.000013	-.001197	-.000780	.0044448	-.003091
#2	-.002693	.000452	.002194	-.004617	-.000048	-.001718	-.002672
#3	-.000747	.000316	-.000766	-.001164	.001154	.006554	-.003410

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000018**	**.0000933**	**.0056975**	**.0004191**	**.0000699**	**.0002237**	**.0004406**
Stddev	.000022	.0000394	.0034957	.0003093	.0002440	.0001544	.0013308
%RSD	126.9938	42.18527	61.35475	73.79536	349.0729	69.02423	302.0795
#1	-.000014	.0000668	.0074418	.0000767	.0000611	.0003756	.0006931
#2	-.000042	.0001385	.0079777	.0006781	.0003182	.0000669	.0016270
#3	.000003	.0000746	.0016729	.0005026	-.000170	.0002285	-.000998

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002601**	**.0129006**	**-.000336**	**.0001218**	**-.126501**	**-.001035**	**.0000655**
Stddev	.0001009	.0163599	.000205	.0002653	.001552	.000874	.0002624
%RSD	38.80050	126.8152	60.91633	217.7895	1.226643	84.39527	400.6947
#1	.0002384	-.005822	-.000396	-.000025	-.124878	-.000682	-.000055
#2	.0001717	.020083	-.000108	-.000037	-.126653	-.000393	-.000115
#3	.0003700	.024441	-.000505	.000428	-.127970	-.002030	.000366

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.038861**	**.0058439**	**.0007969**	**-.000079**	**.0006052**	**.0111998**	**-.000791**
Stddev	.006460	.0002071	.0004177	.000569	.0006095	.0041615	.000163
%RSD	16.62374	3.544043	52.42109	717.3383	100.7141	37.15709	20.59588
#1	-.043964	.0058576	.0012584	.000349	-.000064	.0153824	-.000941
#2	-.041023	.0056303	.0004446	-.000725	.000752	.0070598	-.000814
#3	-.031598	.0060439	.0006876	.000138	.001128	.0111571	-.000617

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCB08 Acquired: 6/10/2025 22:08:57 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB08 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0001603	-.002884	.0001829
Stddev	.0007330	.000498	.0000053
%RSD	457.3617	17.25979	2.900198
#1	-.000166	-.002615	.0001887
#2	-.000353	-.003459	.0001783
#3	.001000	-.002579	.0001818

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3401.013	79658.86	12839.38	2548.249	4839.209
Stddev	35.323	229.13	52.49	9.963	31.852
%RSD	1.038588	.2876440	.4088524	.3909635	.6582018
#1	3383.613	79512.56	12898.46	2537.244	4825.748
#2	3441.660	79922.93	12798.10	2556.655	4875.582
#3	3377.767	79541.09	12821.58	2550.847	4816.298

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2177-06 Acquired: 6/10/2025 22:13:18 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0519098**	**-.056057**	**.5732727**	**-.060711**	**.0030899**	**129.3033**
Stddev	.0017405	.002393	.0018139	.002404	.0048631	.5336
%RSD	3.352997	4.268544	.3164073	3.958994	157.3863	.4126711
#1	.0533467	-.055420	.5726333	-.061069	-.002493	128.8330
#2	.0524082	-.058704	.5753197	-.062916	.005356	129.8831
#3	.0499744	-.054048	.5718652	-.058149	.006407	129.1937

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.419276**	**.0080083**	**.0159757**	**88.83881**	**.2656799**	**.1673796**
Stddev	.010201	.0000561	.0000558	.19385	.0011607	.0002465
%RSD	.7187630	.7004179	.3490197	.2182078	.4368704	.1472419
#1	1.415211	.0080405	.0159137	89.05304	.2669276	.1671815
#2	1.430884	.0080409	.0160216	88.78791	.2654796	.1676556
#3	1.411735	.0079436	.0159919	88.67549	.2646323	.1673016

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2200435**	**320.5866**	**5.589455**	**83.83975**	**.3216755**	**.0021804**
Stddev	.0011960	.8304	.014219	.16927	.0010356	.0005251
%RSD	.5435084	.2590404	.2543979	.2019019	.3219257	24.08217
#1	.2192981	320.9703	5.601470	84.02011	.3209811	.0024019
#2	.2194095	319.6337	5.593138	83.68432	.3211796	.0015809
#3	.2214230	321.1559	5.573756	83.81483	.3228657	.0025585

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.698138**	**.4226988**	**1.469570**	**132.1694**	**-.112345**	**.0027900**
Stddev	.033234	.0019230	.001775	.4594	.006101	.0000825
%RSD	.8986684	.4549265	.1208022	.3475603	5.430880	2.956402
#1	3.678647	.4238001	1.467552	131.6847	-.108033	.0027046
#2	3.736512	.4238180	1.470891	132.5983	-.119326	.0027962
#3	3.679256	.4204784	1.470266	132.2254	-.109677	.0028692

Sample Name: Q2177-06 Acquired: 6/10/2025 22:13:18 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0832616	17.56020	F 18.21485	8.681763	7.333183	.6083836
Stddev	.0008886	.06647	.03664	.005422	.023120	.0042912
%RSD	1.067248	.3785304	.2011646	.0624503	.3152734	.7053384
#1	.0838204	17.54594	18.19107	8.687764	7.306546	.6061828
#2	.0822369	17.63265	18.19645	8.677219	7.344968	.6133287
#3	.0837275	17.50202	18.25705	8.680305	7.348036	.6056394

Elem	Sr4077
Units	ppm
Avg	-.038249
Stddev	.002510
%RSD	6.562951
#1	-.039287
#2	-.035387
#3	-.040075

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3321.539	78489.03	14017.23	2449.731	3861.182
Stddev	10.057	124.43	36.95	10.724	6.568
%RSD	.3027947	.1585287	.2636314	.4377816	.1701054
#1	3317.515	78625.65	14016.49	2462.091	3857.961
#2	3332.986	78459.24	13980.65	2444.219	3868.738
#3	3314.117	78382.20	14054.55	2442.885	3856.845

Sample Name: PB168359BL Acquired: 6/10/2025 22:17:21 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0008924**	**-.001820**	**-.000099**	**-.003310**	**.0018634**	**.0108733**	**-.003855**
Stddev	.0008884	.002604	.000610	.005458	.0003325	.0004407	.000937
%RSD	99.55812	143.0986	617.1156	164.9136	17.84635	4.053013	24.30704
#1	.0007018	-.001789	-.000803	-.000607	.0016393	.0113407	-.004649
#2	.0018606	.000769	.000262	-.009592	.0017055	.0108139	-.004094
#3	.0001147	-.004439	.000244	.000269	.0022455	.0104654	-.002821

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000145**	**.0000444**	**.0079132**	**.0002327**	**.0000837**	**-.000058**	**.0167088**
Stddev	.0000452	.0000642	.0044929	.0002025	.0002023	.000257	.0044092
%RSD	310.8906	144.5776	56.77809	87.03249	241.6368	444.8174	26.38863
#1	-.000011	.0000103	.0075808	.0001134	.0003172	-.000172	.0216255
#2	-.000012	.0000044	.0035956	.0004666	-.000030	.000236	.0153955
#3	.000067	.0001184	.0125630	.0001182	-.000036	-.000238	.0131055

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003685**	**-.003341**	**-.000100**	**.0003003**	**-.123786**	**-.000648**	**.0000070**
Stddev	.0000669	.007718	.000197	.0002613	.009289	.001182	.0001829
%RSD	18.16336	231.0361	196.6755	87.03161	7.503953	182.4342	2625.468
#1	.0003790	.003001	-.000283	.0001461	-.119848	-.001441	.0000454
#2	.0004296	-.011934	.000109	.0006020	-.134395	-.001213	-.000192
#3	.0002969	-.001089	-.000126	.0001528	-.117115	.000711	.000168

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.019599**	**.0013595**	**.0000363**	**-.000554**	**.0014060**	**.0022986**	**-.003175**
Stddev	.022322	.0005954	.0000437	.000649	.0002767	.0030929	.000938
%RSD	113.8963	43.79791	120.4276	117.2230	19.67844	134.5565	29.54787
#1	-.013808	.0016457	.0000028	-.000905	.0012490	-.000764	-.002495
#2	-.000743	.0017578	.0000858	-.000951	.0017254	.005421	-.002784
#3	-.044246	.0006750	.0000204	.000195	.0012435	.002238	-.004245

Sample Name: PB168359BL Acquired: 6/10/2025 22:17:21 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0034867	-.001439	-.000005
Stddev	.0019162	.001954	.000039
%RSD	54.95731	135.7646	759.0362
#1	.0028506	-.000465	-.000037
#2	.0019694	-.003689	-.000016
#3	.0056400	-.000164	.000038

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3385.465	79011.77	12925.56	2501.031	4815.763
Stddev	18.309	123.29	16.24	6.558	15.948
%RSD	.5408084	.1560435	.1256483	.2622140	.3311638
#1	3364.504	79151.55	12936.70	2508.366	4797.465
#2	3393.561	78918.48	12933.05	2495.733	4823.115
#3	3398.331	78965.28	12906.92	2498.995	4826.709

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: PB158359BS Acquired: 6/10/2025 22:21:45 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8299903**	**2.083796**	**1.037980**	**2.100959**	**.8370630**	**2.024311**
Stddev	.0051471	.022181	.002262	.014360	.0037598	.010788
%RSD	.6201374	1.064468	.2179615	.6834925	.4491679	.5329018
#1	.8289917	2.089641	1.039260	2.093123	.8338710	2.036227
#2	.8254157	2.059278	1.035368	2.092222	.8361106	2.021496
#3	.8355635	2.102470	1.039313	2.117532	.8412075	2.015210

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1991139**	**.2150747**	**.2094960**	**1.065851**	**.4293483**	**.2116636**
Stddev	.0008442	.0008594	.0012335	.008149	.0014878	.0011609
%RSD	.4239563	.3995758	.5887987	.7645827	.3465232	.5484632
#1	.2000846	.2140989	.2102394	1.056881	.4301197	.2120085
#2	.1987054	.2157187	.2080721	1.067871	.4302920	.2103693
#3	.1985517	.2154066	.2101765	1.072799	.4276333	.2126129

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3252828**	**3.065655**	**.2111882**	**2.034309**	**.5311937**	**.0778391**
Stddev	.0016910	.009029	.0005554	.002998	.0024607	.0004008
%RSD	.5198635	.2945345	.2629823	.1473755	.4632396	.5148913
#1	.3247464	3.059082	.2113744	2.032813	.5311482	.0777088
#2	.3239250	3.061932	.2105637	2.032353	.5287560	.0782888
#3	.3271769	3.075950	.2116266	2.037761	.5336768	.0775196

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.607921**	**.3100902**	**.2161906**	**9.143757**	**.3146479**	**.4271239**
Stddev	.034323	.0022832	.0009225	.041468	.0025499	.0019749
%RSD	1.316119	.7362960	.4267117	.4535114	.8104092	.4623619
#1	2.647048	.3095349	.2171405	9.191621	.3118207	.4261064
#2	2.593825	.3081358	.2161329	9.118647	.3167737	.4258654
#3	2.582890	.3125998	.2152982	9.121004	.3153493	.4294001

Sample Name: PB158359BS Acquired: 6/10/2025 22:21:45 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.7261526	.2035003	.8814184	6.042652	F -.000345	.1724666
Stddev	.0047411	.0007508	.0073438	.030146	.001232	.0009558
%RSD	.6529105	.3689279	.8331811	.4988796	357.1186	.5542122
#1	.7286676	.2038604	.8898371	6.051011	.001056	.1726983
#2	.7206839	.2026374	.8763282	6.009209	-.000828	.1714162
#3	.7291063	.2040032	.8780899	6.067736	-.001263	.1732853

Elem	Sr4077
Units	ppm
Avg	.2066013
Stddev	.0006473
%RSD	.3133008
#1	.2073332
#2	.2063664
#3	.2061042

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3382.712	78985.54	12287.32	2537.630	4702.506
Stddev	33.832	195.07	47.50	20.056	36.017
%RSD	1.000140	.2469683	.3865579	.7903350	.7659129
#1	3416.819	78772.91	12338.21	2516.877	4732.206
#2	3382.156	79027.46	12279.59	2556.907	4712.868
#3	3349.162	79156.24	12244.17	2539.105	4662.444

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2244-04 Acquired: 6/10/2025 22:25:45 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.005083**	**-.007440**	**.0002037**	**.0099676**	**.0030223**	**.0628281**	**.3837712**
Stddev	.001847	.002364	.0007491	.0034603	.0014673	.0025747	.0016052
%RSD	36.33760	31.78031	367.7757	34.71566	48.54775	4.097963	.4182573
#1	-.006402	-.004715	.0001697	.0122338	.0025014	.0636048	.3850155
#2	-.002972	-.008954	-.000528	.0059845	.0046789	.0649250	.3843386
#3	-.005875	-.008650	.000969	.0116844	.0018865	.0599545	.3819593

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000093**	**.0002949**	**64.35020**	**-.000277**	**-.000291**	**.0089678**	**.0041756**
Stddev	.000043	.0000184	.19429	.000035	.000045	.0000602	.0022426
%RSD	45.70546	6.230762	.3019318	12.53444	15.43425	.6714699	53.70717
#1	-.000046	.0002791	64.24771	-.000245	-.000293	.0089432	.0067077
#2	-.000129	.0002904	64.57428	-.000273	-.000336	.0089239	.0024397
#3	-.000106	.0003151	64.22861	-.000314	-.000246	.0090365	.0033795

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4347265**	**6.529763**	**.0025814**	**-.000262**	**334.7008**	**-.000071**	**.0634433**
Stddev	.0015698	.030664	.0002542	.000176	1.2146	.001198	.0005956
%RSD	.3611096	.4696033	9.849346	67.40900	.3629048	1693.457	.9387626
#1	.4338874	6.502100	.0026260	-.000084	335.0408	-.001452	.0627876
#2	.4365376	6.562735	.0023077	-.000264	335.7093	.000547	.0635913
#3	.4337545	6.524453	.0028103	-.000437	333.3524	.000693	.0639508

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5940444**	**.0369850**	**.0003912**	**-.004501**	**-.001297**	**2.024867**	**.0432896**
Stddev	.0072512	.0002643	.0000458	.000793	.000298	.010931	.0014982
%RSD	1.220657	.7145414	11.71185	17.61548	22.94006	.5398551	3.460964
#1	.5934141	.0370642	.0003949	-.005370	-.001476	2.032939	.0421926
#2	.5871289	.0372006	.0004350	-.004315	-.000954	2.029235	.0426795
#3	.6015902	.0366902	.0003436	-.003817	-.001462	2.012427	.0449966

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2244-04 Acquired: 6/10/2025 22:25:45 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.4362309	.0129277	.1905313
Stddev	.0030811	.0015404	.0006046
%RSD	.7063009	11.91570	.3173045
#1	.4397033	.0116991	.1910628
#2	.4351655	.0124281	.1906574
#3	.4338238	.0146559	.1898736

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3011.762	70746.16	12463.15	2224.705	3983.921
Stddev	14.686	5.89	11.95	10.680	11.673
%RSD	.4876373	.0083229	.0958814	.4800822	.2929932
#1	3021.533	70752.94	12463.72	2213.026	3989.725
#2	2994.873	70742.36	12450.92	2227.113	3970.484
#3	3018.881	70743.18	12474.80	2233.977	3991.554

Sample Name: Q2260-04 Acquired: 6/10/2025 22:30:11 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.003171**	**-.006263**	**.0039647**	**.0106699**	**.0011919**	**.1065749**	**.1740326**
Stddev	.001777	.002459	.0016995	.0052238	.0008872	.0005489	.0011212
%RSD	56.04247	39.26201	42.86537	48.95848	74.43749	.5150047	.6442425
#1	-.001149	-.009083	.0059021	.0047017	.0007792	.1062328	.1752427
#2	-.003880	-.004572	.0027257	.0144114	.0022103	.1062840	.1730291
#3	-.004483	-.005133	.0032663	.0128965	.0005862	.1072080	.1738259

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000756**	**.0001134**	**9.968257**	**-.000577**	**.0031486**	**.0037039**	**.0233603**
Stddev	.0000404	.0000770	.028994	.000462	.0003309	.0001116	.0021307
%RSD	53.42495	67.90822	.2908629	80.00129	10.50813	3.011913	9.121012
#1	.0000668	.0001244	9.970195	-.000357	.0027741	.0038250	.0257919
#2	.0001197	.0000314	9.996234	-.000267	.0034013	.0036813	.0218197
#3	.0000404	.0001842	9.938343	-.001108	.0032705	.0036054	.0224693

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3151431**	**2.010561**	**.0022901**	**-.000168**	**283.1955**	**-.001930**	**.0522963**
Stddev	.0004940	.012240	.0001774	.000266	1.2501	.000731	.0004060
%RSD	.1567666	.6087775	7.746399	158.0215	.4414394	37.89875	.7763475
#1	.3153116	2.018967	.0024949	.000018	284.6211	-.001099	.0518297
#2	.3155308	2.016196	.0021870	-.000050	282.2864	-.002475	.0525684
#3	.3145868	1.996518	.0021883	-.000472	282.6790	-.002217	.0524910

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.517131**	**.0391032**	**.0001902**	**-.002164**	**-.000209**	**1.092960**	**.0102389**
Stddev	.007387	.0005837	.0001767	.000332	.000581	.018234	.0018769
%RSD	.4868826	1.492697	92.87360	15.32737	278.3506	1.668348	18.33135
#1	1.518367	.0392087	.0003937	-.001872	.000353	1.112687	.0121010
#2	1.509205	.0396270	.0001022	-.002525	-.000807	1.076723	.0102684
#3	1.523822	.0384740	.0000748	-.002095	-.000172	1.089469	.0083475

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2260-04 Acquired: 6/10/2025 22:30:11 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.7253401	.0014479	.0676020
Stddev	.0027831	.0010807	.0004587
%RSD	.3836987	74.63655	.6785640
#1	.7225016	.0023147	.0681184
#2	.7254544	.0017918	.0672419
#3	.7280643	.0002371	.0674457

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3073.343	71835.12	12532.57	2315.592	4081.066
Stddev	7.248	174.44	52.76	7.498	4.207
%RSD	.2358291	.2428363	.4209922	.3237966	.1030926
#1	3066.368	71766.84	12481.69	2323.247	4077.745
#2	3072.826	72033.37	12529.00	2315.266	4079.656
#3	3080.836	71705.14	12587.03	2308.263	4085.797

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2262-02 Acquired: 6/10/2025 22:34:38 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.003266**	**-.007093**	**-.000252**	**.0061163**	**.0020084**	**.0760953**	**.0477726**
Stddev	.000079	.001420	.000829	.0022069	.0014277	.0011831	.0001173
%RSD	2.408063	20.01277	328.3423	36.08241	71.08938	1.554707	.2455479
#1	-.003234	-.005459	.000316	.0085698	.0024850	.0769686	.0477424
#2	-.003208	-.008020	.000130	.0042931	.0004033	.0747489	.0479020
#3	-.003355	-.007801	-.001203	.0054860	.0031368	.0765684	.0476733

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000227**	**.0000990**	**167.3188**	**-.000279**	**-.000720**	**.0007443**	**.0092322**
Stddev	.000055	.0000717	.5181	.000334	.000316	.0003139	.0017063
%RSD	24.16171	72.49699	.3096400	119.7342	43.94459	42.17321	18.48225
#1	-.000227	.0000839	166.7208	-.000371	-.000926	.0007669	.0078390
#2	-.000172	.0000360	167.6319	.000091	-.000877	.0010464	.0087222
#3	-.000282	.0001770	167.6037	-.000558	-.000356	.0004198	.0111354

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0169131**	**1.859057**	**-.000343**	**-.000313**	**350.6479**	**.0020767**	**.0212459**
Stddev	.0001089	.016251	.000090	.000252	1.0396	.0010738	.0001682
%RSD	.6441153	.8741579	26.14383	80.60108	.2964696	51.70687	.7917097
#1	.0168028	1.850627	-.000266	-.000601	351.8479	.0030177	.0210530
#2	.0170206	1.877791	-.000322	-.000204	350.0731	.0009069	.0213229
#3	.0169160	1.848752	-.000441	-.000134	350.0227	.0023056	.0213618

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8324084**	**.0241995**	**.0115360**	**-.004114**	**-.003910**	**4.546841**	**.0006908**
Stddev	.0220702	.0003014	.0001900	.001059	.000700	.012035	.0035346
%RSD	2.651366	1.245358	1.646551	25.74476	17.89613	.2646849	511.6662
#1	.8230637	.0243000	.0115952	-.003697	-.004313	4.554489	.0046926
#2	.8576137	.0238607	.0113235	-.003326	-.004315	4.553066	-.000616
#3	.8165478	.0244378	.0116892	-.005318	-.003102	4.532969	-.002005

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2262-02 Acquired: 6/10/2025 22:34:38 Type: Unk
Method: 6010-200.7 NEW(v2) 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	6.825706	.0319499	.8678957
Stddev	.032512	.0016751	.0002846
%RSD	.4763156	5.242825	.0327895
#1	6.798679	.0326435	.8677756
#2	6.816656	.0300394	.8676908
#3	6.861785	.0331668	.8682206

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2913.656	68907.72	12177.33	2146.534	3875.587
Stddev	16.474	89.53	27.23	7.978	13.608
%RSD	.5654060	.1299307	.2236064	.3716639	.3511296
#1	2894.652	68975.02	12198.70	2141.876	3859.906
#2	2922.442	68942.03	12186.62	2155.746	3882.552
#3	2923.875	68806.11	12146.67	2141.980	3884.303

Sample Name: Q2262-04 Acquired: 6/10/2025 22:39:03 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.005887**	**-.006585**	**.0015215**	**.0078294**	**.0044509**	**.4036386**	**.0387561**
Stddev	.000278	.000349	.0005319	.0021742	.0013053	.0011923	.0002660
%RSD	4.729911	5.306752	34.95955	27.76937	29.32701	.2953966	.6862776
#1	-.005716	-.006708	.0021357	.0058273	.0054645	.4042698	.0385615
#2	-.006208	-.006856	.0012055	.0101422	.0049101	.4043826	.0390592
#3	-.005736	-.006191	.0012234	.0075188	.0029780	.4022633	.0386476

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000192**	**-.000015**	**205.1079**	**.0258313**	**-.000661**	**.0008185**	**.0033976**
Stddev	.000056	.000088	.9233	.0005879	.000181	.0003705	.0019891
%RSD	29.36275	570.4163	.4501574	2.275812	27.40516	45.26231	58.54358
#1	-.000256	-.000097	205.9964	.0265030	-.000456	.0003909	.0016564
#2	-.000150	.000078	205.1741	.0254106	-.000800	.0010223	.0029711
#3	-.000170	-.000027	204.1533	.0255802	-.000727	.0010424	.0055654

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001596**	**.0533462**	**-.001107**	**-.000137**	**362.9640**	**.0007377**	**.0039720**
Stddev	.0001702	.0133481	.000366	.000514	2.0300	.0008276	.0001673
%RSD	106.6835	25.02159	33.03839	374.4553	.5592851	112.1787	4.211274
#1	.0003551	.0657279	-.001528	.000407	364.5007	.0012545	.0037844
#2	.0000449	.0392061	-.000925	-.000616	360.6628	.0011755	.0041056
#3	.0000786	.0551047	-.000867	-.000203	363.7287	-.000217	.0040261

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7335323**	**.0043851**	**.0039011**	**-.005958**	**-.005506**	**1.750369**	**.0041394**
Stddev	.0224092	.0011307	.0002569	.002093	.000788	.010170	.0027827
%RSD	3.054967	25.78545	6.584985	35.13079	14.31392	.5810250	67.22416
#1	.7571801	.0032466	.0036052	-.008156	-.005536	1.762103	.0071536
#2	.7308055	.0055078	.0040316	-.005729	-.006279	1.744905	.0016684
#3	.7126113	.0044009	.0040666	-.003989	-.004703	1.744099	.0035962

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2262-04 Acquired: 6/10/2025 22:39:03 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**12.56584**	**.0463851**	**1.162960**
Stddev	.03150	.0012209	.010924
%RSD	.2506447	2.632126	.9393580
#1	12.53437	.0465478	1.157525
#2	12.59737	.0450910	1.175535
#3	12.56578	.0475166	1.155818

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2896.945**	**68512.10**	**11538.64**	**2146.481**	**3838.706**
Stddev	12.650	221.55	44.37	8.027	12.756
%RSD	.4366555	.3233755	.3845014	.3739445	.3322999
#1	2890.594	68311.69	11574.57	2148.711	3830.658
#2	2911.512	68750.01	11489.05	2153.156	3853.414
#3	2888.729	68474.60	11552.30	2137.575	3832.046

Sample Name: Q2265-04 Acquired: 6/10/2025 22:43:38 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.004538**	**-.006944**	**.0000246**	**.0048600**	**.0019308**	**.5084696**	**.1631733**
Stddev	.004098	.000984	.0018007	.0053013	.0002527	.0017554	.0011279
%RSD	90.29962	14.16409	7319.387	109.0791	13.08923	.3452336	.6912087
#1	-.000383	-.005815	-.000510	-.001258	.0020754	.5094624	.1632205
#2	-.008576	-.007615	.002032	.007733	.0020781	.5064427	.1620226
#3	-.004656	-.007403	-.001448	.008105	.0016390	.5095036	.1642769

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001509**	**.0001426**	**3.634482**	**-.000646**	**.0091008**	**.0073378**	**-.002968**
Stddev	.0000260	.0000169	.023111	.000473	.0001303	.0001386	.003901
%RSD	17.25439	11.88264	.6358808	73.32169	1.431849	1.888138	131.4290
#1	.0001647	.0001247	3.608091	-.000950	.0091279	.0072578	.001395
#2	.0001209	.0001446	3.651104	-.000100	.0089590	.0072578	-.006120
#3	.0001671	.0001584	3.644251	-.000887	.0092154	.0074978	-.004179

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1989352**	**2.929812**	**.0038854**	**-.000296**	**345.7902**	**-.000389**	**.0377757**
Stddev	.0009695	.033963	.0003423	.000399	2.9292	.000865	.0005706
%RSD	.4873555	1.159212	8.810394	134.6941	.8471041	222.1866	1.510543
#1	.1983089	2.891265	.0035213	-.000471	349.1608	.000578	.0383083
#2	.1984447	2.942834	.0039342	-.000578	344.3495	-.001088	.0371734
#3	.2000519	2.955337	.0042007	.000160	343.8604	-.000659	.0378455

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.899751**	**.0133046**	**.0003392**	**-.002079**	**-.000310**	**.3308462**	**.0068499**
Stddev	.034808	.0007249	.0000996	.001203	.000346	.0097263	.0026228
%RSD	1.832247	5.448555	29.35517	57.88568	111.4344	2.939841	38.29021
#1	1.909415	.0135265	.0003599	-.002807	.000057	.3399582	.0044206
#2	1.861132	.0138927	.0002309	-.002738	-.000358	.3206042	.0096308
#3	1.928705	.0124947	.0004268	-.000690	-.000629	.3319762	.0064982

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2265-04 Acquired: 6/10/2025 22:43:38 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.9108935	.0005879	.0348524
Stddev	.0019979	.0001141	.0002458
%RSD	.2193328	19.41083	.7053071
#1	.9108180	.0005606	.0349358
#2	.9089344	.0004899	.0345757
#3	.9129280	.0007132	.0350457

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3139.258	75394.47	13272.53	2363.140	4045.547
Stddev	11.904	135.35	18.99	10.028	10.277
%RSD	.3792081	.1795159	.1431100	.4243456	.2540213
#1	3130.250	75238.23	13293.16	2352.120	4040.734
#2	3134.771	75475.53	13255.76	2371.729	4038.560
#3	3152.754	75469.66	13268.68	2365.571	4057.347

Sample Name: Q2266-04 Acquired: 6/10/2025 22:48:05 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.003753**	**-.008841**	**-.001030**	**.0074024**	**.0052936**	**.0685664**	**.4701929**
Stddev	.001187	.001379	.000954	.0063229	.0010880	.0052962	.0010151
%RSD	31.63840	15.60264	92.67296	85.41754	20.55213	7.724144	.2158838
#1	-.003208	-.007467	-.001980	.0034701	.0052158	.0644520	.4690772
#2	-.005116	-.010226	-.001037	.0146961	.0042467	.0667053	.4710619
#3	-.002936	-.008830	-.000072	.0040411	.0064184	.0745419	.4704395

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000239**	**.0004773**	**152.6529**	**-.000300**	**.0015992**	**.0008582**	**.0052625**
Stddev	.000059	.0001410	.7905	.000238	.0001633	.0001285	.0028319
%RSD	24.70509	29.54270	.5178712	79.35478	10.21018	14.97247	53.81269
#1	-.000300	.0005519	152.1279	-.000547	.0014207	.0007686	.0079756
#2	-.000234	.0005652	152.2686	-.000279	.0017409	.0008005	.0054868
#3	-.000182	.0003146	153.5621	-.000073	.0016361	.0010054	.0023252

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.999970**	**5.284313**	**.0035680**	**-.000332**	**332.6606**	**-.000901**	**.0199310**
Stddev	.008199	.041740	.0001675	.000345	2.7439	.000342	.0002444
%RSD	.4099725	.7898813	4.692983	103.9145	.8248378	37.94918	1.226141
#1	1.993860	5.263059	.0035244	-.000217	335.2799	-.001205	.0202077
#2	1.996762	5.257478	.0037529	-.000059	332.8950	-.000967	.0198408
#3	2.009289	5.332402	.0034267	-.000720	329.8071	-.000531	.0197446

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.201975**	**.0079472**	**.0006226**	**-.005559**	**-.004347**	**.8824025**	**.0051739**
Stddev	.013522	.0011649	.0001567	.000593	.000484	.0083883	.0039860
%RSD	1.124959	14.65843	25.17074	10.66762	11.13991	.9506174	77.04081
#1	1.186675	.0086411	.0008032	-.005217	-.004677	.8785302	.0097762
#2	1.206926	.0085981	.0005229	-.005216	-.003791	.8766499	.0028175
#3	1.212323	.0066023	.0005416	-.006244	-.004574	.8920274	.0029281

Sample Name: Q2266-04 Acquired: 6/10/2025 22:48:05 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.3771577	.0241075	.3525900
Stddev	.0017498	.0010000	.0006049
%RSD	.4639303	4.148011	.1715620
#1	.3751795	.0230197	.3520577
#2	.3785026	.0249867	.3524645
#3	.3777911	.0243161	.3532478

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2898.795	70104.95	12635.84	2165.747	3842.422
Stddev	10.415	184.90	25.20	14.642	9.089
%RSD	.3593013	.2637490	.1994229	.6760772	.2365474
#1	2905.766	70308.33	12658.96	2182.628	3850.703
#2	2903.796	70059.52	12639.58	2156.487	3843.866
#3	2886.822	69947.00	12608.98	2158.127	3832.698

Sample Name: Q2266-08 Acquired: 6/10/2025 22:52:31 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.004121**	**-.007795**	**-.000918**	**.0072972**	**.0030736**	**.0362776**	**.6456660**
Stddev	.001991	.002309	.000292	.0042543	.0003406	.0048675	.0015763
%RSD	48.31111	29.61928	31.76443	58.30109	11.08223	13.41733	.2441416
#1	-.002046	-.010169	-.001209	.0065349	.0031063	.0306672	.6462531
#2	-.004303	-.005557	-.000626	.0034755	.0033967	.0387910	.6468646
#3	-.006015	-.007660	-.000920	.0118811	.0027178	.0393745	.6438804

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000116**	**.0003984**	**93.52982**	**-.000620**	**-.000724**	**.0046250**	**-.003491**
Stddev	.000030	.0001207	.35130	.000163	.000197	.0001893	.002146
%RSD	26.03182	30.29920	.3755991	26.27576	27.12613	4.092667	61.48484
#1	-.000118	.0002619	93.76692	-.000690	-.000945	.0048336	-.005956
#2	-.000145	.0004423	93.12623	-.000736	-.000567	.0044642	-.002482
#3	-.000085	.0004910	93.69631	-.000434	-.000661	.0045771	-.002035

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5385921**	**4.514762**	**.0024393**	**-.000228**	**305.0654**	**-.000078**	**.0507947**
Stddev	.0031320	.002065	.0003439	.000147	1.0335	.000294	.0005021
%RSD	.5815073	.0457373	14.10004	64.19475	.3387731	376.5658	.9885207
#1	.5377745	4.517084	.0027023	-.000393	303.9506	-.000414	.0510357
#2	.5359500	4.513131	.0025656	-.000112	305.9915	.000134	.0502175
#3	.5420517	4.514073	.0020501	-.000180	305.2541	.000046	.0511309

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7439031**	**.0203070**	**.0005369**	**-.004597**	**-.002358**	**.9879144**	**.0101756**
Stddev	.0124783	.0006975	.0001740	.000341	.000453	.0081159	.0025427
%RSD	1.677414	3.434649	32.40928	7.420441	19.20659	.8215184	24.98837
#1	.7575482	.0195075	.0004649	-.004227	-.002857	.9965172	.0096970
#2	.7410887	.0206228	.0007354	-.004665	-.001974	.9868319	.0079061
#3	.7330723	.0207907	.0004105	-.004899	-.002242	.9803940	.0129235

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2266-08 Acquired: 6/10/2025 22:52:31 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.5947901	.0168362	.1989254
Stddev	.0050280	.0010702	.0001441
%RSD	.8453441	6.356540	.0724356
#1	.5971687	.0179397	.1989227
#2	.5890141	.0167662	.1990708
#3	.5981875	.0158027	.1987826

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2927.141	70250.70	11649.28	2154.729	3889.265
Stddev	16.983	96.85	20.09	2.151	16.784
%RSD	.5801783	.1378695	.1724172	.0998363	.4315452
#1	2907.536	70169.31	11650.99	2157.196	3870.150
#2	2937.322	70357.82	11668.46	2153.247	3901.590
#3	2936.566	70224.96	11628.40	2153.744	3896.055

Sample Name: CCV09 Acquired: 6/10/2025 22:56:57 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV09 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.148159**	**5.016020**	**5.095745**	**5.180048**	**5.112658**	**10.02796**	**10.09460**
Stddev	.010629	.039382	.017267	.010443	.013013	.04012	.06946
%RSD	.2064599	.7851178	.3388596	.2015995	.2545256	.4001175	.6881076
#1	5.149256	5.039441	5.109090	5.170687	5.106316	10.07142	10.17463
#2	5.137024	5.038066	5.076243	5.178145	5.104032	10.02012	10.05003
#3	5.158197	4.970553	5.101902	5.191311	5.127626	9.99233	10.05913

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2595403**	**2.550694**	**25.14963**	**1.052858**	**2.553651**	**1.272124**	**5.160974**
Stddev	.0036161	.011590	.29576	.009201	.011147	.003073	.037231
%RSD	1.393253	.4543725	1.176004	.8739472	.4365309	.2415499	.7214026
#1	.2575420	2.560476	24.90403	1.046470	2.558980	1.272299	5.119458
#2	.2573644	2.537894	25.06691	1.048698	2.540839	1.268968	5.172060
#3	.2637145	2.553711	25.47794	1.063404	2.561133	1.275106	5.191403

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.511793**	**24.98986**	**2.558815**	**1.287610**	**23.88248**	**2.541202**	**2.584900**
Stddev	.016568	.32690	.010790	.004926	.26340	.013524	.009843
%RSD	.6596106	1.308150	.4216842	.3825628	1.102902	.5321748	.3807758
#1	2.499542	24.75708	2.566207	1.283006	24.13983	2.530955	2.573572
#2	2.505192	24.84891	2.546433	1.287021	23.89421	2.536120	2.591358
#3	2.530644	25.36360	2.563805	1.292804	23.61342	2.556530	2.589771

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.08297**	**5.079018**	**5.132244**	**5.094969**	**5.064920**	**5.263115**	**5.139406**
Stddev	.18763	.046389	.007760	.020981	.007766	.017901	.006937
%RSD	.7790913	.9133475	.1512042	.4118053	.1533237	.3401194	.1349743
#1	24.23150	5.047972	5.132205	5.117402	5.061039	5.243005	5.146366
#2	24.14530	5.056737	5.124503	5.075828	5.059859	5.277309	5.132493
#3	23.87211	5.132343	5.140024	5.091677	5.073861	5.269030	5.139358

Sample Name: CCV09 Acquired: 6/10/2025 22:56:57 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV09 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.972192**	**4.579793**	**5.104915**
Stddev	.016861	.058225	.014191
%RSD	.3390999	1.271336	.2779873
#1	4.986851	4.645058	5.093336
#2	4.953766	4.561138	5.120746
#3	4.975958	4.533182	5.100664

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3228.197**	**74082.82**	**12063.77**	**2402.067**	**4311.404**
Stddev	12.362	425.69	19.82	39.268	13.024
%RSD	.3829377	.5746148	.1642675	1.634778	.3020941
#1	3241.149	73843.55	12040.89	2379.525	4319.199
#2	3226.918	73830.61	12074.75	2379.267	4318.646
#3	3216.524	74574.31	12075.67	2447.410	4296.368

Sample Name: CCB09 Acquired: 6/10/2025 23:01:08 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB09 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002345**	**.0001874**	**-.000906**	**-.001450**	**.0028818**	**.0028806**	**-.004466**
Stddev	.0011512	.0003943	.000419	.001516	.0002577	.0002349	.000700
%RSD	491.0425	210.4685	46.23033	104.5927	8.941168	8.156527	15.67902
#1	.0014379	.0004763	-.001011	.000294	.0026122	.0026286	-.003694
#2	-.000856	.0003476	-.000444	-.002188	.0029076	.0030937	-.005060
#3	.000122	-.000262	-.001262	-.002455	.0031255	.0029194	-.004644

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000047**	**.0001471**	**.0060089**	**.0004178**	**.0001554**	**.0002825**	**.0026539**
Stddev	.0000226	.0000652	.0024427	.0000860	.0000242	.0001961	.0008097
%RSD	479.7271	44.35546	40.65141	20.57645	15.56572	69.43326	30.50866
#1	-.000021	.0002064	.0032239	.0004561	.0001828	.0002462	.0031708
#2	.000013	.0001577	.0070146	.0003193	.0001372	.0004941	.0030701
#3	.000022	.0000772	.0077882	.0004779	.0001461	.0001070	.0017208

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000478**	**.0142066**	**-.000162**	**.0003385**	**.0559397**	**-.001092**	**.0001150**
Stddev	.0003026	.0160655	.000308	.0004668	.0063747	.001289	.0000759
%RSD	632.8472	113.0848	189.9894	137.9120	11.39562	118.0417	65.97719
#1	.0001243	.0098858	-.000497	.0007355	.0613560	-.001747	.0000308
#2	.0003049	.0319907	-.000097	-.000176	.0489148	-.001921	.0001361
#3	-.000286	.0007434	.000108	.000456	.0575483	.000393	.0001781

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0773171**	**.0050212**	**.0008927**	**.0005077**	**.0007185**	**.0136886**	**-.001946**
Stddev	.0191076	.0004912	.0002687	.0008859	.0001144	.0022167	.002502
%RSD	24.71326	9.783303	30.09754	174.4964	15.92769	16.19393	128.6098
#1	.0902870	.0049888	.0006066	.0004225	.0005900	.0157545	.000608
#2	.0553746	.0045470	.0011397	-.000333	.0008096	.0113469	-.002052
#3	.0862896	.0055279	.0009317	.001433	.0007559	.0139645	-.004393

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCB09 Acquired: 6/10/2025 23:01:08 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB09 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.000891	.0017795	.0002526
Stddev	.001234	.0018314	.0000165
%RSD	138.3776	102.9197	6.520322
#1	-.000564	.0036123	.0002716
#2	-.002256	.0017768	.0002432
#3	.000145	-.000051	.0002429

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3401.843	77370.45	13127.94	2490.065	4860.069
Stddev	5.315	224.30	19.21	21.203	8.990
%RSD	.1562335	.2898986	.1463218	.8514911	.1849859
#1	3407.837	77263.11	13108.66	2471.534	4870.420
#2	3397.706	77220.01	13128.09	2485.474	4855.584
#3	3399.984	77628.25	13147.08	2513.187	4854.204

Sample Name: Q2266-08DUP Acquired: 6/10/2025 23:05:28 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.004920**	**-.008042**	**.0003162**	**.0065743**	**.0040989**	**.0542691**	**.7347866**
Stddev	.001567	.000451	.0003200	.0033299	.0004126	.0039922	.0004142
%RSD	31.83974	5.603301	101.2222	50.64936	10.06664	7.356272	.0563750
#1	-.005477	-.007688	.0002166	.0046825	.0044506	.0549402	.7347666
#2	-.006132	-.008549	.0000578	.0104192	.0042015	.0499840	.7343828
#3	-.003151	-.007888	.0006742	.0046214	.0036447	.0578833	.7352106

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000058**	**.0004365**	**104.8484**	**-.000347**	**-.000890**	**.0049308**	**.0012926**
Stddev	.000021	.0001130	.2171	.000051	.000219	.0002286	.0019717
%RSD	35.89987	25.88736	.2070996	14.79624	24.63231	4.635597	152.5381
#1	-.000052	.0004360	105.0875	-.000398	-.000637	.0048797	.0026501
#2	-.000082	.0003237	104.6635	-.000295	-.001024	.0051806	.0021967
#3	-.000041	.0005497	104.7941	-.000348	-.001009	.0047321	-.000969

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5954274**	**4.975271**	**.0023787**	**-.000088**	**367.1423**	**-.000637**	**.0564623**
Stddev	.0019222	.022497	.0001433	.000300	.7052	.001202	.0002645
%RSD	.3228241	.4521701	6.024795	340.5706	.1920874	188.6054	.4684561
#1	.5972785	5.001202	.0023206	-.000287	366.7193	-.001836	.0566188
#2	.5934412	4.960960	.0025420	.000257	366.7511	-.000644	.0566111
#3	.5955624	4.963653	.0022736	-.000235	367.9564	.000568	.0561569

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8741345**	**.0236006**	**.0006518**	**-.004420**	**-.002447**	**1.171037**	**.0122103**
Stddev	.0125870	.0000853	.0000975	.000604	.000402	.005893	.0017742
%RSD	1.439934	.3615087	14.96749	13.65806	16.42172	.5032680	14.53013
#1	.8739957	.0236690	.0007464	-.004104	-.002251	1.177558	.0139053
#2	.8867902	.0235050	.0006575	-.005117	-.002909	1.169461	.0103664
#3	.8616174	.0236278	.0005515	-.004040	-.002181	1.166091	.0123591

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2266-08DUP Acquired: 6/10/2025 23:05:28 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.4081876	.0164480	.2220232
Stddev	.0020204	.0004589	.0003119
%RSD	.4949589	2.789780	.1404820
#1	.4096115	.0165798	.2217920
#2	.4058753	.0168267	.2223779
#3	.4090760	.0159377	.2218996

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2957.026	69583.08	12371.83	2189.837	3878.895
Stddev	17.392	216.22	39.33	13.958	12.740
%RSD	.5881601	.3107391	.3178888	.6373873	.3284427
#1	2937.917	69832.53	12365.66	2205.923	3866.102
#2	2971.931	69449.31	12335.95	2182.658	3891.581
#3	2961.230	69467.39	12413.88	2180.930	3879.003

Sample Name: Q2266-08LX5 Acquired: 6/10/2025 23:09:54 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.001275**	**-.002975**	**.0001878**	**.0000586**	**.0021801**	**.0124565**	**.1308698**
Stddev	.000473	.002005	.0006721	.0047897	.0016390	.0051960	.0009773
%RSD	37.12253	67.40386	357.8113	8176.150	75.18047	41.71266	.7467828
#1	-.000937	-.004453	-.000117	.0033812	.0005951	.0184146	.1315231
#2	-.001071	-.000692	-.000278	-.005432	.0020769	.0088660	.1297463
#3	-.001816	-.003780	.000958	.002226	.0038683	.0100890	.1313400

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000014**	**.0000507**	**19.38404**	**-.000055**	**.0001288**	**.0012842**	**.0008919**
Stddev	.000032	.0000752	.06549	.000096	.0000695	.0001625	.0015419
%RSD	235.8603	148.2583	.3378557	176.0607	53.97946	12.65401	172.8802
#1	.000017	.0000065	19.39038	.000055	.0002027	.0011908	.0024364
#2	-.000012	.0000082	19.31561	-.000126	.0000647	.0014719	.0008868
#3	-.000047	.0001376	19.44613	-.000092	.0001191	.0011899	-.000647

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1131371**	**.9328019**	**.0005218**	**.0001891**	**64.60323**	**.0001182**	**.0100246**
Stddev	.0010409	.0100540	.0004269	.0001090	.29789	.0003982	.0003118
%RSD	.9200097	1.077825	81.82195	57.66658	.4611122	336.8896	3.110500
#1	.1136636	.9301450	.0009173	.0000652	64.94009	.0005622	.0102114
#2	.1119381	.9243433	.0000692	.0002317	64.37449	-.000207	.0101979
#3	.1138095	.9439175	.0005789	.0002703	64.49513	-.000000	.0096647

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2094453**	**.0054126**	**.0002257**	**-.001175**	**-.000500**	**.2080184**	**-.001126**
Stddev	.0164086	.0000899	.0002727	.000252	.000928	.0018056	.001038
%RSD	7.834332	1.661550	120.8361	21.41437	185.8314	.8679937	92.14905
#1	.2061076	.0053286	.0004384	-.001253	.000566	.2065924	.000025
#2	.1949622	.0055075	-.000082	-.000894	-.000936	.2100486	-.001415
#3	.2272663	.0054016	.000320	-.001379	-.001129	.2074141	-.001989

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2266-08LX5 Acquired: 6/10/2025 23:09:54 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.1184407	.0041171	.0408148
Stddev	.0018129	.0011966	.0002032
%RSD	1.530640	29.06334	.4977825
#1	.1182349	.0032244	.0406636
#2	.1167396	.0054767	.0407351
#3	.1203478	.0036502	.0410457

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3235.018	74219.84	12715.42	2373.820	4412.840
Stddev	9.957	164.56	29.77	6.256	14.359
%RSD	.3078033	.2217183	.2341179	.2635557	.3253918
#1	3229.327	74030.17	12733.47	2366.646	4403.912
#2	3246.516	74324.59	12731.73	2376.670	4429.403
#3	3229.211	74304.76	12681.06	2378.144	4405.204

Sample Name: Q2266-08MS Acquired: 6/10/2025 23:14:12 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8432028**	**1.787185**	**.9555013**	**2.075910**	**.8382669**	**2.010681**	**.7572452**
Stddev	.0019024	.020657	.0072621	.006219	.0043097	.009572	.0034281
%RSD	.2256173	1.155828	.7600335	.2995874	.5141180	.4760493	.4527086
#1	.8418386	1.764459	.9473501	2.081245	.8387581	2.000343	.7555496
#2	.8453760	1.792274	.9612819	2.077406	.8423098	2.019236	.7611907
#3	.8423938	1.804822	.9578720	2.069079	.8337326	2.012465	.7549954

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1925182**	**.2032376**	**81.02402**	**.4103421**	**.2037725**	**.3003722**	**3.148468**
Stddev	.0009962	.0012985	.49972	.0007555	.0007952	.0008716	.028476
%RSD	.5174597	.6388944	.6167513	.1841132	.3902297	.2901697	.9044411
#1	.1914171	.2017692	80.96026	.4110676	.2029866	.3008224	3.145855
#2	.1933571	.2042344	81.55256	.4103990	.2045766	.3009265	3.178160
#3	.1927803	.2037092	80.55925	.4095598	.2037542	.2993675	3.121388

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6557349**	**5.704724**	**.5087895**	**.0768631**	**272.9362**	**.3037786**	**.2558893**
Stddev	.0035576	.021981	.0019107	.0004090	2.4185	.0039977	.0005139
%RSD	.5425314	.3853068	.3755414	.5320617	.8860931	1.315983	.2008244
#1	.6555348	5.709236	.5066735	.0773352	274.2244	.3041107	.2561689
#2	.6593883	5.724098	.5103886	.0766321	274.4379	.3075999	.2552962
#3	.6522816	5.680837	.5093064	.0766218	270.1463	.2996252	.2562028

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.20591**	**.2770691**	**.4345441**	**.6943430**	**.1977861**	**1.810060**	**6.350173**
Stddev	.05224	.0018506	.0012944	.0023912	.0018948	.016708	.032834
%RSD	.4661810	.6679388	.2978879	.3443848	.9579962	.9230591	.5170583
#1	11.22272	.2761642	.4338248	.6915818	.1982065	1.818974	6.314101
#2	11.24768	.2791981	.4360385	.6957225	.1994354	1.820420	6.358103
#3	11.14734	.2758451	.4337690	.6957246	.1957164	1.790785	6.378317

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2266-08MS Acquired: 6/10/2025 23:14:12 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.3300856	.1855784	.3693323
Stddev	.0020736	.0009610	.0022539
%RSD	.6282077	.5178307	.6102552
#1	.3299003	.1856973	.3687953
#2	.3281109	.1845634	.3718062
#3	.3322457	.1864743	.3673955

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3048.991	72086.20	12291.73	2235.888	4048.863
Stddev	27.533	58.61	47.48	10.361	25.243
%RSD	.9030291	.0813058	.3863059	.4633791	.6234620
#1	3021.767	72021.62	12332.64	2224.233	4025.646
#2	3048.384	72100.97	12239.66	2244.055	4045.210
#3	3076.823	72136.01	12302.90	2239.375	4075.734

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2266-08MSD Acquired: 6/10/2025 23:18:22 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8674576**	**1.843720**	**.9757849**	**2.164088**	**.8672280**	**2.068697**	**.8300073**
Stddev	.0043974	.007657	.0061030	.006148	.0041422	.007097	.0032170
%RSD	.5069340	.4153053	.6254461	.2841147	.4776325	.3430861	.3875879
#1	.8625487	1.851517	.9728140	2.158540	.8688788	2.068711	.8318726
#2	.8687874	1.836211	.9828046	2.163025	.8625150	2.075788	.8262926
#3	.8710367	1.843431	.9717363	2.170699	.8702902	2.061593	.8318566

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2119186**	**.2085407**	**93.30164**	**.4187159**	**.2095411**	**.3081503**	**3.051037**
Stddev	.0003620	.0010646	.51028	.0012075	.0006965	.0004394	.014750
%RSD	.1708384	.5104859	.5469192	.2883745	.3323843	.1425847	.4834533
#1	.2122489	.2075142	92.91099	.4174566	.2087779	.3076460	3.036030
#2	.2119755	.2096396	93.87898	.4198638	.2097032	.3083540	3.051564
#3	.2115316	.2084684	93.11496	.4188274	.2101422	.3084508	3.065517

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7262445**	**6.426938**	**.5230099**	**.0797460**	**297.6717**	**.3101537**	**.2688510**
Stddev	.0032074	.042884	.0024306	.0002727	1.5180	.0008432	.0009900
%RSD	.4416362	.6672542	.4647413	.3419476	.5099596	.2718567	.3682264
#1	.7227579	6.400117	.5203943	.0796150	297.2605	.3107179	.2698848
#2	.7290695	6.476397	.5251992	.0795636	296.4016	.3091844	.2679116
#3	.7269060	6.404300	.5234363	.0800595	299.3529	.3105587	.2687566

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.16485**	**.3069800**	**.4454854**	**.7170469**	**.2006454**	**1.894117**	**6.632595**
Stddev	.03688	.0010460	.0020245	.0023781	.0006825	.003643	.007341
%RSD	.3303648	.3407295	.4544492	.3316443	.3401694	.1923318	.1106806
#1	11.14602	.3076760	.4445784	.7154481	.2009886	1.895647	6.629080
#2	11.14118	.3074867	.4440731	.7197797	.1998594	1.896745	6.627673
#3	11.20735	.3057771	.4478048	.7159130	.2010882	1.889958	6.641033

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2266-08MSD Acquired: 6/10/2025 23:18:22 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.3529646	.1926825	.3963073
Stddev	.0052710	.0009269	.0007318
%RSD	1.493353	.4810451	.1846597
#1	.3470110	.1932728	.3966821
#2	.3570364	.1916142	.3954640
#3	.3548466	.1931604	.3967758

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2992.692	70117.63	11421.48	2216.563	3951.066
Stddev	26.919	265.25	14.28	14.591	20.498
%RSD	.8994983	.3782899	.1250621	.6582911	.5188020
#1	2983.729	70235.28	11437.85	2227.354	3944.123
#2	3022.949	70303.71	11415.06	2222.372	3974.134
#3	2971.397	69813.91	11411.54	2199.961	3934.941

Sample Name: Q2266-08A Acquired: 6/10/2025 23:32:26 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8412049**	**1.767474**	**.9415645**	**2.112529**	**.8341695**	**1.973335**	**.8627571**
Stddev	.0038491	.017270	.0022374	.004086	.0012839	.002199	.0027406
%RSD	.4575737	.9770732	.2376298	.1934154	.1539184	.1114598	.3176619
#1	.8413987	1.769644	.9431599	2.109184	.8327515	1.973854	.8636360
#2	.8372626	1.749222	.9425267	2.111319	.8345037	1.975230	.8596848
#3	.8449535	1.783556	.9390070	2.117083	.8352533	1.970923	.8649505

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1873682**	**.2005786**	**94.70116**	**.3973642**	**.2010716**	**.2973016**	**3.099658**
Stddev	.0009149	.0008714	.26117	.0007887	.0009173	.0011290	.024068
%RSD	.4883004	.4344527	.2757864	.1984856	.4561875	.3797428	.7764623
#1	.1870115	.2003697	94.91816	.3964592	.2003675	.2963267	3.126884
#2	.1866853	.1998307	94.41129	.3979050	.2007384	.2970397	3.081218
#3	.1884077	.2015355	94.77404	.3977284	.2021089	.2985386	3.090870

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7359017**	**6.264761**	**.5024265**	**.0746222**	**332.7187**	**.2953603**	**.2610967**
Stddev	.0012331	.007726	.0009196	.0004963	1.4504	.0005665	.0009800
%RSD	.1675599	.1233323	.1830283	.6651162	.4359257	.1918074	.3753482
#1	.7369480	6.268660	.5015971	.0751173	334.3906	.2960089	.2621989
#2	.7345422	6.255862	.5022670	.0741247	331.9683	.2949625	.2603236
#3	.7362147	6.269762	.5034154	.0746247	331.7973	.2951094	.2607675

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.49756**	**.2747095**	**.4275000**	**.6883038**	**.1922468**	**1.988614**	**6.305097**
Stddev	.01176	.0015526	.0019276	.0014762	.0006923	.011197	.033165
%RSD	.1022838	.5651745	.4508986	.2144709	.3600926	.5630449	.5259983
#1	11.48522	.2749329	.4273506	.6879902	.1924230	1.983525	6.293979
#2	11.50864	.2730573	.4256515	.6870096	.1914835	2.001451	6.278919
#3	11.49881	.2761383	.4294980	.6899116	.1928340	1.980865	6.342392

Sample Name: Q2266-08A Acquired: 6/10/2025 23:32:26 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.5872887	.1876488	.3980841
Stddev	.0024213	.0015676	.0009920
%RSD	.4122886	.8353799	.2491826
#1	.5847289	.1891186	.3987652
#2	.5895425	.1878290	.3969460
#3	.5875948	.1859990	.3985410

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2938.691	70093.93	12233.55	2195.086	3881.467
Stddev	3.470	148.49	31.27	19.442	5.398
%RSD	.1180954	.2118505	.2556429	.8857271	.1390619
#1	2935.044	69935.67	12212.28	2173.353	3875.595
#2	2941.953	70115.91	12269.46	2201.077	3886.214
#3	2939.075	70230.21	12218.91	2210.828	3882.591

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: PB168333TB Acquired: 6/10/2025 23:36:34 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.003655**	**-.007061**	**-.001560**	**.0084103**	**.0032774**	**.0040004**	**-.006791**
Stddev	.002294	.000485	.001796	.0019159	.0023499	.0010940	.000499
%RSD	62.76266	6.866431	115.1685	22.78016	71.70017	27.34741	7.352129
#1	-.001042	-.007030	-.000967	.0068799	.0006344	.0031147	-.007368
#2	-.005335	-.007561	-.003577	.0077920	.0051309	.0052233	-.006504
#3	-.004588	-.006592	-.000135	.0105590	.0040668	.0036633	-.006502

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000209**	**-.000011**	**-.012125**	**-.000091**	**-.000476**	**-.000245**	**-.001981**
Stddev	.000043	.000070	.004533	.000113	.000070	.000425	.002218
%RSD	20.55176	657.6942	37.38684	124.1586	14.68652	173.5443	111.9278
#1	-.000234	.000062	-.006937	.000039	-.000551	.000245	-.004440
#2	-.000159	-.000077	-.014114	-.000149	-.000463	-.000464	-.001372
#3	-.000233	-.000017	-.015324	-.000162	-.000413	-.000515	-.000132

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012331**	**-.023966**	**-.000025**	**.0000767**	**432.1471**	**-.000221**	**.0007195**
Stddev	.0002747	.011381	.000080	.0001815	3.3395	.002203	.0001672
%RSD	22.28163	47.48748	314.6988	236.6962	.7727784	995.6228	23.23566
#1	.0012087	-.014774	-.000039	.0002460	433.0499	.001817	.0007272
#2	.0009713	-.036696	-.000098	.0000990	434.9425	-.002559	.0005486
#3	.0015192	-.020430	.000060	-.000115	428.4490	.000078	.0008827

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0429528**	**.0002232**	**.0004372**	**-.001473**	**.0002586**	**.0083909**	**.0003921**
Stddev	.0184270	.0003442	.0000598	.000480	.0001611	.0004392	.0016198
%RSD	42.90050	154.2496	13.67054	32.57153	62.30415	5.234138	413.0967
#1	.0259363	.0001718	.0004374	-.001189	.0001079	.0088746	.0007934
#2	.0403983	.0005902	.0004968	-.002027	.0004285	.0082811	-.001391
#3	.0625237	-.000092	.0003773	-.001203	.0002395	.0080170	.001774

Sample Name: PB168333TB Acquired: 6/10/2025 23:36:34 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0348814	-.001491	-.000007
Stddev	.0013983	.002034	.000018
%RSD	4.008583	136.3841	249.5353
#1	.0362220	-.003701	-.000022
#2	.0349904	-.001074	-.000013
#3	.0334318	.000301	.000013

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2941.198	69165.98	12157.44	2201.212	3935.979
Stddev	14.483	426.48	39.19	16.597	13.129
%RSD	.4924336	.6166036	.3223146	.7539974	.3335653
#1	2924.531	68950.57	12120.91	2203.878	3920.983
#2	2950.727	68890.17	12198.83	2183.444	3945.408
#3	2948.335	69657.20	12152.59	2216.316	3941.545

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: PB168384BL Acquired: 6/10/2025 23:41:02 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0025412**	**-.000284**	**.0004750**	**-.001000**	**.0025927**	**.0034645**	**-.003580**
Stddev	.0014199	.000221	.0006796	.005053	.0011021	.0014221	.000594
%RSD	55.87623	77.98446	143.0782	505.0658	42.50766	41.04802	16.60343
#1	.0009035	-.000398	-.000108	-.000329	.0025509	.0043299	-.004260
#2	.0034278	-.000029	.001221	-.006355	.0015121	.0042404	-.003322
#3	.0032922	-.000425	.000312	.003683	.0037150	.0018232	-.003159

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000004**	**-.000056**	**.0053183**	**.0001483**	**-.000009**	**.0001531**	**.0013317**
Stddev	.000104	.000074	.0066017	.0002428	.000164	.0002237	.0032874
%RSD	2921.630	132.6946	124.1316	163.7447	1818.749	146.1466	246.8621
#1	-.000065	.000030	-.001307	.0004285	-.000175	-.000078	.0020374
#2	-.000063	-.000098	.005366	-.000001	-.000006	.000168	.0042088
#3	.000117	-.000098	.011896	.000017	.000154	.000369	-.002251

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000210**	**.0050551**	**-.000030**	**.0000161**	**.2225301**	**.0003363**	**.0000557**
Stddev	.000254	.0221029	.000119	.0001351	.0172435	.0011344	.0001299
%RSD	120.7336	437.2363	400.1809	837.9038	7.748832	337.3792	232.9927
#1	-.000461	.0161967	.000105	-.000031	.2334672	-.000725	.0002029
#2	.000046	.0193699	-.000072	-.000089	.2314707	.001532	.0000070
#3	-.000214	-.020401	-.000123	.000169	.2026524	.000202	-.000043

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1361609**	**.0002533**	**-.000202**	**-.000174**	**.0003981**	**.0070450**	**-.003341**
Stddev	.0200243	.0003601	.000110	.000139	.0006944	.0075402	.001439
%RSD	14.70636	142.2072	54.18266	79.69028	174.4348	107.0284	43.08500
#1	.1547092	.0002844	-.000324	-.000249	-.000270	.0150503	-.003458
#2	.1388426	.0005968	-.000171	-.000259	.001116	.0060074	-.004718
#3	.1149308	-.000121	-.000112	-.000014	.000349	.0000774	-.001847

Sample Name: PB168384BL Acquired: 6/10/2025 23:41:02 Type: Unk
Method: 6010-200.7 NEW(v2) 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	-.001461	.0023545	.0000597
Stddev	.002066	.0011676	.0000314
%RSD	141.4005	49.58842	52.62228
#1	-.003744	.0012457	.0000339
#2	-.000921	.0022449	.0000506
#3	.000281	.0035731	.0000947

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3387.403	78423.15	12225.42	2585.993	4785.104
Stddev	45.257	505.88	38.50	35.679	42.352
%RSD	1.336025	.6450598	.3149367	1.379718	.8850869
#1	3439.603	77998.76	12252.29	2567.449	4833.726
#2	3363.419	78287.72	12242.65	2563.404	4765.332
#3	3359.186	78982.95	12181.31	2627.126	4756.253

Sample Name: PB168384BS Acquired: 6/10/2025 23:45:21 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8425827**	**2.114279**	**1.050578**	**2.122722**	**.8533171**	**2.055997**
Stddev	.0019402	.027405	.003333	.014954	.0056727	.005676
%RSD	.2302690	1.296169	.3172140	.7044850	.6647787	.2760731
#1	.8422438	2.089097	1.048389	2.107349	.8506171	2.056918
#2	.8408344	2.110273	1.048931	2.123598	.8494989	2.061157
#3	.8446701	2.143466	1.054413	2.137219	.8598355	2.049917

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2066418**	**.2112840**	**.2116137**	**1.092845**	**.4358019**	**.2143104**
Stddev	.0003249	.0012253	.0003387	.010479	.0019249	.0009119
%RSD	.1572263	.5799154	.1600617	.9588917	.4416930	.4255190
#1	.2067269	.2098956	.2115681	1.084329	.4336084	.2137502
#2	.2062828	.2122139	.2113002	1.104547	.4365878	.2138182
#3	.2069157	.2117425	.2119729	1.089658	.4372095	.2153626

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3308457**	**3.241641**	**.2167681**	**2.067743**	**.5369973**	**.0797589**
Stddev	.0017235	.014654	.0003921	.028186	.0021497	.0003812
%RSD	.5209449	.4520526	.1808613	1.363120	.4003226	.4779504
#1	.3291989	3.252690	.2166108	2.046909	.5351187	.0794570
#2	.3307014	3.225018	.2164792	2.056507	.5365315	.0801872
#3	.3326369	3.247216	.2172144	2.099814	.5393418	.0796324

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.915397**	**.3183028**	**.2195933**	**9.668506**	**.3094474**	**.4353063**
Stddev	.002863	.0019284	.0010528	.017930	.0008691	.0021502
%RSD	.0982114	.6058273	.4794121	.1854446	.2808625	.4939422
#1	2.913486	.3190011	.2206367	9.688700	.3084446	.4341497
#2	2.914017	.3197848	.2185315	9.654454	.3099156	.4339819
#3	2.918689	.3161226	.2196118	9.662365	.3099820	.4377872

Sample Name: PB168384BS Acquired: 6/10/2025 23:45:21 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.7343429**	**.2087427**	**.9312154**	**6.161314**	F **-.000371**	**.1799124**
Stddev	.0019230	.0004668	.0060408	.024111	.001023	.0021568
%RSD	.2618692	.2236496	.6487032	.3913284	275.4079	1.198830
#1	.7327175	.2085362	.9266164	6.142378	-.000047	.1782809
#2	.7338456	.2084148	.9380568	6.153107	-.001517	.1823578
#3	.7364658	.2092772	.9289732	6.188457	.000450	.1790986

Elem	Sr4077
Units	ppm
Avg	**.2120453**
Stddev	.0002736
%RSD	.1290246
#1	.2117299
#2	.2121869
#3	.2122190

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3348.031**	**78309.38**	**12642.67**	**2528.432**	**4680.237**
Stddev	26.537	36.64	31.62	8.199	30.337
%RSD	.7926049	.0467902	.2501230	.3242739	.6481916
#1	3373.161	78278.21	12676.84	2524.309	4710.856
#2	3350.650	78300.19	12614.44	2523.113	4679.664
#3	3320.282	78349.74	12636.73	2537.874	4650.190

Sample Name: Q2253-01 Acquired: 6/10/2025 23:49:22 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.003418**	**-.003849**	**.0040920**	**.0010978**	**.0010043**	**.0586086**	**-.000599**
Stddev	.001424	.002244	.0002773	.0008582	.0013585	.0021749	.000592
%RSD	41.66840	58.28448	6.776852	78.17335	135.2722	3.710932	98.86052
#1	-.004465	-.006440	.0042595	.0019478	.0000518	.0571093	-.000663
#2	-.001796	-.002532	.0037720	.0011139	.0025600	.0576135	-.001156
#3	-.003991	-.002576	.0042447	.0002317	.0004011	.0611031	.000023

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000134**	**.0000590**	**4.512896**	**.0018390**	**.0056241**	**.0186564**	**2.764498**
Stddev	.000005	.0000788	.029198	.0000930	.0002802	.0003342	.020051
%RSD	3.412052	133.5318	.6469811	5.058465	4.982024	1.791314	.7253109
#1	-.000138	-.000026	4.502843	.0019137	.0056704	.0182866	2.768613
#2	-.000134	.000129	4.490053	.0018686	.0053236	.0189368	2.742709
#3	-.000129	.000074	4.545792	.0017348	.0058783	.0187459	2.782173

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0402454**	**1.526208**	**.0422629**	**-.000057**	**12.48075**	**.0008404**	**.0692546**
Stddev	.0004688	.008604	.0002045	.000284	.09564	.0001814	.0002290
%RSD	1.164977	.5637695	.4838874	495.1988	.7663136	21.57955	.3307108
#1	.0407867	1.525295	.0420372	.000263	12.58569	.0009119	.0691922
#2	.0399861	1.518097	.0423158	-.000155	12.45809	.0006342	.0690633
#3	.0399636	1.535233	.0424358	-.000280	12.39848	.0009751	.0695084

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9816555**	**.0156247**	**.0000850**	**-.002006**	**.0000822**	**6.040904**	**.0040614**
Stddev	.0094279	.0009226	.0001154	.000800	.0001995	.015220	.0012340
%RSD	.9604133	5.904951	135.8038	39.89105	242.7864	.2519423	30.38351
#1	.9845673	.0153603	.0000727	-.002310	-.000035	6.052849	.0031120
#2	.9711151	.0148632	.0002059	-.001098	.000313	6.023768	.0054562
#3	.9892840	.0166507	-.000024	-.002609	-.000031	6.046095	.0036159

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2253-01 Acquired: 6/10/2025 23:49:22 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**4.196538**	**.0004327**	**.0265842**
Stddev	.026249	.0008840	.0002279
%RSD	.6254906	204.2818	.8573990
#1	4.176226	.0003042	.0268429
#2	4.187211	-.000380	.0264131
#3	4.226177	.001374	.0264966

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3373.143**	**78878.90**	**12354.89**	**2533.052**	**4822.711**
Stddev	18.422	46.03	55.40	2.945	16.706
%RSD	.5461493	.0583568	.4484192	.1162484	.3464022
#1	3361.171	78843.37	12338.77	2535.903	4810.990
#2	3363.900	78930.90	12416.57	2530.021	4815.304
#3	3394.357	78862.43	12309.34	2533.231	4841.840

Sample Name: Q2253-02 Acquired: 6/10/2025 23:53:39 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.003234**	**-.004871**	**.0000650**	**.0046578**	**.0016461**	**.0124231**	**-.000182**
Stddev	.001774	.001203	.0008967	.0034529	.0016991	.0025874	.000706
%RSD	54.85570	24.69686	1379.151	74.13075	103.2206	20.82765	388.2725
#1	-.002024	-.004953	.0003941	.0046972	.0025620	.0106681	-.000229
#2	-.005270	-.003628	-.000950	.0080909	.0026907	.0153946	-.000863
#3	-.002407	-.006030	.000751	.0011855	-.000314	.0112067	.000547

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000166**	**.0000443**	**4.464882**	**.0001227**	**.0031698**	**.0051016**	**.1029638**
Stddev	.000009	.0000540	.006263	.0001463	.0000458	.0003066	.0017985
%RSD	5.717151	121.9703	.1402815	119.2275	1.444481	6.008872	1.746698
#1	-.000161	.0001043	4.471813	.0002673	.0032206	.0053924	.1043846
#2	-.000159	-.000000	4.459626	-.000025	.0031318	.0047814	.1009417
#3	-.000177	.000029	4.463209	.000126	.0031570	.0051309	.1035652

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0354642**	**1.847514**	**.0030736**	**.0000487**	**13.02710**	**.0001784**	**.0231457**
Stddev	.0003784	.013220	.0003288	.0002492	.05102	.0011066	.0001652
%RSD	1.066842	.7155615	10.69870	511.2498	.3916611	620.2017	.7135942
#1	.0357460	1.855404	.0033555	-.000226	12.97035	.0008550	.0233120
#2	.0356124	1.854886	.0027123	.000260	13.04179	.0007788	.0231434
#3	.0350342	1.832251	.0031530	.000113	13.06917	-.001099	.0229817

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.045113**	**.0259135**	**-.000038**	**-.002688**	**.0002343**	**6.184037**	**.1187763**
Stddev	.018377	.0004170	.000109	.000747	.0003301	.014492	.0012302
%RSD	.6035065	1.609183	286.4322	27.77299	140.9125	.2343381	1.035721
#1	3.024032	.0261171	-.000135	-.003108	.0006145	6.171675	.1195950
#2	3.057758	.0254338	-.000059	-.001826	.0000212	6.199985	.1173616
#3	3.053549	.0261895	.000080	-.003131	.0000671	6.180452	.1193722

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2253-02 Acquired: 6/10/2025 23:53:39 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.2821488	.0003803	.0327771
Stddev	.0025869	.0018805	.0000802
%RSD	.9168521	494.5053	.2446410
#1	.2835413	-.000261	.0328510
#2	.2791640	.002498	.0327884
#3	.2837412	-.001095	.0326918

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3271.174	79412.99	12656.73	2437.740	4667.124
Stddev	15.428	195.24	12.65	19.150	11.322
%RSD	.4716498	.2458582	.0999351	.7855532	.2425936
#1	3257.982	79638.16	12642.13	2459.834	4656.238
#2	3288.139	79290.74	12663.94	2425.905	4678.837
#3	3267.400	79310.07	12664.13	2427.482	4666.297

Sample Name: CCV10 Acquired: 6/10/2025 23:57:56 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV10 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.182336**	**4.936883**	**5.098590**	**5.227795**	**5.170265**	**10.16577**	**10.00030**
Stddev	.052837	.067251	.026561	.047072	.043575	.03597	.06559
%RSD	1.019556	1.362212	.5209479	.9004218	.8427931	.3537914	.6558712
#1	5.229779	5.009367	5.128800	5.268082	5.203897	10.17764	10.07518
#2	5.191835	4.924768	5.088069	5.239251	5.185860	10.12537	9.97270
#3	5.125394	4.876512	5.078901	5.176052	5.121039	10.19430	9.95303

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2641477**	**2.540863**	**25.44425**	**1.058153**	**2.552372**	**1.278220**	**5.195082**
Stddev	.0013517	.013467	.24894	.002491	.014605	.009710	.041238
%RSD	.5117251	.5300273	.9783737	.2354309	.5721981	.7596292	.7937982
#1	.2651469	2.556042	25.30751	1.060153	2.568688	1.286167	5.163279
#2	.2626096	2.536197	25.29365	1.055363	2.547909	1.281096	5.180292
#3	.2646864	2.530349	25.73159	1.058945	2.540521	1.267397	5.241676

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.529039**	**25.38664**	**2.556096**	**1.306809**	**23.60452**	**2.569688**	**2.630460**
Stddev	.012823	.23080	.013597	.003708	.23129	.012837	.000976
%RSD	.5070349	.9091370	.5319426	.2837209	.9798560	.4995448	.0371066
#1	2.532777	25.25880	2.571276	1.310982	23.84537	2.562670	2.631557
#2	2.514762	25.24805	2.551978	1.303892	23.58404	2.561890	2.630132
#3	2.539578	25.65307	2.545034	1.305554	23.38415	2.584503	2.629690

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.99001**	**5.165945**	**5.158740**	**5.093773**	**5.126313**	**5.253971**	**5.135543**
Stddev	.12182	.020013	.043397	.028665	.022541	.043947	.043800
%RSD	.5078147	.3874003	.8412300	.5627369	.4397150	.8364503	.8528835
#1	24.11623	5.179303	5.193515	5.123541	5.145374	5.229355	5.184357
#2	23.98070	5.142936	5.172600	5.091421	5.101433	5.227849	5.122594
#3	23.87311	5.175598	5.110107	5.066357	5.132133	5.304709	5.099676

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCV10 Acquired: 6/10/2025 23:57:56 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV10 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.967444**	**4.571700**	**5.120920**
Stddev	.032883	.052592	.010150
%RSD	.6619790	1.150380	.1982034
#1	5.005128	4.630683	5.125644
#2	4.952632	4.554726	5.109269
#3	4.944571	4.529691	5.127847

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3183.904**	**72900.32**	**11778.29**	**2339.902**	**4264.315**
Stddev	23.220	164.56	41.28	2.119	19.919
%RSD	.7292999	.2257396	.3504463	.0905702	.4671097
#1	3170.152	72714.43	11750.32	2338.376	4245.783
#2	3170.847	73027.41	11825.69	2342.322	4261.784
#3	3210.714	72959.12	11758.84	2339.009	4285.379

Sample Name: CCB10 Acquired: 6/11/2025 0:02:08 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB10 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000001**	**-.000883**	**-.000329**	**.0011227**	**.0015872**	**.0011259**	**-.003134**
Stddev	.000626	.001694	.001062	.0023009	.0005174	.0012125	.000783
%RSD	112143.1	191.8622	323.2684	204.9424	32.60009	107.6916	24.97784
#1	-.000146	-.001784	.000887	.0007649	.0010200	.0023436	-.002607
#2	-.000541	.001071	-.000798	.0035816	.0020335	.0011156	-.002762
#3	.000685	-.001937	-.001075	-.000978	.0017082	-.000081	-.004033

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000399**	**.0001301**	**.0059861**	**.0000767**	**.0002398**	**.0001582**	**.0017232**
Stddev	.0000485	.0000673	.0105049	.0003531	.0000863	.0003791	.0018880
%RSD	121.7104	51.74842	175.4874	460.3414	35.98240	239.6480	109.5622
#1	.0000370	.0002074	.0112271	.0003068	.0002886	.0004577	-.000450
#2	-.000007	.0000844	.0128394	-.000330	.0001401	.0002848	.002961
#3	.000090	.0000984	-.006108	.000253	.0002905	-.000268	.002659

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001506**	**-.002204**	**-.000074**	**.0002554**	**-.010869**	**.0002887**	**.0002576**
Stddev	.0003873	.008297	.000191	.0001140	.015378	.0004150	.0003185
%RSD	257.2153	376.4070	256.4427	44.63408	141.4926	143.7602	123.6398
#1	-.000226	-.009990	-.000293	.0001255	-.025774	.0007082	.0000492
#2	.000129	.006524	.000012	.0003387	-.011774	-.000122	.0006241
#3	.000548	-.003147	.000058	.0003019	.004943	.000279	.0000994

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0446418**	**.0054108**	**.0007663**	**-.000016**	**.0002251**	**.0112052**	**-.003176**
Stddev	.0063819	.0005118	.0002751	.000709	.0005634	.0063262	.000842
%RSD	14.29588	9.458015	35.90284	4510.868	250.2505	56.45773	26.51734
#1	.0412212	.0059591	.0010790	.000760	.0008534	.0124670	-.004013
#2	.0520048	.0053276	.0006583	-.000631	.0000573	.0168054	-.003187
#3	.0406993	.0049458	.0005616	-.000177	-.000235	.0043432	-.002328

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCB10 Acquired: 6/11/2025 0:02:08 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB10 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0000963	.0004347	.0003258
Stddev	.0019541	.0016479	.0000226
%RSD	2028.091	379.0949	6.935871
#1	-.000553	-.001468	.0003096
#2	.002293	.001412	.0003517
#3	-.001450	.001360	.0003162

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3365.949	76578.85	12801.49	2474.388	4764.704
Stddev	21.646	108.37	33.21	10.462	17.212
%RSD	.6430794	.1415180	.2594029	.4228050	.3612373
#1	3390.723	76454.75	12779.65	2462.684	4782.222
#2	3356.432	76654.83	12839.70	2477.645	4764.075
#3	3350.693	76626.98	12785.11	2482.833	4747.815

Sample Name: Q2253-02DUP Acquired: 6/11/2025 0:06:29 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.003257**	**-.003953**	**-.000755**	**.0015004**	**.0014298**	**.0127534**	**.0015737**
Stddev	.002329	.000304	.001754	.0039822	.0014545	.0010703	.0006946
%RSD	71.49558	7.687197	232.4021	265.4105	101.7261	8.392235	44.13963
#1	-.005895	-.003866	.001213	-.003061	.0004230	.0119446	.0020152
#2	-.002387	-.003703	-.001323	.004286	.0030973	.0123486	.0019328
#3	-.001489	-.004291	-.002155	.003276	.0007690	.0139671	.0007730

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000164**	**.0000640**	**4.354346**	**-.000171**	**.0029947**	**.0047232**	**.1113300**
Stddev	.000069	.0000366	.028766	.000141	.0001123	.0002214	.0022547
%RSD	41.86875	57.15414	.6606282	82.21874	3.751394	4.687282	2.025199
#1	-.000172	.0000795	4.387095	-.000311	.0030334	.0046423	.1105991
#2	-.000092	.0000222	4.342779	-.000174	.0030826	.0049737	.1138594
#3	-.000229	.0000902	4.333164	-.000029	.0028681	.0045537	.1095314

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0826448**	**1.789110**	**.0027276**	**.0000610**	**13.16444**	**.0001253**	**.0214577**
Stddev	.0010198	.002814	.0002328	.0001259	.03537	.0012017	.0003166
%RSD	1.233960	.1573014	8.536550	206.4807	.2686446	959.0643	1.475431
#1	.0835281	1.792150	.0029840	.0001811	13.14422	.0015127	.0218230
#2	.0828776	1.786595	.0025294	-.000070	13.20527	-.000588	.0212633
#3	.0815288	1.788584	.0026695	.000072	13.14382	-.000548	.0212868

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.046457**	**.0259896**	**.0001724**	**-.003128**	**-.000340**	**6.095559**	**.1187355**
Stddev	.009531	.0004997	.0001613	.000731	.000180	.016779	.0016361
%RSD	.3128693	1.922551	93.56633	23.36784	52.79811	.2752740	1.377901
#1	3.047603	.0255973	.0000828	-.002507	-.000186	6.114021	.1177071
#2	3.036405	.0258194	.0000758	-.002942	-.000537	6.081236	.1206221
#3	3.055364	.0265521	.0003585	-.003933	-.000298	6.091421	.1178774

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2253-02DUP Acquired: 6/11/2025 0:06:29 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.2813707	-.000585	.0321991
Stddev	.0009005	.001438	.0000078
%RSD	.3200521	245.7241	.0243732
#1	.2803309	-.000628	.0321970
#2	.2818830	.000873	.0322078
#3	.2818982	-.002001	.0321925

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3301.702	78982.00	12856.12	2505.982	4697.031
Stddev	8.680	107.65	15.12	13.334	6.313
%RSD	.2628992	.1362978	.1176270	.5321061	.1343983
#1	3291.955	78867.13	12845.09	2495.925	4689.765
#2	3304.550	79080.58	12849.91	2521.108	4700.155
#3	3308.600	78998.28	12873.36	2500.914	4701.172

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2253-02LX5 Acquired: 6/11/2025 0:10:47 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.001161**	**-.001102**	**-.000479**	**-.002243**	**.0009800**	**.0032992**	**-.001930**
Stddev	.000405	.000950	.001209	.002596	.0005979	.0020162	.000409
%RSD	34.84831	86.17984	252.3842	115.7391	61.01127	61.11106	21.16373
#1	-.001521	-.001981	-.001056	.000335	.0012316	.0050558	-.001741
#2	-.000723	-.001232	.000910	-.004857	.0002974	.0037441	-.001651
#3	-.001240	-.000094	-.001291	-.002206	.0014109	.0010977	-.002399

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000060**	**-.000039**	**.9356967**	**.0003145**	**.0005915**	**.0012400**	**.0220241**
Stddev	.000032	.000071	.0085762	.0000461	.0001405	.0002705	.0022058
%RSD	52.45855	180.9885	.9165592	14.64690	23.75927	21.81427	10.01537
#1	-.000055	-.000081	.9283327	.0003347	.0006656	.0012170	.0222998
#2	-.000032	-.000080	.9451128	.0002617	.0006794	.0009817	.0196934
#3	-.000094	.000043	.9336446	.0003469	.0004294	.0015212	.0240791

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0074552**	**.3853397**	**.0006433**	**.0001195**	**2.440613**	**-.000975**	**.0051874**
Stddev	.0002870	.0175413	.0001551	.0004326	.015703	.000782	.0003328
%RSD	3.849856	4.552162	24.11137	361.9501	.6434182	80.17529	6.414980
#1	.0077492	.3855168	.0007905	.0002130	2.447180	-.001644	.0054314
#2	.0071757	.4027918	.0004813	-.000352	2.422693	-.001165	.0053225
#3	.0074407	.3677106	.0006582	.000498	2.451967	-.000116	.0048084

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5896346**	**.0079524**	**-.000020**	**-.000609**	**-.000005**	**1.222512**	**.0239367**
Stddev	.0110479	.0007193	.000114	.000095	.000621	.011726	.0010188
%RSD	1.873677	9.045627	556.6231	15.54538	13382.00	.9591606	4.256237
#1	.5991629	.0086470	.000091	-.000571	.000708	1.219524	.0231017
#2	.5922164	.0079995	-.000137	-.000540	-.000288	1.212570	.0250718
#3	.5775244	.0072106	-.000015	-.000717	-.000434	1.235443	.0236365

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2253-02LX5 Acquired: 6/11/2025 0:10:47 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0617816	-.000712	.0067012
Stddev	.0024236	.001237	.0000950
%RSD	3.922778	173.8419	1.416846
#1	.0644423	-.002136	.0068042
#2	.0597001	-.000083	.0066172
#3	.0612024	.000085	.0066823

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3371.254	81342.19	12471.83	2598.014	4759.366
Stddev	16.313	597.79	38.98	51.101	13.223
%RSD	.4838712	.7349032	.3125141	1.966922	.2778372
#1	3359.190	81518.21	12505.15	2621.324	4749.249
#2	3389.814	81832.21	12428.96	2633.302	4774.328
#3	3364.759	80676.16	12481.37	2539.414	4754.520

Sample Name: Q2253-02MS Acquired: 6/11/2025 0:15:06 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.7974992**	**1.851054**	**.9463931**	**1.918341**	**.8153938**	**1.988189**	**.1961754**
Stddev	.0048142	.007360	.0035774	.003860	.0046583	.004349	.0009178
%RSD	.6036620	.3976250	.3779991	.2012361	.5712991	.2187449	.4678582
#1	.7919499	1.858382	.9433093	1.920902	.8122738	1.989897	.1958794
#2	.7999899	1.851120	.9455547	1.920219	.8131591	1.983245	.1954422
#3	.8005577	1.843662	.9503152	1.913901	.8207484	1.991424	.1972048

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2045791**	**.1956343**	**5.548435**	**.4189581**	**.2056051**	**.3137064**	**2.972025**
Stddev	.0006486	.0006906	.018268	.0010478	.0008834	.0010608	.015269
%RSD	.3170656	.3530074	.3292449	.2500934	.4296458	.3381511	.5137485
#1	.2038348	.1950211	5.528490	.4180938	.2049992	.3126381	2.955943
#2	.2050231	.1954994	5.564354	.4201234	.2051974	.3137218	2.986324
#3	.2048795	.1963824	5.552461	.4186570	.2066187	.3147595	2.973808

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2623446**	**3.885443**	**.5053791**	**.0729451**	**14.89982**	**.3069143**	**.2241081**
Stddev	.0009961	.005602	.0017160	.0004681	.05710	.0014186	.0014643
%RSD	.3796706	.1441725	.3395534	.6416781	.3832010	.4622106	.6534022
#1	.2614321	3.887329	.5041245	.0731887	14.94719	.3083762	.2228909
#2	.2621946	3.889858	.5046782	.0732411	14.83642	.3055433	.2257331
#3	.2634071	3.879141	.5073347	.0724055	14.91585	.3068234	.2237003

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.49418**	**.3063132**	**.4416273**	**.6853805**	**.2014854**	**6.757085**	**5.715130**
Stddev	.00292	.0007535	.0009515	.0017285	.0003578	.029168	.013706
%RSD	.0253760	.2459824	.2154514	.2521937	.1776011	.4316646	.2398202
#1	11.49647	.3054565	.4410560	.6834298	.2013006	6.738515	5.711353
#2	11.49518	.3066102	.4411002	.6859903	.2018979	6.790704	5.703709
#3	11.49090	.3068729	.4427257	.6867215	.2012578	6.742036	5.730329

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2253-02MS Acquired: 6/11/2025 0:15:06 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.2742032	.1627884	.2316733
Stddev	.0020927	.0025302	.0010497
%RSD	.7631767	1.554256	.4530881
#1	.2734733	.1644045	.2319324
#2	.2765630	.1598726	.2305184
#3	.2725732	.1640882	.2325693

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3272.575	79495.23	11915.46	2493.116	4618.459
Stddev	2.905	221.84	48.69	13.993	9.512
%RSD	.0887733	.2790607	.4086006	.5612486	.2059531
#1	3275.911	79740.41	11963.31	2508.433	4626.344
#2	3271.212	79308.39	11917.08	2489.910	4621.139
#3	3270.602	79436.89	11865.98	2481.005	4607.895

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2253-02MSD Acquired: 6/11/2025 0:19:05 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.7984108**	**1.872644**	**.9459660**	**1.931016**	**.8227282**	**2.022874**	**.1958342**
Stddev	.0010197	.044110	.0021718	.013885	.0022604	.003302	.0009693
%RSD	.1277206	2.355471	.2295867	.7190372	.2747463	.1632199	.4949723
#1	.7974899	1.822157	.9464627	1.914997	.8205460	2.021411	.1964698
#2	.7982358	1.892061	.9435888	1.938458	.8225792	2.026655	.1963141
#3	.7995067	1.903714	.9478463	1.939593	.8250595	2.020557	.1947185

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2131619**	**.1944876**	**5.597981**	**.4260489**	**.2045914**	**.3136670**	**2.974012**
Stddev	.0006404	.0003812	.020229	.0015630	.0005113	.0013352	.013571
%RSD	.3004049	.1959905	.3613584	.3668604	.2498985	.4256859	.4563333
#1	.2126807	.1944670	5.608641	.4247357	.2043076	.3121325	2.970827
#2	.2138887	.1941171	5.610651	.4277777	.2042849	.3143039	2.988893
#3	.2129163	.1948786	5.574652	.4256333	.2051816	.3145645	2.962317

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2377247**	**3.921968**	**.5029586**	**.0747823**	**15.28902**	**.3090889**	**.2306768**
Stddev	.0013360	.014155	.0006683	.0005684	.04208	.0018658	.0000105
%RSD	.5619895	.3609095	.1328844	.7600524	.2752053	.6036573	.0045705
#1	.2382145	3.937749	.5024053	.0749886	15.25716	.3109420	.2306743
#2	.2387467	3.917764	.5027693	.0752187	15.33672	.3072105	.2306677
#3	.2362130	3.910392	.5037012	.0741396	15.27319	.3091142	.2306883

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.69753**	**.3189604**	**.4484791**	**.6846065**	**.2050190**	**6.874837**	**5.630713**
Stddev	.01697	.0003421	.0011649	.0025749	.0009414	.042353	.027371
%RSD	.1451090	.1072580	.2597416	.3761068	.4591741	.6160526	.4861051
#1	11.67852	.3186170	.4471354	.6824396	.2048484	6.904280	5.611713
#2	11.70291	.3189628	.4492050	.6839268	.2060340	6.893934	5.618340
#3	11.71116	.3193012	.4490968	.6874530	.2041745	6.826299	5.662086

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2253-02MSD Acquired: 6/11/2025 0:19:05 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.2784956	.1688307	.2338184
Stddev	.0036541	.0007300	.0005694
%RSD	1.312090	.4324039	.2435046
#1	.2797275	.1681499	.2337617
#2	.2813745	.1687404	.2344140
#3	.2743847	.1696016	.2332795

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3281.742	77073.24	11523.68	2440.821	4663.679
Stddev	11.913	114.28	23.84	7.834	9.489
%RSD	.3630105	.1482708	.2068914	.3209644	.2034705
#1	3295.494	77065.02	11518.33	2432.328	4674.631
#2	3274.585	76963.30	11502.97	2447.765	4658.505
#3	3275.147	77191.41	11549.74	2442.370	4657.902

Sample Name: Q2253-02A Acquired: 6/11/2025 1:01:10 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.7684010**	**1.817208**	**.9174837**	**1.846955**	**.7770652**	**1.917926**	**.1960369**
Stddev	.0024307	.005823	.0033123	.006447	.0010401	.009174	.0013735
%RSD	.3163333	.3204412	.3610210	.3490365	.1338501	.4783231	.7006289
#1	.7656907	1.813183	.9168911	1.839898	.7764830	1.921186	.1976191
#2	.7691245	1.814556	.9145077	1.852534	.7764467	1.907567	.1951503
#3	.7703879	1.823885	.9210523	1.848433	.7782661	1.925025	.1953414

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1895110**	**.1880255**	**5.463648**	**.4060869**	**.1979741**	**.2998214**	**3.086419**
Stddev	.0013388	.0001906	.023377	.0026810	.0002376	.0007778	.011204
%RSD	.7064726	.1013543	.4278718	.6601973	.1199957	.2594218	.3630146
#1	.1901560	.1878988	5.485024	.4075416	.1977268	.2989360	3.099239
#2	.1879718	.1879331	5.467236	.4029931	.1979949	.3001337	3.078504
#3	.1904053	.1882447	5.438684	.4077262	.1982005	.3003945	3.081514

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2365449**	**3.750110**	**.4870671**	**.0706203**	**15.99472**	**.2991787**	**.2224867**
Stddev	.0009457	.031368	.0010074	.0002461	.10043	.0032976	.0011589
%RSD	.3997801	.8364638	.2068359	.3485586	.6278743	1.102220	.5208799
#1	.2375759	3.763555	.4866654	.0708891	16.10834	.3018766	.2233712
#2	.2363409	3.714260	.4863225	.0705659	15.91783	.2955027	.2211748
#3	.2357179	3.772513	.4882134	.0704059	15.95798	.3001569	.2229139

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.96740**	**.2881121**	**.4241465**	**.6622020**	**.1969070**	**7.010859**	**5.489319**
Stddev	.05575	.0015704	.0006963	.0009941	.0011817	.016009	.016377
%RSD	.4658291	.5450599	.1641615	.1501152	.6001448	.2283447	.2983450
#1	12.01996	.2890988	.4233901	.6619125	.1982610	7.029335	5.483670
#2	11.97331	.2863012	.4247608	.6613848	.1963767	7.002122	5.476515
#3	11.90893	.2889364	.4242884	.6633087	.1960834	7.001119	5.507773

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2253-02A Acquired: 6/11/2025 1:01:10 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.2661899	.1630920	.2292803
Stddev	.0017091	.0024826	.0018826
%RSD	.6420468	1.522193	.8210908
#1	.2681578	.1655822	.2314094
#2	.2653345	.1630768	.2278357
#3	.2650775	.1606171	.2285958

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3332.076	78367.37	12476.65	2477.609	4706.037
Stddev	7.810	164.23	56.13	2.113	5.954
%RSD	.2343877	.2095626	.4498970	.0852657	.1265108
#1	3336.833	78233.71	12418.20	2478.516	4711.533
#2	3323.063	78550.70	12530.13	2475.194	4699.712
#3	3336.333	78317.69	12481.62	2479.116	4706.867

Sample Name: PB168385BL Acquired: 6/11/2025 1:05:10 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.000132**	**-.001074**	**-.000430**	**-.001822**	**.0028181**	**.0025412**	**-.003093**
Stddev	.001262	.001812	.000755	.003705	.0004941	.0014694	.000556
%RSD	958.9685	168.7080	175.4727	203.3557	17.53234	57.82368	17.97729
#1	.001152	.000906	-.001296	-.005750	.0023609	.0008948	-.002472
#2	-.001372	-.001478	-.000086	.001609	.0027511	.0030089	-.003544
#3	-.000174	-.002650	.000091	-.001324	.0033422	.0037197	-.003262

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000039**	**.0000083**	**.0270435**	**.0006941**	**-.000085**	**.0001460**	**.0052539**
Stddev	.000060	.0000579	.0131046	.0003285	.000197	.0001852	.0011051
%RSD	153.7272	697.9454	48.45731	47.32917	232.8190	126.8366	21.03436
#1	.000030	.0000335	.0157350	.0003774	-.000129	-.000029	.0064118
#2	-.000075	.0000493	.0239905	.0006718	.000131	.000128	.0042105
#3	-.000071	-.000058	.0414051	.0010333	-.000256	.000340	.0051395

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003941**	**.0246667**	**-.000220**	**.0002194**	**-.065417**	**-.000621**	**-.000144**
Stddev	.0001887	.0123325	.000058	.0001205	.009076	.000641	.000350
%RSD	47.88292	49.99663	26.47801	54.90461	13.87440	103.2714	241.9246
#1	.0005306	.0114887	-.000285	.0000818	-.075124	-.001344	.000122
#2	.0001788	.0265817	-.000172	.0003059	-.063986	-.000394	-.000015
#3	.0004729	.0359297	-.000203	.0002706	-.057142	-.000124	-.000540

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0178893**	**.0002501**	**.0002929**	**.0018782**	**.0000905**	**.0037294**	**-.002927**
Stddev	.0106343	.0002038	.0000898	.0006451	.0000443	.0068622	.000331
%RSD	59.44485	81.48671	30.67473	34.34898	48.95487	184.0019	11.29950
#1	.0066200	.0003747	.0002490	.0026192	.0000468	.0106021	-.002767
#2	.0193003	.0003606	.0002334	.0015737	.0001353	-.003122	-.002707
#3	.0277477	.0000149	.0003962	.0014417	.0000893	.003708	-.003307

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: PB168385BL Acquired: 6/11/2025 1:05:10 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**-.000088**	**-.001192**	**.0000138**
Stddev	.000512	.000907	.0000444
%RSD	583.0188	76.09242	322.0812
#1	-.000643	-.001557	-.000013
#2	.000366	-.001860	.000065
#3	.000014	-.000159	-.000011

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3366.666**	**78964.18**	**12158.46**	**2533.645**	**4800.748**
Stddev	30.605	366.20	10.21	9.942	23.440
%RSD	.9090668	.4637553	.0839647	.3923837	.4882633
#1	3334.314	79380.19	12166.17	2541.506	4774.260
#2	3370.526	78690.57	12162.32	2522.470	4809.171
#3	3395.159	78821.78	12146.88	2536.960	4818.813

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: PB168385BS Acquired: 6/11/2025 1:09:29 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8028243**	**1.972256**	**.9951810**	**2.031048**	**.8138125**	**1.949358**
Stddev	.0038203	.010345	.0008848	.018864	.0076192	.003141
%RSD	.4758522	.5245075	.0889111	.9288047	.9362335	.1611240
#1	.7993538	1.966878	.9947693	2.021688	.8102730	1.946742
#2	.8022015	1.965707	.9945771	2.018694	.8086069	1.948491
#3	.8069177	1.984182	.9961967	2.052762	.8225577	1.952841

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1921888**	**.2000386**	**.2000960**	**1.049178**	**.4113663**	**.2032468**
Stddev	.0009857	.0007331	.0004497	.003447	.0027003	.0006547
%RSD	.5128722	.3664831	.2247432	.3285358	.6564099	.3221302
#1	.1913379	.2008186	.1997298	1.048010	.4144425	.2025169
#2	.1919596	.1993638	.2005979	1.053058	.4093875	.2037824
#3	.1932689	.1999333	.1999604	1.046467	.4102690	.2034412

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3142977**	**3.040126**	**.2024639**	**1.937350**	**.5097900**	**.0757797**
Stddev	.0012934	.006354	.0007926	.009852	.0013579	.0007766
%RSD	.4115236	.2089958	.3914573	.5085546	.2663649	1.024852
#1	.3133239	3.046538	.2028844	1.940019	.5082240	.0766325
#2	.3138039	3.040007	.2015497	1.945593	.5106421	.0751132
#3	.3157652	3.033833	.2029575	1.926438	.5105037	.0755933

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.642513**	**.2989813**	**.2091576**	**9.098629**	**.2956067**	**.4140533**
Stddev	.014986	.0009971	.0013306	.051904	.0002131	.0025853
%RSD	.5671002	.3334895	.6361858	.5704639	.0720951	.6243789
#1	2.649086	.2980631	.2105128	9.158289	.2957590	.4124165
#2	2.653090	.2988388	.2091071	9.063840	.2953631	.4127098
#3	2.625364	.3000419	.2078530	9.073759	.2956978	.4170337

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: PB168385BS Acquired: 6/11/2025 1:09:29 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.6972114	.1965811	.8785765	5.772421	F -.002472	.1661778
Stddev	.0026156	.0003723	.0040081	.010792	.000233	.0011344
%RSD	.3751572	.1893758	.4562065	.1869610	9.415146	.6826546
#1	.6962655	.1966303	.8831717	5.784024	-.002620	.1674713
#2	.7001684	.1961867	.8758012	5.770558	-.002591	.1657097
#3	.6952002	.1969264	.8767567	5.762682	-.002203	.1653523

Elem	Sr4077
Units	ppm
Avg	.1990832
Stddev	.0008260
%RSD	.4148822
#1	.1986187
#2	.1985942
#3	.2000369

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3330.222	77386.93	12488.82	2479.255	4657.741
Stddev	24.656	195.67	23.07	9.930	19.861
%RSD	.7403754	.2528427	.1847576	.4005073	.4264031
#1	3341.311	77187.01	12487.22	2468.001	4669.423
#2	3347.387	77395.74	12512.65	2482.983	4668.990
#3	3301.969	77578.04	12466.58	2486.781	4634.809

Sample Name: Q2271-01 Acquired: 6/11/2025 1:13:29 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0554932**	**-.004903**	**.2603885**	**-.034107**	**-.003554**	**87.28969**	**.4935441**
Stddev	.0019633	.001708	.0016306	.003195	.003428	.07613	.0021431
%RSD	3.537891	34.84070	.6262089	9.368261	96.44756	.0872191	.4342215
#1	.0537539	-.005955	.2591116	-.036721	-.003602	87.30803	.4915632
#2	.0551035	-.002932	.2622253	-.035055	-.006958	87.20606	.4932500
#3	.0576221	-.005821	.2598287	-.030545	-.000103	87.35498	.4958190

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0079854**	**.0081645**	**30.71047**	**.1947110**	**.1300943**	**.3094889**	**253.0665**
Stddev	.0000715	.0004547	.03752	.0007235	.0002920	.0015232	1.3551
%RSD	.8949382	5.568733	.1221621	.3715755	.2244118	.4921607	.5354613
#1	.0079386	.0084707	30.70160	.1943724	.1297833	.3107852	251.9871
#2	.0080677	.0083809	30.67819	.1955417	.1301371	.3098704	252.6251
#3	.0079501	.0076421	30.75163	.1942189	.1303625	.3078113	254.5872

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.143459**	**30.13252**	**.1457318**	**.0018755**	**10.35884**	**.3232660**	**.4030124**
Stddev	.016037	.05674	.0003437	.0004089	.07135	.0011098	.0026602
%RSD	.3870330	.1883098	.2358671	21.80394	.6887456	.3433012	.6600656
#1	4.127825	30.15193	.1455876	.0015179	10.29590	.3223219	.4025967
#2	4.142684	30.06862	.1454837	.0017874	10.34427	.3229876	.4005845
#3	4.159870	30.17701	.1461241	.0023214	10.43634	.3244884	.4058559

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**12.20526**	**-.049906**	**.0038768**	**.0593481**	**2.387513**	**3.566478**	**4.878448**
Stddev	.07317	.003181	.0002951	.0013514	.005926	.045193	.009596
%RSD	.5994579	6.374593	7.612895	2.277040	.2481971	1.267164	.1966943
#1	12.16027	-.051962	.0037899	.0601969	2.387743	3.557554	4.886695
#2	12.16583	-.051514	.0042056	.0577897	2.381476	3.526413	4.867916
#3	12.28968	-.046242	.0036349	.0600577	2.393320	3.615468	4.880733

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2271-01 Acquired: 6/11/2025 1:13:29 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.8925647	.1904188	-.107886
Stddev	.0055269	.0022505	.000893
%RSD	.6192123	1.181842	.8281241
#1	.8882665	.1884112	-.107169
#2	.8906284	.1899937	-.107602
#3	.8987992	.1928515	-.108886

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3441.079	82164.96	14544.06	2603.482	4104.705
Stddev	28.729	192.36	15.10	11.390	24.090
%RSD	.8348858	.2341138	.1038557	.4374951	.5868902
#1	3413.129	82198.04	14527.01	2610.489	4081.922
#2	3439.579	82338.64	14549.40	2609.618	4102.276
#3	3470.529	81958.21	14555.76	2590.340	4129.918

Sample Name: Q2272-01 Acquired: 6/11/2025 1:17:35 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.0679757	-.017616	.1776727	-.040667	-.004982	141.2938	.8017994
Stddev	.0010229	.001408	.0057559	.009363	.000861	.3914	.0010369
%RSD	1.504852	7.994229	3.239620	23.02271	17.27462	.2770189	.1293214
#1	.0672354	-.018881	.1742119	-.037682	-.004118	141.2194	.8023197
#2	.0675488	-.017868	.1744891	-.033161	-.004988	140.9448	.8006053
#3	.0691430	-.016098	.1843172	-.051158	-.005839	141.7170	.8024731

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0115283	.0163423	26.08900	.2150864	.1472875	1.182424	275.1236
Stddev	.0002497	.0002377	.21170	.0002704	.0011372	.001591	2.7328
%RSD	2.166206	1.454344	.8114651	.1257043	.7720913	.1345358	.9933069
#1	.0114121	.0165152	25.86350	.2152612	.1469315	1.181670	271.9826
#2	.0113578	.0160713	26.12003	.2152231	.1463710	1.181350	276.9572
#3	.0118149	.0164404	26.28348	.2147750	.1485602	1.184251	276.4309

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.901109	53.00217	.2668832	.0011740	9.221258	.3404561	.5291875
Stddev	.061998	.63545	.0008904	.0008230	.027722	.0033685	.0003875
%RSD	.7846766	1.198910	.3336275	70.10488	.3006296	.9893950	.0732267
#1	7.836446	52.37441	.2660028	.0003200	9.203402	.3395696	.5292190
#2	7.906836	52.98707	.2668637	.0019620	9.253194	.3376195	.5287852
#3	7.960045	53.64504	.2677833	.0012398	9.207178	.3441791	.5295583

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.79388	-.129349	.0010136	.0096033	4.656904	4.341130	6.077042
Stddev	.08707	.007258	.0002773	.0009816	.019679	.023454	.025138
%RSD	.5512609	5.610859	27.36040	10.22196	.4225754	.5402822	.4136622
#1	15.74347	-.135405	.0009099	.0084877	4.638146	4.327530	6.054975
#2	15.89442	-.121304	.0008030	.0103350	4.655177	4.368213	6.071743
#3	15.74376	-.131338	.0013278	.0099871	4.677390	4.327648	6.104407

Sample Name: Q2272-01 Acquired: 6/11/2025 1:17:35 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.3746384	.2801867	-.064624
Stddev	.0048103	.0016578	.002858
%RSD	1.283980	.5916875	4.422852
#1	.3762202	.2786008	-.061405
#2	.3692364	.2819081	-.066865
#3	.3784586	.2800512	-.065601

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3755.260	89753.82	15438.10	2850.159	4074.115
Stddev	1.670	424.65	86.73	25.149	10.971
%RSD	.0444617	.4731294	.5617707	.8823581	.2692875
#1	3755.837	90239.21	15505.35	2876.382	4084.673
#2	3756.565	89450.88	15468.73	2826.244	4074.898
#3	3753.378	89571.38	15340.21	2847.852	4062.773

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2273-01 Acquired: 6/11/2025 1:21:40 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0732246**	**-.010846**	**.1960233**	**-.047592**	**-.003565**	**96.22370**	**1.850604**
Stddev	.0015585	.000602	.0010408	.001314	.002511	.05643	.003711
%RSD	2.128442	5.554845	.5309629	2.760193	70.44244	.0586475	.2005387
#1	.0748543	-.010733	.1955206	-.046197	-.004470	96.27660	1.852610
#2	.0717486	-.010307	.1953293	-.047775	-.005498	96.23021	1.846321
#3	.0730710	-.011496	.1972201	-.048805	-.000727	96.16429	1.852879

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0151391**	**.0195086**	**64.10710**	**.2244331**	**.2328509**	**.1129648**	**267.6895**
Stddev	.0001070	.0004920	.46315	.0003025	.0006434	.0007306	1.6831
%RSD	.7068029	2.521724	.7224601	.1347990	.2763215	.6467407	.6287462
#1	.0151626	.0195633	64.18958	.2247763	.2325269	.1126840	268.0561
#2	.0152324	.0189915	64.52347	.2243177	.2324338	.1124162	269.1591
#3	.0150223	.0199709	63.60825	.2242052	.2335918	.1137941	265.8533

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.037063**	**83.72831**	**.5078338**	**-.002041**	**1.578397**	**.3843370**	**.8497286**
Stddev	.035905	.86424	.0017737	.000426	.008965	.0019591	.0043493
%RSD	.5102220	1.032194	.3492634	20.88535	.5680000	.5097241	.5118485
#1	7.035832	83.69119	.5079821	-.001906	1.587766	.3846921	.8484529
#2	7.073567	84.61051	.5059906	-.001699	1.569899	.3860942	.8545732
#3	7.001789	82.88323	.5095286	-.002518	1.577527	.3822247	.8461599

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.71917**	**-.180627**	**.0031164**	**.0064584**	**3.126558**	**3.448688**	**13.42656**
Stddev	.05863	.003026	.0002875	.0022218	.010893	.014872	.04765
%RSD	.2973001	1.675267	9.223870	34.40190	.3484020	.4312247	.3548646
#1	19.78251	-.177733	.0029001	.0041435	3.132978	3.464706	13.39104
#2	19.70819	-.180378	.0030064	.0085737	3.132715	3.446041	13.40794
#3	19.66682	-.183769	.0034426	.0066580	3.113981	3.435318	13.48071

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2273-01 Acquired: 6/11/2025 1:21:40 Type: Unk
Method: 6010-200.7 NEW(v2) 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	3.365550	.3895629	.1096184
Stddev	.016247	.0024515	.0018844
%RSD	.4827437	.6293031	1.719077
#1	3.347092	.3873981	.1096261
#2	3.371872	.3890656	.1077301
#3	3.377685	.3922249	.1114989

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3764.329	90513.44	15060.92	2863.081	3990.943
Stddev	7.725	117.37	45.97	12.179	8.020
%RSD	.2052095	.1296768	.3052411	.4253968	.2009515
#1	3761.398	90531.54	15092.79	2862.816	3985.366
#2	3773.090	90388.07	15008.22	2851.036	4000.134
#3	3758.497	90620.71	15081.75	2875.391	3987.329

Sample Name: CCV11 Acquired: 6/11/2025 1:35:29 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV11 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.280408**	**4.947185**	**5.158341**	**5.322272**	**5.244108**	**10.21286**	**10.12605**
Stddev	.017075	.033176	.030314	.012135	.011971	.01622	.09595
%RSD	.3233692	.6705959	.5876730	.2280037	.2282843	.1588125	.9475384
#1	5.276112	4.919743	5.132598	5.313610	5.255589	10.22209	10.20797
#2	5.265892	4.984054	5.150672	5.317064	5.231700	10.19414	10.14969
#3	5.299221	4.937757	5.191754	5.336141	5.245034	10.22237	10.02049

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2594037**	**2.567587**	**25.13412**	**1.035967**	**2.580072**	**1.289224**	**5.060450**
Stddev	.0013969	.014700	.11076	.001788	.011889	.004668	.029169
%RSD	.5385139	.5725269	.4406718	.1726165	.4608129	.3620736	.5764077
#1	.2584413	2.552756	25.22795	1.034647	2.567844	1.288961	5.082990
#2	.2587639	2.567854	25.16246	1.035252	2.580782	1.284693	5.070853
#3	.2610059	2.582152	25.01194	1.038002	2.591591	1.294018	5.027505

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.517038**	**24.93646**	**2.586778**	**1.284086**	**23.69025**	**2.555737**	**2.598028**
Stddev	.002833	.01226	.010701	.001200	.14750	.004446	.007704
%RSD	.1125549	.0491705	.4136967	.0934690	.6226203	.1739485	.2965151
#1	2.520030	24.94757	2.575379	1.284251	23.85339	2.560333	2.589168
#2	2.516689	24.93852	2.588346	1.285195	23.56631	2.555419	2.603144
#3	2.514396	24.92330	2.596608	1.282811	23.65104	2.551459	2.601771

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.78754**	**5.128913**	**5.207480**	**5.138355**	**5.132834**	**5.126279**	**5.146255**
Stddev	.07794	.022774	.013261	.021367	.011504	.014217	.028856
%RSD	.3276388	.4440348	.2546458	.4158412	.2241176	.2773434	.5607254
#1	23.87674	5.110786	5.202036	5.116290	5.139767	5.141783	5.113123
#2	23.75324	5.121477	5.197809	5.139827	5.119555	5.123204	5.165887
#3	23.73264	5.154476	5.222597	5.158948	5.139181	5.113851	5.159754

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCV11 Acquired: 6/11/2025 1:35:29 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV11 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**5.010807**	**4.688710**	**5.148372**
Stddev	.011600	.034358	.009822
%RSD	.2314935	.7327735	.1907815
#1	5.007879	4.693073	5.152553
#2	5.000951	4.652380	5.137151
#3	5.023589	4.720678	5.155411

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3169.730**	**74042.92**	**11757.40**	**2314.322**	**4253.793**
Stddev	18.134	239.55	6.07	12.582	12.847
%RSD	.5721111	.3235335	.0516293	.5436471	.3020192
#1	3148.792	73909.93	11764.25	2315.614	4239.052
#2	3180.414	73899.37	11752.72	2301.144	4259.716
#3	3179.985	74319.47	11755.22	2326.207	4262.610

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCB11 Acquired: 6/11/2025 1:39:41 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB11 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000332**	**-.000760**	**.0001520**	**.0009090**	**.0024541**	**.0036957**	**-.005213**
Stddev	.000304	.000931	.0005101	.0040497	.0021662	.0037947	.000050
%RSD	91.70602	122.4676	335.5179	445.4985	88.26709	102.6812	.9597168
#1	-.000084	-.001801	.0004578	.0014924	.0009062	.0010342	-.005171
#2	-.000671	-.000471	-.000437	.0046354	.0049296	.0020118	-.005201
#3	-.000239	-.000008	.000435	-.003401	.0015265	.0080409	-.005268

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000029**	**.0001263**	**.0009467**	**.0006679**	**.0001009**	**.0001506**	**.0022318**
Stddev	.000043	.0000223	.0041724	.0004102	.0001455	.0003142	.0020436
%RSD	149.5955	17.63790	440.7435	61.41922	144.1967	208.5944	91.56745
#1	-.000045	.0001008	-.002984	.0004885	.0002644	.0004583	.0045726
#2	-.000061	.0001422	.005325	.0011373	-.000015	.0001632	.0008025
#3	.000020	.0001358	.000499	.0003779	.000053	-.000170	.0013204

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001130**	**-.002308**	**.0002756**	**.0003495**	**-.084637**	**-.000301**	**-.000075**
Stddev	.0000179	.014404	.0000718	.0000905	.004504	.000802	.000443
%RSD	15.80349	624.0688	26.06413	25.88825	5.321057	266.3808	589.7216
#1	.0001327	.003810	.0003483	.0002765	-.089724	.000426	.000232
#2	.0000978	.008027	.0002046	.0004507	-.081156	-.001162	-.000584
#3	.0001086	-.018761	.0002739	.0003212	-.083032	-.000167	.000126

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.004772**	**.0053356**	**.0008054**	**.0005672**	**.0005727**	**.0130340**	**-.002645**
Stddev	.006468	.0004711	.0000441	.0004467	.0002186	.0056910	.002509
%RSD	135.5331	8.828973	5.472600	78.74375	38.17483	43.66265	94.86144
#1	-.008325	.0057111	.0007959	.0005022	.0004651	.0180338	-.005261
#2	-.008686	.0054885	.0008535	.0010428	.0008242	.0142271	-.000258
#3	.002694	.0048070	.0007669	.0001566	.0004287	.0068410	-.002416

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCB11 Acquired: 6/11/2025 1:39:41 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB11 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.002068	-.000975	.0003978
Stddev	.001673	.000963	.0000261
%RSD	80.88523	98.73829	6.553482
#1	-.000290	.000101	.0004266
#2	-.002305	-.001271	.0003758
#3	-.003610	-.001755	.0003910

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3326.777	77942.02	12896.35	2460.298	4770.773
Stddev	4.926	300.63	12.16	17.606	9.742
%RSD	.1480676	.3857035	.0943069	.7156234	.2042077
#1	3322.783	77800.29	12890.86	2454.666	4773.768
#2	3325.265	78287.31	12910.29	2480.031	4778.666
#3	3332.281	77738.45	12887.90	2446.196	4759.885

Sample Name: Q2273-05 Acquired: 6/11/2025 1:44:01 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.1567246**	**-.022532**	**.2395634**	**-.041870**	**-.003593**	**82.90865**	**.6118439**
Stddev	.0020878	.002104	.0002326	.004539	.001231	.19880	.0016218
%RSD	1.332145	9.336046	.0970889	10.84138	34.26472	.2397877	.2650708
#1	.1574507	-.024746	.2397636	-.037253	-.004627	82.72189	.6122983
#2	.1583524	-.020559	.2396182	-.046327	-.003921	83.11763	.6131900
#3	.1543707	-.022292	.2393083	-.042031	-.002231	82.88643	.6100433

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0261484**	**.0249122**	**71.85126**	**.2433231**	**.4033648**	**.0227868**	**218.6814**
Stddev	.0000366	.0003635	.27704	.0005955	.0022176	.0002864	.4694
%RSD	.1398817	1.459114	.3855719	.2447240	.5497795	1.256973	.2146693
#1	.0261775	.0249431	71.72504	.2426414	.4024656	.0226097	219.1820
#2	.0261074	.0245342	72.16893	.2435862	.4017380	.0226335	218.6109
#3	.0261604	.0252592	71.65980	.2437418	.4058908	.0231173	218.2511

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.514140**	**99.70872**	**1.022193**	**-.002749**	**2.653715**	**.1997946**	**1.103979**
Stddev	.005167	.37143	.006305	.000069	.009344	.0018168	.002622
%RSD	.3412206	.3725186	.6168140	2.514911	.3521114	.9093158	.2374988
#1	1.513062	99.50498	1.019148	-.002821	2.664457	.2018508	1.105340
#2	1.519760	100.1374	1.017989	-.002683	2.647469	.1984065	1.105642
#3	1.509597	99.4837	1.029443	-.002742	2.649218	.1991264	1.100957

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**35.54832**	**-.120790**	**.0025607**	**.0077120**	**4.554378**	**1.435867**	**16.34634**
Stddev	.10725	.002777	.0002234	.0011046	.011155	.021473	.10226
%RSD	.3016971	2.298819	8.723574	14.32353	.2449189	1.495460	.6255941
#1	35.64953	-.117681	.0027614	.0066422	4.550943	1.441752	16.28092
#2	35.43591	-.123023	.0026006	.0076453	4.566846	1.453784	16.29391
#3	35.55952	-.121667	.0023200	.0088485	4.545345	1.412066	16.46418

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2273-05 Acquired: 6/11/2025 1:44:01 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**9.984211**	**.4581065**	**.3396798**
Stddev	.027864	.0018220	.0007645
%RSD	.2790772	.3977301	.2250587
#1	9.984171	.4600909	.3393450
#2	9.956368	.4577196	.3405545
#3	10.01210	.4565089	.3391398

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4403.055**	**107073.8**	**18104.59**	**3297.432**	**3935.622**
Stddev	15.987	29.9	63.69	20.866	7.633
%RSD	.3630889	.0279495	.3517680	.6327957	.1939485
#1	4386.065	107041.5	18152.62	3284.784	3930.468
#2	4405.298	107079.6	18032.35	3285.996	3944.391
#3	4417.802	107100.5	18128.80	3321.516	3932.007

Sample Name: Q2274-01 Acquired: 6/11/2025 1:48:06 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.1401661**	**-.007865**	**.1492689**	**-.102929**	**-.014997**	**324.3934**	**1.303062**
Stddev	.0045122	.003131	.0019866	.003090	.001993	1.4704	.009442
%RSD	3.219159	39.80344	1.330873	3.001599	13.29143	.4532785	.7245794
#1	.1415193	-.010325	.1489137	-.099364	-.013409	326.0902	1.313318
#2	.1351322	-.008929	.1474840	-.104813	-.014348	323.4937	1.301136
#3	.1438468	-.004341	.1514092	-.104611	-.017234	323.5962	1.294731

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0173669**	**.0369240**	**7.792787**	**.4047716**	**.3402418**	**.3254747**	**568.4682**
Stddev	.0001573	.0009856	.038675	.0019797	.0010767	.0012885	.8251
%RSD	.9056242	2.669380	.4962863	.4890816	.3164500	.3958681	.1451456
#1	.0173412	.0363461	7.822459	.4051752	.3404872	.3241151	568.7962
#2	.0172240	.0363639	7.806854	.4065184	.3390636	.3256312	569.0789
#3	.0175354	.0380621	7.749048	.4026213	.3411747	.3266777	567.5296

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.889365**	**12.04971**	**.3813531**	**-.014299**	**2.148165**	**.7783513**	**.3657555**
Stddev	.030627	.07022	.0021398	.000083	.005886	.0035365	.0014543
%RSD	.5200363	.5827169	.5611173	.5822380	.2739890	.4543608	.3976091
#1	5.915711	12.03057	.3817002	-.014205	2.153924	.7801896	.3665118
#2	5.896622	12.12751	.3790609	-.014364	2.148411	.7805901	.3666757
#3	5.855761	11.99104	.3832982	-.014327	2.142161	.7742742	.3640789

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.068990**	**^ *****	**.0022392**	**.0139666**	**4.620266**	**3.144027**	**8.697187**
Stddev	.026196	-----	.0002839	.0011680	.019919	.014374	.045099
%RSD	.4316442	-----	12.67912	8.362679	.4311181	.4571948	.5185465
#1	6.089088	^ -----	.0025151	.0151212	4.638133	3.128391	8.672507
#2	6.078519	^ -----	.0019479	.0139928	4.623876	3.156668	8.669815
#3	6.039363	^ -----	.0022545	.0127857	4.598789	3.147021	8.749240

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2274-01 Acquired: 6/11/2025 1:48:06 Type: Unk
Method: 6010-200.7 NEW(v2) 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	1.023693	.2834817	-.519409
Stddev	.009086	.0004298	.000754
%RSD	.8875818	.1516202	.1451360
#1	1.015793	.2835993	-.519600
#2	1.033622	.2838405	-.520049
#3	1.021664	.2830054	-.518578

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3579.339	84025.75	13643.18	2679.343	4054.882
Stddev	15.350	103.10	18.66	12.311	18.496
%RSD	.4288427	.1226975	.1367754	.4594890	.4561430
#1	3590.718	83993.44	13637.63	2666.655	4065.130
#2	3585.418	83942.68	13627.92	2680.137	4065.987
#3	3561.880	84141.13	13663.98	2691.239	4033.531

Sample Name: Q2274-01DUP Acquired: 6/11/2025 1:52:26 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.1452166**	**-.010585**	**.1516536**	**-.107378**	**-.019385**	**319.5611**	**1.283863**
Stddev	.0023956	.003234	.0025958	.009906	.001142	1.9311	.001785
%RSD	1.649641	30.55626	1.711663	9.225577	5.893548	.6043028	.1389952
#1	.1439811	-.011148	.1496660	-.104026	-.020550	317.3411	1.284456
#2	.1436910	-.013501	.1507044	-.118525	-.019337	320.8530	1.285276
#3	.1479776	-.007106	.1545904	-.099582	-.018267	320.4890	1.281858

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0172598**	**.0380510**	**7.995871**	**.4027346**	**.3405480**	**.3244527**	**579.5353**
Stddev	.0001141	.0006347	.032982	.0020004	.0008680	.0008772	2.1166
%RSD	.6612101	1.668085	.4124864	.4966953	.2548809	.2703480	.3652259
#1	.0172969	.0373860	7.973032	.4019414	.3401386	.3243143	581.0941
#2	.0171317	.0381166	8.033683	.4012524	.3399604	.3236531	580.3862
#3	.0173507	.0386504	7.980897	.4050099	.3415450	.3253909	577.1257

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.044976**	**12.31522**	**.3808674**	**-.015591**	**2.198625**	**.7799583**	**.3721725**
Stddev	.010894	.02514	.0008010	.000808	.016659	.0024974	.0020890
%RSD	.1802211	.2041081	.2103031	5.184470	.7577082	.3201923	.5613056
#1	6.033946	12.34191	.3813658	-.015267	2.193852	.7782043	.3708014
#2	6.055729	12.29200	.3799435	-.014996	2.217150	.7788529	.3711392
#3	6.045255	12.31174	.3812929	-.016511	2.184873	.7828175	.3745768

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.160096**	**^ *****	**.0023864**	**.0168360**	**4.628712**	**3.131112**	**8.708486**
Stddev	.005884	-----	.0003236	.0011122	.001109	.005863	.017951
%RSD	.0955164	-----	13.55921	6.605949	.0239514	.1872648	.2061365
#1	6.166076	^ -----	.0021613	.0172702	4.627897	3.133520	8.693644
#2	6.159900	^ -----	.0027572	.0176656	4.628264	3.135389	8.703377
#3	6.154313	^ -----	.0022406	.0155722	4.629974	3.124429	8.728439

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2274-01DUP Acquired: 6/11/2025 1:52:26 Type: Unk
Method: 6010-200.7 NEW(v2) 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	1.053728	.2905786	-.529501
Stddev	.008386	.0013625	.002157
%RSD	.7958045	.4688972	.4073112
#1	1.056418	.2921191	-.531146
#2	1.044328	.2895317	-.530298
#3	1.060439	.2900849	-.527059

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3563.524	83813.24	13750.96	2664.097	4040.043
Stddev	11.950	175.60	23.60	7.046	7.011
%RSD	.3353344	.2095114	.1715889	.2644654	.1735457
#1	3575.512	83649.74	13778.17	2656.839	4047.202
#2	3551.612	83791.13	13738.64	2670.909	4033.189
#3	3563.449	83998.85	13736.08	2664.542	4039.739

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2274-01LX5 Acquired: 6/11/2025 1:56:49 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.0327548**	**-.001900**	**.0331072**	**-.027431**	**-.004435**	**76.70230**	**.2945163**
Stddev	.0002014	.001484	.0007820	.002601	.001868	.78486	.0015380
%RSD	.6148565	78.08188	2.362100	9.481378	42.11658	1.023254	.5221953
#1	.0325445	-.001781	.0322267	-.024664	-.003024	75.80214	.2929351
#2	.0329459	-.000480	.0337211	-.027804	-.003727	77.24344	.2960071
#3	.0327740	-.003440	.0333737	-.029825	-.006553	77.06132	.2946066

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0043237**	**.0040087**	**1.662253**	**.0992193**	**.0720705**	**.0837223**	**134.7587**
Stddev	.0000947	.0001880	.008972	.0001108	.0003697	.0007977	.1325
%RSD	2.190517	4.690532	.5397344	.1116426	.5129792	.9528441	.0983427
#1	.0043899	.0042238	1.653049	.0990949	.0720382	.0846197	134.7559
#2	.0042152	.0038758	1.670973	.0993073	.0717179	.0830935	134.6276
#3	.0043660	.0039264	1.662739	.0992558	.0724552	.0834538	134.8926

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.404238**	**2.917964**	**.0823386**	**-.004283**	**.3823492**	**.1843412**	**.0861325**
Stddev	.007377	.019905	.0004243	.000400	.0045738	.0018458	.0007300
%RSD	.5253481	.6821623	.5152705	9.338953	1.196236	1.001305	.8475185
#1	1.397546	2.902811	.0825082	-.004129	.3774484	.1822122	.0867169
#2	1.412149	2.910575	.0818558	-.003984	.3865044	.1854922	.0853143
#3	1.403021	2.940508	.0826518	-.004738	.3830948	.1853193	.0863665

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.301326**	**-.181054**	**.0004951**	**.0033697**	**1.144205**	**1.226241**	**1.754297**
Stddev	.004112	.003248	.0002625	.0010331	.011393	.006820	.008853
%RSD	.3159476	1.793800	53.01849	30.65892	.9957072	.5561596	.5046191
#1	1.302212	-.177363	.0003659	.0023836	1.132393	1.218804	1.745180
#2	1.296843	-.183474	.0007972	.0032814	1.155127	1.227715	1.754855
#3	1.304922	-.182325	.0003223	.0044442	1.145095	1.232203	1.762858

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2274-01LX5 Acquired: 6/11/2025 1:56:49 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.2025095	.0656280	-.123141
Stddev	.0046149	.0003579	.000172
%RSD	2.278840	.5453411	.1394532
#1	.2036952	.0659774	-.123133
#2	.1974174	.0656446	-.122974
#3	.2064158	.0652621	-.123317

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3414.818	78447.22	12119.49	2504.029	4519.737
Stddev	13.505	136.97	54.33	20.998	7.935
%RSD	.3954878	.1746023	.4483094	.8385529	.1755708
#1	3399.735	78290.62	12168.24	2479.986	4510.581
#2	3418.928	78544.71	12060.92	2518.758	4524.617
#3	3425.790	78506.34	12129.31	2513.344	4524.013

Sample Name: Q2274-01MS Acquired: 6/11/2025 2:01:01 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.7931613**	**1.656149**	**1.029250**	**1.384982**	**.2820783**	**328.9713**	**1.174436**
Stddev	.0046670	.011845	.000893	.009906	.0041850	1.4921	.000377
%RSD	.5884007	.7152016	.0867539	.7152506	1.483639	.4535716	.0321113
#1	.7984222	1.669750	1.028461	1.396345	.2831844	328.2912	1.174443
#2	.7895197	1.650592	1.030220	1.378162	.2855992	327.9404	1.174055
#3	.7915419	1.648103	1.029070	1.380439	.2774514	330.6823	1.174809

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1870662**	**.2310527**	**9.618640**	**.6018536**	**.4583421**	**.4932539**	**534.4535**
Stddev	.0007808	.0004224	.057460	.0010599	.0006965	.0020077	1.8928
%RSD	.4174034	.1828159	.5973794	.1761055	.1519676	.4070345	.3541500
#1	.1863341	.2310046	9.664936	.6029358	.4583081	.4922284	535.4613
#2	.1869764	.2306564	9.636652	.6018075	.4576631	.4919660	535.6291
#3	.1878880	.2314971	9.554332	.6008176	.4590549	.4955673	532.2701

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.352690**	**14.98456**	**.8321150**	**.0468396**	**4.197723**	**.8903031**	**.5542831**
Stddev	.010896	.07696	.0011886	.0007982	.004329	.0030621	.0014881
%RSD	.2035582	.5136092	.1428422	1.704153	.1031279	.3439396	.2684744
#1	5.363253	15.03172	.8328914	.0464164	4.196166	.8867847	.5556390
#2	5.353329	14.89575	.8307467	.0477604	4.202616	.8923659	.5526910
#3	5.341489	15.02622	.8327071	.0463422	4.194389	.8917586	.5545193

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**13.69622**	**^ *****	**.3302616**	**.6530910**	**3.969980**	**3.568842**	**13.94245**
Stddev	.01983	-----	.0008865	.0025400	.005679	.003158	.02845
%RSD	.1447990	-----	.2684231	.3889276	.1430404	.0884987	.2040631
#1	13.67941	^ -----	.3310197	.6502141	3.965651	3.565459	13.91201
#2	13.71809	^ -----	.3292869	.6540348	3.967879	3.569355	13.94696
#3	13.69116	^ -----	.3304783	.6550240	3.976410	3.571713	13.96838

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2274-01MS Acquired: 6/11/2025 2:01:01 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**1.268875**	**.4191444**	**-.315160**
Stddev	.009289	.0018050	.002003
%RSD	.7320756	.4306264	.6354761
#1	1.260391	.4208267	-.316573
#2	1.267432	.4193688	-.316038
#3	1.278801	.4172378	-.312868

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3622.322**	**85320.37**	**13624.99**	**2703.258**	**4025.723**
Stddev	11.337	59.11	11.52	12.796	10.175
%RSD	.3129624	.0692811	.0845488	.4733419	.2527532
#1	3612.665	85349.13	13637.73	2699.120	4018.665
#2	3634.804	85252.38	13621.93	2717.611	4037.387
#3	3619.496	85359.59	13615.30	2693.043	4021.117

Sample Name: Q2274-01MSD Acquired: 6/11/2025 2:05:15 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8241027**	**1.736317**	**1.052965**	**1.452367**	**.2858308**	**302.6535**	**1.155256**
Stddev	.0069676	.011285	.000666	.010262	.0032340	1.2765	.005000
%RSD	.8454800	.6499615	.0632856	.7065671	1.131437	.4217853	.4328188
#1	.8301065	1.736009	1.052969	1.441012	.2866625	302.8305	1.156776
#2	.8164626	1.725190	1.052297	1.460979	.2822621	303.8324	1.159319
#3	.8257391	1.747754	1.053630	1.455109	.2885676	301.2977	1.149672

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1886236**	**.2239708**	**9.970754**	**.6578109**	**.4469363**	**.4811151**	**555.6984**
Stddev	.0001785	.0010137	.017073	.0000878	.0007283	.0017623	1.9247
%RSD	.0946359	.4525850	.1712314	.0133394	.1629451	.3662978	.3463640
#1	.1888152	.2245015	9.989895	.6577097	.4463315	.4815563	554.4567
#2	.1885937	.2228019	9.965269	.6578582	.4467326	.4791742	557.9156
#3	.1884620	.2246089	9.957097	.6578649	.4477447	.4826150	554.7230

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.393194**	**14.77015**	**.8227411**	**.0603111**	**4.529461**	**.8981132**	**.5479899**
Stddev	.014124	.05174	.0020912	.0005196	.019697	.0032488	.0018649
%RSD	.2618869	.3503220	.2541807	.8615498	.4348558	.3617362	.3403166
#1	5.392641	14.79325	.8232138	.0598450	4.548861	.8986112	.5501383
#2	5.407586	14.80632	.8204539	.0608713	4.530043	.9010842	.5467892
#3	5.379354	14.71088	.8245555	.0602170	4.509480	.8946441	.5470421

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.31472**	**^ *****	**.3491503**	**.6614310**	**3.820540**	**3.644334**	**13.38273**
Stddev	.07208	-----	.0013029	.0016350	.010280	.028778	.04336
%RSD	.5035696	-----	.3731607	.2471830	.2690605	.7896621	.3240341
#1	14.38025	^ -----	.3495755	.6595650	3.828606	3.653127	13.36236
#2	14.32640	^ -----	.3476879	.6626122	3.824049	3.667690	13.35330
#3	14.23751	^ -----	.3501875	.6621158	3.808966	3.612185	13.43253

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: Q2274-01MSD Acquired: 6/11/2025 2:05:15 Type: Unk
Method: 6010-200.7 NEW(v2) 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	1.139663	.4386526	-.323203
Stddev	.001810	.0023338	.001530
%RSD	.1587903	.5320307	.4733003
#1	1.139579	.4386024	-.321801
#2	1.137897	.4410110	-.324834
#3	1.141514	.4363443	-.322974

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3589.282	82885.09	13717.45	2654.031	4116.481
Stddev	20.019	214.11	15.08	5.556	23.821
%RSD	.5577486	.2583224	.1099605	.2093572	.5786711
#1	3573.341	82637.90	13719.57	2648.343	4102.757
#2	3611.751	83012.36	13701.42	2659.446	4143.987
#3	3582.755	83005.02	13731.37	2654.303	4102.698

Sample Name: Q2274-01A Acquired: 6/11/2025 2:09:29 Type: Unk
Method: 6010-200.7 NEW(v2) 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	**.8249722**	**1.718317**	**1.051172**	**1.524950**	**.6577858**	**319.8100**	**1.491607**
Stddev	.0044107	.005054	.004686	.004648	.0052519	.4641	.005515
%RSD	.5346474	.2941294	.4457990	.3048074	.7984183	.1451031	.3697544
#1	.8216667	1.715608	1.050112	1.522983	.6570667	320.0915	1.485470
#2	.8232695	1.715196	1.047106	1.530258	.6529305	319.2744	1.493201
#3	.8299805	1.724149	1.056297	1.521609	.6633601	320.0641	1.496150

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1832649**	**.2244215**	**8.456532**	**.7268177**	**.5319751**	**.5508309**	**581.7134**
Stddev	.0005030	.0010102	.052991	.0024762	.0016011	.0023956	3.0026
%RSD	.2744467	.4501140	.6266238	.3406926	.3009685	.4349127	.5161676
#1	.1834435	.2241548	8.448348	.7291285	.5315080	.5508475	578.2606
#2	.1836541	.2235715	8.408110	.7242040	.5306596	.5484270	583.7123
#3	.1826970	.2255383	8.513139	.7271206	.5337578	.5532182	583.1674

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.057693**	**13.50794**	**.8633972**	**.0592463**	**4.695328**	**1.027031**	**.5268879**
Stddev	.022140	.10379	.0016356	.0010433	.026558	.003471	.0018591
%RSD	.3654933	.7683553	.1894336	1.760935	.5656361	.3379350	.3528385
#1	6.062323	13.62104	.8631405	.0581925	4.673772	1.027592	.5257001
#2	6.033604	13.48572	.8619052	.0602788	4.687216	1.030187	.5259332
#3	6.077153	13.41706	.8651460	.0592676	4.724997	1.023314	.5290303

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.61633**	^ *****	**.3474891**	**.6738099**	**4.897573**	**5.424748**	**14.23532**
Stddev	.05276	-----	.0015884	.0014462	.004884	.008132	.05908
%RSD	.3609937	-----	.4571071	.2146248	.0997145	.1498982	.4149978
#1	14.58069	^ -----	.3468896	.6733219	4.896433	5.420028	14.18359
#2	14.59136	^ -----	.3462876	.6754369	4.893360	5.420079	14.22268
#3	14.67695	^ -----	.3492900	.6726708	4.902926	5.434138	14.29970

Sample Name: Q2274-01A Acquired: 6/11/2025 2:09:29 Type: Unk
Method: 6010-200.7 NEW(v2) 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	.9951382	.4376542	-.360833
Stddev	.0081417	.0026074	.002485
%RSD	.8181490	.5957756	.6887722
#1	.9870493	.4347482	-.358011
#2	.9950335	.4384251	-.362694
#3	1.003332	.4397892	-.361794

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3616.110	84029.47	14017.98	2706.514	4085.573
Stddev	20.725	242.46	14.76	13.338	17.696
%RSD	.5731234	.2885423	.1053097	.4928120	.4331429
#1	3629.568	84018.24	14015.17	2716.772	4097.540
#2	3626.518	84277.35	14033.94	2711.333	4093.933
#3	3592.244	83792.81	14004.82	2691.436	4065.245

Sample Name: CCV12 Acquired: 6/11/2025 2:21:21 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV12 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.848961**	**4.659661**	**4.814579**	**4.878329**	**4.838552**	**10.17763**	**10.03840**
Stddev	.535042	.457066	.423067	.573471	.560832	.01456	.04747
%RSD	11.03416	9.808991	8.787212	11.75549	11.59091	.1430811	.4728929
#1	5.167494	4.892520	5.063064	5.222790	5.175546	10.16174	10.02802
#2	5.148140	4.953404	5.054587	5.195872	5.148969	10.18078	9.99697
#3	4.231249	4.133059	4.326088	4.216323	4.191141	10.19035	10.09020

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2636179**	**2.403527**	**24.85389**	**1.030089**	**2.415749**	**1.197632**	**4.927882**
Stddev	.0022132	.204083	.10821	.004458	.216748	.127174	.036231
%RSD	.8395474	8.490989	.4353650	.4327664	8.972299	10.61878	.7352168
#1	.2618826	2.521693	24.77052	1.025132	2.543294	1.274956	4.912401
#2	.2628607	2.521015	24.81498	1.033769	2.538469	1.267086	4.969281
#3	.2661103	2.167872	24.97617	1.031367	2.165485	1.050855	4.901963

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.492256**	**24.90475**	**2.420807**	**1.277193**	**22.81626**	**2.529708**	**2.592038**
Stddev	.009950	.22277	.215013	.004224	.28306	.005435	.009429
%RSD	.3992507	.8944814	8.881878	.3307454	1.240586	.2148469	.3637829
#1	2.480901	24.71039	2.545373	1.277171	22.92175	2.523485	2.591247
#2	2.496412	24.85600	2.544517	1.281428	23.03141	2.532113	2.601838
#3	2.499455	25.14786	2.172532	1.272980	22.49560	2.533525	2.583029

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.07546**	**5.207556**	**4.847220**	**4.808914**	**5.049312**	**5.067808**	**4.769129**
Stddev	.28790	.035002	.509891	.418780	.003689	.028121	.460724
%RSD	1.247650	.6721415	10.51925	8.708415	.0730553	.5549003	9.660549
#1	23.16620	5.185846	5.149046	5.047851	5.051825	5.048523	5.025893
#2	23.30706	5.188886	5.134102	5.053532	5.051035	5.100076	5.044257
#3	22.75312	5.247934	4.258511	4.325360	5.045077	5.054827	4.237236

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCV12 Acquired: 6/11/2025 2:21:21 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV12 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.639533**	**4.546802**	**5.107126**
Stddev	.459006	.031870	.010444
%RSD	9.893358	.7009226	.2044951
#1	4.891980	4.564969	5.097228
#2	4.916904	4.565433	5.106108
#3	4.109714	4.510003	5.118041

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3407.371**	**74154.40**	**11656.76**	**2343.860**	**4547.508**
Stddev	365.988	510.89	17.82	21.080	431.292
%RSD	10.74108	.6889486	.1528994	.8993791	9.484142
#1	3179.315	73984.88	11667.22	2332.820	4282.453
#2	3213.275	73749.83	11666.89	2330.592	4314.904
#3	3829.523	74728.50	11636.18	2368.167	5045.169

Sample Name: CCB12 Acquired: 6/11/2025 2:25:32 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB12 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004869**	**.0000449**	**.0005131**	**-.002005**	**.0020187**	**.0013977**	**-.005228**
Stddev	.0013717	.0009996	.0012210	.003660	.0009673	.0027328	.000097
%RSD	281.6842	2227.401	237.9548	182.5138	47.91337	195.5201	1.847522
#1	-.000671	.0004515	.0011692	.001429	.0017338	.0000903	-.005313
#2	.002002	-.001094	-.000896	-.005855	.0012260	-.000436	-.005123
#3	.000130	.000777	.001266	-.001590	.0030965	.004539	-.005247

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000015**	**.0000889**	**.0048310**	**.0001543**	**.0000015**	**.0001767**	**.0016538**
Stddev	.000025	.0000301	.0060777	.0000359	.0001811	.0002453	.0009310
%RSD	165.4332	33.82648	125.8057	23.27755	11840.02	138.7951	56.29357
#1	-.000040	.0000861	.0086541	.0001444	.0001737	.0000023	.0007323
#2	-.000016	.0000604	.0080163	.0001244	-.000187	.0004572	.0025939
#3	.000010	.0001204	-.002177	.0001941	.000018	.0000707	.0016351

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000163**	**.0130296**	**.0000352**	**.0003938**	**-.101038**	**-.000429**	**.0000312**
Stddev	.000239	.0035945	.0002622	.0000296	.003692	.000653	.0002388
%RSD	146.4531	27.58730	744.4581	7.522486	3.654428	152.1564	766.3079
#1	-.000439	.0114414	.0002877	.0004047	-.100156	-.000190	-.000034
#2	-.000037	.0105028	.0000537	.0004164	-.097866	.000071	.000296
#3	-.000014	.0171447	-.000236	.0003602	-.105091	-.001169	-.000168

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.010452**	**.0075400**	**.0008626**	**-.000079**	**.0001357**	**.0122177**	**-.001076**
Stddev	.006558	.0002214	.0002832	.000223	.0003330	.0088611	.000411
%RSD	62.74012	2.936973	32.83182	280.2930	245.4989	72.52641	38.21242
#1	-.016561	.0074553	.0010138	-.000161	-.000122	.0110273	-.001533
#2	-.011274	.0077913	.0010382	-.000250	.000017	.0040120	-.000736
#3	-.003523	.0073734	.0005359	.000173	.000512	.0216138	-.000958

Reviewed By:jaswal
On:6/11/2025 2:45:55 PM
Inst Id :P4
LB :LB136097

Sample Name: CCB12 Acquired: 6/11/2025 2:25:32 Type: Unk
Method: 6010-200.7 NEW(v2) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB12 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.001221	-.001901	.0002185
Stddev	.001556	.001131	.0000195
%RSD	127.4158	59.52632	8.916382
#1	.000570	-.002770	.0002406
#2	-.001998	-.000622	.0002112
#3	-.002236	-.002310	.0002037

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3360.711	79975.60	13134.91	2518.553	4828.093
Stddev	16.758	249.22	29.06	13.603	17.789
%RSD	.4986576	.3116184	.2212802	.5400971	.3684433
#1	3366.236	80253.03	13101.69	2531.188	4826.865
#2	3374.010	79770.67	13155.64	2504.155	4846.464
#3	3341.888	79903.11	13147.41	2520.316	4810.950

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB168384

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: 06/10/2025 **Time :** 10:05 **Temp :** 96 °C

End Digest Date: 06/10/2025 **Time :** 13:10 **Temp :** 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: SLS.

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	M6016
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Conc. HNO3	3.00	M6158
1:1 HCL	5.00	MP85156
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

HOT BLOCK#1 CELL#50 96 C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
06/10/25 14:10	SLS. met. dig	Metals Lab
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB168384

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
PB168384BL	PBW384	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	1
PB168384BS	LCS384	<2	50	25	Colorless	Colorless	Clear	Clear	M6007,M6016	2
Q2253-01	RW8-SP100-20250605	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	3
Q2253-02	RW8-SP303-20250605	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	4
Q2253-02MS	RW8-SP303-20250605MS	<2	50	25	Colorless	Colorless	Clear	Clear	M6007,M6016	6
Q2253-02MSD	RW8-SP303-20250605MSD	<2	50	25	Colorless	Colorless	Clear	Clear	M6007,M6016	7
Q2253-02DUP	RW8-SP303-20250605DUP	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	5

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB168384 **WorkList ID :** 190067 **Department :** Digestion **Date :** 06-10-2025 09:49:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2253-01	RW8-SP100-20250605	Water	Metals Group4	1:1 HNO3 to pH < 2	TETR06	D21	06/05/2025	6010D
Q2253-02	RW8-SO303-20250605	Water	Metals Group4	1:1 HNO3 to pH < 2	TETR06	D21	06/05/2025	6010D

Date/Time 06/10/25 10:05
Raw Sample Received by: SDS-metals
Raw Sample Relinquished by: JT(SM)

Date/Time 06/10/25 11:05
Raw Sample Received by: JT(SM)
Raw Sample Relinquished by: SDS metals

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 # LB136097

Review By	Janvi	Review On	6/11/2025 10:49:51 AM
Supervise By	jaswal	Supervise On	6/11/2025 2:45:55 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85934
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	06/10/25 14:01		Jaswal	OK
2	S1	S1	CAL2	06/10/25 14:05		Jaswal	OK
3	S2	S2	CAL3	06/10/25 14:09		Jaswal	OK
4	S3	S3	CAL4	06/10/25 14:14		Jaswal	OK
5	S4	S4	CAL5	06/10/25 14:18		Jaswal	OK
6	S5	S5	CAL6	06/10/25 14:22		Jaswal	OK
7	ICV01	ICV01	ICV	06/10/25 14:37		Jaswal	OK
8	LLICV01	LLICV01	LLICV	06/10/25 14:41		Jaswal	OK
9	ICB01	ICB01	ICB	06/10/25 14:45		Jaswal	OK
10	CRI01	CRI01	CRDL	06/10/25 14:50		Jaswal	OK
11	ICSA01	ICSA01	ICSA	06/10/25 14:54		Jaswal	OK
12	ICSAB01	ICSAB01	ICSAB	06/10/25 15:18		Jaswal	OK
13	ICSADL	ICSADL	ICSA	06/10/25 15:22		Jaswal	OK
14	ICSABDL	ICSABDL	ICSAB	06/10/25 15:26		Jaswal	OK
15	CCV01	CCV01	CCV	06/10/25 15:30		Jaswal	OK
16	CCB01	CCB01	CCB	06/10/25 15:35		Jaswal	OK
17	Q2242-04	TP09-MHJ	SAM	06/10/25 15:39		Jaswal	OK
18	Q2242-04DUP	TP09-MHJDUP	DUP	06/10/25 15:43		Jaswal	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB136097

Review By	Janvi	Review On	6/11/2025 10:49:51 AM
Supervise By	jaswal	Supervise On	6/11/2025 2:45:55 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85934
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

19	Q2242-04L	TP09-MHJL	SD	06/10/25 15:48		Jaswal	OK
20	Q2242-04MS	TP09-MHJMS	MS	06/10/25 15:52		Jaswal	OK
21	Q2242-04MSD	TP09-MHJMSD	MSD	06/10/25 15:56		Jaswal	OK
22	Q2242-04A	TP09-MHJA	PS	06/10/25 16:00	0.1ML EACH M6004, M6013-10ML SAMPLE	Jaswal	OK
23	Q2197-01	DSN002	SAM	06/10/25 16:05		Jaswal	OK
24	Q2197-03	DSN001	SAM	06/10/25 16:15		Jaswal	OK
25	Q2197-05	DSN003	SAM	06/10/25 16:19		Jaswal	OK
26	Q2210-01	TW1	SAM	06/10/25 16:23		Jaswal	OK
27	CCV02	CCV02	CCV	06/10/25 16:28		Jaswal	OK
28	CCB02	CCB02	CCB	06/10/25 16:32		Jaswal	OK
29	Q2243-01	WATER-TREATMENT	SAM	06/10/25 16:37		Jaswal	OK
30	Q2241-01	TP-N	SAM	06/10/25 16:41		Jaswal	OK
31	Q2241-05	TP-S	SAM	06/10/25 16:45		Jaswal	OK
32	Q2248-01	TR-05-060525	SAM	06/10/25 16:49		Jaswal	OK
33	Q2197-05DUP	DSN003DUP	DUP	06/10/25 16:53		Jaswal	OK
34	Q2197-05L	DSN003L	SD	06/10/25 16:58		Jaswal	OK
35	Q2197-05MS	DSN003MS	MS	06/10/25 17:02		Jaswal	OK
36	Q2197-05MSD	DSN003MSD	MSD	06/10/25 17:06		Jaswal	OK
37	Q2197-05A	DSN003A	PS	06/10/25 17:28	0.1ML EACH M6004, M6013-10ML SAMPLE	Jaswal	OK

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB136097

Review By	Janvi	Review On	6/11/2025 10:49:51 AM
Supervise By	jaswal	Supervise On	6/11/2025 2:45:55 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85934
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

38	Q2137-05	MOO-25-0151	SAM	06/10/25 17:32		Jaswal	OK
39	CCV03	CCV03	CCV	06/10/25 17:36		Jaswal	OK
40	CCB03	CCB03	CCB	06/10/25 17:40		Jaswal	OK
41	Q2240-01	TP-3	SAM	06/10/25 17:45		Jaswal	OK
42	Q2240-05	TP-2	SAM	06/10/25 17:49		Jaswal	OK
43	Q2240-09	TP-1	SAM	06/10/25 17:53		Jaswal	OK
44	Q2244-01	TP03-MHC	SAM	06/10/25 17:58		Jaswal	OK
45	Q2242-01	TP09-MHJ	SAM	06/10/25 18:02		Jaswal	OK
46	Q2238-01DUP	0528DUP	DUP	06/10/25 18:06	RPD fail for more than 50% parameter	Jaswal	Not Ok
47	Q2238-01L	0528L	SD	06/10/25 18:11	RPD fail for more than 50% parameter	Jaswal	Not Ok
48	Q2238-01MS	0528MS	MS	06/10/25 18:15	RPD fail for more than 50% parameter	Jaswal	Not Ok
49	Q2238-01MSD	0528MSD	MSD	06/10/25 18:19	RPD fail for more than 50% parameter	Jaswal	Not Ok
50	Q2238-01A	0528A	PS	06/10/25 18:23	RPD fail for more than 50% parameter	Jaswal	Not Ok
51	CCV04	CCV04	CCV	06/10/25 18:28		Jaswal	OK
52	CCB04	CCB04	CCB	06/10/25 18:32		Jaswal	OK
53	PB168309BL	PB168309BL	MB	06/10/25 18:36		Jaswal	OK
54	PB168309BS	PB168309BS	LCS	06/10/25 18:40		Jaswal	OK
55	PB168284BL	PB168284BL	MB	06/10/25 18:44	NOT USE	Jaswal	Not Ok

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB136097

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Supervise By	jaswal	Supervise On	6/11/2025 2:45:55 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85934
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

56	PB168284BS	PB168284BS	LCS	06/10/25 18:49	NOT USE	Jaswal	Not Ok
57	PB168310BL	PB168310BL	MB	06/10/25 18:53		Jaswal	OK
58	PB168310BS	PB168310BS	LCS	06/10/25 18:57		Jaswal	OK
59	Q2246-01	BU-03-060525	SAM	06/10/25 19:01		Jaswal	OK
60	Q2259-03	OU4-PCS-TC-37-060	SAM	06/10/25 19:05		Jaswal	OK
61	Q2259-05	OU4-TS-29-060525	SAM	06/10/25 19:10		Jaswal	OK
62	Q2259-06	OU4-TS-30-060525	SAM	06/10/25 19:14		Jaswal	OK
63	CCV05	CCV05	CCV	06/10/25 19:18		Jaswal	OK
64	CCB05	CCB05	CCB	06/10/25 19:22		Jaswal	OK
65	Q2265-01	TP11-MHL-WC	SAM	06/10/25 19:27		Jaswal	OK
66	Q2266-01	WC-3	SAM	06/10/25 19:31		Jaswal	OK
67	Q2266-05	WC-5	SAM	06/10/25 19:35		Jaswal	OK
68	Q2260-01	TP10-MHG-WC	SAM	06/10/25 19:39		Jaswal	OK
69	Q2260-01DUP	TP10-MHG-WCDUP	DUP	06/10/25 19:44		Jaswal	OK
70	Q2260-01L	TP10-MHG-WCL	SD	06/10/25 19:48		Jaswal	OK
71	Q2260-01MS	TP10-MHG-WCMS	MS	06/10/25 19:52		Jaswal	OK
72	Q2260-01MSD	TP10-MHG-WCMSD	MSD	06/10/25 19:57		Jaswal	OK
73	Q2260-01A	TP10-MHG-WCA	PS	06/10/25 20:01	0.1ML EACH M6004, M6013-10ML SAMPLE	Jaswal	OK
74	PB168353BL	PB168353BL	MB	06/10/25 20:05		Jaswal	OK

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Fax : 908 789 8922

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB136097

Review By	Janvi	Review On	6/11/2025 10:49:51 AM
Supervise By	jaswal	Supervise On	6/11/2025 2:45:55 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85934
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

75	CCV06	CCV06	CCV	06/10/25 20:09		Jaswal	OK
76	CCB06	CCB06	CCB	06/10/25 20:14		Jaswal	OK
77	PB168353BS	PB168353BS	LCS	06/10/25 20:22		Jaswal	OK
78	Q2259-01	OU4-PCS-TC-36-060	SAM	06/10/25 20:26		Jaswal	OK
79	Q2238-01	0528	SAM	06/10/25 20:30	RPD fail for more than 50% parameter	Jaswal	Not Ok
80	PB168245BL	PB168245BL	MB	06/10/25 20:35		Jaswal	OK
81	PB168245BS	PB168245BS	LCS	06/10/25 20:39		Jaswal	OK
82	Q2176-01	TP-46	SAM	06/10/25 20:43		Jaswal	OK
83	Q2176-02	TP-56	SAM	06/10/25 20:47		Jaswal	OK
84	Q2176-03	TP-25	SAM	06/10/25 20:51		Jaswal	OK
85	Q2176-04	TP-26	SAM	06/10/25 20:55		Jaswal	OK
86	Q2176-05	TP-28	SAM	06/10/25 21:00		Jaswal	OK
87	CCV07	CCV07	CCV	06/10/25 21:04		Jaswal	OK
88	CCB07	CCB07	CCB	06/10/25 21:08		Jaswal	OK
89	Q2176-06	TP-27	SAM	06/10/25 21:12		Jaswal	OK
90	Q2176-07	TP-31	SAM	06/10/25 21:16		Jaswal	OK
91	Q2176-08	TP-65	SAM	06/10/25 21:32		Jaswal	OK
92	Q2177-02	B-187-SB01	SAM	06/10/25 21:36		Jaswal	OK
93	Q2177-04	B-187-SB02	SAM	06/10/25 21:40		Jaswal	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB136097

Review By	Janvi	Review On	6/11/2025 10:49:51 AM
Supervise By	jaswal	Supervise On	6/11/2025 2:45:55 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85934
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

94	Q2177-04DUP	B-187-SB02DUP	DUP	06/10/25 21:44		Jaswal	OK
95	Q2177-04L	B-187-SB02L	SD	06/10/25 21:48		Jaswal	OK
96	Q2177-04MS	B-187-SB02MS	MS	06/10/25 21:52		Jaswal	OK
97	Q2177-04MSD	B-187-SB02MSD	MSD	06/10/25 21:56		Jaswal	OK
98	Q2177-04A	B-187-SB02A	PS	06/10/25 22:00	0.1ML EACH M6004, M6013-10ML SAMPLE	Jaswal	OK
99	CCV08	CCV08	CCV	06/10/25 22:04		Jaswal	OK
100	CCB08	CCB08	CCB	06/10/25 22:08		Jaswal	OK
101	Q2177-06	B-202-SB01	SAM	06/10/25 22:13		Jaswal	OK
102	PB168359BL	PB168359BL	MB	06/10/25 22:17		Jaswal	OK
103	PB168359BS	PB168359BS	LCS	06/10/25 22:21		Jaswal	OK
104	Q2244-04	TP03-MHC	SAM	06/10/25 22:25		Jaswal	OK
105	Q2260-04	TP10-MHG-WC	SAM	06/10/25 22:30		Jaswal	OK
106	Q2262-02	ARS20-0032	SAM	06/10/25 22:34		Jaswal	OK
107	Q2262-04	ARS20-0001	SAM	06/10/25 22:39		Jaswal	OK
108	Q2265-04	TP11-MHL-WC	SAM	06/10/25 22:43		Jaswal	OK
109	Q2266-04	WC-3	SAM	06/10/25 22:48		Jaswal	OK
110	Q2266-08	WC-5	SAM	06/10/25 22:52		Jaswal	OK
111	CCV09	CCV09	CCV	06/10/25 22:56		Jaswal	OK
112	CCB09	CCB09	CCB	06/10/25 23:01		Jaswal	OK

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Instrument ID: P4

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Supervise By	jaswal	Supervise On	6/11/2025 2:45:55 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85934
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

113	Q2266-08DUP	WC-5DUP	DUP	06/10/25 23:05		Jaswal	OK
114	Q2266-08L	WC-5L	SD	06/10/25 23:09		Jaswal	OK
115	Q2266-08MS	WC-5MS	MS	06/10/25 23:14		Jaswal	OK
116	Q2266-08MSD	WC-5MSD	MSD	06/10/25 23:18		Jaswal	OK
117	Q2266-08A	WC-5A	PS	06/10/25 23:32	0.1ML EACH M6004, M6013-10ML SAMPLE	Jaswal	OK
118	PB168333TB	PB168333TB	MB	06/10/25 23:36		Jaswal	OK
119	PB168384BL	PB168384BL	MB	06/10/25 23:41		Jaswal	OK
120	PB168384BS	PB168384BS	LCS	06/10/25 23:45		Jaswal	OK
121	Q2253-01	RW8-SP100-2025060	SAM	06/10/25 23:49		Jaswal	OK
122	Q2253-02	RW8-SP303-2025060	SAM	06/10/25 23:53		Jaswal	OK
123	CCV10	CCV10	CCV	06/10/25 23:57		Jaswal	OK
124	CCB10	CCB10	CCB	06/11/25 00:02		Jaswal	OK
125	Q2253-02DUP	RW8-SP303-2025060	DUP	06/11/25 00:06		Jaswal	OK
126	Q2253-02L	RW8-SP303-2025060	SD	06/11/25 00:10		Jaswal	OK
127	Q2253-02MS	RW8-SP303-2025060	MS	06/11/25 00:15		Jaswal	OK
128	Q2253-02MSD	RW8-SP303-2025060	MSD	06/11/25 00:19		Jaswal	OK
129	Q2253-02A	RW8-SP303-2025060	PS	06/11/25 01:01	0.1ML EACH M6004, M6013-10ML SAMPLE	Jaswal	OK
130	PB168385BL	PB168385BL	MB	06/11/25 01:05		Jaswal	OK
131	PB168385BS	PB168385BS	LCS	06/11/25 01:09		Jaswal	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB136097

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Supervise By	jaswal	Supervise On	6/11/2025 2:45:55 PM

STD. NAME	STD REF.#
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868
ICV Standard	MP85934
CCV Standard	MP85875
ICSA Standard	MP85873,MP85874
CRI Standard	MP85897
LCS Standard	
Chk Standard	MP85876,MP85877

132	Q2271-01	TP12-MHK-WC	SAM	06/11/25 01:13		Jaswal	OK
133	Q2272-01	TP-6	SAM	06/11/25 01:17		Jaswal	OK
134	Q2273-01	WC-4	SAM	06/11/25 01:21		Jaswal	OK
135	CCV11	CCV11	CCV	06/11/25 01:35		Jaswal	OK
136	CCB11	CCB11	CCB	06/11/25 01:39		Jaswal	OK
137	Q2273-05	WC-6	SAM	06/11/25 01:44		Jaswal	OK
138	Q2274-01	TP-13-MHP-WC	SAM	06/11/25 01:48		Jaswal	OK
139	Q2274-01DUP	TP-13-MHP-WCDUP	DUP	06/11/25 01:52		Jaswal	OK
140	Q2274-01L	TP-13-MHP-WCL	SD	06/11/25 01:56		Jaswal	OK
141	Q2274-01MS	TP-13-MHP-WCMS	MS	06/11/25 02:01		Jaswal	OK
142	Q2274-01MSD	TP-13-MHP-WCMSD	MSD	06/11/25 02:05		Jaswal	OK
143	Q2274-01A	TP-13-MHP-WCA	PS	06/11/25 02:09	0.1ML EACH M6004, M6013-10ML SAMPLE	Jaswal	OK
144	CCV12	CCV12	CCV	06/11/25 02:21		Jaswal	OK
145	CCB12	CCB12	CCB	06/11/25 02:25		Jaswal	OK

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Prep Standard - Chemical Standard Summary

Order ID : Q2253

Test : Metals Group4

Prepbatch ID : PB168384,

Sequence ID/Qc Batch ID: LB136097,

Standard ID :
MP85156,MP85867,MP85868,MP85869,MP85870,MP85871,MP85873,MP85874,MP85875,MP85876,MP85877,MP85896,MP85897,MP85934,

Chemical ID :
M5466,M5467,M5471,M5658,M5697,M5747,M5748,M5798,M5799,M5800,M5801,M5811,M5814,M5820,M5942,M5962,M5969,M5970,M5984,M5985,M5996,M5997,M6007,M6016,M6021,M6023,M6028,M6030,M6032,M6077,M6127,M6128,M6137,M6138,M6142,M6144,M6145,M6146,M6151,M6152,M6155,M6158,M6159,M6162,M6163,M6164,M6165,W3112,

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
170	1:1HCL	MP85156	04/07/2025	08/18/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 1250.00000ml of M6151 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
902	ICP AES CAL BLK (SO/ICB/CCB)	MP85867	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 125.00000ml of M6151 + 2350.00000ml of W3112 + 25.00000ml of M6162 = Final Quantity: 2500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
907	ICP AES STD S (S5)	MP85868	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 5.00000ml of M5467 + 5.00000ml of M5471 + 5.00000ml of M5820 + 5.00000ml of M5969 + 5.00000ml of M5970 + 5.00000ml of M5996 + 5.00000ml of M5997 + 5.00000ml of M6077 + 5.00000ml of M6146 + 455.00000ml of MP85867 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
910	ICP AES STD S4	MP85869	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 50.00000ml of MP85867 + 50.00000ml of MP85868 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
909	ICP AES STD S3	MP85870	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 25.00000ml of MP85868 + 75.00000ml of MP85867 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
908	ICP AES S2/CRI MINERALS ONLY STD	MP85871	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 8.00000ml of MP85868 + 92.00000ml of MP85867 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
904	ICP AES ICSA SOLN	MP85873	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 25.00000ml of M6152 + 225.00000ml of MP85867 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3494	ICP AES ICSAB SOLN-1	MP85874	06/02/2025	06/20/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 10.00000ml of M6152 + 10.00000ml of M6155 + 80.00000ml of MP85867 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
911	ICP AES CCV SOLN	MP85875	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 50.00000ml of MP85867 + 50.00000ml of MP85868 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
919	ICP AES INTERNAL STD	MP85876	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 1.00000ml of M5984 + 10.00000ml of M5985 + 1969.00000ml of W3112 + 20.00000ml of M6162 = Final Quantity: 2000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
903	ICP AES RINSE SOLN	MP85877	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 200.00000ml of M6162 + 9800.00000ml of W3112 = Final Quantity: 10000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2950	ICP AES S1/CRI STOCK STD	MP85896	06/02/2025	06/13/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 0.03000ml of M5798 + 0.03000ml of M6028 + 0.05000ml of M5658 + 0.05000ml of M5811 + 0.05000ml of M6030 + 0.05000ml of M6159 + 0.06000ml of M5747 + 0.10000ml of M5471 + 0.10000ml of M5697 + 0.10000ml of M5801 + 0.10000ml of M5820 + 0.10000ml of M5962 + 0.10000ml of M5969 + 0.10000ml of M5970 + 0.10000ml of M6128 + 0.15000ml of M5800 + 0.20000ml of M5748 + 0.20000ml of M5799 + 0.20000ml of M5942 + 0.20000ml of M6021 + 0.20000ml of M6023 + 0.20000ml of M6145 + 0.25000ml of M5466 + 0.25000ml of M6146 + 0.50000ml of M5814 + 0.50000ml of M6032 + 1.00000ml of M6127 + 1.00000ml of M6138 + 1.00000ml of M6142 + 1.00000ml of M6144 + 2.00000ml of M6137 + 90.03000ml of MP85867 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2951	ICP AES S1/CRI WORK STD	MP85897	06/02/2025	06/23/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 06/14/2025

FROM 2.00000ml of MP85896 + 90.03000ml of MP85867 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4163	NEW ICV-060925	MP85934	06/10/2025	06/23/2025	Sarabjit Jaswal	METALS_SCALE_1 (M SC-1)	METALS_PIPETTE_3 (A)	Mohan Bera 06/16/2025

FROM 0.20000ml of M6163 + 0.20000ml of M6164 + 0.20000ml of M6165 + 49.40000ml of MP85867 = Final Quantity: 50.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57058 / Cerium, 1000PPM, 100ML	061322	06/13/2025	03/06/2023 / bin	03/01/2023 / bin	M5466

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57058 / Cerium, 1000PPM, 100ML	020623	02/06/2026	03/06/2023 / bin	03/01/2023 / bin	M5467

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57038 / Sr, 1000 PPM, 125 ml	082922	08/29/2025	04/14/2025 / jaswal	03/16/2023 / jaswal	M5471

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58024 / Chromium, Cr, 500 ml, 1000 PPM	060523	06/05/2026	08/28/2023 / jaswal	08/25/2023 / jaswal	M5658

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	102523	10/25/2026	04/03/2024 / jaswal	10/27/2023 / jaswal	M5697

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ Lead (Pb) 1000PPM	100923	10/09/2026	05/20/2024 / Jaswal	12/20/2023 / jaswal	M5747

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ Nickel (Ni) 1000PPM	091223	09/12/2026	01/02/2024 / bin	12/20/2023 / jaswal	M5748

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57005 / B, 1000 PPM, 125 ml	071123	07/11/2026	03/26/2024 / Sohil	01/03/2024 / jaswal	M5814

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57015 / P, 1000 PPM, 125 ml	091123	09/11/2026	05/01/2024 / jaswal	02/09/2024 / jaswal	M5820

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGTI1-1 / TITANIUM 125mL 1000ug/mL	T2-TI719972	06/17/2027	06/18/2024 / Jaswal	02/22/2024 / Jaswal	M5942

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57034 / Se, 1000 PPM, 125 ml	060624	06/06/2027	07/02/2024 / Jaswal	06/14/2024 / Jaswal	M5962

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57016 / S, 1000 PPM, 125 ml	122923	03/31/2026	03/31/2025 / kareem	06/11/2024 / Jaswal	M5969

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	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	10/30/2025	04/30/2025 / mohan	05/14/2024 / Jaswal	M6016

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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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	112124	11/21/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6127

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58025 / Mn, 1000 PPM, 500 ml	101124	10/11/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6128

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGSI1-1 / SILICON 125mL 1000ug/mL	V2-SI744713	07/10/2029	01/14/2025 / Jaswal	10/03/2024 / Jaswal	M6137

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	121824	12/18/2027	04/17/2025 / Janvi	01/13/2025 / Jaswal	M6138

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

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58030 / Zinc, Zn, 500 ml, 1000 PPM	121724	12/17/2027	02/04/2025 / jaswal	01/13/2025 / Jaswal	M6145

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57051 / Sb, 1000 PPM, 125 ml	071724	07/17/2027	01/31/2025 / kareem	10/18/2024 / kareem	M6146

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	08/18/2025	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART A / ICSA (ICP) STOCK SOLN	ICSA-1211	08/24/2025	02/24/2025 / kareem	04/20/2021 / kareem	M6152

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART B / ICSAB (ICP) STOCK SOLN	ICSB-0710	06/20/2025	02/10/2025 / kareem	02/09/2024 / kareem	M6155

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	03/25/2029	03/10/2025 / Eman	02/02/2025 / Sagar	M6158

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / Al, 10000 PPM, 500 ml	011325	03/18/2026	03/18/2025 / kareem	02/09/2025 / kareem	M6159

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24H0162012	11/27/2025	05/27/2025 / Sagar	04/27/2025 / Sagar	M6162

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	QCP-CICV-1-125ML / EPA CLP ICP Verification Standard1	V2-MEB744107	05/22/2029	06/09/2025 / jaswal	06/06/2025 / jaswal	M6163

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	QCP-CICV-2-125ML / EPA CLP ICP Verification Standard2	U2-MEB733713	06/01/2028	06/09/2025 / jaswal	06/09/2025 / jaswal	M6164

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	QCP-CICV-3-125ML / EPA CLP ICP Verification Standard3	V2-MEB749572	01/02/2030	06/09/2025 / jaswal	06/09/2025 / jaswal	M6165

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

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M6032

R 8/5/24

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CERTIFIED WEIGHT REPORT:

Part Number:	**57056**		**Lot #**		
Lot Number:	**010924**	**Solvent:**	24002546	Nitric Acid	
Description:	**Barium (Ba)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	010927				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

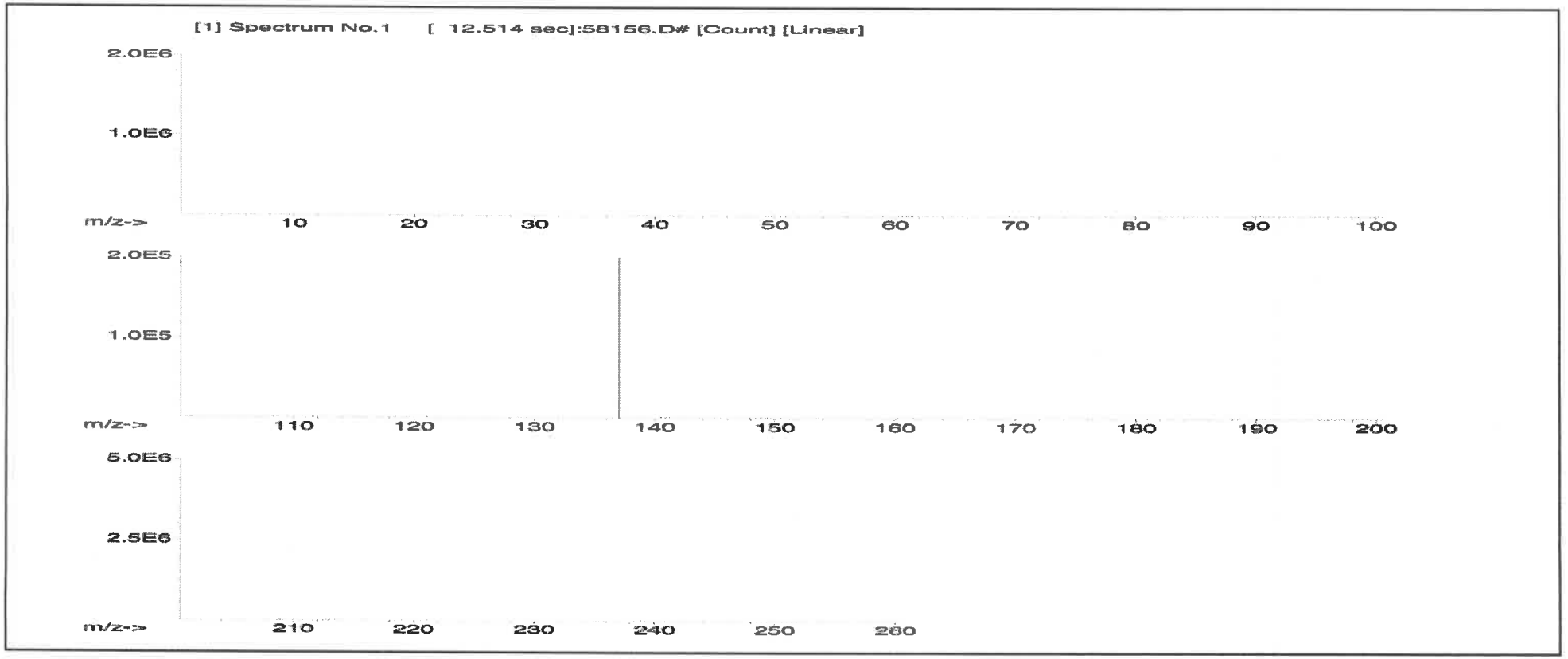
Giovanni Esposito

Formulated By:	Giovanni Esposito	010924

Pedro Rentas

Reviewed By:	Pedro L. Rentas	010924

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Barium nitrate (Ba)	IN023	BAD022019A1	1000	99.999	0.10	52.3	3.82417	3.82441	**1000.1**	**2.0**	10022-31-8	0.5 mg/m3	orl-rat 355 mg/kg	3104a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M6028

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R: 8/5/24

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

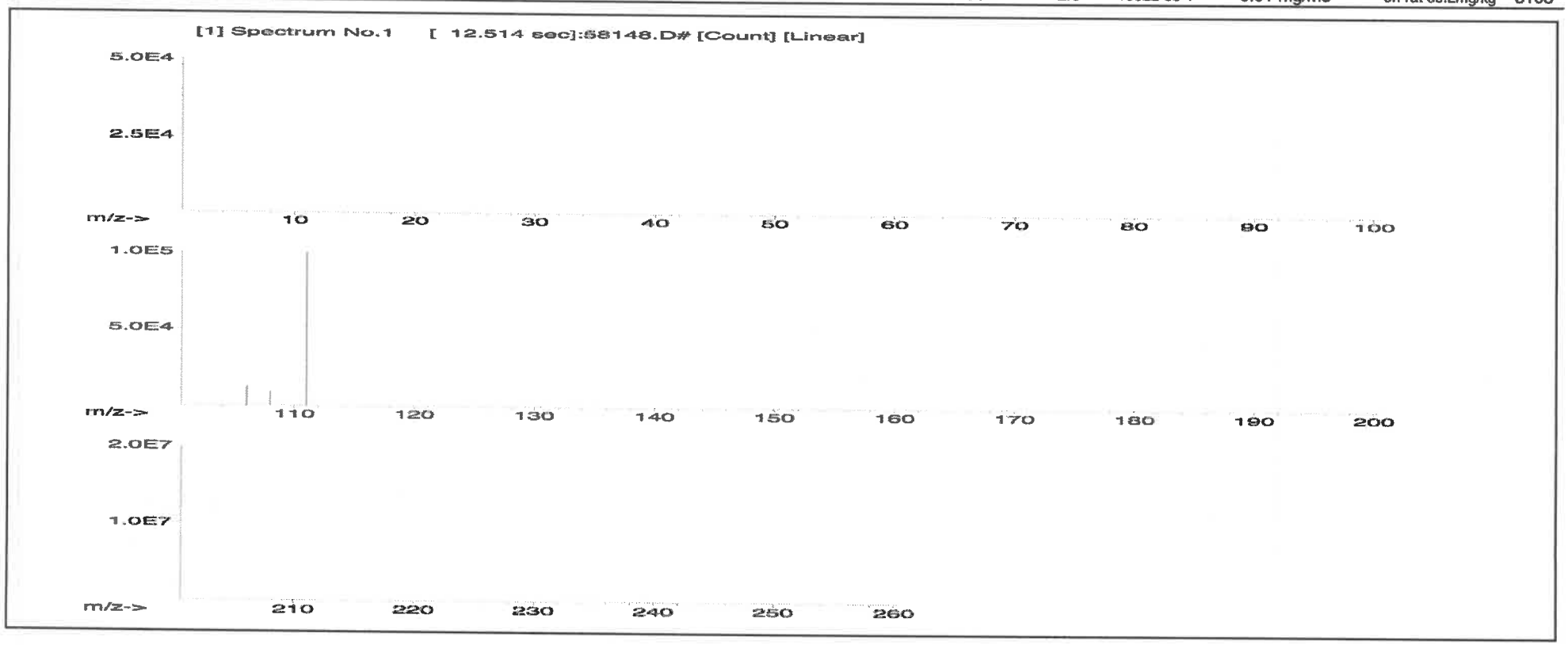
Weight shown below was diluted to (mL): 2000.07 ± 0.100 Flask Uncertainty

	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



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	T	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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R : 01/03/24. M5810, M5811

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CERTIFIED WEIGHT REPORT:

Part Number: 58126
Lot Number: 051523
Description: Iron (Fe)

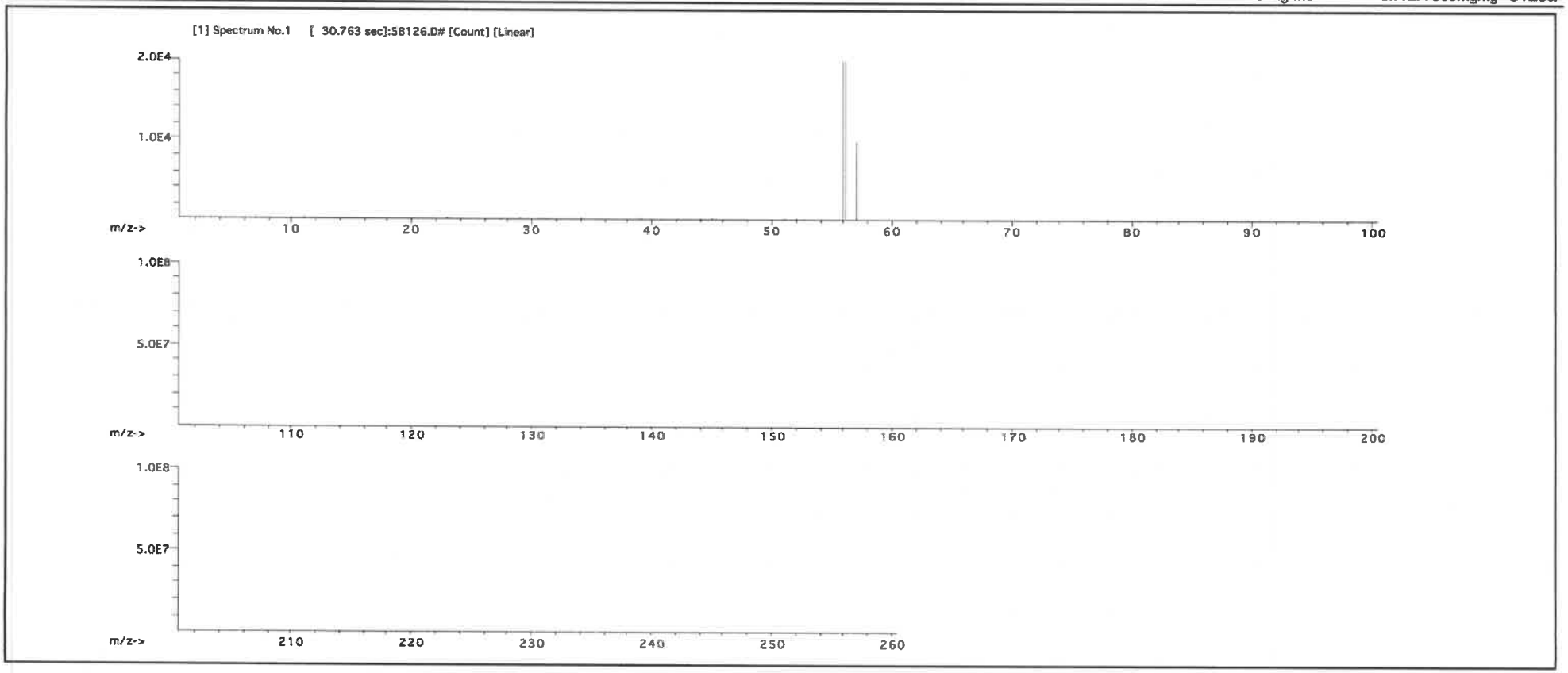
Expiration Date: 051526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 5000.1 ± 0.12 Flask Uncertainty

		Lot #	
Solvent:	21110221	Nitric Acid	
	5.0%	250.0 (mL)	Nitric Acid
	5E-05	Balance Uncertainty	

Giovanni Esposito
Formulated By: Giovanni Esposito 051523

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



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.10	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).

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RD:05/14/2024

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inorganicventures.com

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-1
Lot Number:	T2-MEB723367
Matrix:	5% (v/v) HNO3

Value / Analyte(s):	1 000 µg/mL ea: Potassium,	
	600 µg/mL ea: Phosphorus,	
	300 µg/mL ea: Sodium,	Iron,
	200 µg/mL ea: Magnesium, Cerium, Thallium,	Aluminum, Selenium,
	100 µg/mL ea: Lead,	Calcium,
	80 µg/mL ea: Arsenic,	
	70 µg/mL ea: Mercury,	
	50 µg/mL ea: Nickel,	
	40 µg/mL ea: Chromium,	
	30 µg/mL ea: Copper, Vanadium,	Boron,
	20 µg/mL ea: Zinc, Barium, Cadmium, Manganese,	Strontium, Beryllium, Cobalt, Lithium,
	7.5 µg/mL ea: Silver	

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	200.0 ± 0.7 µg/mL	Arsenic, As	80.0 ± 0.7 µg/mL
Barium, Ba	20.00 ± 0.09 µg/mL	Beryllium, Be	20.00 ± 0.13 µg/mL
Boron, B	30.00 ± 0.18 µg/mL	Cadmium, Cd	20.00 ± 0.09 µg/mL
Calcium, Ca	100.0 ± 0.4 µg/mL	Cerium, Ce	200.0 ± 0.8 µg/mL
Chromium, Cr	40.00 ± 0.30 µg/mL	Cobalt, Co	20.00 ± 0.10 µg/mL
Copper, Cu	30.00 ± 0.13 µg/mL	Iron, Fe	300.0 ± 1.3 µg/mL
Lead, Pb	100.0 ± 0.4 µg/mL	Lithium, Li	20.00 ± 0.08 µg/mL
Magnesium, Mg	200.0 ± 0.8 µg/mL	Manganese, Mn	20.00 ± 0.08 µg/mL
Mercury, Hg	70.0 ± 0.3 µg/mL	Nickel, Ni	50.00 ± 0.22 µg/mL
Phosphorus, P	600.0 ± 2.7 µg/mL	Potassium, K	1 000 ± 4 µg/mL
Selenium, Se	200.0 ± 1.3 µg/mL	Silver, Ag	7.50 ± 0.03 µg/mL
Sodium, Na	300.0 ± 1.4 µg/mL	Strontium, Sr	20.01 ± 0.08 µg/mL
Thallium, Tl	200.0 ± 1.4 µg/mL	Vanadium, V	30.00 ± 0.13 µg/mL
Zinc, Zn	20.00 ± 0.09 µg/mL		

Density: 1.034 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
B	ICP Assay	3107	190605
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Ce	ICP Assay	3110	090504
Ce	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	Traceable to 3152A	S2-NA700842
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Tl	ICP Assay	3158	151215
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 30, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 30, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



INORGANIC VENTURES

Refine your results. Redefine your industry.

Certificate of Analysis

RD:05/14/2024

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01 ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-2
Lot Number:	U2-MEB731108
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	200 µg/mL ea: Silica, 80 µg/mL ea: Antimony, 70 µg/mL ea: Tin, 40 µg/mL ea: Molybdenum, 20 µg/mL ea: Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	80.1 ± 0.6 µg/mL	Molybdenum, Mo	40.03 ± 0.18 µg/mL
Silica, SiO2	200.2 ± 1.3 µg/mL	Tin, Sn	70.0 ± 0.4 µg/mL
Titanium, Ti	20.01 ± 0.13 µg/mL		

Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
SiO2	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925
Ti	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 17, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- March 17, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

M 5466

Certified Reference Material CRM

R: 03/01/23 BH

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57058
Lot Number: 061322
Description: Cerium (Ce)

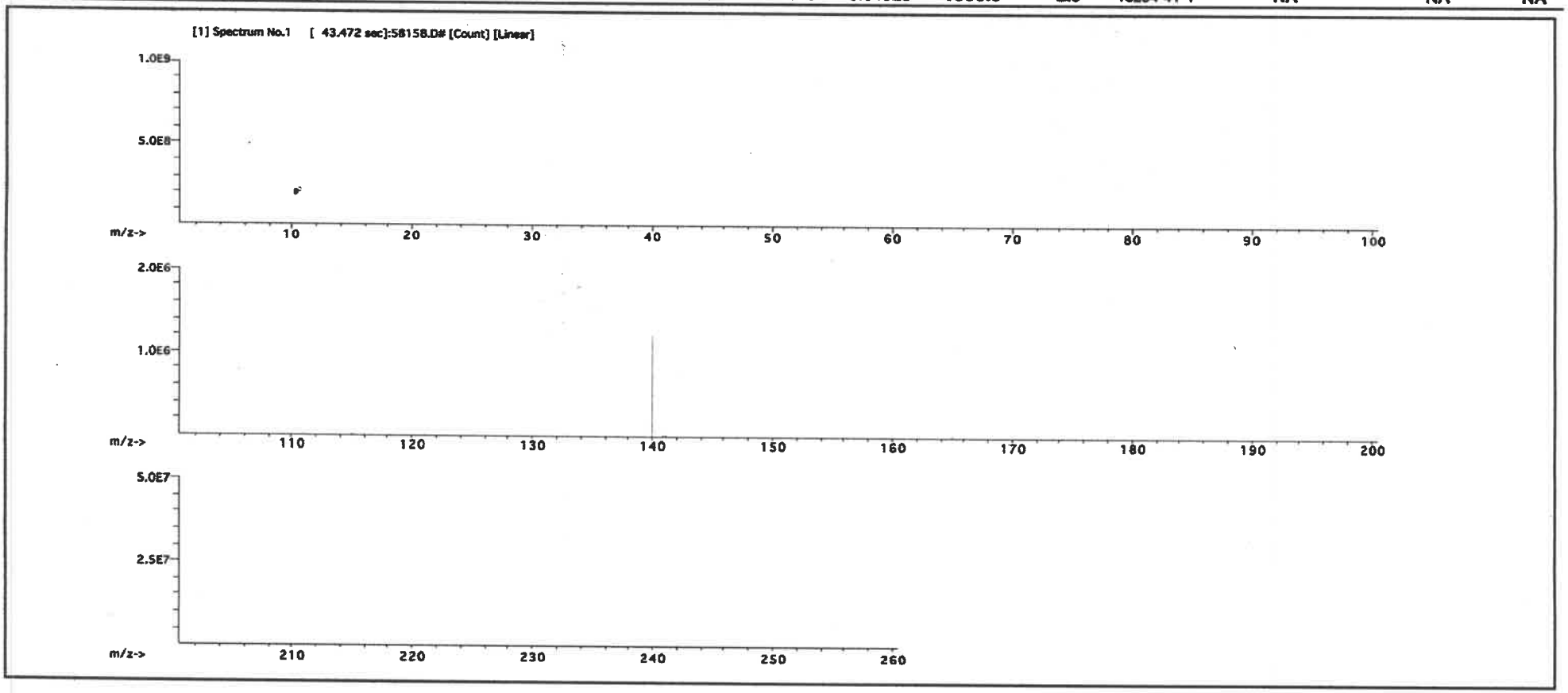
Expiration Date: 061325
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12 ± 0.058 Flask Uncertainty

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	20.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Lawrence Barry	061322
Reviewed By:	Pedro L. Rentas	061322

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cerium nitrate hexahydrate (Ce)	IN146	Z512CEB1	1000	99.999	0.10	32.8	3.04919	3.04923	1000.0	2.0	10294-41-4	NA	NA	NA



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass 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).

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Certified Reference Material CRM

M5467 R: 03/01/23 (LA)

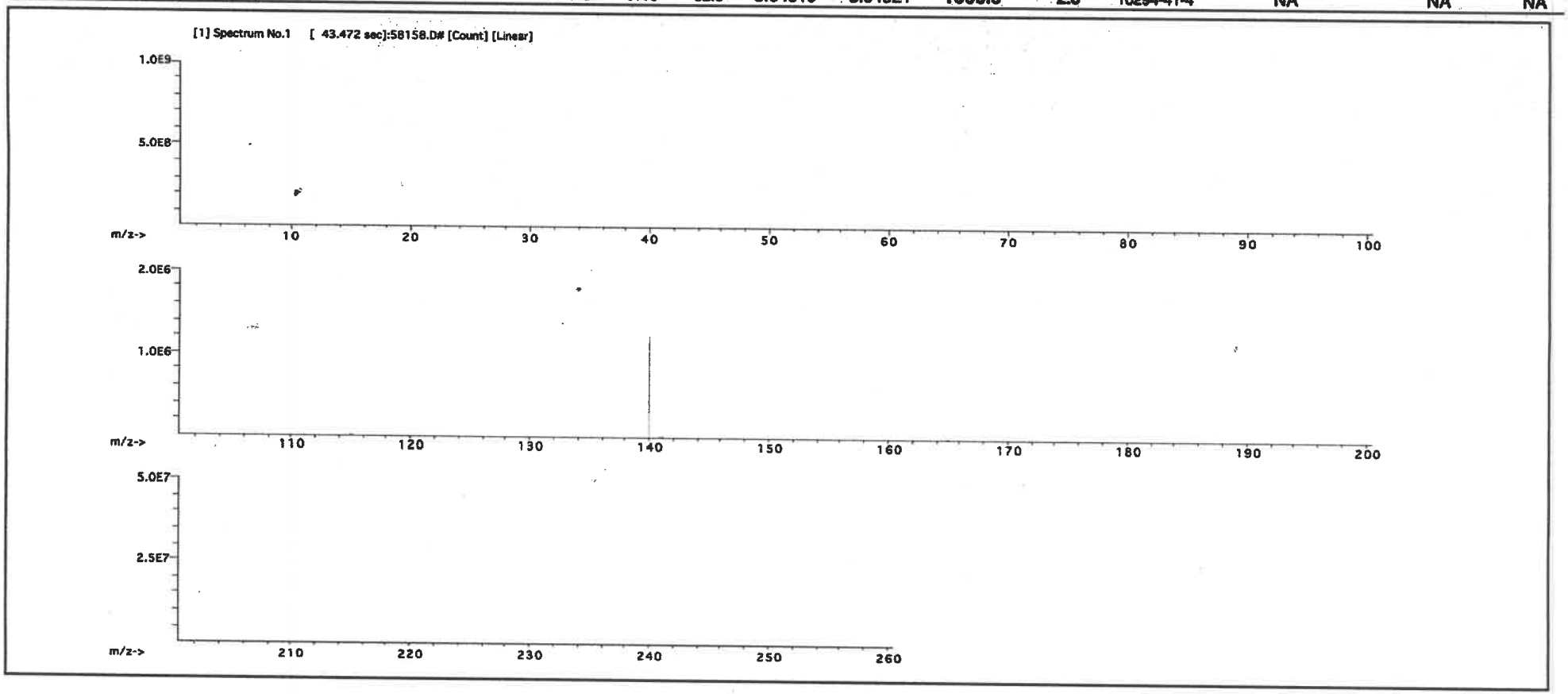
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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



22653-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).

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Certified Reference Material CRM

M5658 R ! 8/25/23

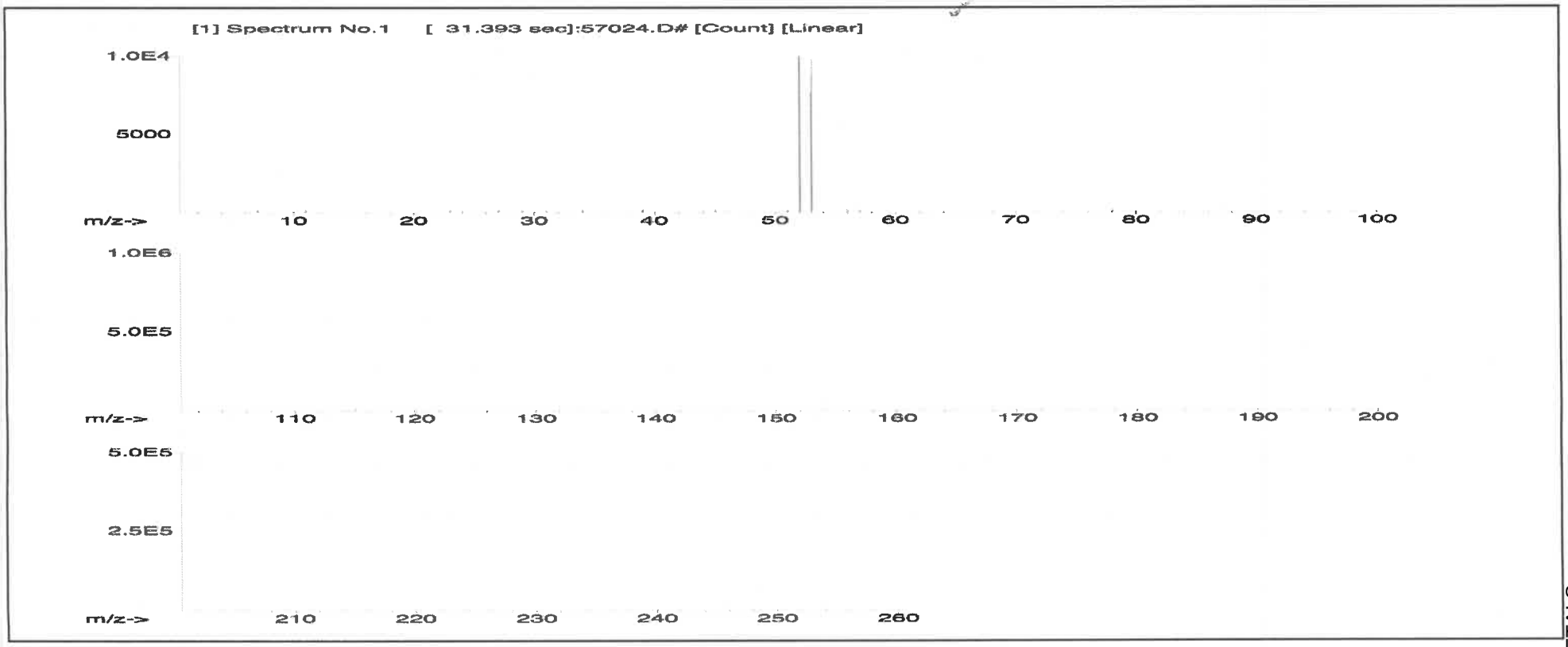
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	T	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M5697 R: 10/27/23

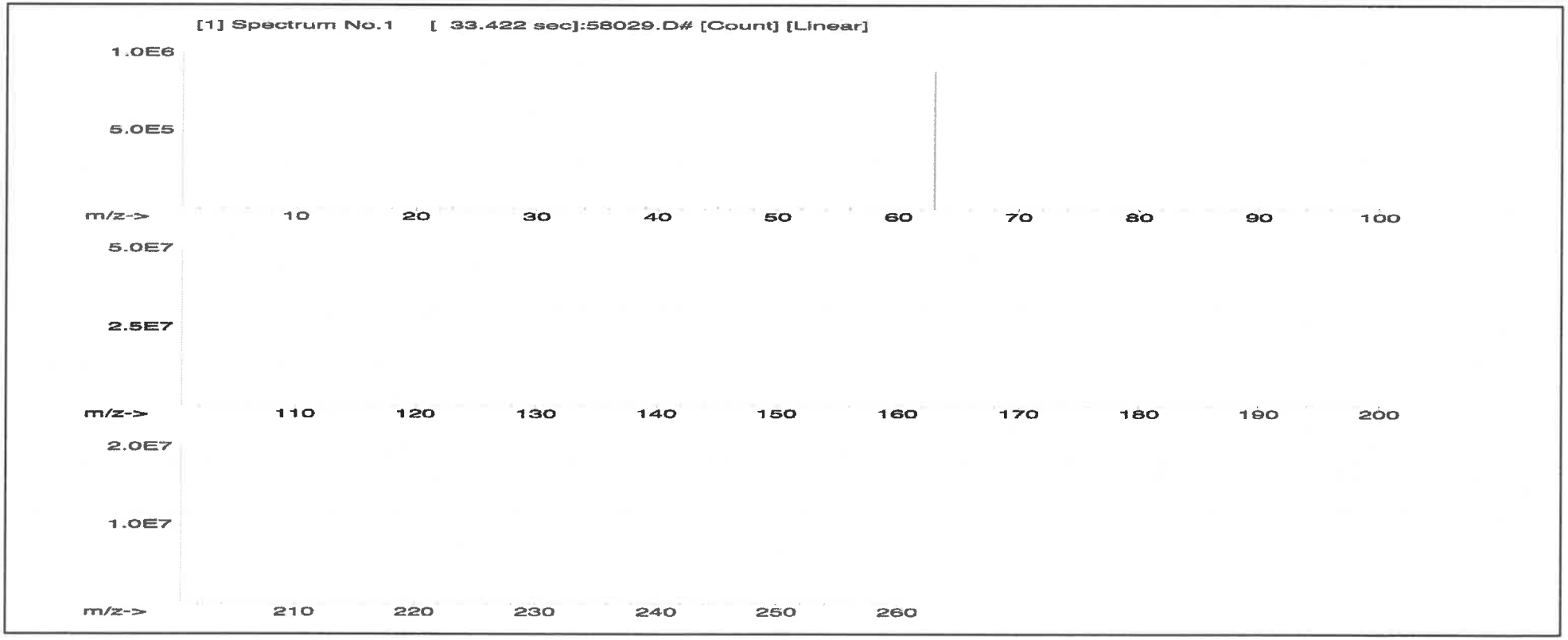
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58029**	24002546	Nitric Acid	
Lot Number:	**102523**			
Description:	**Copper (Cu)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	102526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Copper(II) nitrate trihydrate (Cu)	58129	100223	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	10031-43-3	1 mg/m3	orl-rat 794 mg/kg	3114



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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CERTIFIED WEIGHT REPORT:

Part Number: 57082
Lot Number: 100923
Description: Lead (Pb)

Expiration Date: 100926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

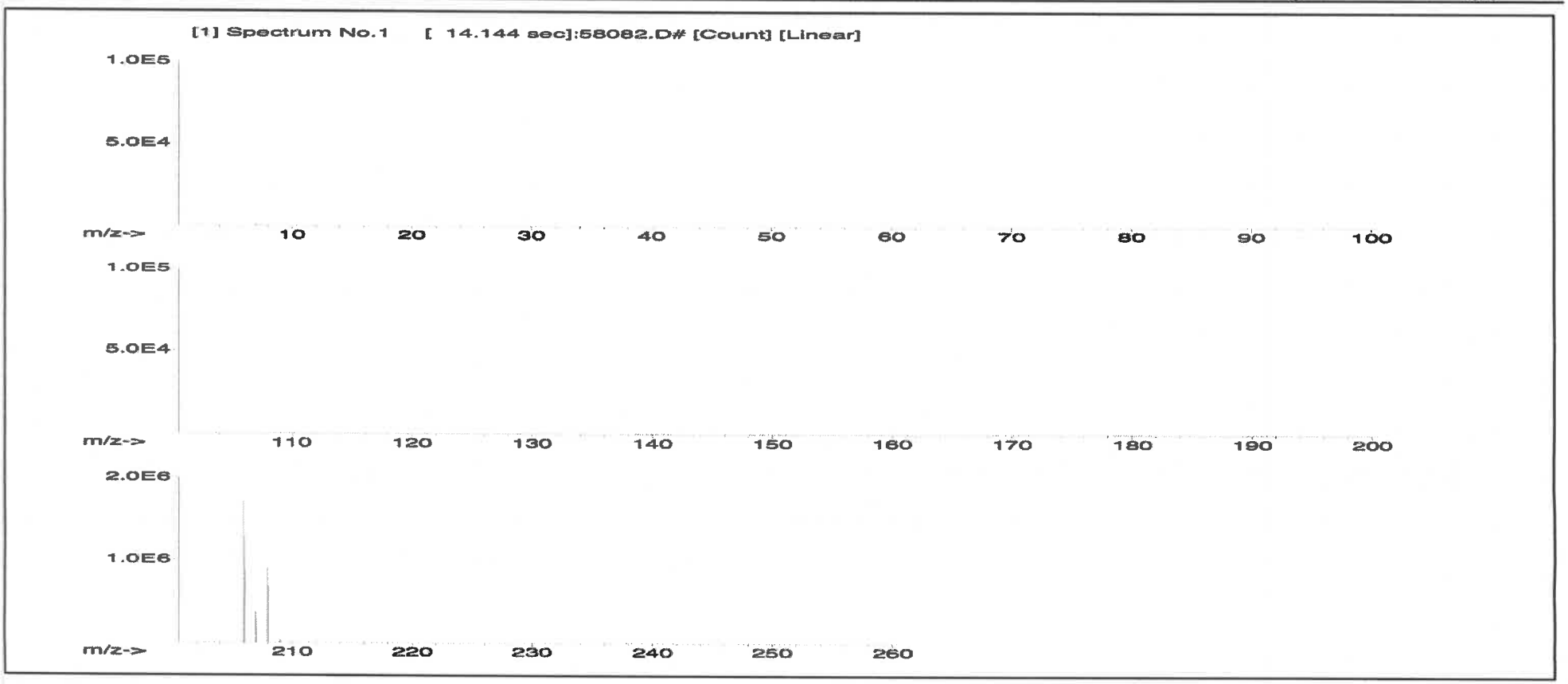
Weight shown below was diluted to (mL): 3000.41 0.06 Flask Uncertainty

	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



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	T	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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R: 12/20/23 M5748

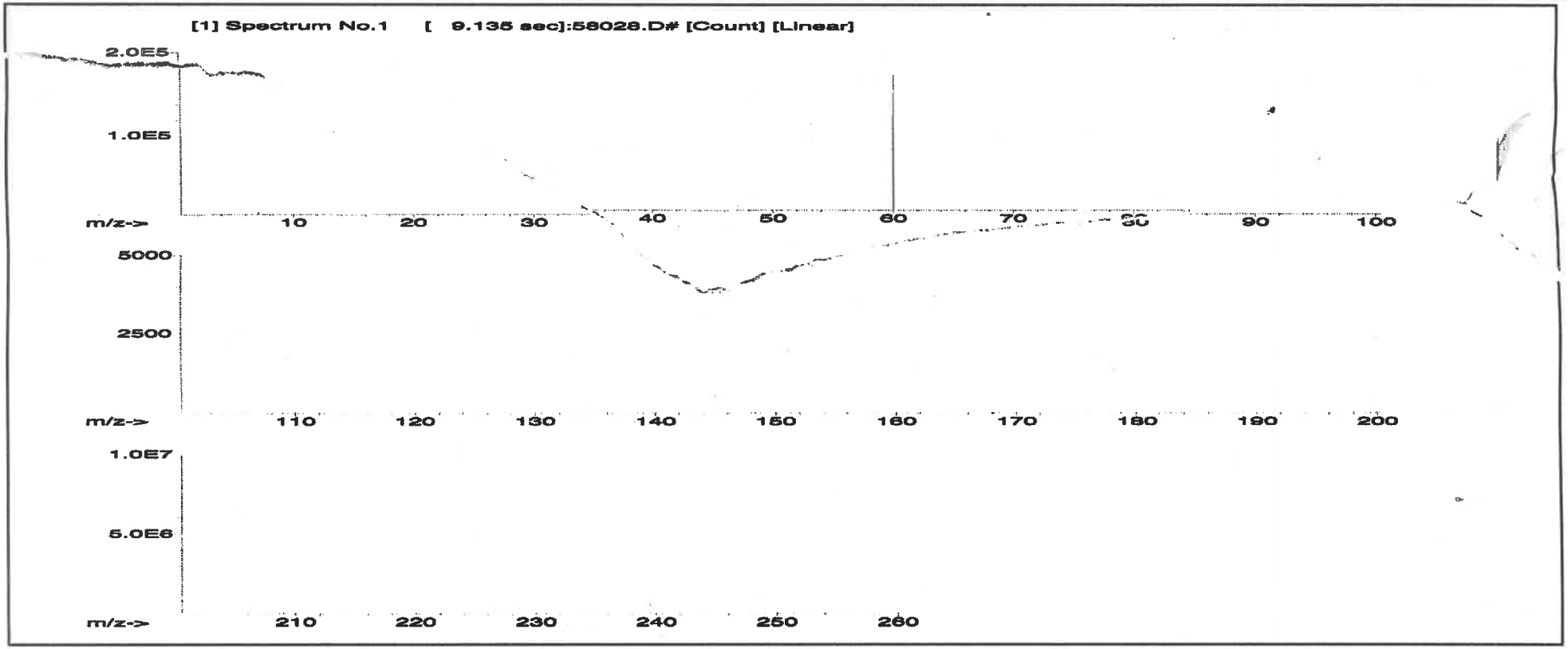
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57028**	24002546	Nitric Acid	
Lot Number:	**091223**			
Description:	**Nickel (Ni)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	091226			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	091223
Reviewed By:	Pedro L. Rentas	091223

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Nickel(II) nitrate hexahydrate (Ni)	58128	062023	0.1000	200.0	0.084	1000	10000.4	**1000.0**	2.2	13478-00-7	1 mg/m3	orl-rat 1620 mg/kg	3136



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	T	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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R: 02/09/24 M5798

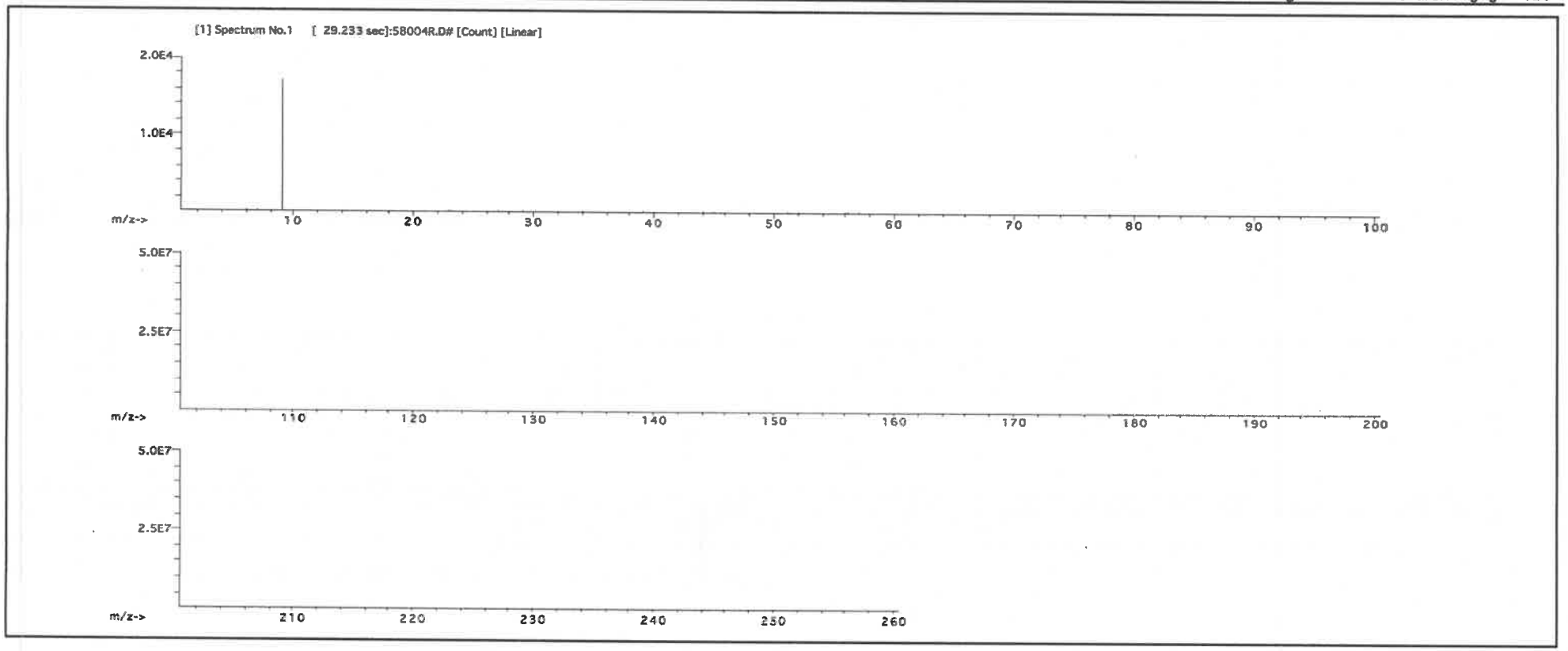
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57004**			
Lot Number:	**102523**	24002546	Nitric Acid	
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



Q2253-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	T	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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R? 02/09/24 IV15799

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BG

CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

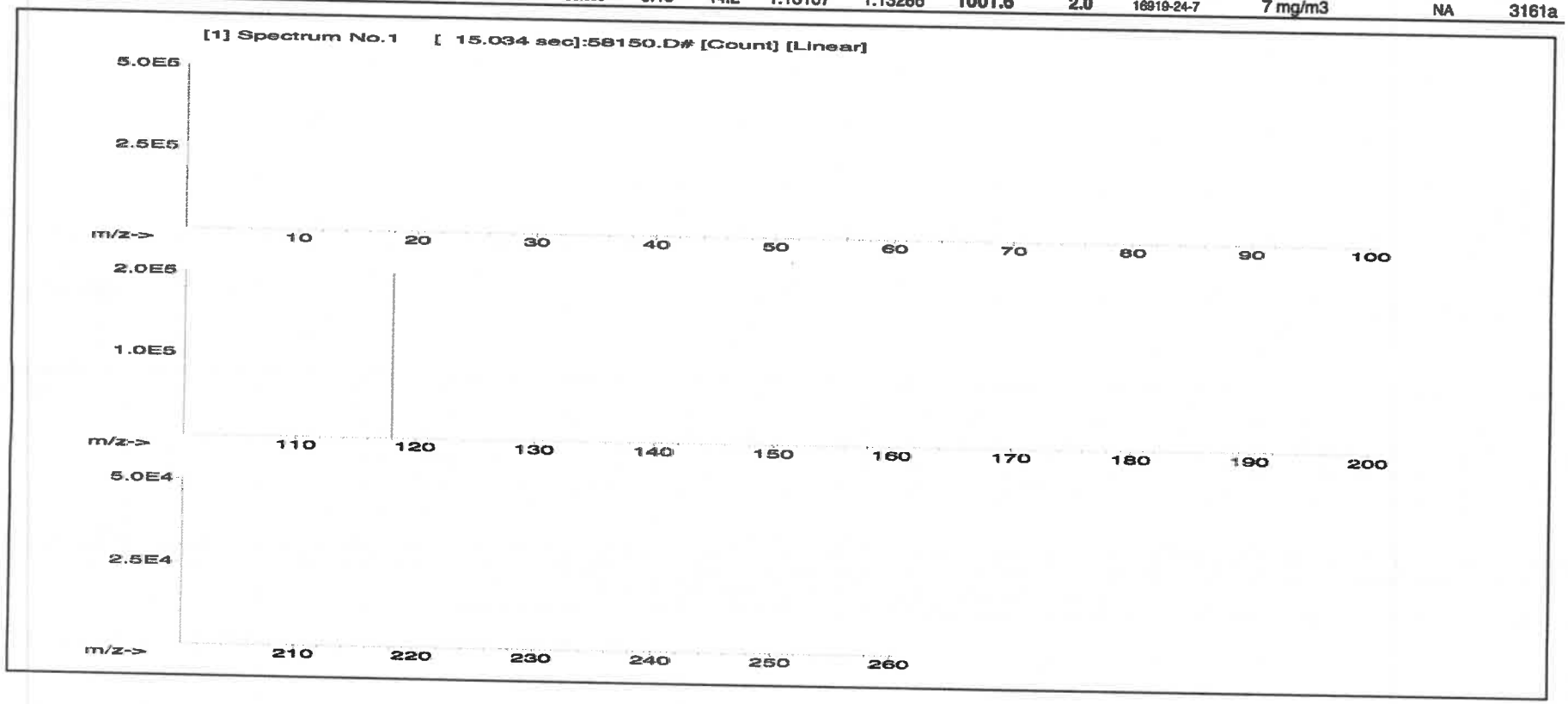
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	Lot #	
Solvents:	21110221	Nitric Acid
	22D0562008	Hydrochloric acid
2%	10.0	Nitric Acid
6%	30.0	Hydrochloric acid
	(mL)	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Benson Chan	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium hexafluorostannate(IV) (Sn)	IN010	SND042023A1	1000	99.999	0.10	44.2	1.13107	1.13286	**1001.6**	**2.0**	16919-24-7	7 mg/m3	NA	3161a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<500	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	T	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
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* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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R: 02/09/24 IM5800 BH

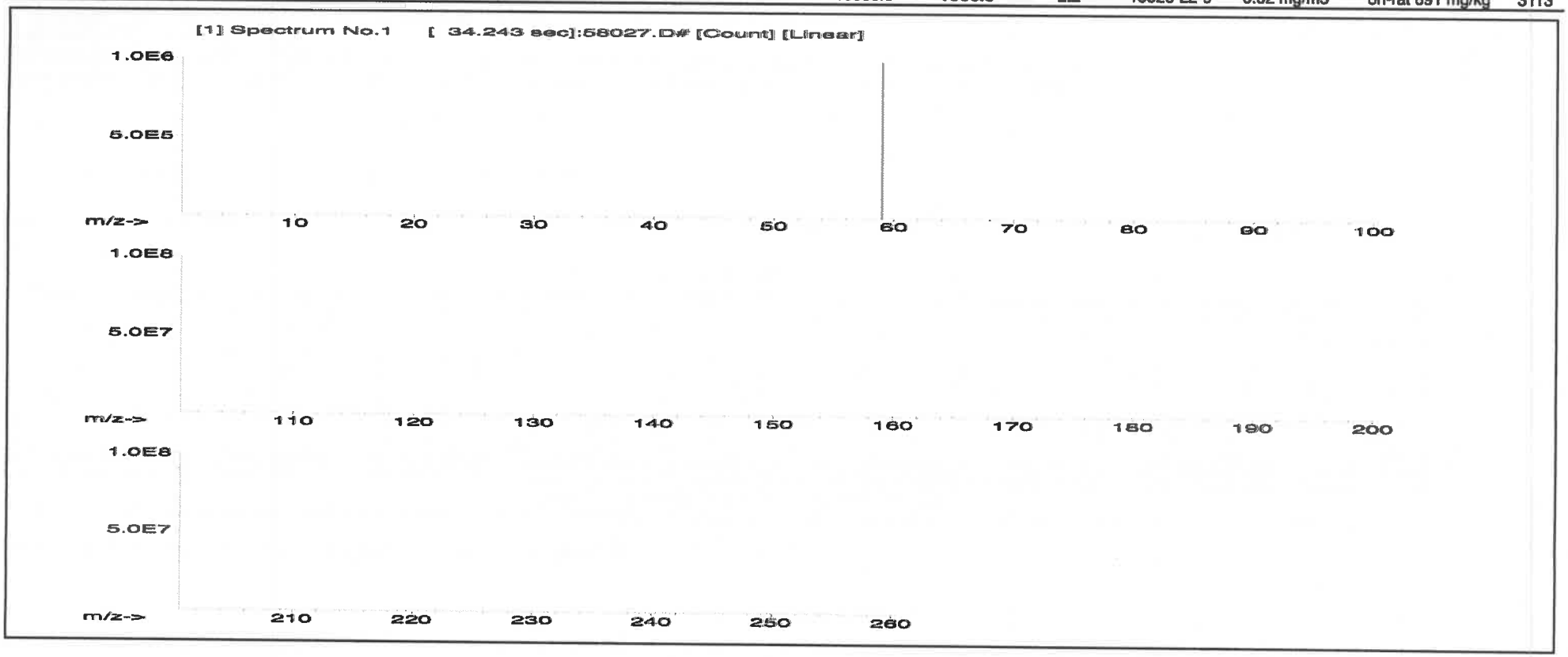
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57027**	24002546	Nitric Acid		
Lot Number:	**091923**				
Description:	**Cobalt (Co)**	2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	091926				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	091923
Reviewed By:	Pedro L. Rentas	091923

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cobalt(II) nitrate hexahydrate (Co)	58127	050923	0.1000	200.0	0.084	1000	10000.0	**1000.0**	2.2	10026-22-9	0.02 mg/m3	orl-rat 691 mg/kg	3113



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	T	Gé	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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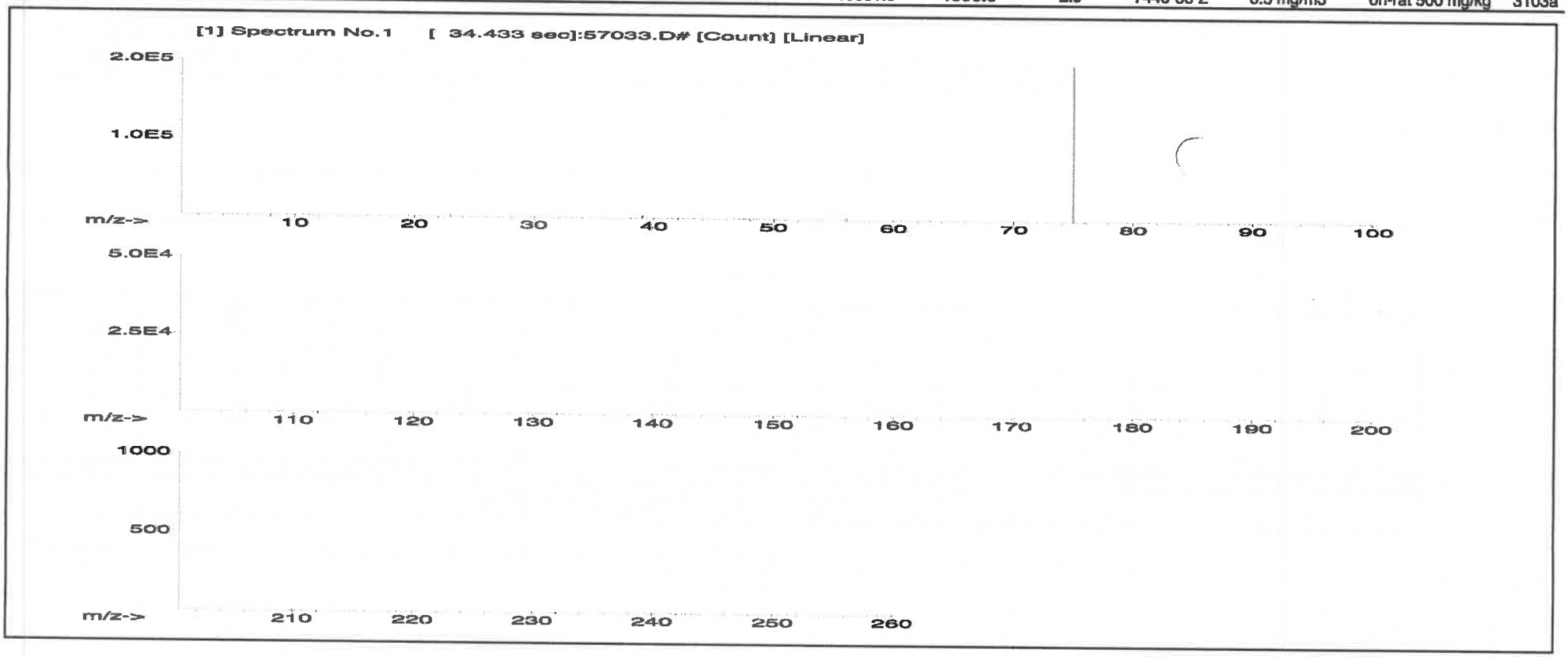
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CERTIFIED **WEIGHT** REPORT:

		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



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	T	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge*	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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A: 02/09/24 M.5814

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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

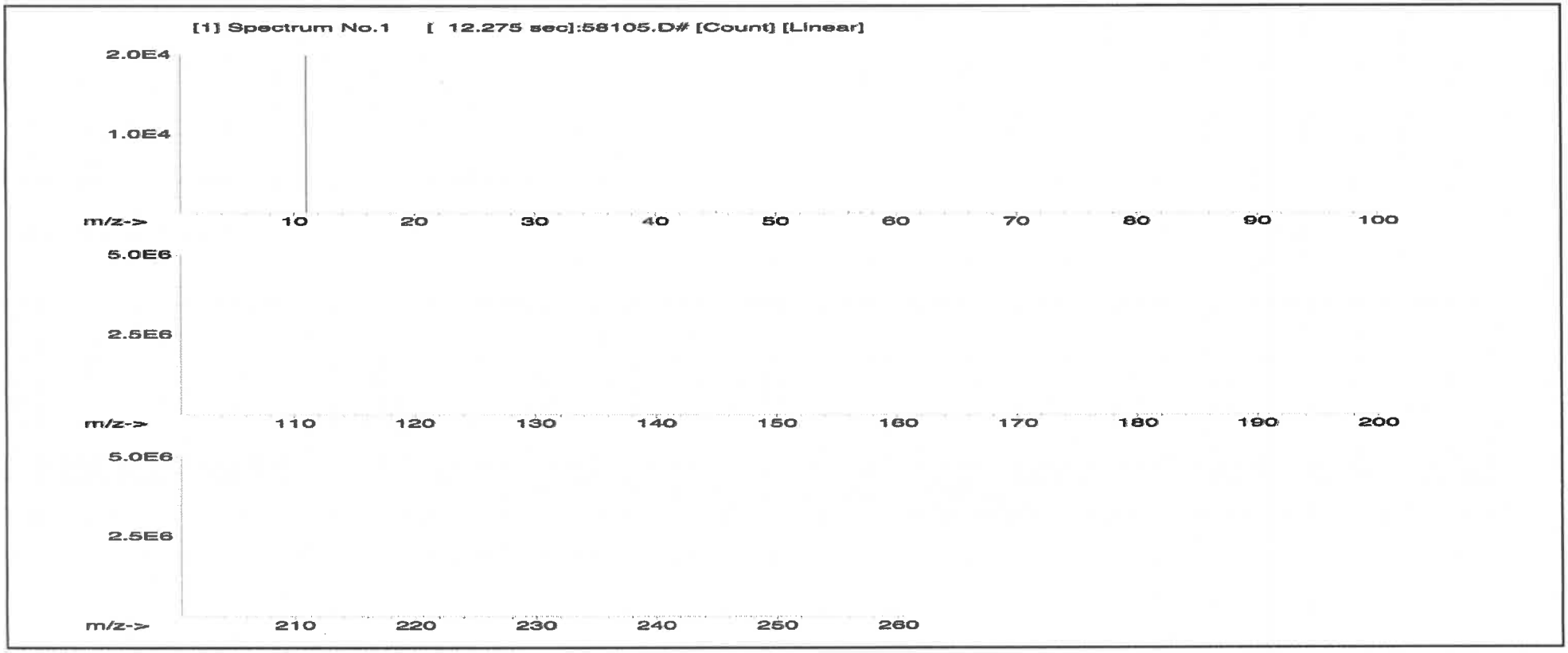
	Lot #			
Solvent:	MKBQ8597V	Ammonium hydroxide		
		2.0%	40.0 (mL)	Ammonium hydroxide

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



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	T	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

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Certified by:

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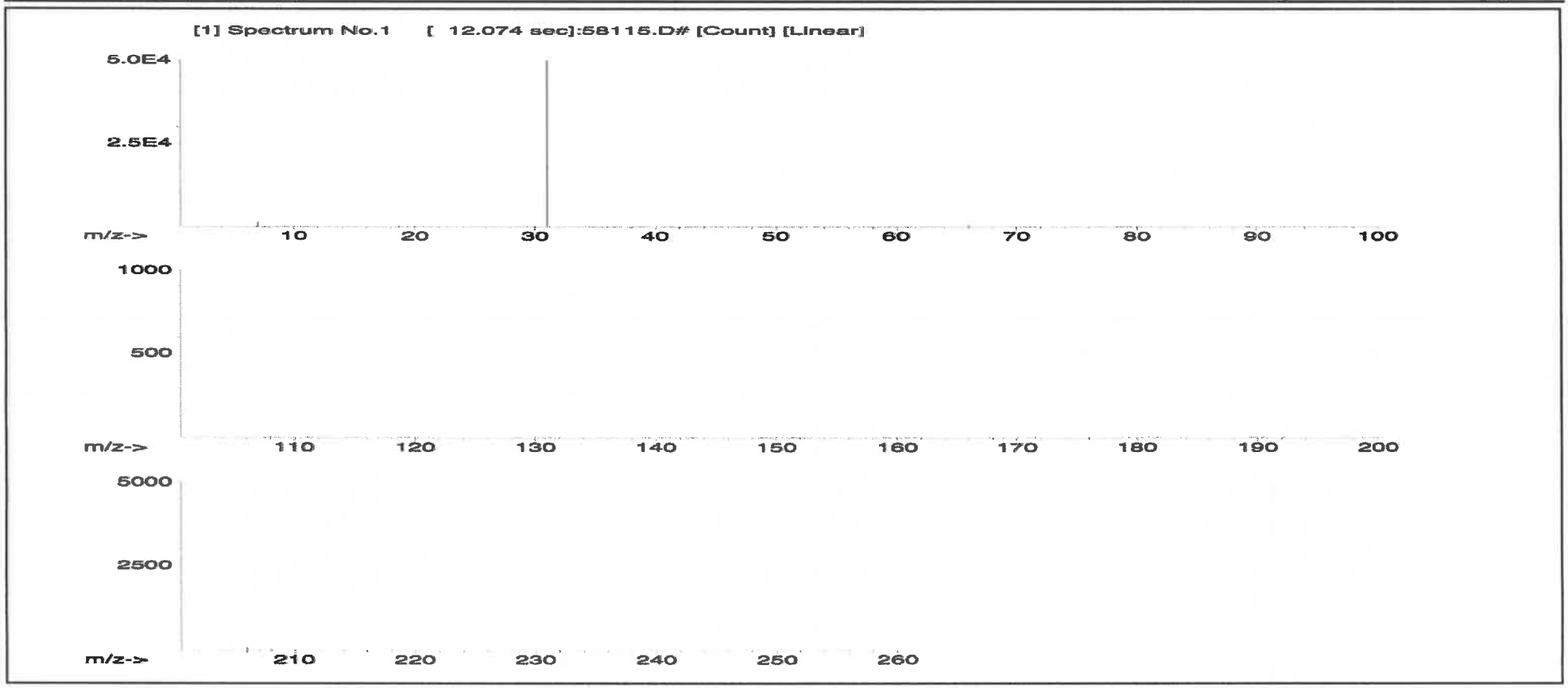
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CERTIFIED WEIGHT REPORT:

Part Number:	**57015**		**Lot #**		
Lot Number:	**091123**	**Solvent:**	24002546	Nitric Acid	
Description:	**Phosphorous (P)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	091126				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	091123
Reviewed By:	Pedro L. Rentas	091123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium dihydrogen phosphate (P)	IN008	PV082019A1	1000	99.999	0.10	27.5	7.2729	7.2730	**1000.0**	**2.0**	7722-76-1	5 mg/m3	orl-rat >2000mg/k	3186



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	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.

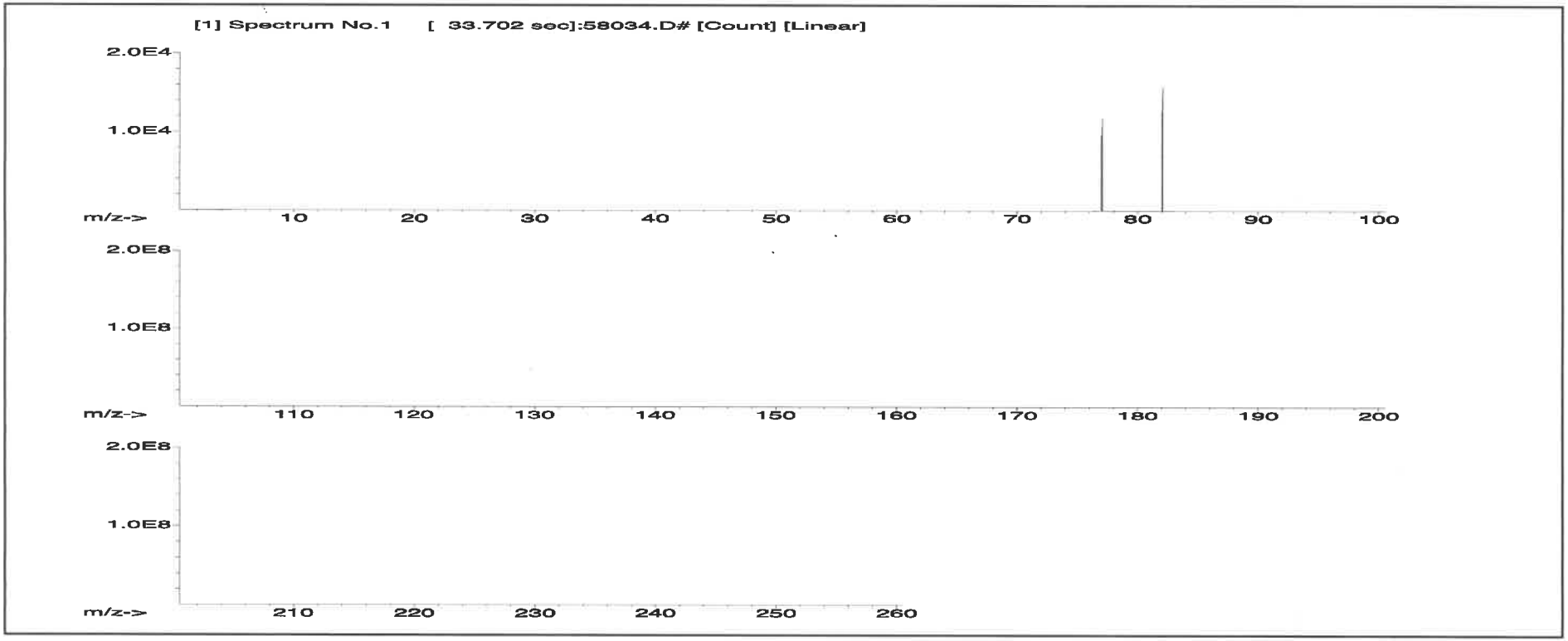
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	T	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

M5969 R: 06/11/24

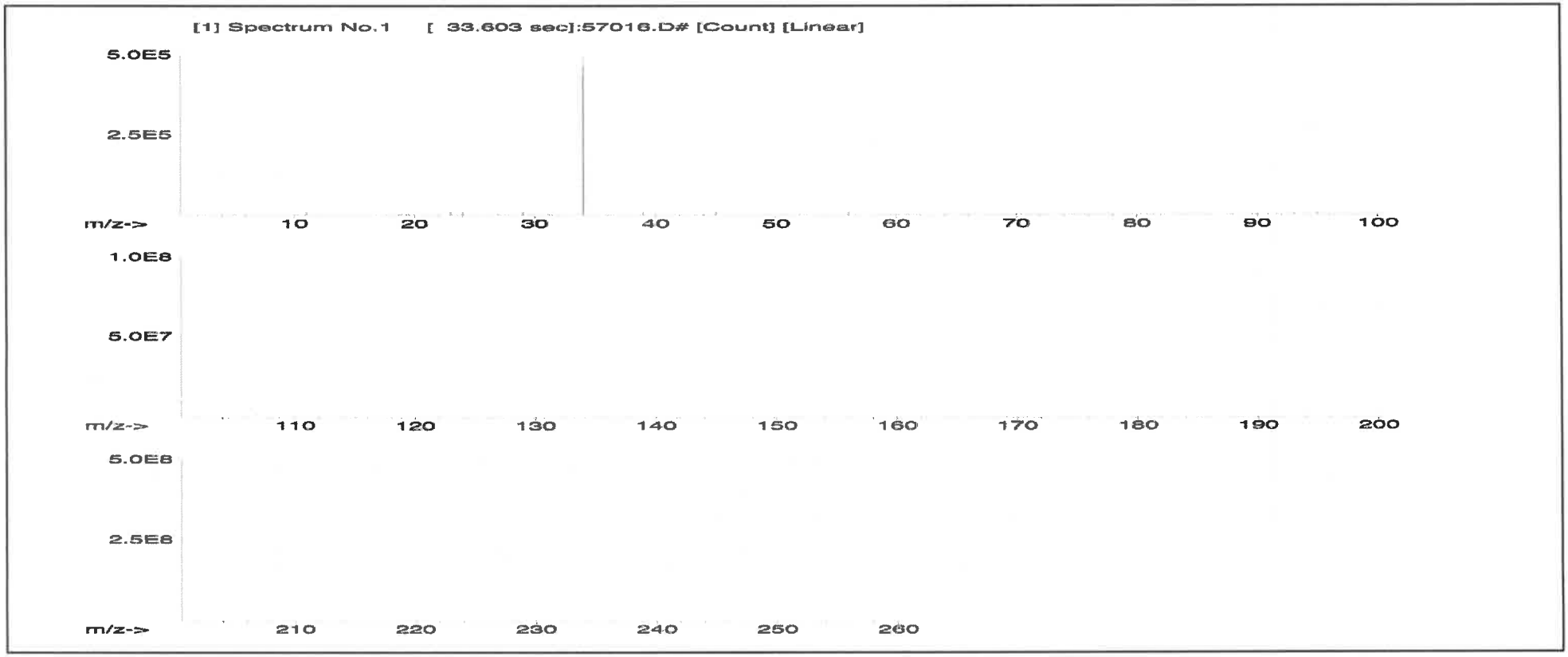
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CERTIFIED WEIGHT REPORT:

Part Number:	**57016**	**Solvent:**	**Lot #** 122923	ASTM Type 1 Water
Lot Number:	**122923**			
Description:	**Sulfur (S)**			
Expiration Date:	122926			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty	

Formulated By:	Benson Chan	122923
Reviewed By:	Pedro L. Rentas	122923

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium sulfate (S)	IN117	SLBR7225V	1000	99.9	0.10	24.3	16.4979	16.4980	**1000.0**	**2.0**	7783-20-2	NA	orl-rat 4250mg/kg	3181



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Certified Reference Material CRM

M5970, M5971 R: 7/01/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

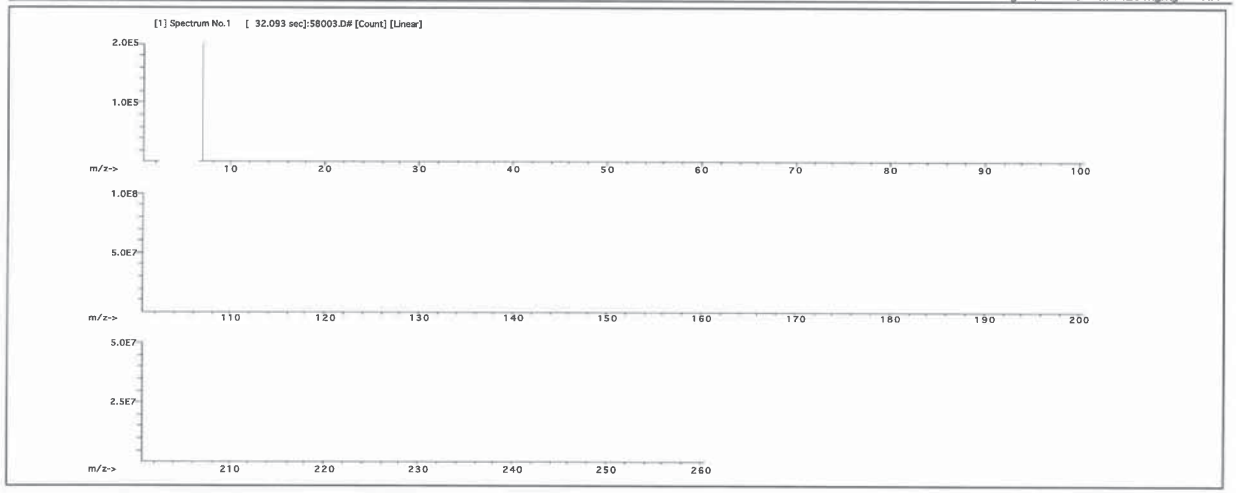
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57003**	24002546	Nitric Acid		
Lot Number:	**062124**				
Description:	**Lithium (Li)**	2.0%	5.0 (mL)	Nitric Acid	
Expiration Date:	062127				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	250.11	0.016	Flask Uncertainty		

Giovanni Esposito
Formulated By: Giovanni Esposito 062124

Pedro Rentas
Reviewed By: Pedro L. Rentas 062124

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lithium nitrate (Li)	58103	070622	0.1000	25.0	0.004	1000	10000.4	**1000.0**	**2.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/kg	NA



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	T	Ni	<0.02	Pr	<0.02	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES™
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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



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Certificate of Analysis

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MS985
R: 6/14/24

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGIN10
Lot Number:	U2-IN729349
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Indium
Starting Material:	Indium Metal
Starting Material Lot#:	2511
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.044 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10021 ± 56 µg/mL** ICP Assay NIST SRM 3124a Lot Number: 110516
Assay Method #2	**10035 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	**10001 ± 33 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000760	M	Eu	<	0.000760	O	Na		0.012771	M	Se	<	0.023000	M	Zn	<	0.006100
M	Al		0.003385	O	Fe		0.004462	M	Nb	<	0.000760	O	Si		0.024619	M	Zr	<	0.000760
M	As	<	0.004600	M	Ga	<	0.000760	M	Nd	<	0.000760	M	Sm	<	0.000760				
M	Au	<	0.002300	M	Gd	<	0.000760	O	Ni	<	0.005100	M	Sn	<	0.000760				
O	B		0.003692	M	Ge	<	0.001600	M	Os	<	0.000760	O	Sr	<	0.000610				
M	Ba	<	0.001600	M	Hf	<	0.000760	n	P	<		M	Ta	<	0.000760				
O	Be	<	0.000130	M	Hg	<	0.003100	M	Pb		0.001400	M	Tb	<	0.000760				
M	Bi	<	0.000760	M	Ho	<	0.000760	M	Pd	<	0.001600	M	Te	<	0.000760				
O	Ca		0.004616	s	In	<		M	Pr	<	0.000760	M	Th	<	0.000760				
M	Cd	<	0.000760	M	Ir	<	0.000760	M	Pt	<	0.000760	O	Ti	<	0.001100				
M	Ce	<	0.000760	O	K		0.007078	M	Rb	<	0.000760	M	Tl	<	0.000760				
M	Co	<	0.000760	M	La	<	0.000760	M	Re	<	0.000760	M	Tm	<	0.000760				
O	Cr	<	0.001300	O	Li	<	0.000130	M	Rh	<	0.000760	M	U	<	0.000760				
M	Cs	<	0.000760	M	Lu	<	0.000760	M	Ru	<	0.000760	M	V	<	0.001600				
M	Cu	<	0.003800	O	Mg		0.000707	n	S	<		M	W	<	0.001600				
M	Dy	<	0.000760	O	Mn		0.000149	M	Sb	<	0.000760	M	Y	<	0.000760				
M	Er	<	0.000760	M	Mo	<	0.002300	M	Sc	<	0.000760	M	Yb	<	0.000760				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 114.82 +3 6 In(H2O)6+3

Chemical Compatibility -Soluble in HCl, HNO3, and H2SO4. Avoid neutral and basic media. Stable with most metals and inorganic anions. The oxalate, sulfide, carbonate, hydroxide and phosphate are insoluble in water.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

In Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); Oxide (Soluble in mineral acids); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 115 amu	1 ppt	n/a	115Sn, 99Ru16O
ICP-OES 158.583 nm	0.05 / 0.002 µg/mL	1	
ICP-OES 230.606 nm	0.1 / 0.03 µg/mL	1	Ni, Os
ICP-OES 325.609 nm	0.2 / 0.05 µg/mL	1	Mn, Mo, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 21, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- February 21, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-CAL-1
Lot Number:	T2-MEB714417
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea:
	Calcium, Potassium,
	Magnesium, Sodium,
	2 000 µg/mL ea:
	Aluminum, Barium,
	1 000 µg/mL ea:
	Iron,
	500 µg/mL ea:
	Nickel, Vanadium,
	Zinc, Cobalt,
	Manganese,
	250 µg/mL ea:
	Silver, Copper,
	200 µg/mL ea:
	Chromium,
	50 µg/mL ea:
	Beryllium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	2 000 ± 7 µg/mL	Barium, Ba	2 000 ± 9 µg/mL
Beryllium, Be	50.00 ± 0.26 µg/mL	Calcium, Ca	5 000 ± 22 µg/mL
Chromium, Cr	200.0 ± 1.0 µg/mL	Cobalt, Co	500.0 ± 2.4 µg/mL
Copper, Cu	250.0 ± 1.0 µg/mL	Iron, Fe	1 000 ± 4 µg/mL
Magnesium, Mg	5 000 ± 20 µg/mL	Manganese, Mn	500.0 ± 2.0 µg/mL
Nickel, Ni	500.0 ± 2.2 µg/mL	Potassium, K	5 000 ± 19 µg/mL
Silver, Ag	250.0 ± 1.1 µg/mL	Sodium, Na	5 000 ± 18 µg/mL
Vanadium, V	499.7 ± 2.2 µg/mL	Zinc, Zn	500.0 ± 2.2 µg/mL

Density: 1.118 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 27, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- January 27, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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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



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Certificate of Analysis

M6074
M6075
M6076
M6077

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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

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 06, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- September 06, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Joseph Burns
Custom VS Manager



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

R -> 1/13/25

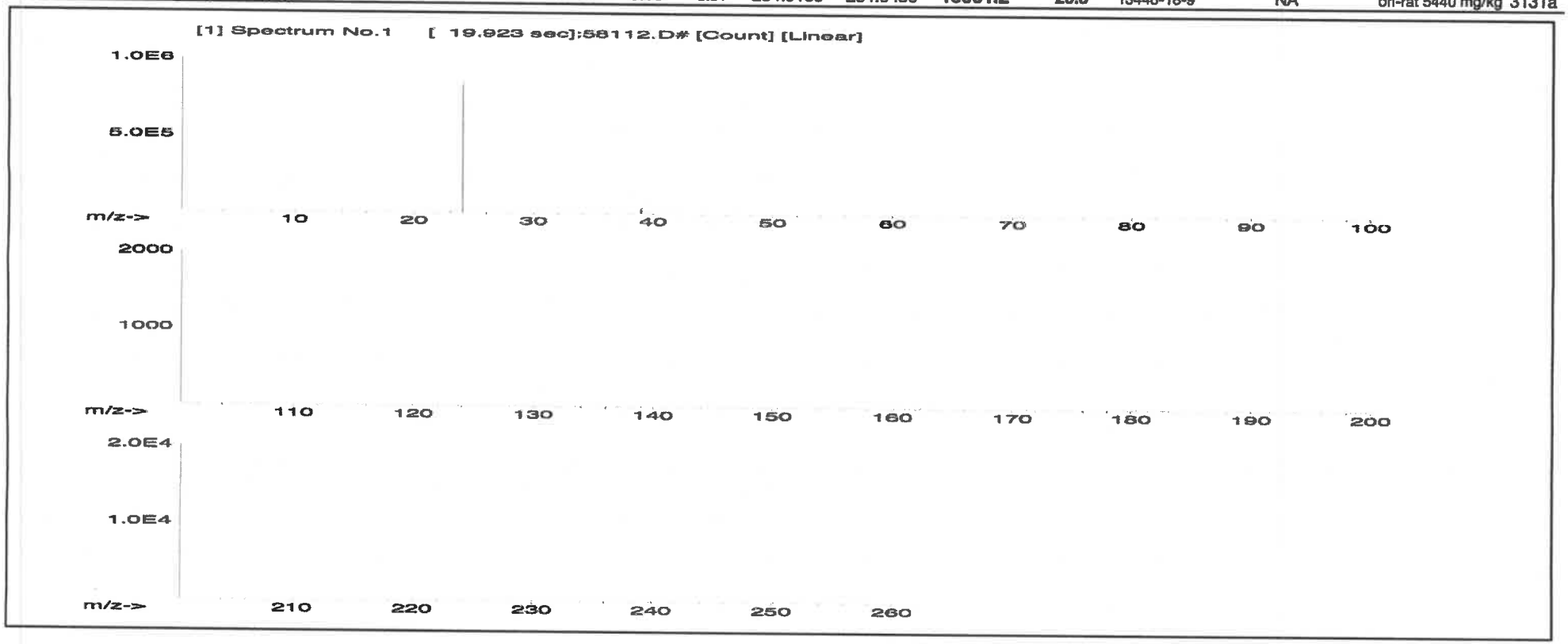
M 6127

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



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	T	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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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**	**Solvent:**	**Lot #** 24002546	Nitric Acid
Lot Number:	**101124**			
Description:	**Manganese (Mn)**	2%	80.0 (mL)	Nitric Acid
Expiration Date:	101127			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	4000.2	0.10	Flask Uncertainty	

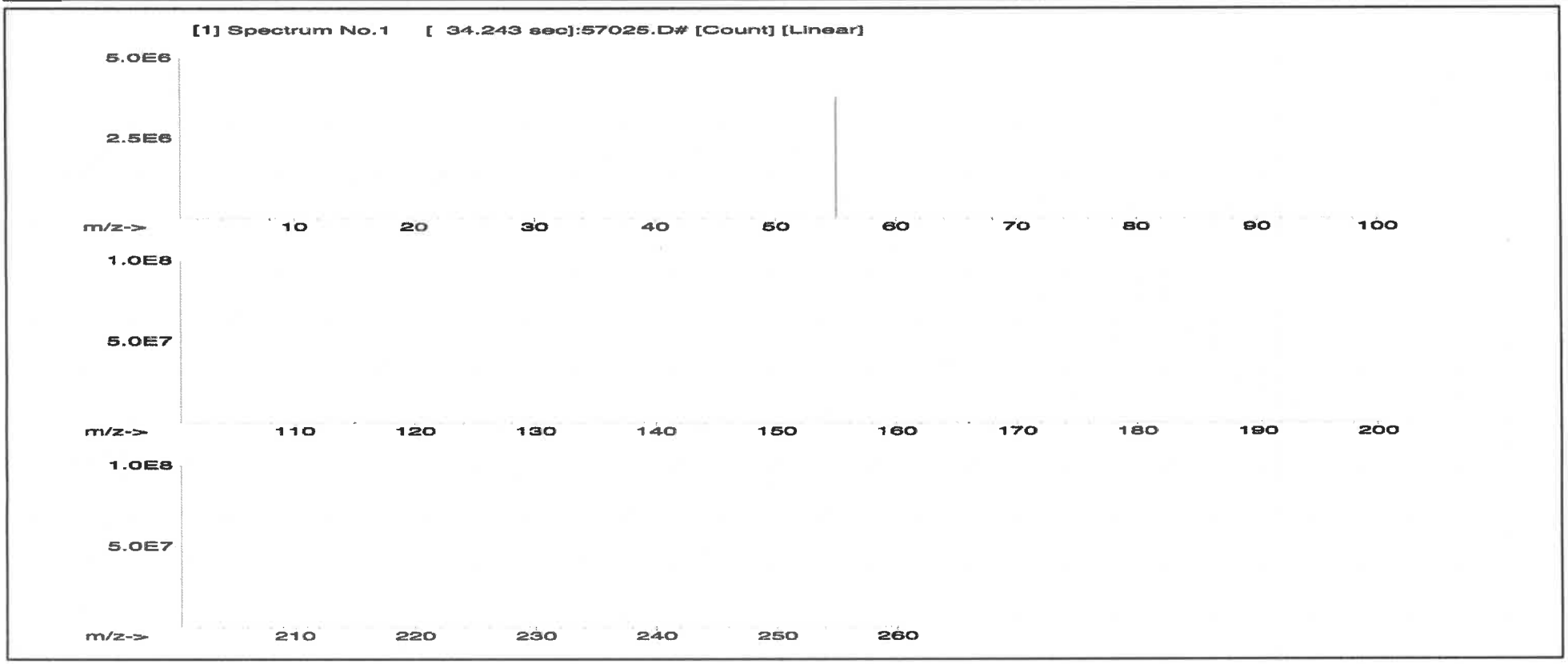
Giovanni Esposito

Formulated By:	Giovanni Esposito	101124

Pedro Rentas

Reviewed By:	Pedro L. Rentas	101124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	**Actual Conc. (µg/mL)**	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Manganese(II) nitrate hydrate (Mn)	IN031	MNM092020A1	1000	99.999	0.10	20.8	19.2322	19.2344	**1000.1**	**2.0**	15710-66-4	5 mg/m3	orl-rat >300mg/kg	3132



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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).

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M6137 R→10/3/24

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSI1
Lot Number:	V2-SI744713
Matrix:	tr. HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Silicon
Starting Material:	Silica
Starting Material Lot#:	1771
Starting Material Purity:	99.9981%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 6 µg/mL

Density: 1.003 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**999 ± 5 µg/mL** ICP Assay NIST SRM Traceable to 3150 Lot Number: S2-SI702546
Assay Method #2	**1000 ± 7 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2 (u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = 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

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M6138
R->1/13/25

CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 121824
Description: Calcium (Ca)

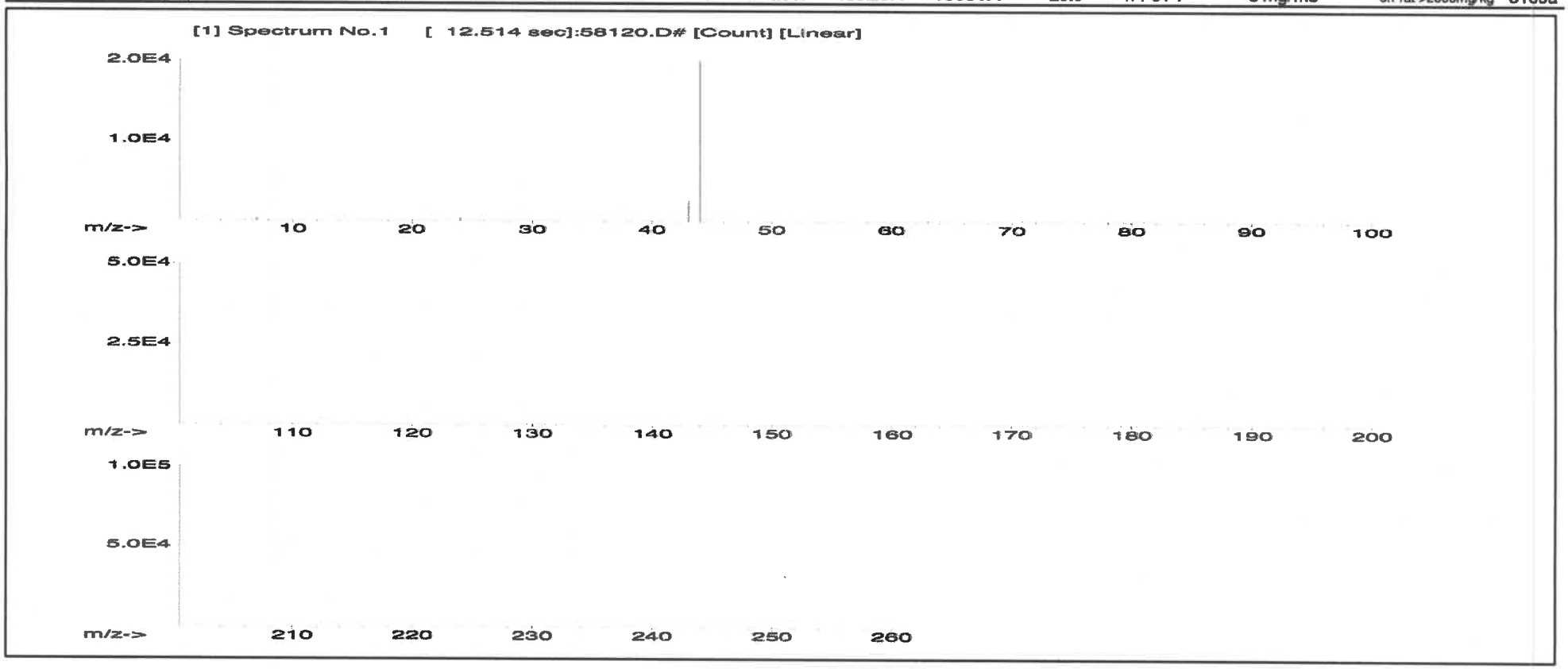
Expiration Date: 121827
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 4000.1

	Lot #			
Solvent:	24012496	Nitric Acid		
2%	80.0 (mL)	Nitric Acid		
			5E-05	Balance Uncertainty
			0.15	Flask Uncertainty

Giovanni Esposito

Formulated By:	Giovanni Esposito	121824
Reviewed By:	Pedro L. Rentas	121824

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD03203B3	10000	99.999	0.10	39.9	100.2537	100.2677	**10001.4**	**20.0**	471-34-1	5 mg/m3	orl-rat >2000mg/kg	3109a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	30	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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CERTIFIED WEIGHT REPORT:

R-> 1/13/25

Part Number: 57119
Lot Number: 103024
Description: Potassium (K)
M6141
M6142
M6143
Expiration Date: 103027
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

				Lot #	
Solvent:			24002546	Nitric Acid	
	2%		80.0 (mL)	Nitric Acid	
		5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	4000.1	0.15	Flask Uncertainty		

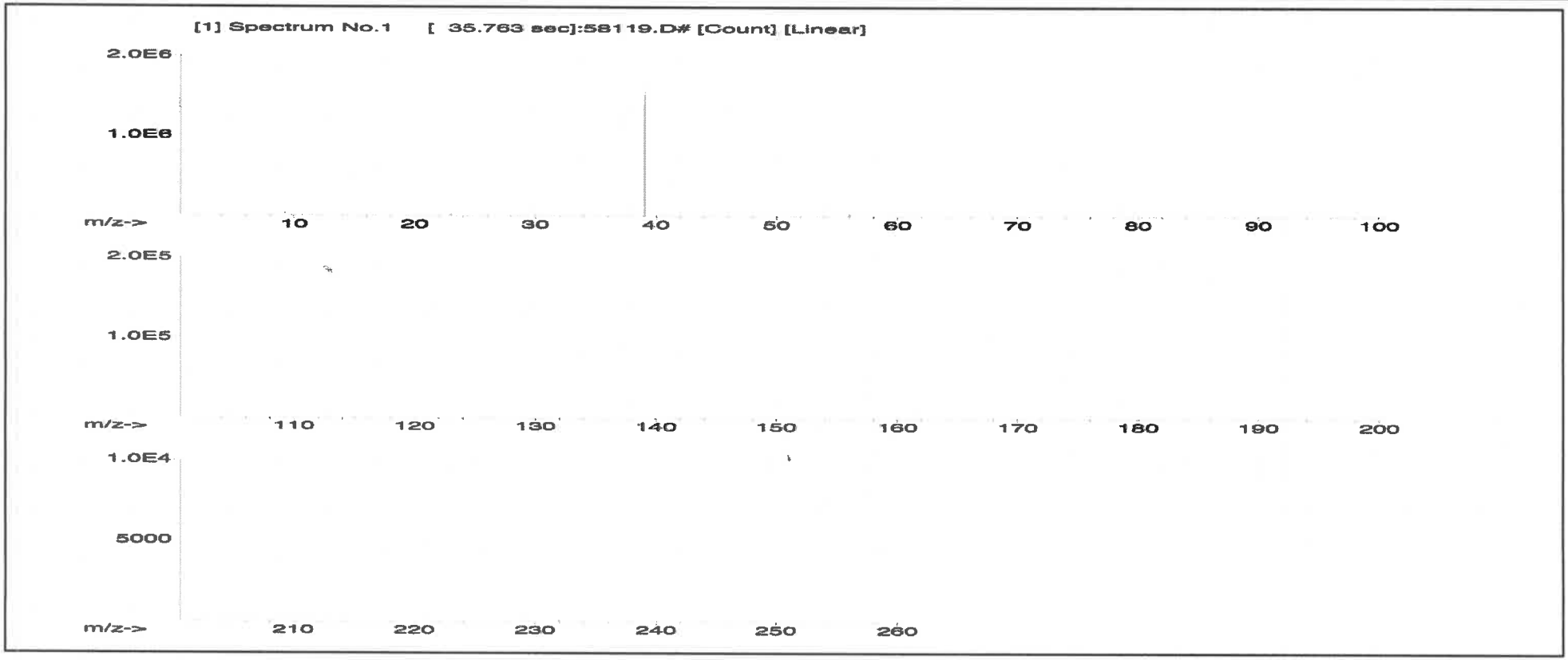
Giovanni Esposito

Formulated By:	Giovanni Esposito	103024

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



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	T	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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CERTIFIED WEIGHT REPORT:

Part Number: 58111
Lot Number: 072424
Description: Sodium (Na)

R->1/13/25

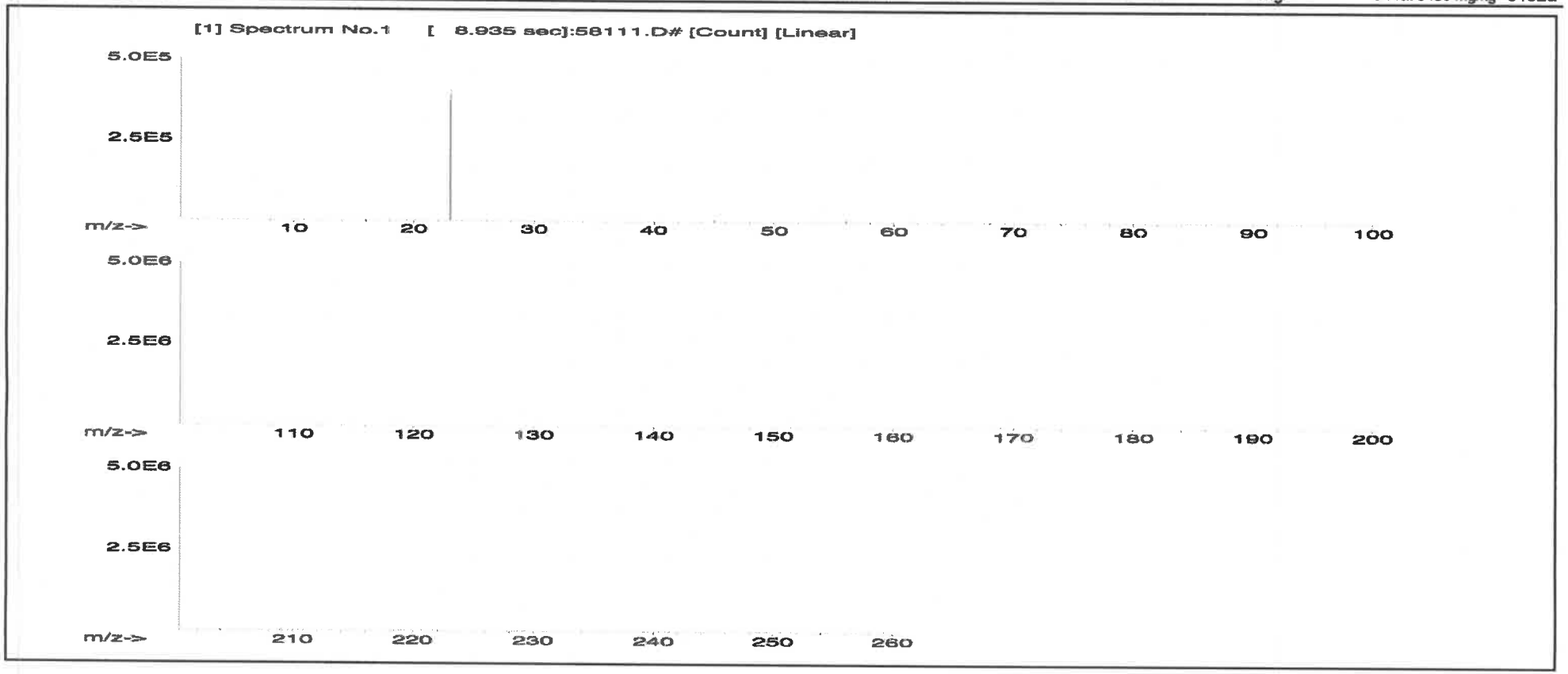
M6144

Expiration Date: 072427
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 4000.2

	Lot #	
Solvent:	24002546	Nitric Acid
2%	80.0 (mL)	Nitric Acid
5E-05	Balance Uncertainty	
0.10	Flask Uncertainty	

Formulated By:	Benson Chan	072424
Reviewed By:	Pedro L. Rentas	072424

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Sodium nitrate (Na)	IN036	NAV012015I1	10000	99.999	0.10	26.9	148.7096	######	**10000.0**	**20.0**	7631-99-4	5 mg/m3	orl-rat 3430 mg/kg	3152a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	T	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* 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).
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* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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CERTIFIED WEIGHT REPORT:

Part Number: 58030
Lot Number: 121724
Description: Zinc (Zn)

R → 1/13/25

M6145

Expiration Date: 121727
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

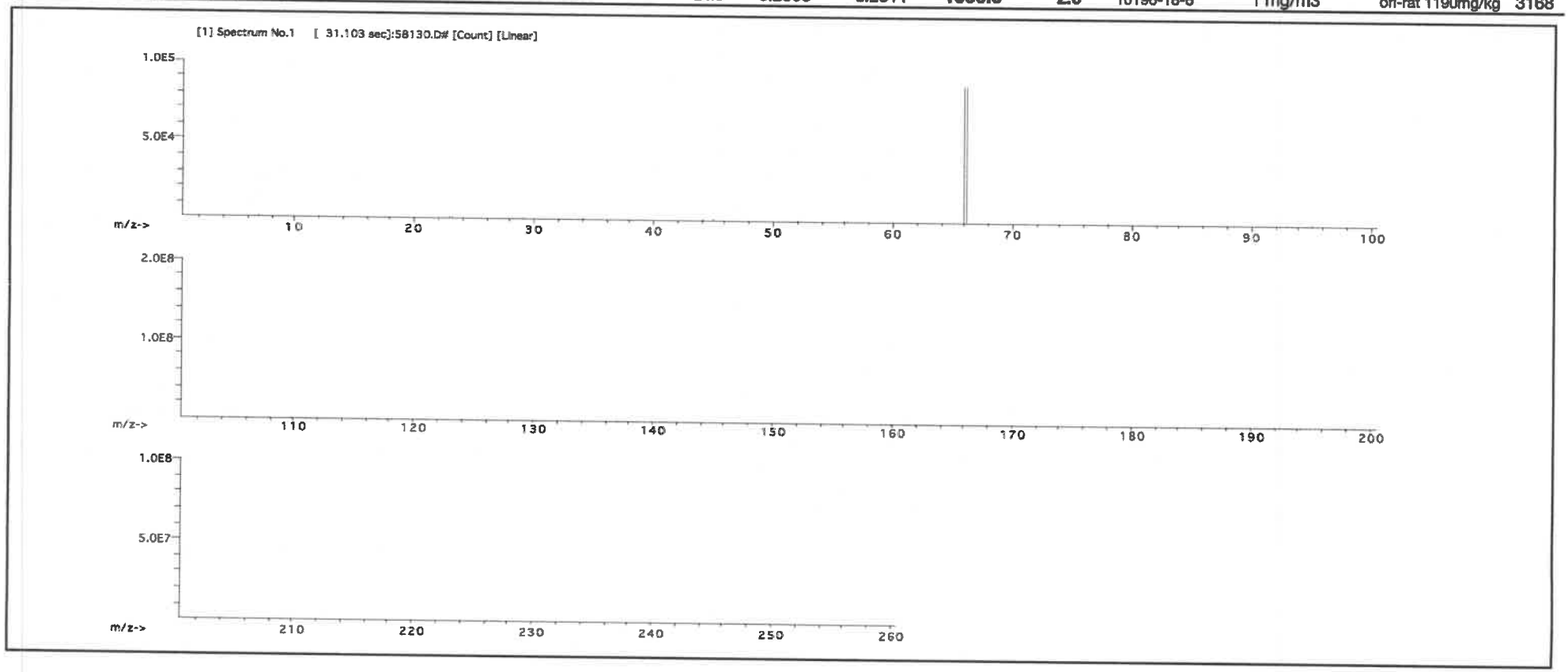
		Lot #	
Solvent:	24012496	Nitric Acid	
	2%	40.0 (mL)	Nitric Acid

5E-05 Balance Uncertainty
Weight shown below was diluted to (mL): 2000.1 0.10 Flask Uncertainty

Aleah O'Brady

Formulated By:	Aleah O'Brady	121724
Reviewed By:	Pedro L. Rentas	121724

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Zinc nitrate hexahydrate (Zn)	IN016	ZNE032021A1	1000	99.999	0.10	24.3	8.2308	8.2311	**1000.0**	**2.0**	10196-18-6	1 mg/m3	ori-rat 1190mg/kg	3168



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	T
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

M6151

R-> 1/15/25

Material No.: 9530-33
Batch No.: 22G2862015
Manufactured Date: 2022-06-15
Retest Date: 2027-06-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl_2)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO_4)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO_3)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH_4)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
Trace Impurities – Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities – Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	2.9 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities – Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities – Niobium (Nb)	≤ 1.0 ppb	0.8 ppb
Trace Impurities – Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	0.5 ppb
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	2.3 ppb
Trace Impurities – Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Tantalum (Ta)	≤ 1.0 ppb	1.6 ppb
Trace Impurities – Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	4.0 ppb
Trace Impurities – Titanium (Ti)	≤ 1.0 ppb	1.5 ppb
Trace Impurities – Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities – Zirconium (Zr)	≤ 1.0 ppb	0.3 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result

For Laboratory,Research,or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

R-02102/2025

M-6158

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
Trace Impurities - Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities - Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities - Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities - Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities - Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count - 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count - 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

M-6162

R. Date :- 04/27/2025

Material No.: 9606-03
Batch No.: 24H0162012
Manufactured Date: 2024-06-28
Retest Date: 2029-06-27
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 – 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	< 1 ppm
Chloride (Cl)	≤ 0.08 ppm	0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities – Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	0.1 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 30.0 ppb	0.1 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 20 ppb	< 1 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 1 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Nickel (Ni)	≤ 20.0 ppb	< 1.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24H0162012

Test	Specification	Result
Trace Impurities - Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities - Potassium (K)	≤ 50 ppb	< 1 ppb
Trace Impurities - Silicon (Si)	≤ 50 ppb	1 ppb
Trace Impurities - Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Sodium (Na)	≤ 150.0 ppb	< 1.0 ppb
Trace Impurities - Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Tantalum (Ta)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Thallium (Tl)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Tin (Sn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count - 0.5 µm and greater	≤ 60 par/ml	13 par/ml
Particle Count - 1.0 µm and greater	≤ 10 par/ml	5 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24H0162012

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

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Refine your results. Redefine your industry.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	QCP-CICV-1
Lot Number:	V2-MEB744107
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	2 500 µg/mL ea: Calcium, Potassium, Magnesium, Sodium, 1 000 µg/mL ea: Aluminum, Barium, 500 µg/mL ea: Iron, 250 µg/mL ea: Nickel, Vanadium, Zinc, Cobalt, Manganese, 125 µg/mL ea: Silver, Copper, 100 µg/mL ea: Chromium, 25 µg/mL ea: Beryllium

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	1 000 ± 4 µg/mL	Barium, Ba	1 000 ± 6 µg/mL
Beryllium, Be	24.98 ± 0.12 µg/mL	Calcium, Ca	2 500 ± 8 µg/mL
Chromium, Cr	99.9 ± 0.6 µg/mL	Cobalt, Co	250.2 ± 1.2 µg/mL
Copper, Cu	125.0 ± 0.5 µg/mL	Iron, Fe	500.0 ± 2.2 µg/mL
Magnesium, Mg	2 500 ± 11 µg/mL	Manganese, Mn	249.9 ± 1.1 µg/mL
Nickel, Ni	250.0 ± 1.2 µg/mL	Potassium, K	2 500 ± 11 µg/mL
Silver, Ag	125.0 ± 0.6 µg/mL	Sodium, Na	2 500 ± 11 µg/mL
Vanadium, V	250.0 ± 1.1 µg/mL	Zinc, Zn	249.9 ± 1.1 µg/mL

Density: 1.081 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	120618
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	200413
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information (https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver)

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 22, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 22, 2029**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

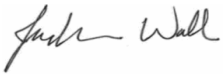
Certificate Prepared By:

Justin Dirico
Stock Processing Supervisor



Certificate Approved By:

Jodie Wall
Stock VSM Coordinator



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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Refine your results. Redefine your industry.

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	QCP-CICV-2
Lot Number:	U2-MEB733713
Matrix:	3% (w/v) Tartaric acid 1% (v/v) HNO3
Value / Analyte(s):	500 µg/mL ea: Antimony

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**500.0 ± 2.8 µg/mL**		

Density: 1.017 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Sb	ICP Assay	3102a	140911

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$
w_i = the weighting factors for each method calculated using the inverse square of the variance:
$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2
$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method
u_{bb} = bottle to bottle homogeneity standard uncertainty
u_{lts} = long term stability standard uncertainty (storage)
u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with
$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2
$u_{char\ a}$ = the errors from characterization
u_{bb} = bottle to bottle homogeneity standard uncertainty
u_{lts} = long term stability standard uncertainty (storage)
u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 01, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 01, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

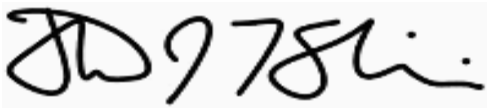
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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

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$X_{CRM/RM} = \Sigma(w_i)(X_i)$

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

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u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

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- 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.

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- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

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- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

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9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

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- 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

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- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 02, 2025

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 02, 2030**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

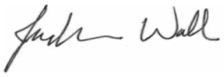
Certificate Prepared By:

Justin Dirico
Stock Processing Supervisor



Certificate Approved By:

Jodie Wall
Stock VSM Coordinator



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6030

R: 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

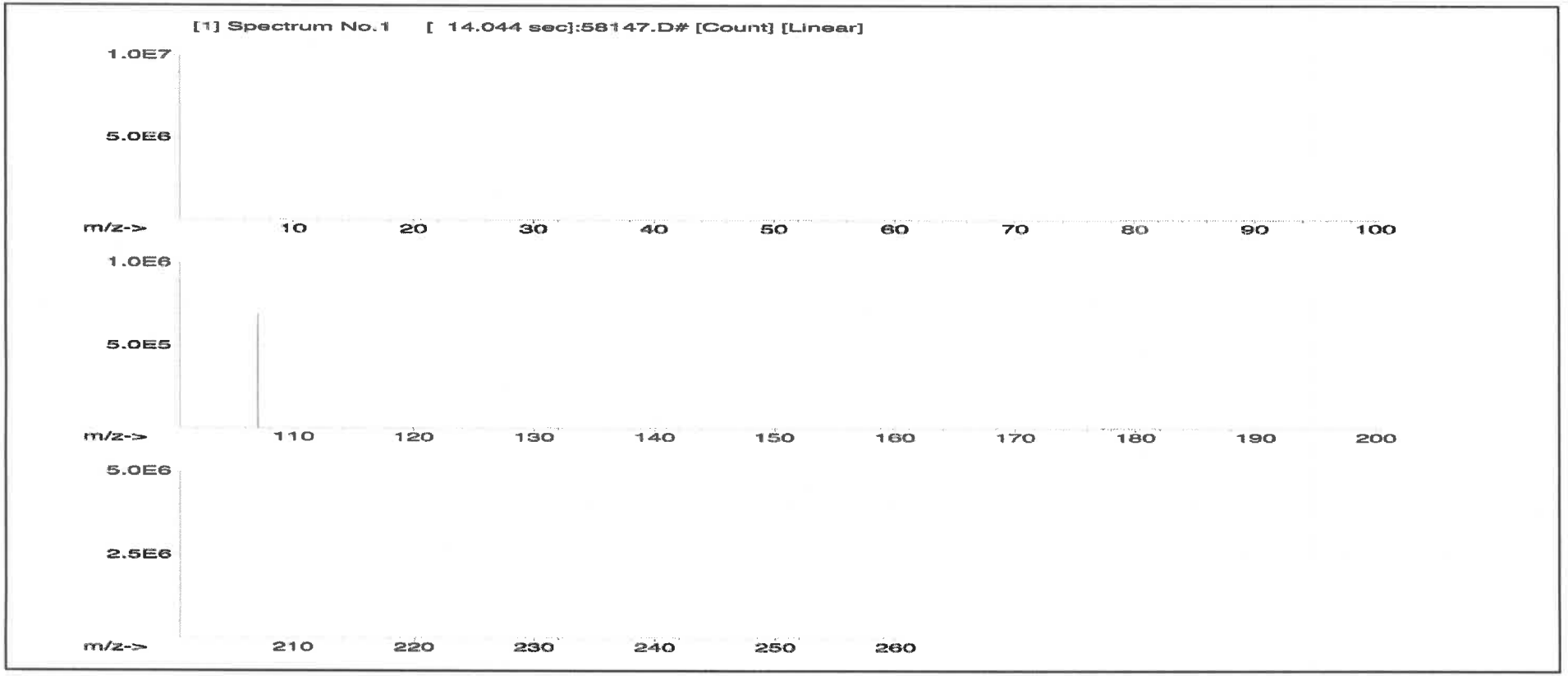
Part Number: 57047
Lot Number: 122823
Description: Silver (Ag)

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

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	80.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	122823
Reviewed By:	Pedro L. Rentas	122823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Silver nitrate (Ag)	IN035	J0612AGA1	1000.0	99.9999	0.10	63.7	6.27992	6.27998	**1000.0**	**2.0**	7761-88-8	10 ug/m3	NA	3151



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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).

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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

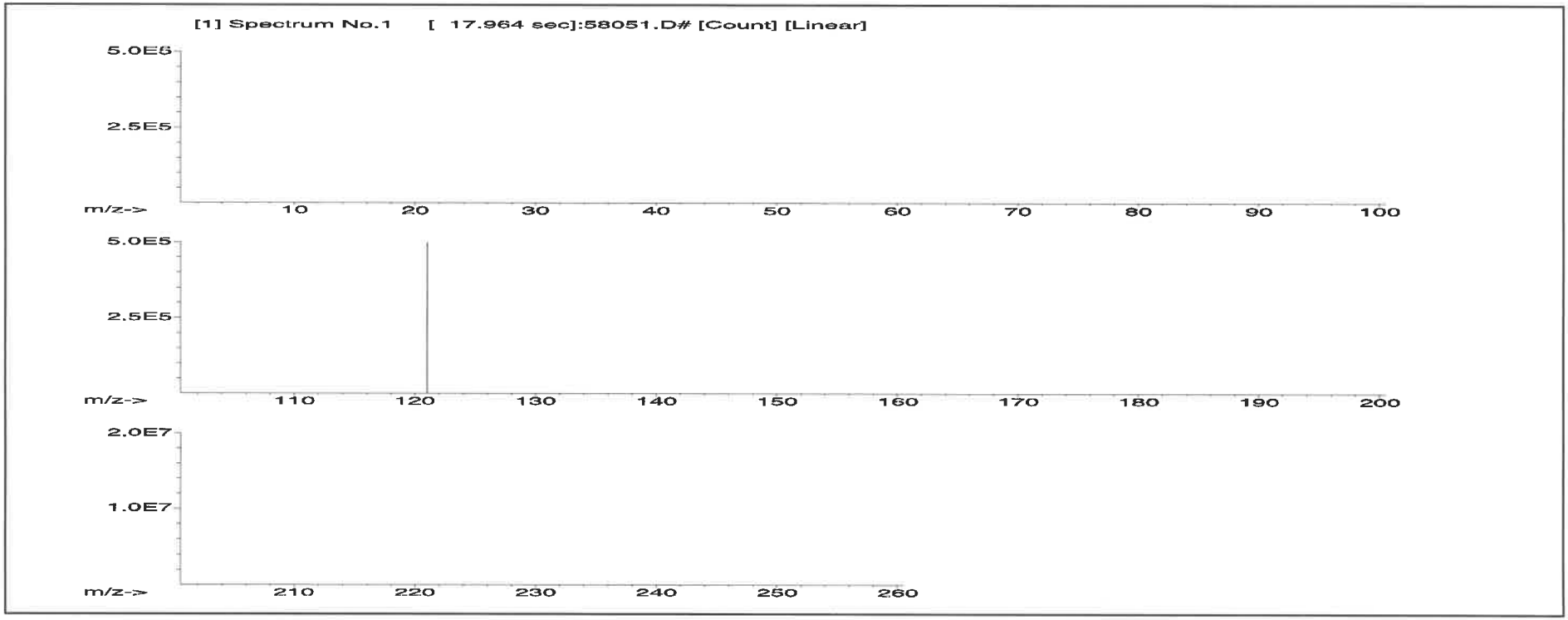
Giovanni Esposito

Formulated By:	Giovanni Esposito	071724

Pedro Rentas

Reviewed By:	Pedro L. Rentas	071724

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Antimony (Sb)	58151	060324	0.1000	200.0	0.084	1000	10001.4	**1000.0**	**2.2**	7440-36-0	0.5 mg/m3	orl-rat 7000 mg/kg	3102a



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<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.

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.

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.

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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.

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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
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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
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Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

R: 8/5/24 M6019

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 888.01 ACCREDITED Reference Material Producer Certificate 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

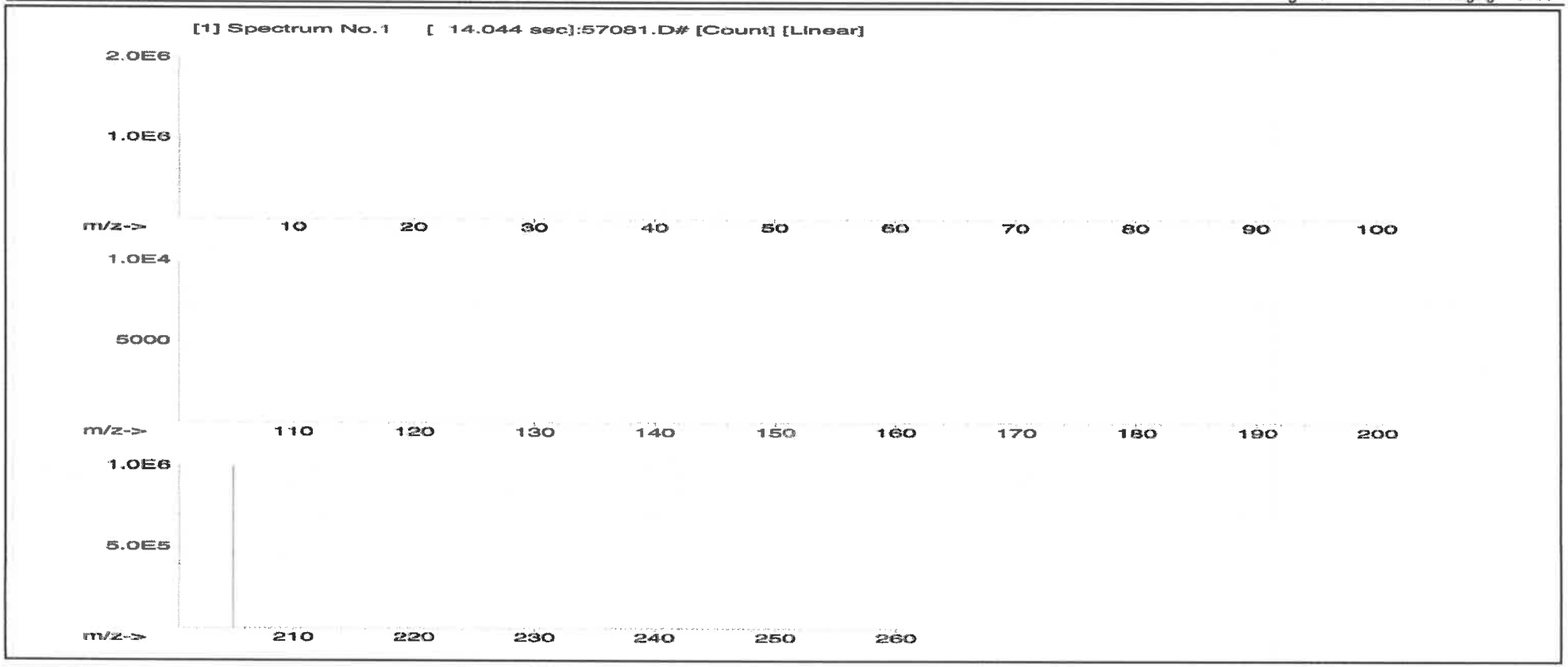
CERTIFIED WEIGHT REPORT:

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



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	T	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6021

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Rc. 8/5/24

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57023**			
Lot Number:	**062424**	24002546	Nitric Acid	
Description:	**Vanadium (V)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	062427			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.3	0.06	Flask Uncertainty	

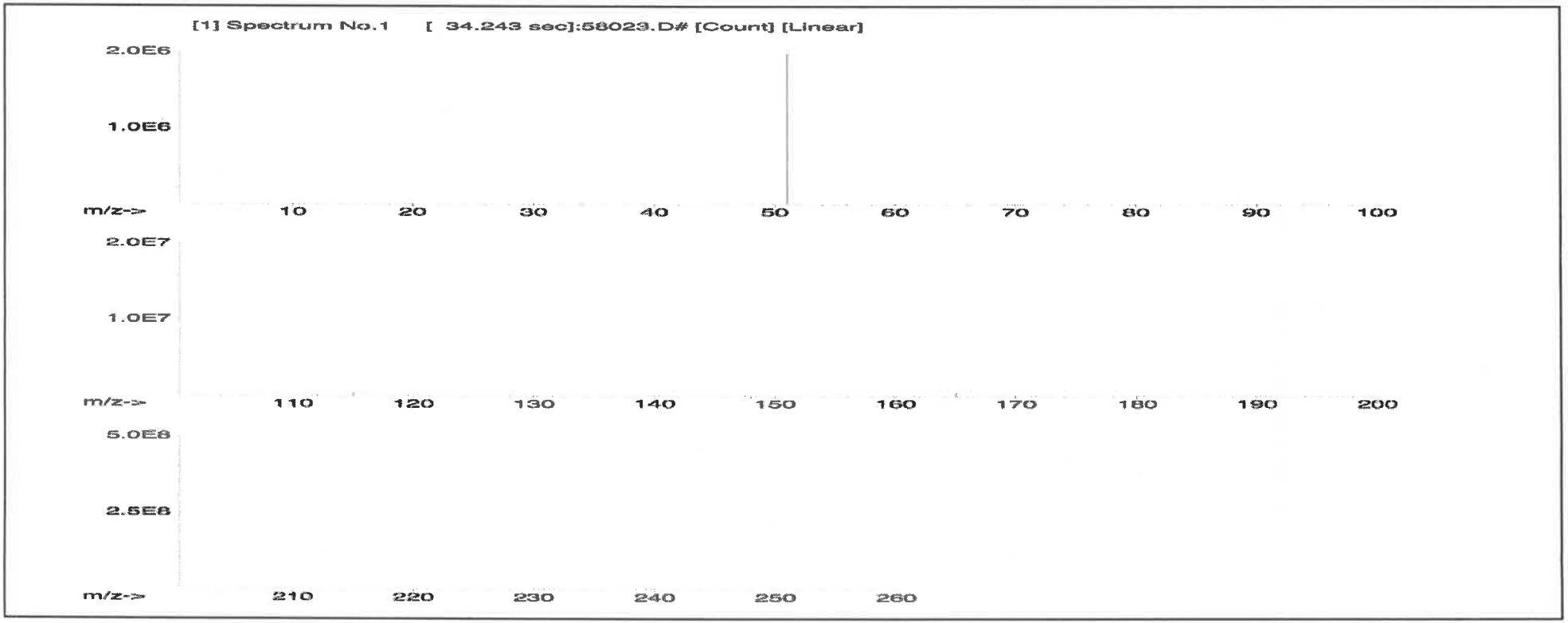
Aleah O'Brady

Formulated By:	Aleah O'Brady	062424

Pedro Rentas

Reviewed By:	Pedro L. Rentas	062424

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium metavanadate (V)	58123	021224	0.1000	200.0	0.084	1000	10000.3	**1000.0**	**2.2**	7803-55-6	0.05 mg/m3	orl-rat 58.1mg/kg	3165



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: Q2253
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: 5 DAYS*
HARD COPY: 5 DAYS*
EDD 5 DAYS*
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ RESEULTS 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					
PRESERVATIVES		B							

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# of Bottles	1	2	3	4	5	6	7	8	9	COMMENTS
1.	RW8-SP100-20250605	GW		x	6/5/25	13:05	2	x	x								
2.	RW8-SP303-20250605	GW		x	6/5/25	13:13	4	x	x	x	x						
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

<-- Specify Preservatives
A-HCl B-HNO3
C-H2SO4 D-NaOH
E-ICE F-Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSSESSION INCLUDING COURIER DELIVERY

	DATE/TIME		
1. RELINQUISHED BY SAMPLER	6/5/25 1550	1. RECEIVED BY	6.5.25 1550
2. RELINQUISHED BY	DATE/TIME	2. RECEIVED BY	
3. RELINQUISHED BY	6-5-25 1925	3. RECEIVED FOR LAB BY	

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 2.1°C
MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler?:
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