284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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DATA PACKAGE

METALS

PROJECT NAME : NJ DRINKING WATER PT

CHEMTECH CONSULTING GROUP

284 Sheffield St,

Mountainside, NJ - 07092

Phone No: 908-789-8900

ORDER ID : Q1172

ATTENTION : QA Officer

Laboratory Certification ID # 20012

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Cover Page

Order ID : Q1172

Project ID : NJ Drinking Water PT

Client : Chemtech Consulting Group

Lab Sample Number	Client Sample Number
Q1172-01	PT-TURB-WS
Q1172-02	PT-TURB-WS
Q1172-03	PT-MIN-WS
Q1172-04	PT-TM-WS
Q1172-05	PT-HG-WS
Q1172-06	PT-SIO2-WS
Q1172-07	PT-RVOA-WS
Q1172-08	PT-UNRVOA-WS
Q1172-09	PT-THM-WS
Q1172-10	PT-ADD-WS
Q1172-11	PT-EDBCP-WS

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 11:12 am, Mar 10, 2025* Date: 2/28/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Chemtech Consulting Group
Project Name: NJ Drinking Water PT
Project # N/A
Chemtech Project # Q1172
Test Name: Metals Group7,Metals Group3,Metals Group6,Mercury,Silica,Hardness, Calcium

A. Number of Samples and Date of Receipt:
11 Water samples were received on 01/15/2025.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Hardness, Calcium, Hardness, Total, Mercury, Metals Group3, Metals Group6, Metals Group7, Silica, Turbidity, VOCGC Group 1, VOCMS Group1, VOCMS Group2, VOCMS Group3, VOCMS Group4 and VOCMS Group5. This data package contains results for Metals Group7,Metals Group3,Metals Group6,Mercury,Silica,Hardness, Calcium.

C. Analytical Techniques:
The analysis and digestion of Metals Group3,Metals Group6,Silica was based on 200.7, The analysis and digestion of Metals Group7 was based on 200.8 and The analysis and digestion of Mercury was based on 245.1.

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:

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

Signature_____ APPROVED
By Nimisha Pandya, QA/QC Supervisor at 11:12 am, Mar 10, 2025

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

ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092

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

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1172 MATRIX: Water

METHOD: 200.7,200.8,245.1,SM2340B

		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. The Holding Times were met for all analysis.			

ADDITIONAL COMMENTS:

QA REVIEW

REVIEWED

By Sohil Jodhani, QA/QC Director at 10:45 am, Mar 10, 2025

Date

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1172

	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:** 02/28/2025

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LAB CHRONICLE

OrderID:	Q1172	**OrderDate:**	1/23/2025 2:53:00 PM
Client:	Chemtech Consulting Group	**Project:**	NJ Drinking Water PT
Contact:	QA Officer	**Location:**	QA Office,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1172-03	**PT-MIN-WS**	**Water**			**01/13/25**			**01/15/25**
			Hardness, Calcium	SM2340B		02/12/25	02/18/25	
			Metals Group3	200.7		02/12/25	02/18/25	
Q1172-04	**PT-TM-WS**	**Water**			**01/13/25**			**01/15/25**
			Metals Group6	200.7		02/12/25	02/12/25	
			Metals Group7	200.8		02/11/25	02/14/25	
Q1172-05	**PT-HG-WS**	**Water**			**01/13/25**			**01/15/25**
			Mercury	245.1		02/11/25	02/11/25	
Q1172-06	**PT-SIO2-WS**	**Water**			**01/13/25**			**01/15/25**
			Silica	200.7		02/12/25	02/18/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1172 **Order ID:** Q1172

Client: Chemtech Consulting Group **Project ID:** NJ Drinking Water PT

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : PT-MIN-WS								
Q1172-03	PT-MIN-WS	Water	Calcium	50900		104	2000	ug/L
Q1172-03	PT-MIN-WS	Water	Calcium Hardness	127000		260	4990	ug/L
Q1172-03	PT-MIN-WS	Water	Magnesium	5700		122	2000	ug/L
Q1172-03	PT-MIN-WS	Water	Potassium	32800		562	2000	ug/L
Q1172-03	PT-MIN-WS	Water	Sodium	24100		896	2000	ug/L
Q1172-03	PT-MIN-WS	Water	Hardness, Total	151000		762	13200	ug/L
Client ID : PT-TM-WS								
Q1172-04	PT-TM-WS	Water	Aluminum	491		21.2	100	ug/L
Q1172-04	PT-TM-WS	Water	Antimony	20.1	J	5.92	50.0	ug/L
Q1172-04	PT-TM-WS	Water	Barium	1740		22.6	100	ug/L
Q1172-04	PT-TM-WS	Water	Beryllium	16.4		0.38	6.00	ug/L
Q1172-04	PT-TM-WS	Water	Boron	1520		10.7	100	ug/L
Q1172-04	PT-TM-WS	Water	Cadmium	24.0		0.42	6.00	ug/L
Q1172-04	PT-TM-WS	Water	Chromium	23.5		1.04	10.0	ug/L
Q1172-04	PT-TM-WS	Water	Copper	733		3.04	20.0	ug/L
Q1172-04	PT-TM-WS	Water	Iron	1450		24.8	100	ug/L
Q1172-04	PT-TM-WS	Water	Lead	19.9		3.14	12.0	ug/L
Q1172-04	PT-TM-WS	Water	Manganese	819		1.74	20.0	ug/L
Q1172-04	PT-TM-WS	Water	Molybdenum	51.1	J	10.2	200	ug/L
Q1172-04	PT-TM-WS	Water	Nickel	212		2.56	40.0	ug/L
Q1172-04	PT-TM-WS	Water	Selenium	27.3		6.14	20.0	ug/L
Q1172-04	PT-TM-WS	Water	Silver	238		1.66	10.0	ug/L
Q1172-04	PT-TM-WS	Water	Thallium	5.33	J	4.42	40.0	ug/L
Q1172-04	PT-TM-WS	Water	Vanadium	290		4.80	40.0	ug/L
Q1172-04	PT-TM-WS	Water	Zinc	223		2.88	40.0	ug/L
Client ID : PT-HG-WS								
Q1172-05	PT-HG-WS	Water	Mercury	7.94		0.022	0.20	ug/L
Client ID : PT-SIO2-WS								
Q1172-06	PT-SIO2-WS	Water	Dissolved Silica	10900		128	856	ug/L

SAMPLE DATA

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	01/13/25
Project:	NJ Drinking Water PT	Date Received:	01/15/25
Client Sample ID:	PT-MIN-WS	SDG No.:	Q1172
Lab Sample ID:	Q1172-03	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-70-2	Calcium	50900		1	104	2000	ug/L	02/12/25 10:00	02/18/25 14:06	EPA 200.7	
Calcium Hardness	Calcium Hardness	127000		1	260	4990	ug/L	02/12/25 10:00	02/18/25 14:06	EPA 200.7	
Hardness	Hardness, Total	151000		1	762	13200	ug/L	02/12/25 10:00	02/18/25 14:06	EPA 200.7	
7439-95-4	Magnesium	5700		1	122	2000	ug/L	02/12/25 10:00	02/18/25 14:06	EPA 200.7	
7440-09-7	Potassium	32800		1	562	2000	ug/L	02/12/25 10:00	02/18/25 14:06	EPA 200.7	
7440-23-5	Sodium	24100		1	896	2000	ug/L	02/12/25 10:00	02/18/25 14:06	EPA 200.7	

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Hardness, Calcium				

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:	Chemtech Consulting Group	Date Collected:	01/13/25
Project:	NJ Drinking Water PT	Date Received:	01/15/25
Client Sample ID:	PT-TM-WS	SDG No.:	Q1172
Lab Sample ID:	Q1172-04	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	491		1	21.2	100	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	
7440-36-0	Antimony	20.1	J	1	5.92	50.0	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	
7440-38-2	Arsenic	5.68	U	1	5.68	20.0	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	
7440-39-3	Barium	1740		1	22.6	100	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	
7440-41-7	Beryllium	16.4		1	0.38	6.00	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	
7440-42-8	Boron	1520		1	10.7	100	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	
7440-43-9	Cadmium	24.0		1	0.42	6.00	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	
7440-47-3	Chromium	23.5		1	1.04	10.0	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	
7440-50-8	Copper	733		1	3.04	20.0	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	
7439-89-6	Iron	1450		1	24.8	100	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	
7439-92-1	Lead	19.9		1	3.14	12.0	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	
7439-96-5	Manganese	819		1	1.74	20.0	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	
7439-98-7	Molybdenum	51.1	J	1	10.2	200	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	
7440-02-0	Nickel	212		1	2.56	40.0	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	
7782-49-2	Selenium	27.3		1	6.14	20.0	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	
7440-22-4	Silver	238		1	1.66	10.0	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	
7440-28-0	Thallium	5.33	J	1	4.42	40.0	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	
7440-62-2	Vanadium	290		1	4.80	40.0	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	
7440-66-6	Zinc	223		1	2.88	40.0	ug/L	02/12/25 10:00	02/12/25 16:55	EPA 200.7	

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group6				

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:	Chemtech Consulting Group	Date Collected:	01/13/25
Project:	NJ Drinking Water PT	Date Received:	01/15/25
Client Sample ID:	PT-HG-WS	SDG No.:	Q1172
Lab Sample ID:	Q1172-05	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7439-97-6	Mercury	7.94		1	0.022	0.20	ug/L	02/11/25 11:50	02/11/25 16:06	E245.1	

Color Before:	Clarity Before:	Texture:
Color After:	Clarity After:	Artifacts:

Comments: Mercury

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:	Chemtech Consulting Group	Date Collected:	01/13/25
Project:	NJ Drinking Water PT	Date Received:	01/15/25
Client Sample ID:	PT-SIO2-WS	SDG No.:	Q1172
Lab Sample ID:	Q1172-06	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
Dissolved Silica	Dissolved Silica	10900		1	128	856	ug/L	02/12/25 10:00	02/18/25 14:10	EPA 200.7	

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Silica				

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: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV96	Mercury	3.85	4.0	96	95 - 105	CV	02/11/2025	15:17	LB134671

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV56	Mercury	5.24	5.0	105	90 - 110	CV	02/11/2025	15:21	LB134671
CCV57	Mercury	5.01	5.0	100	90 - 110	CV	02/11/2025	15:59	LB134671
CCV58	Mercury	5.17	5.0	103	90 - 110	CV	02/11/2025	16:20	LB134671

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Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Aluminum	2420	2500	97	95 - 105	P	02/12/2025	12:59	LB134704
	Antimony	1010	1000	101	95 - 105	P	02/12/2025	12:59	LB134704
	Arsenic	998	1000	100	95 - 105	P	02/12/2025	12:59	LB134704
	Barium	545	520	105	95 - 105	P	02/12/2025	12:59	LB134704
	Beryllium	501	510	98	95 - 105	P	02/12/2025	12:59	LB134704
	Boron	2620	2500	105	95 - 105	P	02/12/2025	12:59	LB134704
	Cadmium	505	510	99	95 - 105	P	02/12/2025	12:59	LB134704
	Calcium	9700	10000	97	95 - 105	P	02/12/2025	12:59	LB134704
	Chromium	528	520	102	95 - 105	P	02/12/2025	12:59	LB134704
	Copper	520	510	102	95 - 105	P	02/12/2025	12:59	LB134704
	Iron	10400	10000	104	95 - 105	P	02/12/2025	12:59	LB134704
	Lead	987	1000	99	95 - 105	P	02/12/2025	12:59	LB134704
	Magnesium	6290	6000	105	95 - 105	P	02/12/2025	12:59	LB134704
	Manganese	496	520	95	95 - 105	P	02/12/2025	12:59	LB134704
	Molybdenum	2480	2500	99	95 - 105	P	02/12/2025	12:59	LB134704
	Nickel	514	530	97	95 - 105	P	02/12/2025	12:59	LB134704
	Potassium	10100	9900	102	95 - 105	P	02/12/2025	12:59	LB134704
	Selenium	1030	1000	103	95 - 105	P	02/12/2025	12:59	LB134704
	Silver	247	250	99	95 - 105	P	02/12/2025	12:59	LB134704
	Sodium	10300	10000	103	95 - 105	P	02/12/2025	12:59	LB134704
	Thallium	1020	1000	102	95 - 105	P	02/12/2025	12:59	LB134704
	Vanadium	517	500	103	95 - 105	P	02/12/2025	12:59	LB134704
	Zinc	1010	1000	101	95 - 105	P	02/12/2025	12:59	LB134704

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Aluminum	95.9	100	96	80 - 120	P	02/12/2025	13:08	LB134704
	Antimony	49.5	50.0	99	80 - 120	P	02/12/2025	13:08	LB134704
	Arsenic	19.2	20.0	96	80 - 120	P	02/12/2025	13:08	LB134704
	Barium	97.5	100	98	80 - 120	P	02/12/2025	13:08	LB134704
	Beryllium	5.68	6.0	95	80 - 120	P	02/12/2025	13:08	LB134704
	Boron	91.1	100	91	80 - 120	P	02/12/2025	13:08	LB134704
	Cadmium	5.79	6.0	96	80 - 120	P	02/12/2025	13:08	LB134704
	Calcium	1990	2000	99	80 - 120	P	02/12/2025	13:08	LB134704
	Chromium	10.2	10.0	102	80 - 120	P	02/12/2025	13:08	LB134704
	Copper	21.9	20.0	110	80 - 120	P	02/12/2025	13:08	LB134704
	Iron	102	100	102	80 - 120	P	02/12/2025	13:08	LB134704
	Lead	10.4	12.0	87	80 - 120	P	02/12/2025	13:08	LB134704
	Magnesium	2110	2000	105	80 - 120	P	02/12/2025	13:08	LB134704
	Manganese	19.8	20.0	99	80 - 120	P	02/12/2025	13:08	LB134704
	Molybdenum	203	200	102	80 - 120	P	02/12/2025	13:08	LB134704
	Nickel	39.3	40.0	98	80 - 120	P	02/12/2025	13:08	LB134704
	Potassium	2090	2000	104	80 - 120	P	02/12/2025	13:08	LB134704
	Selenium	18.5	20.0	92	80 - 120	P	02/12/2025	13:08	LB134704
	Silver	10.2	10.0	102	80 - 120	P	02/12/2025	13:08	LB134704
	Sodium	2090	2000	104	80 - 120	P	02/12/2025	13:08	LB134704
	Thallium	39.9	40.0	100	80 - 120	P	02/12/2025	13:08	LB134704
	Vanadium	38.4	40.0	96	80 - 120	P	02/12/2025	13:08	LB134704
	Zinc	42.2	40.0	106	80 - 120	P	02/12/2025	13:08	LB134704

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Aluminum	9840	10000	98	90 - 110	P	02/12/2025	13:39	LB134704
	Antimony	4950	5000	99	90 - 110	P	02/12/2025	13:39	LB134704
	Arsenic	4980	5000	100	90 - 110	P	02/12/2025	13:39	LB134704
	Barium	10100	10000	101	90 - 110	P	02/12/2025	13:39	LB134704
	Beryllium	246	250	98	90 - 110	P	02/12/2025	13:39	LB134704
	Boron	4890	5000	98	90 - 110	P	02/12/2025	13:39	LB134704
	Cadmium	2500	2500	100	90 - 110	P	02/12/2025	13:39	LB134704
	Calcium	25000	25000	100	90 - 110	P	02/12/2025	13:39	LB134704
	Chromium	999	1000	100	90 - 110	P	02/12/2025	13:39	LB134704
	Copper	1260	1250	101	90 - 110	P	02/12/2025	13:39	LB134704
	Iron	5110	5000	102	90 - 110	P	02/12/2025	13:39	LB134704
	Lead	5000	5000	100	90 - 110	P	02/12/2025	13:39	LB134704
	Magnesium	25000	25000	100	90 - 110	P	02/12/2025	13:39	LB134704
	Manganese	2520	2500	101	90 - 110	P	02/12/2025	13:39	LB134704
	Molybdenum	4980	5000	100	90 - 110	P	02/12/2025	13:39	LB134704
	Nickel	2500	2500	100	90 - 110	P	02/12/2025	13:39	LB134704
	Potassium	25100	25000	100	90 - 110	P	02/12/2025	13:39	LB134704
	Selenium	4980	5000	100	90 - 110	P	02/12/2025	13:39	LB134704
	Silver	1240	1250	99	90 - 110	P	02/12/2025	13:39	LB134704
	Sodium	25200	25000	101	90 - 110	P	02/12/2025	13:39	LB134704
	Thallium	5020	5000	100	90 - 110	P	02/12/2025	13:39	LB134704
	Vanadium	2490	2500	100	90 - 110	P	02/12/2025	13:39	LB134704
	Zinc	2470	2500	99	90 - 110	P	02/12/2025	13:39	LB134704
CCV02	Aluminum	9980	10000	100	90 - 110	P	02/12/2025	14:29	LB134704
	Antimony	5040	5000	101	90 - 110	P	02/12/2025	14:29	LB134704
	Arsenic	5040	5000	101	90 - 110	P	02/12/2025	14:29	LB134704
	Barium	10000	10000	100	90 - 110	P	02/12/2025	14:29	LB134704
	Beryllium	247	250	99	90 - 110	P	02/12/2025	14:29	LB134704
	Boron	4870	5000	98	90 - 110	P	02/12/2025	14:29	LB134704
	Cadmium	2540	2500	102	90 - 110	P	02/12/2025	14:29	LB134704
	Calcium	25100	25000	100	90 - 110	P	02/12/2025	14:29	LB134704
	Chromium	1030	1000	103	90 - 110	P	02/12/2025	14:29	LB134704
	Copper	1270	1250	102	90 - 110	P	02/12/2025	14:29	LB134704
	Iron	5210	5000	104	90 - 110	P	02/12/2025	14:29	LB134704

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV02	Lead	5060	5000	101	90 - 110	P	02/12/2025	14:29	LB134704
	Magnesium	25200	25000	101	90 - 110	P	02/12/2025	14:29	LB134704
	Manganese	2500	2500	100	90 - 110	P	02/12/2025	14:29	LB134704
	Molybdenum	5090	5000	102	90 - 110	P	02/12/2025	14:29	LB134704
	Nickel	2530	2500	101	90 - 110	P	02/12/2025	14:29	LB134704
	Potassium	26000	25000	104	90 - 110	P	02/12/2025	14:29	LB134704
	Selenium	5040	5000	101	90 - 110	P	02/12/2025	14:29	LB134704
	Silver	1270	1250	102	90 - 110	P	02/12/2025	14:29	LB134704
	Sodium	26300	25000	105	90 - 110	P	02/12/2025	14:29	LB134704
	Thallium	5160	5000	103	90 - 110	P	02/12/2025	14:29	LB134704
	Vanadium	2510	2500	100	90 - 110	P	02/12/2025	14:29	LB134704
	Zinc	2520	2500	101	90 - 110	P	02/12/2025	14:29	LB134704
CCV03	Aluminum	9920	10000	99	90 - 110	P	02/12/2025	15:20	LB134704
	Antimony	4990	5000	100	90 - 110	P	02/12/2025	15:20	LB134704
	Arsenic	4960	5000	99	90 - 110	P	02/12/2025	15:20	LB134704
	Barium	10000	10000	100	90 - 110	P	02/12/2025	15:20	LB134704
	Beryllium	243	250	97	90 - 110	P	02/12/2025	15:20	LB134704
	Boron	4820	5000	96	90 - 110	P	02/12/2025	15:20	LB134704
	Cadmium	2490	2500	100	90 - 110	P	02/12/2025	15:20	LB134704
	Calcium	24900	25000	100	90 - 110	P	02/12/2025	15:20	LB134704
	Chromium	1020	1000	102	90 - 110	P	02/12/2025	15:20	LB134704
	Copper	1250	1250	100	90 - 110	P	02/12/2025	15:20	LB134704
	Iron	5160	5000	103	90 - 110	P	02/12/2025	15:20	LB134704
	Lead	4980	5000	100	90 - 110	P	02/12/2025	15:20	LB134704
	Magnesium	24900	25000	100	90 - 110	P	02/12/2025	15:20	LB134704
	Manganese	2470	2500	99	90 - 110	P	02/12/2025	15:20	LB134704
	Molybdenum	5050	5000	101	90 - 110	P	02/12/2025	15:20	LB134704
	Nickel	2490	2500	100	90 - 110	P	02/12/2025	15:20	LB134704
	Potassium	26000	25000	104	90 - 110	P	02/12/2025	15:20	LB134704
	Selenium	4970	5000	99	90 - 110	P	02/12/2025	15:20	LB134704
	Silver	1260	1250	101	90 - 110	P	02/12/2025	15:20	LB134704
	Sodium	26600	25000	106	90 - 110	P	02/12/2025	15:20	LB134704
	Thallium	5070	5000	101	90 - 110	P	02/12/2025	15:20	LB134704
	Vanadium	2490	2500	99	90 - 110	P	02/12/2025	15:20	LB134704

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

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
CCV03	Zinc	2510	2500	100	90 - 110	P	02/12/2025	15:20	LB134704
CCV04	Aluminum	9770	10000	98	90 - 110	P	02/12/2025	16:13	LB134704
	Antimony	4820	5000	96	90 - 110	P	02/12/2025	16:13	LB134704
	Arsenic	4870	5000	97	90 - 110	P	02/12/2025	16:13	LB134704
	Barium	9830	10000	98	90 - 110	P	02/12/2025	16:13	LB134704
	Beryllium	245	250	98	90 - 110	P	02/12/2025	16:13	LB134704
	Boron	4800	5000	96	90 - 110	P	02/12/2025	16:13	LB134704
	Cadmium	2500	2500	100	90 - 110	P	02/12/2025	16:13	LB134704
	Calcium	24900	25000	100	90 - 110	P	02/12/2025	16:13	LB134704
	Chromium	1020	1000	102	90 - 110	P	02/12/2025	16:13	LB134704
	Copper	1240	1250	99	90 - 110	P	02/12/2025	16:13	LB134704
	Iron	5120	5000	102	90 - 110	P	02/12/2025	16:13	LB134704
	Lead	4970	5000	99	90 - 110	P	02/12/2025	16:13	LB134704
	Magnesium	25200	25000	101	90 - 110	P	02/12/2025	16:13	LB134704
	Manganese	2480	2500	99	90 - 110	P	02/12/2025	16:13	LB134704
	Molybdenum	4920	5000	98	90 - 110	P	02/12/2025	16:13	LB134704
	Nickel	2490	2500	100	90 - 110	P	02/12/2025	16:13	LB134704
	Potassium	25000	25000	100	90 - 110	P	02/12/2025	16:13	LB134704
	Selenium	4810	5000	96	90 - 110	P	02/12/2025	16:13	LB134704
	Silver	1250	1250	100	90 - 110	P	02/12/2025	16:13	LB134704
	Sodium	26200	25000	105	90 - 110	P	02/12/2025	16:13	LB134704
	Thallium	4760	5000	95	90 - 110	P	02/12/2025	16:13	LB134704
	Vanadium	2470	2500	99	90 - 110	P	02/12/2025	16:13	LB134704
	Zinc	2470	2500	99	90 - 110	P	02/12/2025	16:13	LB134704
CCV05	Aluminum	9750	10000	98	90 - 110	P	02/12/2025	17:04	LB134704
	Antimony	4870	5000	97	90 - 110	P	02/12/2025	17:04	LB134704
	Arsenic	4890	5000	98	90 - 110	P	02/12/2025	17:04	LB134704
	Barium	9700	10000	97	90 - 110	P	02/12/2025	17:04	LB134704
	Beryllium	251	250	100	90 - 110	P	02/12/2025	17:04	LB134704
	Boron	4920	5000	98	90 - 110	P	02/12/2025	17:04	LB134704
	Cadmium	2490	2500	100	90 - 110	P	02/12/2025	17:04	LB134704
	Calcium	24700	25000	99	90 - 110	P	02/12/2025	17:04	LB134704
	Chromium	1020	1000	102	90 - 110	P	02/12/2025	17:04	LB134704
	Copper	1250	1250	100	90 - 110	P	02/12/2025	17:04	LB134704

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV05	Iron	5000	5000	100	90 - 110	P	02/12/2025	17:04	LB134704
	Lead	4970	5000	100	90 - 110	P	02/12/2025	17:04	LB134704
	Magnesium	25000	25000	100	90 - 110	P	02/12/2025	17:04	LB134704
	Manganese	2460	2500	98	90 - 110	P	02/12/2025	17:04	LB134704
	Molybdenum	4950	5000	99	90 - 110	P	02/12/2025	17:04	LB134704
	Nickel	2490	2500	100	90 - 110	P	02/12/2025	17:04	LB134704
	Potassium	24200	25000	97	90 - 110	P	02/12/2025	17:04	LB134704
	Selenium	4840	5000	97	90 - 110	P	02/12/2025	17:04	LB134704
	Silver	1250	1250	100	90 - 110	P	02/12/2025	17:04	LB134704
	Sodium	24800	25000	99	90 - 110	P	02/12/2025	17:04	LB134704
	Thallium	4720	5000	94	90 - 110	P	02/12/2025	17:04	LB134704
	Vanadium	2450	2500	98	90 - 110	P	02/12/2025	17:04	LB134704
	Zinc	2480	2500	99	90 - 110	P	02/12/2025	17:04	LB134704
CCV06	Aluminum	9860	10000	99	90 - 110	P	02/12/2025	17:55	LB134704
	Antimony	4890	5000	98	90 - 110	P	02/12/2025	17:55	LB134704
	Arsenic	4910	5000	98	90 - 110	P	02/12/2025	17:55	LB134704
	Barium	9930	10000	99	90 - 110	P	02/12/2025	17:55	LB134704
	Beryllium	250	250	100	90 - 110	P	02/12/2025	17:55	LB134704
	Boron	4910	5000	98	90 - 110	P	02/12/2025	17:55	LB134704
	Cadmium	2500	2500	100	90 - 110	P	02/12/2025	17:55	LB134704
	Calcium	25200	25000	101	90 - 110	P	02/12/2025	17:55	LB134704
	Chromium	1020	1000	102	90 - 110	P	02/12/2025	17:55	LB134704
	Copper	1250	1250	100	90 - 110	P	02/12/2025	17:55	LB134704
	Iron	5180	5000	104	90 - 110	P	02/12/2025	17:55	LB134704
	Lead	4980	5000	100	90 - 110	P	02/12/2025	17:55	LB134704
	Magnesium	25400	25000	102	90 - 110	P	02/12/2025	17:55	LB134704
	Manganese	2530	2500	101	90 - 110	P	02/12/2025	17:55	LB134704
	Molybdenum	4960	5000	99	90 - 110	P	02/12/2025	17:55	LB134704
	Nickel	2500	2500	100	90 - 110	P	02/12/2025	17:55	LB134704
	Potassium	25100	25000	100	90 - 110	P	02/12/2025	17:55	LB134704
	Selenium	4860	5000	97	90 - 110	P	02/12/2025	17:55	LB134704
	Silver	1260	1250	101	90 - 110	P	02/12/2025	17:55	LB134704
	Sodium	25700	25000	103	90 - 110	P	02/12/2025	17:55	LB134704
	Thallium	4740	5000	95	90 - 110	P	02/12/2025	17:55	LB134704

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV06	Vanadium	2510	2500	100	90 - 110	P	02/12/2025	17:55	LB134704
	Zinc	2490	2500	99	90 - 110	P	02/12/2025	17:55	LB134704
CCV07	Aluminum	9920	10000	99	90 - 110	P	02/12/2025	18:34	LB134704
	Antimony	5000	5000	100	90 - 110	P	02/12/2025	18:34	LB134704
	Arsenic	5020	5000	100	90 - 110	P	02/12/2025	18:34	LB134704
	Barium	9970	10000	100	90 - 110	P	02/12/2025	18:34	LB134704
	Beryllium	245	250	98	90 - 110	P	02/12/2025	18:34	LB134704
	Boron	4820	5000	96	90 - 110	P	02/12/2025	18:34	LB134704
	Cadmium	2520	2500	101	90 - 110	P	02/12/2025	18:34	LB134704
	Calcium	24900	25000	100	90 - 110	P	02/12/2025	18:34	LB134704
	Chromium	1020	1000	102	90 - 110	P	02/12/2025	18:34	LB134704
	Copper	1270	1250	102	90 - 110	P	02/12/2025	18:34	LB134704
	Iron	5160	5000	103	90 - 110	P	02/12/2025	18:34	LB134704
	Lead	5020	5000	100	90 - 110	P	02/12/2025	18:34	LB134704
	Magnesium	25100	25000	100	90 - 110	P	02/12/2025	18:34	LB134704
	Manganese	2480	2500	99	90 - 110	P	02/12/2025	18:34	LB134704
	Molybdenum	5010	5000	100	90 - 110	P	02/12/2025	18:34	LB134704
	Nickel	2510	2500	100	90 - 110	P	02/12/2025	18:34	LB134704
	Potassium	25400	25000	102	90 - 110	P	02/12/2025	18:34	LB134704
	Selenium	5000	5000	100	90 - 110	P	02/12/2025	18:34	LB134704
	Silver	1260	1250	101	90 - 110	P	02/12/2025	18:34	LB134704
	Sodium	26100	25000	105	90 - 110	P	02/12/2025	18:34	LB134704
	Thallium	4800	5000	96	90 - 110	P	02/12/2025	18:34	LB134704
	Vanadium	2490	2500	100	90 - 110	P	02/12/2025	18:34	LB134704
	Zinc	2470	2500	99	90 - 110	P	02/12/2025	18:34	LB134704

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Aluminum	2590	2500	104	95 - 105	P	02/18/2025	11:58	LB134743
	Antimony	998	1000	100	95 - 105	P	02/18/2025	11:58	LB134743
	Arsenic	1020	1000	102	95 - 105	P	02/18/2025	11:58	LB134743
	Barium	513	520	99	95 - 105	P	02/18/2025	11:58	LB134743
	Beryllium	519	510	102	95 - 105	P	02/18/2025	11:58	LB134743
	Cadmium	496	510	97	95 - 105	P	02/18/2025	11:58	LB134743
	Calcium	9960	10000	100	95 - 105	P	02/18/2025	11:58	LB134743
	Chromium	514	520	99	95 - 105	P	02/18/2025	11:58	LB134743
	Copper	514	510	101	95 - 105	P	02/18/2025	11:58	LB134743
	Iron	9600	10000	96	95 - 105	P	02/18/2025	11:58	LB134743
	Lead	992	1000	99	95 - 105	P	02/18/2025	11:58	LB134743
	Magnesium	5740	6000	96	95 - 105	P	02/18/2025	11:58	LB134743
	Manganese	523	520	100	95 - 105	P	02/18/2025	11:58	LB134743
	Nickel	552	530	104	95 - 105	P	02/18/2025	11:58	LB134743
	Potassium	9440	9900	95	95 - 105	P	02/18/2025	11:58	LB134743
	Selenium	1020	1000	102	95 - 105	P	02/18/2025	11:58	LB134743
	Silver	250	250	100	95 - 105	P	02/18/2025	11:58	LB134743
	Sodium	10400	10000	104	95 - 105	P	02/18/2025	11:58	LB134743
	Thallium	1020	1000	102	95 - 105	P	02/18/2025	11:58	LB134743
	Vanadium	518	500	104	95 - 105	P	02/18/2025	11:58	LB134743
	Zinc	985	1000	98	95 - 105	P	02/18/2025	11:58	LB134743

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Aluminum	99.6	100	100	80 - 120	P	02/18/2025	12:10	LB134743
	Antimony	50.4	50.0	101	80 - 120	P	02/18/2025	12:10	LB134743
	Arsenic	23.3	20.0	116	80 - 120	P	02/18/2025	12:10	LB134743
	Barium	91.8	100	92	80 - 120	P	02/18/2025	12:10	LB134743
	Beryllium	5.62	6.0	94	80 - 120	P	02/18/2025	12:10	LB134743
	Cadmium	6.01	6.0	100	80 - 120	P	02/18/2025	12:10	LB134743
	Calcium	1940	2000	97	80 - 120	P	02/18/2025	12:10	LB134743
	Chromium	10.2	10.0	102	80 - 120	P	02/18/2025	12:10	LB134743
	Copper	21.8	20.0	109	80 - 120	P	02/18/2025	12:10	LB134743
	Iron	108	100	108	80 - 120	P	02/18/2025	12:10	LB134743
	Lead	12.0	12.0	100	80 - 120	P	02/18/2025	12:10	LB134743
	Magnesium	2000	2000	100	80 - 120	P	02/18/2025	12:10	LB134743
	Manganese	19.8	20.0	99	80 - 120	P	02/18/2025	12:10	LB134743
	Nickel	38.6	40.0	97	80 - 120	P	02/18/2025	12:10	LB134743
	Potassium	2010	2000	100	80 - 120	P	02/18/2025	12:10	LB134743
	Selenium	19.8	20.0	99	80 - 120	P	02/18/2025	12:10	LB134743
	Silver	10.4	10.0	104	80 - 120	P	02/18/2025	12:10	LB134743
	Sodium	2000	2000	100	80 - 120	P	02/18/2025	12:10	LB134743
	Thallium	37.6	40.0	94	80 - 120	P	02/18/2025	12:10	LB134743
	Vanadium	36.7	40.0	92	80 - 120	P	02/18/2025	12:10	LB134743
	Zinc	45.2	40.0	113	80 - 120	P	02/18/2025	12:10	LB134743

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Aluminum	9740	10000	97	90 - 110	P	02/18/2025	12:41	LB134743
	Antimony	4970	5000	99	90 - 110	P	02/18/2025	12:41	LB134743
	Arsenic	4940	5000	99	90 - 110	P	02/18/2025	12:41	LB134743
	Barium	9790	10000	98	90 - 110	P	02/18/2025	12:41	LB134743
	Beryllium	244	250	98	90 - 110	P	02/18/2025	12:41	LB134743
	Cadmium	2470	2500	99	90 - 110	P	02/18/2025	12:41	LB134743
	Calcium	24400	25000	98	90 - 110	P	02/18/2025	12:41	LB134743
	Chromium	1000	1000	100	90 - 110	P	02/18/2025	12:41	LB134743
	Copper	1250	1250	100	90 - 110	P	02/18/2025	12:41	LB134743
	Iron	5050	5000	101	90 - 110	P	02/18/2025	12:41	LB134743
	Lead	4940	5000	99	90 - 110	P	02/18/2025	12:41	LB134743
	Magnesium	24000	25000	96	90 - 110	P	02/18/2025	12:41	LB134743
	Manganese	2450	2500	98	90 - 110	P	02/18/2025	12:41	LB134743
	Nickel	2470	2500	99	90 - 110	P	02/18/2025	12:41	LB134743
	Potassium	25100	25000	100	90 - 110	P	02/18/2025	12:41	LB134743
	Selenium	4960	5000	99	90 - 110	P	02/18/2025	12:41	LB134743
	Silver	1250	1250	100	90 - 110	P	02/18/2025	12:41	LB134743
	Sodium	25100	25000	100	90 - 110	P	02/18/2025	12:41	LB134743
	Thallium	4960	5000	99	90 - 110	P	02/18/2025	12:41	LB134743
	Vanadium	2440	2500	98	90 - 110	P	02/18/2025	12:41	LB134743
	Zinc	2490	2500	100	90 - 110	P	02/18/2025	12:41	LB134743
CCV02	Aluminum	9690	10000	97	90 - 110	P	02/18/2025	13:32	LB134743
	Antimony	5060	5000	101	90 - 110	P	02/18/2025	13:32	LB134743
	Arsenic	5030	5000	101	90 - 110	P	02/18/2025	13:32	LB134743
	Barium	9440	10000	94	90 - 110	P	02/18/2025	13:32	LB134743
	Beryllium	244	250	98	90 - 110	P	02/18/2025	13:32	LB134743
	Cadmium	2470	2500	99	90 - 110	P	02/18/2025	13:32	LB134743
	Calcium	23700	25000	95	90 - 110	P	02/18/2025	13:32	LB134743
	Chromium	1000	1000	100	90 - 110	P	02/18/2025	13:32	LB134743
	Copper	1270	1250	102	90 - 110	P	02/18/2025	13:32	LB134743
	Iron	4880	5000	98	90 - 110	P	02/18/2025	13:32	LB134743
	Lead	4950	5000	99	90 - 110	P	02/18/2025	13:32	LB134743
	Magnesium	23400	25000	94	90 - 110	P	02/18/2025	13:32	LB134743
	Manganese	2360	2500	94	90 - 110	P	02/18/2025	13:32	LB134743

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV02	Nickel	2480	2500	99	90 - 110	P	02/18/2025	13:32	LB134743
	Potassium	24200	25000	97	90 - 110	P	02/18/2025	13:32	LB134743
	Selenium	5040	5000	101	90 - 110	P	02/18/2025	13:32	LB134743
	Silver	1250	1250	100	90 - 110	P	02/18/2025	13:32	LB134743
	Sodium	24500	25000	98	90 - 110	P	02/18/2025	13:32	LB134743
	Thallium	5050	5000	101	90 - 110	P	02/18/2025	13:32	LB134743
	Vanadium	2400	2500	96	90 - 110	P	02/18/2025	13:32	LB134743
	Zinc	2510	2500	100	90 - 110	P	02/18/2025	13:32	LB134743
CCV03	Aluminum	9760	10000	98	90 - 110	P	02/18/2025	14:23	LB134743
	Antimony	5040	5000	101	90 - 110	P	02/18/2025	14:23	LB134743
	Arsenic	5000	5000	100	90 - 110	P	02/18/2025	14:23	LB134743
	Barium	9690	10000	97	90 - 110	P	02/18/2025	14:23	LB134743
	Beryllium	235	250	94	90 - 110	P	02/18/2025	14:23	LB134743
	Cadmium	2450	2500	98	90 - 110	P	02/18/2025	14:23	LB134743
	Calcium	24100	25000	97	90 - 110	P	02/18/2025	14:23	LB134743
	Chromium	993	1000	99	90 - 110	P	02/18/2025	14:23	LB134743
	Copper	1260	1250	100	90 - 110	P	02/18/2025	14:23	LB134743
	Iron	4990	5000	100	90 - 110	P	02/18/2025	14:23	LB134743
	Lead	4910	5000	98	90 - 110	P	02/18/2025	14:23	LB134743
	Magnesium	23700	25000	95	90 - 110	P	02/18/2025	14:23	LB134743
	Manganese	2380	2500	95	90 - 110	P	02/18/2025	14:23	LB134743
	Nickel	2460	2500	98	90 - 110	P	02/18/2025	14:23	LB134743
	Potassium	25300	25000	101	90 - 110	P	02/18/2025	14:23	LB134743
	Selenium	5040	5000	101	90 - 110	P	02/18/2025	14:23	LB134743
	Silver	1240	1250	99	90 - 110	P	02/18/2025	14:23	LB134743
	Sodium	25700	25000	103	90 - 110	P	02/18/2025	14:23	LB134743
	Thallium	4980	5000	100	90 - 110	P	02/18/2025	14:23	LB134743
	Vanadium	2430	2500	97	90 - 110	P	02/18/2025	14:23	LB134743
	Zinc	2470	2500	99	90 - 110	P	02/18/2025	14:23	LB134743
CCV04	Aluminum	9370	10000	94	90 - 110	P	02/18/2025	15:19	LB134743
	Antimony	4740	5000	95	90 - 110	P	02/18/2025	15:19	LB134743
	Arsenic	4680	5000	94	90 - 110	P	02/18/2025	15:19	LB134743
	Barium	9380	10000	94	90 - 110	P	02/18/2025	15:19	LB134743
	Beryllium	239	250	96	90 - 110	P	02/18/2025	15:19	LB134743

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV04	Cadmium	2340	2500	94	90 - 110	P	02/18/2025	15:19	LB134743
	Calcium	23300	25000	93	90 - 110	P	02/18/2025	15:19	LB134743
	Chromium	960	1000	96	90 - 110	P	02/18/2025	15:19	LB134743
	Copper	1200	1250	96	90 - 110	P	02/18/2025	15:19	LB134743
	Iron	4720	5000	94	90 - 110	P	02/18/2025	15:19	LB134743
	Lead	4700	5000	94	90 - 110	P	02/18/2025	15:19	LB134743
	Magnesium	22600	25000	90	90 - 110	P	02/18/2025	15:19	LB134743
	Manganese	2340	2500	94	90 - 110	P	02/18/2025	15:19	LB134743
	Nickel	2360	2500	94	90 - 110	P	02/18/2025	15:19	LB134743
	Potassium	23400	25000	93	90 - 110	P	02/18/2025	15:19	LB134743
	Selenium	4700	5000	94	90 - 110	P	02/18/2025	15:19	LB134743
	Silver	1210	1250	96	90 - 110	P	02/18/2025	15:19	LB134743
	Sodium	23500	25000	94	90 - 110	P	02/18/2025	15:19	LB134743
	Thallium	4830	5000	97	90 - 110	P	02/18/2025	15:19	LB134743
	Vanadium	2340	2500	94	90 - 110	P	02/18/2025	15:19	LB134743
	Zinc	2380	2500	95	90 - 110	P	02/18/2025	15:19	LB134743
CCV05	Aluminum	9430	10000	94	90 - 110	P	02/18/2025	16:06	LB134743
	Antimony	4950	5000	99	90 - 110	P	02/18/2025	16:06	LB134743
	Arsenic	4890	5000	98	90 - 110	P	02/18/2025	16:06	LB134743
	Barium	9720	10000	97	90 - 110	P	02/18/2025	16:06	LB134743
	Beryllium	229	250	92	90 - 110	P	02/18/2025	16:06	LB134743
	Cadmium	2390	2500	96	90 - 110	P	02/18/2025	16:06	LB134743
	Calcium	23300	25000	93	90 - 110	P	02/18/2025	16:06	LB134743
	Chromium	957	1000	96	90 - 110	P	02/18/2025	16:06	LB134743
	Copper	1240	1250	99	90 - 110	P	02/18/2025	16:06	LB134743
	Iron	4830	5000	97	90 - 110	P	02/18/2025	16:06	LB134743
	Lead	4790	5000	96	90 - 110	P	02/18/2025	16:06	LB134743
	Magnesium	22700	25000	91	90 - 110	P	02/18/2025	16:06	LB134743
	Manganese	2320	2500	93	90 - 110	P	02/18/2025	16:06	LB134743
	Nickel	2400	2500	96	90 - 110	P	02/18/2025	16:06	LB134743
	Potassium	24500	25000	98	90 - 110	P	02/18/2025	16:06	LB134743
	Selenium	4930	5000	99	90 - 110	P	02/18/2025	16:06	LB134743
	Silver	1210	1250	96	90 - 110	P	02/18/2025	16:06	LB134743
	Sodium	24700	25000	99	90 - 110	P	02/18/2025	16:06	LB134743

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV05	Thallium	4850	5000	97	90 - 110	P	02/18/2025	16:06	LB134743
	Vanadium	2340	2500	94	90 - 110	P	02/18/2025	16:06	LB134743
	Zinc	2360	2500	94	90 - 110	P	02/18/2025	16:06	LB134743

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Metals

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CRDL STANDARD FOR AA & ICP

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRA	Mercury	0.055	0.05	111	40 - 160	CV	02/11/2025	15:28	LB134671
CRI01	Aluminum	91.2	100	91	40 - 160	P	02/12/2025	13:17	LB134704
	Antimony	51.2	50.0	102	40 - 160	P	02/12/2025	13:17	LB134704
	Arsenic	19.8	20.0	99	40 - 160	P	02/12/2025	13:17	LB134704
	Barium	100.0	100	100	40 - 160	P	02/12/2025	13:17	LB134704
	Beryllium	5.74	6.0	96	40 - 160	P	02/12/2025	13:17	LB134704
	Boron	93.7	100	94	40 - 160	P	02/12/2025	13:17	LB134704
	Cadmium	5.89	6.0	98	40 - 160	P	02/12/2025	13:17	LB134704
	Calcium	2030	2000	101	40 - 160	P	02/12/2025	13:17	LB134704
	Chromium	10.1	10.0	101	40 - 160	P	02/12/2025	13:17	LB134704
	Copper	22.2	20.0	111	40 - 160	P	02/12/2025	13:17	LB134704
	Iron	102	100	102	40 - 160	P	02/12/2025	13:17	LB134704
	Lead	11.8	12.0	98	40 - 160	P	02/12/2025	13:17	LB134704
	Magnesium	2140	2000	107	40 - 160	P	02/12/2025	13:17	LB134704
	Manganese	20.1	20.0	101	40 - 160	P	02/12/2025	13:17	LB134704
	Molybdenum	207	200	103	40 - 160	P	02/12/2025	13:17	LB134704
	Nickel	40.4	40.0	101	40 - 160	P	02/12/2025	13:17	LB134704
	Potassium	2070	2000	104	40 - 160	P	02/12/2025	13:17	LB134704
	Selenium	19.5	20.0	98	40 - 160	P	02/12/2025	13:17	LB134704
	Silver	10.4	10.0	104	40 - 160	P	02/12/2025	13:17	LB134704
	Sodium	2070	2000	103	40 - 160	P	02/12/2025	13:17	LB134704
	Thallium	40.8	40.0	102	40 - 160	P	02/12/2025	13:17	LB134704
	Vanadium	39.2	40.0	98	40 - 160	P	02/12/2025	13:17	LB134704
	Zinc	43.0	40.0	108	40 - 160	P	02/12/2025	13:17	LB134704
CRI01	Aluminum	92.5	100	92	40 - 160	P	02/18/2025	12:18	LB134743
	Antimony	50.9	50.0	102	40 - 160	P	02/18/2025	12:18	LB134743
	Arsenic	22.9	20.0	114	40 - 160	P	02/18/2025	12:18	LB134743
	Barium	91.3	100	91	40 - 160	P	02/18/2025	12:18	LB134743
	Beryllium	5.61	6.0	94	40 - 160	P	02/18/2025	12:18	LB134743
	Cadmium	6.11	6.0	102	40 - 160	P	02/18/2025	12:18	LB134743
	Calcium	1930	2000	96	40 - 160	P	02/18/2025	12:18	LB134743
	Chromium	10.3	10.0	103	40 - 160	P	02/18/2025	12:18	LB134743
	Copper	21.9	20.0	110	40 - 160	P	02/18/2025	12:18	LB134743
	Iron	107	100	107	40 - 160	P	02/18/2025	12:18	LB134743
	Lead	13.4	12.0	111	40 - 160	P	02/18/2025	12:18	LB134743

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Metals

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CRDL STANDARD FOR AA & ICP

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRI01	Magnesium	1990	2000	100	40 - 160	P	02/18/2025	12:18	LB134743
	Manganese	19.9	20.0	100	40 - 160	P	02/18/2025	12:18	LB134743
	Nickel	39.0	40.0	98	40 - 160	P	02/18/2025	12:18	LB134743
	Potassium	1980	2000	99	40 - 160	P	02/18/2025	12:18	LB134743
	Selenium	19.6	20.0	98	40 - 160	P	02/18/2025	12:18	LB134743
	Silver	10.3	10.0	103	40 - 160	P	02/18/2025	12:18	LB134743
	Sodium	1980	2000	99	40 - 160	P	02/18/2025	12:18	LB134743
	Thallium	37.1	40.0	93	40 - 160	P	02/18/2025	12:18	LB134743
	Vanadium	36.8	40.0	92	40 - 160	P	02/18/2025	12:18	LB134743
	Zinc	44.3	40.0	111	40 - 160	P	02/18/2025	12:18	LB134743

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB96	Mercury	0.20	+/-0.20	U	0.20	CV	02/11/2025	15:19	LB134671

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB56	Mercury	0.20	+/-0.20	U	0.20	CV	02/11/2025	15:24	LB134671
CCB57	Mercury	0.20	+/-0.20	U	0.20	CV	02/11/2025	16:02	LB134671
CCB58	Mercury	0.20	+/-0.20	U	0.20	CV	02/11/2025	16:22	LB134671

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Aluminum	100	+/-100	U	100	P	02/12/2025	13:12	LB134704
	Antimony	50.0	+/-50.0	U	50.0	P	02/12/2025	13:12	LB134704
	Arsenic	20.0	+/-20.0	U	20.0	P	02/12/2025	13:12	LB134704
	Barium	100	+/-100	U	100	P	02/12/2025	13:12	LB134704
	Beryllium	6.00	+/-6.00	U	6.00	P	02/12/2025	13:12	LB134704
	Boron	100	+/-100	U	100	P	02/12/2025	13:12	LB134704
	Cadmium	6.00	+/-6.00	U	6.00	P	02/12/2025	13:12	LB134704
	Calcium	2000	+/-2000	U	2000	P	02/12/2025	13:12	LB134704
	Chromium	10.0	+/-10.0	U	10.0	P	02/12/2025	13:12	LB134704
	Copper	20.0	+/-20.0	U	20.0	P	02/12/2025	13:12	LB134704
	Iron	100	+/-100	U	100	P	02/12/2025	13:12	LB134704
	Lead	12.0	+/-12.0	U	12.0	P	02/12/2025	13:12	LB134704
	Magnesium	2000	+/-2000	U	2000	P	02/12/2025	13:12	LB134704
	Manganese	20.0	+/-20.0	U	20.0	P	02/12/2025	13:12	LB134704
	Molybdenum	200	+/-200	U	200	P	02/12/2025	13:12	LB134704
	Nickel	40.0	+/-40.0	U	40.0	P	02/12/2025	13:12	LB134704
	Potassium	2000	+/-2000	U	2000	P	02/12/2025	13:12	LB134704
	Selenium	20.0	+/-20.0	U	20.0	P	02/12/2025	13:12	LB134704
	Silver	10.0	+/-10.0	U	10.0	P	02/12/2025	13:12	LB134704
	Sodium	2000	+/-2000	U	2000	P	02/12/2025	13:12	LB134704
	Thallium	40.0	+/-40.0	U	40.0	P	02/12/2025	13:12	LB134704
	Vanadium	40.0	+/-40.0	U	40.0	P	02/12/2025	13:12	LB134704
	Zinc	40.0	+/-40.0	U	40.0	P	02/12/2025	13:12	LB134704

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Aluminum	100	+/-100	U	100	P	02/12/2025	13:43	LB134704
	Antimony	50.0	+/-50.0	U	50.0	P	02/12/2025	13:43	LB134704
	Arsenic	20.0	+/-20.0	U	20.0	P	02/12/2025	13:43	LB134704
	Barium	100	+/-100	U	100	P	02/12/2025	13:43	LB134704
	Beryllium	6.00	+/-6.00	U	6.00	P	02/12/2025	13:43	LB134704
	Boron	100	+/-100	U	100	P	02/12/2025	13:43	LB134704
	Cadmium	6.00	+/-6.00	U	6.00	P	02/12/2025	13:43	LB134704
	Calcium	2000	+/-2000	U	2000	P	02/12/2025	13:43	LB134704
	Chromium	10.0	+/-10.0	U	10.0	P	02/12/2025	13:43	LB134704
	Copper	20.0	+/-20.0	U	20.0	P	02/12/2025	13:43	LB134704
	Iron	100	+/-100	U	100	P	02/12/2025	13:43	LB134704
	Lead	12.0	+/-12.0	U	12.0	P	02/12/2025	13:43	LB134704
	Magnesium	2000	+/-2000	U	2000	P	02/12/2025	13:43	LB134704
	Manganese	20.0	+/-20.0	U	20.0	P	02/12/2025	13:43	LB134704
	Molybdenum	200	+/-200	U	200	P	02/12/2025	13:43	LB134704
	Nickel	40.0	+/-40.0	U	40.0	P	02/12/2025	13:43	LB134704
	Potassium	2000	+/-2000	U	2000	P	02/12/2025	13:43	LB134704
	Selenium	20.0	+/-20.0	U	20.0	P	02/12/2025	13:43	LB134704
	Silver	10.0	+/-10.0	U	10.0	P	02/12/2025	13:43	LB134704
	Sodium	2000	+/-2000	U	2000	P	02/12/2025	13:43	LB134704
	Thallium	40.0	+/-40.0	U	40.0	P	02/12/2025	13:43	LB134704
	Vanadium	40.0	+/-40.0	U	40.0	P	02/12/2025	13:43	LB134704
	Zinc	40.0	+/-40.0	U	40.0	P	02/12/2025	13:43	LB134704
CCB02	Aluminum	100	+/-100	U	100	P	02/12/2025	14:33	LB134704
	Antimony	50.0	+/-50.0	U	50.0	P	02/12/2025	14:33	LB134704
	Arsenic	20.0	+/-20.0	U	20.0	P	02/12/2025	14:33	LB134704
	Barium	100	+/-100	U	100	P	02/12/2025	14:33	LB134704
	Beryllium	6.00	+/-6.00	U	6.00	P	02/12/2025	14:33	LB134704
	Boron	100	+/-100	U	100	P	02/12/2025	14:33	LB134704
	Cadmium	6.00	+/-6.00	U	6.00	P	02/12/2025	14:33	LB134704
	Calcium	2000	+/-2000	U	2000	P	02/12/2025	14:33	LB134704
	Chromium	10.0	+/-10.0	U	10.0	P	02/12/2025	14:33	LB134704
	Copper	20.0	+/-20.0	U	20.0	P	02/12/2025	14:33	LB134704
	Iron	100	+/-100	U	100	P	02/12/2025	14:33	LB134704
	Lead	12.0	+/-12.0	U	12.0	P	02/12/2025	14:33	LB134704
	Magnesium	2000	+/-2000	U	2000	P	02/12/2025	14:33	LB134704
	Manganese	20.0	+/-20.0	U	20.0	P	02/12/2025	14:33	LB134704
	Molybdenum	200	+/-200	U	200	P	02/12/2025	14:33	LB134704
	Nickel	40.0	+/-40.0	U	40.0	P	02/12/2025	14:33	LB134704

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Potassium	2000	+/-2000	U	2000	P	02/12/2025	14:33	LB134704
	Selenium	20.0	+/-20.0	U	20.0	P	02/12/2025	14:33	LB134704
	Silver	10.0	+/-10.0	U	10.0	P	02/12/2025	14:33	LB134704
	Sodium	2000	+/-2000	U	2000	P	02/12/2025	14:33	LB134704
	Thallium	40.0	+/-40.0	U	40.0	P	02/12/2025	14:33	LB134704
	Vanadium	40.0	+/-40.0	U	40.0	P	02/12/2025	14:33	LB134704
	Zinc	40.0	+/-40.0	U	40.0	P	02/12/2025	14:33	LB134704
CCB03	Aluminum	100	+/-100	U	100	P	02/12/2025	15:24	LB134704
	Antimony	50.0	+/-50.0	U	50.0	P	02/12/2025	15:24	LB134704
	Arsenic	20.0	+/-20.0	U	20.0	P	02/12/2025	15:24	LB134704
	Barium	100	+/-100	U	100	P	02/12/2025	15:24	LB134704
	Beryllium	6.00	+/-6.00	U	6.00	P	02/12/2025	15:24	LB134704
	Boron	100	+/-100	U	100	P	02/12/2025	15:24	LB134704
	Cadmium	6.00	+/-6.00	U	6.00	P	02/12/2025	15:24	LB134704
	Calcium	2000	+/-2000	U	2000	P	02/12/2025	15:24	LB134704
	Chromium	10.0	+/-10.0	U	10.0	P	02/12/2025	15:24	LB134704
	Copper	20.0	+/-20.0	U	20.0	P	02/12/2025	15:24	LB134704
	Iron	100	+/-100	U	100	P	02/12/2025	15:24	LB134704
	Lead	12.0	+/-12.0	U	12.0	P	02/12/2025	15:24	LB134704
	Magnesium	2000	+/-2000	U	2000	P	02/12/2025	15:24	LB134704
	Manganese	20.0	+/-20.0	U	20.0	P	02/12/2025	15:24	LB134704
	Molybdenum	200	+/-200	U	200	P	02/12/2025	15:24	LB134704
	Nickel	40.0	+/-40.0	U	40.0	P	02/12/2025	15:24	LB134704
	Potassium	2000	+/-2000	U	2000	P	02/12/2025	15:24	LB134704
	Selenium	20.0	+/-20.0	U	20.0	P	02/12/2025	15:24	LB134704
	Silver	10.0	+/-10.0	U	10.0	P	02/12/2025	15:24	LB134704
	Sodium	559	+/-2000	J	2000	P	02/12/2025	15:24	LB134704
	Thallium	40.0	+/-40.0	U	40.0	P	02/12/2025	15:24	LB134704
	Vanadium	40.0	+/-40.0	U	40.0	P	02/12/2025	15:24	LB134704
	Zinc	40.0	+/-40.0	U	40.0	P	02/12/2025	15:24	LB134704
CCB04	Aluminum	100	+/-100	U	100	P	02/12/2025	16:17	LB134704
	Antimony	50.0	+/-50.0	U	50.0	P	02/12/2025	16:17	LB134704
	Arsenic	20.0	+/-20.0	U	20.0	P	02/12/2025	16:17	LB134704
	Barium	100	+/-100	U	100	P	02/12/2025	16:17	LB134704
	Beryllium	6.00	+/-6.00	U	6.00	P	02/12/2025	16:17	LB134704
	Boron	100	+/-100	U	100	P	02/12/2025	16:17	LB134704
	Cadmium	6.00	+/-6.00	U	6.00	P	02/12/2025	16:17	LB134704
	Calcium	2000	+/-2000	U	2000	P	02/12/2025	16:17	LB134704
	Chromium	10.0	+/-10.0	U	10.0	P	02/12/2025	16:17	LB134704

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Copper	20.0	+/-20.0	U	20.0	P	02/12/2025	16:17	LB134704
	Iron	100	+/-100	U	100	P	02/12/2025	16:17	LB134704
	Lead	12.0	+/-12.0	U	12.0	P	02/12/2025	16:17	LB134704
	Magnesium	2000	+/-2000	U	2000	P	02/12/2025	16:17	LB134704
	Manganese	20.0	+/-20.0	U	20.0	P	02/12/2025	16:17	LB134704
	Molybdenum	200	+/-200	U	200	P	02/12/2025	16:17	LB134704
	Nickel	40.0	+/-40.0	U	40.0	P	02/12/2025	16:17	LB134704
	Potassium	2000	+/-2000	U	2000	P	02/12/2025	16:17	LB134704
	Selenium	20.0	+/-20.0	U	20.0	P	02/12/2025	16:17	LB134704
	Silver	10.0	+/-10.0	U	10.0	P	02/12/2025	16:17	LB134704
	Sodium	505	+/-2000	J	2000	P	02/12/2025	16:17	LB134704
	Thallium	40.0	+/-40.0	U	40.0	P	02/12/2025	16:17	LB134704
	Vanadium	40.0	+/-40.0	U	40.0	P	02/12/2025	16:17	LB134704
	Zinc	4.78	+/-40.0	J	40.0	P	02/12/2025	16:17	LB134704
CCB05	Aluminum	100	+/-100	U	100	P	02/12/2025	17:08	LB134704
	Antimony	50.0	+/-50.0	U	50.0	P	02/12/2025	17:08	LB134704
	Arsenic	20.0	+/-20.0	U	20.0	P	02/12/2025	17:08	LB134704
	Barium	100	+/-100	U	100	P	02/12/2025	17:08	LB134704
	Beryllium	6.00	+/-6.00	U	6.00	P	02/12/2025	17:08	LB134704
	Boron	100	+/-100	U	100	P	02/12/2025	17:08	LB134704
	Cadmium	6.00	+/-6.00	U	6.00	P	02/12/2025	17:08	LB134704
	Calcium	2000	+/-2000	U	2000	P	02/12/2025	17:08	LB134704
	Chromium	10.0	+/-10.0	U	10.0	P	02/12/2025	17:08	LB134704
	Copper	20.0	+/-20.0	U	20.0	P	02/12/2025	17:08	LB134704
	Iron	100	+/-100	U	100	P	02/12/2025	17:08	LB134704
	Lead	12.0	+/-12.0	U	12.0	P	02/12/2025	17:08	LB134704
	Magnesium	2000	+/-2000	U	2000	P	02/12/2025	17:08	LB134704
	Manganese	20.0	+/-20.0	U	20.0	P	02/12/2025	17:08	LB134704
	Molybdenum	200	+/-200	U	200	P	02/12/2025	17:08	LB134704
	Nickel	40.0	+/-40.0	U	40.0	P	02/12/2025	17:08	LB134704
	Potassium	2000	+/-2000	U	2000	P	02/12/2025	17:08	LB134704
	Selenium	20.0	+/-20.0	U	20.0	P	02/12/2025	17:08	LB134704
	Silver	10.0	+/-10.0	U	10.0	P	02/12/2025	17:08	LB134704
	Sodium	2000	+/-2000	U	2000	P	02/12/2025	17:08	LB134704
	Thallium	40.0	+/-40.0	U	40.0	P	02/12/2025	17:08	LB134704
	Vanadium	40.0	+/-40.0	U	40.0	P	02/12/2025	17:08	LB134704
	Zinc	40.0	+/-40.0	U	40.0	P	02/12/2025	17:08	LB134704
CCB06	Aluminum	100	+/-100	U	100	P	02/12/2025	17:59	LB134704
	Antimony	50.0	+/-50.0	U	50.0	P	02/12/2025	17:59	LB134704

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Arsenic	20.0	+/-20.0	U	20.0	P	02/12/2025	17:59	LB134704
	Barium	100	+/-100	U	100	P	02/12/2025	17:59	LB134704
	Beryllium	6.00	+/-6.00	U	6.00	P	02/12/2025	17:59	LB134704
	Boron	100	+/-100	U	100	P	02/12/2025	17:59	LB134704
	Cadmium	6.00	+/-6.00	U	6.00	P	02/12/2025	17:59	LB134704
	Calcium	2000	+/-2000	U	2000	P	02/12/2025	17:59	LB134704
	Chromium	10.0	+/-10.0	U	10.0	P	02/12/2025	17:59	LB134704
	Copper	20.0	+/-20.0	U	20.0	P	02/12/2025	17:59	LB134704
	Iron	100	+/-100	U	100	P	02/12/2025	17:59	LB134704
	Lead	12.0	+/-12.0	U	12.0	P	02/12/2025	17:59	LB134704
	Magnesium	2000	+/-2000	U	2000	P	02/12/2025	17:59	LB134704
	Manganese	20.0	+/-20.0	U	20.0	P	02/12/2025	17:59	LB134704
	Molybdenum	200	+/-200	U	200	P	02/12/2025	17:59	LB134704
	Nickel	40.0	+/-40.0	U	40.0	P	02/12/2025	17:59	LB134704
	Potassium	2000	+/-2000	U	2000	P	02/12/2025	17:59	LB134704
	Selenium	20.0	+/-20.0	U	20.0	P	02/12/2025	17:59	LB134704
	Silver	10.0	+/-10.0	U	10.0	P	02/12/2025	17:59	LB134704
	Sodium	2000	+/-2000	U	2000	P	02/12/2025	17:59	LB134704
	Thallium	40.0	+/-40.0	U	40.0	P	02/12/2025	17:59	LB134704
	Vanadium	40.0	+/-40.0	U	40.0	P	02/12/2025	17:59	LB134704
	Zinc	40.0	+/-40.0	U	40.0	P	02/12/2025	17:59	LB134704
CCB07	Aluminum	100	+/-100	U	100	P	02/12/2025	18:38	LB134704
	Antimony	50.0	+/-50.0	U	50.0	P	02/12/2025	18:38	LB134704
	Arsenic	20.0	+/-20.0	U	20.0	P	02/12/2025	18:38	LB134704
	Barium	100	+/-100	U	100	P	02/12/2025	18:38	LB134704
	Beryllium	6.00	+/-6.00	U	6.00	P	02/12/2025	18:38	LB134704
	Boron	100	+/-100	U	100	P	02/12/2025	18:38	LB134704
	Cadmium	6.00	+/-6.00	U	6.00	P	02/12/2025	18:38	LB134704
	Calcium	2000	+/-2000	U	2000	P	02/12/2025	18:38	LB134704
	Chromium	10.0	+/-10.0	U	10.0	P	02/12/2025	18:38	LB134704
	Copper	20.0	+/-20.0	U	20.0	P	02/12/2025	18:38	LB134704
	Iron	100	+/-100	U	100	P	02/12/2025	18:38	LB134704
	Lead	12.0	+/-12.0	U	12.0	P	02/12/2025	18:38	LB134704
	Magnesium	2000	+/-2000	U	2000	P	02/12/2025	18:38	LB134704
	Manganese	20.0	+/-20.0	U	20.0	P	02/12/2025	18:38	LB134704
	Molybdenum	200	+/-200	U	200	P	02/12/2025	18:38	LB134704
	Nickel	40.0	+/-40.0	U	40.0	P	02/12/2025	18:38	LB134704
	Potassium	2000	+/-2000	U	2000	P	02/12/2025	18:38	LB134704
	Selenium	20.0	+/-20.0	U	20.0	P	02/12/2025	18:38	LB134704

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB07	Silver	10.0	+/-10.0	U	10.0	P	02/12/2025	18:38	LB134704
	Sodium	2000	+/-2000	U	2000	P	02/12/2025	18:38	LB134704
	Thallium	40.0	+/-40.0	U	40.0	P	02/12/2025	18:38	LB134704
	Vanadium	40.0	+/-40.0	U	40.0	P	02/12/2025	18:38	LB134704
	Zinc	40.0	+/-40.0	U	40.0	P	02/12/2025	18:38	LB134704

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Aluminum	100	+/-100	U	100	P	02/18/2025	12:14	LB134743
	Antimony	50.0	+/-50.0	U	50.0	P	02/18/2025	12:14	LB134743
	Arsenic	20.0	+/-20.0	U	20.0	P	02/18/2025	12:14	LB134743
	Barium	100	+/-100	U	100	P	02/18/2025	12:14	LB134743
	Beryllium	6.00	+/-6.00	U	6.00	P	02/18/2025	12:14	LB134743
	Cadmium	6.00	+/-6.00	U	6.00	P	02/18/2025	12:14	LB134743
	Calcium	2000	+/-2000	U	2000	P	02/18/2025	12:14	LB134743
	Chromium	10.0	+/-10.0	U	10.0	P	02/18/2025	12:14	LB134743
	Copper	20.0	+/-20.0	U	20.0	P	02/18/2025	12:14	LB134743
	Iron	100	+/-100	U	100	P	02/18/2025	12:14	LB134743
	Lead	12.0	+/-12.0	U	12.0	P	02/18/2025	12:14	LB134743
	Magnesium	2000	+/-2000	U	2000	P	02/18/2025	12:14	LB134743
	Manganese	20.0	+/-20.0	U	20.0	P	02/18/2025	12:14	LB134743
	Nickel	40.0	+/-40.0	U	40.0	P	02/18/2025	12:14	LB134743
	Potassium	2000	+/-2000	U	2000	P	02/18/2025	12:14	LB134743
	Selenium	20.0	+/-20.0	U	20.0	P	02/18/2025	12:14	LB134743
	Silver	10.0	+/-10.0	U	10.0	P	02/18/2025	12:14	LB134743
	Sodium	2000	+/-2000	U	2000	P	02/18/2025	12:14	LB134743
	Thallium	40.0	+/-40.0	U	40.0	P	02/18/2025	12:14	LB134743
	Vanadium	40.0	+/-40.0	U	40.0	P	02/18/2025	12:14	LB134743
	Zinc	40.0	+/-40.0	U	40.0	P	02/18/2025	12:14	LB134743

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Aluminum	100	+/-100	U	100	P	02/18/2025	12:45	LB134743
	Antimony	50.0	+/-50.0	U	50.0	P	02/18/2025	12:45	LB134743
	Arsenic	20.0	+/-20.0	U	20.0	P	02/18/2025	12:45	LB134743
	Barium	100	+/-100	U	100	P	02/18/2025	12:45	LB134743
	Beryllium	6.00	+/-6.00	U	6.00	P	02/18/2025	12:45	LB134743
	Cadmium	6.00	+/-6.00	U	6.00	P	02/18/2025	12:45	LB134743
	Calcium	2000	+/-2000	U	2000	P	02/18/2025	12:45	LB134743
	Chromium	10.0	+/-10.0	U	10.0	P	02/18/2025	12:45	LB134743
	Copper	20.0	+/-20.0	U	20.0	P	02/18/2025	12:45	LB134743
	Iron	100	+/-100	U	100	P	02/18/2025	12:45	LB134743
	Lead	12.0	+/-12.0	U	12.0	P	02/18/2025	12:45	LB134743
	Magnesium	2000	+/-2000	U	2000	P	02/18/2025	12:45	LB134743
	Manganese	20.0	+/-20.0	U	20.0	P	02/18/2025	12:45	LB134743
	Nickel	40.0	+/-40.0	U	40.0	P	02/18/2025	12:45	LB134743
	Potassium	2000	+/-2000	U	2000	P	02/18/2025	12:45	LB134743
	Selenium	20.0	+/-20.0	U	20.0	P	02/18/2025	12:45	LB134743
	Silver	10.0	+/-10.0	U	10.0	P	02/18/2025	12:45	LB134743
	Sodium	2000	+/-2000	U	2000	P	02/18/2025	12:45	LB134743
	Thallium	40.0	+/-40.0	U	40.0	P	02/18/2025	12:45	LB134743
	Vanadium	40.0	+/-40.0	U	40.0	P	02/18/2025	12:45	LB134743
	Zinc	40.0	+/-40.0	U	40.0	P	02/18/2025	12:45	LB134743
CCB02	Aluminum	100	+/-100	U	100	P	02/18/2025	13:36	LB134743
	Antimony	50.0	+/-50.0	U	50.0	P	02/18/2025	13:36	LB134743
	Arsenic	20.0	+/-20.0	U	20.0	P	02/18/2025	13:36	LB134743
	Barium	100	+/-100	U	100	P	02/18/2025	13:36	LB134743
	Beryllium	6.00	+/-6.00	U	6.00	P	02/18/2025	13:36	LB134743
	Cadmium	6.00	+/-6.00	U	6.00	P	02/18/2025	13:36	LB134743
	Calcium	2000	+/-2000	U	2000	P	02/18/2025	13:36	LB134743
	Chromium	10.0	+/-10.0	U	10.0	P	02/18/2025	13:36	LB134743
	Copper	20.0	+/-20.0	U	20.0	P	02/18/2025	13:36	LB134743
	Iron	100	+/-100	U	100	P	02/18/2025	13:36	LB134743
	Lead	12.0	+/-12.0	U	12.0	P	02/18/2025	13:36	LB134743
	Magnesium	2000	+/-2000	U	2000	P	02/18/2025	13:36	LB134743
	Manganese	20.0	+/-20.0	U	20.0	P	02/18/2025	13:36	LB134743
	Nickel	40.0	+/-40.0	U	40.0	P	02/18/2025	13:36	LB134743
	Potassium	2000	+/-2000	U	2000	P	02/18/2025	13:36	LB134743
	Selenium	20.0	+/-20.0	U	20.0	P	02/18/2025	13:36	LB134743
	Silver	10.0	+/-10.0	U	10.0	P	02/18/2025	13:36	LB134743
	Sodium	2000	+/-2000	U	2000	P	02/18/2025	13:36	LB134743

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Thallium	40.0	+/-40.0	U	40.0	P	02/18/2025	13:36	LB134743
	Vanadium	40.0	+/-40.0	U	40.0	P	02/18/2025	13:36	LB134743
	Zinc	40.0	+/-40.0	U	40.0	P	02/18/2025	13:36	LB134743
CCB03	Aluminum	100	+/-100	U	100	P	02/18/2025	14:27	LB134743
	Antimony	50.0	+/-50.0	U	50.0	P	02/18/2025	14:27	LB134743
	Arsenic	20.0	+/-20.0	U	20.0	P	02/18/2025	14:27	LB134743
	Barium	100	+/-100	U	100	P	02/18/2025	14:27	LB134743
	Beryllium	6.00	+/-6.00	U	6.00	P	02/18/2025	14:27	LB134743
	Cadmium	6.00	+/-6.00	U	6.00	P	02/18/2025	14:27	LB134743
	Calcium	2000	+/-2000	U	2000	P	02/18/2025	14:27	LB134743
	Chromium	10.0	+/-10.0	U	10.0	P	02/18/2025	14:27	LB134743
	Copper	20.0	+/-20.0	U	20.0	P	02/18/2025	14:27	LB134743
	Iron	100	+/-100	U	100	P	02/18/2025	14:27	LB134743
	Lead	12.0	+/-12.0	U	12.0	P	02/18/2025	14:27	LB134743
	Magnesium	2000	+/-2000	U	2000	P	02/18/2025	14:27	LB134743
	Manganese	20.0	+/-20.0	U	20.0	P	02/18/2025	14:27	LB134743
	Nickel	40.0	+/-40.0	U	40.0	P	02/18/2025	14:27	LB134743
	Potassium	2000	+/-2000	U	2000	P	02/18/2025	14:27	LB134743
	Selenium	20.0	+/-20.0	U	20.0	P	02/18/2025	14:27	LB134743
	Silver	10.0	+/-10.0	U	10.0	P	02/18/2025	14:27	LB134743
	Sodium	2000	+/-2000	U	2000	P	02/18/2025	14:27	LB134743
	Thallium	40.0	+/-40.0	U	40.0	P	02/18/2025	14:27	LB134743
	Vanadium	40.0	+/-40.0	U	40.0	P	02/18/2025	14:27	LB134743
	Zinc	40.0	+/-40.0	U	40.0	P	02/18/2025	14:27	LB134743
CCB04	Aluminum	100	+/-100	U	100	P	02/18/2025	15:23	LB134743
	Antimony	50.0	+/-50.0	U	50.0	P	02/18/2025	15:23	LB134743
	Arsenic	20.0	+/-20.0	U	20.0	P	02/18/2025	15:23	LB134743
	Barium	100	+/-100	U	100	P	02/18/2025	15:23	LB134743
	Beryllium	6.00	+/-6.00	U	6.00	P	02/18/2025	15:23	LB134743
	Cadmium	6.00	+/-6.00	U	6.00	P	02/18/2025	15:23	LB134743
	Calcium	2000	+/-2000	U	2000	P	02/18/2025	15:23	LB134743
	Chromium	10.0	+/-10.0	U	10.0	P	02/18/2025	15:23	LB134743
	Copper	20.0	+/-20.0	U	20.0	P	02/18/2025	15:23	LB134743
	Iron	100	+/-100	U	100	P	02/18/2025	15:23	LB134743
	Lead	12.0	+/-12.0	U	12.0	P	02/18/2025	15:23	LB134743
	Magnesium	2000	+/-2000	U	2000	P	02/18/2025	15:23	LB134743
	Manganese	20.0	+/-20.0	U	20.0	P	02/18/2025	15:23	LB134743
	Nickel	40.0	+/-40.0	U	40.0	P	02/18/2025	15:23	LB134743
	Potassium	2000	+/-2000	U	2000	P	02/18/2025	15:23	LB134743

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Selenium	20.0	+/-20.0	U	20.0	P	02/18/2025	15:23	LB134743
	Silver	10.0	+/-10.0	U	10.0	P	02/18/2025	15:23	LB134743
	Sodium	2000	+/-2000	U	2000	P	02/18/2025	15:23	LB134743
	Thallium	40.0	+/-40.0	U	40.0	P	02/18/2025	15:23	LB134743
	Vanadium	40.0	+/-40.0	U	40.0	P	02/18/2025	15:23	LB134743
	Zinc	40.0	+/-40.0	U	40.0	P	02/18/2025	15:23	LB134743
CCB05	Aluminum	100	+/-100	U	100	P	02/18/2025	16:11	LB134743
	Antimony	50.0	+/-50.0	U	50.0	P	02/18/2025	16:11	LB134743
	Arsenic	20.0	+/-20.0	U	20.0	P	02/18/2025	16:11	LB134743
	Barium	100	+/-100	U	100	P	02/18/2025	16:11	LB134743
	Beryllium	6.00	+/-6.00	U	6.00	P	02/18/2025	16:11	LB134743
	Cadmium	6.00	+/-6.00	U	6.00	P	02/18/2025	16:11	LB134743
	Calcium	2000	+/-2000	U	2000	P	02/18/2025	16:11	LB134743
	Chromium	10.0	+/-10.0	U	10.0	P	02/18/2025	16:11	LB134743
	Copper	20.0	+/-20.0	U	20.0	P	02/18/2025	16:11	LB134743
	Iron	100	+/-100	U	100	P	02/18/2025	16:11	LB134743
	Lead	12.0	+/-12.0	U	12.0	P	02/18/2025	16:11	LB134743
	Magnesium	2000	+/-2000	U	2000	P	02/18/2025	16:11	LB134743
	Manganese	20.0	+/-20.0	U	20.0	P	02/18/2025	16:11	LB134743
	Nickel	40.0	+/-40.0	U	40.0	P	02/18/2025	16:11	LB134743
	Potassium	2000	+/-2000	U	2000	P	02/18/2025	16:11	LB134743
	Selenium	20.0	+/-20.0	U	20.0	P	02/18/2025	16:11	LB134743
	Silver	10.0	+/-10.0	U	10.0	P	02/18/2025	16:11	LB134743
	Sodium	2000	+/-2000	U	2000	P	02/18/2025	16:11	LB134743
	Thallium	40.0	+/-40.0	U	40.0	P	02/18/2025	16:11	LB134743
	Vanadium	40.0	+/-40.0	U	40.0	P	02/18/2025	16:11	LB134743
	Zinc	40.0	+/-40.0	U	40.0	P	02/18/2025	16:11	LB134743

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Metals
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PREPARATION BLANK SUMMARY

Client: Chemtech Consulting Group **SDG No.:** Q1172

Instrument: CV1

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB166684BL		**WATER**		**Batch Number:**	**PB166684**		**Prep Date:**	**02/11/2025**	
	Mercury	0.20	<0.20	U	0.20	CV	02/11/2025	15:35	LB134671

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PREPARATION BLANK SUMMARY

Client: Chemtech Consulting Group **SDG No.:** Q1172

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB166688BL		**WATER**		**Batch Number:**	**PB166688**		**Prep Date:**	**02/12/2025**	
	Aluminum	24.4	<100	J	100	P	02/12/2025	18:16	LB134704
	Antimony	50.0	<50.0	U	50.0	P	02/12/2025	18:16	LB134704
	Arsenic	20.0	<20.0	U	20.0	P	02/12/2025	18:16	LB134704
	Barium	100	<100	U	100	P	02/12/2025	18:16	LB134704
	Beryllium	6.00	<6.00	U	6.00	P	02/12/2025	18:16	LB134704
	Boron	100	<100	U	100	P	02/12/2025	18:16	LB134704
	Cadmium	6.00	<6.00	U	6.00	P	02/12/2025	18:16	LB134704
	Calcium	2000	<2000	U	2000	P	02/12/2025	18:16	LB134704
	Chromium	10.0	<10.0	U	10.0	P	02/12/2025	18:16	LB134704
	Copper	20.0	<20.0	U	20.0	P	02/12/2025	18:16	LB134704
	Iron	35.2	<100	J	100	P	02/12/2025	18:16	LB134704
	Lead	12.0	<12.0	U	12.0	P	02/12/2025	18:16	LB134704
	Magnesium	2000	<2000	U	2000	P	02/12/2025	18:16	LB134704
	Manganese	3.12	<20.0	J	20.0	P	02/12/2025	18:16	LB134704
	Molybdenum	200	<200	U	200	P	02/12/2025	18:16	LB134704
	Nickel	40.0	<40.0	U	40.0	P	02/12/2025	18:16	LB134704
	Potassium	2000	<2000	U	2000	P	02/12/2025	18:16	LB134704
	Selenium	20.0	<20.0	U	20.0	P	02/12/2025	18:16	LB134704
	Silver	10.0	<10.0	U	10.0	P	02/12/2025	18:16	LB134704
	Sodium	2000	<2000	U	2000	P	02/12/2025	18:16	LB134704
	Thallium	40.0	<40.0	U	40.0	P	02/12/2025	18:16	LB134704
	Vanadium	40.0	<40.0	U	40.0	P	02/12/2025	18:16	LB134704
	Zinc	3.99	<40.0	J	40.0	P	02/12/2025	18:16	LB134704

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

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	Aluminum	245000	255000	96	216000	294000	02/12/2025	13:21	LB134704
	Antimony	0.84			-50	50	02/12/2025	13:21	LB134704
	Arsenic	-4.34			-20	20	02/12/2025	13:21	LB134704
	Barium	6.69	6.0	112	-94	106	02/12/2025	13:21	LB134704
	Beryllium	2.82			-6	6	02/12/2025	13:21	LB134704
	Boron	-20.2	1000	2	-100	100	02/12/2025	13:21	LB134704
	Cadmium	-3.20	1.0	320	-5	7	02/12/2025	13:21	LB134704
	Calcium	234000	245000	96	208000	282000	02/12/2025	13:21	LB134704
	Chromium	59.1	52.0	114	42	62	02/12/2025	13:21	LB134704
	Copper	7.73	2.0	386	-18	22	02/12/2025	13:21	LB134704
	Iron	106000	101000	105	85600	116500	02/12/2025	13:21	LB134704
	Lead	7.88			-12	12	02/12/2025	13:21	LB134704
	Magnesium	252000	255000	99	216000	294000	02/12/2025	13:21	LB134704
	Manganese	-0.86	7.0	12	-13	27	02/12/2025	13:21	LB134704
	Molybdenum	-0.26	1000		-200	200	02/12/2025	13:21	LB134704
	Nickel	4.04	2.0	202	-38	42	02/12/2025	13:21	LB134704
	Potassium	10.9			0	0	02/12/2025	13:21	LB134704
	Selenium	-16.2			-20	20	02/12/2025	13:21	LB134704
	Silver	-5.31			-10	10	02/12/2025	13:21	LB134704
	Sodium	50.4			0	0	02/12/2025	13:21	LB134704
	Thallium	-0.098			-40	40	02/12/2025	13:21	LB134704
	Vanadium	7.52			-40	40	02/12/2025	13:21	LB134704
	Zinc	4.54			-40	40	02/12/2025	13:21	LB134704
ICSAB01	Aluminum	241000	247000	98	209000	285000	02/12/2025	13:25	LB134704
	Antimony	608	618	98	525	711	02/12/2025	13:25	LB134704
	Arsenic	106	104	102	88.4	120	02/12/2025	13:25	LB134704
	Barium	482	537	90	437	637	02/12/2025	13:25	LB134704
	Beryllium	468	495	94	420	570	02/12/2025	13:25	LB134704
	Boron	908	1000	91	850	1150	02/12/2025	13:25	LB134704
	Cadmium	1000	972	103	826	1120	02/12/2025	13:25	LB134704
	Calcium	231000	235000	98	199000	271000	02/12/2025	13:25	LB134704
	Chromium	571	542	105	460	624	02/12/2025	13:25	LB134704
	Copper	498	511	98	434	588	02/12/2025	13:25	LB134704
	Iron	105000	99300	106	84400	114500	02/12/2025	13:25	LB134704
	Lead	56.5	49.0	115	37	61	02/12/2025	13:25	LB134704
	Magnesium	248000	248000	100	210000	286000	02/12/2025	13:25	LB134704
	Manganese	468	507	92	430	584	02/12/2025	13:25	LB134704
	Molybdenum	1070	1000	107	850	1150	02/12/2025	13:25	LB134704
	Nickel	1010	954	106	810	1100	02/12/2025	13:25	LB134704
	Potassium	-9.51			0	0	02/12/2025	13:25	LB134704
	Selenium	33.8	46.0	74	26	66	02/12/2025	13:25	LB134704
	Silver	213	201	106	170	232	02/12/2025	13:25	LB134704

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INTERFERENCE CHECK SAMPLE

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

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
ICSAB01	Sodium	50.1			0	0	02/12/2025	13:25	LB134704
	Thallium	89.5	108	83	68	148	02/12/2025	13:25	LB134704
	Vanadium	468	491	95	417	565	02/12/2025	13:25	LB134704
	Zinc	1050	952	110	809	1095	02/12/2025	13:25	LB134704
ICSA	Aluminum	243000	255000	95	216000	294000	02/12/2025	13:31	LB134704
	Antimony	-10.3			-50	50	02/12/2025	13:31	LB134704
	Arsenic	-21.5			-20	20	02/12/2025	13:31	LB134704
	Barium	-24.4	6.0	407	-94	106	02/12/2025	13:31	LB134704
	Beryllium	4.88			-6	6	02/12/2025	13:31	LB134704
	Boron	-106	1000	11	-100	100	02/12/2025	13:31	LB134704
	Cadmium	-6.98	1.0	698	-5	7	02/12/2025	13:31	LB134704
	Calcium	244000	245000	100	208000	282000	02/12/2025	13:31	LB134704
	Chromium	60.1	52.0	116	42	62	02/12/2025	13:31	LB134704
	Copper	14.5	2.0	725	-18	22	02/12/2025	13:31	LB134704
	Iron	104000	101000	103	85600	116500	02/12/2025	13:31	LB134704
	Lead	-6.64			-12	12	02/12/2025	13:31	LB134704
	Magnesium	251000	255000	98	216000	294000	02/12/2025	13:31	LB134704
	Manganese	-3.88	7.0	55	-13	27	02/12/2025	13:31	LB134704
	Molybdenum	1.99	1000		-200	200	02/12/2025	13:31	LB134704
	Nickel	6.40	2.0	320	-38	42	02/12/2025	13:31	LB134704
	Potassium	262			0	0	02/12/2025	13:31	LB134704
	Selenium	-95.1			-20	20	02/12/2025	13:31	LB134704
	Silver	-6.74			-10	10	02/12/2025	13:31	LB134704
	Sodium	351			0	0	02/12/2025	13:31	LB134704
	Thallium	19.8			-40	40	02/12/2025	13:31	LB134704
	Vanadium	-34.9			-40	40	02/12/2025	13:31	LB134704
	Zinc	5.42			-40	40	02/12/2025	13:31	LB134704
ICSAB	Aluminum	241000	247000	98	209000	285000	02/12/2025	13:35	LB134704
	Antimony	577	618	93	525	711	02/12/2025	13:35	LB134704
	Arsenic	82.5	104	79	88.4	120	02/12/2025	13:35	LB134704
	Barium	539	537	100	437	637	02/12/2025	13:35	LB134704
	Beryllium	496	495	100	420	570	02/12/2025	13:35	LB134704
	Boron	861	1000	86	850	1150	02/12/2025	13:35	LB134704
	Cadmium	993	972	102	826	1120	02/12/2025	13:35	LB134704
	Calcium	244000	235000	104	199000	271000	02/12/2025	13:35	LB134704
	Chromium	577	542	106	460	624	02/12/2025	13:35	LB134704
	Copper	521	511	102	434	588	02/12/2025	13:35	LB134704
	Iron	106000	99300	107	84400	114500	02/12/2025	13:35	LB134704
	Lead	45.6	49.0	93	37	61	02/12/2025	13:35	LB134704
	Magnesium	250000	248000	101	210000	286000	02/12/2025	13:35	LB134704
	Manganese	500	507	99	430	584	02/12/2025	13:35	LB134704
	Molybdenum	1080	1000	108	850	1150	02/12/2025	13:35	LB134704

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INTERFERENCE CHECK SAMPLE

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

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
ICSAB	Nickel	1010	954	106	810	1100	02/12/2025	13:35	LB134704
	Potassium	553			0	0	02/12/2025	13:35	LB134704
	Selenium	-16.8	46.0	36	26	66	02/12/2025	13:35	LB134704
	Silver	205	201	102	170	232	02/12/2025	13:35	LB134704
	Sodium	312			0	0	02/12/2025	13:35	LB134704
	Thallium	63.9	108	59	68	148	02/12/2025	13:35	LB134704
	Vanadium	481	491	98	417	565	02/12/2025	13:35	LB134704
	Zinc	1050	952	110	809	1095	02/12/2025	13:35	LB134704
ICSA01	Aluminum	235000	255000	92	216000	294000	02/18/2025	12:23	LB134743
	Antimony	-2.15			-50	50	02/18/2025	12:23	LB134743
	Arsenic	-0.10			-20	20	02/18/2025	12:23	LB134743
	Barium	0.70	6.0	12	-94	106	02/18/2025	12:23	LB134743
	Beryllium	1.24			-6	6	02/18/2025	12:23	LB134743
	Cadmium	-0.11	1.0	11	-5	7	02/18/2025	12:23	LB134743
	Calcium	221000	245000	90	208000	282000	02/18/2025	12:23	LB134743
	Chromium	56.4	52.0	108	42	62	02/18/2025	12:23	LB134743
	Copper	17.7	2.0	885	-18	22	02/18/2025	12:23	LB134743
	Iron	96200	101000	95	85600	116500	02/18/2025	12:23	LB134743
	Lead	6.91			-12	12	02/18/2025	12:23	LB134743
	Magnesium	241000	255000	94	216000	294000	02/18/2025	12:23	LB134743
	Manganese	3.91	7.0	56	-13	27	02/18/2025	12:23	LB134743
	Nickel	2.40	2.0	120	-38	42	02/18/2025	12:23	LB134743
	Potassium	71.7			0	0	02/18/2025	12:23	LB134743
	Selenium	-16.8			-20	20	02/18/2025	12:23	LB134743
	Silver	-1.82			-10	10	02/18/2025	12:23	LB134743
	Sodium	45.8			0	0	02/18/2025	12:23	LB134743
	Thallium	5.85			-40	40	02/18/2025	12:23	LB134743
	Vanadium	6.77			-40	40	02/18/2025	12:23	LB134743
	Zinc	3.88			-40	40	02/18/2025	12:23	LB134743
ICSAB01	Aluminum	243000	247000	98	209000	285000	02/18/2025	12:29	LB134743
	Antimony	619	618	100	525	711	02/18/2025	12:29	LB134743
	Arsenic	119	104	114	88.4	120	02/18/2025	12:29	LB134743
	Barium	452	537	84	437	637	02/18/2025	12:29	LB134743
	Beryllium	476	495	96	420	570	02/18/2025	12:29	LB134743
	Cadmium	1010	972	104	826	1120	02/18/2025	12:29	LB134743
	Calcium	227000	235000	97	199000	271000	02/18/2025	12:29	LB134743
	Chromium	566	542	104	460	624	02/18/2025	12:29	LB134743
	Copper	505	511	99	434	588	02/18/2025	12:29	LB134743
	Iron	101000	99300	102	84400	114500	02/18/2025	12:29	LB134743
	Lead	55.8	49.0	114	37	61	02/18/2025	12:29	LB134743
	Magnesium	247000	248000	100	210000	286000	02/18/2025	12:29	LB134743
	Manganese	455	507	90	430	584	02/18/2025	12:29	LB134743

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

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
ICSAB01	Nickel	1000	954	105	810	1100	02/18/2025	12:29	LB134743
	Potassium	61.5			0	0	02/18/2025	12:29	LB134743
	Selenium	33.0	46.0	72	26	66	02/18/2025	12:29	LB134743
	Silver	217	201	108	170	232	02/18/2025	12:29	LB134743
	Sodium	49.1			0	0	02/18/2025	12:29	LB134743
	Thallium	93.5	108	87	68	148	02/18/2025	12:29	LB134743
	Vanadium	455	491	93	417	565	02/18/2025	12:29	LB134743
	Zinc	1040	952	109	809	1095	02/18/2025	12:29	LB134743
ICSA	Aluminum	236000	255000	92	216000	294000	02/18/2025	12:33	LB134743
	Antimony	-1.58			-50	50	02/18/2025	12:33	LB134743
	Arsenic	23.0			-20	20	02/18/2025	12:33	LB134743
	Barium	-24.9	6.0	415	-94	106	02/18/2025	12:33	LB134743
	Beryllium	1.84			-6	6	02/18/2025	12:33	LB134743
	Cadmium	-0.94	1.0	94	-5	7	02/18/2025	12:33	LB134743
	Calcium	233000	245000	95	208000	282000	02/18/2025	12:33	LB134743
	Chromium	59.3	52.0	114	42	62	02/18/2025	12:33	LB134743
	Copper	23.3	2.0	1165	-18	22	02/18/2025	12:33	LB134743
	Iron	100000	101000	99	85600	116500	02/18/2025	12:33	LB134743
	Lead	10.9			-12	12	02/18/2025	12:33	LB134743
	Magnesium	238000	255000	93	216000	294000	02/18/2025	12:33	LB134743
	Manganese	0.72	7.0	10	-13	27	02/18/2025	12:33	LB134743
	Nickel	5.41	2.0	270	-38	42	02/18/2025	12:33	LB134743
	Potassium	751			0	0	02/18/2025	12:33	LB134743
	Selenium	-35.7			-20	20	02/18/2025	12:33	LB134743
	Silver	-2.58			-10	10	02/18/2025	12:33	LB134743
	Sodium	385			0	0	02/18/2025	12:33	LB134743
	Thallium	-68.8			-40	40	02/18/2025	12:33	LB134743
	Vanadium	9.57			-40	40	02/18/2025	12:33	LB134743
	Zinc	-10.8			-40	40	02/18/2025	12:33	LB134743
ICSAB	Aluminum	234000	247000	95	209000	285000	02/18/2025	12:37	LB134743
	Antimony	711	618	115	525	711	02/18/2025	12:37	LB134743
	Arsenic	147	104	141	88.4	120	02/18/2025	12:37	LB134743
	Barium	516	537	96	437	637	02/18/2025	12:37	LB134743
	Beryllium	620	495	125	420	570	02/18/2025	12:37	LB134743
	Cadmium	1220	972	126	826	1120	02/18/2025	12:37	LB134743
	Calcium	232000	235000	99	199000	271000	02/18/2025	12:37	LB134743
	Chromium	701	542	129	460	624	02/18/2025	12:37	LB134743
	Copper	647	511	127	434	588	02/18/2025	12:37	LB134743
	Iron	97000	99300	98	84400	114500	02/18/2025	12:37	LB134743
	Lead	69.5	49.0	142	37	61	02/18/2025	12:37	LB134743
	Magnesium	237000	248000	96	210000	286000	02/18/2025	12:37	LB134743
	Manganese	598	507	118	430	584	02/18/2025	12:37	LB134743

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INTERFERENCE CHECK SAMPLE

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

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
ICSAB	Nickel	1230	954	129	810	1100	02/18/2025	12:37	LB134743
	Potassium	212			0	0	02/18/2025	12:37	LB134743
	Selenium	68.9	46.0	150	26	66	02/18/2025	12:37	LB134743
	Silver	254	201	126	170	232	02/18/2025	12:37	LB134743
	Sodium	321			0	0	02/18/2025	12:37	LB134743
	Thallium	76.1	108	70	68	148	02/18/2025	12:37	LB134743
	Vanadium	583	491	119	417	565	02/18/2025	12:37	LB134743
	Zinc	1250	952	131	809	1095	02/18/2025	12:37	LB134743

METAL QC DATA

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MATRIX SPIKE SUMMARY

client: Chemtech Consulting Group **level:** low **sdg no.:** Q1172

contract: CHEM02 **lab code:** CHEM **case no.:** Q1172 **sas no.:** Q1172

matrix: Water **sample id:** Q1322-01 **client id:** MANHOLEMS

Percent Solids for Sample: NA **Spiked ID:** Q1322-01MS **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75 - 125	3.55		0.20	U	4.0	89		CV

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metals
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MATRIX SPIKE DUPLICATE SUMMARY

client: Chemtech Consulting Group **level:** low **sdg no.:** Q1172

contract: CHEM02 **lab code:** CHEM **case no.:** Q1172 **sas no.:** Q1172

matrix: Water **sample id:** Q1322-01 **client id:** MANHOLEMSD

Percent Solids for Sample: NA **Spiked ID:** Q1322-01MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75 - 125	3.79		0.20	U	4.0	95		CV

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Metals
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Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

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: Chemtech Consulting Group **Level:** LOW **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Matrix: Water **Sample ID:** Q1322-01 **Client ID:** MANHOLEDUP

Percent Solids for Sample: NA **Duplicate ID** Q1322-01DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L	20	0.20	U	0.20	U			CV

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

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: Chemtech Consulting Group **Level:** LOW **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Matrix: Water **Sample ID:** Q1322-01MS **Client ID:** MANHOLEMSD

Percent Solids for Sample: NA **Duplicate ID** Q1322-01MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L	20	3.55		3.79		7		CV

"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: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB166684BS							
Mercury	ug/L	4.0	3.75		94	85 - 115	CV

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB166688BS							
Aluminum	ug/L	2000	1920		96	85 - 115	P
Antimony	ug/L	800	754		94	85 - 115	P
Arsenic	ug/L	800	731		91	85 - 115	P
Barium	ug/L	200	196		98	85 - 115	P
Beryllium	ug/L	200	186		93	85 - 115	P
Boron	ug/L	300	262		87	85 - 115	P
Cadmium	ug/L	200	188		94	85 - 115	P
Calcium	ug/L	1000	1060	J	106	85 - 115	P
Chromium	ug/L	400	414		104	85 - 115	P
Copper	ug/L	300	300		100	85 - 115	P
Iron	ug/L	3000	3090		103	85 - 115	P
Lead	ug/L	1000	936		94	85 - 115	P
Magnesium	ug/L	2000	1960	J	98	85 - 115	P
Manganese	ug/L	200	203		102	85 - 115	P
Molybdenum	ug/L	400	407		102	85 - 115	P
Nickel	ug/L	500	490		98	85 - 115	P
Potassium	ug/L	10000	9590		96	85 - 115	P
Selenium	ug/L	2000	1760		88	85 - 115	P
Silver	ug/L	75.0	72.9		97	85 - 115	P
Sodium	ug/L	3000	3180		106	85 - 115	P
Thallium	ug/L	2000	1780		89	85 - 115	P
Vanadium	ug/L	300	292		97	85 - 115	P
Zinc	ug/L	200	196		98	85 - 115	P

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ICP SERIAL DILUTIONS

SAMPLE NO.

MANHOLEL

Lab Name: Chemtech Consulting Group **Contract:** CHEM02

Lab Code: CHEM **Lb No.:** lb134671 **Lab Sample ID :** Q1322-01L **SDG No.:** Q1172

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

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Mercury	0.20	U	1.00	U			CV

METAL PREPARATION & INSTRUMENT DATA

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ICP INTERELEMENT CORRECTION FACTORS

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Al	Ca	Fe	Mg	Ag
Aluminum	396.100	0.0000000	-0.0002060	0.0000000	0.0000000	0.0000000
Antimony	206.833	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	0.0000000	0.0000000	-0.0000440	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000930	0.0000000	0.0000000
Calcium	373.690	0.0000000	0.0000000	-0.0075970	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0007850	0.0000000	0.0000000
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	-0.0000920	0.0000000	0.0000380	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	-0.0001440	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	-0.0001490	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0001050	0.0000000	0.0000000

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ICP INTERELEMENT CORRECTION FACTORS

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: As	Ba	Be	Cd	Co
Aluminum	396.100	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.833	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0002870
Calcium	373.690	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0000000	0.0009530
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	-0.0039600
Lead	220.353	0.0000000	0.0003170	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	-0.0003570
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0000000	0.0054900
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

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ICP INTERELEMENT CORRECTION FACTORS

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Cr	Cu	K	Mn	Mo
Aluminum	396.100	0.0000000	0.0000000	0.0000590	0.0000000	0.0396900
Antimony	206.833	0.0122000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	-0.0029000	0.0000000	0.0000000	0.0000000	0.0004900
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	-0.0000710	-0.0003400
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	373.690	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000070	0.0002200	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0006510	0.0020500
Iron	240.488	0.0000000	0.0000000	0.0000730	0.0000000	-0.0015250
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0001400	-0.0008600
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0007460	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000120
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0017400	-0.0100400
Vanadium	292.402	-0.0025100	0.0000000	0.0000000	0.0000000	-0.0072000
Zinc	213.800	0.0000000	0.0009010	0.0000000	0.0000000	0.0000000

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Na	Ni	Pb	Sb	Se
Aluminum	396.100	0.0000000	0.0000000	0.0012800	0.0000000	0.0000000
Antimony	206.833	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	373.690	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	-0.0047000	0.0036100	0.0000000	0.0000000
Iron	240.488	0.0000000	-0.0017000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0006580	0.0000000	0.0000000	0.0001290
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0003330	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0067600	0.0000000	0.0000000	0.0000000

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Case No.:** Q1172 **SAS No.:** Q1172

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Sn	Ti	Tl	V	Zn
Aluminum	396.100	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.833	-0.0035600	-0.0007970	0.0000000	-0.0018900	0.0000000
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000630	0.0001280	0.0000000	0.0000000
Calcium	373.690	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0001110	0.0000000
Copper	224.700	0.0000000	0.0003840	0.0000000	0.0000000	0.0000000
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	-0.0003610	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	-0.0007420	0.0000000	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	-0.0039700	0.0000000	-0.0115600	0.0000000
Vanadium	292.402	0.0000000	0.0005320	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

METAL PREPARATION & ANALYICAL SUMMARY

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Metals
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SAMPLE PREPARATION SUMMARY

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Method:**

Case No.: Q1172 **SAS No.:** Q1172

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB166684**						
PB166684BL	PB166684BL	MB	WATER	02/11/2025	30.0	30.0	
PB166684BS	PB166684BS	LCS	WATER	02/11/2025	30.0	30.0	
Q1172-05	PT-HG-WS	SAM	WATER	02/11/2025	30.0	30.0	
Q1322-01DUP	MANHOLEDUP	DUP	WATER	02/11/2025	30.0	30.0	
Q1322-01MS	MANHOLEMS	MS	WATER	02/11/2025	30.0	30.0	
Q1322-01MSD	MANHOLEMSD	MSD	WATER	02/11/2025	30.0	30.0	

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Fax : 908 789 8922

Metals
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SAMPLE PREPARATION SUMMARY

Client: Chemtech Consulting Group **SDG No.:** Q1172

Contract: CHEM02 **Lab Code:** CHEM **Method:**

Case No.: Q1172 **SAS No.:** Q1172

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB166688**						
PB166688BL	PB166688BL	MB	WATER	02/12/2025	50.0	50.0	
PB166688BS	PB166688BS	LCS	WATER	02/12/2025	50.0	50.0	
Q1172-03	PT-MIN-WS	SAM	WATER	02/12/2025	50.0	50.0	
Q1172-04	PT-TM-WS	SAM	WATER	02/12/2025	50.0	50.0	
Q1172-06	PT-SIO2-WS	SAM	WATER	02/12/2025	50.0	50.0	

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metals
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ANALYSIS RUN LOG

Client: Chemtech Consulting Group **Contract:** CHEM02

Lab code: CHEM **Case no.:** Q1172 **Sas no.:** Q1172 **Sdg no.:** Q1172

Instrument id number: **Method:** **Run number:** LB134671

Start date: 02/11/2025 **End date:** 02/11/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1500	HG
S0.05	S0.05	1	1502	HG
S0.2	S0.2	1	1504	HG
S2.5	S2.5	1	1506	HG
S5	S5	1	1509	HG
S7.5	S7.5	1	1511	HG
S10	S10	1	1513	HG
ICV96	ICV96	1	1517	HG
ICB96	ICB96	1	1519	HG
CCV56	CCV56	1	1521	HG
CCB56	CCB56	1	1524	HG
CRA	CRA	1	1528	HG
PB166684BL	PB166684BL	1	1535	HG
Q1322-01DUP	MANHOLEDUP	1	1552	HG
Q1322-01MS	MANHOLEMS	1	1557	HG
CCV57	CCV57	1	1559	HG
CCB57	CCB57	1	1602	HG
Q1322-01MSD	MANHOLEMSD	1	1604	HG
Q1172-05	PT-HG-WS	1	1606	HG
Q1322-01L	MANHOLEL	5	1613	HG
PB166684BS	PB166684BS	1	1618	HG
CCV58	CCV58	1	1620	HG
CCB58	CCB58	1	1622	HG

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metals
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ANALYSIS RUN LOG

Client: Chemtech Consulting Group **Contract:** CHEM02

Lab code: CHEM **Case no.:** Q1172 **Sas no.:** Q1172 **Sdg no.:** Q1172

Instrument id number: **Method:** **Run number:** LB134704

Start date: 02/12/2025 **End date:** 02/12/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1147	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
S1	S1	1	1152	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
S2	S2	1	1156	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
S3	S3	1	1200	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
S4	S4	1	1204	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
S5	S5	1	1209	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
ICV01	ICV01	1	1259	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
LLICV01	LLICV01	1	1308	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
ICB01	ICB01	1	1312	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
CRI01	CRI01	1	1317	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA01	ICSA01	1	1321	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB01	ICSAB01	1	1325	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA	ICSA	20	1331	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB	ICSAB	20	1335	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
CCV01	CCV01	1	1339	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
CCB01	CCB01	1	1343	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
CCV02	CCV02	1	1429	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
CCB02	CCB02	1	1433	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
CCV03	CCV03	1	1520	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
CCB03	CCB03	1	1524	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
CCV04	CCV04	1	1613	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
CCB04	CCB04	1	1617	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
Q1172-04	PT-TM-WS	1	1655	Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
CCV05	CCV05	1	1704	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
CCB05	CCB05	1	1708	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
CCV06	CCV06	1	1755	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
CCB06	CCB06	1	1759	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
PB166688BL	PB166688BL	1	1816	Ag,Al,As,B,Ba,Be,Ca,Cd,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB166688BS	PB166688BS	1	1820	Ag,Al,As,B,Ba,Be,Ca,Cd,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV07	CCV07	1	1834	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
CCB07	CCB07	1	1838	Ca,K,Mg,Na,Ag,Al,As,B,Ba,Be,Cd,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn

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metals
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ANALYSIS RUN LOG

Client: Chemtech Consulting Group **Contract:** CHEM02

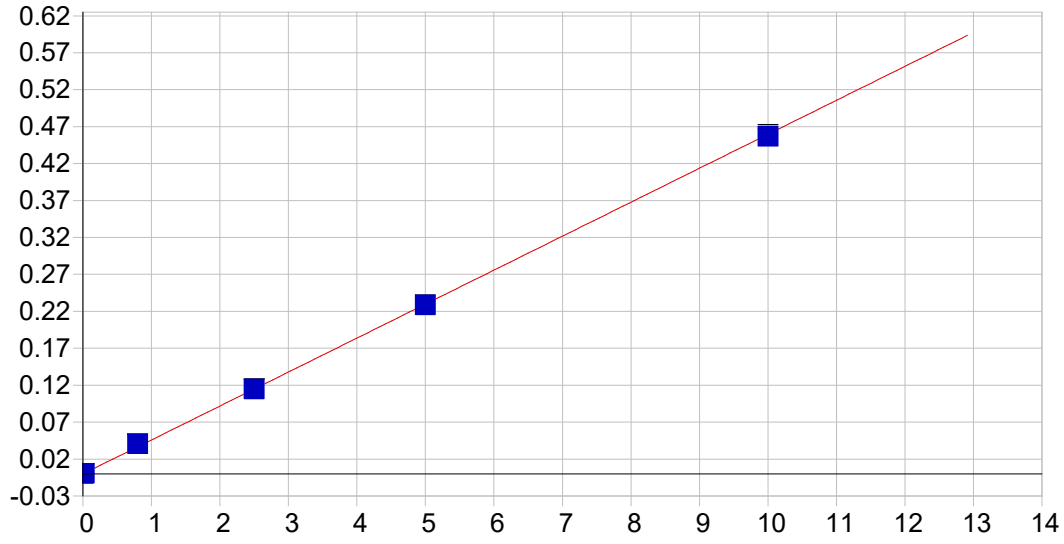
Lab code: CHEM **Case no.:** Q1172 **Sas no.:** Q1172 **Sdg no.:** Q1172

Instrument id number: **Method:** **Run number:** LB134743

Start date: 02/18/2025 **End date:** 02/18/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1119	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
S1	S1	1	1124	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
S2	S2	1	1128	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
S3	S3	1	1132	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
S4	S4	1	1137	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
S5	S5	1	1141	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
ICV01	ICV01	1	1158	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
LLICV01	LLICV01	1	1210	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
ICB01	ICB01	1	1214	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
CRI01	CRI01	1	1218	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA01	ICSA01	1	1223	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB01	ICSAB01	1	1229	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA	ICSA	20	1233	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB	ICSAB	20	1237	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
CCV01	CCV01	1	1241	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
CCB01	CCB01	1	1245	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
CCV02	CCV02	1	1332	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
CCB02	CCB02	1	1336	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
Q1172-03	PT-MIN-WS	1	1406	Ca,K,Mg,Na
Q1172-06	PT-SIO2-WS	1	1410	Si
CCV03	CCV03	1	1423	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
CCB03	CCB03	1	1427	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
CCV04	CCV04	1	1519	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
CCB04	CCB04	1	1523	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
CCV05	CCV05	1	1606	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn
CCB05	CCB05	1	1611	Ca,K,Mg,Na,Ag,Al,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn

METAL
RAW DATA

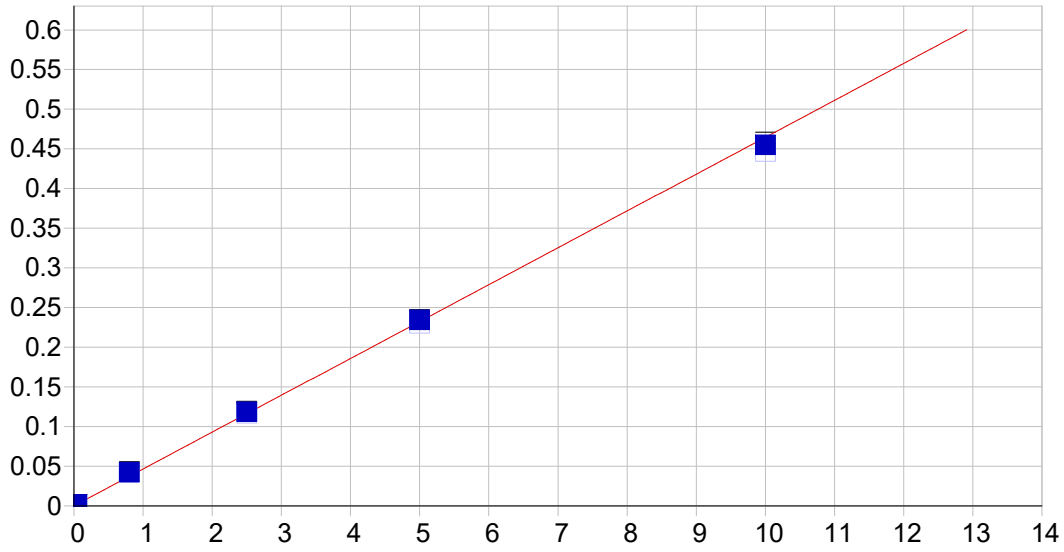


As 189.042 {479}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000151	Re-Slope:	1.000000
A1 (Gain):	0.045982	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999701	Status:	OK.
Std Error of Est:	0.000026		
Predicted MDL:	0.003191		
Predicted MQL:	0.010635		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00015	.000	1
S1	.02000	.02063	.001	3.17	.00079	.000	1
S3	2.5000	2.5013	.001	.053	.11474	.001	1
S4	5.0000	4.9707	-.029	-.586	.22816	.000	1
S5	10.000	9.9364	-.064	-.636	.45625	.003	1
S2	.80000	.89097	.091	11.4	.04078	.000	1

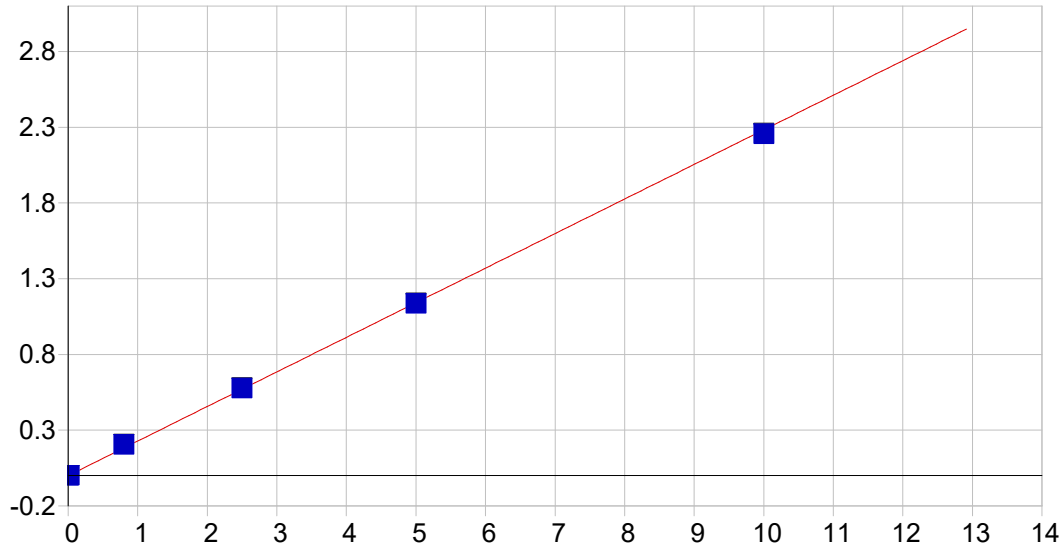


Tl 190.856 {477}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000071	Re-Slope:	1.000000
A1 (Gain):	0.046462	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999387	Status:	OK.
Std Error of Est:	0.000053		
Predicted MDL:	0.002279		
Predicted MQL:	0.007595		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00007	.000	1
S1	.04000	.03928	-.001	-1.79	.00178	.000	1
S3	2.5000	2.5528	.053	2.11	.11654	.001	1
S4	5.0000	5.0420	.042	.840	.23005	.000	1
S5	10.000	9.7930	-.207	-2.07	.44652	.004	1
S2	.80000	.91283	.113	14.1	.04180	.001	1

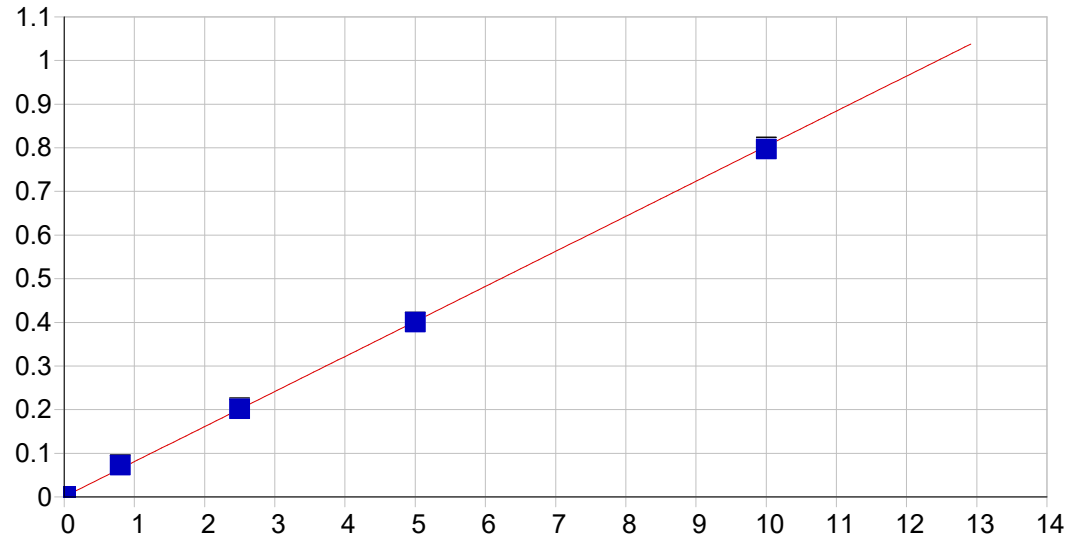


Pb 220.353 {453}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000131	Re-Slope:	1.000000
A1 (Gain):	0.228295	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999574	Status:	OK.
Std Error of Est:	0.000121		
Predicted MDL:	0.001185		
Predicted MQL:	0.003951		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00013	.000	1
S1	.01200	.00999	-.002	-16.7	.00210	.000	1
S3	2.5000	2.5303	.030	1.21	.57689	.002	1
S4	5.0000	4.9785	-.021	-.429	1.1352	.003	1
S5	10.000	9.8891	-.111	-1.11	2.2550	.004	1
S2	.80000	.90407	.104	13.0	.20606	.000	1

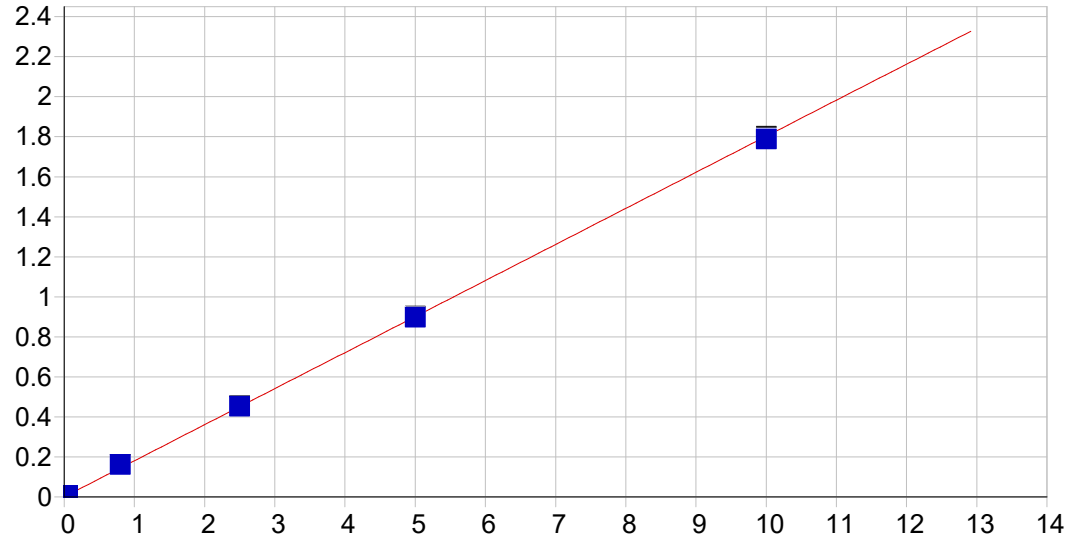


Se 196.090 {472}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000455	Re-Slope:	1.000000
A1 (Gain):	0.080322	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999611	Status:	OK.
Std Error of Est:	0.000053		
Predicted MDL:	0.002574		
Predicted MQL:	0.008580		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00046	.000	1
S1	.02000	.01746	-.003	-12.7	.00186	.000	1
S3	2.5000	2.5076	.008	.304	.20182	.002	1
S4	5.0000	4.9770	-.023	-.461	.40011	.001	1
S5	10.000	9.9156	-.084	-.844	.79669	.005	1
S2	.80000	.90238	.102	12.8	.07292	.000	1

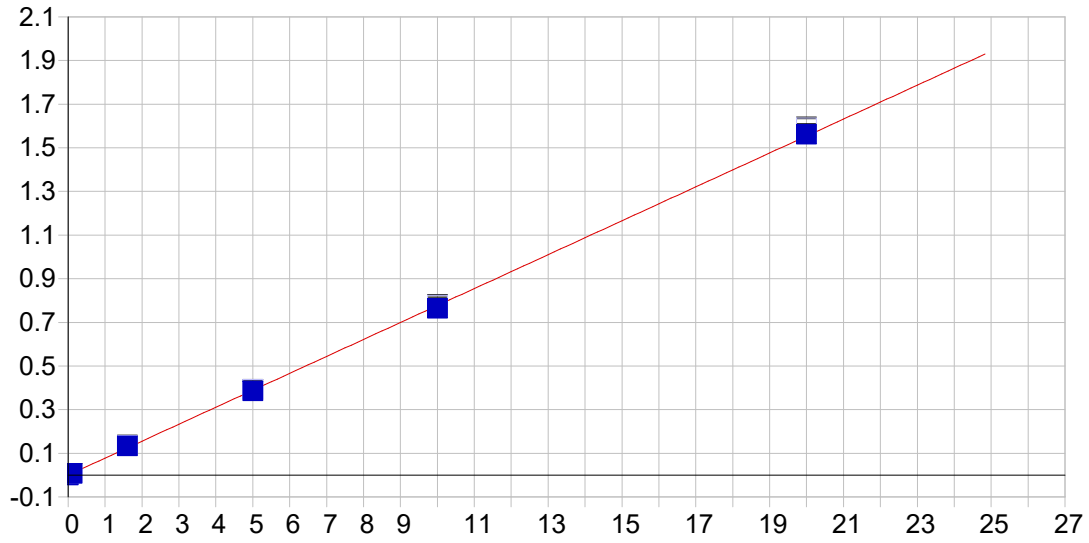


Sb 206.833 {463}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000396	Re-Slope:	1.000000
A1 (Gain):	0.180181	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999678	Status:	OK.
Std Error of Est:	0.000170		
Predicted MDL:	0.001443		
Predicted MQL:	0.004810		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00039	.000	1
S1	.05000	.04937	-.001	-1.27	.00931	.000	1
S3	2.5000	2.5087	.009	.348	.45364	.003	1
S4	5.0000	4.9802	-.020	-.396	.90018	.003	1
S5	10.000	9.9176	-.082	-.824	1.7922	.010	1
S2	.80000	.89413	.094	11.8	.16189	.000	1

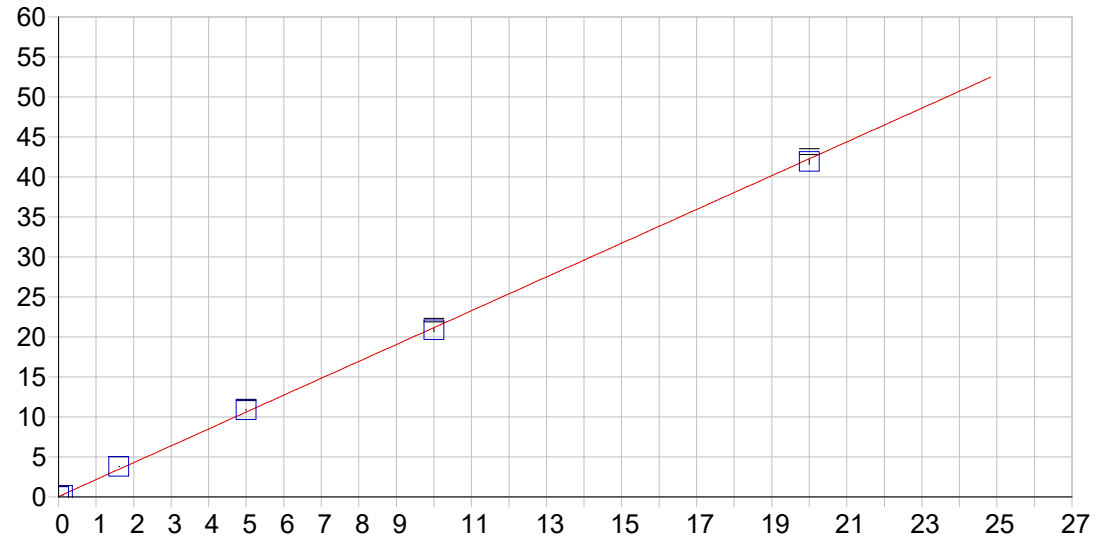


Al 396.152 { 85}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000144	Re-Slope:	1.000000
A1 (Gain):	0.077697	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999839	Status:	OK.
Std Error of Est:	0.000105		
Predicted MDL:	0.007482		
Predicted MQL:	0.024940		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00014	.000	1
S1	.10000	.09597	-.004	-4.03	.00820	.000	1
S3	5.0000	4.9610	-.039	-.779	.39314	.000	1
S4	10.000	9.8297	-.170	-1.70	.77896	.003	1
S5	20.000	20.097	.097	.486	1.5918	.004	1
S2	1.6000	1.7163	.116	7.27	.13591	.001	1

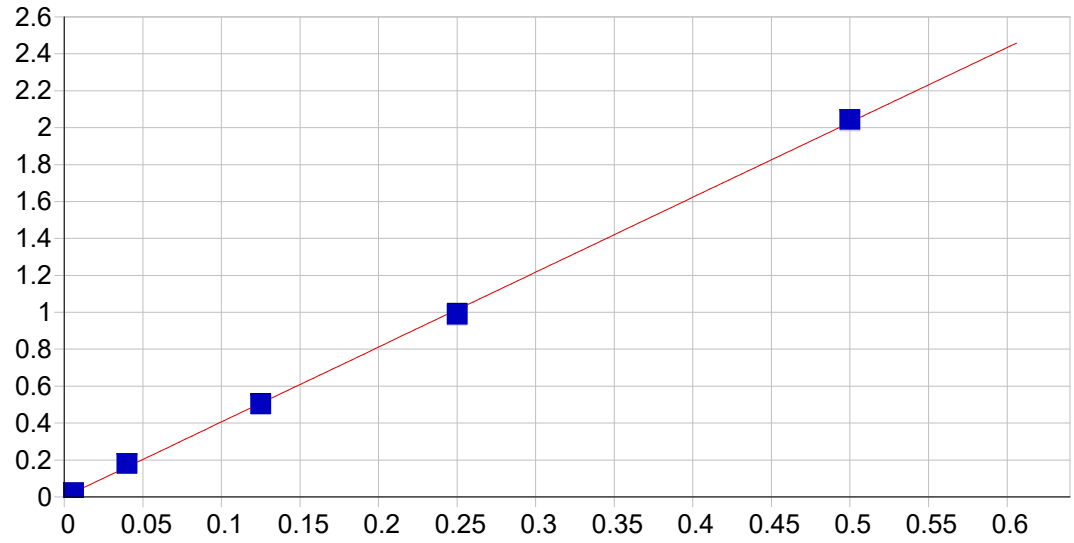


Ba 493.409 { 68}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.056612	Re-Slope:	1.000000
A1 (Gain):	2.110401	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999656	Status:	OK.
Std Error of Est:	0.004104		
Predicted MDL:	0.000933		
Predicted MQL:	0.003111		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.05660	.001	1
S1	.10000	.09486	-.005	-5.14	.25681	.002	1
S3	5.0000	5.1275	.127	2.55	10.878	.097	1
S4	10.000	9.8631	-.137	-1.37	20.872	.214	1
S5	20.000	19.842	-.158	-.790	41.931	.364	1
S2	1.6000	1.7725	.173	10.8	3.7973	.011	1

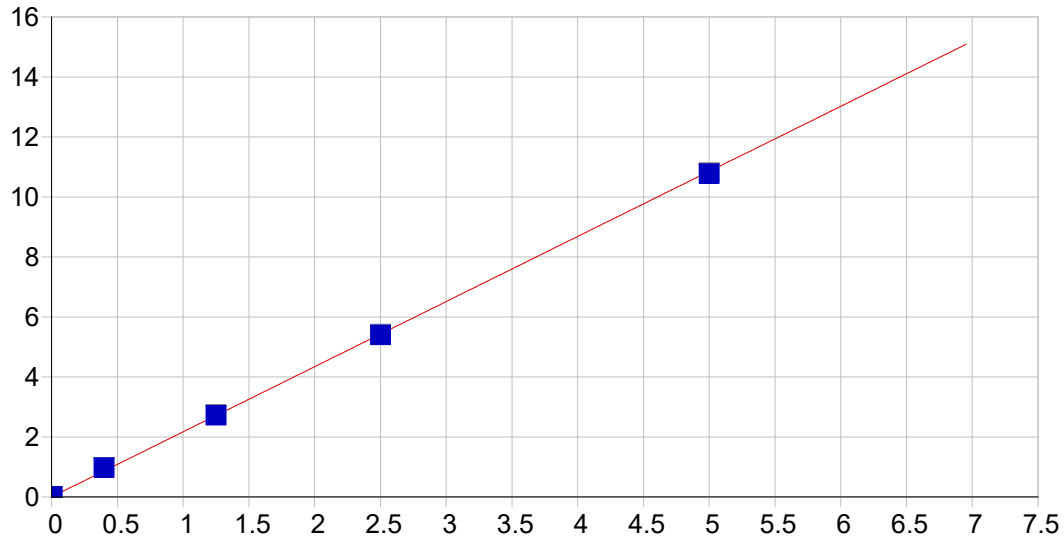


Be 234.861 {144}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000112	Re-Slope:	1.000000
A1 (Gain):	4.057560	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999624	Status:	OK.
Std Error of Est:	0.000319		
Predicted MDL:	0.000063		
Predicted MQL:	0.000209		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00011	.000	1
S1	.00600	.00568	-.000	-5.30	.02298	.000	1
S3	.12500	.12387	-.001	-.901	.50046	.004	1
S4	.25000	.24350	-.006	-2.60	.98360	.007	1
S5	.50000	.50363	.004	.727	2.0345	.001	1
S2	.04000	.04431	.004	10.8	.17916	.001	1

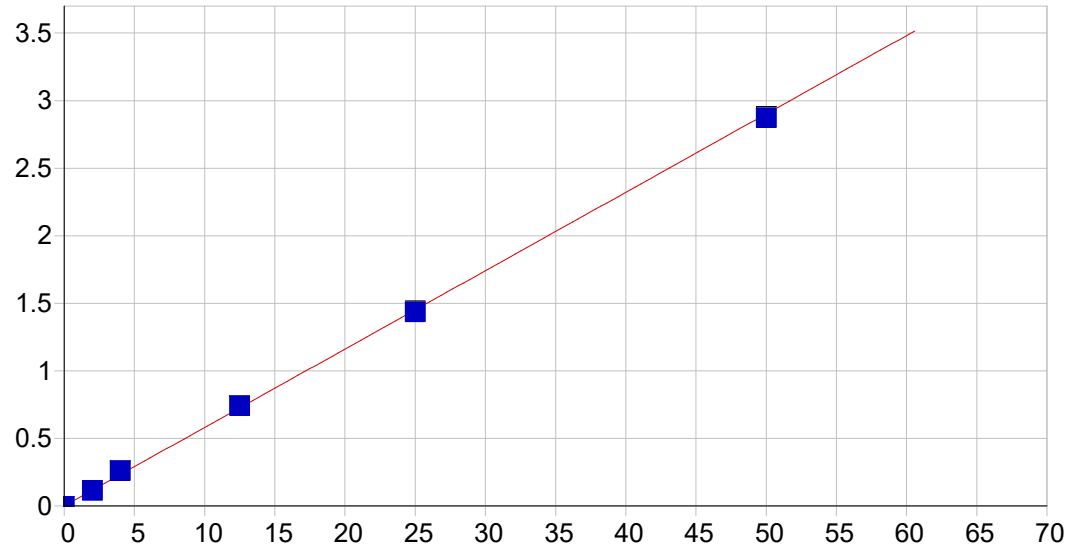


Cd 226.502 {449}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000210	Re-Slope:	1.000000
A1 (Gain):	2.170368	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999667	Status:	OK.
Std Error of Est:	0.000509		
Predicted MDL:	0.000095		
Predicted MQL:	0.000316		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00021	.000	1
S1	.00600	.00592	-.000	-1.35	.01310	.000	1
S3	1.2500	1.2519	.002	.153	2.7192	.006	1
S4	2.5000	2.4887	-.011	-.453	5.4052	.016	1
S5	5.0000	4.9615	-.039	-.770	10.776	.016	1
S2	.40000	.44801	.048	12.0	.97314	.002	1

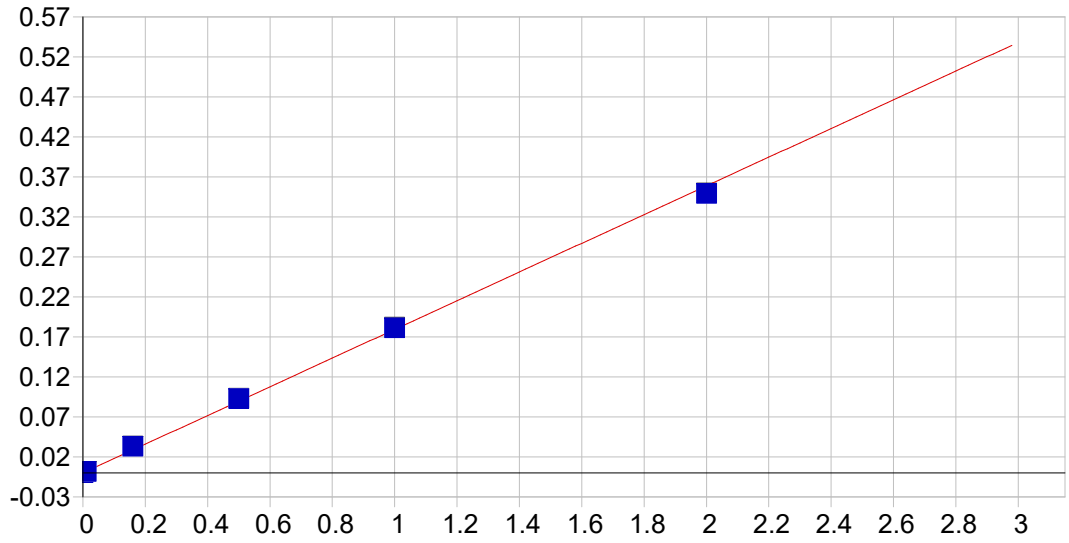


Ca 373.690 { 90}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000525	Re-Slope:	1.000000
A1 (Gain):	0.058020	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999608	Status:	OK.
Std Error of Est:	0.000860		
Predicted MDL:	0.009450		
Predicted MQL:	0.031499		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00020	-.000	.000	.00051	.000	1
S2	4.0000	4.4849	.485	12.1	.26074	.001	1
S3	12.500	12.785	.285	2.28	.74233	.001	1
S4	25.000	24.748	-.252	-1.01	1.4364	.005	1
S5	50.000	49.527	-.473	-.947	2.8741	.009	1
S1	2.0000	1.9553	-.045	-2.24	.11397	.000	1

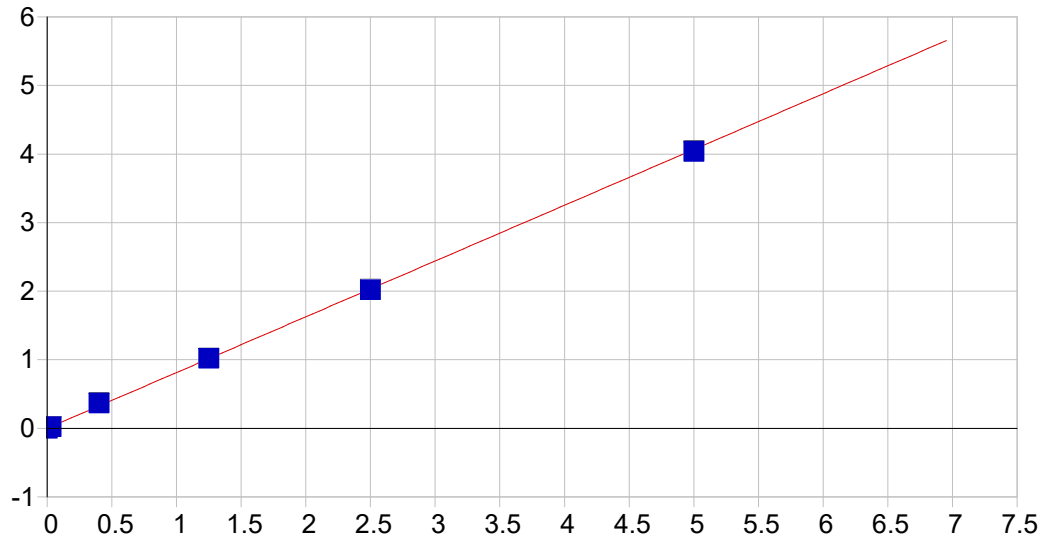


Cr 267.716 {126}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000026	Re-Slope:	1.000000
A1 (Gain):	0.179389	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999183	Status:	OK.
Std Error of Est:	0.000054		
Predicted MDL:	0.000492		
Predicted MQL:	0.001640		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00003	.000	1
S1	.01000	.00996	-.000	-.434	.00176	.000	1
S3	.50000	.51746	.017	3.49	.09283	.000	1
S4	1.0000	1.0108	.011	1.08	.18135	.001	1
S5	2.0000	1.9469	-.053	-2.65	.34934	.000	1
S2	.16000	.18489	.025	15.6	.03315	.000	1

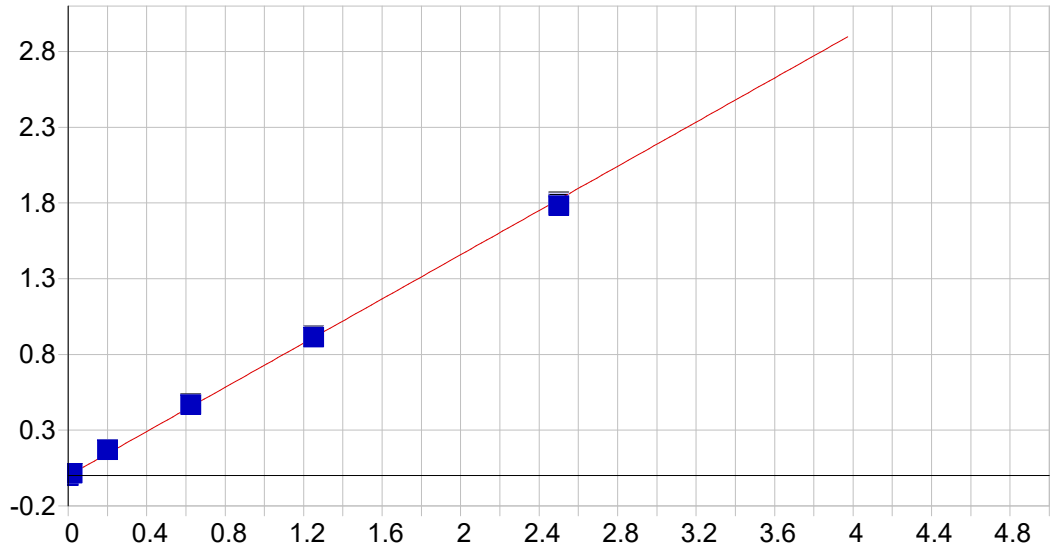


Co 228.616 {448}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000006	Re-Slope:	1.000000
A1 (Gain):	0.813297	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999644	Status:	OK.
Std Error of Est:	0.000441		
Predicted MDL:	0.000224		
Predicted MQL:	0.000748		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00000	.000	1
S1	.03000	.02950	-.001	-1.67	.02390	.000	1
S3	1.2500	1.2528	.003	.223	1.0206	.002	1
S4	2.5000	2.4843	-.016	-.629	2.0239	.004	1
S5	5.0000	4.9637	-.036	-.725	4.0439	.006	1
S2	.40000	.44970	.050	12.4	.36630	.001	1

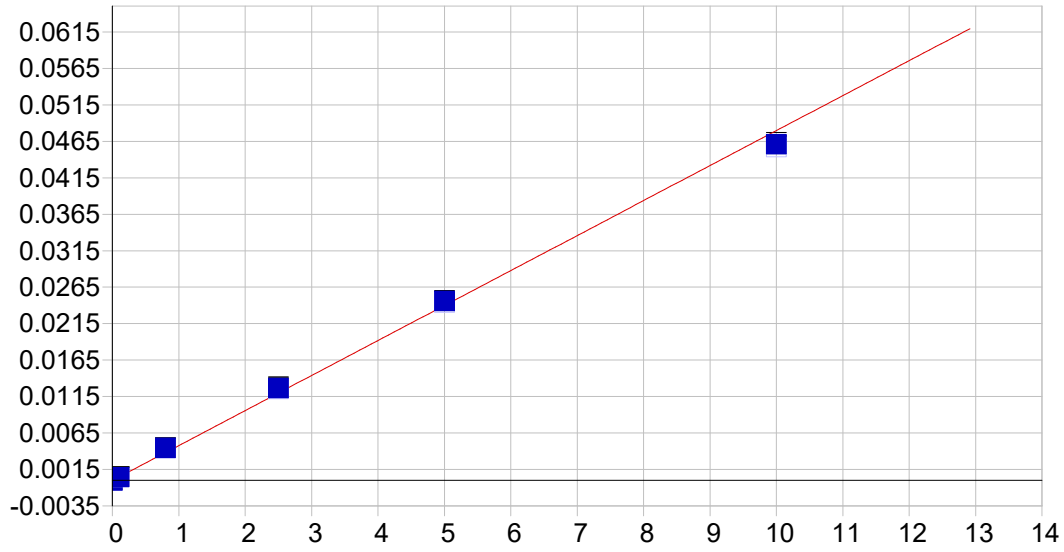


Cu 224.700 {450}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000734	Re-Slope:	1.000000
A1 (Gain):	0.729511	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999151	Status:	OK.
Std Error of Est:	0.000356		
Predicted MDL:	0.000454		
Predicted MQL:	0.001512		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00074	.000	1
S1	.02000	.02232	.002	11.6	.01574	.000	1
S3	.62500	.64234	.017	2.77	.47220	.001	1
S4	1.2500	1.2525	.003	.200	.92167	.001	1
S5	2.5000	2.4434	-.057	-2.26	1.7991	.008	1
S2	.20000	.23441	.034	17.2	.17166	.001	1

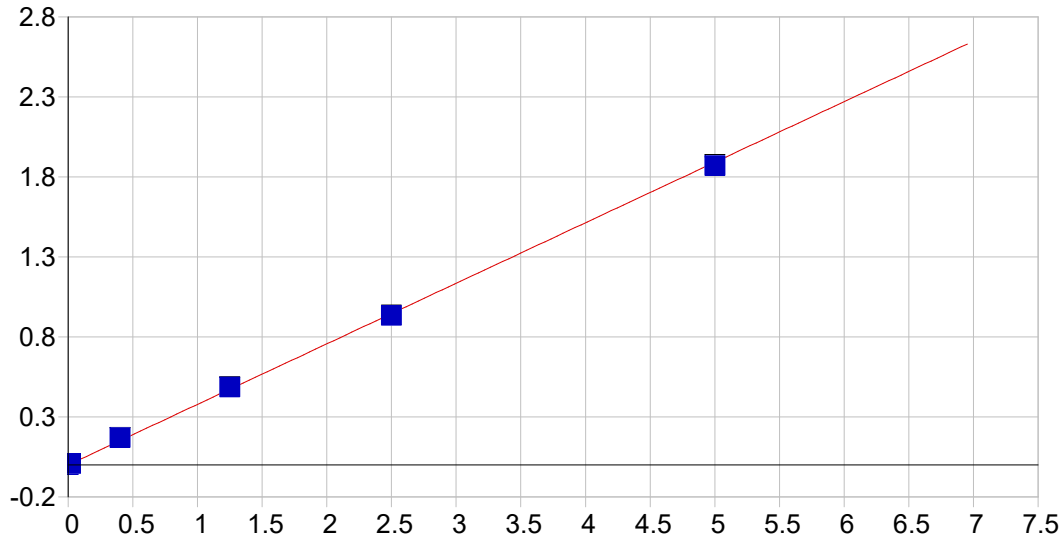


Fe 240.488 {140}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000023	Re-Slope:	1.000000
A1 (Gain):	0.004800	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998716	Status:	OK.
Std Error of Est:	0.000013		
Predicted MDL:	0.005919		
Predicted MQL:	0.019731		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	-.00002	.000	1
S1	.10000	.10238	.002	2.38	.00046	.000	1
S3	2.5000	2.6391	.139	5.56	.01254	.000	1
S4	5.0000	5.1235	.124	2.47	.02436	.000	1
S5	10.000	9.6077	-.392	-3.92	.04568	.000	1
S2	.80000	.92735	.127	15.9	.00440	.000	1

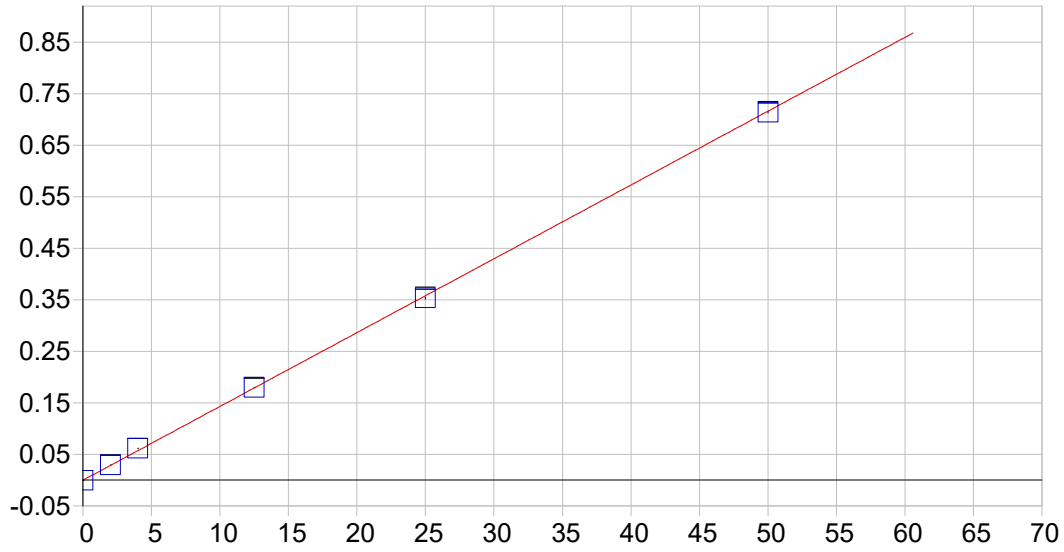


Mn 257.610 {131}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000016	Re-Slope:	1.000000
A1 (Gain):	0.378358	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999538	Status:	OK.
Std Error of Est:	0.000191		
Predicted MDL:	0.000523		
Predicted MQL:	0.001742		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00001	.000	1
S1	.02000	.01971	-.000	-1.47	.00748	.000	1
S3	1.2500	1.2853	.035	2.83	.48643	.001	1
S4	2.5000	2.4702	-.030	-1.19	.93484	.002	1
S5	5.0000	4.9437	-.056	-1.13	1.8709	.008	1
S2	.40000	.45097	.051	12.7	.17067	.000	1

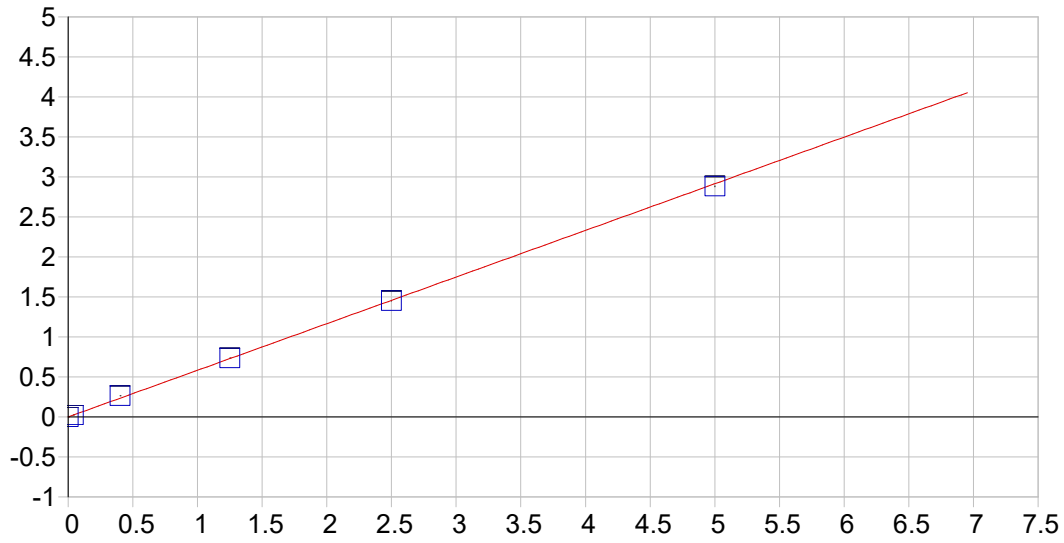


Mg 279.079 {121}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000188	Re-Slope:	1.000000
A1 (Gain):	0.014324	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999816	Status:	OK.
Std Error of Est:	0.000146		
Predicted MDL:	0.016032		
Predicted MQL:	0.053442		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00022	-.000	.000	-.00019	.000	1
S2	4.0000	4.3307	.331	8.27	.06185	.000	1
S3	12.500	12.554	.054	.433	.17964	.001	1
S4	25.000	24.690	-.310	-1.24	.35347	.002	1
S5	50.000	49.853	-.147	-.293	.71392	.002	1
S1	2.0000	2.0719	.072	3.60	.02949	.000	1

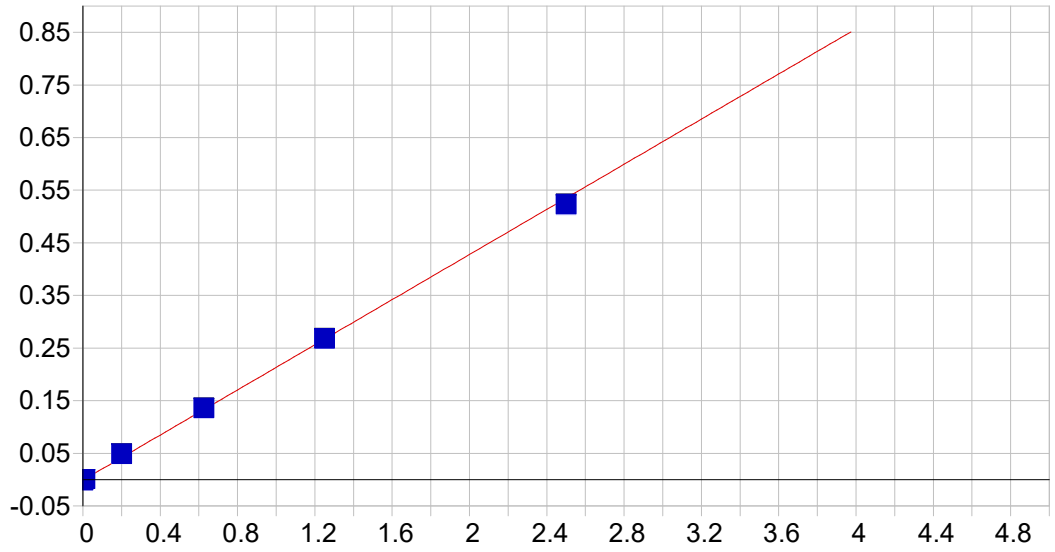


Ni 231.604 {446}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000118	Re-Slope:	1.000000
A1 (Gain):	0.582884	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999558	Status:	OK.
Std Error of Est:	0.000407		
Predicted MDL:	0.000350		
Predicted MQL:	0.001166		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00012	.000	1
S1	.04000	.03974	-.000	-.639	.02305	.000	1
S3	1.2500	1.2624	.012	.992	.73572	.001	1
S4	2.5000	2.4887	-.011	-.453	1.4505	.004	1
S5	5.0000	4.9450	-.055	-1.10	2.8822	.006	1
S2	.40000	.45420	.054	13.6	.26463	.001	1

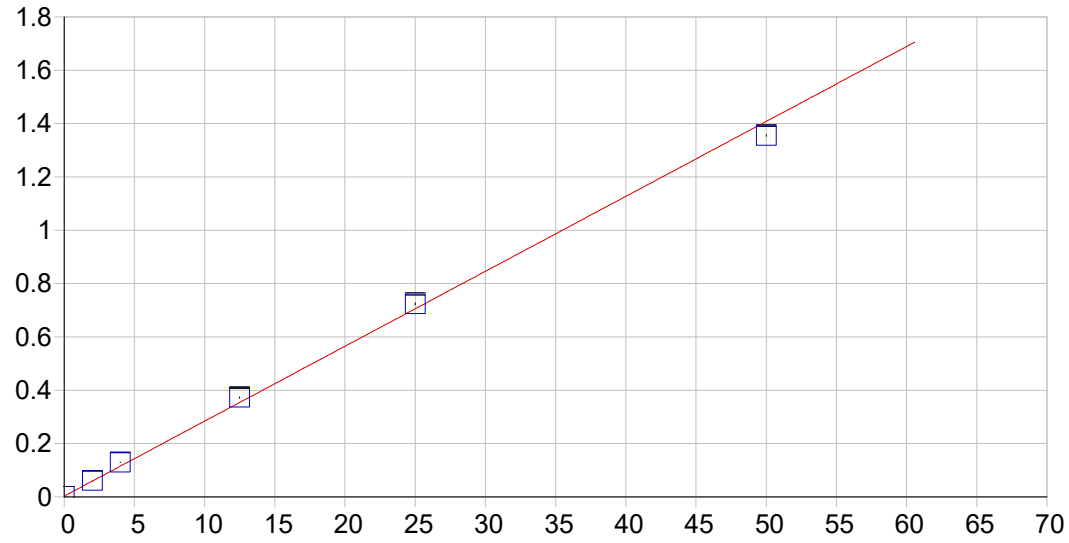


Ag 328.068 {103}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001124	Re-Slope:	1.000000
A1 (Gain):	0.214462	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999232	Status:	OK.
Std Error of Est:	0.000069		
Predicted MDL:	0.000522		
Predicted MQL:	0.001740		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00112	.000	1
S1	.01000	.01036	.000	3.62	.00108	.000	1
S3	.62500	.63898	.014	2.24	.13538	.000	1
S4	1.2500	1.2560	.006	.482	.26718	.000	1
S5	2.5000	2.4465	-.054	-2.14	.52143	.000	1
S2	.20000	.23315	.033	16.6	.04871	.000	1

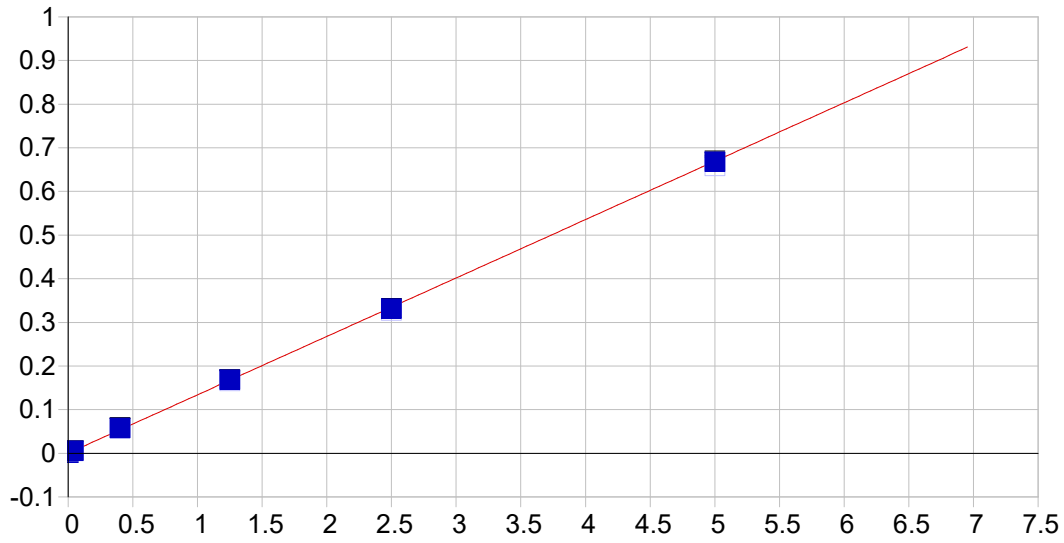


Na 589.592 { 57}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003137	Re-Slope:	1.000000
A1 (Gain):	0.028096	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999000	Status:	OK.
Std Error of Est:	0.000665		
Predicted MDL:	0.007936		
Predicted MQL:	0.026454		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00039	-.000	.000	.00313	.000	1
S2	4.0000	4.5056	.506	12.6	.12973	.001	1
S3	12.500	13.154	.654	5.23	.37271	.003	1
S4	25.000	25.656	.656	2.63	.72398	.004	1
S5	50.000	48.127	-1.87	-3.75	1.3553	.003	1
S1	2.0000	2.0572	.057	2.86	.06094	.000	1

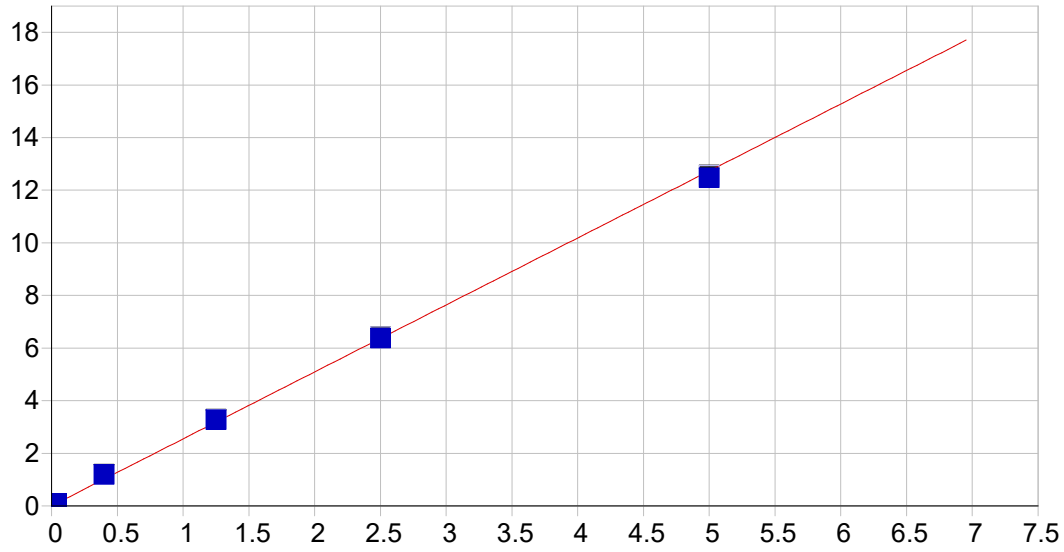


V 292.402 {115}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000187	Re-Slope:	1.000000
A1 (Gain):	0.133828	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999839	Status:	OK.
Std Error of Est:	0.000056		
Predicted MDL:	0.001873		
Predicted MQL:	0.006242		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00019	.000	1
S1	.04000	.03795	-.002	-5.12	.00507	.000	1
S3	1.2500	1.2555	.005	.436	.16576	.000	1
S4	2.5000	2.4748	-.025	-1.01	.32650	.001	1
S5	5.0000	4.9903	-.010	-.193	.65828	.002	1
S2	.40000	.43143	.031	7.86	.05714	.000	1

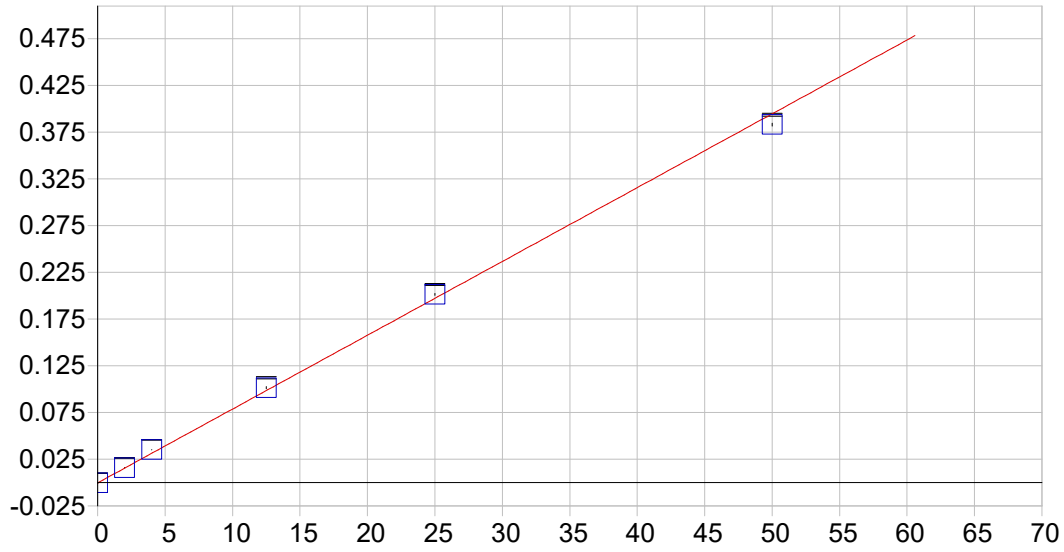


Zn 213.856 {158}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001687	Re-Slope:	1.000000
A1 (Gain):	2.546051	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999255	Status:	OK.
Std Error of Est:	0.002324		
Predicted MDL:	0.000345		
Predicted MQL:	0.001151		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00166	.001	1
S1	.04000	.04227	.002	5.69	.11003	.001	1
S3	1.2500	1.2821	.032	2.57	3.2882	.003	1
S4	2.5000	2.5024	.002	.095	6.4171	.008	1
S5	5.0000	4.8974	-.103	-2.05	12.559	.023	1
S2	.40000	.46586	.066	16.5	1.1949	.005	1

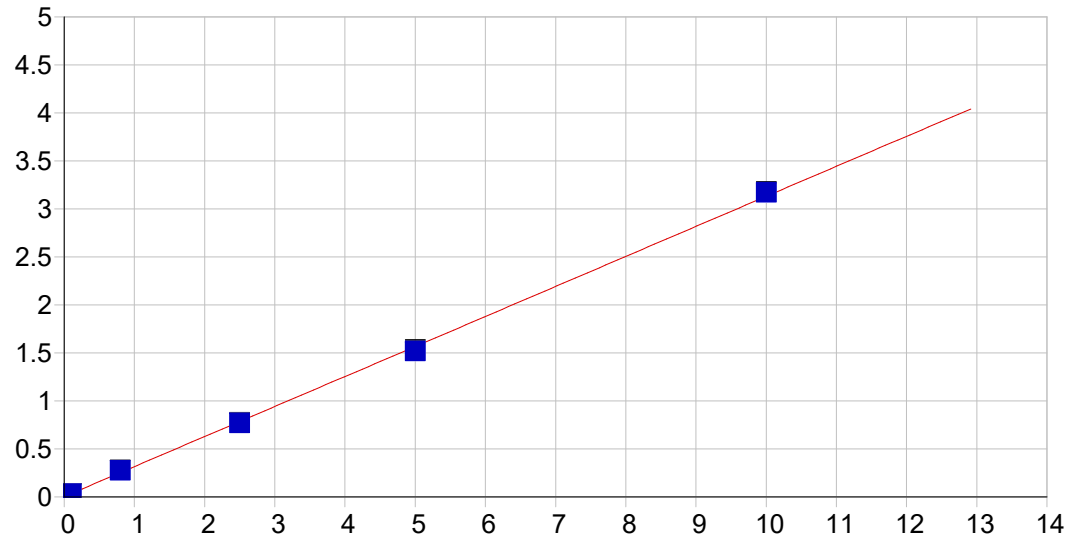


K 766.490 { 44}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000351	Re-Slope:	1.000000
A1 (Gain):	0.007900	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999315	Status:	OK.
Std Error of Est:	0.000155		
Predicted MDL:	0.033707		
Predicted MQL:	0.112357		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00035	-.000	.000	-.00035	.000	1
S2	4.0000	4.4915	.492	12.3	.03513	.000	1
S3	12.500	12.894	.394	3.15	.10152	.001	1
S4	25.000	25.524	.524	2.09	.20130	.001	1
S5	50.000	48.537	-1.46	-2.93	.38311	.002	1
S1	2.0000	2.0538	.054	2.69	.01588	.000	1

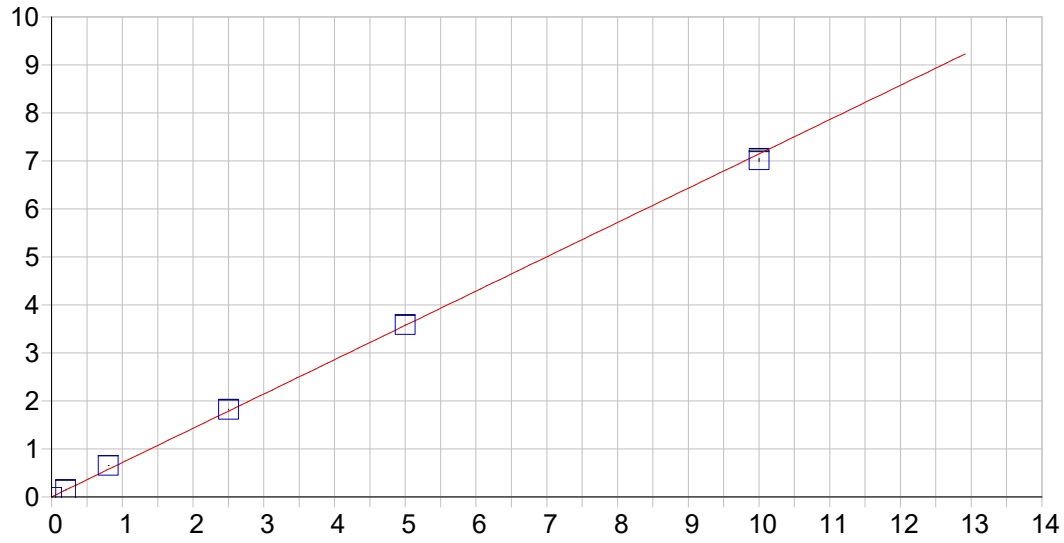


B 249.678 {135}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003051	Re-Slope:	1.000000
A1 (Gain):	0.312743	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999599	Status:	OK.
Std Error of Est:	0.000464		
Predicted MDL:	0.000928		
Predicted MQL:	0.003094		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00305	.000	1
S1	.10000	.09249	-.008	-7.51	.03184	.000	1
S3	2.5000	2.4524	-.048	-1.90	.76850	.005	1
S4	5.0000	4.8487	-.151	-3.03	1.5164	.013	1
S5	10.000	10.132	.132	1.32	3.1656	.007	1
S2	.80000	.87437	.074	9.30	.27601	.002	1

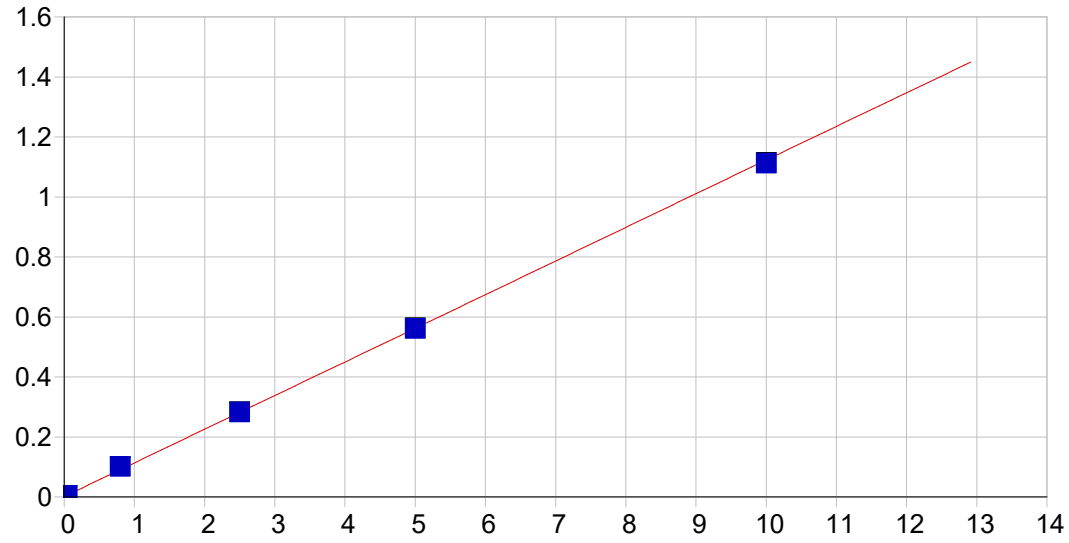


Mo 202.030 {467}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000218	Re-Slope:	1.000000
A1 (Gain):	0.714583	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999454	Status:	OK.
Std Error of Est:	0.001758		
Predicted MDL:	0.000302		
Predicted MQL:	0.001007		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00003	-.000	.000	.00020	.000	1
S1	.20000	.20267	.003	1.34	.14505	.000	1
S3	2.5000	2.5473	.047	1.89	1.8204	.007	1
S4	5.0000	5.0145	.014	.290	3.5835	.003	1
S5	10.000	9.8222	-.178	-1.78	7.0190	.031	1
S2	.80000	.91336	.113	14.2	.65289	.002	1

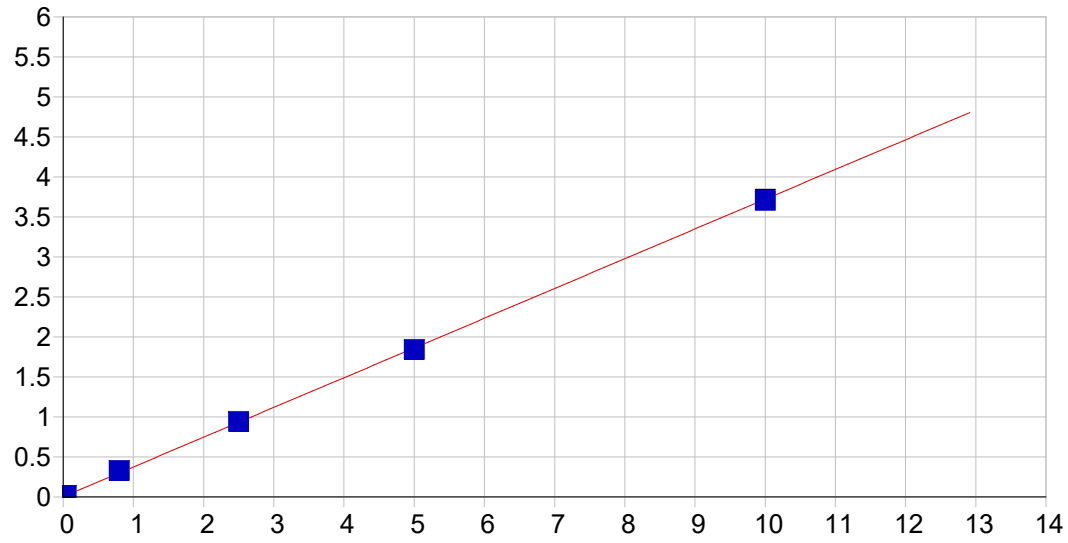


Sn 189.989 {478}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001219	Re-Slope:	1.000000
A1 (Gain):	0.112155	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999688	Status:	OK.
Std Error of Est:	0.000093		
Predicted MDL:	0.000848		
Predicted MQL:	0.002825		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00122	.000	1
S1	.04000	.03858	-.001	-3.55	.00554	.000	1
S3	2.5000	2.5110	.011	.439	.28255	.001	1
S4	5.0000	4.9948	-.005	-.105	.56083	.002	1
S5	10.000	9.9044	-.096	-.956	1.1109	.002	1
S2	.80000	.89127	.091	11.4	.10109	.000	1

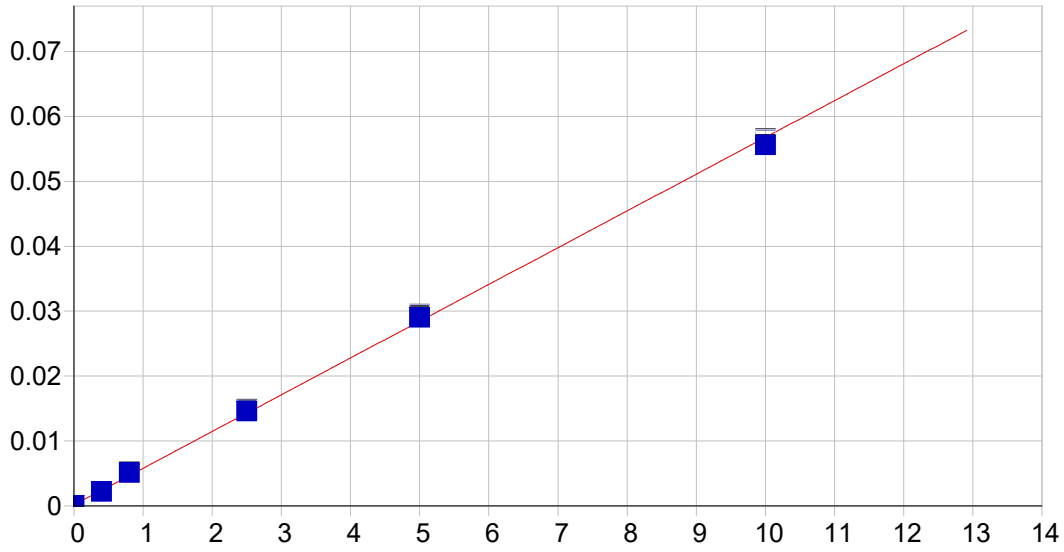


Ti 336.121 {100}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002575	Re-Slope:	1.000000
A1 (Gain):	0.371834	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999771	Status:	OK.
Std Error of Est:	0.000264		
Predicted MDL:	0.000896		
Predicted MQL:	0.002985		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00257	.000	1
S1	.04000	.03840	-.002	-4.01	.01684	.000	1
S3	2.5000	2.5244	.024	.975	.94089	.002	1
S4	5.0000	4.9425	-.057	-1.15	1.8397	.005	1
S5	10.000	9.9585	-.042	-.415	3.7041	.015	1
S2	.80000	.87623	.076	9.53	.32828	.000	1

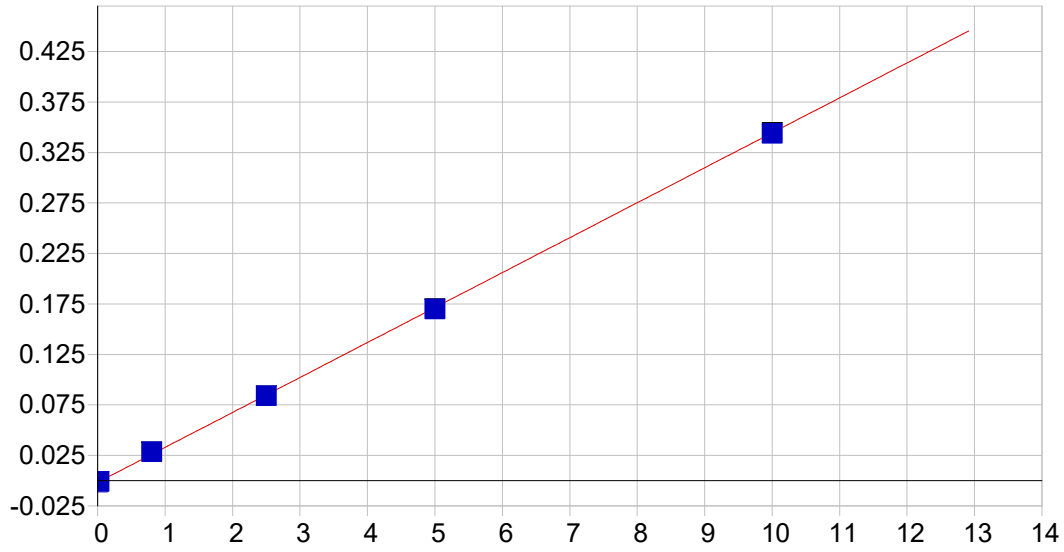


Si 288.158 {117}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000134	Re-Slope:	1.000000
A1 (Gain):	0.005663	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999511	Status:	OK.
Std Error of Est:	0.000019		
Predicted MDL:	0.009221		
Predicted MQL:	0.030735		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00013	.000	1
S1	.40000	.36505	-.035	-8.74	.00221	.000	1
S3	2.5000	2.5540	.054	2.16	.01481	.000	1
S4	5.0000	5.1053	.105	2.11	.02947	.000	1
S5	10.000	9.7943	-.206	-2.06	.05645	.000	1
S2	.80000	.88091	.081	10.1	.00519	.000	1

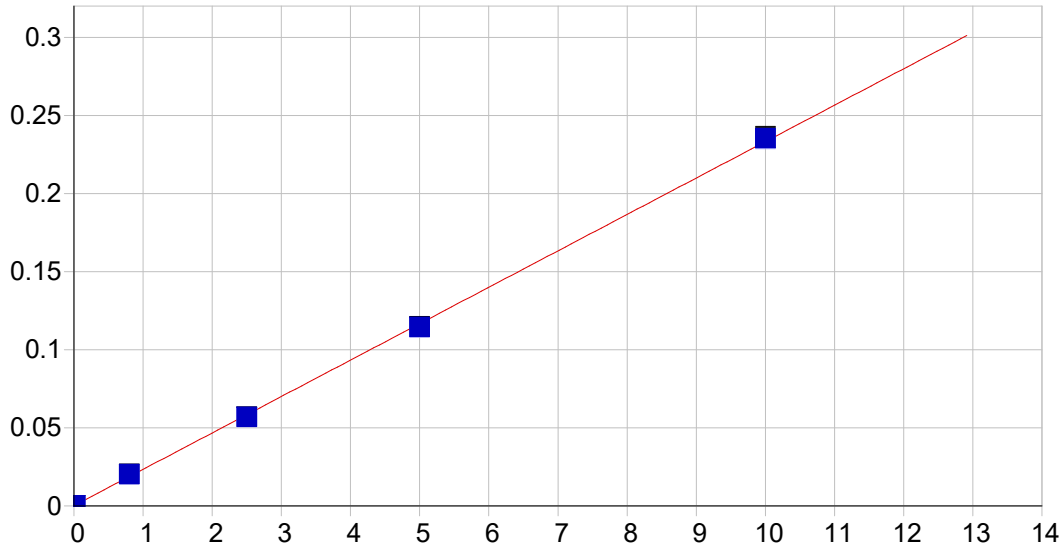


P 177.495 {490}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001682	Re-Slope:	1.000000
A1 (Gain):	0.034615	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999784	Status:	OK.
Std Error of Est:	0.000017		
Predicted MDL:	0.002633		
Predicted MQL:	0.008775		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00168	.000	1
S1	.02000	.01958	-.000	-2.12	-.00100	.000	1
S3	2.5000	2.4793	-.021	-.827	.08413	.000	1
S4	5.0000	4.9584	-.042	-.832	.16993	.000	1
S5	10.000	9.9859	-.014	-.141	.34393	.001	1
S2	.80000	.87683	.077	9.60	.02866	.000	1

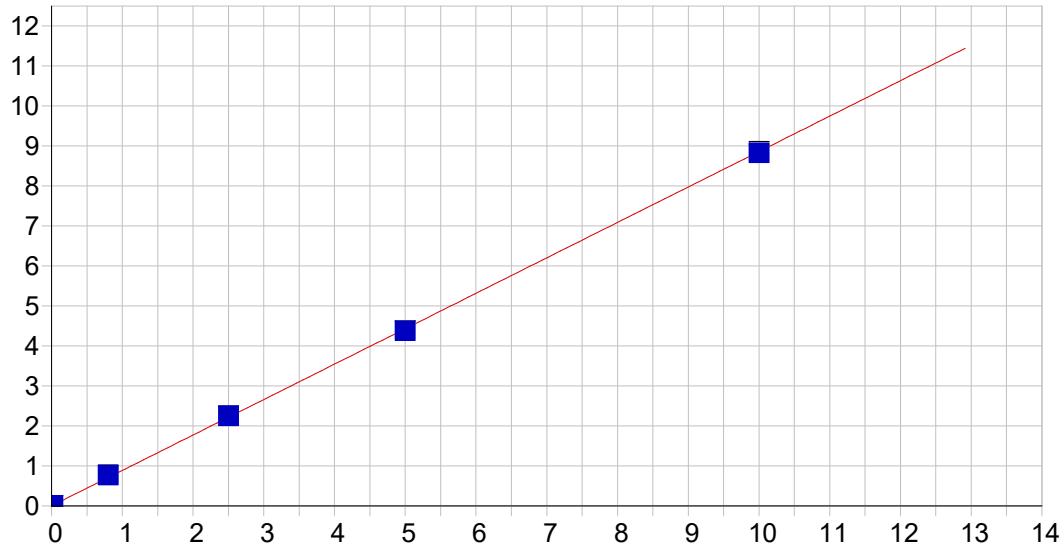


S 182.034 {485}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000113	Re-Slope:	1.000000
A1 (Gain):	0.023310	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999727	Status:	OK.
Std Error of Est:	0.000013		
Predicted MDL:	0.003728		
Predicted MQL:	0.012425		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00011	.000	1
S1	.02000	.02065	.001	3.27	.00057	.000	1
S3	2.5000	2.4345	-.065	-2.62	.05671	.000	1
S4	5.0000	4.9046	-.095	-1.91	.11414	.000	1
S5	10.000	10.094	.094	.939	.23480	.001	1
S2	.80000	.86639	.066	8.30	.02026	.000	1

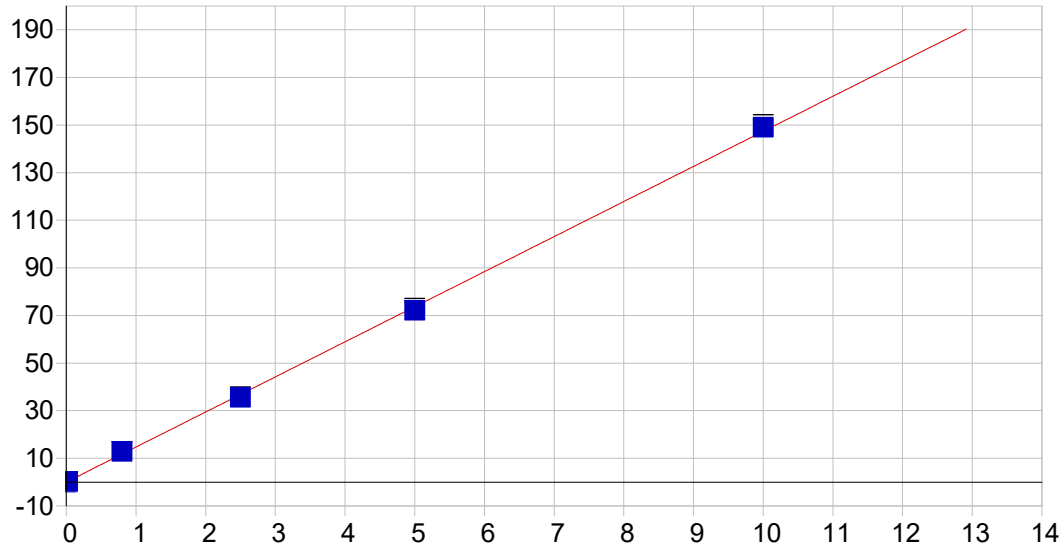


Li 670.784 { 50}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001037	Re-Slope:	1.000000
A1 (Gain):	0.886034	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999803	Status:	OK.
Std Error of Est:	0.000413		
Predicted MDL:	0.001225		
Predicted MQL:	0.004083		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00104	.001	1
S5	10.000	9.9596	-.040	-.404	8.8335	.036	1
S4	5.0000	4.9368	-.063	-1.26	4.3792	.004	1
S3	2.5000	2.5387	.039	1.55	2.2524	.007	1
S1	.02000	.01834	-.002	-8.30	.01761	.000	1
S2	.80000	.86660	.067	8.33	.76952	.001	1

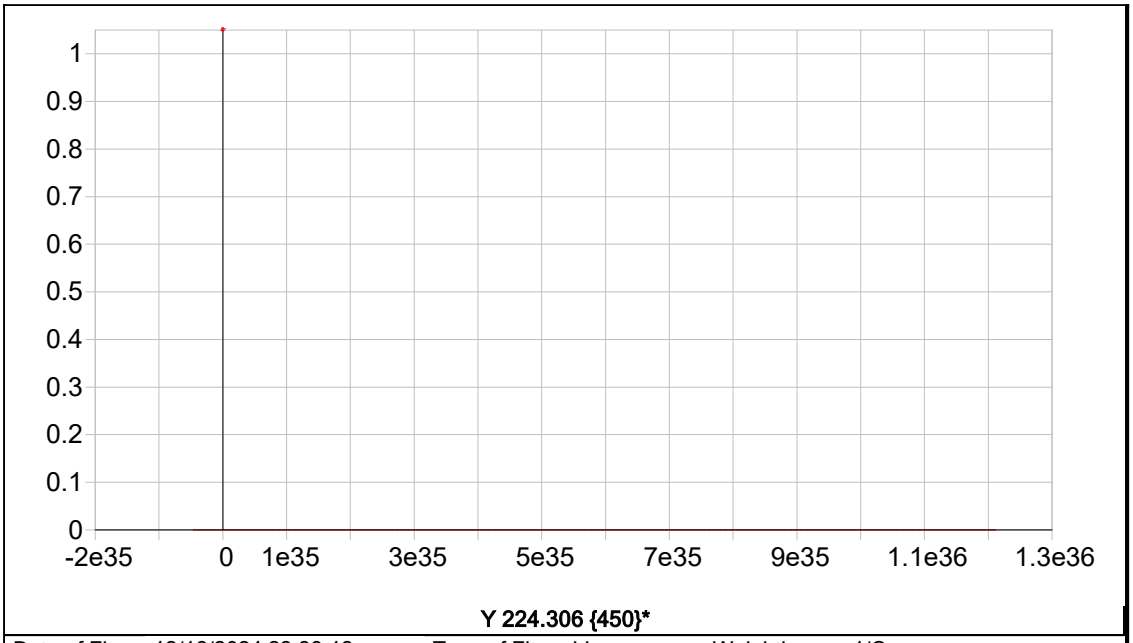


Sr 407.771 { 83}

Date of Fit:	2/12/2025 12:13:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000429	Re-Slope:	1.000000
A1 (Gain):	14.736904	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999666	Status:	OK.
Std Error of Est:	0.008938		
Predicted MDL:	0.000044		
Predicted MQL:	0.000147		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00043	.000	1
S1	.02000	.01882	-.001	-5.92	.27834	.002	1
S3	2.5000	2.4171	-.083	-3.31	35.658	.199	1
S4	5.0000	4.8980	-.102	-2.04	72.255	.769	1
S5	10.000	10.117	.117	1.17	149.23	.988	1
S2	.80000	.86938	.069	8.67	12.823	.003	1

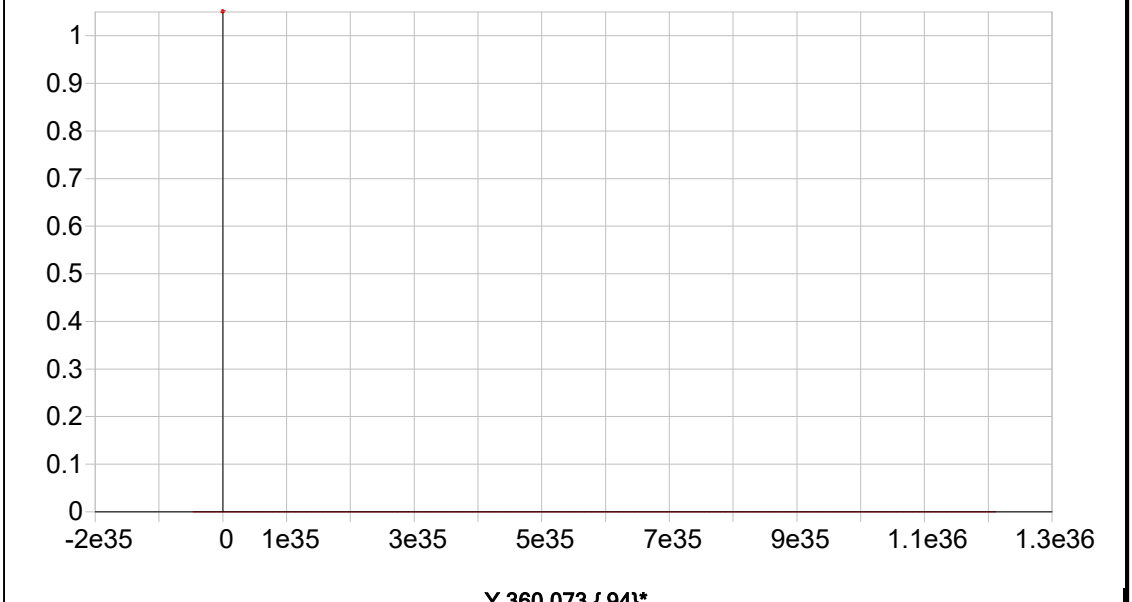


Y 224.306 {450}*

Date of Fit:	12/16/2024 23:39:18	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



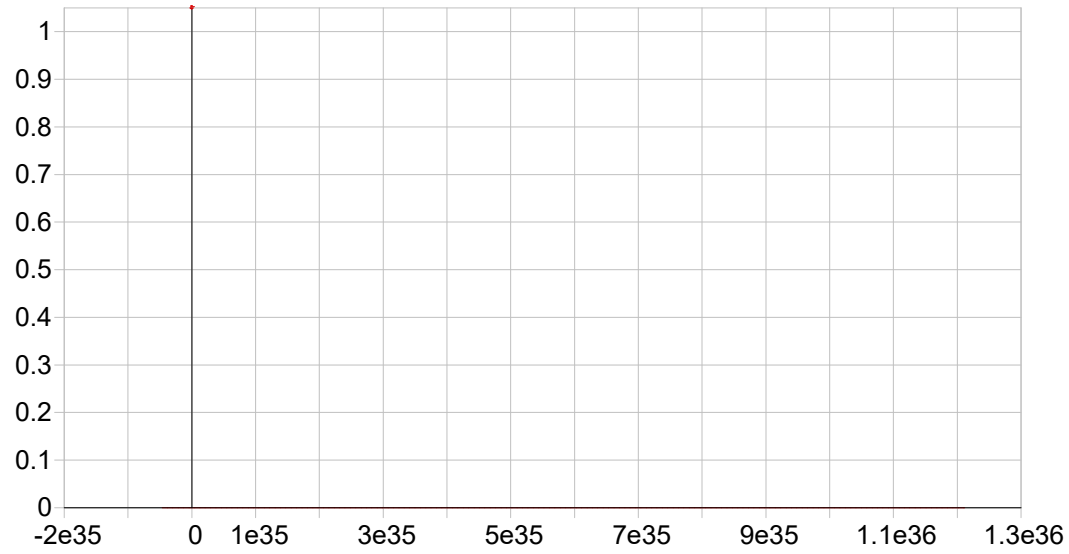
Y 360.073 { 94}*

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					

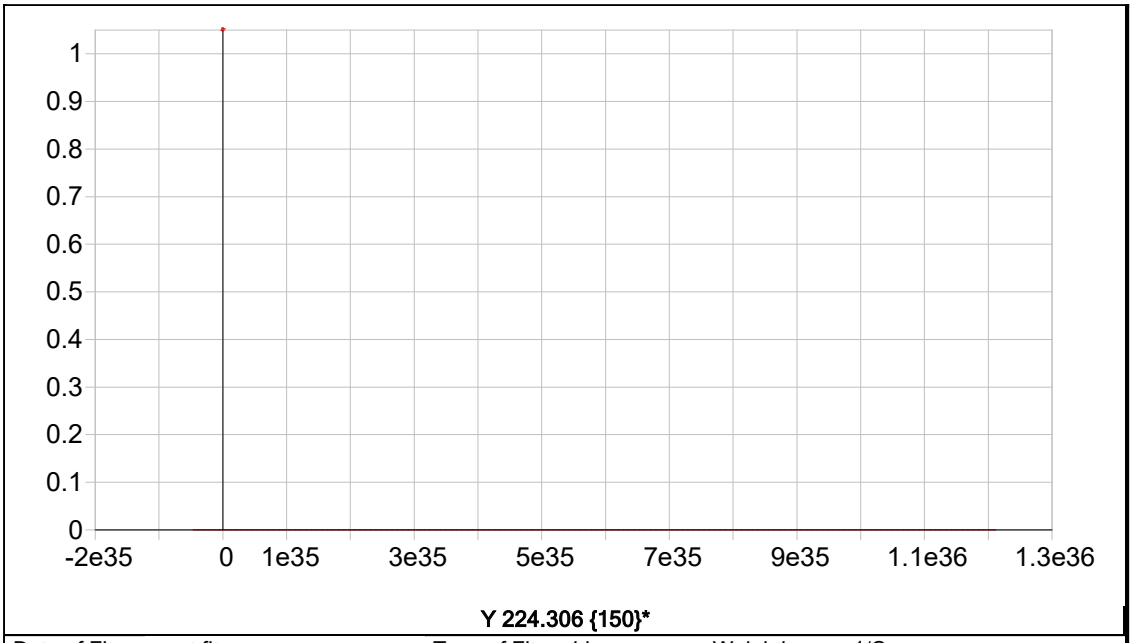
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



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

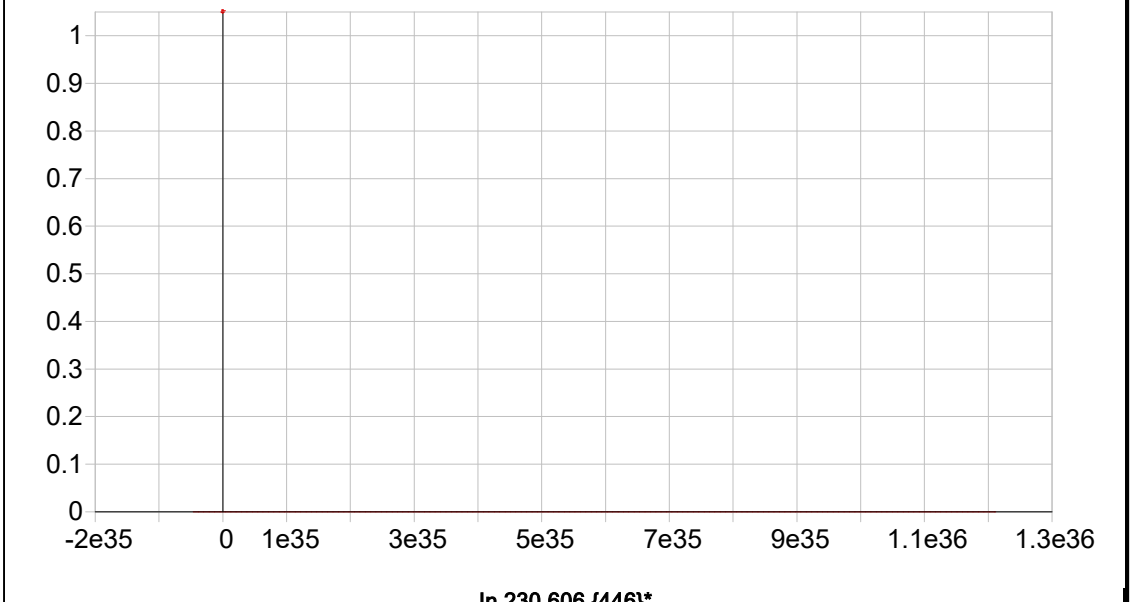


Y 224.306 {150}*

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:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: S0 Acquired: 2/12/2025 11:47:57 Type: Cal
Method: NON EPA-6010-200.7(v2536) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	**-.00015**	**.00007**	**-.00013**	**.00046**	**.00039**	**.00014**	**.05660**	**.00011**
Stddev	.00010	.00006	.00010	.00010	.00006	.00040	.00125	.00005
%RSD	68.455	78.342	77.622	21.069	14.650	277.75	2.2068	49.116
#1	-.00011	.00001	-.00015	.00039	.00045	-.00028	.05765	.00011
#2	-.00027	.00012	-.00002	.00057	.00039	.00052	.05522	.00006
#3	-.00008	.00008	-.00022	.00041	.00034	.00019	.05693	.00016

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	**.00021**	**.00051**	**-.00003**	**.00000**	**-.00074**	**-.00002**	**.00001**	**-.00019**
Stddev	.00009	.00040	.00008	.00009	.00012	.00002	.00014	.00018
%RSD	44.916	78.850	308.41	2863.0	16.759	105.06	951.73	93.357
#1	.00031	.00071	-.00012	.00001	-.00082	.00000	.00018	-.00008
#2	.00019	.00005	.00001	-.00009	-.00060	-.00003	-.00007	-.00040
#3	.00013	.00078	.00003	.00009	-.00080	-.00005	-.00006	-.00009

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	**-.00012**	**-.00112**	**.00313**	**.00019**	**.00166**	**-.00035**	**.00305**	**.00020**
Stddev	.00023	.00008	.00006	.00027	.00109	.00018	.00011	.00011
%RSD	187.25	7.4806	1.8588	145.68	65.392	51.913	3.6311	57.054
#1	-.00036	-.00122	.00311	.00028	.00106	-.00046	.00305	.00024
#2	-.00009	-.00105	.00319	.00040	.00101	-.00046	.00316	.00007
#3	.00009	-.00110	.00308	-.00012	.00292	-.00014	.00294	.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	**.00122**	**.00257**	**.00013**	**-.00168**	**.00011**	**.00104**	**-.00043**
Stddev	.00009	.00012	.00002	.00003	.00004	.00069	.00043
%RSD	7.7021	4.7184	18.538	1.8747	36.651	66.121	100.33
#1	.00117	.00245	.00016	-.00172	.00014	.00092	-.00069
#2	.00116	.00258	.00014	-.00168	.00007	.00042	.00007
#3	.00133	.00269	.00011	-.00165	.00013	.00177	-.00065

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: S0 Acquired: 2/12/2025 11:47:57 Type: Cal
Method: NON EPA-6010-200.7(v2536) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	2696.6	54735.	10612.	1775.3	4591.2
Stddev	7.2	123.	65.	12.0	13.2
%RSD	.26588	.22415	.61458	.67815	.28681
#1	2703.5	54829.	10678.	1773.7	4604.6
#2	2697.1	54780.	10608.	1788.1	4590.7
#3	2689.2	54596.	10548.	1764.2	4578.3

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: S1 Acquired: 2/12/2025 11:52:24 Type: Cal
Method: NON EPA-6010-200.7(v2536) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	**.00079**	**.00178**	**.00210**	**.00186**	**.00931**	**.00820**	**.25681**	**.02298**
Stddev	.00007	.00009	.00026	.00022	.00031	.00023	.00186	.00029
%RSD	8.9508	5.2432	12.182	11.823	3.3122	2.8382	.72246	1.2777
#1	.00080	.00179	.00185	.00211	.00964	.00846	.25476	.02266
#2	.00086	.00168	.00208	.00178	.00927	.00814	.25836	.02323
#3	.00072	.00186	.00236	.00168	.00902	.00801	.25731	.02307

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	**.01310**	**.11397**	**.00176**	**.02390**	**.01574**	**.00046**	**.00748**	**.02949**
Stddev	.00014	.00019	.00002	.00003	.00028	.00002	.00021	.00012
%RSD	1.0870	.16916	.87361	.12330	1.7545	5.2740	2.7456	.41155
#1	.01322	.11400	.00175	.02389	.01583	.00047	.00745	.02936
#2	.01294	.11414	.00176	.02387	.01596	.00048	.00769	.02961
#3	.01315	.11376	.00178	.02393	.01543	.00043	.00728	.02950

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	**.02305**	**.00108**	**.06094**	**.00507**	**.11003**	**.01588**	**.03184**	**.14505**
Stddev	.00007	.00002	.00043	.00008	.00076	.00030	.00021	.00043
%RSD	.32253	1.4603	.69861	1.6619	.68700	1.8809	.64726	.29630
#1	.02306	.00110	.06142	.00509	.11020	.01621	.03164	.14543
#2	.02297	.00108	.06062	.00497	.11069	.01563	.03184	.14458
#3	.02312	.00107	.06077	.00514	.10921	.01578	.03205	.14513

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	**.00554**	**.01684**	**.00221**	**-.00100**	**.00057**	**.01761**	**.27834**
Stddev	.00004	.00014	.00002	.00003	.00001	.00034	.00191
%RSD	.74480	.81937	.94484	2.8117	2.4817	1.9243	.68494
#1	.00551	.01694	.00218	-.00098	.00059	.01752	.27675
#2	.00553	.01690	.00221	-.00099	.00057	.01732	.28045
#3	.00559	.01668	.00222	-.00104	.00056	.01798	.27781

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: S1 Acquired: 2/12/2025 11:52:24 Type: Cal
Method: NON EPA-6010-200.7(v2536) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	2708.0	54831.	10621.	1781.7	4561.5
Stddev	2.8	186.	51.	12.0	8.7
%RSD	.10403	.33866	.47873	.67095	.19015
#1	2705.8	54623.	10674.	1770.0	4556.2
#2	2711.1	54981.	10573.	1781.2	4571.5
#3	2706.9	54888.	10616.	1793.9	4556.8

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: S2 Acquired: 2/12/2025 11:56:44 Type: Cal
Method: NON EPA-6010-200.7(v2536) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	**.04078**	**.04180**	**.20606**	**.07292**	**.16189**	**.13591**	**3.7973**	**.17916**
Stddev	.00015	.00058	.00047	.00027	.00014	.00100	.0111	.00092
%RSD	.36795	1.3792	.22882	.37475	.08729	.73553	.29148	.51086
#1	.04061	.04245	.20587	.07280	.16196	.13567	3.8099	.17898
#2	.04081	.04135	.20572	.07273	.16173	.13701	3.7931	.18015
#3	.04091	.04160	.20660	.07323	.16198	.13505	3.7890	.17835

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	**.97314**	**.26074**	**.03315**	**.36630**	**.17166**	**.00440**	**.17067**	**.06185**
Stddev	.00248	.00060	.00011	.00065	.00105	.00004	.00045	.00016
%RSD	.25526	.23097	.33260	.17716	.61328	.95580	.26436	.25393
#1	.97254	.26139	.03318	.36617	.17094	.00436	.17116	.06169
#2	.97102	.26063	.03303	.36572	.17117	.00438	.17027	.06200
#3	.97587	.26020	.03324	.36700	.17287	.00444	.17059	.06184

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	**.26463**	**.04871**	**.12973**	**.05714**	**1.1949**	**.03513**	**.27601**	**.65289**
Stddev	.00072	.00010	.00120	.00022	.0047	.00023	.00188	.00186
%RSD	.27103	.19587	.92551	.38589	.39295	.65609	.67991	.28480
#1	.26422	.04860	.13026	.05704	1.1950	.03501	.27449	.65175
#2	.26422	.04874	.12835	.05740	1.1995	.03499	.27811	.65189
#3	.26546	.04878	.13057	.05700	1.1901	.03540	.27544	.65504

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	**.10109**	**.32828**	**.00519**	**.02866**	**.02026**	**.76952**	**12.823**
Stddev	.00035	.00032	.00002	.00006	.00004	.00091	.003
%RSD	.34148	.09612	.31725	.22215	.21687	.11847	.02455
#1	.10105	.32863	.00521	.02874	.02027	.77014	12.821
#2	.10076	.32819	.00517	.02861	.02021	.76993	12.827
#3	.10145	.32801	.00519	.02865	.02030	.76847	12.823

Sample Name: S2 Acquired: 2/12/2025 11:56:44 Type: Cal
Method: NON EPA-6010-200.7(v2536) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	**2689.3**	**54886.**	**10338.**	**1801.5**	**4459.4**
Stddev	7.2	105.	72.	3.8	11.5
%RSD	.26646	.19079	.69891	.21110	.25814
#1	2693.8	54892.	10371.	1805.9	4463.3
#2	2693.2	54987.	10256.	1799.5	4468.5
#3	2681.1	54778.	10389.	1799.1	4446.5

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: S3 Acquired: 2/12/2025 12:00:48 Type: Cal
Method: NON EPA-6010-200.7(v2536) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	**.11474**	**.11654**	**.57689**	**.20182**	**.45364**	**.39314**	**10.878**	**.50046**
Stddev	.00062	.00091	.00178	.00174	.00253	.00034	.097	.00351
%RSD	.54217	.77763	.30858	.86069	.55662	.08648	.88839	.70073
#1	.11438	.11557	.57516	.20046	.45218	.39316	10.914	.50191
#2	.11438	.11668	.57680	.20122	.45218	.39347	10.951	.49647
#3	.11546	.11736	.57872	.20378	.45655	.39279	10.768	.50302

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	**2.7192**	**.74233**	**.09283**	**1.0206**	**.47220**	**.01254**	**.48643**	**.17964**
Stddev	.0064	.00149	.00041	.0020	.00137	.00016	.00091	.00091
%RSD	.23371	.20016	.44510	.19862	.29079	1.3051	.18766	.50558
#1	2.7140	.74403	.09248	1.0188	.47209	.01239	.48647	.18008
#2	2.7173	.74132	.09328	1.0203	.47089	.01271	.48733	.18024
#3	2.7263	.74163	.09273	1.0228	.47363	.01252	.48550	.17859

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	**.73572**	**.13538**	**.37271**	**.16576**	**3.2882**	**.10152**	**.76850**	**1.8204**
Stddev	.00128	.00042	.00327	.00029	.0033	.00119	.00549	.0073
%RSD	.17359	.30958	.87628	.17359	.10058	1.1721	.71410	.40303
#1	.73490	.13500	.37120	.16605	3.2919	.10079	.77294	1.8168
#2	.73507	.13583	.37646	.16575	3.2870	.10289	.76236	1.8157
#3	.73719	.13532	.37048	.16548	3.2855	.10087	.77020	1.8289

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	**.28255**	**.94089**	**.01481**	**.08413**	**.05671**	**2.2524**	**35.658**
Stddev	.00115	.00245	.00007	.00026	.00016	.0066	.199
%RSD	.40595	.26077	.44707	.30673	.27680	.29139	.55777
#1	.28138	.94208	.01475	.08383	.05653	2.2532	35.766
#2	.28259	.94252	.01488	.08423	.05680	2.2585	35.428
#3	.28367	.93807	.01480	.08432	.05680	2.2454	35.779

Sample Name: S3 Acquired: 2/12/2025 12:00:48 Type: Cal
Method: NON EPA-6010-200.7(v2536) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	2662.4	54025.	10177.	1747.1	4370.2
Stddev	6.9	262.	53.	2.6	5.3
%RSD	.26033	.48409	.52532	.14954	.12233
#1	2662.4	54307.	10159.	1749.8	4371.0
#2	2669.3	53790.	10238.	1744.5	4375.1
#3	2655.5	53980.	10135.	1746.9	4364.5

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: S4 Acquired: 2/12/2025 12:04:57 Type: Cal
Method: NON EPA-6010-200.7(v2536) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	**.22816**	**.23005**	**1.1352**	**.40011**	**.90018**	**.77896**	**20.872**	**.98360**
Stddev	.00013	.00029	.0028	.00052	.00259	.00306	.214	.00703
%RSD	.05787	.12619	.24279	.12919	.28736	.39229	1.0252	.71507
#1	.22817	.23037	1.1349	.39956	.89777	.77735	20.757	.97601
#2	.22829	.22998	1.1326	.40059	.89986	.77704	20.739	.98489
#3	.22803	.22981	1.1381	.40019	.90292	.78248	21.118	.98990

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	**5.4052**	**1.4364**	**.18135**	**2.0239**	**.92167**	**.02436**	**.93484**	**.35347**
Stddev	.0162	.0055	.00054	.0041	.00077	.00011	.00165	.00229
%RSD	.30014	.37939	.29637	.20280	.08316	.46180	.17673	.64753
#1	5.4033	1.4360	.18172	2.0226	.92083	.02449	.93359	.35197
#2	5.3901	1.4311	.18073	2.0206	.92234	.02433	.93421	.35234
#3	5.4223	1.4420	.18159	2.0285	.92185	.02427	.93671	.35611

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	**1.4505**	**.26718**	**.72398**	**.32650**	**6.4171**	**.20130**	**1.5164**	**3.5835**
Stddev	.0036	.00026	.00414	.00073	.0083	.00100	.0126	.0031
%RSD	.24718	.09894	.57162	.22434	.12907	.49440	.83244	.08500
#1	1.4488	.26688	.72861	.32607	6.4130	.20245	1.5020	3.5811
#2	1.4480	.26735	.72267	.32609	6.4266	.20074	1.5214	3.5825
#3	1.4546	.26732	.72065	.32735	6.4116	.20070	1.5258	3.5869

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	**.56083**	**1.8397**	**.02947**	**.16993**	**.11414**	**4.3792**	**72.255**
Stddev	.00193	.0047	.00008	.00044	.00045	.0043	.769
%RSD	.34432	.25381	.27112	.26014	.39814	.09836	1.0645
#1	.56037	1.8419	.02952	.16968	.11410	4.3829	71.844
#2	.55917	1.8343	.02952	.16966	.11370	4.3745	71.779
#3	.56295	1.8429	.02938	.17044	.11461	4.3803	73.142

Sample Name: S4 Acquired: 2/12/2025 12:04:57 Type: Cal
Method: NON EPA-6010-200.7(v2536) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	2619.1	53066.	10021.	1695.2	4233.1
Stddev	2.3	179.	64.	4.1	7.8
%RSD	.08702	.33736	.63926	.24137	.18458
#1	2621.7	52911.	10069.	1691.3	4239.0
#2	2617.4	53262.	10045.	1699.4	4236.2
#3	2618.2	53025.	9947.9	1694.8	4224.3

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: S5 Acquired: 2/12/2025 12:09:10 Type: Cal
Method: NON EPA-6010-200.7(v2536) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	**.45625**	**.44652**	**2.2550**	**.79669**	**1.7922**	**1.5918**	**41.931**	**2.0345**
Stddev	.00280	.00352	.0036	.00498	.0097	.0036	.364	.0008
%RSD	.61459	.78785	.16082	.62539	.53962	.22859	.86743	.03885
#1	.45449	.44897	2.2542	.79584	1.7873	1.5904	41.892	2.0337
#2	.45476	.44249	2.2518	.79219	1.7861	1.5959	41.589	2.0347
#3	.45948	.44809	2.2589	.80204	1.8034	1.5890	42.313	2.0353

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	**10.776**	**2.8741**	**.34934**	**4.0439**	**1.7991**	**.04568**	**1.8709**	**.71392**
Stddev	.016	.0087	.00029	.0060	.0085	.00028	.0078	.00158
%RSD	.14798	.30305	.08257	.14941	.47091	.61849	.41644	.22138
#1	10.768	2.8796	.34917	4.0408	1.7943	.04596	1.8735	.71482
#2	10.765	2.8786	.34918	4.0400	1.7943	.04568	1.8771	.71485
#3	10.794	2.8640	.34967	4.0509	1.8089	.04540	1.8621	.71209

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	**2.8822**	**.52143**	**1.3553**	**.65828**	**12.559**	**.38311**	**3.1656**	**7.0190**
Stddev	.0058	.00010	.0031	.00232	.023	.00164	.0071	.0315
%RSD	.20221	.01880	.22946	.35273	.18695	.42737	.22416	.44856
#1	2.8819	.52145	1.3582	.65877	12.557	.38414	3.1624	7.0096
#2	2.8766	.52132	1.3556	.66031	12.537	.38397	3.1608	6.9933
#3	2.8882	.52151	1.3521	.65575	12.584	.38122	3.1738	7.0541

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	**1.1109**	**3.7041**	**.05645**	**.34393**	**.23480**	**8.8335**	**149.23**
Stddev	.0023	.0145	.00007	.00083	.00113	.0359	.99
%RSD	.20493	.39173	.11984	.24195	.48115	.40599	.66203
#1	1.1109	3.7067	.05645	.34360	.23398	8.8453	148.86
#2	1.1086	3.7172	.05652	.34330	.23433	8.8621	150.35
#3	1.1132	3.6885	.05639	.34487	.23609	8.7933	148.49

Sample Name: S5 Acquired: 2/12/2025 12:09:10 Type: Cal
Method: NON EPA-6010-200.7(v2536) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	2525.7	52256.	9210.1	1626.8	3998.1
Stddev	8.0	145.	17.7	2.1	2.8
%RSD	.31607	.27741	.19242	.13207	.07096
#1	2530.2	52144.	9212.0	1625.4	3998.8
#2	2530.5	52203.	9191.5	1625.9	4000.5
#3	2516.5	52419.	9226.8	1629.3	3995.0

Sample Name: ICV01 Acquired: 2/12/2025 12:59:27 Type: Unk
Method: NON EPA-6010-200.7(v2688) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9978805**	**1.020656**	**.9869668**	**1.026740**	**1.010654**	**2.419387**
Stddev	.0045971	.008087	.0051364	.001132	.001087	.002089
%RSD	.4606860	.7923416	.5204187	.1102717	.1075807	.0863514
#1	1.001485	1.027309	.9883753	1.026393	1.011208	2.421786
#2	.992704	1.011654	.9812731	1.028005	1.009402	2.417967
#3	.999453	1.023004	.9912519	1.025821	1.011353	2.418408

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5454903**	**.5006336**	**.5052430**	**9.697536**	**.5283321**	**.5090562**
Stddev	.0017011	.0037479	.0020666	.015849	.0005130	.0019083
%RSD	.3118430	.7486305	.4090322	.1634323	.0970991	.3748739
#1	.5470782	.4971896	.5053799	9.691068	.5288999	.5097681
#2	.5436951	.5000859	.5031113	9.685945	.5279019	.5068943
#3	.5456976	.5046252	.5072377	9.715597	.5281945	.5105063

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5202704**	**10.35354**	**.4955212**	**6.293609**	**.5140263**	**.2469577**
Stddev	.0027909	.05626	.0021919	.054536	.0023561	.0006008
%RSD	.5364302	.5434092	.4423507	.8665227	.4583619	.2432704
#1	.5193852	10.41850	.4930135	6.263293	.5155755	.2472250
#2	.5180294	10.32197	.4964777	6.260968	.5113149	.2462697
#3	.5233965	10.32015	.4970723	6.356567	.5151886	.2473785

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.30514**	**.5165294**	**1.012724**	**10.12450**	**2.623611**	**2.482670**
Stddev	.08358	.0024072	.005720	.04509	.019272	.007703
%RSD	.8110875	.4660418	.5648087	.4453703	.7345765	.3102695
#1	10.37996	.5188303	1.014415	10.17657	2.612300	2.482270
#2	10.32053	.5140283	1.006349	10.09825	2.612669	2.475174
#3	10.21493	.5167298	1.017407	10.09868	2.645864	2.490565

Sample Name: ICV01 Acquired: 2/12/2025 12:59:27 Type: Unk
Method: NON EPA-6010-200.7(v2688) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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 -.001458	F .0001005	2.606328	F .0046376	F -.001770	F -.001542
Stddev	.000641	.0001154	.018709	.0006571	.001587	.000723
%RSD	43.99128	114.8939	.7178355	14.16952	89.66288	46.91589
#1	-.000973	.0002248	2.615870	.0038897	-.000011	-.001331
#2	-.001215	-.000003	2.618342	.0049008	-.003096	-.002347
#3	-.002185	.000080	2.584772	.0051224	-.002204	-.000947

Elem	Sr4077
Units	ppm
Avg	F -.009169
Stddev	.000089
%RSD	.9724803
#1	-.009270
#2	-.009135
#3	-.009101

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2624.855	53526.01	10567.54	1709.036	4341.979
Stddev	8.255	173.87	93.60	14.392	18.777
%RSD	.3144923	.3248410	.8857101	.8421336	.4324444
#1	2626.300	53416.13	10611.97	1705.425	4337.074
#2	2632.292	53726.47	10630.64	1724.890	4362.722
#3	2615.973	53435.43	10460.00	1696.793	4326.142

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: LLICV01 Acquired: 2/12/2025 13:08:41 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	**.0191891**	**.0398647**	**.0104011**	**.0184953**	**.0494807**	**.0959277**	**.0975336**
Stddev	.0017684	.0009733	.0010348	.0016858	.0001389	.0035229	.0012656
%RSD	9.215475	2.441545	9.948787	9.114987	.2806250	3.672493	1.297574
#1	.0201313	.0387475	.0104560	.0165796	.0494482	.0986929	.0969345
#2	.0202869	.0405293	.0114074	.0191539	.0496329	.0919612	.0989875
#3	.0171492	.0403173	.0093400	.0197524	.0493610	.0971291	.0966789

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0056826**	**.0057910**	**1.987164**	**.0102267**	**.0292892**	**.0219276**	**.1019190**
Stddev	.0000414	.0000223	.004268	.0001787	.0001935	.0003224	.0027482
%RSD	.7293938	.3852544	.2147800	1.746993	.6605369	1.470204	2.696415
#1	.0056676	.0058086	1.991645	.0101541	.0294939	.0218080	.0987830
#2	.0057294	.0057659	1.983146	.0100957	.0292643	.0216821	.1030669
#3	.0056507	.0057986	1.986701	.0104302	.0291094	.0222926	.1039072

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0198027**	**2.106620**	**.0392738**	**.0101674**	**2.085360**	**.0383759**	**.0422185**
Stddev	.0001621	.017300	.0001233	.0001469	.029523	.0013941	.0005755
%RSD	.8184119	.8212306	.3140185	1.444771	1.415724	3.632625	1.363272
#1	.0196416	2.099930	.0393115	.0101632	2.067594	.0367662	.0420237
#2	.0198007	2.093663	.0393739	.0100227	2.069046	.0391940	.0428661
#3	.0199657	2.126266	.0391361	.0103164	2.119440	.0391674	.0417656

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.090541**	**.0911275**	**.2034916**	**.0389169**	**.0379384**	**.3752869**	**.0197958**
Stddev	.040891	.0014702	.0009081	.0006035	.0005207	.0021914	.0016705
%RSD	1.956019	1.613363	.4462424	1.550688	1.372400	.5839199	8.438622
#1	2.070137	.0907136	.2027916	.0391349	.0375398	.3753214	.0204893
#2	2.063866	.0927603	.2031656	.0382347	.0385275	.3774609	.0178902
#3	2.137619	.0899086	.2045177	.0393810	.0377478	.3730785	.0210078

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: LLICV01 Acquired: 2/12/2025 13:08:41 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0178205	.0192866	.0186257
Stddev	.0019190	.0000417	.0000128
%RSD	10.76858	.2160075	.0684506
#1	.0157190	.0192405	.0186390
#2	.0194799	.0193215	.0186136
#3	.0182627	.0192979	.0186244

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2710.997	53836.11	10560.19	1751.018	4607.780
Stddev	3.013	259.57	74.93	7.090	9.737
%RSD	.1111230	.4821446	.7095583	.4049017	.2113059
#1	2708.536	53945.86	10524.46	1758.548	4597.078
#2	2714.357	54022.77	10509.80	1744.471	4610.146
#3	2710.097	53539.69	10646.29	1750.035	4616.115

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: ICB01 Acquired: 2/12/2025 13:12:59 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	**-.002774**	**.0015209**	**-.000053**	**-.001074**	**-.000465**	**-.005300**	**.0023076**
Stddev	.002327	.0014233	.001097	.001857	.000734	.001831	.0005716
%RSD	83.88476	93.57790	2085.216	172.9429	157.8816	34.55211	24.76908
#1	-.000146	.0002602	-.000164	.000866	.000342	-.004247	.0027436
#2	-.003605	.0030643	-.001090	-.001253	-.001094	-.007415	.0016605
#3	-.004572	.0012384	.001096	-.002835	-.000642	-.004238	.0025186

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000073**	**-.000080**	**-.000418**	**.0002141**	**.0000180**	**.0004674**	**.0027455**
Stddev	.0000525	.000091	.008631	.0001551	.0000644	.0001597	.0016252
%RSD	716.2667	113.7599	2065.522	72.46166	357.6053	34.15677	59.19441
#1	-.000018	-.000001	.009526	.0003905	.0000884	.0005665	.0010957
#2	-.000028	-.000059	-.004811	.0000991	-.000038	.0002832	.0027961
#3	.000068	-.000180	-.005968	.0001526	.000004	.0005525	.0043449

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000450**	**.0051087**	**.0001238**	**-.000021**	**-.015029**	**-.001727**	**.0001442**
Stddev	.000357	.0059325	.0002953	.000384	.003223	.000979	.0002553
%RSD	79.27219	116.1274	238.5815	1831.761	21.44664	56.65351	177.0858
#1	-.000809	.0106068	-.000215	.000422	-.012929	-.000601	.0003899
#2	-.000445	.0058984	.000324	-.000233	-.018740	-.002370	.0001624
#3	-.000096	-.001179	.000263	-.000252	-.013418	-.002210	-.000120

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.021705**	**-.006173**	**.0000183**	**-.000104**	**-.000955**	**.0028320**	**.0002827**
Stddev	.018715	.001109	.0002745	.000419	.000409	.0038289	.0016840
%RSD	86.22416	17.97209	1499.517	402.6165	42.86271	135.1997	595.6921
#1	-.000103	-.006884	.0003096	.000075	-.001423	.0065275	.0019889
#2	-.033029	-.006741	-.000019	.000196	-.000665	-.001118	-.001378
#3	-.031983	-.004895	-.000236	-.000583	-.000777	.003086	.000237

Sample Name: ICB01 Acquired: 2/12/2025 13:12:59 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0027125	.0008010	-.000037
Stddev	.0033090	.0005175	.000045
%RSD	121.9924	64.60558	119.8200
#1	.0026790	.0012872	-.000001
#2	.0060381	.0002570	-.000024
#3	-.000580	.0008589	-.000087

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2762.306	54626.52	10345.47	1789.340	4759.964
Stddev	8.805	191.23	6.37	16.089	17.754
%RSD	.3187716	.3500643	.0615830	.8991479	.3729887
#1	2759.352	54447.04	10351.08	1770.871	4747.660
#2	2772.208	54604.88	10346.80	1800.310	4780.317
#3	2755.357	54827.65	10338.55	1796.840	4751.915

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CRI01 Acquired: 2/12/2025 13:17:21 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	**.0197550**	**.0407957**	**.0117777**	**.0195479**	**.0511604**	**.0911852**	**.0999547**
Stddev	.0004838	.0012780	.0010588	.0009046	.0007652	.0039448	.0006021
%RSD	2.449094	3.132789	8.990212	4.627479	1.495620	4.326168	.6023200
#1	.0195869	.0419598	.0105688	.0198077	.0515407	.0912043	.1005167
#2	.0193777	.0394281	.0122236	.0185419	.0516609	.0872308	.1000280
#3	.0203005	.0409991	.0125406	.0202942	.0502796	.0951204	.0993193

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0057410**	**.0058875**	**2.026383**	**.0101235**	**.0300450**	**.0222327**	**.1015845**
Stddev	.0000654	.0000742	.016510	.0003079	.0000888	.0003252	.0026702
%RSD	1.139750	1.260666	.8147369	3.041556	.2954924	1.462668	2.628533
#1	.0057086	.0058529	2.042975	.0102599	.0300856	.0223294	.0989803
#2	.0058163	.0059727	2.026217	.0097709	.0301063	.0218702	.1014571
#3	.0056981	.0058369	2.009956	.0103396	.0299432	.0224986	.1043161

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0201165**	**2.139474**	**.0403921**	**.0103561**	**2.066558**	**.0391654**	**.0430061**
Stddev	.0004621	.015445	.0003459	.0002884	.010889	.0020284	.0005685
%RSD	2.297289	.7218983	.8564374	2.784494	.5268971	5.178986	1.321855
#1	.0206389	2.140192	.0403341	.0106860	2.057656	.0393485	.0423652
#2	.0197612	2.123683	.0400788	.0102306	2.063320	.0410960	.0432038
#3	.0199492	2.154548	.0407633	.0101518	2.078699	.0370517	.0434493

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.070387**	**.0937371**	**.2068810**	**.0398425**	**.0386291**	**.3768867**	**.0175898**
Stddev	.024455	.0017310	.0002150	.0007445	.0010466	.0047193	.0012231
%RSD	1.181159	1.846697	.1039462	1.868584	2.709415	1.252167	6.953503
#1	2.093342	.0948214	.2068890	.0390149	.0398331	.3783026	.0164659
#2	2.073151	.0946492	.2066621	.0404578	.0379369	.3716216	.0174111
#3	2.044667	.0917408	.2070919	.0400548	.0381173	.3807359	.0188924

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CRI01 Acquired: 2/12/2025 13:17:21 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0197041	.0192751	.0188721
Stddev	.0041590	.0010481	.0000164
%RSD	21.10714	5.437654	.0869053
#1	.0199407	.0184877	.0188738
#2	.0154319	.0204647	.0188876
#3	.0237397	.0188728	.0188549

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2687.678	54615.93	10415.41	1775.319	4532.279
Stddev	4.075	69.20	46.45	4.516	8.088
%RSD	.1516279	.1267064	.4459481	.2543679	.1784618
#1	2689.806	54575.13	10363.07	1774.555	4535.106
#2	2682.979	54695.83	10431.46	1780.168	4523.156
#3	2690.249	54576.83	10451.71	1771.233	4538.574

Sample Name: ICSA01 Acquired: 2/12/2025 13:21:39 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.004342**	**-.000098**	**.0078796**	**-.016199**	**.0008396**	**245.2097**
Stddev	.002641	.001181	.0015880	.000985	.0016315	.5297
%RSD	60.83380	1203.447	20.15388	6.080116	194.3320	.2160031
#1	-.005994	-.000291	.0087438	-.016577	.0012678	244.7104
#2	-.001296	-.001171	.0060468	-.015081	-.000963	245.7652
#3	-.005736	.001167	.0088480	-.016939	.002214	245.1534

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0066852**	**.0028235**	**-.003203**	**233.7925**	**.0590568**	**.0021536**
Stddev	.0008422	.0001246	.000157	.5340	.0007159	.0002321
%RSD	12.59830	4.413641	4.914411	.2284182	1.212257	10.77853
#1	.0071348	.0028575	-.003365	233.6939	.0596785	.0022823
#2	.0072073	.0029277	-.003050	234.3689	.0582741	.0018856
#3	.0057136	.0026855	-.003194	233.3146	.0592179	.0022929

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0077274**	**105.5956**	**-.000857**	**252.1987**	**.0040368**	**-.005313**
Stddev	.0004027	.2939	.000510	.9676	.0005447	.000586
%RSD	5.211544	.2782956	59.56624	.3836523	13.49226	11.03828
#1	.0072884	105.8990	-.001360	251.6299	.0040894	-.004826
#2	.0078140	105.5754	-.000870	253.3159	.0045533	-.005149
#3	.0080797	105.3123	-.000340	251.6503	.0034678	-.005964

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0503810**	**.0075225**	**.0045351**	**.0109361**	**-.020202**	**-.000262**
Stddev	.0089774	.0005760	.0003082	.0350038	.001110	.000272
%RSD	17.81900	7.657191	6.797015	320.0743	5.496481	103.8808
#1	.0422388	.0070314	.0043275	-.013439	-.019785	-.000258
#2	.0600084	.0081565	.0048893	.051046	-.019361	-.000536
#3	.0488959	.0073796	.0043885	-.004799	-.021461	.000008

Sample Name: ICSA01 Acquired: 2/12/2025 13:21:39 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	-.003573	-.003650	.0211600	.0017486	F -.023216	F -.036362
Stddev	.001059	.001158	.0025701	.0012728	.004826	.001573
%RSD	29.63539	31.73969	12.14599	72.79110	20.78900	4.327062
#1	-.004785	-.002319	.0191211	.0003950	-.017757	-.034553
#2	-.003108	-.004195	.0240470	.0029214	-.026916	-.037414
#3	-.002826	-.004435	.0203120	.0019294	-.024975	-.037119

Elem	Sr4077
Units	ppm
Avg	-.009719
Stddev	.000479
%RSD	4.931866
#1	-.010269
#2	-.009492
#3	-.009395

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2371.798	47745.12	10066.80	1540.024	3678.305
Stddev	5.671	19.83	19.84	5.770	5.046
%RSD	.2391144	.0415366	.1970614	.3746843	.1371831
#1	2370.309	47749.00	10083.93	1546.271	3678.964
#2	2378.065	47723.63	10045.07	1538.909	3682.989
#3	2367.020	47762.72	10071.40	1534.893	3672.962

Sample Name: ICSAB01 Acquired: 2/12/2025 13:25:53 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1057654**	**.0895215**	**.0564936**	**.0337957**	**.6077986**	**241.4372**
Stddev	.0042570	.0050341	.0015596	.0034025	.0034289	.2130
%RSD	4.024976	5.623346	2.760639	10.06779	.5641525	.0882179
#1	.1019491	.0935889	.0554617	.0323596	.6074155	241.5659
#2	.1049905	.0838913	.0582877	.0376808	.6114030	241.5544
#3	.1103567	.0910841	.0557314	.0313467	.6045773	241.1913

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4819955**	**.4679601**	**1.002705**	**230.8189**	**.5714924**	**.5089307**
Stddev	.0015940	.0020507	.000901	.0464	.0017513	.0003545
%RSD	.3307086	.4382256	.0898155	.0201170	.3064482	.0696635
#1	.4836077	.4686656	1.003303	230.8000	.5735118	.5088497
#2	.4819584	.4656497	1.001669	230.8718	.5705753	.5086238
#3	.4804204	.4695649	1.003142	230.7849	.5703901	.5093188

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4981281**	**104.5260**	**.4675410**	**248.2285**	**1.008608**	**.2132944**
Stddev	.0012064	.4920	.0003300	.2117	.001961	.0004800
%RSD	.2421868	.4707098	.0705750	.0852702	.1944167	.2250283
#1	.4968712	104.5433	.4674214	248.0919	1.010573	.2137503
#2	.4982363	105.0092	.4672875	248.1213	1.006651	.2133394
#3	.4992767	104.0256	.4679141	248.4724	1.008600	.2127935

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0500683**	**.4678635**	**1.045311**	**-.009511**	**.9079815**	**1.072126**
Stddev	.0047405	.0002151	.001134	.028126	.0036157	.000195
%RSD	9.468039	.0459731	.1085055	295.7188	.3982086	.0181895
#1	.0453479	.4679618	1.046614	-.038545	.9043888	1.072183
#2	.0548286	.4680119	1.044768	.017609	.9079359	1.072286
#3	.0500283	.4676169	1.044550	-.007597	.9116197	1.071909

Sample Name: ICSAB01 Acquired: 2/12/2025 13:25:53 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.071838	.9987893	.9744944	F .0083676	F -.018147	F -.035083
Stddev	.000884	.0029030	.0067022	.0020042	.001587	.000399
%RSD	.0824612	.2906510	.6877649	23.95155	8.746243	1.136129
#1	1.072689	1.001051	.9671426	.0104774	-.018363	-.035502
#2	1.070925	.999801	.9760766	.0081361	-.019615	-.034709
#3	1.071900	.995516	.9802639	.0064892	-.016462	-.035037

Elem	Sr4077
Units	ppm
Avg	F -.011144
Stddev	.000390
%RSD	3.500574
#1	-.011192
#2	-.011508
#3	-.010732

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2378.623	48301.92	10201.48	1545.259	3708.857
Stddev	2.335	83.24	33.53	3.213	2.175
%RSD	.0981829	.1723404	.3287064	.2079284	.0586323
#1	2379.754	48311.71	10206.72	1548.550	3707.858
#2	2375.938	48214.21	10232.09	1542.130	3711.351
#3	2380.178	48379.83	10165.64	1545.099	3707.361

Sample Name: ICSADLX20 Acquired: 2/12/2025 13:31:01 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	**-.001077**	**.0009875**	**-.000332**	**-.004756**	**-.000514**	**12.17125**	**-.001221**
Stddev	.002884	.0017143	.000481	.002782	.000986	.01513	.000652
%RSD	267.8123	173.5944	144.9181	58.49711	191.8970	.1242819	53.37972
#1	-.004382	.0029308	-.000162	-.003268	-.000693	12.17955	-.000867
#2	.000223	-.000310	-.000875	-.003034	-.001399	12.18042	-.001973
#3	.000928	.000342	.000041	-.007965	.000550	12.15379	-.000822

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002442**	**-.000349**	**12.18562**	**.0030033**	**.0000821**	**.0007233**	**5.211674**
Stddev	.0000374	.000053	.04342	.0003907	.0001070	.0001308	.032706
%RSD	15.31612	15.19272	.3562950	13.00912	130.3737	18.08814	.6275565
#1	.0002156	-.000307	12.20387	.0034372	.0000966	.0007190	5.203701
#2	.0002304	-.000332	12.21694	.0026794	-.000031	.0005947	5.183692
#3	.0002865	-.000409	12.13606	.0028933	.000181	.0008563	5.247630

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000194**	**12.53301**	**.0003199**	**-.000337**	**.0175600**	**-.001746**	**.0002708**
Stddev	.000293	.04457	.0003250	.000157	.0028587	.000594	.0000976
%RSD	151.4551	.3556024	101.5930	46.43082	16.27943	34.01885	36.05587
#1	-.000504	12.56906	.0006810	-.000393	.0159267	-.001315	.0003425
#2	-.000156	12.54678	.0002281	-.000458	.0158924	-.001499	.0001596
#3	.000079	12.48318	.0000507	-.000160	.0208608	-.002423	.0003102

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0130949**	**-.005286**	**.0000995**	**-.001645**	**-.000571**	**.0022725**	**.0003250**
Stddev	.0040118	.000183	.0002802	.000211	.000322	.0028026	.0021926
%RSD	30.63662	3.467661	281.6644	12.83394	56.44626	123.3266	674.6638
#1	.0116308	-.005458	.0003970	-.001416	-.000861	.0042337	-.001486
#2	.0176332	-.005093	.0000607	-.001689	-.000627	-.000937	-.000301
#3	.0100208	-.005306	-.000159	-.001831	-.000224	.003521	.002763

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: ICSADLX20 Acquired: 2/12/2025 13:31:01 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSADLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0006850	-.002948	-.000277
Stddev	.0013458	.000921	.000079
%RSD	196.4660	31.24718	28.42166
#1	-.000477	-.002294	-.000227
#2	.000373	-.004002	-.000236
#3	.002159	-.002548	-.000368

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2656.004	53740.28	10404.11	1731.164	4434.503
Stddev	4.801	78.89	83.84	6.499	4.448
%RSD	.1807642	.1467933	.8058131	.3753841	.1003150
#1	2661.439	53663.49	10339.88	1730.744	4438.606
#2	2652.339	53821.11	10373.50	1724.885	4435.128
#3	2654.235	53736.23	10498.95	1737.862	4429.775

Sample Name: ICSABDLX20 Acquired: 2/12/2025 13:35:19 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	.0041266	.0031957	.0022821	-.000838	.0288301	12.05874	.0269742
Stddev	.0020341	.0021819	.0009629	.002307	.0012569	.03153	.0007711
%RSD	49.29091	68.27607	42.19260	275.2437	4.359728	.2614427	2.858635
#1	.0037447	.0006819	.0013893	-.001461	.0296200	12.09451	.0278290
#2	.0023106	.0045985	.0021547	.001717	.0294897	12.04672	.0263308
#3	.0063246	.0043066	.0033024	-.002770	.0273807	12.03500	.0267629

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0247866	.0496276	12.18614	.0288617	.0250989	.0260577	5.297049
Stddev	.0001927	.0001114	.05929	.0003485	.0000318	.0001136	.037097
%RSD	.7774996	.2245154	.4865560	1.207573	.1266264	.4359206	.7003421
#1	.0250006	.0496857	12.25452	.0285081	.0251339	.0259731	5.329294
#2	.0247324	.0494991	12.15485	.0292050	.0250719	.0260130	5.256505
#3	.0246269	.0496980	12.14904	.0288721	.0250907	.0261868	5.305349

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0250100	12.51317	.0504797	.0102344	.0156233	.0240350	.0526349
Stddev	.0002186	.03368	.0001093	.0001206	.0033418	.0005195	.0004379
%RSD	.8738374	.2691462	.2166105	1.178155	21.38977	2.161521	.8319341
#1	.0252615	12.55107	.0503542	.0100952	.0150216	.0237851	.0521958
#2	.0249022	12.48667	.0505545	.0103045	.0192250	.0246322	.0526375
#3	.0248663	12.50176	.0505304	.0103035	.0126232	.0236876	.0530715

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0276267	.0430439	.0538414	.0514289	.0518208	.0526553	.0001532
Stddev	.0254211	.0004003	.0002572	.0005966	.0000729	.0089238	.0065307
%RSD	92.01647	.9298627	.4776454	1.159972	.1407051	16.94765	4263.933
#1	.0017209	.0433613	.0535713	.0517059	.0517502	.0543695	-.006311
#2	.0525336	.0431763	.0538696	.0507442	.0518958	.0605976	.006749
#3	.0286254	.0425943	.0540833	.0518366	.0518165	.0429987	.000021

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: ICSABDLX20 Acquired: 2/12/2025 13:35:19 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSABDLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0013908	-.002066	-.000545
Stddev	.0022678	.000270	.000070
%RSD	163.0553	13.08809	12.80478
#1	.0039098	-.002265	-.000593
#2	.0007508	-.001758	-.000465
#3	-.000488	-.002175	-.000578

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2702.083	53396.16	10469.34	1756.013	4508.880
Stddev	9.458	196.90	11.42	5.571	8.283
%RSD	.3500404	.3687466	.1090732	.3172580	.1836933
#1	2708.983	53470.77	10458.64	1761.866	4516.980
#2	2705.966	53544.85	10481.36	1755.398	4509.234
#3	2691.302	53172.87	10468.01	1750.775	4500.426

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCV01 Acquired: 2/12/2025 13:39:35 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.979199**	**5.015870**	**4.996297**	**4.977374**	**4.948560**	**9.844909**	**10.14323**
Stddev	.018302	.025106	.007483	.015608	.021653	.030521	.11850
%RSD	.3675772	.5005251	.1497782	.3135704	.4375646	.3100211	1.168241
#1	4.962660	5.044854	4.994156	4.975573	4.939543	9.843888	10.05087
#2	4.976074	5.000916	4.990118	4.962745	4.932872	9.814911	10.10198
#3	4.998862	5.001839	5.004618	4.993804	4.973264	9.875928	10.27684

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2458351**	**2.502484**	**25.04125**	**.9986793**	**2.490673**	**1.259238**	**5.105103**
Stddev	.0006294	.003564	.07618	.0011940	.003224	.003461	.004580
%RSD	.2560323	.1424378	.3042200	.1195559	.1294233	.2748520	.0897193
#1	.2452601	2.499274	24.98676	.9973266	2.488648	1.258238	5.108550
#2	.2457377	2.501858	25.00870	.9991248	2.488981	1.256388	5.099906
#3	.2465076	2.506320	25.12830	.9995864	2.494390	1.263089	5.106853

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.520623**	**24.99617**	**2.500791**	**1.242307**	**25.24839**	**2.486566**	**2.472735**
Stddev	.010974	.11341	.002785	.000995	.04895	.006664	.005778
%RSD	.4353559	.4536922	.1113458	.0800782	.1938730	.2679959	.2336813
#1	2.515802	24.90881	2.498869	1.242725	25.30462	2.480484	2.472398
#2	2.512885	24.95538	2.499521	1.241172	25.21533	2.485524	2.467133
#3	2.533182	25.12433	2.503985	1.243026	25.22522	2.493689	2.478675

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.11594**	**4.888976**	**4.976838**	**5.017397**	**4.995797**	**4.958997**	**5.110101**
Stddev	.04825	.010977	.012861	.005628	.009956	.008946	.013234
%RSD	.1921275	.2245346	.2584145	.1121794	.1992965	.1803906	.2589719
#1	25.16899	4.878199	4.976366	5.013993	4.994953	4.969242	5.124548
#2	25.10418	4.888586	4.964220	5.014305	4.986289	4.955016	5.098565
#3	25.07466	4.900143	4.989929	5.023894	5.006148	4.952733	5.107190

Sample Name: CCV01 Acquired: 2/12/2025 13:39:35 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.999938**	**5.024895**	**4.824326**
Stddev	.010236	.005622	.012240
%RSD	.2047202	.1118853	.2537145
#1	5.010360	5.023972	4.830613
#2	4.989899	5.019791	4.810220
#3	4.999557	5.030921	4.832145

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2555.741**	**52969.02**	**9742.045**	**1714.826**	**4103.695**
Stddev	6.780	78.01	44.470	2.253	5.356
%RSD	.2652766	.1472759	.4564788	.1313689	.1305060
#1	2557.838	52995.06	9773.375	1715.579	4106.440
#2	2561.225	53030.68	9761.613	1716.605	4107.121
#3	2548.161	52881.32	9691.146	1712.293	4097.523

Sample Name: CCB01 Acquired: 2/12/2025 13:43:46 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	**-.000137**	**.0014248**	**-.001136**	**-.002179**	**-.000149**	**-.003951**	**-.000549**
Stddev	.001845	.0010818	.000612	.000589	.000695	.001944	.001410
%RSD	1350.091	75.92318	53.88295	27.04316	466.7466	49.18894	256.6840
#1	.001092	.0009539	-.001545	-.002632	-.000945	-.001836	-.001964
#2	.000757	.0026623	-.000432	-.001513	.000158	-.004358	-.000539
#3	-.002259	.0006584	-.001431	-.002392	.000340	-.005659	.000855

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000418**	**.0000173**	**-.000771**	**-.000293**	**.0001006**	**.0001412**	**-.003629**
Stddev	.0000542	.0000300	.002884	.000502	.0001732	.0002161	.001992
%RSD	129.4923	172.9630	374.0406	171.1782	172.0566	153.1097	54.87676
#1	.0000985	.0000345	.001264	-.000604	.0002862	.0003907	-.001336
#2	.0000364	-.000017	-.004071	-.000563	.0000724	.0000215	-.004921
#3	-.000009	.000035	.000495	.000286	-.000057	.0000114	-.004632

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000455**	**-.012261**	**.0001349**	**-.000101**	**.0124887**	**.0010306**	**-.000283**
Stddev	.000661	.002183	.0001439	.000226	.0112343	.0012276	.000298
%RSD	145.4096	17.80644	106.7031	224.6238	89.95577	119.1061	105.0403
#1	-.001168	-.014666	.0002236	.000055	-.000438	.0008750	-.000095
#2	.000138	-.011713	.0002121	-.000360	.019890	.0023286	-.000129
#3	-.000334	-.010403	-.000031	.000003	.018015	-.000112	-.000627

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0141308**	**.0050808**	**.0001052**	**.0003247**	**-.000432**	**.0020232**	**-.001125**
Stddev	.0069864	.0012622	.0002390	.0001928	.000683	.0112946	.000216
%RSD	49.44071	24.84298	227.2367	59.37460	158.0057	558.2532	19.21032
#1	.0135433	.0065190	.0002658	.0002611	-.000907	.0095853	-.001365
#2	.0074568	.0041570	.0002193	.0005413	.000351	-.010960	-.001063
#3	.0213925	.0045665	-.000170	.0001717	-.000740	.007444	-.000947

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCB01 Acquired: 2/12/2025 13:43:46 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.000452	-.000044	.0000271
Stddev	.000998	.000952	.0000305
%RSD	220.9005	2187.429	112.3626
#1	.000583	-.001138	-.000006
#2	-.001408	.000585	.000032
#3	-.000530	.000422	.000055

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2682.012	55349.15	10315.79	1770.779	4567.435
Stddev	2.487	193.06	27.03	6.996	6.967
%RSD	.0927310	.3488037	.2620398	.3950594	.1525341
#1	2679.239	55298.82	10346.98	1765.352	4559.626
#2	2684.046	55562.39	10299.20	1778.674	4573.012
#3	2682.751	55186.24	10301.19	1768.311	4569.668

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1341-01 Acquired: 2/12/2025 13:48:07 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0990256**	**-.030931**	**1.726874**	**-.040818**	**.0048805**	**122.8157**	**.9926275**
Stddev	.0019706	.001032	.002704	.003130	.0021444	.2120	.0017842
%RSD	1.989938	3.337223	.1565625	7.669337	43.93772	.1725905	.1797420
#1	.1004822	-.031330	1.723756	-.042801	.0024937	122.8096	.9926620
#2	.0998112	-.029759	1.728302	-.037209	.0055031	123.0306	.9908263
#3	.0967834	-.031704	1.728563	-.042445	.0066446	122.6068	.9943941

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0112389**	**-.003104**	**39.12257**	**.5374521**	**.2336224**	**.7088340**	**272.0169**
Stddev	.0002963	.000283	.08179	.0025908	.0002855	.0031003	1.8535
%RSD	2.636600	9.115389	.2090608	.4820588	.1221900	.4373776	.6813961
#1	.0110078	-.003153	39.10224	.5344612	.2333103	.7102709	271.7290
#2	.0115729	-.002799	39.21261	.5388908	.2336863	.7109552	270.3243
#3	.0111359	-.003358	39.05286	.5390044	.2338704	.7052760	273.9976

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.220846**	**29.24889**	**.7496379**	**-.009278**	**1.383144**	**.4631098**	**2.229185**
Stddev	.005231	.12706	.0008463	.000345	.013779	.0030852	.005477
%RSD	.1239228	.4344234	.1128907	3.716470	.9961947	.6661979	.2456980
#1	4.218837	29.17794	.7504998	-.009183	1.389410	.4631142	2.222963
#2	4.226783	29.39558	.7488082	-.009661	1.367346	.4661929	2.231314
#3	4.216918	29.17315	.7496058	-.008992	1.392676	.4600224	2.233278

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.882662**	**.0113553**	**.0205030**	**.2156478**	**3.397845**	**3.882331**	**6.969334**
Stddev	.053394	.0057862	.0000474	.0014061	.005833	.024410	.003504
%RSD	.5402824	50.95572	.2313007	.6520127	.1716729	.6287578	.0502844
#1	9.876458	.0120921	.0204847	.2145944	3.404459	3.858381	6.971509
#2	9.832641	.0052360	.0205568	.2172444	3.395644	3.881435	6.965291
#3	9.938887	.0167377	.0204674	.2151046	3.393434	3.907177	6.971202

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1341-01 Acquired: 2/12/2025 13:48:07 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**2.694210**	**.1365779**	**-.048826**
Stddev	.000680	.0003556	.002070
%RSD	.0252232	.2603760	4.239916
#1	2.694981	.1362697	-.047960
#2	2.693950	.1364970	-.047328
#3	2.693699	.1369670	-.051188

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2847.555**	**58845.17**	**12103.09**	**1893.252**	**4043.754**
Stddev	3.058	225.08	91.30	3.605	1.714
%RSD	.1073799	.3825002	.7543855	.1904143	.0423943
#1	2844.497	59071.24	12160.05	1896.500	4042.083
#2	2847.556	58843.18	11997.78	1893.881	4045.509
#3	2850.613	58621.08	12151.43	1889.373	4043.669

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-01 Acquired: 2/12/2025 13:52:13 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0499551	-.017985	.9400911	-.044964	.0053044	183.1863	2.381589
Stddev	.0041059	.002640	.0051014	.002230	.0018026	.1253	.004940
%RSD	8.219228	14.68056	.5426538	4.959825	33.98348	.0683785	.2074338
#1	.0544849	-.015449	.9347126	-.042863	.0071720	183.2116	2.386205
#2	.0464780	-.017786	.9407000	-.044725	.0051664	183.0504	2.376379
#3	.0489026	-.020719	.9448608	-.047304	.0035747	183.2970	2.382184

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0132335	-.013241	28.82560	.2852644	.1254652	.3610002	319.9373
Stddev	.0001845	.000169	.05782	.0011162	.0007312	.0018219	.7535
%RSD	1.394503	1.277706	.2005798	.3912840	.5827927	.5046739	.2355034
#1	.0132207	-.013414	28.87967	.2839880	.1246451	.3597058	319.1174
#2	.0130557	-.013235	28.76465	.2857477	.1257014	.3602112	320.5992
#3	.0134241	-.013075	28.83249	.2860575	.1260491	.3630836	320.0953

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.39913	52.42974	.2783133	-.014957	6.431751	.3960469	1.101417
Stddev	.02382	.16330	.0018532	.000469	.034391	.0010615	.005989
%RSD	.1654514	.3114589	.6658607	3.134699	.5347004	.2680165	.5437646
#1	14.41130	52.32194	.2764047	-.015256	6.402925	.3952122	1.097937
#2	14.37168	52.34967	.2784296	-.014416	6.469818	.3956869	1.097983
#3	14.41442	52.61762	.2801056	-.015198	6.422510	.3972415	1.108333

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.05111	-.011179	.0056225	.0207434	2.086077	4.063027	3.988866
Stddev	.03134	.000658	.0004074	.0004589	.002908	.023997	.020388
%RSD	.3117639	5.889799	7.246535	2.212041	.1394192	.5906166	.5111255
#1	10.07266	-.011596	.0051631	.0202137	2.088365	4.035348	3.966438
#2	10.01516	-.010420	.0057642	.0210198	2.082804	4.075755	3.993881
#3	10.06550	-.011522	.0059401	.0209967	2.087062	4.077979	4.006278

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-01 Acquired: 2/12/2025 13:52:13 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.9858585	.3159922	-.009913
Stddev	.0017080	.0005143	.000978
%RSD	.1732476	.1627667	9.871257
#1	.9846636	.3165612	-.008838
#2	.9878147	.3158551	-.010753
#3	.9850971	.3155603	-.010146

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2767.762	56299.60	11649.01	1822.497	4027.404
Stddev	12.171	291.66	41.42	9.338	21.049
%RSD	.4397474	.5180439	.3556034	.5123563	.5226369
#1	2777.251	56630.17	11666.85	1828.616	4046.993
#2	2771.995	56190.06	11678.52	1827.125	4030.070
#3	2754.039	56078.58	11601.65	1811.749	4005.149

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-05 Acquired: 2/12/2025 13:56:18 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0548402**	**-.047824**	**.5806588**	**-.087579**	**.0077284**	**241.7012**	**1.026390**
Stddev	.0015271	.005892	.0020052	.000713	.0016356	2.7123	.004274
%RSD	2.784645	12.32077	.3453358	.8136278	21.16390	1.122175	.4163632
#1	.0561370	-.054616	.5822777	-.088401	.0058648	244.0167	1.027324
#2	.0531570	-.044774	.5812830	-.087203	.0083949	242.3696	1.030118
#3	.0552265	-.044082	.5784157	-.087134	.0089256	238.7171	1.021726

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0198315**	**-.020901**	**22.33375**	**.4067978**	**.2089562**	**.5077293**	**545.5361**
Stddev	.0002298	.001053	.11983	.0007688	.0006543	.0043724	5.0210
%RSD	1.158506	5.037508	.5365335	.1889912	.3131341	.8611623	.9203776
#1	.0200920	-.021163	22.37074	.4074475	.2092694	.5055656	546.5355
#2	.0197449	-.019741	22.43072	.4059490	.2082041	.5127617	540.0906
#3	.0196577	-.021797	22.19978	.4069969	.2093950	.5048607	549.9823

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.159274**	**102.4444**	**.4441815**	**-.035319**	**4.992618**	**.5897103**	**1.841175**
Stddev	.023017	.0918	.0009166	.000822	.015282	.0010899	.008716
%RSD	.3214951	.0896235	.2063517	2.327706	.3060931	.1848221	.4734159
#1	7.164385	102.5270	.4431750	-.035454	4.992148	.5885063	1.841375
#2	7.179305	102.4606	.4444016	-.036065	4.977576	.5906295	1.832360
#3	7.134131	102.3456	.4449681	-.034437	5.008129	.5899951	1.849790

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**28.88562**	**-.008527**	**.0120203**	**.0116095**	**4.248049**	**3.498867**	**8.919870**
Stddev	.06609	.006062	.0001895	.0003072	.013335	.012863	.035380
%RSD	.2287951	71.08896	1.576273	2.646335	.3139056	.3676430	.3966436
#1	28.82111	-.007263	.0121808	.0112614	4.247339	3.492415	8.922205
#2	28.95318	-.015121	.0118113	.0117245	4.261725	3.490508	8.883381
#3	28.88256	-.003197	.0120688	.0118427	4.235083	3.513680	8.954025

Sample Name: Q1343-05 Acquired: 2/12/2025 13:56:18 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.8054800	.5696289	-.398561
Stddev	.0035886	.0031934	.004918
%RSD	.4455248	.5606100	1.234005
#1	.8015593	.5704589	-.399088
#2	.8086019	.5723253	-.393401
#3	.8062788	.5661024	-.403195

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2717.471	55221.19	11463.20	1785.178	3935.899
Stddev	1.824	225.57	33.83	8.016	5.223
%RSD	.0671275	.4084915	.2951564	.4490440	.1327066
#1	2716.890	55138.17	11424.71	1778.089	3933.396
#2	2716.009	55476.51	11476.62	1793.877	3932.399
#3	2719.515	55048.89	11488.26	1783.568	3941.903

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-09 Acquired: 2/12/2025 14:00:39 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0282931**	**-.009811**	**.6150724**	**-.023543**	**-.000158**	**119.6231**	**1.361074**
Stddev	.0016255	.003406	.0046376	.000844	.000511	.0870	.003595
%RSD	5.745058	34.71750	.7539855	3.583949	323.6299	.0727010	.2641568
#1	.0264163	-.006083	.6145645	-.024488	.000365	119.5489	1.365216
#2	.0292493	-.010589	.6107098	-.023276	-.000657	119.6016	1.358755
#3	.0292136	-.012760	.6199431	-.022865	-.000183	119.7188	1.359252

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0091038**	**-.008437**	**19.87952**	**.1559840**	**.0765084**	**.1955913**	**173.6241**
Stddev	.0000201	.000340	.04293	.0008493	.0004712	.0015186	.7222
%RSD	.2206083	4.029961	.2159701	.5444681	.6159249	.7764310	.4159453
#1	.0091088	-.008570	19.87689	.1564588	.0763644	.1944677	174.4563
#2	.0091209	-.008690	19.83796	.1550035	.0761260	.1949871	173.1617
#3	.0090817	-.008050	19.92371	.1564898	.0770349	.1973190	173.2543

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.233389**	**24.02550**	**.1317487**	**-.008310**	**10.83452**	**.2682083**	**.5067224**
Stddev	.004388	.12492	.0011351	.000303	.04944	.0021561	.0008590
%RSD	.1357098	.5199377	.8615936	3.647092	.4562814	.8039028	.1695299
#1	3.236630	23.95727	.1322841	-.008065	10.87303	.2699894	.5059242
#2	3.228396	23.94955	.1304449	-.008649	10.85175	.2658112	.5066114
#3	3.235142	24.16967	.1325171	-.008216	10.77878	.2688243	.5076315

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.558782**	**-.006385**	**.0034684**	**.0265421**	**.6883457**	**5.429896**	**3.980435**
Stddev	.019769	.002144	.0002053	.0000979	.0020471	.011479	.025184
%RSD	.4336549	33.57788	5.917893	.3687450	.2973894	.2114124	.6327031
#1	4.559827	-.004529	.0036873	.0266539	.6859823	5.443147	3.975318
#2	4.578008	-.008731	.0034378	.0264720	.6895669	5.423541	3.958201
#3	4.538511	-.005894	.0032802	.0265005	.6894877	5.422999	4.007784

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-09 Acquired: 2/12/2025 14:00:39 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.258544	.1793572	-.012667
Stddev	.007125	.0010101	.000865
%RSD	.5661366	.5631588	6.827851
#1	1.257774	.1804169	-.013664
#2	1.251836	.1792495	-.012110
#3	1.266023	.1784054	-.012228

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2900.617	58155.47	11810.64	1919.768	4203.792
Stddev	2.541	140.76	66.58	8.497	9.771
%RSD	.0875933	.2420381	.5637508	.4426119	.2324312
#1	2900.519	58169.25	11856.95	1924.172	4204.602
#2	2903.206	58288.83	11840.63	1925.160	4213.133
#3	2898.127	58008.32	11734.33	1909.973	4193.642

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-09DUP Acquired: 2/12/2025 14:04:45 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0289352	-.013200	.6136832	-.023399	.0003285	118.6572	1.342286
Stddev	.0046021	.005017	.0029055	.003256	.0017862	.2471	.001674
%RSD	15.90502	38.00461	.4734558	13.91574	543.7101	.2082313	.1247229
#1	.0311063	-.018955	.6152250	-.023884	.0012397	118.5523	1.344197
#2	.0320501	-.009750	.6103318	-.019928	-.001730	118.4800	1.341078
#3	.0236491	-.010895	.6154929	-.026385	.001475	118.9395	1.341583

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0090927	-.008027	19.65002	.1554581	.0762017	.1962800	171.2913
Stddev	.0000549	.000230	.01272	.0006658	.0001047	.0016848	.6994
%RSD	.6042746	2.863660	.0647099	.4282927	.1373506	.8583507	.4082946
#1	.0090449	-.007822	19.64988	.1555436	.0760824	.1948511	171.1948
#2	.0090804	-.007982	19.63738	.1547537	.0762449	.1981377	170.6452
#3	.0091527	-.008275	19.66281	.1560770	.0762779	.1958512	172.0339

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.194195	23.79723	.1315086	-.008194	10.73504	.2681711	.5026194
Stddev	.010638	.02813	.0006684	.000464	.03756	.0024146	.0009655
%RSD	.3330520	.1182193	.5082462	5.660328	.3499193	.9003785	.1920968
#1	3.205978	23.76570	.1309697	-.008380	10.70197	.2707778	.5031670
#2	3.185295	23.81978	.1312995	-.007666	10.72727	.2660111	.5015046
#3	3.191313	23.80621	.1322565	-.008536	10.77588	.2677245	.5031866

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.509438	-.008251	.0033403	.0257003	.6846080	6.011490	3.970462
Stddev	.037339	.000919	.0000888	.0003568	.0020660	.007557	.002284
%RSD	.8280175	11.13481	2.659160	1.388419	.3017843	.1257087	.0575165
#1	4.466345	-.009159	.0034034	.0254044	.6838672	6.006065	3.972780
#2	4.529769	-.008273	.0032387	.0260966	.6830145	6.008284	3.970391
#3	4.532199	-.007322	.0033787	.0256000	.6869423	6.020122	3.968215

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-09DUP Acquired: 2/12/2025 14:04:45 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.268765	.1774112	-.011555
Stddev	.005836	.0009550	.000401
%RSD	.4599921	.5382985	3.472213
#1	1.270377	.1776888	-.011692
#2	1.262292	.1763481	-.011103
#3	1.273626	.1781966	-.011870

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2876.063	58236.49	11809.65	1918.515	4172.852
Stddev	11.081	314.97	37.75	7.169	9.753
%RSD	.3852846	.5408408	.3196487	.3736509	.2337233
#1	2887.080	58346.36	11793.10	1921.201	4182.968
#2	2876.189	58481.81	11852.85	1923.953	4172.079
#3	2864.919	57881.31	11783.00	1910.392	4163.508

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-09DLX5 Acquired: 2/12/2025 14:08:52 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0055116**	**-.000604**	**.1267829**	**-.007709**	**-.000013**	**26.08971**	**.2840532**
Stddev	.0034081	.002091	.0007743	.002346	.001163	.02836	.0012554
%RSD	61.83514	346.3274	.6107090	30.43479	9039.930	.1087060	.4419682
#1	.0026437	-.000469	.1258938	-.005071	-.001283	26.10209	.2848013
#2	.0092794	-.002758	.1271461	-.009561	.000244	26.05726	.2826038
#3	.0046117	.001416	.1273088	-.008495	.001001	26.10978	.2847545

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0021331**	**-.002368**	**4.386227**	**.0348654**	**.0155492**	**.0471134**	**36.98050**
Stddev	.0000230	.000059	.014439	.0000243	.0001002	.0004301	.07152
%RSD	1.077038	2.499462	.3291875	.0696904	.6445218	.9128926	.1934082
#1	.0021189	-.002305	4.369560	.0348756	.0156647	.0472859	36.95350
#2	.0021209	-.002374	4.394948	.0348376	.0154844	.0474305	36.92641
#3	.0021596	-.002423	4.394171	.0348828	.0154986	.0466238	37.06159

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7078210**	**5.288390**	**.0270959**	**-.002230**	**2.287791**	**.0576673**	**.1132927**
Stddev	.0007388	.010567	.0000982	.000210	.012950	.0006821	.0010307
%RSD	.1043723	.1998225	.3624242	9.435352	.5660517	1.182830	.9097788
#1	.7073882	5.280513	.0271442	-.002026	2.284028	.0584187	.1136603
#2	.7074007	5.300399	.0271606	-.002446	2.277139	.0574960	.1121285
#3	.7086740	5.284257	.0269829	-.002217	2.302205	.0570872	.1140891

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9745393**	**-.008452**	**.0006891**	**.0056631**	**.1484309**	**1.254667**	**.8077919**
Stddev	.0151928	.000206	.0002575	.0004230	.0015327	.008038	.0018295
%RSD	1.558969	2.434467	37.36433	7.470004	1.032616	.6406614	.2264759
#1	.9784346	-.008232	.0009230	.0052769	.1498642	1.259529	.8056822
#2	.9577781	-.008482	.0007313	.0055972	.1486133	1.245389	.8087538
#3	.9874051	-.008640	.0004132	.0061152	.1468151	1.259084	.8089398

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-09DLX5 Acquired: 2/12/2025 14:08:52 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2578142	.0369797	-.000390
Stddev	.0027527	.0008503	.000073
%RSD	1.067712	2.299445	18.65860
#1	.2600804	.0362115	-.000349
#2	.2586112	.0368342	-.000346
#3	.2547509	.0378934	-.000474

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2685.409	54163.68	10764.49	1768.538	4352.459
Stddev	1.043	52.57	26.77	7.450	4.373
%RSD	.0388317	.0970605	.2487070	.4212759	.1004631
#1	2684.206	54132.81	10738.41	1769.552	4347.412
#2	2686.057	54224.38	10763.15	1760.633	4354.856
#3	2685.963	54133.85	10791.91	1775.430	4355.109

Sample Name: Q1343-09MS Acquired: 2/12/2025 14:13:09 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7308232**	**1.888039**	**1.636297**	**1.637096**	**.2869152**	**146.3807**
Stddev	.0036913	.003814	.003078	.000176	.0015814	.0737
%RSD	.5050810	.2020131	.1880934	.0107312	.5511614	.0503224
#1	.7309983	1.883698	1.633960	1.637128	.2883545	146.4135
#2	.7270475	1.890852	1.635147	1.637253	.2871688	146.2963
#3	.7344238	1.889569	1.639784	1.636906	.2852224	146.4322

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.592511**	**.1909988**	**.1917826**	**23.15808**	**.5384644**	**.2800313**
Stddev	.001608	.0004949	.0003943	.03188	.0008250	.0003052
%RSD	.1009855	.2591334	.2056106	.1376481	.1532105	.1089684
#1	1.594100	.1912237	.1921991	23.14243	.5377927	.2802212
#2	1.590884	.1904313	.1914150	23.13705	.5393853	.2796793
#3	1.592550	.1913413	.1917337	23.19476	.5382154	.2801934

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5337967**	**214.0133**	**5.907325**	**26.67885**	**.6444922**	**.0533131**
Stddev	.0014342	.8157	.011915	.04374	.0004864	.0007219
%RSD	.2686765	.3811535	.2016975	.1639490	.0754701	1.353994
#1	.5347987	213.0714	5.910681	26.72785	.6449649	.0524873
#2	.5321538	214.4790	5.894092	26.66499	.6439932	.0538241
#3	.5344375	214.4894	5.917202	26.64373	.6445186	.0536278

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**12.60411**	**.5307891**	**.6945997**	**12.70312**	**.0603522**	**.3638919**
Stddev	.04245	.0013277	.0026008	.05504	.0022731	.0005006
%RSD	.3368226	.2501455	.3744333	.4333130	3.766356	.1375748
#1	12.55959	.5296655	.6936564	12.67020	.0581272	.3633496
#2	12.64415	.5304477	.6975405	12.76667	.0602589	.3639894
#3	12.60858	.5322543	.6926022	12.67249	.0626705	.3643365

Sample Name: Q1343-09MS Acquired: 2/12/2025 14:13:09 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6440102	.8709989	4.402355	F 10.38046	1.364125	.3801708
Stddev	.0009329	.0018724	.036932	.00377	.005573	.0001523
%RSD	.1448658	.2149685	.8389222	.0362956	.4085621	.0400670
#1	.6450743	.8688601	4.377862	10.37798	1.370339	.3803318
#2	.6433323	.8723421	4.444835	10.38480	1.359568	.3801516
#3	.6436242	.8717946	4.384368	10.37861	1.362469	.3800290

Elem	Sr4077
Units	ppm
Avg	.1654123
Stddev	.0011154
%RSD	.6742826
#1	.1666961
#2	.1646818
#3	.1648589

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2771.045	57635.78	10586.51	1838.456	4029.059
Stddev	4.389	184.77	19.09	10.413	7.234
%RSD	.1583817	.3205812	.1802782	.5664264	.1795354
#1	2770.225	57848.35	10577.36	1850.449	4022.332
#2	2775.786	57513.73	10608.45	1833.210	4036.710
#3	2767.124	57545.25	10573.72	1831.708	4028.135

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-09MSD Acquired: 2/12/2025 14:17:09 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7237929**	**1.866695**	**1.618289**	**1.618846**	**.2821354**	**147.2251**
Stddev	.0029007	.004715	.005061	.008884	.0013539	.2765
%RSD	.4007676	.2525980	.3127585	.5487778	.4798712	.1878351
#1	.7255232	1.862684	1.623824	1.626958	.2832093	147.5412
#2	.7204441	1.871889	1.617145	1.609352	.2806145	147.0277
#3	.7254115	1.865512	1.613897	1.620228	.2825823	147.1065

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.660720**	**.1730842**	**.1849577**	**23.16992**	**.5336417**	**.2766845**
Stddev	.001558	.0007135	.0007239	.02507	.0006589	.0015538
%RSD	.0938150	.4122214	.3914048	.1081982	.1234755	.5615617
#1	1.661534	.1722674	.1857583	23.14184	.5330126	.2784706
#2	1.661703	.1735855	.1847657	23.17787	.5335856	.2756448
#3	1.658924	.1733998	.1843491	23.19005	.5343269	.2759381

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5043177**	**236.2572**	**5.991607**	**27.09552**	**.6369835**	**.0583725**
Stddev	.0012006	.3728	.006804	.07699	.0019977	.0001514
%RSD	.2380696	.1577854	.1135660	.2841385	.3136254	.2594519
#1	.5051747	236.4412	5.983750	27.01457	.6392002	.0585215
#2	.5029455	235.8281	5.995508	27.10417	.6353223	.0583772
#3	.5048331	236.5021	5.995563	27.16782	.6364280	.0582187

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.64028**	**.5400757**	**.6890299**	**14.35995**	**.1042222**	**.3588453**
Stddev	.12203	.0025982	.0007020	.08755	.0035150	.0007022
%RSD	.8334962	.4810765	.1018856	.6096895	3.372627	.1956716
#1	14.75817	.5389649	.6884405	14.45866	.1031731	.3595748
#2	14.51450	.5382176	.6898066	14.29167	.1013512	.3581741
#3	14.64818	.5430447	.6888425	14.32953	.1081424	.3587870

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-09MSD Acquired: 2/12/2025 14:17:09 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6357735	.8999909	5.459285	F 10.19868	1.340100	.3958207
Stddev	.0023402	.0029363	.033401	.03404	.005717	.0006653
%RSD	.3680869	.3262583	.6118166	.3337713	.4265794	.1680911
#1	.6381957	.8967011	5.490435	10.23542	1.344096	.3960928
#2	.6335250	.9023463	5.424015	10.16823	1.342653	.3950624
#3	.6355998	.9009252	5.463404	10.19237	1.333552	.3963068

Elem	Sr4077
Units	ppm
Avg	.1267767
Stddev	.0009670
%RSD	.7627856
#1	.1278930
#2	.1261952
#3	.1262419

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2784.294	57198.63	11654.26	1835.919	4047.145
Stddev	8.642	164.04	19.45	4.435	17.764
%RSD	.3103958	.2867948	.1669129	.2415851	.4389262
#1	2775.153	57030.49	11660.62	1830.993	4026.642
#2	2792.332	57358.24	11632.43	1839.595	4057.938
#3	2785.397	57207.14	11669.74	1837.168	4056.854

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-09A Acquired: 2/12/2025 14:21:10 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7111384**	**1.862488**	**1.607363**	**1.584807**	**.2760114**	**147.9601**
Stddev	.0065480	.005673	.003909	.005762	.0012701	.3025
%RSD	.9207807	.3045918	.2431675	.3635522	.4601624	.2044147
#1	.7035794	1.856515	1.603006	1.580408	.2771007	148.2334
#2	.7147647	1.863145	1.608522	1.582685	.2746163	147.6351
#3	.7150710	1.867804	1.610561	1.591329	.2763171	148.0117

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.682253**	**.1775223**	**.1834288**	**23.44679**	**.5353641**	**.2754882**
Stddev	.008793	.0006406	.0006235	.05542	.0001677	.0004361
%RSD	.5226661	.3608614	.3399295	.2363677	.0313231	.1583159
#1	1.691774	.1768035	.1827128	23.50903	.5355557	.2751316
#2	1.674440	.1780328	.1838527	23.40279	.5352923	.2753586
#3	1.680545	.1777307	.1837208	23.42854	.5352442	.2759745

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5025166**	**234.4588**	**6.089499**	**27.42032**	**.6332063**	**.0574573**
Stddev	.0026407	1.0961	.015388	.01704	.0006423	.0005532
%RSD	.5255037	.4674980	.2526935	.0621369	.1014378	.9628542
#1	.4996121	235.6867	6.100766	27.40109	.6324709	.0580805
#2	.5031650	233.5793	6.071967	27.43355	.6334903	.0570242
#3	.5047728	234.1102	6.095764	27.42631	.6336576	.0572671

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.32913**	**.5449019**	**.6906341**	**14.17134**	**.1032568**	**.3585703**
Stddev	.09655	.0022113	.0022371	.08952	.0014258	.0003244
%RSD	.6737901	.4058204	.3239124	.6317284	1.380796	.0904703
#1	14.43602	.5443461	.6916529	14.26924	.1048628	.3584178
#2	14.24825	.5430214	.6921804	14.09363	.1021402	.3583502
#3	14.30311	.5473381	.6880690	14.15116	.1027675	.3589428

Sample Name: Q1343-09A Acquired: 2/12/2025 14:21:10 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6311375	.9151236	5.779515	F 10.17250	1.302689	.3966422
Stddev	.0017537	.0028967	.046754	.03372	.003792	.0018685
%RSD	.2778684	.3165320	.8089558	.3314448	.2910825	.4710764
#1	.6308273	.9182895	5.823734	10.13447	1.300184	.3987462
#2	.6295596	.9126060	5.730583	10.18432	1.300831	.3951766
#3	.6330256	.9144754	5.784228	10.19872	1.307052	.3960037

Elem	Sr4077
Units	ppm
Avg	.1288064
Stddev	.0007406
%RSD	.5750014
#1	.1280484
#2	.1288424
#3	.1295284

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2829.924	57523.07	11411.01	1855.461	4121.737
Stddev	1.069	38.42	43.37	1.942	2.716
%RSD	.0377883	.0667988	.3800901	.1046406	.0659023
#1	2829.624	57561.95	11461.09	1854.577	4124.137
#2	2831.111	57522.14	11386.55	1854.118	4118.788
#3	2829.036	57485.12	11385.39	1857.687	4122.287

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-13 Acquired: 2/12/2025 14:25:10 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0459689**	**-.028374**	**.4103833**	**-.042428**	**.0044640**	**145.8905**	**2.425878**
Stddev	.0029240	.002481	.0019794	.002261	.0008354	.2752	.012980
%RSD	6.360872	8.743002	.4823283	5.328445	18.71336	.1886288	.5350553
#1	.0490620	-.029392	.4097908	-.040236	.0036504	145.8158	2.425841
#2	.0432501	-.030183	.4125912	-.042296	.0053195	146.1953	2.438877
#3	.0455945	-.025546	.4087677	-.044752	.0044221	145.6603	2.412917

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0144414**	**-.004119**	**28.61671**	**.2341082**	**.1257693**	**.2760605**	**278.4435**
Stddev	.0000179	.000315	.06107	.0000889	.0003817	.0006285	1.2923
%RSD	.1238333	7.657917	.2134181	.0379507	.3035160	.2276736	.4641047
#1	.0144609	-.004327	28.62339	.2341659	.1254707	.2763676	277.9556
#2	.0144257	-.004275	28.67418	.2341528	.1261994	.2753375	279.9087
#3	.0144377	-.003756	28.55258	.2340059	.1256379	.2764764	277.4663

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.271768**	**36.81936**	**.2277848**	**-.017225**	**4.000888**	**.4378826**	**5.275036**
Stddev	.010304	.04765	.0003394	.000151	.037883	.0016973	.003787
%RSD	.3149299	.1294026	.1490177	.8775697	.9468668	.3876103	.0717867
#1	3.266653	36.87304	.2273956	-.017386	3.995326	.4359695	5.277432
#2	3.283629	36.80298	.2280197	-.017086	4.041245	.4392077	5.270670
#3	3.265023	36.78207	.2279390	-.017203	3.966093	.4384706	5.277004

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.615444**	**-.030393**	**.0015927**	**.0096240**	**1.415876**	**2.431174**	**4.311241**
Stddev	.038110	.000726	.0002174	.0002266	.005617	.006721	.013246
%RSD	.3963446	2.389623	13.64928	2.354768	.3967115	.2764612	.3072324
#1	9.606549	-.031228	.0018073	.0098857	1.418261	2.434350	4.311089
#2	9.657216	-.029913	.0015982	.0094938	1.419908	2.435718	4.324562
#3	9.582569	-.030037	.0013726	.0094925	1.409460	2.423453	4.298072

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-13 Acquired: 2/12/2025 14:25:10 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.5174648	.2500553	-.053008
Stddev	.0046700	.0014975	.000895
%RSD	.9024782	.5988471	1.688776
#1	.5228570	.2501083	-.052719
#2	.5147214	.2515256	-.054012
#3	.5148162	.2485321	-.052293

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2948.546	60172.01	12022.48	1973.935	4053.384
Stddev	6.137	118.26	8.76	3.063	12.494
%RSD	.2081450	.1965406	.0728850	.1551665	.3082311
#1	2955.189	60204.21	12018.92	1976.082	4067.776
#2	2943.087	60040.99	12032.46	1975.294	4047.060
#3	2947.363	60270.84	12016.05	1970.427	4045.317

Sample Name: CCV02 Acquired: 2/12/2025 14:29:16 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	**5.044263**	**5.163228**	**5.060633**	**5.041602**	**5.042702**	**9.984453**	**9.997134**
Stddev	.002717	.027344	.002514	.003917	.000327	.039997	.074637
%RSD	.0538715	.5295923	.0496694	.0776964	.0064832	.4005902	.7465842
#1	5.042604	5.167086	5.057935	5.045842	5.043067	10.02923	10.06251
#2	5.042786	5.188439	5.062910	5.040847	5.042604	9.95227	10.01308
#3	5.047399	5.134161	5.061053	5.038118	5.042435	9.97186	9.91581

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2466976**	**2.537947**	**25.09503**	**1.033197**	**2.526710**	**1.271930**	**5.211668**
Stddev	.0020362	.002975	.10042	.001376	.003592	.002080	.024859
%RSD	.8253953	.1172186	.4001620	.1332271	.1421521	.1635339	.4769806
#1	.2490343	2.534988	25.20351	1.032074	2.523138	1.272417	5.182965
#2	.2457552	2.537914	25.00531	1.034733	2.526670	1.269649	5.225805
#3	.2453033	2.540938	25.07625	1.032786	2.530321	1.273723	5.226235

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.498807**	**25.19341**	**2.533101**	**1.272235**	**26.26215**	**2.513452**	**2.523877**
Stddev	.012087	.03221	.001134	.001040	.07355	.009164	.006129
%RSD	.4837280	.1278611	.0447548	.0817473	.2800548	.3645987	.2428431
#1	2.512758	25.19803	2.531992	1.273397	26.17922	2.523077	2.519046
#2	2.491467	25.15914	2.533053	1.271915	26.31946	2.512448	2.521814
#3	2.492197	25.22307	2.534258	1.271392	26.28778	2.504831	2.530771

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.01236**	**4.872700**	**5.085283**	**5.094075**	**5.001648**	**5.186981**	**5.090820**
Stddev	.11086	.040113	.000766	.010804	.027911	.032654	.003483
%RSD	.4261665	.8232168	.0150699	.2120944	.5580264	.6295371	.0684087
#1	25.90400	4.918956	5.084467	5.084938	5.033865	5.150935	5.086799
#2	26.00753	4.847490	5.085987	5.106000	4.984818	5.195424	5.092826
#3	26.12555	4.851653	5.085397	5.091288	4.986260	5.214584	5.092836

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCV02 Acquired: 2/12/2025 14:29:16 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	4.996258	5.008165	5.016069
Stddev	.010689	.030495	.029107
%RSD	.2139440	.6089026	.5802821
#1	5.008415	5.043301	5.022974
#2	4.988329	4.988578	5.041103
#3	4.992031	4.992618	4.984130

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2565.656	51877.26	9840.302	1659.138	4137.438
Stddev	.853	194.25	43.415	12.302	1.933
%RSD	.0332550	.3744326	.4411910	.7414864	.0467087
#1	2566.297	52069.94	9795.176	1672.286	4139.652
#2	2564.688	51681.49	9843.956	1647.906	4136.089
#3	2565.984	51880.34	9881.774	1657.221	4136.573

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCB02 Acquired: 2/12/2025 14:33:26 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	**-.000016**	**-.001731**	**-.000708**	**-.000816**	**.0011824**	**.0035873**	**-.000966**
Stddev	.001323	.001182	.001042	.000522	.0004122	.0015883	.000938
%RSD	8324.228	68.30497	147.2594	63.98280	34.86290	44.27480	97.04786
#1	.001361	-.000384	-.000596	-.001261	.0012714	.0048294	-.000316
#2	-.000132	-.002208	.000274	-.000241	.0007330	.0041349	-.002041
#3	-.001277	-.002599	-.001801	-.000946	.0015430	.0017977	-.000541

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000006**	**-.000066**	**-.005682**	**-.000064**	**-.000179**	**.0002032**	**.0024000**
Stddev	.000016	.000023	.004570	.000153	.000207	.0005612	.0043583
%RSD	251.6534	35.67089	80.43296	240.9485	115.8469	276.2453	181.5934
#1	.000004	-.000092	-.003428	.000036	-.000378	.0008285	.0033272
#2	-.000024	-.000056	-.010942	.000013	.000035	-.000257	-.002347
#3	.000002	-.000048	-.002677	-.000240	-.000194	.000037	.006220

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001454**	**-.005652**	**.0000713**	**.0002346**	**.0289875**	**-.000999**	**-.000013**
Stddev	.0000934	.020787	.0000442	.0007288	.0142495	.000961	.000205
%RSD	64.23621	367.7848	62.03578	310.7102	49.15724	96.17862	1610.879
#1	.0000381	-.015170	.0000204	.0008839	.0205131	-.001967	.000061
#2	.0002087	-.019976	.0001001	-.000554	.0210105	-.000985	.000145
#3	.0001894	.018190	.0000935	.000374	.0454388	-.000045	-.000244

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0679623**	**.0029313**	**.0001497**	**.0001773**	**.0006725**	**.0098090**	**.0010014**
Stddev	.0305784	.0002843	.0001339	.0002092	.0005716	.0077981	.0022058
%RSD	44.99308	9.698183	89.46275	118.0304	84.99296	79.49967	220.2859
#1	.0363715	.0030019	.0002788	.0001574	.0002255	.0009279	-.000911
#2	.0974161	.0031736	.0000114	.0003957	.0004755	.0129628	.000500
#3	.0700994	.0026183	.0001589	-.000021	.0013166	.0155362	.003415

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCB02 Acquired: 2/12/2025 14:33:26 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0017896	-.001358	.0000481
Stddev	.0035059	.001035	.0000308
%RSD	195.9033	76.19945	64.00965
#1	.0040299	-.001523	.0000827
#2	-.002251	-.000250	.0000234
#3	.003590	-.002300	.0000383

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2634.512	55003.73	10384.21	1741.847	4456.877
Stddev	3.006	44.14	61.98	6.289	4.568
%RSD	.1140930	.0802426	.5968413	.3610426	.1024985
#1	2633.851	55052.79	10449.79	1744.581	4457.274
#2	2637.793	54991.15	10376.25	1746.306	4461.233
#3	2631.892	54967.25	10326.60	1734.654	4452.123

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-17 Acquired: 2/12/2025 14:37:47 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0341341**	**-.023365**	**.8452688**	**-.044019**	**.0107171**	**155.2265**	**1.013592**
Stddev	.0003213	.001207	.0027526	.003946	.0006013	.2097	.004477
%RSD	.9413726	5.167731	.3256488	8.963280	5.610812	.1350811	.4416968
#1	.0337964	-.021971	.8479116	-.044155	.0105207	155.3642	1.018182
#2	.0341699	-.024083	.8424182	-.047896	.0113920	154.9851	1.009237
#3	.0344361	-.024040	.8454764	-.040008	.0102385	155.3301	1.013356

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0121494**	**-.010772**	**24.97230**	**.2535972**	**.1205202**	**.3464387**	**311.1607**
Stddev	.0000586	.000207	.14045	.0010510	.0002923	.0005647	.7670
%RSD	.4820495	1.920369	.5624033	.4144307	.2425658	.1630117	.2465014
#1	.0121375	-.010611	25.12931	.2541837	.1208100	.3470722	311.6170
#2	.0120977	-.010699	24.85864	.2523839	.1205254	.3462560	310.2752
#3	.0122130	-.011005	24.92896	.2542242	.1202253	.3459879	311.5899

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.948183**	**43.56667**	**.2229113**	**-.016100**	**2.900597**	**.4015642**	**1.455985**
Stddev	.024847	.19970	.0013560	.000129	.023956	.0032729	.004193
%RSD	.6293166	.4583750	.6083024	.8001302	.8258902	.8150459	.2880160
#1	3.975202	43.77013	.2242572	-.016155	2.872989	.4048524	1.452777
#2	3.926317	43.37096	.2229312	-.015953	2.915899	.3983067	1.454448
#3	3.943030	43.55891	.2215455	-.016193	2.912902	.4015335	1.460730

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.12170**	**-.006877**	**.0065784**	**.0398114**	**2.798389**	**4.923205**	**5.962667**
Stddev	.07046	.002097	.0005123	.0008073	.013487	.018268	.020441
%RSD	.6960882	30.48797	7.786939	2.027757	.4819430	.3710630	.3428114
#1	10.04206	-.008266	.0070691	.0402430	2.812445	4.913048	5.983328
#2	10.17590	-.004465	.0066191	.0388801	2.785554	4.944294	5.962219
#3	10.14715	-.007899	.0060470	.0403112	2.797169	4.912272	5.942454

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-17 Acquired: 2/12/2025 14:37:47 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.8887665	.2341779	.1193708
Stddev	.0057242	.0007254	.0011457
%RSD	.6440628	.3097418	.9597458
#1	.8906653	.2348508	.1180506
#2	.8933000	.2334095	.1199586
#3	.8823341	.2342733	.1201034

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2869.004	56787.86	11740.12	1827.810	4247.884
Stddev	.305	51.94	77.36	5.083	5.398
%RSD	.0106390	.0914620	.6589224	.2780791	.1270815
#1	2868.695	56728.75	11651.56	1828.846	4241.665
#2	2869.010	56826.19	11794.56	1832.295	4250.628
#3	2869.306	56808.65	11774.23	1822.289	4251.359

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: PB166634BL Acquired: 2/12/2025 14:41:53 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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**	**-.001045**	**-.000732**	**-.000689**	**.0009122**	**-.002799**	**-.000203**
Stddev	.001734	.001925	.000790	.001403	.0008530	.000993	.000292
%RSD	249.9683	184.2244	107.8777	203.6622	93.51248	35.49206	144.1143
#1	.001307	-.000243	.000050	.000236	.0014195	-.002654	-.000473
#2	-.001617	-.003241	-.001531	-.002302	-.000073	-.001886	.000107
#3	-.001771	.000349	-.000717	.000000	.001390	-.003857	-.000243

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000169**	**-.000100**	**.0084247**	**-.000400**	**.0000509**	**.0000396**	**.0035887**
Stddev	.0000488	.000027	.0036148	.000196	.0001284	.0003419	.0017883
%RSD	288.4507	27.23176	42.90704	49.08115	252.3115	863.7727	49.83182
#1	.0000361	-.000130	.0048916	-.000236	-.000073	.0003797	.0046372
#2	-.000039	-.000092	.0082666	-.000618	.000042	-.000304	.0046050
#3	.000053	-.000077	.0121160	-.000346	.000183	.000043	.0015238

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000237**	**.0093164**	**.0000319**	**.0003759**	**.0199505**	**.0003582**	**-.000011**
Stddev	.000125	.0039152	.0002449	.0000168	.0128998	.0018056	.000165
%RSD	52.73889	42.02466	768.5650	4.465751	64.65873	504.0351	1447.535
#1	-.000193	.0050001	-.000132	.0003570	.0050777	-.001719	.000168
#2	-.000140	.0103101	.000313	.0003817	.0266786	.001552	-.000158
#3	-.000378	.0126389	-.000086	.0003890	.0280954	.001241	-.000044

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0396960**	**-.004758**	**-.000135**	**.0018585**	**-.000680**	**.0056368**	**-.002072**
Stddev	.0252209	.000330	.000260	.0004053	.000779	.0019376	.000746
%RSD	63.53501	6.929642	192.4094	21.80860	114.4393	34.37410	35.99221
#1	.0659321	-.004394	-.000123	.0013967	-.000934	.0062457	-.002752
#2	.0156306	-.004842	.000118	.0021552	-.001300	.0071969	-.001274
#3	.0375253	-.005037	-.000401	.0020235	.000194	.0034679	-.002189

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: PB166634BL Acquired: 2/12/2025 14:41:53 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0024142	-.000377	-.000059
Stddev	.0026561	.000550	.000025
%RSD	110.0181	145.9856	42.50687
#1	.0054217	-.000935	-.000039
#2	.0014316	.000164	-.000087
#3	.0003895	-.000358	-.000052

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2668.692	54703.26	10518.97	1776.412	4496.695
Stddev	8.007	64.58	47.53	7.979	13.273
%RSD	.3000425	.1180621	.4518262	.4491626	.2951778
#1	2659.531	54714.28	10502.85	1776.756	4481.381
#2	2674.354	54633.87	10481.60	1768.266	4504.897
#3	2672.192	54761.62	10572.46	1784.213	4503.807

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: PB166634BS Acquired: 2/12/2025 14:46:14 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6912593**	**1.771495**	**.8752303**	**1.674846**	**.7075510**	**1.806064**
Stddev	.0030747	.024917	.0098914	.014882	.0062418	.017823
%RSD	.4447946	1.406577	1.130154	.8885881	.8821641	.9868567
#1	.6877693	1.745492	.8678474	1.660527	.7011321	1.814140
#2	.6924396	1.773831	.8713745	1.673777	.7079219	1.818420
#3	.6935689	1.795162	.8864690	1.690234	.7135991	1.785632

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1855420**	**.1730652**	**.1762862**	**.9750418**	**.3836112**	**.1827580**
Stddev	.0016266	.0014640	.0018569	.0136187	.0017977	.0020061
%RSD	.8766932	.8459489	1.053337	1.396724	.4686248	1.097709
#1	.1859218	.1744743	.1748488	.9800970	.3833587	.1811907
#2	.1869452	.1731695	.1756271	.9854100	.3819530	.1820644
#3	.1837591	.1715518	.1783828	.9596184	.3855217	.1850190

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2804262**	**2.991982**	**.1926149**	**1.823991**	**.4583042**	**.0694362**
Stddev	.0022575	.024106	.0025911	.019734	.0051566	.0005002
%RSD	.8050335	.8056781	1.345219	1.081918	1.125159	.7203489
#1	.2785718	3.000379	.1923803	1.825381	.4535019	.0695899
#2	.2797667	3.010766	.1953153	1.842993	.4576566	.0688772
#3	.2829400	2.964800	.1901491	1.803598	.4637540	.0698415

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.910030**	**.2750795**	**.1874557**	**9.395944**	**.2432100**	**.3766061**
Stddev	.011848	.0037830	.0016064	.047333	.0014786	.0035327
%RSD	.4071281	1.375243	.8569695	.5037611	.6079341	.9380251
#1	2.896494	.2739832	.1877325	9.342085	.2448538	.3730135
#2	2.915086	.2792897	.1857289	9.430927	.2427874	.3767292
#3	2.918511	.2719658	.1889058	9.414819	.2419887	.3800756

Sample Name: PB166634BS Acquired: 2/12/2025 14:46:14 Type: Unk
Method: NON EPA-6010-200.7(v2689) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6224860	.1838262	.7487899	5.130833	F .0020185	.1902877
Stddev	.0066684	.0022731	.0054953	.059312	.0036478	.0033443
%RSD	1.071253	1.236541	.7338917	1.155984	180.7197	1.757471
#1	.6166765	.1827209	.7472462	5.079897	-.000993	.1921084
#2	.6210141	.1864406	.7442315	5.116652	.006075	.1923265
#3	.6297673	.1823171	.7548919	5.195949	.000973	.1864281

Elem	Sr4077
Units	ppm
Avg	.1716335
Stddev	.0017640
%RSD	1.027782
#1	.1724808
#2	.1728139
#3	.1696057

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2681.383	54645.42	10315.22	1775.421	4502.438
Stddev	17.987	182.91	92.30	12.380	34.986
%RSD	.6708073	.3347142	.8947547	.6973070	.7770413
#1	2698.174	54563.15	10228.56	1766.638	4529.963
#2	2683.573	54855.01	10304.81	1789.581	4514.284
#3	2662.401	54518.10	10412.27	1770.045	4463.067

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1324-01 Acquired: 2/12/2025 14:50:38 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.006612**	**-.002835**	**.0000220**	**.0030812**	**.0020340**	**32.93721**
Stddev	.001071	.000654	.0036843	.0014408	.0004560	.07195
%RSD	16.19278	23.08164	16776.96	46.76035	22.41903	.2184352
#1	-.006689	-.003402	-.002264	.0033053	.0023489	33.00967
#2	-.007643	-.002983	-.001942	.0043968	.0022421	32.86579
#3	-.005505	-.002119	.004272	.0015415	.0015111	32.93619

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001275**	**-.000122**	**-.000272**	**17.14111**	**.3312166**	**.0009723**
Stddev	.000596	.000058	.000144	.02531	.0003330	.0002544
%RSD	46.74574	47.97016	52.91832	.1476590	.1005390	26.16744
#1	-.000588	-.000169	-.000425	17.17000	.3311261	.0012514
#2	-.001647	-.000140	-.000253	17.13050	.3309381	.0007532
#3	-.001591	-.000056	-.000139	17.12283	.3315855	.0009125

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0261365**	**1.895353**	**.0131731**	**2.729351**	**.0135585**	**-.000143**
Stddev	.0002084	.011708	.0002965	.023396	.0002526	.000033
%RSD	.7971629	.6177010	2.250906	.8572146	1.862816	23.17381
#1	.0260632	1.884310	.0128359	2.753123	.0135295	-.000152
#2	.0259747	1.907628	.0133931	2.728580	.0138244	-.000106
#3	.0263716	1.894122	.0132903	2.706350	.0133217	-.000171

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **2392.720**	**-.001336**	**.3259220**	**216.6324**	**5.030829**	**.0216204**
Stddev	11.501	.001480	.0007234	1.6422	.036855	.0001174
%RSD	.4806709	110.8308	.2219594	.7580626	.7325849	.5431985
#1	2386.489	.000068	.3255202	214.7881	5.073366	.0215402
#2	2385.680	-.002883	.3254886	217.9364	5.010680	.0215658
#3	2405.992	-.001193	.3267571	217.1725	5.008442	.0217552

Sample Name: Q1324-01 Acquired: 2/12/2025 14:50:38 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002882	-.001432	.5131592	1.721817	F 1141.052	.0037237
Stddev	.001632	.001030	.0059755	.003889	.674	.0008358
%RSD	56.64011	71.96520	1.164447	.2258498	.0591078	22.44490
#1	-.003149	-.001239	.5065922	1.719738	1140.996	.0033854
#2	-.004365	-.002545	.5146091	1.719410	1140.408	.0031102
#3	-.001133	-.000511	.5182762	1.726303	1141.753	.0046756

Elem	Sr4077
Units	ppm
Avg	.0929487
Stddev	.0001986
%RSD	.2136104
#1	.0931731
#2	.0927959
#3	.0928772

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2184.502	43513.68	9898.639	1408.301	3243.985
Stddev	5.683	12.54	72.604	3.764	5.083
%RSD	.2601411	.0288265	.7334714	.2672721	.1566996
#1	2181.028	43512.84	9814.804	1411.433	3242.077
#2	2191.060	43501.57	9940.607	1409.344	3249.747
#3	2181.418	43526.62	9940.507	1404.125	3240.133

Sample Name: Q1324-01DUP Acquired: 2/12/2025 14:55:00 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.005008**	**-.002702**	**-.001335**	**.0030760**	**.0017693**	**32.85572**
Stddev	.001518	.002315	.001851	.0018734	.0021180	.10076
%RSD	30.31209	85.67628	138.5962	60.90310	119.7100	.3066799
#1	-.004059	-.003996	-.002926	.0041750	.0000549	32.74030
#2	-.006759	-.004081	.000696	.0041402	.0011159	32.92616
#3	-.004206	-.000029	-.001776	.0009129	.0041369	32.90070

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000628**	**-.000106**	**-.000232**	**17.05420**	**.3286443**	**.0011114**
Stddev	.001178	.000037	.000065	.07198	.0017709	.0001450
%RSD	187.4096	35.20292	28.15561	.4220567	.5388616	13.04922
#1	-.001947	-.000148	-.000187	17.00397	.3305184	.0012737
#2	-.000257	-.000094	-.000308	17.02198	.3269988	.0009945
#3	.000319	-.000076	-.000203	17.13666	.3284157	.0010661

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0258379**	**1.877188**	**.0123598**	**2.730869**	**.0132166**	**-.000446**
Stddev	.0001747	.006077	.0002763	.022590	.0003780	.000085
%RSD	.6761187	.3237158	2.235340	.8272238	2.860197	19.05769
#1	.0258344	1.876712	.0125833	2.730133	.0129253	-.000500
#2	.0256650	1.871363	.0120509	2.708656	.0130807	-.000348
#3	.0260143	1.883488	.0124451	2.753819	.0136438	-.000490

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **2349.367**	**-.002261**	**.3230859**	**214.7990**	**4.990817**	**.0219679**
Stddev	7.227	.001233	.0006963	1.5404	.018204	.0003047
%RSD	.3076160	54.53169	.2155006	.7171154	.3647420	1.386997
#1	2353.843	-.002474	.3237210	216.4663	4.971761	.0219375
#2	2341.030	-.000936	.3231953	214.5017	4.992660	.0216795
#3	2353.229	-.003374	.3223414	213.4290	5.008028	.0222866

Sample Name: Q1324-01DUP Acquired: 2/12/2025 14:55:00 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003107	-.001483	.5125947	1.697441	F 1124.324	.0030332
Stddev	.000641	.001194	.0155745	.005019	4.779	.0008960
%RSD	20.62463	80.50352	3.038367	.2956827	.4250598	29.53910
#1	-.003585	-.001266	.5138910	1.698014	1127.347	.0039062
#2	-.003358	-.000412	.5274806	1.692160	1118.814	.0030776
#3	-.002379	-.002769	.4964126	1.702149	1126.809	.0021159

Elem	Sr4077
Units	ppm
Avg	.0929785
Stddev	.0003771
%RSD	.4055416
#1	.0926149
#2	.0929529
#3	.0933677

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2205.039	44249.81	10041.49	1424.618	3282.720
Stddev	7.342	141.92	45.35	3.207	7.472
%RSD	.3329725	.3207323	.4516512	.2250952	.2276094
#1	2196.564	44109.11	10083.43	1422.047	3274.735
#2	2209.062	44392.93	10047.67	1428.211	3289.541
#3	2209.490	44247.38	9993.36	1423.594	3283.884

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1324-01DLX5 Acquired: 2/12/2025 14:59:23 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.006280**	**.0034517**	**-.000936**	**-.000594**	**-.000468**	**6.591456**
Stddev	.001938	.0005057	.001281	.003170	.001767	.016655
%RSD	30.85165	14.65130	136.7852	533.6339	377.9420	.2526723
#1	-.006291	.0036688	.000406	.000393	-.000401	6.572505
#2	-.004337	.0038127	-.001070	.001965	-.002267	6.598098
#3	-.008212	.0028737	-.002145	-.004140	.001265	6.603765

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.005897**	**-.000032**	**-.000166**	**3.461929**	**.0661694**	**.0001548**
Stddev	.000759	.000031	.000064	.009911	.0006566	.0001190
%RSD	12.87617	95.48192	38.68907	.2862820	.9922574	76.88364
#1	-.005181	-.000055	-.000237	3.459787	.0665606	.0001218
#2	-.006694	-.000045	-.000149	3.453264	.0665362	.0002869
#3	-.005818	.000003	-.000112	3.472735	.0654114	.0000558

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0057912**	**.3553503**	**.0016745**	**.5501032**	**.0026509**	**.0002602**
Stddev	.0002053	.0036586	.0005788	.0033361	.0002084	.0001198
%RSD	3.544555	1.029567	34.56690	.6064416	7.861055	46.02365
#1	.0059008	.3594910	.0011930	.5523270	.0028730	.0001449
#2	.0055544	.3525545	.0023167	.5462673	.0024597	.0002518
#3	.0059185	.3540055	.0015137	.5517153	.0026199	.0003839

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**484.6479**	**-.000246**	**.0624432**	**38.88705**	**1.153251**	**.0041235**
Stddev	3.8393	.000878	.0000853	.33026	.010176	.0002354
%RSD	.7921809	357.0791	.1365870	.8492844	.8824005	5.709389
#1	488.1239	.000703	.0624305	39.26672	1.141964	.0043913
#2	480.5270	-.000410	.0625342	38.72829	1.156063	.0039490
#3	485.2929	-.001030	.0623651	38.66616	1.161725	.0040303

Sample Name: Q1324-01DLX5 Acquired: 2/12/2025 14:59:23 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012017	.0001883	.0992609	.3154470	F 260.1503	.0043297
Stddev	.0003719	.0000965	.0080927	.0042089	.5978	.0010945
%RSD	30.94396	51.26318	8.153007	1.334276	.2297969	25.27882
#1	.0016192	.0001823	.0961820	.3189958	260.7242	.0032099
#2	.0010797	.0000949	.0931595	.3107969	259.5311	.0043821
#3	.0009062	.0002876	.1084412	.3165483	260.1955	.0053970

Elem	Sr4077
Units	ppm
Avg	.0190189
Stddev	.0000782
%RSD	.4109482
#1	.0189427
#2	.0190150
#3	.0190989

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2476.019	50139.74	10638.56	1600.973	3881.163
Stddev	1.244	254.66	57.77	6.151	3.024
%RSD	.0502472	.5079012	.5429818	.3842310	.0779267
#1	2475.118	49847.41	10701.13	1593.898	3880.099
#2	2475.500	50258.38	10587.25	1603.965	3884.576
#3	2477.438	50313.44	10627.32	1605.057	3878.814

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1324-01MS Acquired: 2/12/2025 15:03:48 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8254915**	**1.797655**	**.9388991**	**2.156536**	**.8104311**	**35.36251**
Stddev	.0040355	.014142	.0041500	.006642	.0023852	.02138
%RSD	.4888638	.7866987	.4420041	.3079855	.2943135	.0604579
#1	.8242316	1.783564	.9349854	2.150381	.8087716	35.35614
#2	.8222362	1.797554	.9432506	2.155650	.8093572	35.34504
#3	.8300066	1.811848	.9384612	2.163576	.8131644	35.38635

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1887447**	**.1806571**	**.2043673**	**18.32552**	**.7238736**	**.2046187**
Stddev	.0003222	.0010269	.0006040	.01806	.0015672	.0002653
%RSD	.1707098	.5684364	.2955473	.0985382	.2164955	.1296517
#1	.1885789	.1817937	.2039984	18.32219	.7250907	.2045726
#2	.1891161	.1797961	.2040391	18.30936	.7244247	.2043795
#3	.1885392	.1803816	.2050643	18.34501	.7221053	.2049040

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2975333**	**5.277093**	**.2120732**	**4.556528**	**.5178390**	**.0829547**
Stddev	.0007365	.021559	.0013235	.018293	.0012786	.0006069
%RSD	.2475322	.4085308	.6240793	.4014586	.2469144	.7315819
#1	.2970005	5.256904	.2114063	4.537957	.5167768	.0834544
#2	.2972256	5.274576	.2112159	4.557098	.5174820	.0831303
#3	.2983737	5.299800	.2135975	4.574529	.5192582	.0822794

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **2336.341**	**.2883711**	**.5380246**	**225.9911**	**5.354228**	**.4237634**
Stddev	16.526	.0017425	.0009191	1.4584	.032568	.0010891
%RSD	.7073488	.6042492	.1708198	.6453172	.6082737	.2570105
#1	2351.449	.2888063	.5375339	224.4223	5.389017	.4233299
#2	2318.691	.2864523	.5390849	227.3056	5.324465	.4229579
#3	2338.884	.2898547	.5374551	226.2455	5.349203	.4250025

Sample Name: Q1324-01MS Acquired: 2/12/2025 15:03:48 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7055848	.1895187	1.382509	8.452278	F 1102.630	.2129988
Stddev	.0026480	.0004836	.017534	.044197	3.948	.0006457
%RSD	.3752896	.2551807	1.268278	.5228992	.3580470	.3031617
#1	.7048486	.1890503	1.377065	8.423196	1099.977	.2126306
#2	.7033829	.1894897	1.402119	8.430500	1100.746	.2137444
#3	.7085230	.1900162	1.368343	8.503137	1107.167	.2126213

Elem	Sr4077
Units	ppm
Avg	.2817472
Stddev	.0003693
%RSD	.1310611
#1	.2816968
#2	.2821390
#3	.2814057

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2236.643	44296.79	9786.298	1427.411	3327.084
Stddev	3.167	126.81	58.972	6.434	6.140
%RSD	.1416178	.2862810	.6025955	.4507652	.1845410
#1	2235.186	44175.03	9724.496	1425.430	3324.253
#2	2240.277	44287.22	9841.960	1422.201	3334.128
#3	2234.467	44428.11	9792.439	1434.603	3322.870

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1324-01MSD Acquired: 2/12/2025 15:07:57 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8195105**	**1.803629**	**.9335314**	**2.136340**	**.8026051**	**35.09777**
Stddev	.0057569	.013076	.0046893	.012452	.0048198	.03058
%RSD	.7024802	.7249970	.5023180	.5828761	.6005200	.0871310
#1	.8148429	1.816109	.9303201	2.122024	.7970479	35.12717
#2	.8177453	1.790029	.9313615	2.142334	.8051215	35.10001
#3	.8259434	1.804750	.9389127	2.144660	.8056458	35.06613

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1879232**	**.1838555**	**.2041637**	**18.32518**	**.7262351**	**.2045506**
Stddev	.0009297	.0004016	.0005678	.05003	.0001558	.0007087
%RSD	.4947219	.2184226	.2780880	.2730388	.0214478	.3464709
#1	.1880965	.1843088	.2036255	18.37172	.7263221	.2039332
#2	.1887541	.1835442	.2041085	18.27226	.7260553	.2043941
#3	.1869191	.1837135	.2047570	18.33154	.7263280	.2053245

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2969290**	**5.212731**	**.2119869**	**4.541228**	**.5175895**	**.0828187**
Stddev	.0016233	.012501	.0015097	.016210	.0014362	.0003761
%RSD	.5466943	.2398155	.7121408	.3569614	.2774748	.4541234
#1	.2956239	5.220752	.2130326	4.559578	.5168278	.0830577
#2	.2964163	5.219113	.2126720	4.535252	.5166947	.0823852
#3	.2987467	5.198327	.2102562	4.528854	.5192461	.0830133

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **2290.303**	**.2858403**	**.5349267**	**220.5781**	**5.445333**	**.4227148**
Stddev	16.950	.0026660	.0004809	.1309	.011828	.0013282
%RSD	.7400842	.9326826	.0898963	.0593255	.2172082	.3142019
#1	2306.436	.2889177	.5354621	220.7290	5.456641	.4216653
#2	2272.640	.2842353	.5345317	220.5089	5.433046	.4222711
#3	2291.833	.2843678	.5347862	220.4963	5.446311	.4242081

Sample Name: Q1324-01MSD Acquired: 2/12/2025 15:07:57 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7033097	.1896174	1.350210	8.453317	F 1098.303	.2106194
Stddev	.0046490	.0001804	.002204	.032529	2.868	.0022785
%RSD	.6610220	.0951477	.1632700	.3848109	.2611736	1.081788
#1	.6984556	.1896057	1.348496	8.438647	1096.680	.2127773
#2	.7037515	.1894432	1.352697	8.430706	1096.613	.2108440
#3	.7077221	.1898034	1.349437	8.490597	1101.615	.2082370

Elem	Sr4077
Units	ppm
Avg	.2799403
Stddev	.0004474
%RSD	.1598234
#1	.2795458
#2	.2804265
#3	.2798487

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2251.885	44627.19	9670.562	1460.132	3348.713
Stddev	3.797	91.36	37.381	5.531	2.526
%RSD	.1686124	.2047120	.3865439	.3787687	.0754289
#1	2256.173	44526.74	9627.398	1453.936	3350.468
#2	2250.530	44649.52	9692.212	1464.568	3349.852
#3	2248.951	44705.31	9692.076	1461.893	3345.818

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1324-01A Acquired: 2/12/2025 15:12:06 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8525398**	**1.840409**	**.9564805**	**2.233601**	**.8297918**	**35.73189**
Stddev	.0033066	.006748	.0016248	.008355	.0053711	.30777
%RSD	.3878536	.3666330	.1698746	.3740667	.6472825	.8613239
#1	.8488455	1.845610	.9546423	2.224543	.8237909	36.08214
#2	.8552222	1.832785	.9570746	2.235257	.8341489	35.50464
#3	.8535517	1.842833	.9577247	2.241005	.8314357	35.60890

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1854889**	**.1891507**	**.2095104**	**18.43864**	**.7398241**	**.2091447**
Stddev	.0021969	.0012203	.0001933	.17291	.0004713	.0005581
%RSD	1.184403	.6451470	.0922385	.9377583	.0637009	.2668245
#1	.1880252	.1904258	.2094782	18.63644	.7403154	.2089601
#2	.1842643	.1879938	.2093353	18.31618	.7397811	.2087024
#3	.1841771	.1890326	.2097177	18.36330	.7393758	.2097717

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3061815**	**5.107911**	**.2129862**	**4.604219**	**.5312338**	**.0840636**
Stddev	.0011255	.018936	.0015089	.066562	.0013327	.0006508
%RSD	.3675762	.3707260	.7084305	1.445669	.2508712	.7741260
#1	.3049269	5.129776	.2147263	4.669570	.5297003	.0847193
#2	.3065151	5.096800	.2120398	4.536510	.5321119	.0840536
#3	.3071024	5.097157	.2121927	4.606577	.5318893	.0834180

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **2237.068**	**.2895062**	**.5405673**	**216.2640**	**5.573114**	**.4313345**
Stddev	6.563	.0011358	.0012870	1.4496	.039487	.0017352
%RSD	.2933950	.3923051	.2380739	.6702811	.7085329	.4022906
#1	2244.409	.2906793	.5410167	217.2872	5.611050	.4293497
#2	2231.766	.2884119	.5391158	216.8997	5.532239	.4320900
#3	2235.029	.2894274	.5415692	214.6052	5.576052	.4325640

Sample Name: Q1324-01A Acquired: 2/12/2025 15:12:06 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7248104	.1910749	1.339569	8.754866	F 1140.898	.2104332
Stddev	.0036968	.0010110	.011682	.010987	1.403	.0020018
%RSD	.5100318	.5291086	.8720754	.1254986	.1229827	.9512851
#1	.7205478	.1921220	1.332743	8.749103	1140.697	.2126349
#2	.7267451	.1909985	1.353058	8.747959	1139.606	.2099421
#3	.7271383	.1901043	1.332906	8.767536	1142.390	.2087226

Elem	Sr4077
Units	ppm
Avg	.2900416
Stddev	.0024189
%RSD	.8339953
#1	.2928118
#2	.2883473
#3	.2889657

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2178.672	44224.53	9364.806	1419.652	3238.527
Stddev	5.651	55.40	79.611	5.584	3.758
%RSD	.2593914	.1252696	.8501059	.3933347	.1160533
#1	2185.194	44161.68	9287.046	1420.247	3242.848
#2	2175.225	44245.58	9446.147	1424.915	3236.017
#3	2175.596	44266.31	9361.225	1413.795	3236.716

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: PB166635BL Acquired: 2/12/2025 15:16:15 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.004380**	**-.000777**	**-.000903**	**-.003360**	**.0004576**	**.0057232**
Stddev	.001125	.002603	.000252	.000188	.0017396	.0062930
%RSD	25.68713	335.1689	27.89549	5.590992	380.1504	109.9562
#1	-.005182	-.003142	-.000660	-.003574	-.001436	.0011097
#2	-.004863	.002013	-.001163	-.003283	.000824	.0031680
#3	-.003094	-.001201	-.000887	-.003222	.001985	.0128919

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002648**	**-.000071**	**-.000171**	**.0120817**	**.0008200**	**-.000204**
Stddev	.0010054	.000018	.000022	.0031513	.0001664	.000030
%RSD	379.7039	26.16238	13.01966	26.08346	20.28815	14.66635
#1	.0005813	-.000080	-.000149	.0102820	.0007496	-.000174
#2	.0010738	-.000049	-.000193	.0157205	.0010100	-.000234
#3	-.000861	-.000083	-.000170	.0102427	.0007004	-.000204

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004701**	**.0032960**	**.0059305**	**.0443648**	**.0001144**	**-.000259**
Stddev	.0001501	.0018319	.0002148	.0096965	.0002281	.000713
%RSD	31.93516	55.57903	3.621223	21.85633	199.4676	275.1988
#1	.0004416	.0045445	.0061674	.0526351	.0003235	-.000423
#2	.0006324	.0011930	.0057487	.0467661	-.000129	.000522
#3	.0003363	.0041504	.0058754	.0336933	.000149	-.000876

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1714532**	**-.001573**	**.0182977**	**.0451064**	**.0089861**	**.0001815**
Stddev	.0050091	.001420	.0004610	.0164928	.0004345	.0001588
%RSD	2.921529	90.29232	2.519621	36.56421	4.835316	87.46264
#1	.1760225	-.000578	.0186219	.0498451	.0092960	.0001641
#2	.1660974	-.000942	.0177699	.0587111	.0091729	.0003483
#3	.1722396	-.003199	.0185012	.0267630	.0084895	.0000322

Sample Name: PB166635BL Acquired: 2/12/2025 15:16:15 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.009530	.0000820	.0114863	.0087084	F .1268814	-.002259
Stddev	.000898	.0002565	.0058283	.0001224	.0070684	.000377
%RSD	9.427966	312.9898	50.74184	1.405789	5.570854	16.68247
#1	-.008525	-.000130	.0049818	.0086451	.1350427	-.002555
#2	-.010255	.000367	.0132425	.0088495	.1228814	-.001835
#3	-.009809	.000009	.0162345	.0086305	.1227201	-.002389

Elem	Sr4077
Units	ppm
Avg	.0000110
Stddev	.0000241
%RSD	219.0977
#1	.0000338
#2	-.000014
#3	.000013

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2706.119	57039.10	10736.47	1788.681	4637.143
Stddev	3.431	190.90	36.14	9.152	6.132
%RSD	.1268009	.3346784	.3366450	.5116818	.1322473
#1	2703.655	57120.78	10702.10	1794.576	4633.239
#2	2704.664	57175.57	10733.14	1793.330	4633.979
#3	2710.038	56820.95	10774.16	1778.137	4644.211

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCV03 Acquired: 2/12/2025 15:20:35 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.962162**	**5.066126**	**4.977831**	**4.968577**	**4.986459**	**9.918371**	**10.00448**
Stddev	.014524	.033774	.007492	.004107	.004293	.034256	.08089
%RSD	.2926877	.6666697	.1505160	.0826592	.0860911	.3453751	.8084902
#1	4.953898	5.105058	4.973821	4.971633	4.990422	9.957896	10.08878
#2	4.953657	5.044678	4.973198	4.963908	4.981899	9.899928	9.99716
#3	4.978932	5.048642	4.986476	4.970189	4.987056	9.897288	9.92751

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2431682**	**2.492840**	**24.86653**	**1.020907**	**2.486450**	**1.253726**	**5.160877**
Stddev	.0011530	.003610	.07500	.002408	.004131	.001495	.001004
%RSD	.4741568	.1448298	.3016059	.2358628	.1661228	.1192481	.0194576
#1	.2440834	2.491230	24.92121	1.020820	2.484634	1.253209	5.160262
#2	.2418732	2.490315	24.78103	1.018543	2.483539	1.252558	5.160333
#3	.2435481	2.496975	24.89734	1.023357	2.491178	1.255410	5.162036

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.468462**	**24.87158**	**2.491688**	**1.260502**	**26.55187**	**2.485406**	**2.506469**
Stddev	.003560	.08086	.003662	.001206	.05513	.004662	.005527
%RSD	.1442331	.3251065	.1469556	.0956644	.2076245	.1875665	.2205126
#1	2.471785	24.86872	2.490058	1.260819	26.54968	2.484491	2.503845
#2	2.464704	24.79218	2.489124	1.259169	26.60807	2.481269	2.502743
#3	2.468896	24.95382	2.495881	1.261517	26.49788	2.490457	2.512819

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.03803**	**4.824397**	**5.049166**	**5.007044**	**4.955702**	**5.125775**	**4.937080**
Stddev	.01576	.014137	.001530	.002971	.017315	.019177	.013904
%RSD	.0605231	.2930240	.0302959	.0593366	.3493886	.3741352	.2816206
#1	26.02087	4.834028	5.050027	5.007902	4.972565	5.105161	4.940346
#2	26.05186	4.808168	5.047400	5.003738	4.937969	5.129078	4.949061
#3	26.04135	4.830996	5.050071	5.009491	4.956571	5.143086	4.921834

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCV03 Acquired: 2/12/2025 15:20:35 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.990576**	**4.937809**	**4.955200**
Stddev	.015632	.011418	.029496
%RSD	.3132258	.2312383	.5952448
#1	5.008378	4.950822	4.974800
#2	4.984258	4.929465	4.921278
#3	4.979093	4.933141	4.969522

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2590.573**	**52172.32**	**9913.155**	**1653.692**	**4204.979**
Stddev	3.530	8.30	26.973	.559	4.985
%RSD	.1362781	.0159181	.2720909	.0338227	.1185388
#1	2587.213	52179.22	9887.310	1654.062	4200.122
#2	2594.252	52174.65	9941.129	1653.965	4210.082
#3	2590.253	52163.10	9911.025	1653.048	4204.733

Sample Name: CCB03 Acquired: 2/12/2025 15:24:46 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003623**	**.0022619**	**-.000350**	**-.001536**	**.0010256**	**-.007724**
Stddev	.003106	.0007923	.000699	.001383	.0011509	.003411
%RSD	85.72359	35.02912	199.9735	90.02646	112.2140	44.16812
#1	-.002084	.0014060	-.000905	-.000075	.0009606	-.011653
#2	-.007198	.0029697	.000436	-.001709	-.000091	-.006002
#3	-.001588	.0024100	-.000580	-.002824	.002208	-.005517

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001476**	**.0000075**	**-.000054**	**-.001388**	**-.000324**	**-.000107**
Stddev	.000323	.0000364	.000017	.009089	.000187	.000050
%RSD	21.87098	488.1243	31.19769	654.6354	57.67699	46.71043
#1	-.001103	.0000311	-.000040	-.009210	-.000485	-.000132
#2	-.001663	-.000034	-.000050	.008582	-.000119	-.000050
#3	-.001662	.000026	-.000073	-.003538	-.000367	-.000140

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000190**	**.0006317**	**-.000259**	**-.006398**	**.0000457**	**.0000968**
Stddev	.0003179	.0044364	.000182	.008216	.0002448	.0001928
%RSD	1668.418	702.2975	70.18264	128.4145	535.5557	199.2356
#1	-.000071	-.000447	-.000070	.000860	.0001554	.0000017
#2	-.000244	.005508	-.000274	-.004736	-.000235	-.000030
#3	.000372	-.003166	-.000433	-.015318	.000216	.000319

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5592553**	**-.001178**	**-.000090**	**.4149421**	**.0125982**	**.0002230**
Stddev	.0152829	.000413	.000289	.0312966	.0003382	.0001461
%RSD	2.732718	35.07859	319.0702	7.542393	2.684623	65.50660
#1	.5440792	-.001190	.000172	.4041389	.0128511	.0003847
#2	.5590441	-.000759	-.000044	.3904782	.0127294	.0001005
#3	.5746427	-.001586	-.000400	.4502091	.0122140	.0001837

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCB03 Acquired: 2/12/2025 15:24:46 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006582	-.000466	.0067658	.0001452	F .0791651	.0063025
Stddev	.0005560	.000808	.0088796	.0009994	.0083071	.0006702
%RSD	84.47799	173.6486	131.2442	688.1441	10.49339	10.63426
#1	.0006395	-.000461	.0007389	.0012390	.0878932	.0065723
#2	.0001118	-.001276	.0169629	-.000720	.0782467	.0067959
#3	.0012234	.000341	.0025955	-.000083	.0713553	.0055395

Elem	Sr4077
Units	ppm
Avg	.0000408
Stddev	.0000415
%RSD	101.6615
#1	-.000006
#2	.000073
#3	.000056

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2676.078	54395.77	9929.879	1777.791	4529.862
Stddev	5.003	244.19	21.960	9.395	3.498
%RSD	.1869520	.4489170	.2211459	.5284379	.0772142
#1	2670.301	54652.25	9922.971	1785.803	4533.806
#2	2678.958	54369.00	9954.461	1780.119	4527.136
#3	2678.975	54166.07	9912.203	1767.451	4528.645

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: PB166635BS Acquired: 2/12/2025 15:29:06 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7116119**	**1.784312**	**.8986451**	**1.703481**	**.7352095**	**1.857560**
Stddev	.0048749	.003632	.0035287	.010978	.0030458	.008032
%RSD	.6850565	.2035714	.3926725	.6444444	.4142770	.4323736
#1	.7072757	1.785873	.8965262	1.697269	.7342363	1.848645
#2	.7106713	1.780160	.8966905	1.697017	.7327692	1.864231
#3	.7168885	1.786902	.9027187	1.716156	.7386230	1.859803

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1932182**	**.1786722**	**.1804250**	**1.015940**	**.3989037**	**.1882975**
Stddev	.0011965	.0010674	.0006735	.005353	.0021144	.0003000
%RSD	.6192605	.5974028	.3732714	.5268617	.5300479	.1593240
#1	.1945613	.1788343	.1803880	1.009898	.3971049	.1880072
#2	.1928272	.1775331	.1797708	1.017836	.4012327	.1882791
#3	.1922660	.1796493	.1811162	1.020087	.3983735	.1886063

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2923513**	**2.996691**	**.2069795**	**1.912888**	**.4713677**	**.0702983**
Stddev	.0016392	.014750	.0014333	.007575	.0021688	.0007741
%RSD	.5606803	.4922215	.6924940	.3960233	.4601119	1.101186
#1	.2910475	3.004810	.2086341	1.918866	.4707417	.0705617
#2	.2918150	3.005598	.2061187	1.904368	.4695808	.0709064
#3	.2941915	2.979665	.2061857	1.915430	.4737807	.0694269

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.302262**	**.2866515**	**.1999036**	**9.618892**	**.2546584**	**.4019396**
Stddev	.026529	.0012282	.0004962	.057681	.0026739	.0019360
%RSD	.8033463	.4284650	.2482406	.5996598	1.049997	.4816780
#1	3.305586	.2852483	.1995518	9.597803	.2563271	.4013075
#2	3.326972	.2875316	.2004712	9.684150	.2515744	.4003986
#3	3.274228	.2871745	.1996876	9.574724	.2560739	.4041127

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: PB166635BS Acquired: 2/12/2025 15:29:06 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6405670	.1904249	.7584488	5.098210	F .1041135	.1951991
Stddev	.0028120	.0011138	.0141801	.025901	.0002605	.0011626
%RSD	.4389796	.5849113	1.869617	.5080402	.2502446	.5955764
#1	.6401617	.1893354	.7642895	5.085005	.1039402	.1962297
#2	.6379797	.1903779	.7687758	5.081573	.1039873	.1954286
#3	.6435596	.1915615	.7422813	5.128052	.1044131	.1939389

Elem	Sr4077
Units	ppm
Avg	.1792256
Stddev	.0002845
%RSD	.1587119
#1	.1788990
#2	.1794189
#3	.1793590

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2667.571	55144.27	10186.96	1780.264	4549.505
Stddev	4.533	241.17	42.24	6.096	10.039
%RSD	.1699442	.4373490	.4146856	.3424482	.2206702
#1	2664.570	55205.29	10172.52	1780.888	4548.510
#2	2672.786	54878.45	10234.53	1773.880	4560.005
#3	2665.357	55349.08	10153.82	1786.025	4540.001

Sample Name: PB166651TB Acquired: 2/12/2025 15:33:10 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.006434**	**-.002833**	**-.000925**	**.0020679**	**.0009589**	**.0003734**
Stddev	.000815	.000834	.000566	.0017657	.0004272	.0028283
%RSD	12.66483	29.42321	61.14611	85.38921	44.54881	757.3741
#1	-.006322	-.003796	-.000306	.0016103	.0004716	-.002536
#2	-.007299	-.002337	-.001414	.0040173	.0011364	.003113
#3	-.005681	-.002367	-.001056	.0005760	.0012688	.000543

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001748**	**-.000135**	**-.000242**	**.0605480**	**.0006738**	**-.000147**
Stddev	.000157	.000035	.000037	.0074479	.0001242	.000197
%RSD	8.977078	26.06508	15.33157	12.30083	18.43073	134.2405
#1	-.001904	-.000141	-.000283	.0691417	.0005773	-.000255
#2	-.001749	-.000167	-.000211	.0565399	.0006302	.000081
#3	-.001591	-.000097	-.000231	.0559625	.0008139	-.000267

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004775**	**.0038555**	**.0017049**	**-.000174**	**.0013651**	**-.000168**
Stddev	.0001909	.0043224	.0003319	.017090	.0003481	.000377
%RSD	39.98205	112.1103	19.46548	9806.592	25.50244	223.9478
#1	.0005034	.0038683	.0014697	-.008432	.0017415	.000223
#2	.0006542	.0081714	.0020845	-.011568	.0010547	-.000529
#3	.0002750	-.000473	.0015604	.019477	.0012990	-.000199

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **382.5537**	**-.001300**	**.0018554**	**.1183080**	**.0013274**	**.0003403**
Stddev	.9952	.000760	.0001985	.0630546	.0004118	.0002919
%RSD	.2601520	58.44293	10.69623	53.29695	31.02525	85.77814
#1	382.9641	-.002007	.0020303	.1607675	.0010777	.0006340
#2	383.2782	-.001395	.0016397	.1483010	.0018028	.0003368
#3	381.4190	-.000497	.0018960	.0458555	.0011018	.0000502

Sample Name: PB166651TB Acquired: 2/12/2025 15:33:10 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.009280	.0004583	.0111998	.0064404	F .0224051	-.002608
Stddev	.000297	.0010331	.0058126	.0017556	.0013071	.000558
%RSD	3.196739	225.4294	51.89925	27.25876	5.834090	21.40773
#1	-.009526	.0000889	.0179109	.0060944	.0238175	-.002010
#2	-.009363	.0016253	.0077552	.0048835	.0212380	-.002698
#3	-.008951	-.000339	.0079334	.0083431	.0221599	-.003116

Elem	Sr4077
Units	ppm
Avg	.0000103
Stddev	.0000623
%RSD	607.6730
#1	.0000796
#2	-.000041
#3	-.000008

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2516.340	50603.45	10058.72	1645.920	4034.722
Stddev	7.894	136.57	83.37	2.478	11.687
%RSD	.3137170	.2698777	.8288391	.1505327	.2896668
#1	2522.283	50627.25	10011.62	1646.466	4043.098
#2	2519.353	50456.55	10009.55	1643.215	4039.698
#3	2507.383	50726.55	10154.98	1648.079	4021.371

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-04 Acquired: 2/12/2025 15:37:39 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.007074**	**-.003473**	**.0017988**	**.0013296**	**.0010358**	**.0407338**	**.2781810**
Stddev	.001422	.001805	.0004199	.0005058	.0007278	.0031600	.0003182
%RSD	20.10475	51.96549	23.34475	38.04108	70.26206	7.757578	.1143899
#1	-.008258	-.005379	.0020192	.0018917	.0011486	.0394085	.2781583
#2	-.007468	-.001791	.0020627	.0011859	.0002582	.0384524	.2785099
#3	-.005497	-.003248	.0013146	.0009112	.0017006	.0443406	.2778747

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000028**	**-.000029**	**11.80911**	**.0002157**	**-.000393**	**.0099912**	**.0125499**
Stddev	.000036	.000050	.00612	.0004375	.000161	.0001622	.0057305
%RSD	128.4116	176.2911	.0518400	202.8195	40.94594	1.623505	45.66190
#1	.000012	-.000045	11.81592	.0001999	-.000412	.0101682	.0169329
#2	-.000039	.000028	11.80407	.0006609	-.000544	.0099558	.0146516
#3	-.000057	-.000069	11.80733	-.000214	-.000224	.0098496	.0060653

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0264882**	**1.261621**	**.0013451**	**-.000380**	**296.8407**	**-.000929**	**.0719725**
Stddev	.0004856	.006426	.0003917	.000403	1.7760	.001606	.0006189
%RSD	1.833230	.5093180	29.12096	106.0679	.5982916	172.9484	.8599698
#1	.0262499	1.254670	.0010492	-.000298	294.8575	-.000594	.0726866
#2	.0270469	1.262848	.0011968	-.000024	298.2843	.000484	.0716412
#3	.0261678	1.267344	.0017893	-.000818	297.3804	-.002675	.0715897

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4077572**	**.0346157**	**.0003433**	**-.005209**	**.0000104**	**.7375197**	**.0294074**
Stddev	.0155635	.0012071	.0001566	.000168	.0005951	.0115682	.0036169
%RSD	3.816865	3.487151	45.62297	3.216979	5706.338	1.568532	12.29911
#1	.4083234	.0357076	.0001696	-.005140	-.000076	.7251761	.0292278
#2	.4230298	.0333195	.0004737	-.005086	.000644	.7481132	.0331108
#3	.3919182	.0348200	.0003867	-.005399	-.000537	.7392697	.0258838

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-04 Acquired: 2/12/2025 15:37:39 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.3026583	-.002671	.0952467
Stddev	.0018132	.001034	.0001187
%RSD	.5991044	38.72615	.1246690
#1	.3018424	-.003816	.0952642
#2	.3013964	-.002391	.0951202
#3	.3047362	-.001805	.0953557

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2494.346	50344.61	10021.39	1622.644	4005.969
Stddev	2.248	349.13	39.76	8.388	6.827
%RSD	.0901118	.6934856	.3967848	.5169293	.1704315
#1	2493.728	50621.51	9977.33	1631.920	4008.993
#2	2496.838	49952.41	10032.22	1615.592	4010.762
#3	2492.472	50459.91	10054.61	1620.421	3998.152

Sample Name: Q1343-08 Acquired: 2/12/2025 15:42:08 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.007343**	**-.003943**	**.0025689**	**.0024371**	**.0007919**	**.1768709**	**.2630119**
Stddev	.002946	.000974	.0012517	.0019830	.0009803	.0096258	.0013696
%RSD	40.12586	24.69791	48.72329	81.36595	123.7891	5.442252	.5207365
#1	-.009554	-.004796	.0036301	.0006805	.0019211	.1768279	.2633398
#2	-.003998	-.004153	.0011886	.0020434	.0001587	.1672667	.2641879
#3	-.008476	-.002882	.0028881	.0045874	.0002959	.1865180	.2615082

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000051**	**-.000046**	**2.237068**	**.0005662**	**-.000219**	**.0155914**	**.0131042**
Stddev	.000048	.000084	.018493	.0004086	.000035	.0003270	.0018788
%RSD	95.85729	182.6681	.8266530	72.16598	15.82012	2.097242	14.33700
#1	-.000086	-.000058	2.258067	.0010231	-.000219	.0159682	.0144374
#2	-.000070	-.000123	2.229922	.0002360	-.000254	.0153823	.0109555
#3	.000005	.000043	2.223214	.0004394	-.000184	.0154237	.0139197

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0205941**	**.4542827**	**.0013047**	**-.000563**	**332.7394**	**.0000350**	**.0756280**
Stddev	.0006335	.0080557	.0002286	.000207	1.9549	.0018039	.0004513
%RSD	3.075916	1.773283	17.52150	36.66968	.5875137	5155.348	.5967280
#1	.0198808	.4635139	.0010560	-.000329	332.0571	-.000996	.0760553
#2	.0210908	.4486756	.0013524	-.000720	334.9440	-.001017	.0756727
#3	.0208108	.4506585	.0015057	-.000641	331.2171	.002118	.0751560

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5220723**	**.0222299**	**.0002275**	**-.009818**	**.0005207**	**.1434528**	**.0104306**
Stddev	.0072326	.0007786	.0000659	.000697	.0004003	.0072647	.0017685
%RSD	1.385371	3.502407	28.96475	7.102635	76.87614	5.064158	16.95478
#1	.5286989	.0213604	.0002240	-.009065	.0000607	.1488193	.0115010
#2	.5143570	.0228625	.0001634	-.010441	.0007112	.1351860	.0083894
#3	.5231609	.0224668	.0002951	-.009949	.0007902	.1463530	.0114015

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-08 Acquired: 2/12/2025 15:42:08 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.3891219	-.002246	.0196611
Stddev	.0041371	.001061	.0000467
%RSD	1.063184	47.25662	.2374488
#1	.3844044	-.002828	.0196206
#2	.3908292	-.001021	.0196505
#3	.3921321	-.002889	.0197122

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2532.863	50502.43	10266.86	1622.088	4072.696
Stddev	6.533	55.99	58.12	3.705	9.853
%RSD	.2579205	.1108758	.5660630	.2283899	.2419227
#1	2536.664	50460.68	10298.51	1620.821	4075.816
#2	2536.606	50566.06	10302.28	1626.260	4080.611
#3	2525.320	50480.54	10199.79	1619.183	4061.661

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-12 Acquired: 2/12/2025 15:46:36 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.004472**	**-.002041**	**.0052370**	**.0016771**	**.0008090**	**.0673332**	**.3331188**
Stddev	.001371	.000662	.0009214	.0010275	.0001748	.0036000	.0019964
%RSD	30.66653	32.45052	17.59374	61.26515	21.60493	5.346568	.5992940
#1	-.003542	-.002238	.0053302	.0005071	.0009162	.0712465	.3309965
#2	-.003827	-.002584	.0061081	.0024324	.0006073	.0665910	.3334006
#3	-.006047	-.001303	.0042725	.0020920	.0009035	.0641622	.3349593

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000043**	**.0000267**	**8.171661**	**.0016950**	**-.000387**	**.0202361**	**.0329846**
Stddev	.000035	.0000635	.015547	.0002535	.000032	.0001792	.0003267
%RSD	80.62705	237.7379	.1902563	14.95272	8.377726	.8854102	.9905598
#1	-.000045	.0000983	8.181289	.0018929	-.000413	.0201402	.0332979
#2	-.000076	-.000023	8.153725	.0014093	-.000398	.0204428	.0330100
#3	-.000007	.000005	8.179969	.0017828	-.000351	.0201253	.0326459

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0353750**	**.8251193**	**.0028958**	**-.000080**	**348.2165**	**-.001908**	**.1151994**
Stddev	.0002201	.0105529	.0001703	.000716	2.9072	.000689	.0005369
%RSD	.6222848	1.278948	5.879954	891.1600	.8348842	36.10671	.4660483
#1	.0351208	.8355360	.0027115	-.000899	345.1752	-.001173	.1157882
#2	.0355046	.8253865	.0030472	.000431	350.9679	-.002539	.1147370
#3	.0354996	.8144354	.0029288	.000227	348.5062	-.002010	.1150731

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3525857**	**.0510950**	**.0002941**	**-.010208**	**-.000151**	**.8726070**	**.0314317**
Stddev	.0276743	.0008922	.0003203	.000447	.000550	.0038430	.0013493
%RSD	7.848952	1.746238	108.9226	4.379202	363.4945	.4404034	4.292909
#1	.3213820	.0507659	.0005262	-.009700	.000339	.8732994	.0329395
#2	.3741551	.0504140	-.000071	-.010383	-.000047	.8760568	.0303379
#3	.3622200	.0521050	.000427	-.010541	-.000745	.8684649	.0310176

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-12 Acquired: 2/12/2025 15:46:36 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.3428078	-.003403	.0634390
Stddev	.0038211	.000818	.0000192
%RSD	1.114640	24.02199	.0302942
#1	.3447946	-.002466	.0634327
#2	.3384026	-.003778	.0634237
#3	.3452261	-.003966	.0634606

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2472.271	49942.45	10258.82	1610.154	3952.337
Stddev	2.098	18.68	39.70	4.335	5.514
%RSD	.0848642	.0374009	.3869870	.2692199	.1395007
#1	2473.603	49963.98	10285.31	1608.027	3957.007
#2	2473.359	49932.79	10277.99	1607.294	3953.749
#3	2469.853	49930.58	10213.17	1615.142	3946.255

Sample Name: Q1343-16 Acquired: 2/12/2025 15:51:04 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.006574**	**-.003462**	**.0150590**	**.0013463**	**.0014545**	**.0815702**	**.2853106**
Stddev	.001480	.001548	.0013648	.0013960	.0003398	.0041401	.0006265
%RSD	22.51197	44.69846	9.062742	103.6921	23.35962	5.075544	.2195894
#1	-.004949	-.004561	.0160260	.0019943	.0010701	.0862375	.2858270
#2	-.007844	-.001692	.0156531	-.000256	.0017145	.0783403	.2846136
#3	-.006929	-.004133	.0134979	.002301	.0015790	.0801329	.2854912

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000010**	**.0003079**	**8.275753**	**.0003121**	**-.000246**	**.0117473**	**.0168455**
Stddev	.000053	.0000764	.006945	.0001089	.000157	.0003888	.0033218
%RSD	544.6987	24.80090	.0839218	34.90275	63.66480	3.309805	19.71927
#1	.000016	.0003205	8.267766	.0001864	-.000202	.0113103	.0171823
#2	-.000071	.0002260	8.279121	.0003731	-.000421	.0120550	.0133681
#3	.000025	.0003772	8.280372	.0003770	-.000116	.0118765	.0199861

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0297597**	**1.035491**	**.0014876**	**-.000279**	**314.7034**	**.0005040**	**.0855735**
Stddev	.0005308	.004942	.0003611	.000393	1.1395	.0008726	.0002315
%RSD	1.783619	.4772587	24.27430	141.0709	.3620713	173.1212	.2705481
#1	.0294816	1.032175	.0010708	-.000733	315.9683	.0005839	.0854069
#2	.0294257	1.033127	.0017063	-.000056	313.7572	.0013340	.0854758
#3	.0303718	1.041171	.0016856	-.000047	314.3849	-.000406	.0858378

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3068355**	**.0315970**	**.0003177**	**-.010212**	**.0004235**	**.3289193**	**.0153329**
Stddev	.0086782	.0001796	.0003458	.000383	.0007307	.0050256	.0015714
%RSD	2.828301	.5683408	108.8621	3.750842	172.5685	1.527904	10.24842
#1	.3160331	.0316037	-.000019	-.010430	-.000177	.3314915	.0145139
#2	.2987921	.0314141	.000301	-.010437	.000210	.3231283	.0171446
#3	.3056812	.0317731	.000672	-.009770	.001237	.3321381	.0143401

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-16 Acquired: 2/12/2025 15:51:04 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.3454856	-.001784	.0816174
Stddev	.0039349	.001135	.0001524
%RSD	1.138933	63.58976	.1866950
#1	.3464131	-.002223	.0816385
#2	.3411698	-.000496	.0814556
#3	.3488738	-.002634	.0817581

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2510.739	50430.79	10208.16	1639.381	4033.377
Stddev	1.918	135.77	48.68	5.561	9.949
%RSD	.0763915	.2692218	.4768269	.3392089	.2466655
#1	2512.852	50285.72	10260.09	1633.152	4038.296
#2	2510.255	50554.80	10163.57	1641.144	4039.907
#3	2509.109	50451.83	10200.82	1643.846	4021.926

Sample Name: Q1343-20 Acquired: 2/12/2025 15:55:32 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.008091**	**-.003586**	**.0058801**	**.0013480**	**.0015962**	**.1168642**	**.2944527**
Stddev	.001013	.000455	.0008958	.0003666	.0014796	.0113427	.0007159
%RSD	12.51940	12.69104	15.23511	27.19771	92.69483	9.705910	.2431146
#1	-.006944	-.003072	.0052909	.0009310	.0032976	.1193258	.2944441
#2	-.008863	-.003935	.0069111	.0014933	.0006115	.1044928	.2951728
#3	-.008467	-.003752	.0054385	.0016197	.0008794	.1267740	.2937412

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000043**	**.0001299**	**10.42796**	**.0062890**	**-.000109**	**.0131739**	**.0623061**
Stddev	.000027	.0000574	.02557	.0001470	.000063	.0001231	.0042685
%RSD	62.91451	44.19196	.2452330	2.336852	58.23258	.9341447	6.850825
#1	-.000056	.0001137	10.41542	.0061708	-.000169	.0132998	.0645104
#2	-.000061	.0000824	10.45738	.0062427	-.000043	.0131680	.0650217
#3	-.000012	.0001937	10.41108	.0064535	-.000115	.0130538	.0573861

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0733560**	**1.381144**	**.0016756**	**-.000784**	**363.8003**	**-.001392**	**.1219884**
Stddev	.0003009	.012168	.0004949	.000426	3.0868	.001522	.0005163
%RSD	.4101367	.8810275	29.53851	54.35670	.8484851	109.2696	.4232760
#1	.0736953	1.389004	.0020645	-.001275	366.5442	-.002449	.1221807
#2	.0732511	1.387300	.0011184	-.000570	364.3986	-.002080	.1214035
#3	.0731217	1.367128	.0018437	-.000507	360.4582	.000351	.1223810

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3744572**	**.0569038**	**.0004677**	**-.005063**	**.0005040**	**.4688816**	**.0170006**
Stddev	.0214949	.0005715	.0001929	.000843	.0008127	.0032030	.0021364
%RSD	5.740283	1.004374	41.24456	16.65829	161.2584	.6831080	12.56637
#1	.3717906	.0572959	.0003136	-.004114	.0010777	.4655818	.0145338
#2	.3544199	.0571675	.0004055	-.005349	-.000426	.4690852	.0182519
#3	.3971609	.0562481	.0006840	-.005726	.000860	.4719780	.0182161

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1343-20 Acquired: 2/12/2025 15:55:32 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.3791932	-.003534	.1176464
Stddev	.0062297	.000722	.0001427
%RSD	1.642894	20.42057	.1213070
#1	.3740411	-.002760	.1177664
#2	.3861169	-.004189	.1176842
#3	.3774217	-.003655	.1174886

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2497.158	50010.46	10170.77	1627.235	4001.611
Stddev	4.694	56.48	41.04	2.292	7.201
%RSD	.1879759	.1129317	.4035129	.1408370	.1799442
#1	2502.579	49947.99	10150.36	1625.195	4009.909
#2	2494.465	50057.90	10143.92	1629.715	3997.914
#3	2494.432	50025.49	10218.01	1626.795	3997.009

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1334-02 Acquired: 2/12/2025 15:59:59 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.005853**	**-.001580**	**.0005534**	**.0010491**	**.0004015**	**.0676575**	**.2238194**
Stddev	.000560	.002687	.0005986	.0012267	.0008249	.0035736	.0008460
%RSD	9.570123	170.0095	108.1812	116.9287	205.4775	5.281822	.3780011
#1	-.006500	-.000097	.0009185	.0010411	-.000520	.0696953	.2247880
#2	-.005535	-.004682	.0008791	.0022797	.001071	.0635312	.2234455
#3	-.005525	.000038	-.000138	-.000174	.000654	.0697459	.2232248

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000443**	**.0000498**	**10.85249**	**.0004156**	**.0095781**	**.0195636**	**.1350573**
Stddev	.0000384	.0001321	.01283	.0001644	.0001981	.0009120	.0042870
%RSD	86.60194	265.2094	.1182600	39.55843	2.068482	4.661843	3.174214
#1	.0000552	-.000055	10.86103	.0002512	.0098064	.0195238	.1327542
#2	.0000017	.000198	10.83773	.0004155	.0094512	.0186722	.1400036
#3	.0000761	.000006	10.85871	.0005800	.0094768	.0204949	.1324140

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6781929**	**1.195764**	**.0036368**	**-.000284**	**317.6143**	**-.002399**	**.0722062**
Stddev	.0015390	.002053	.0002038	.000183	.6918	.002364	.0004909
%RSD	.2269312	.1716543	5.604960	64.47884	.2178248	98.55769	.6798250
#1	.6796355	1.198128	.0037220	-.000073	317.9384	-.000234	.0725226
#2	.6765729	1.194724	.0037842	-.000401	318.0846	-.004922	.0716407
#3	.6783702	1.194439	.0034042	-.000379	316.8199	-.002040	.0724552

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8104584**	**.0255496**	**.0003083**	**-.002184**	**-.000145**	**.8383174**	**.0066677**
Stddev	.0350668	.0003325	.0002972	.000468	.000244	.0047514	.0007747
%RSD	4.326786	1.301568	96.39692	21.41653	167.8984	.5667815	11.61870
#1	.8369053	.0252351	.0000378	-.002501	-.000408	.8438004	.0070423
#2	.7706812	.0258977	.0006264	-.001647	.000074	.8357457	.0057769
#3	.8237886	.0255161	.0002606	-.002405	-.000102	.8354061	.0071839

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1334-02 Acquired: 2/12/2025 15:59:59 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.3091803	-.001922	.0505771
Stddev	.0052024	.000335	.0000925
%RSD	1.682654	17.44030	.1829517
#1	.3114755	-.001737	.0505100
#2	.3032250	-.001721	.0506827
#3	.3128405	-.002310	.0505388

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2516.661	51019.50	10414.46	1643.893	4023.968
Stddev	4.273	97.23	9.74	4.450	5.450
%RSD	.1697717	.1905832	.0934845	.2706855	.1354471
#1	2515.830	51129.85	10419.50	1638.822	4024.101
#2	2521.288	50982.26	10403.23	1647.146	4029.350
#3	2512.865	50946.39	10420.63	1645.711	4018.452

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1334-04 Acquired: 2/12/2025 16:04:27 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.004501**	**-.004452**	**.0010523**	**.0023822**	**-.000298**	**.0724483**	**.2759998**
Stddev	.001200	.002961	.0004957	.0011531	.000207	.0021012	.0014872
%RSD	26.64932	66.50815	47.11112	48.40395	69.48246	2.900255	.5388561
#1	-.003853	-.007232	.0004816	.0027635	-.000172	.0733030	.2771897
#2	-.003765	-.004786	.0013759	.0010868	-.000538	.0700544	.2743325
#3	-.005885	-.001338	.0012993	.0032964	-.000186	.0739874	.2764771

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000913**	**.0003565**	**11.07087**	**.0006876**	**.0123558**	**.0190717**	**.1637918**
Stddev	.0000425	.0000459	.01803	.0003185	.0000891	.0002763	.0052362
%RSD	46.54281	12.86876	.1628756	46.31940	.7211788	1.448773	3.196868
#1	.0000438	.0003253	11.05542	.0009258	.0123798	.0188098	.1578550
#2	.0001045	.0003350	11.09068	.0008112	.0122572	.0190448	.1677521
#3	.0001256	.0004091	11.06650	.0003259	.0124304	.0193604	.1657682

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5575281**	**1.071473**	**.0029443**	**-.000300**	**341.6632**	**-.000717**	**.0867669**
Stddev	.0015329	.004831	.0004463	.000244	2.4158	.001019	.0002080
%RSD	.2749544	.4509069	15.15646	81.24788	.7070650	142.0454	.2396716
#1	.5558115	1.068489	.0028488	-.000577	339.4034	.000095	.0865749
#2	.5587603	1.077047	.0034306	-.000116	341.3768	-.001860	.0869878
#3	.5580127	1.068883	.0025536	-.000208	344.2094	-.000387	.0867381

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9312227**	**.0360391**	**.0003416**	**-.010557**	**-.000161**	**.8101110**	**.0109170**
Stddev	.0314335	.0001410	.0000655	.000326	.000586	.0140801	.0025966
%RSD	3.375504	.3911228	19.16321	3.085970	363.6994	1.738049	23.78471
#1	.9668457	.0359362	.0004146	-.010592	-.000820	.7954936	.0134676
#2	.9073851	.0361998	.0002880	-.010863	.000300	.8235841	.0110068
#3	.9194373	.0359814	.0003223	-.010215	.000037	.8112553	.0082767

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1334-04 Acquired: 2/12/2025 16:04:27 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.3308426	-.002099	.0552762
Stddev	.0037206	.000619	.0001420
%RSD	1.124574	29.50459	.2568097
#1	.3315656	-.001509	.0554007
#2	.3268136	-.002044	.0551216
#3	.3341486	-.002744	.0553064

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2529.520	50763.72	10386.31	1636.051	4035.649
Stddev	7.429	151.03	34.04	2.247	10.972
%RSD	.2936885	.2975234	.3277794	.1373714	.2718834
#1	2525.191	50926.04	10395.40	1637.288	4033.629
#2	2538.098	50627.33	10414.88	1637.407	4047.490
#3	2525.270	50737.80	10348.64	1633.456	4025.826

Sample Name: Q1346-02 Acquired: 2/12/2025 16:08:56 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.004859**	**-.003086**	**.0233547**	**.0021566**	**.0002459**	**.0131822**	**.3125450**
Stddev	.000679	.000931	.0003257	.0026348	.0007401	.0046265	.0002523
%RSD	13.96699	30.17812	1.394452	122.1774	301.0001	35.09670	.0807402
#1	-.004647	-.004138	.0231362	.0051144	-.000144	.0148464	.3123071
#2	-.004312	-.002752	.0231988	.0012946	.001099	.0167464	.3125182
#3	-.005619	-.002367	.0237289	.0000607	-.000218	.0079538	.3128096

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000122**	**.0009684**	**31.16289**	**.0008118**	**-.000296**	**.0166455**	**.0205253**
Stddev	.000029	.0000613	.04737	.0000094	.000061	.0000893	.0020767
%RSD	23.48579	6.325911	.1520230	1.154416	20.51546	.5361703	10.11766
#1	-.000092	.0009776	31.16771	.0008197	-.000322	.0167209	.0196177
#2	-.000149	.0010245	31.20766	.0008141	-.000226	.0166687	.0190570
#3	-.000124	.0009030	31.11328	.0008014	-.000339	.0165470	.0229013

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0455858**	**.9068451**	**.0018822**	**-.000713**	**320.0546**	**-.000513**	**.2227516**
Stddev	.0005207	.0051269	.0002037	.000458	1.9131	.001841	.0009501
%RSD	1.142134	.5653591	10.82027	64.15714	.5977561	358.6688	.4265194
#1	.0460831	.9009263	.0019460	-.001169	317.8583	-.000656	.2230233
#2	.0456297	.9099101	.0016543	-.000254	321.3581	.001395	.2235363
#3	.0450446	.9096989	.0020463	-.000718	320.9476	-.002278	.2216953

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7064509**	**.0426500**	**.0004722**	**-.011475**	**.0000268**	**.4379052**	**.2329302**
Stddev	.0109241	.0003211	.0002729	.001250	.0001059	.0138080	.0021071
%RSD	1.546338	.7529066	57.79836	10.89001	394.7469	3.153187	.9046284
#1	.6978697	.0424285	.0006993	-.012914	.0001462	.4472273	.2306776
#2	.7027346	.0425033	.0005478	-.010849	-.000010	.4220422	.2348530
#3	.7187483	.0430183	.0001694	-.010662	-.000056	.4444461	.2332600

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1346-02 Acquired: 2/12/2025 16:08:56 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.4297899	-.006401	.1174942
Stddev	.0008423	.001141	.0001347
%RSD	.1959880	17.82597	.1146681
#1	.4293086	-.006066	.1176485
#2	.4292986	-.007672	.1173999
#3	.4307626	-.005465	.1174342

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2498.444	50864.72	9901.368	1620.404	3999.778
Stddev	2.348	63.40	23.109	6.829	13.378
%RSD	.0939919	.1246443	.2333871	.4214335	.3344652
#1	2500.876	50799.34	9892.272	1613.322	4010.440
#2	2498.268	50868.89	9884.192	1620.941	4004.126
#3	2496.189	50925.93	9927.641	1626.948	3984.766

Sample Name: CCV04 Acquired: 2/12/2025 16:13:22 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.869070**	**4.762237**	**4.965294**	**4.812565**	**4.816071**	**9.766955**	**9.828142**
Stddev	.011577	.031574	.009636	.005122	.014348	.025792	.086683
%RSD	.2377600	.6630043	.1940758	.1064208	.2979107	.2640755	.8819911
#1	4.863901	4.782520	4.959976	4.809397	4.803580	9.737289	9.786070
#2	4.860979	4.725859	4.959489	4.809825	4.812892	9.779510	9.927832
#3	4.882331	4.778333	4.976418	4.818474	4.831742	9.784066	9.770524

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2453877**	**2.495878**	**24.92901**	**1.020749**	**2.474713**	**1.241009**	**5.120177**
Stddev	.0011665	.006615	.07457	.001976	.005002	.004550	.014572
%RSD	.4753479	.2650349	.2991433	.1935731	.2021341	.3666001	.2846013
#1	.2440856	2.495149	24.84618	1.021929	2.472248	1.236892	5.136293
#2	.2463371	2.489658	24.99080	1.021851	2.471422	1.240243	5.116308
#3	.2457402	2.502827	24.95006	1.018468	2.480469	1.245893	5.107930

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.478876**	**25.20052**	**2.487478**	**1.245123**	**26.15708**	**2.474401**	**2.467261**
Stddev	.005108	.16810	.006877	.002711	.07235	.014711	.013698
%RSD	.2060680	.6670319	.2764825	.2177533	.2765918	.5945098	.5552016
#1	2.473255	25.02845	2.485567	1.246248	26.24030	2.457597	2.471653
#2	2.480137	25.36434	2.481759	1.247090	26.10915	2.480652	2.478224
#3	2.483236	25.20878	2.495109	1.242030	26.12179	2.484954	2.451905

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.03825**	**4.799456**	**4.915072**	**4.976597**	**4.929666**	**5.051109**	**4.946141**
Stddev	.13663	.022124	.008919	.013620	.014099	.018915	.004675
%RSD	.5456713	.4609732	.1814582	.2736894	.2860035	.3744744	.0945114
#1	25.06352	4.776560	4.909017	4.970213	4.913479	5.029491	4.949521
#2	24.89075	4.820718	4.910886	4.967340	4.936258	5.059216	4.940806
#3	25.16047	4.801091	4.925314	4.992237	4.939262	5.064619	4.948096

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCV04 Acquired: 2/12/2025 16:13:22 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.857283**	**4.868918**	**4.839528**
Stddev	.011495	.007233	.062173
%RSD	.2366451	.1485502	1.284695
#1	4.857071	4.866696	4.819040
#2	4.845895	4.863057	4.909360
#3	4.868881	4.877001	4.790185

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2564.248**	**51362.02**	**9643.694**	**1669.718**	**4121.589**
Stddev	2.626	39.21	50.758	12.392	4.462
%RSD	.1023941	.0763351	.5263359	.7421560	.1082526
#1	2567.127	51398.85	9700.834	1668.048	4121.332
#2	2563.631	51320.81	9603.825	1658.245	4126.173
#3	2561.986	51366.40	9626.423	1682.860	4117.261

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCB04 Acquired: 2/12/2025 16:17:34 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002416**	**.0012214**	**-.000580**	**-.001794**	**.0001676**	**-.001719**
Stddev	.0009752	.0005793	.001148	.001830	.0003459	.003552
%RSD	403.7037	47.42844	197.9954	101.9964	206.4553	206.6680
#1	.0009296	.0017423	-.001064	-.002682	-.000204	-.004037
#2	-.000874	.0013242	.000731	-.003011	.000480	-.003490
#3	.000669	.0005975	-.001406	.000310	.000226	.002371

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0066501**	**-.000016**	**-.000121**	**.0321462**	**.0001100**	**-.000051**
Stddev	.0009488	.000062	.000096	.0039204	.0002397	.000131
%RSD	14.26756	382.2244	79.71743	12.19536	217.9649	257.5462
#1	.0069021	.000053	-.000096	.0348012	.0003788	.000098
#2	.0074474	-.000037	-.000227	.0276435	.0000325	-.000106
#3	.0056007	-.000064	-.000039	.0339940	-.000081	-.000144

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001101**	**-.000026**	**-.000137**	**.0009205**	**.0001411**	**-.000628**
Stddev	.0003547	.001633	.000651	.0033274	.0003810	.000594
%RSD	322.2557	6203.425	473.4668	361.4790	270.0239	94.60277
#1	-.000021	.000453	-.000630	-.000471	-.000138	-.000912
#2	-.000161	.001313	.000600	.004718	-.000014	.000055
#3	.000512	-.001845	-.000383	-.001485	.000575	-.001026

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5051205**	**-.000923**	**.0047777**	**.3085484**	**.0031578**	**-.000018**
Stddev	.0249476	.002055	.0002704	.0328008	.0007217	.000196
%RSD	4.938942	222.5149	5.659285	10.63068	22.85285	1068.514
#1	.4856545	-.000294	.0047371	.2775133	.0038581	.000163
#2	.4964636	-.003219	.0045299	.3052640	.0024165	-.000227
#3	.5332434	.000743	.0050661	.3428678	.0031988	.000009

Sample Name: CCB04 Acquired: 2/12/2025 16:17:34 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008002	-.000538	.0042076	.0000667	F .0326786	.0060393
Stddev	.0007763	.001041	.0088950	.0021723	.0030337	.0020559
%RSD	97.01606	193.4714	211.4032	3254.816	9.283523	34.04123
#1	.0001280	-.000857	.0118704	.0020195	.0296453	.0069508
#2	.0016499	-.001382	-.005547	-.002273	.0326777	.0074818
#3	.0006228	.000625	.006299	.000454	.0357127	.0036853

Elem	Sr4077
Units	ppm
Avg	.0000489
Stddev	.0000130
%RSD	26.52156
#1	.0000626
#2	.0000367
#3	.0000475

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2630.787	52988.31	9975.811	1744.497	4438.323
Stddev	1.604	75.72	40.364	5.291	3.805
%RSD	.0609837	.1428963	.4046209	.3033229	.0857400
#1	2629.572	52911.10	9994.981	1747.376	4433.934
#2	2632.606	53062.44	9929.433	1738.391	4440.702
#3	2630.184	52991.40	10003.02	1747.726	4440.333

Sample Name: Q1346-02DUP Acquired: 2/12/2025 16:21:55 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.004569**	**-.002639**	**.0246436**	**.0037174**	**.0012428**	**.0225125**	**.3235626**
Stddev	.001106	.000934	.0008769	.0013312	.0014260	.0139277	.0008743
%RSD	24.20357	35.38971	3.558343	35.81086	114.7415	61.86619	.2702186
#1	-.005795	-.003257	.0245106	.0049581	.0028043	.0286251	.3245213
#2	-.003649	-.001565	.0238408	.0023111	.0009147	.0323386	.3228092
#3	-.004262	-.003096	.0255794	.0038830	.0000094	.0065738	.3233573

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000108**	**.0009342**	**31.65769**	**.0007778**	**-.000096**	**.0168192**	**.0273843**
Stddev	.000013	.0000723	.05967	.0001358	.000096	.0002103	.0049483
%RSD	11.78865	7.744751	.1884797	17.46024	100.3315	1.250314	18.06982
#1	-.000115	.0008718	31.70441	.0009154	-.000014	.0169879	.0296457
#2	-.000094	.0009174	31.67818	.0006438	-.000071	.0165836	.0217094
#3	-.000117	.0010135	31.59047	.0007743	-.000202	.0168861	.0307979

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0462028**	**.9333865**	**.0016039**	**-.000813**	**347.7732**	**.0001552**	**.2274115**
Stddev	.0005436	.0065286	.0002476	.000249	2.0418	.0012258	.0021659
%RSD	1.176506	.6994538	15.43450	30.66292	.5870935	789.9919	.9524342
#1	.0463672	.9269937	.0013860	-.000977	347.2073	.0006634	.2261209
#2	.0466452	.9400429	.0015526	-.000937	346.0741	.0010451	.2262015
#3	.0455960	.9331229	.0018731	-.000526	350.0382	-.001243	.2299121

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7900280**	**.0446010**	**.0006734**	**-.011161**	**-.000149**	**.4732953**	**.2443860**
Stddev	.0095368	.0011014	.0002478	.000510	.000724	.0045605	.0031705
%RSD	1.207150	2.469333	36.79708	4.565939	486.8026	.9635705	1.297333
#1	.7950742	.0433709	.0009566	-.011106	.000687	.4774444	.2426601
#2	.7959815	.0449366	.0004961	-.010682	-.000560	.4740291	.2424530
#3	.7790283	.0454956	.0005676	-.011696	-.000573	.4684123	.2480451

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1346-02DUP Acquired: 2/12/2025 16:21:55 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.4395825	-.005165	.1157178
Stddev	.0043230	.000603	.0001245
%RSD	.9834253	11.68243	.1076251
#1	.4367293	-.004492	.1156050
#2	.4445562	-.005346	.1156969
#3	.4374618	-.005657	.1158515

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2451.392	48982.08	10004.32	1595.713	3903.977
Stddev	9.335	57.13	15.35	2.285	13.079
%RSD	.3807861	.1166384	.1534463	.1432123	.3350217
#1	2452.470	49008.92	9993.36	1596.511	3912.003
#2	2460.141	49020.84	10021.87	1597.492	3911.043
#3	2441.565	48916.47	9997.73	1593.136	3888.885

Sample Name: Q1346-02DLX5 Acquired: 2/12/2025 16:26:21 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003009**	**.0006579**	**.0043890**	**-.001205**	**.0013519**	**.0040012**	**.0708705**
Stddev	.002392	.0004448	.0016323	.002126	.0004498	.0047437	.0007811
%RSD	79.50169	67.61782	37.19090	176.4525	33.27148	118.5589	1.102115
#1	-.000247	.0005291	.0035715	-.003351	.0008448	.0002147	.0717719
#2	-.004389	.0011529	.0033270	.000899	.0015081	.0093222	.0703950
#3	-.004391	.0002916	.0062686	-.001162	.0017027	.0024666	.0704445

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000009**	**.0000885**	**6.549425**	**-.000304**	**-.000006**	**.0034099**	**.0029301**
Stddev	.000093	.0001231	.024490	.000304	.000083	.0002880	.0009769
%RSD	1064.739	139.0900	.3739263	100.0574	1436.873	8.444710	33.33996
#1	-.000055	.0001774	6.550538	.000032	.000070	.0037269	.0031815
#2	.000099	.0001400	6.524398	-.000561	.000006	.0033382	.0037568
#3	-.000070	-.000052	6.573340	-.000382	-.000094	.0031646	.0018521

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0087638**	**.1978074**	**.0004981**	**-.000695**	**67.72295**	**.0003109**	**.0457621**
Stddev	.0008161	.0139039	.0001060	.000507	.69345	.0018920	.0006712
%RSD	9.312323	7.029004	21.28101	72.92746	1.023953	608.5800	1.466801
#1	.0087024	.2127732	.0003762	-.001262	67.09790	-.000657	.0454642
#2	.0096089	.1953579	.0005684	-.000540	67.60204	.002491	.0452914
#3	.0079802	.1852910	.0005496	-.000284	68.46890	-.000901	.0465307

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2797700**	**.0069128**	**.0000373**	**-.002233**	**.0009597**	**.1014637**	**.0503087**
Stddev	.0014667	.0007660	.0002358	.000625	.0004066	.0009292	.0001772
%RSD	.5242472	11.08082	632.1212	28.01119	42.36391	.9157936	.3522907
#1	.2791652	.0074043	-.000234	-.001632	.0013819	.1003954	.0501281
#2	.2787024	.0073039	.000155	-.002880	.0005709	.1020842	.0504824
#3	.2814424	.0060302	.000191	-.002187	.0009263	.1019115	.0503157

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1346-02DLX5 Acquired: 2/12/2025 16:26:21 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.1115182	.0017369	.0234421
Stddev	.0031122	.0009216	.0001427
%RSD	2.790744	53.05889	.6085048
#1	.1151090	.0009530	.0234331
#2	.1095993	.0015056	.0235890
#3	.1098463	.0027521	.0233041

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2562.935	51285.79	10076.59	1675.965	4189.176
Stddev	7.330	283.47	46.49	13.997	10.424
%RSD	.2859997	.5527281	.4613330	.8351365	.2488339
#1	2569.755	51575.93	10036.82	1687.782	4195.988
#2	2563.867	51271.95	10065.25	1679.605	4194.363
#3	2555.184	51009.50	10127.70	1660.508	4177.176

Sample Name: Q1346-02MS Acquired: 2/12/2025 16:30:40 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7477006**	**1.706964**	**.9337782**	**1.820523**	**.7508035**	**1.831910**	**.4801542**
Stddev	.0060462	.009823	.0051038	.012150	.0010214	.006981	.0005888
%RSD	.8086413	.5754591	.5465751	.6673961	.1360372	.3811025	.1226251
#1	.7532424	1.701522	.9366131	1.833284	.7514414	1.835511	.4794784
#2	.7412524	1.701067	.9278862	1.809094	.7496255	1.836355	.4804275
#3	.7486071	1.718303	.9368353	1.819190	.7513437	1.823863	.4805567

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1807878**	**.1924146**	**30.28968**	**.4085596**	**.1930601**	**.2949730**	**3.076775**
Stddev	.0010218	.0010536	.04095	.0002856	.0011479	.0012315	.010995
%RSD	.5652231	.5475514	.1351974	.0698952	.5945535	.4174871	.3573451
#1	.1809457	.1931314	30.26075	.4088679	.1938464	.2956420	3.069582
#2	.1796961	.1912049	30.27175	.4083041	.1917429	.2935518	3.089431
#3	.1817215	.1929075	30.33654	.4085067	.1935909	.2957251	3.071311

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2236948**	**2.687761**	**.4841078**	**.0734739**	**319.1936**	**.2826662**	**.4057022**
Stddev	.0010850	.011604	.0019816	.0005630	5.6467	.0008066	.0008316
%RSD	.4850297	.4317329	.4093312	.7663037	1.769060	.2853392	.2049670
#1	.2239485	2.698025	.4855416	.0741050	323.4927	.2824200	.4063230
#2	.2225055	2.675170	.4818466	.0732936	312.7986	.2820115	.4060261
#3	.2246305	2.690089	.4849353	.0730231	321.2895	.2835672	.4047574

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.91291**	**.2825771**	**.4039740**	**.6645805**	**.1845810**	**1.219119**	**5.871107**
Stddev	.02675	.0006177	.0015851	.0035191	.0013154	.010302	.031223
%RSD	.2451455	.2185883	.3923835	.5295282	.7126567	.8450115	.5318021
#1	10.91866	.2818965	.4042581	.6672660	.1831313	1.207263	5.886569
#2	10.88375	.2831022	.4022660	.6605967	.1849134	1.225885	5.835170
#3	10.93632	.2827325	.4053978	.6658789	.1856984	1.224209	5.891580

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1346-02MS Acquired: 2/12/2025 16:30:40 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.3813237	.1833711	.2898812
Stddev	.0008756	.0007679	.0000278
%RSD	.2296269	.4187970	.0095733
#1	.3823245	.1832185	.2898587
#2	.3809472	.1826909	.2899122
#3	.3806992	.1842039	.2898728

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2524.293	49506.71	9954.558	1595.144	4061.753
Stddev	6.769	41.56	37.422	4.141	16.506
%RSD	.2681481	.0839432	.3759268	.2595707	.4063863
#1	2520.828	49458.73	9923.754	1596.098	4053.277
#2	2532.093	49529.75	9996.204	1590.610	4080.776
#3	2519.959	49531.64	9943.718	1598.725	4051.207

Sample Name: Q1346-02MSD Acquired: 2/12/2025 16:34:50 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7566208**	**1.749983**	**.9461347**	**1.831157**	**.7506690**	**1.852685**	**.4880632**
Stddev	.0009045	.004735	.0030119	.004687	.0017004	.010282	.0009289
%RSD	.1195434	.2705509	.3183334	.2559571	.2265156	.5550013	.1903150
#1	.7558254	1.751329	.9427233	1.827259	.7523947	1.855592	.4876192
#2	.7564323	1.753898	.9472550	1.829855	.7506170	1.861200	.4874397
#3	.7576047	1.744721	.9484259	1.836358	.7489952	1.841261	.4891307

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1823333**	**.1944387**	**30.65255**	**.4053145**	**.1946144**	**.2974917**	**3.054842**
Stddev	.0003622	.0004079	.06912	.0010169	.0004149	.0008798	.016139
%RSD	.1986584	.2097803	.2254845	.2508888	.2132174	.2957307	.5282998
#1	.1827507	.1940379	30.70950	.4052233	.1941541	.2964792	3.041186
#2	.1821017	.1944249	30.67249	.4043463	.1947292	.2979268	3.050687
#3	.1821475	.1948534	30.57565	.4063739	.1949598	.2980692	3.072652

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2271063**	**2.738643**	**.4885214**	**.0725941**	**312.0560**	**.2844606**	**.4001127**
Stddev	.0011789	.003740	.0008238	.0005122	2.3603	.0029438	.0004603
%RSD	.5191044	.1365719	.1686393	.7056256	.7563573	1.034858	.1150371
#1	.2257660	2.739100	.4877113	.0721574	312.1389	.2820840	.3997376
#2	.2275703	2.734696	.4884946	.0724671	309.6555	.2835443	.3999742
#3	.2279827	2.742134	.4893583	.0731580	314.3738	.2877536	.4006264

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.67503**	**.2857825**	**.4028853**	**.6726203**	**.1862075**	**1.194760**	**6.045965**
Stddev	.05881	.0023735	.0009748	.0014333	.0014301	.008047	.011003
%RSD	.5508835	.8305289	.2419523	.2130904	.7680129	.6734995	.1819947
#1	10.61024	.2870726	.4025443	.6721161	.1878251	1.187134	6.035697
#2	10.68981	.2830434	.4021268	.6715073	.1856858	1.193977	6.044618
#3	10.72503	.2872315	.4039848	.6742376	.1851114	1.203170	6.057579

Sample Name: Q1346-02MSD Acquired: 2/12/2025 16:34:50 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.3875163	.1847157	.2885628
Stddev	.0023716	.0004221	.0006478
%RSD	.6119908	.2284923	.2244856
#1	.3847889	.1844746	.2883331
#2	.3890928	.1852031	.2892941
#3	.3886671	.1844694	.2880611

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2500.153	50287.59	9816.288	1629.071	3996.319
Stddev	6.012	110.55	21.493	4.521	9.284
%RSD	.2404680	.2198339	.2189513	.2775003	.2323250
#1	2507.076	50334.38	9794.801	1634.078	4007.026
#2	2497.134	50367.05	9837.787	1627.845	3990.500
#3	2496.248	50161.34	9816.276	1625.289	3991.430

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1346-02A Acquired: 2/12/2025 16:39:00 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7568271**	**1.726268**	**.9447099**	**1.824758**	**.7480595**	**1.858077**	**.5009705**
Stddev	.0026127	.010296	.0034623	.008138	.0012977	.017350	.0004214
%RSD	.3452132	.5964258	.3664906	.4459768	.1734752	.9337787	.0841214
#1	.7539318	1.716348	.9408803	1.817642	.7471900	1.844421	.5006653
#2	.7575407	1.725552	.9456311	1.823003	.7495511	1.852210	.5007947
#3	.7590089	1.736903	.9476185	1.833631	.7474373	1.877600	.5014513

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1835845**	**.1942168**	**31.16707**	**.4077638**	**.1948542**	**.2987683**	**3.117852**
Stddev	.0018581	.0005364	.12757	.0026706	.0004411	.0007616	.045220
%RSD	1.012107	.2762040	.4093046	.6549282	.2263791	.2549050	1.450373
#1	.1814498	.1936022	31.03189	.4100508	.1943715	.2982342	3.169652
#2	.1844654	.1944574	31.18397	.4084116	.1949549	.2984302	3.086259
#3	.1848382	.1945908	31.28534	.4048289	.1952364	.2996403	3.097643

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2327215**	**2.745970**	**.4880766**	**.0727162**	**320.9598**	**.2898326**	**.4044992**
Stddev	.0012065	.037517	.0012580	.0005372	1.9835	.0021554	.0023358
%RSD	.5184145	1.366272	.2577510	.7388207	.6179903	.7436606	.5774580
#1	.2318978	2.703592	.4866313	.0730801	321.2676	.2908439	.4058124
#2	.2321603	2.759371	.4886733	.0729692	322.7715	.2912963	.4058829
#3	.2341063	2.774946	.4889253	.0720991	318.8404	.2873575	.4018024

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.87626**	**.2876556**	**.4032113**	**.6712850**	**.1897842**	**1.223538**	**6.103702**
Stddev	.07511	.0025049	.0012287	.0026757	.0007482	.020439	.033247
%RSD	.6906128	.8708041	.3047305	.3985960	.3942507	1.670457	.5447072
#1	10.96053	.2847643	.4020128	.6705887	.1905267	1.244598	6.074995
#2	10.81636	.2890287	.4031530	.6690262	.1890304	1.222233	6.095981
#3	10.85189	.2891737	.4044682	.6742400	.1897955	1.203783	6.140131

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1346-02A Acquired: 2/12/2025 16:39:00 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.3852899	.1897357	.2842291
Stddev	.0010523	.0007327	.0006226
%RSD	.2731122	.3861905	.2190298
#1	.3848895	.1892848	.2840575
#2	.3844966	.1893411	.2837104
#3	.3864836	.1905812	.2849195

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2493.125	49881.69	9800.047	1629.048	3986.414
Stddev	5.786	187.76	69.743	9.286	6.135
%RSD	.2320726	.3764124	.7116637	.5700298	.1539029
#1	2497.342	49670.45	9879.935	1618.792	3991.108
#2	2495.504	49945.05	9751.299	1631.467	3988.661
#3	2486.529	50029.58	9768.906	1636.886	3979.472

Sample Name: PB166680BL Acquired: 2/12/2025 16:43:11 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003175**	**.0004934**	**-.000638**	**.0003677**	**.0015867**	**.0078658**	**.0042266**
Stddev	.002048	.0012984	.000416	.0018862	.0011372	.0052688	.0003539
%RSD	64.48741	263.1736	65.22885	512.9463	71.67307	66.98444	8.373316
#1	-.003505	-.000719	-.001117	-.001687	.0017299	.0086032	.0039362
#2	-.000983	.001863	-.000438	.002020	.0003847	.0022671	.0041229
#3	-.005038	.000336	-.000360	.000771	.0026456	.0127271	.0046208

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000100**	**-.000239**	**-.002890**	**.0003001**	**-.000194**	**.0003950**	**-.000570**
Stddev	.000051	.000046	.006812	.0001882	.000119	.0004875	.008259
%RSD	50.68293	19.19582	235.7385	62.71110	61.22318	123.4007	1448.679
#1	-.000141	-.000275	-.007543	.0003175	-.000272	.0009060	-.008255
#2	-.000043	-.000187	-.006056	.0004790	-.000253	-.000065	.008163
#3	-.000117	-.000254	.004929	.0001038	-.000057	.000344	-.001618

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012328**	**-.009890**	**-.000018**	**-.000723**	**-.041823**	**-.000519**	**.0013814**
Stddev	.0003741	.009130	.000115	.000308	.010836	.000536	.0001513
%RSD	30.34429	92.31848	650.2091	42.65295	25.90864	103.3019	10.95315
#1	.0016217	-.000213	-.000092	-.000781	-.049443	-.000855	.0013954
#2	.0012012	-.011105	-.000076	-.000998	-.029418	-.000801	.0015253
#3	.0008755	-.018351	.000115	-.000390	-.046607	.000099	.0012236

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.058936**	**-.005064**	**.0001502**	**-.009687**	**.0002340**	**.0074498**	**.0059588**
Stddev	.033099	.000872	.0001022	.000698	.0013807	.0103793	.0018686
%RSD	56.16024	17.21947	68.05024	7.208535	590.0157	139.3221	31.35934
#1	-.092953	-.004985	.0001059	-.009970	.0014898	.0097642	.0060423
#2	-.057016	-.004235	.0000777	-.008891	-.001245	.0164765	.0040498
#3	-.026839	-.005973	.0002672	-.010199	.000457	-.003891	.0077842

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: PB166680BL Acquired: 2/12/2025 16:43:11 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0072207	-.002230	-.000009
Stddev	.0013789	.000774	.000041
%RSD	19.09595	34.69603	454.5890
#1	.0086284	-.003123	.000028
#2	.0071613	-.001773	-.000054
#3	.0058726	-.001793	-.000002

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2678.093	54221.85	10346.63	1747.899	4595.302
Stddev	1.693	153.53	23.91	1.871	6.270
%RSD	.0631980	.2831538	.2311285	.1070480	.1364470
#1	2676.150	54077.26	10319.02	1745.776	4588.469
#2	2678.885	54205.31	10360.69	1748.615	4600.791
#3	2679.245	54382.98	10360.18	1749.306	4596.645

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: PB166680BS Acquired: 2/12/2025 16:47:31 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7293841**	**1.769737**	**.9085178**	**1.745047**	**.7466031**	**1.832056**
Stddev	.0035327	.026652	.0025177	.005334	.0015458	.007479
%RSD	.4843385	1.505990	.2771197	.3056495	.2070455	.4082245
#1	.7288776	1.753459	.9073804	1.744188	.7459340	1.825426
#2	.7261320	1.755258	.9067695	1.740195	.7455046	1.840163
#3	.7331427	1.800495	.9114035	1.750758	.7483708	1.830579

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1820286**	**.1783490**	**.1836133**	**.9558356**	**.4023093**	**.1899004**
Stddev	.0001141	.0006328	.0005504	.0016266	.0009371	.0005666
%RSD	.0626580	.3548287	.2997809	.1701750	.2329365	.2983833
#1	.1819088	.1777328	.1834692	.9556060	.4022260	.1898348
#2	.1821358	.1789972	.1831492	.9543359	.4014166	.1893695
#3	.1820411	.1783169	.1842214	.9575647	.4032853	.1904970

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2949496**	**2.800935**	**.1943556**	**1.871722**	**.4762308**	**.0686144**
Stddev	.0008174	.006480	.0013331	.005518	.0010310	.0001680
%RSD	.2771461	.2313482	.6859061	.2948329	.2164879	.2448075
#1	.2948448	2.801645	.1930221	1.876129	.4764135	.0688065
#2	.2941896	2.794129	.1943565	1.873503	.4751207	.0685416
#3	.2958144	2.807031	.1956883	1.865533	.4771583	.0684951

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.918234**	**.2792180**	**.1869395**	**8.807649**	**.2400869**	**.4036381**
Stddev	.003954	.0009818	.0005313	.020252	.0017968	.0008892
%RSD	.1354979	.3516376	.2842219	.2299380	.7484057	.2202904
#1	2.915559	.2803039	.1875419	8.784275	.2390286	.4030360
#2	2.922776	.2783929	.1867392	8.819949	.2421616	.4032189
#3	2.916368	.2789573	.1865375	8.818725	.2390706	.4046594

Sample Name: PB166680BS Acquired: 2/12/2025 16:47:31 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6493952	.1834979	F .7088779	5.151884	F .0154003	.1825028
Stddev	.0020541	.0004054	.0041638	.027589	.0023006	.0012955
%RSD	.3163061	.2209473	.5873801	.5355072	14.93888	.7098421
#1	.6470693	.1830791	.7043310	5.143838	.0179451	.1810966
#2	.6501558	.1838885	.7097978	5.129212	.0147879	.1836477
#3	.6509605	.1835261	.7125048	5.182601	.0134678	.1827640

Elem	Sr4077
Units	ppm
Avg	.1850060
Stddev	.0003858
%RSD	.2085619
#1	.1847329
#2	.1848377
#3	.1854474

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2616.602	55668.83	10035.10	1736.008	4456.786
Stddev	6.017	147.04	43.39	6.470	6.915
%RSD	.2299432	.2641295	.4323602	.3726915	.1551515
#1	2620.763	55834.63	10082.24	1740.314	4463.964
#2	2619.339	55554.27	9996.84	1739.142	4456.227
#3	2609.703	55617.59	10026.22	1728.568	4450.168

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1172-04 Acquired: 2/12/2025 16:55:56 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0046604**	**.0053296**	**.0198560**	**.0272932**	**.0201153**	**.4905826**	**1.736950**
Stddev	.0026323	.0010570	.0015657	.0018580	.0007077	.0079924	.002263
%RSD	56.48166	19.83304	7.885166	6.807531	3.518443	1.629168	.1303092
#1	.0016462	.0064695	.0180658	.0275932	.0209298	.4961924	1.734337
#2	.0058283	.0043818	.0209692	.0289830	.0197662	.4941242	1.738262
#3	.0065066	.0051375	.0205331	.0253035	.0196499	.4814314	1.738252

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0164290**	**.0240326**	**.0059911**	**.0234883**	**-.000392**	**.7326313**	**1.445081**
Stddev	.0001645	.0000431	.0137352	.0003941	.000295	.0024675	.008327
%RSD	1.001036	.1792064	229.2592	1.677933	75.17006	.3367958	.5762641
#1	.0162490	.0239913	.0162669	.0237266	-.000733	.7318594	1.453822
#2	.0164665	.0240773	-.009609	.0237049	-.000212	.7306421	1.437240
#3	.0165714	.0240291	.011316	.0230334	-.000233	.7353925	1.444180

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8191916**	**-.011968**	**.2124815**	**.2376827**	**.3328156**	**.2895837**	**.2226513**
Stddev	.0022722	.003311	.0001135	.0008402	.0095869	.0004339	.0012404
%RSD	.2773675	27.66741	.0533909	.3534945	2.880543	.1498349	.5571076
#1	.8187986	-.012161	.2126120	.2378541	.3238961	.2896614	.2233037
#2	.8171416	-.008564	.2124254	.2367700	.3315973	.2899735	.2234293
#3	.8216347	-.015178	.2124070	.2384239	.3429534	.2891162	.2212208

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2155096**	**1.519755**	**.0511175**	**-.000627**	**.0004818**	**.1552533**	**.0092447**
Stddev	.0342159	.015600	.0001851	.000120	.0003374	.0038267	.0023829
%RSD	15.87675	1.026484	.3620512	19.12298	70.02712	2.464817	25.77642
#1	.1962414	1.501809	.0509063	-.000590	.0008022	.1596645	.0071345
#2	.1952727	1.527378	.0511951	-.000761	.0005137	.1528235	.0087703
#3	.2550148	1.530077	.0512511	-.000530	.0001296	.1532721	.0118291

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1172-04 Acquired: 2/12/2025 16:55:56 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0149541	.0033626	-.001444
Stddev	.0029026	.0000527	.000012
%RSD	19.41009	1.567495	.8413439
#1	.0127051	.0033740	-.001430
#2	.0182307	.0033050	-.001451
#3	.0139264	.0034086	-.001451

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2656.787	53897.58	10048.77	1739.099	4485.859
Stddev	4.841	151.68	46.70	15.038	7.560
%RSD	.1822293	.2814153	.4646968	.8647291	.1685399
#1	2656.747	53725.87	10102.56	1724.298	4482.310
#2	2661.648	54013.29	10025.05	1738.634	4494.541
#3	2651.965	53953.59	10018.69	1754.364	4480.726

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1346-01 Acquired: 2/12/2025 17:00:10 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1034473**	**-.016595**	**5.045306**	**-.031689**	**.0131343**	**93.55841**
Stddev	.0016194	.002594	.010140	.000865	.0008002	.04175
%RSD	1.565406	15.62936	.2009715	2.731111	6.092361	.0446242
#1	.1043886	-.019394	5.053565	-.031881	.0126503	93.51022
#2	.1015774	-.014272	5.033989	-.032442	.0140579	93.58338
#3	.1043758	-.016120	5.048362	-.030744	.0126947	93.58165

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.054442**	**.0145190**	**.0265783**	**93.74349**	**.6945468**	**.0951070**
Stddev	.008259	.0000679	.0001498	.10687	.0004240	.0004868
%RSD	.2703878	.4678669	.5634696	.1140066	.0610469	.5118978
#1	3.045242	.0145898	.0267304	93.62034	.6942628	.0956186
#2	3.061217	.0145129	.0264310	93.79821	.6950342	.0946494
#3	3.056868	.0144544	.0265735	93.81193	.6943434	.0950529

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7546159**	**224.2751**	**2.740840**	**23.98233**	**.2967540**	**-.002717**
Stddev	.0036345	.6119	.004237	.07498	.0011504	.000177
%RSD	.4816288	.2728270	.1545877	.3126288	.3876548	6.511277
#1	.7578629	224.1354	2.737054	24.01572	.2980794	-.002578
#2	.7506898	224.9448	2.745416	23.89646	.2961678	-.002916
#3	.7552950	223.7452	2.740049	24.03481	.2960147	-.002657

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.735462**	**.2861811**	**3.538241**	**10.27688**	**.0292443**	**.0192411**
Stddev	.007015	.0027287	.009530	.06785	.0000482	.0004222
%RSD	.4041949	.9535030	.2693563	.6602071	.1646748	2.194144
#1	1.727589	.2868383	3.527250	10.24628	.0292083	.0189808
#2	1.737751	.2831838	3.544205	10.35464	.0292256	.0190143
#3	1.741046	.2885213	3.543269	10.22972	.0292990	.0197282

Sample Name: Q1346-01 Acquired: 2/12/2025 17:00:10 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2343208	1.602727	4.155778	F 25.05326	2.542364	.1349857
Stddev	.0023393	.012976	.040079	.06314	.016490	.0010771
%RSD	.9983388	.8096322	.9644152	.2520052	.6485993	.7979676
#1	.2370175	1.589656	4.115449	25.11889	2.556916	.1338272
#2	.2331072	1.615606	4.156284	24.99296	2.524454	.1359570
#3	.2328376	1.602921	4.195602	25.04792	2.545722	.1351727

Elem	Sr4077
Units	ppm
Avg	.2376748
Stddev	.0007842
%RSD	.3299421
#1	.2377069
#2	.2368751
#3	.2384425

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2794.508	56729.22	11314.51	1851.183	4096.472
Stddev	6.802	65.26	18.96	4.288	9.015
%RSD	.2434014	.1150452	.1675332	.2316406	.2200557
#1	2788.472	56769.97	11325.68	1854.900	4087.359
#2	2801.878	56653.95	11325.23	1846.491	4105.385
#3	2793.175	56763.74	11292.62	1852.156	4096.671

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCV05 Acquired: 2/12/2025 17:04:14 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.889321**	**4.721687**	**4.973255**	**4.841168**	**4.866186**	**9.746280**	**9.704286**
Stddev	.017461	.056439	.009198	.015089	.021514	.019027	.028258
%RSD	.3571211	1.195316	.1849472	.3116802	.4421025	.1952230	.2911923
#1	4.878871	4.659771	4.966335	4.826314	4.858116	9.760528	9.732088
#2	4.879614	4.735035	4.969736	4.840710	4.849875	9.753639	9.705177
#3	4.909478	4.770256	4.983692	4.856481	4.890568	9.724673	9.675593

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2509980**	**2.493516**	**24.72827**	**1.021744**	**2.477809**	**1.245739**	**5.002067**
Stddev	.0015499	.005811	.09692	.000694	.003556	.003112	.006016
%RSD	.6174741	.2330335	.3919481	.0679503	.1435223	.2498154	.1202764
#1	.2513644	2.488782	24.71294	1.021100	2.474442	1.242611	4.995128
#2	.2523318	2.491766	24.83194	1.022480	2.477455	1.245773	5.005245
#3	.2492978	2.500001	24.63993	1.021654	2.481528	1.248834	5.005828

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.462523**	**24.97777**	**2.488924**	**1.252521**	**24.78697**	**2.453668**	**2.476612**
Stddev	.012008	.09543	.004273	.002741	.07966	.014197	.001843
%RSD	.4876458	.3820623	.1716674	.2188782	.3213697	.5786177	.0744157
#1	2.472233	24.89345	2.485348	1.249802	24.74858	2.458073	2.475084
#2	2.466241	25.08136	2.487767	1.252474	24.73378	2.465141	2.476094
#3	2.449096	24.95850	2.493655	1.255285	24.87855	2.437790	2.478659

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.20574**	**4.922698**	**4.953429**	**4.969267**	**4.882229**	**4.922135**	**4.930072**
Stddev	.07333	.032340	.022999	.012041	.017604	.041764	.020789
%RSD	.3029537	.6569483	.4643063	.2423146	.3605763	.8484895	.4216717
#1	24.20361	4.933742	4.939857	4.955791	4.892689	4.913499	4.907672
#2	24.13350	4.948069	4.940446	4.973039	4.892093	4.885364	4.933799
#3	24.28012	4.886283	4.979984	4.978971	4.861904	4.967542	4.948745

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCV05 Acquired: 2/12/2025 17:04:14 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.830517**	**4.803692**	**4.884005**
Stddev	.020161	.018052	.013981
%RSD	.4173718	.3757944	.2862680
#1	4.807446	4.819768	4.898989
#2	4.839358	4.807147	4.871308
#3	4.844748	4.784163	4.881718

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2570.659**	**51529.78**	**9461.415**	**1663.541**	**4148.813**
Stddev	7.292	139.88	46.043	4.889	6.069
%RSD	.2836677	.2714558	.4866409	.2938836	.1462883
#1	2573.438	51670.56	9456.809	1667.305	4153.073
#2	2576.153	51527.96	9417.849	1665.301	4151.501
#3	2562.386	51390.82	9509.588	1658.015	4141.863

Sample Name: CCB05 Acquired: 2/12/2025 17:08:25 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001480**	**.0009511**	**.0002848**	**.0001891**	**-.001007**	**-.004400**
Stddev	.001364	.0015765	.0008528	.0022907	.001929	.005918
%RSD	92.19673	165.7650	299.3916	1211.408	191.6002	134.5017
#1	-.002222	.0008203	.0007091	.0027301	-.000903	-.009119
#2	-.002312	-.000556	-.000697	-.000445	.000868	-.006319
#3	.000095	.002589	.000842	-.001718	-.002986	.002239

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0048141**	**.0000094**	**-.000032**	**-.013089**	**.0001656**	**.0000225**
Stddev	.0014255	.0000868	.000054	.003448	.0004463	.0002276
%RSD	29.60961	921.3420	171.1811	26.34068	269.5736	1011.226
#1	.0032314	.0000575	-.000028	-.012795	.0001709	.0002760
#2	.0059969	-.000091	-.000087	-.009797	.0006092	-.000044
#3	.0052140	.000062	.000021	-.016674	-.000283	-.000164

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002412**	**.0009302**	**-.000387**	**-.013342**	**.0000109**	**-.000391**
Stddev	.0001795	.0037847	.000359	.014326	.0001423	.000269
%RSD	74.40417	406.8750	92.73276	107.3772	1307.546	68.93435
#1	.0000400	.0046290	-.000039	-.001721	-.000013	-.000380
#2	.0002989	-.002935	-.000756	-.029348	-.000118	-.000665
#3	.0003848	.001096	-.000365	-.008956	.000163	-.000127

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2678890**	**-.000037**	**-.000287**	**.1896461**	**.0012541**	**.0001484**
Stddev	.0165396	.000953	.000232	.0131550	.0010237	.0000245
%RSD	6.174038	2559.153	80.79986	6.936593	81.62978	16.48573
#1	.2521528	-.001126	-.000232	.2048079	.0024293	.0001341
#2	.2663852	.000373	-.000087	.1828685	.0007767	.0001345
#3	.2851292	.000642	-.000541	.1812621	.0005563	.0001767

Sample Name: CCB05 Acquired: 2/12/2025 17:08:25 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000444	-.000112	.0081191	.0017003	F .0135193	.0028557
Stddev	.0007180	.000515	.0116107	.0013399	.0022776	.0005333
%RSD	1618.587	457.6809	143.0045	78.80268	16.84700	18.67325
#1	.0007365	.000417	-.003445	.0021266	.0149336	.0023912
#2	.0000936	-.000612	.008027	.0027751	.0147323	.0027380
#3	-.000697	-.000142	.019775	.0001991	.0108919	.0034380

Elem	Sr4077
Units	ppm
Avg	.0000437
Stddev	.0000090
%RSD	20.71966
#1	.0000538
#2	.0000364
#3	.0000408

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2682.708	53406.12	10325.86	1741.493	4579.891
Stddev	1.669	38.26	1.66	4.156	6.094
%RSD	.0622236	.0716443	.0160936	.2386409	.1330690
#1	2684.556	53447.39	10327.13	1746.123	4577.671
#2	2682.258	53399.15	10326.48	1738.087	4575.217
#3	2681.310	53371.83	10323.98	1740.267	4586.784

Sample Name: PB166704BL Acquired: 2/12/2025 17:12:47 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.002992**	**.0006408**	**-.000013**	**-.000711**	**.0006838**	**.0285178**
Stddev	.001715	.0009571	.000238	.000742	.0014947	.0022990
%RSD	57.32674	149.3455	1862.958	104.2551	218.5808	8.061530
#1	-.001441	.0003190	.000086	.000143	-.000741	.0310975
#2	-.002702	.0017173	-.000284	-.001183	.002240	.0266858
#3	-.004835	-.000114	.000160	-.001094	.000552	.0277700

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0026211**	**-.000138**	**-.000298**	**.0542403**	**.0009200**	**-.000023**
Stddev	.0008227	.000071	.000058	.0093729	.0000820	.000113
%RSD	31.38800	51.76488	19.42883	17.28037	8.915924	499.3743
#1	.0017361	-.000183	-.000351	.0474800	.0009870	-.000068
#2	.0033627	-.000056	-.000236	.0649399	.0009444	-.000107
#3	.0027643	-.000174	-.000308	.0503009	.0008285	.000106

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006783**	**.0325351**	**.0032889**	**.0604954**	**.0003999**	**-.000603**
Stddev	.0001748	.0023226	.0005085	.0153616	.0001226	.000171
%RSD	25.77540	7.138873	15.46256	25.39304	30.64752	28.36878
#1	.0008801	.0299171	.0028550	.0767799	.0002985	-.000611
#2	.0005772	.0343484	.0038485	.0584435	.0003651	-.000428
#3	.0005774	.0333398	.0031632	.0462629	.0005361	-.000770

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2148142**	**-.001678**	**.0045155**	**.1575179**	**-.001831**	**.0002616**
Stddev	.0088346	.001171	.0000789	.0147119	.000789	.0002002
%RSD	4.112662	69.81848	1.747177	9.339811	43.08473	76.52239
#1	.2121315	-.000614	.0044333	.1522130	-.001232	.0004824
#2	.2076319	-.002933	.0045906	.1461942	-.002724	.0000921
#3	.2246791	-.001486	.0045226	.1741465	-.001535	.0002102

Sample Name: PB166704BL Acquired: 2/12/2025 17:12:47 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.009600	.0006954	.0276083	F .0137177	F .0179159	.0022850
Stddev	.000360	.0006279	.0099128	.0012970	.0028071	.0012919
%RSD	3.751490	90.29894	35.90517	9.455217	15.66802	56.53583
#1	-.009467	.0006201	.0223955	.0152065	.0211478	.0009799
#2	-.010008	.0001085	.0390399	.0128325	.0160868	.0035632
#3	-.009325	.0013575	.0213896	.0131139	.0165129	.0023120

Elem	Sr4077
Units	ppm
Avg	.0001050
Stddev	.0000261
%RSD	24.80437
#1	.0001171
#2	.0001228
#3	.0000751

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2616.658	53531.76	10266.05	1706.012	4420.435
Stddev	11.680	206.66	56.05	17.397	17.221
%RSD	.4463634	.3860529	.5459629	1.019772	.3895683
#1	2616.916	53604.15	10298.19	1700.015	4422.711
#2	2628.206	53692.49	10201.33	1725.615	4436.405
#3	2604.851	53298.64	10298.62	1692.407	4402.190

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: PB166704BS Acquired: 2/12/2025 17:17:08 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7612807**	**1.838741**	**.9531358**	**1.841403**	**.7797067**	**1.923526**
Stddev	.0023811	.006236	.0040894	.007909	.0045802	.020266
%RSD	.3127785	.3391396	.4290505	.4295332	.5874299	1.053597
#1	.7596617	1.843718	.9504924	1.841189	.7755983	1.901965
#2	.7640147	1.831746	.9510689	1.833603	.7788767	1.926429
#3	.7601656	1.840758	.9578462	1.849418	.7846452	1.942184

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1939920**	**.1835516**	**.1930050**	**1.053380**	**.4190375**	**.1988478**
Stddev	.0012465	.0004109	.0011713	.006207	.0010743	.0006875
%RSD	.6425615	.2238875	.6068778	.5892667	.2563837	.3457372
#1	.1925644	.1833726	.1919425	1.058582	.4179355	.1983099
#2	.1945470	.1832605	.1928114	1.055049	.4200819	.1986111
#3	.1948647	.1840217	.1942610	1.046509	.4190950	.1996224

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3061301**	**3.133169**	**.1992774**	**1.961672**	**.5006624**	**.0732483**
Stddev	.0011045	.003458	.0007765	.009502	.0022549	.0006964
%RSD	.3608106	.1103549	.3896832	.4843834	.4503934	.9507414
#1	.3054524	3.130524	.1993696	1.954508	.4986257	.0729238
#2	.3055331	3.137081	.1984588	1.972451	.5002758	.0727734
#3	.3074047	3.131901	.2000037	1.958057	.5030857	.0740478

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.322094**	**.2933803**	**.1985864**	**9.860444**	**.2585634**	**.4128855**
Stddev	.004636	.0010309	.0006162	.063781	.0018866	.0016127
%RSD	.1395583	.3513806	.3102973	.6468356	.7296276	.3905937
#1	3.321906	.2944882	.1983541	9.786837	.2607227	.4118109
#2	3.317555	.2932035	.1981201	9.899373	.2577335	.4121056
#3	3.326822	.2924493	.1992850	9.895121	.2572342	.4147399

Sample Name: PB166704BS Acquired: 2/12/2025 17:17:08 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6740141	.1947830	.8124817	5.448909	F .0031238	.1993800
Stddev	.0040405	.0004152	.0078026	.021299	.0022418	.0009482
%RSD	.5994606	.2131811	.9603438	.3908854	71.76554	.4755732
#1	.6706334	.1949970	.8213674	5.438004	.0042484	.1982907
#2	.6729201	.1950476	.8093294	5.435271	.0045806	.2000207
#3	.6784890	.1943044	.8067485	5.473453	.0005423	.1998285

Elem	Sr4077
Units	ppm
Avg	.1898534
Stddev	.0002236
%RSD	.1177609
#1	.1901043
#2	.1897806
#3	.1896752

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2595.201	53600.37	10182.63	1703.187	4379.800
Stddev	11.283	111.09	33.68	4.329	21.870
%RSD	.4347724	.2072576	.3307821	.2541915	.4993370
#1	2604.832	53672.61	10213.61	1704.592	4400.463
#2	2597.984	53656.05	10187.50	1706.640	4382.042
#3	2582.787	53472.45	10146.77	1698.330	4356.896

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1346-03 Acquired: 2/12/2025 17:21:09 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0721789**	**-.017385**	**.9212253**	**-.053833**	**.0024443**	**195.6847**
Stddev	.0028319	.002775	.0025853	.002848	.0012327	.1914
%RSD	3.923432	15.96029	.2806419	5.291093	50.43146	.0977908
#1	.0697341	-.017375	.9215414	-.057096	.0011398	195.9029
#2	.0752819	-.020165	.9184965	-.051839	.0026034	195.5452
#3	.0715207	-.014616	.9236381	-.052565	.0035897	195.6060

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.188098**	**.0119347**	**.0184197**	F **2002.648**	**.3878184**	**.0522664**
Stddev	.006993	.0000594	.0001185	2.196	.0024059	.0001243
%RSD	.5886023	.4976298	.6430451	.1096458	.6203595	.2377349
#1	1.192865	.0118759	.0184456	2000.757	.3859156	.0523750
#2	1.180070	.0119335	.0182904	2002.129	.3905227	.0522931
#3	1.191359	.0119947	.0185230	2005.056	.3870170	.0521309

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1860475**	**207.4806**	**3.053678**	**123.7699**	**.1226545**	**-.014979**
Stddev	.0006855	.9858	.018807	.4114	.0010261	.000473
%RSD	.3684448	.4751259	.6158737	.3323815	.8365761	3.156320
#1	.1857543	208.2777	3.064778	124.0684	.1220923	-.014463
#2	.1855574	207.7859	3.031963	123.3006	.1220325	-.015392
#3	.1868308	206.3783	3.064291	123.9407	.1238389	-.015083

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.245665**	**.3207585**	**.8699420**	**14.68761**	**.4265058**	**.0063276**
Stddev	.019743	.0020139	.0036331	.02053	.0019494	.0005082
%RSD	.8791766	.6278419	.4176207	.1397490	.4570607	8.031107
#1	2.232836	.3197546	.8657472	14.68002	.4257735	.0069124
#2	2.268400	.3194439	.8720840	14.71085	.4250286	.0059935
#3	2.235758	.3230770	.8719948	14.67196	.4287153	.0060769

Sample Name: Q1346-03 Acquired: 2/12/2025 17:21:09 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0279221	6.482760	1.678941	F 13.46172	F 252.4815	-.187561
Stddev	.0006057	.031276	.005483	.08108	1.1388	.001233
%RSD	2.169220	.4824435	.3265713	.6023207	.4510507	.6574639
#1	.0273108	6.512831	1.672829	13.42739	252.2306	-.186156
#2	.0279335	6.450405	1.683426	13.40345	251.4891	-.188465
#3	.0285221	6.485044	1.680569	13.55432	253.7249	-.188061

Elem	Sr4077
Units	ppm
Avg	7.701465
Stddev	.034381
%RSD	.4464162
#1	7.684497
#2	7.741031
#3	7.678867

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2354.814	47079.09	10545.24	1535.585	3204.161
Stddev	4.991	198.07	56.02	3.248	11.086
%RSD	.2119506	.4207090	.5311884	.2115439	.3460018
#1	2352.971	47009.45	10522.38	1535.693	3199.167
#2	2360.464	46925.24	10609.07	1532.284	3216.866
#3	2351.006	47302.57	10504.26	1538.778	3196.451

Sample Name: Q1353-01 Acquired: 2/12/2025 17:25:31 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0412727**	**-.064302**	**.4312280**	**-.107124**	**.0087534**	**217.5962**	**1.890249**
Stddev	.0011875	.006012	.0007485	.003878	.0008421	1.8958	.001880
%RSD	2.877095	9.349384	.1735733	3.620038	9.619659	.8712636	.0994639
#1	.0399130	-.070169	.4303791	-.111602	.0086869	216.3678	1.891176
#2	.0421056	-.064582	.4315118	-.104894	.0079465	219.7796	1.891485
#3	.0417995	-.058155	.4317932	-.104876	.0096267	216.6411	1.888085

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0270892**	**.0522689**	**70.58505**	**.4927603**	**.3324098**	**.4229935**	**583.1159**
Stddev	.0000823	.0008241	.16381	.0011458	.0008491	.0015115	3.3207
%RSD	.3036657	1.576640	.2320676	.2325174	.2554285	.3573240	.5694793
#1	.0270724	.0521337	70.72143	.4920771	.3332180	.4237233	584.1726
#2	.0271785	.0531522	70.63038	.4940830	.3315251	.4240017	579.3954
#3	.0270166	.0515208	70.40336	.4921206	.3324863	.4212557	585.7797

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.53402**	**138.3599**	**.6620410**	**-.046397**	**4.475436**	**.6307803**	**1.550782**
Stddev	.02029	.1524	.0008131	.000994	.015581	.0020239	.005454
%RSD	.1926122	.1101363	.1228151	2.142660	.3481398	.3208503	.3516740
#1	10.54617	138.4828	.6627795	-.045365	4.489614	.6330013	1.552439
#2	10.54531	138.4076	.6611697	-.046479	4.477939	.6290402	1.544691
#3	10.51060	138.1894	.6621739	-.047349	4.458755	.6302992	1.555214

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**37.88895**	**.9566820**	**.0052339**	**-.001666**	**7.584237**	**3.910673**	**8.633527**
Stddev	.05503	.0071478	.0003831	.000365	.013912	.058742	.027942
%RSD	.1452469	.7471420	7.319093	21.93431	.1834325	1.502103	.3236453
#1	37.89298	.9517557	.0052536	-.001278	7.600284	3.977519	8.653364
#2	37.94186	.9534102	.0048414	-.001717	7.575572	3.867280	8.645645
#3	37.83201	.9648800	.0056068	-.002004	7.576855	3.887220	8.601571

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1353-01 Acquired: 2/12/2025 17:25:31 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.325457	.7534285	-.312061
Stddev	.014204	.0015628	.003161
%RSD	1.071666	.2074203	1.013033
#1	1.341580	.7551830	-.312591
#2	1.320004	.7529164	-.308668
#3	1.314787	.7521860	-.314923

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3008.981	62077.60	12602.27	2023.649	3828.400
Stddev	1.983	91.90	18.16	5.449	3.378
%RSD	.0659079	.1480415	.1440848	.2692852	.0882259
#1	3008.354	62123.81	12592.47	2017.704	3824.507
#2	3007.387	61971.76	12591.13	2024.835	3830.146
#3	3011.202	62137.22	12623.23	2028.407	3830.548

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1353-01DUP Acquired: 2/12/2025 17:29:49 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0433722**	**-.062133**	**.4323312**	**-.104360**	**.0075551**	**216.0073**	**1.879225**
Stddev	.0010322	.007059	.0016644	.000986	.0032116	.7531	.002578
%RSD	2.379777	11.36103	.3849779	.9452035	42.50920	.3486631	.1371650
#1	.0422058	-.054608	.4335079	-.105466	.0082950	215.1988	1.881921
#2	.0441673	-.063183	.4330588	-.103573	.0040381	216.6890	1.878970
#3	.0437436	-.068608	.4304269	-.104039	.0103322	216.1341	1.876785

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0267408**	**.0524237**	**69.98988**	**.4939075**	**.3319483**	**.4125464**	**587.3299**
Stddev	.0000745	.0001480	.06682	.0014157	.0002191	.0003211	1.0769
%RSD	.2787713	.2823942	.0954729	.2866261	.0659905	.0778386	.1833478
#1	.0266799	.0522747	70.06385	.4923859	.3317598	.4125277	587.2366
#2	.0268239	.0525708	69.93387	.4941510	.3318964	.4128765	586.3027
#3	.0267186	.0524256	69.97192	.4951856	.3321886	.4122351	588.4503

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.43723**	**137.4324**	**.6633085**	**-.043571**	**4.430274**	**.6264268**	**1.541467**
Stddev	.02714	.0826	.0006156	.000379	.012593	.0022564	.005359
%RSD	.2600130	.0601263	.0928044	.8704668	.2842575	.3602060	.3476816
#1	10.45770	137.4739	.6632560	-.043134	4.419221	.6249507	1.537959
#2	10.40645	137.3372	.6627209	-.043774	4.443984	.6253056	1.538806
#3	10.44756	137.4860	.6639487	-.043807	4.427617	.6290243	1.547636

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**38.16392**	**.9490570**	**.0049490**	**-.001003**	**7.563715**	**4.400943**	**8.546629**
Stddev	.07209	.0023527	.0002923	.001617	.008709	.021603	.009521
%RSD	.1889053	.2478978	5.905686	161.1188	.1151458	.4908719	.1113970
#1	38.13320	.9502601	.0050266	-.002426	7.573569	4.420465	8.543185
#2	38.24629	.9463460	.0046258	.000755	7.560528	4.377734	8.539311
#3	38.11228	.9505647	.0051947	-.001339	7.557048	4.404631	8.557393

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1353-01DUP Acquired: 2/12/2025 17:29:49 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.290698	.7498282	-.316410
Stddev	.007648	.0004526	.001612
%RSD	.5925507	.0603549	.5094845
#1	1.291876	.7502547	-.317144
#2	1.282529	.7498764	-.314561
#3	1.297689	.7493534	-.317524

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3006.598	62130.42	12763.44	1994.632	3828.060
Stddev	4.157	28.63	50.14	7.651	7.439
%RSD	.1382717	.0460761	.3928295	.3835663	.1943278
#1	3011.213	62140.52	12714.88	2000.619	3836.584
#2	3005.438	62152.62	12815.02	1997.266	3822.879
#3	3003.145	62098.11	12760.42	1986.013	3824.718

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1353-01DLX5 Acquired: 2/12/2025 17:34:07 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0081134**	**-.005308**	**.0924452**	**-.025062**	**.0018591**	**51.49790**	**.4332669**
Stddev	.0010999	.001015	.0009605	.002059	.0013302	.00911	.0019906
%RSD	13.55660	19.12864	1.039009	8.216309	71.55424	.0176829	.4594396
#1	.0090998	-.004456	.0916529	-.025399	.0033873	51.49254	.4312853
#2	.0083132	-.006431	.0921692	-.026931	.0009613	51.50841	.4332492
#3	.0069274	-.005036	.0935135	-.022855	.0012286	51.49275	.4352664

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0070828**	**.0069319**	**17.40320**	**.1257671**	**.0694395**	**.1125676**	**143.6847**
Stddev	.0001287	.0000667	.02058	.0004155	.0001652	.0007102	.5064
%RSD	1.817630	.9623164	.1182413	.3304074	.2379236	.6309440	.3524710
#1	.0071998	.0068917	17.37949	.1262034	.0693082	.1132094	143.0999
#2	.0071037	.0068951	17.41366	.1257220	.0693852	.1118045	143.9750
#3	.0069449	.0070089	17.41644	.1253760	.0696250	.1126890	143.9793

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.530114**	**33.40346**	**.1418563**	**-.011165**	**1.153240**	**.1515127**	**.3851827**
Stddev	.002449	.06480	.0001465	.000496	.013147	.0015255	.0008612
%RSD	.0968084	.1939872	.1032815	4.446380	1.140037	1.006815	.2235845
#1	2.528266	33.46303	.1419517	-.011672	1.138518	.1529687	.3854373
#2	2.529183	33.41288	.1416877	-.011143	1.157389	.1516433	.3842229
#3	2.532892	33.33446	.1419297	-.010679	1.163812	.1499262	.3858879

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.544802**	**.2506404**	**.0010551**	**-.001175**	**1.824340**	**.9662886**	**1.772809**
Stddev	.057920	.0012382	.0001072	.000406	.003632	.0066540	.006795
%RSD	.6778386	.4940179	10.15590	34.51655	.1990840	.6886162	.3832758
#1	8.484459	.2500922	.0010628	-.001077	1.820167	.9617083	1.770161
#2	8.549999	.2497710	.0011582	-.000827	1.826789	.9739212	1.767737
#3	8.599949	.2520581	.0009443	-.001621	1.826064	.9632364	1.780529

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1353-01DLX5 Acquired: 2/12/2025 17:34:07 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2652502	.1740404	-.075830
Stddev	.0027260	.0016854	.000510
%RSD	1.027724	.9683963	.6723641
#1	.2627927	.1721039	-.075266
#2	.2681824	.1748410	-.075965
#3	.2647755	.1751763	-.076259

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2704.908	54671.17	10724.60	1771.042	4173.169
Stddev	1.007	40.04	12.13	4.657	1.255
%RSD	.0372300	.0732328	.1131218	.2629330	.0300626
#1	2705.492	54716.69	10716.45	1771.085	4174.130
#2	2705.487	54641.42	10718.81	1775.678	4171.750
#3	2703.745	54655.40	10738.55	1766.364	4173.629

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1353-01MS Acquired: 2/12/2025 17:38:15 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6346848**	**1.613528**	**1.339094**	**1.264930**	**.2977823**	**228.7957**
Stddev	.0012851	.015436	.007583	.002884	.0021156	1.2944
%RSD	.2024713	.9566813	.5662582	.2279974	.7104454	.5657578
#1	.6336414	1.602488	1.339482	1.262767	.2966200	227.6873
#2	.6361202	1.606930	1.331325	1.263818	.2965027	230.2183
#3	.6342928	1.631167	1.346475	1.268204	.3002242	228.4813

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.151196**	**.1674648**	**.2385168**	**73.78502**	**.7881928**	**.5364351**
Stddev	.009064	.0013778	.0010575	.09247	.0038321	.0023621
%RSD	.4213258	.8227210	.4433596	.1253184	.4861847	.4403242
#1	2.141379	.1684735	.2386245	73.74543	.7922342	.5361611
#2	2.159247	.1680259	.2374096	73.89069	.7877325	.5342220
#3	2.152962	.1658950	.2395163	73.71895	.7846117	.5389222

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6183653**	**577.2036**	**10.47366**	**153.2022**	**1.150126**	**.0185438**
Stddev	.0014991	1.2643	.03382	.1759	.005374	.0008711
%RSD	.2424289	.2190334	.3229296	.1148447	.4672763	4.697427
#1	.6175378	577.0557	10.44109	153.1567	1.148639	.0185790
#2	.6174623	576.0198	10.50861	153.3964	1.145651	.0176556
#3	.6200957	578.5353	10.47128	153.0535	1.156087	.0193967

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.356290**	**.8164279**	**1.790580**	**49.90413**	**.8896243**	**.2920465**
Stddev	.022850	.0035292	.004063	.25214	.0013463	.0009554
%RSD	.3106163	.4322726	.2269134	.5052451	.1513293	.3271367
#1	7.349820	.8128352	1.792878	49.78868	.8881473	.2913388
#2	7.337374	.8165587	1.792974	49.73040	.8907825	.2916674
#3	7.381678	.8198899	1.785889	50.19333	.8899432	.2931332

Sample Name: Q1353-01MS Acquired: 2/12/2025 17:38:15 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6294927	7.255451	5.098860	F 14.57336	1.372192	.9609620
Stddev	.0062851	.009497	.054232	.05801	.002274	.0022311
%RSD	.9984342	.1308889	1.063611	.3980365	.1657455	.2321768
#1	.6283911	7.244502	5.102854	14.57664	1.374165	.9584728
#2	.6238313	7.260397	5.042742	14.51378	1.369704	.9616314
#3	.6362558	7.261453	5.150985	14.62965	1.372706	.9627818

Elem	Sr4077
Units	ppm
Avg	-.127104
Stddev	.001046
%RSD	.8230260
#1	-.127017
#2	-.126103
#3	-.128190

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2967.198	61281.46	12639.30	1949.042	3771.918
Stddev	4.704	237.19	68.84	5.388	12.523
%RSD	.1585486	.3870524	.5446465	.2764524	.3320056
#1	2968.643	61007.62	12585.88	1945.714	3773.661
#2	2971.010	61422.40	12615.04	1946.152	3783.478
#3	2961.941	61414.37	12716.98	1955.258	3758.615

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1353-01MSD Acquired: 2/12/2025 17:42:28 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6404301	1.613303	1.345513	1.272167	.3013717	227.5774
Stddev	.0032300	.006418	.003279	.002669	.0025171	2.0063
%RSD	.5043400	.3978193	.2437111	.2097980	.8352045	.8815704
#1	.6367012	1.608604	1.344450	1.270123	.3031530	228.3438
#2	.6422298	1.620615	1.342897	1.271192	.2984921	225.3009
#3	.6423593	1.610689	1.349192	1.275187	.3024700	229.0875

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.137753	.1681443	.2388515	73.37797	.7874123	.5365148
Stddev	.006996	.0009608	.0004110	.22121	.0013873	.0005234
%RSD	.3272442	.5714169	.1720840	.3014628	.1761874	.0975623
#1	2.144827	.1691646	.2385708	73.62104	.7887099	.5365075
#2	2.137593	.1672568	.2386603	73.32438	.7859500	.5359951
#3	2.130839	.1680115	.2393232	73.18848	.7875771	.5370419

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6244982	569.4628	10.39938	152.3487	1.149729	.0172648
Stddev	.0013117	2.8112	.02780	.4188	.000719	.0004706
%RSD	.2100350	.4936585	.2673230	.2748896	.0625605	2.725647
#1	.6243122	572.7021	10.43148	152.8205	1.149842	.0177917
#2	.6232895	568.0249	10.38315	152.0209	1.150385	.0168864
#3	.6258929	567.6613	10.38351	152.2048	1.148960	.0171164

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.153574	.8114683	1.772272	49.54766	.8884971	.2961131
Stddev	.009671	.0043726	.004068	.06159	.0087247	.0003136
%RSD	.1351961	.5388449	.2295379	.1243127	.9819607	.1058961
#1	7.143166	.8163961	1.775939	49.55857	.8985606	.2957698
#2	7.162283	.8099567	1.767896	49.60307	.8838712	.2961850
#3	7.155274	.8080520	1.772982	49.48134	.8830595	.2963845

Sample Name: Q1353-01MSD Acquired: 2/12/2025 17:42:28 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6271453	7.238151	5.913715	F 14.48609	1.348840	.9459818
Stddev	.0004448	.021495	.094797	.04249	.003077	.0036402
%RSD	.0709167	.2969635	1.602999	.2932826	.2280978	.3848069
#1	.6274810	7.262967	5.844915	14.43726	1.345302	.9501745
#2	.6273140	7.225321	6.021846	14.51455	1.350333	.9441443
#3	.6266409	7.226167	5.874382	14.50647	1.350886	.9436266

Elem	Sr4077
Units	ppm
Avg	-.116389
Stddev	.002100
%RSD	1.804173
#1	-.118750
#2	-.115686
#3	-.114731

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2968.969	61444.86	12589.86	1952.917	3774.670
Stddev	1.925	123.91	62.46	6.070	2.137
%RSD	.0648208	.2016675	.4960745	.3108425	.0566087
#1	2967.606	61419.64	12532.02	1950.015	3777.126
#2	2971.171	61579.45	12656.08	1959.893	3773.239
#3	2968.132	61335.50	12581.48	1948.841	3773.645

Sample Name: Q1353-01A Acquired: 2/12/2025 17:46:44 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6380514**	**1.650723**	**1.358398**	**1.281973**	**.3049377**	**230.9964**
Stddev	.0060966	.005129	.001821	.004773	.0000434	1.8433
%RSD	.9555023	.3107196	.1340418	.3723146	.0142238	.7979859
#1	.6312423	1.645073	1.356340	1.286998	.3049878	229.3013
#2	.6430036	1.655086	1.359798	1.277500	.3049133	230.7290
#3	.6399083	1.652009	1.359057	1.281420	.3049121	232.9588

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.161832**	**.1689071**	**.2407127**	**73.94173**	**.7972195**	**.5416015**
Stddev	.004358	.0007390	.0003401	.22540	.0016646	.0012477
%RSD	.2015816	.4375451	.1412918	.3048409	.2088021	.2303777
#1	2.166850	.1693735	.2407538	74.17177	.7954033	.5414507
#2	2.159641	.1680550	.2403539	73.72126	.7975826	.5404360
#3	2.159005	.1692927	.2410304	73.93218	.7986726	.5429177

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6207117**	**581.4412**	**10.50317**	**154.1721**	**1.160856**	**.0188904**
Stddev	.0060097	4.8539	.03021	.5283	.001876	.0011342
%RSD	.9682002	.8348043	.2875918	.3426745	.1616306	6.004150
#1	.6222140	578.6930	10.53334	154.6824	1.158795	.0185465
#2	.6140933	587.0457	10.47293	153.6275	1.161305	.0201568
#3	.6258278	578.5850	10.50325	154.2063	1.162466	.0179680

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.319710**	**.8217531**	**1.793591**	**50.44241**	**.9091295**	**.2985282**
Stddev	.014500	.0048553	.003228	.08943	.0092348	.0007180
%RSD	.1980987	.5908497	.1799548	.1772920	1.015786	.2405143
#1	7.308050	.8255502	1.792926	50.42637	.9039967	.2986382
#2	7.335947	.8162823	1.790748	50.53877	.9197905	.2977616
#3	7.315134	.8234268	1.797100	50.36208	.9036013	.2991849

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1353-01A Acquired: 2/12/2025 17:46:44 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6358712	7.330179	6.193342	F 14.73539	1.360731	.9564690
Stddev	.0031775	.021114	.053189	.04385	.006804	.0027963
%RSD	.4997067	.2880466	.8588110	.2975764	.5000161	.2923553
#1	.6323524	7.352473	6.249361	14.72935	1.364151	.9585925
#2	.6385305	7.310485	6.143528	14.69487	1.365145	.9533008
#3	.6367308	7.327577	6.187137	14.78194	1.352895	.9575138

Elem	Sr4077
Units	ppm
Avg	-.127667
Stddev	.005096
%RSD	3.991436
#1	-.123986
#2	-.133483
#3	-.125532

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2950.898	60704.54	12558.05	1935.952	3743.002
Stddev	2.776	54.46	39.57	.535	4.854
%RSD	.0940736	.0897159	.3150893	.0276376	.1296779
#1	2950.885	60737.59	12538.80	1935.932	3745.223
#2	2953.680	60641.68	12603.56	1936.496	3746.348
#3	2948.128	60734.35	12531.79	1935.427	3737.435

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1354-01 Acquired: 2/12/2025 17:50:59 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0384159**	**-.041174**	**.3251076**	**-.067882**	**.0051720**	**106.7676**	**.6725573**
Stddev	.0045211	.002715	.0012661	.002636	.0017942	.3375	.0039242
%RSD	11.76893	6.594872	.3894470	3.883811	34.68997	.3161491	.5834747
#1	.0413516	-.039703	.3253009	-.065952	.0034219	106.8812	.6683758
#2	.0332095	-.044307	.3237559	-.070886	.0050870	107.0337	.6761599
#3	.0406866	-.039511	.3262659	-.066808	.0070072	106.3879	.6731361

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0138972**	**.0276557**	**557.6916**	**.3800209**	**.1476407**	**.2941537**	**327.9638**
Stddev	.0000598	.0005596	5.7880	.0012531	.0007185	.0004822	1.9140
%RSD	.4303846	2.023597	1.037858	.3297393	.4866531	.1639344	.5835940
#1	.0138889	.0282846	557.3640	.3792233	.1468138	.2944559	325.8837
#2	.0139607	.0274702	563.6365	.3793742	.1481127	.2944077	328.3573
#3	.0138419	.0272124	552.0744	.3814652	.1479956	.2935976	329.6505

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.809837**	**334.5369**	**.3579699**	**-.026229**	**8.122345**	**.3926453**	**.6955062**
Stddev	.022200	1.2210	.0001860	.000890	.016949	.0021498	.0016371
%RSD	.7900951	.3649778	.0519651	3.392519	.2086734	.5475246	.2353873
#1	2.787690	334.1585	.3581039	-.027251	8.112246	.3934729	.6969997
#2	2.832091	335.9023	.3577575	-.025631	8.112875	.3942584	.6957629
#3	2.809731	333.5499	.3580482	-.025804	8.141912	.3902047	.6937558

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.19994**	**.0930659**	**.0046128**	**-.005485**	**4.183247**	**5.348060**	**5.032777**
Stddev	.08060	.0016559	.0003173	.001044	.020489	.029997	.003481
%RSD	.7196320	1.779308	6.877903	19.03400	.4897952	.5609011	.0691640
#1	11.12354	.0912640	.0042528	-.004287	4.163905	5.380262	5.035866
#2	11.19211	.0934128	.0048516	-.005962	4.204718	5.343008	5.029006
#3	11.28417	.0945209	.0047339	-.006205	4.181120	5.320909	5.033460

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: Q1354-01 Acquired: 2/12/2025 17:50:59 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.882210	.0961603	.2839361
Stddev	.009871	.0009153	.0051413
%RSD	.1678130	.9518439	1.810716
#1	5.874801	.0955175	.2891586
#2	5.893416	.0957552	.2837697
#3	5.878414	.0972083	.2788801

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2643.198	53969.82	11221.46	1729.956	3514.822
Stddev	1.992	27.30	56.77	5.079	3.515
%RSD	.0753716	.0505925	.5059218	.2935636	.0999955
#1	2645.469	53973.13	11235.89	1728.573	3515.345
#2	2641.744	53995.32	11158.87	1725.712	3518.046
#3	2642.380	53941.01	11269.63	1735.583	3511.076

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCV06 Acquired: 2/12/2025 17:55:11 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.909840**	**4.737150**	**4.982986**	**4.864038**	**4.889526**	**9.863668**	**9.928436**
Stddev	.007270	.042496	.009381	.010291	.008341	.036042	.134210
%RSD	.1480652	.8970836	.1882638	.2115726	.1705874	.3654011	1.351772
#1	4.911723	4.711241	4.977151	4.863866	4.893490	9.859537	10.00957
#2	4.901815	4.714014	4.978000	4.853833	4.879943	9.829869	9.77352
#3	4.915984	4.786194	4.993807	4.874413	4.895147	9.901597	10.00221

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2495669**	**2.499829**	**25.19989**	**1.022860**	**2.485093**	**1.248048**	**5.178240**
Stddev	.0008703	.006317	.03975	.001708	.005271	.001233	.009153
%RSD	.3487348	.2527010	.1577277	.1669863	.2120929	.0987575	.1767516
#1	.2490215	2.496071	25.16703	1.021969	2.481840	1.248863	5.187376
#2	.2491086	2.496294	25.18859	1.024830	2.482264	1.246630	5.178274
#3	.2505706	2.507122	25.24407	1.021782	2.491174	1.248651	5.169071

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.530785**	**25.36766**	**2.496495**	**1.258575**	**25.65181**	**2.506914**	**2.485743**
Stddev	.004700	.06980	.004165	.001436	.09447	.002546	.008761
%RSD	.1857042	.2751525	.1668428	.1141172	.3682596	.1015598	.3524591
#1	2.525603	25.38037	2.494835	1.258493	25.61776	2.505466	2.476557
#2	2.534772	25.29238	2.493416	1.260050	25.75858	2.505423	2.494007
#3	2.531980	25.43023	2.501235	1.257182	25.57909	2.509854	2.486666

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.09311**	**4.912021**	**4.964443**	**4.978020**	**5.006256**	**5.113848**	**4.960600**
Stddev	.10990	.013591	.010656	.015193	.002509	.023537	.025095
%RSD	.4379866	.2766885	.2146451	.3052091	.0501185	.4602601	.5058896
#1	25.06125	4.899917	4.967263	4.968463	5.004704	5.097765	4.937577
#2	25.21542	4.909421	4.952661	4.970058	5.009150	5.140863	4.956872
#3	25.00265	4.926724	4.973406	4.995540	5.004912	5.102915	4.987350

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCV06 Acquired: 2/12/2025 17:55:11 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.853352**	**4.993897**	**4.899194**
Stddev	.021003	.010554	.060324
%RSD	.4327493	.2113350	1.231304
#1	4.833753	4.989354	4.838699
#2	4.850781	5.005962	4.899537
#3	4.875522	4.986376	4.959346

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2618.554**	**52429.68**	**9729.621**	**1702.975**	**4223.095**
Stddev	7.280	55.62	38.837	5.365	8.980
%RSD	.2780004	.1060889	.3991618	.3150473	.2126356
#1	2610.247	52475.60	9741.477	1709.109	4216.341
#2	2623.822	52367.83	9761.148	1700.660	4233.286
#3	2621.592	52445.61	9686.238	1699.156	4219.659

Sample Name: CCB06 Acquired: 2/12/2025 17:59:22 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	**-.000931**	**.0023187**	**-.000636**	**-.000600**	**.0007491**	**.0000341**	**.0046390**
Stddev	.000507	.0013890	.000605	.001321	.0008197	.0056740	.0011709
%RSD	54.50158	59.90306	95.03652	220.2508	109.4195	16646.88	25.23889
#1	-.000750	.0012829	-.000157	-.001561	.0001982	.0010370	.0055566
#2	-.000539	.0017761	-.000436	.000906	.0003581	-.006075	.0050402
#3	-.001504	.0038970	-.001316	-.001144	.0016912	.005140	.0033204

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000007**	**.0000330**	**.0007022**	**.0000360**	**-.000176**	**-.000106**	**.0031175**
Stddev	.000029	.0000215	.0046836	.0001447	.000140	.000192	.0072214
%RSD	381.9427	64.90312	666.9347	402.2077	79.69540	181.8828	231.6429
#1	-.000013	.0000203	.0027274	-.000061	-.000325	-.000005	.0101929
#2	.000023	.0000210	-.004653	-.000033	-.000047	.000015	.0034012
#3	-.000033	.0000578	.004032	.000202	-.000155	-.000327	-.004242

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000145**	**-.002807**	**-.000010**	**-.000380**	**.2223547**	**-.000939**	**-.000082**
Stddev	.000123	.015462	.000198	.000134	.0194982	.000823	.000368
%RSD	84.68124	550.9288	1975.293	35.29758	8.768963	87.59679	449.6399
#1	-.000013	.002363	-.000176	-.000413	.2052690	.000011	-.000293
#2	-.000166	-.020191	.000209	-.000233	.2181995	-.001415	-.000295
#3	-.000256	.009409	-.000064	-.000495	.2435956	-.001414	.000343

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1625595**	**.0019119**	**.0001980**	**.0002792**	**.0001074**	**.0081308**	**.0004351**
Stddev	.0277929	.0004873	.0001002	.0005855	.0009368	.0037150	.0005319
%RSD	17.09707	25.48902	50.61313	209.7475	872.4234	45.69073	122.2537
#1	.1603228	.0015839	.0001389	-.000393	.0011566	.0124135	-.000128
#2	.1359525	.0024719	.0001414	.000553	-.000645	.0057772	.000504
#3	.1914032	.0016799	.0003137	.000678	-.000189	.0062016	.000929

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCB06 Acquired: 2/12/2025 17:59:22 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0092217	.0012294	.0000821
Stddev	.0025775	.0010747	.0000078
%RSD	27.95005	87.41792	9.436499
#1	.0073091	.0012576	.0000855
#2	.0121528	.0001409	.0000732
#3	.0082031	.0022898	.0000875

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2655.681	53337.82	10204.99	1733.697	4502.834
Stddev	4.427	209.65	81.02	8.143	9.818
%RSD	.1666941	.3930569	.7938948	.4696815	.2180381
#1	2655.523	53502.23	10209.13	1740.562	4499.214
#2	2651.335	53101.73	10121.99	1724.700	4495.339
#3	2660.185	53409.49	10283.86	1735.828	4513.947

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: PB166414BL Acquired: 2/12/2025 18:08:03 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000928**	**.0009757**	**-.001019**	**-.001307**	**.0000229**	**-.005153**	**.0040597**
Stddev	.003155	.0011047	.000052	.002092	.0007081	.003401	.0005530
%RSD	340.0112	113.2164	5.121071	160.0005	3092.059	66.00029	13.62091
#1	-.003013	.0000676	-.001012	-.003412	-.000176	-.002357	.0034292
#2	.002702	.0022056	-.000971	.000772	.000809	-.004163	.0042876
#3	-.002473	.0006540	-.001074	-.001282	-.000565	-.008939	.0044622

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000616**	**-.000092**	**-.002752**	**-.000025**	**.0000074**	**.0000543**	**.0023510**
Stddev	.0000352	.000073	.006505	.000325	.0001511	.0003479	.0010840
%RSD	57.19987	79.19095	236.3673	1312.289	2029.669	640.5600	46.10643
#1	.0000221	-.000104	-.004275	.000341	.0000772	-.000009	.0035578
#2	.0000728	-.000159	.004379	-.000133	-.000166	-.000258	.0014600
#3	.0000899	-.000014	-.008361	-.000282	.000111	.000429	.0020353

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000061**	**-.004406**	**-.000158**	**-.000420**	**.2016340**	**-.001050**	**-.000013**
Stddev	.000270	.017855	.000205	.000327	.0085354	.000328	.000199
%RSD	446.3659	405.2114	129.5652	77.85058	4.233118	31.24251	1529.192
#1	-.000291	-.003473	-.000194	-.000735	.1934133	-.001417	.000027
#2	-.000127	.012964	-.000342	-.000444	.2010360	-.000785	-.000228
#3	.000237	-.022710	.000063	-.000082	.2104527	-.000948	.000163

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1539203**	**-.002302**	**-.000173**	**-.000127**	**-.000284**	**.0065105**	**.0031344**
Stddev	.0299933	.000339	.000233	.000362	.000608	.0100437	.0008835
%RSD	19.48626	14.72015	134.7793	285.9756	214.2877	154.2697	28.18587
#1	.1714415	-.001970	-.000162	-.000419	.000418	-.004562	.0037885
#2	.1710317	-.002647	-.000411	-.000240	-.000653	.015034	.0034854
#3	.1192878	-.002288	.000055	.000278	-.000617	.009060	.0021294

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: PB166414BL Acquired: 2/12/2025 18:08:03 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0051563	.0004743	-.000002
Stddev	.0025240	.0002195	.000007
%RSD	48.94958	46.28118	375.5366
#1	.0077487	.0006835	.000003
#2	.0050136	.0002458	.000001
#3	.0027068	.0004935	-.000010

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2710.029	54049.14	10312.97	1757.298	4632.231
Stddev	5.051	92.46	29.03	11.255	5.774
%RSD	.1863953	.1710730	.2814936	.6404790	.1246491
#1	2705.583	53947.39	10287.81	1745.305	4626.330
#2	2715.522	54128.02	10306.37	1758.958	4637.869
#3	2708.983	54072.02	10344.73	1767.631	4632.492

Sample Name: PB166414BS Acquired: 2/12/2025 18:12:25 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7674464**	**1.887046**	**.9578445**	**1.920727**	**.7713701**	**1.881652**
Stddev	.0025275	.011131	.0036396	.004151	.0050245	.010469
%RSD	.3293450	.5898697	.3799793	.2160942	.6513793	.5563971
#1	.7702571	1.874870	.9546289	1.919708	.7725365	1.891652
#2	.7653602	1.896699	.9571090	1.917181	.7658649	1.882534
#3	.7667218	1.889570	.9617957	1.925293	.7757089	1.870769

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1933960**	**.1917708**	**.1943547**	**1.009221**	**.4077876**	**.1958800**
Stddev	.0004749	.0009218	.0007097	.009786	.0007666	.0004921
%RSD	.2455595	.4806913	.3651461	.9696723	.1879803	.2512354
#1	.1938162	.1921928	.1937223	1.006336	.4069039	.1956195
#2	.1928808	.1924062	.1942196	1.020126	.4082732	.1955728
#3	.1934911	.1907136	.1951223	1.001202	.4081857	.1964476

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3063357**	**3.098212**	**.1965696**	**1.942071**	**.4950690**	**.0753375**
Stddev	.0012561	.034722	.0008212	.008122	.0020027	.0004797
%RSD	.4100384	1.120721	.4177861	.4181958	.4045216	.6366833
#1	.3064762	3.073767	.1971184	1.950789	.4939914	.0758219
#2	.3050152	3.082912	.1956255	1.940706	.4938359	.0753277
#3	.3075156	3.137956	.1969649	1.934719	.4973797	.0748628

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.229879**	**.2877735**	**.2020377**	**9.876034**	**.2750037**	**.3978734**
Stddev	.034853	.0012225	.0005298	.098020	.0011016	.0016431
%RSD	1.079073	.4248044	.2622159	.9925032	.4005818	.4129596
#1	3.194211	.2889722	.2025720	9.831449	.2760517	.3966647
#2	3.231569	.2878198	.2020283	9.808233	.2751040	.3972113
#3	3.263855	.2865285	.2015126	9.988422	.2738554	.3997442

Sample Name: PB166414BS Acquired: 2/12/2025 18:12:25 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6809834**	**.1912441**	**.8024996**	**5.552128**	F **-.006752**	**.1995332**
Stddev	.0029711	.0005390	.0064068	.019988	.003014	.0011562
%RSD	.4362960	.2818370	.7983588	.3600075	44.63423	.5794324
#1	.6792805	.1913119	.8004214	5.535573	-.005078	.1991123
#2	.6792556	.1906744	.7973898	5.546478	-.004946	.1986464
#3	.6844141	.1917460	.8096875	5.574332	-.010231	.2008408

Elem	Sr4077
Units	ppm
Avg	**.1836135**
Stddev	.0002655
%RSD	.1445810
#1	.1833470
#2	.1838779
#3	.1836157

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2673.122**	**53584.68**	**10233.60**	**1747.637**	**4491.241**
Stddev	10.414	277.25	21.54	1.936	15.996
%RSD	.3895956	.5174065	.2104474	.1107516	.3561617
#1	2676.130	53860.23	10221.14	1745.971	4504.897
#2	2681.702	53588.05	10221.20	1749.760	4495.184
#3	2661.535	53305.76	10258.47	1747.181	4473.642

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: PB166688BL Acquired: 2/12/2025 18:16:25 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.004919**	**-.001600**	**-.000194**	**.0003221**	**.0019213**	**.0244198**
Stddev	.003041	.001803	.000553	.0019195	.0010033	.0079343
%RSD	61.82538	112.6666	284.1894	595.8557	52.22022	32.49133
#1	-.003642	.000355	-.000265	.0023122	.0007724	.0187244
#2	-.002724	-.001959	-.000708	-.001518	.0023667	.0334824
#3	-.008390	-.003196	.000390	.000172	.0026247	.0210526

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0018005**	**-.000098**	**-.000126**	**.0580029**	**.0009445**	**-.000078**
Stddev	.0010224	.000028	.000066	.0039096	.0003943	.000102
%RSD	56.78466	28.15993	52.31496	6.740366	41.75086	130.2490
#1	.0020115	-.000072	-.000154	.0540430	.0005053	-.000070
#2	.0006890	-.000094	-.000051	.0618602	.0010601	.000019
#3	.0027009	-.000127	-.000173	.0581057	.0012681	-.000184

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008598**	**.0351777**	**.0031191**	**.0750009**	**.0004819**	**-.000686**
Stddev	.0001662	.0030950	.0004266	.0168655	.0001632	.000073
%RSD	19.33229	8.798229	13.67792	22.48702	33.85937	10.65910
#1	.0009243	.0374285	.0035372	.0861863	.0006617	-.000754
#2	.0006710	.0364564	.0026844	.0556021	.0004406	-.000609
#3	.0009841	.0316483	.0031359	.0832143	.0003433	-.000695

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1571284**	**-.001353**	**.0039888**	**.0930400**	**-.003224**	**.0003090**
Stddev	.0033510	.000560	.0001043	.0338511	.000413	.0004276
%RSD	2.132654	41.39654	2.613431	36.38338	12.80546	138.3781
#1	.1533711	-.000930	.0039373	.0547999	-.002748	-.000183
#2	.1598079	-.001142	.0041088	.1191719	-.003482	.000524
#3	.1582061	-.001988	.0039204	.1051482	-.003442	.000586

Sample Name: PB166688BL Acquired: 2/12/2025 18:16:25 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.009378	.0007578	.0251500	F .0132513	F .0141170	-.000451
Stddev	.000222	.0011805	.0046383	.0018946	.0014839	.001030
%RSD	2.363196	155.7756	18.44247	14.29702	10.51104	228.4021
#1	-.009127	-.000596	.0245193	.0134396	.0158303	.000658
#2	-.009544	.001572	.0208593	.0150447	.0132797	-.001378
#3	-.009465	.001297	.0300714	.0112697	.0132411	-.000633

Elem	Sr4077
Units	ppm
Avg	.0000576
Stddev	.0000113
%RSD	19.59462
#1	.0000661
#2	.0000448
#3	.0000620

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2650.605	53724.33	10344.25	1728.861	4485.336
Stddev	4.251	125.44	31.67	4.718	4.861
%RSD	.1603639	.2334806	.3061764	.2728899	.1083722
#1	2645.715	53738.75	10356.20	1724.570	4490.866
#2	2653.418	53592.31	10368.22	1728.099	4481.738
#3	2652.682	53841.93	10308.35	1733.913	4483.403

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: PB166688BS Acquired: 2/12/2025 18:20:47 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7308920**	**1.784384**	**.9355168**	**1.762770**	**.7540468**	**1.917355**
Stddev	.0013867	.012040	.0048005	.007300	.0008093	.005639
%RSD	.1897317	.6747480	.5131439	.4141072	.1073277	.2940820
#1	.7293454	1.773174	.9331002	1.762749	.7538855	1.918226
#2	.7320245	1.782867	.9324047	1.755481	.7533303	1.911332
#3	.7313061	1.797110	.9410454	1.770080	.7549246	1.922508

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1960155**	**.1855392**	**.1882631**	**1.057330**	**.4137128**	**.1952418**
Stddev	.0003388	.0010447	.0004857	.003633	.0012606	.0003926
%RSD	.1728272	.5630617	.2580043	.3435690	.3047039	.2010667
#1	.1957655	.1843423	.1880698	1.060631	.4142549	.1953750
#2	.1964011	.1862675	.1879038	1.053438	.4146117	.1948000
#3	.1958800	.1860080	.1888158	1.057922	.4122718	.1955505

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2999174**	**3.085180**	**.2026145**	**1.962703**	**.4896563**	**.0728611**
Stddev	.0006456	.008251	.0007577	.017334	.0011199	.0001068
%RSD	.2152461	.2674505	.3739359	.8831508	.2287054	.1466359
#1	.2994850	3.089580	.2024155	1.943333	.4897484	.0727511
#2	.2996078	3.075661	.2019762	1.976753	.4884932	.0729645
#3	.3006595	3.090298	.2034518	1.968023	.4907272	.0728678

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.175138**	**.2920388**	**.1963021**	**9.594515**	**.2621469**	**.4073767**
Stddev	.015081	.0015757	.0003964	.063107	.0031173	.0015304
%RSD	.4749629	.5395376	.2019292	.6577451	1.189133	.3756743
#1	3.183853	.2929228	.1963794	9.667319	.2585816	.4067862
#2	3.157724	.2902196	.1958728	9.560802	.2635007	.4062296
#3	3.183837	.2929739	.1966542	9.555424	.2643584	.4091144

Sample Name: PB166688BS Acquired: 2/12/2025 18:20:47 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6582115	.1946294	.7948794	5.363712	F -.000539	.2009974
Stddev	.0023104	.0007247	.0073434	.023956	.001227	.0020678
%RSD	.3510168	.3723438	.9238436	.4466307	227.7233	1.028777
#1	.6555559	.1937947	.8033588	5.348660	-.000254	.1990861
#2	.6593180	.1950978	.7906111	5.351139	-.001883	.2031924
#3	.6597606	.1949956	.7906684	5.391337	.000520	.2007137

Elem	Sr4077
Units	ppm
Avg	.1863547
Stddev	.0006079
%RSD	.3262054
#1	.1865951
#2	.1868055
#3	.1856633

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2654.312	54378.45	10042.19	1748.281	4494.915
Stddev	6.120	264.50	13.94	7.194	12.158
%RSD	.2305628	.4864078	.1388390	.4115019	.2704830
#1	2649.098	54075.70	10057.31	1741.966	4487.808
#2	2661.050	54564.72	10029.84	1756.113	4508.954
#3	2652.788	54494.93	10039.43	1746.765	4487.984

Sample Name: LR1 Acquired: 2/12/2025 18:24:56 Type: Unk
Method: NON EPA-6010-200.7(v2690) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.013875**	**-.024064**	**.0338954**	**-.174376**	**-.003372**	**2046.733**	**.0179729**
Stddev	.007941	.020926	.0017386	.003158	.006832	27.137	.0005083
%RSD	57.23571	86.95730	5.129209	1.811025	202.6029	1.325857	2.828250
#1	-.011918	-.045344	.0334240	-.177771	-.010747	2027.566	.0175190
#2	-.007095	-.003511	.0358211	-.171526	.002741	2077.785	.0185221
#3	-.022612	-.023337	.0324411	-.173830	-.002110	2034.849	.0178775

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0166298**	**.0718733**	**1944.029**	**.0010451**	**.0257276**	**-.010065**	**929.5971**
Stddev	.0002967	.0015343	1.794	.0013927	.0002891	.005050	7.2051
%RSD	1.784216	2.134731	.0922723	133.2594	1.123762	50.17922	.7750829
#1	.0168153	.0701055	1942.266	.0020117	.0255260	-.015871	937.0349
#2	.0167864	.0726571	1945.852	.0016747	.0255980	-.006691	922.6497
#3	.0162876	.0728574	1943.970	-.000551	.0260589	-.007632	929.1068

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.087145**	**1782.064**	**.0364130**	**-.092683**	**2025.867**	**.0522241**	**.1748622**
Stddev	.000655	8.451	.0008303	.002296	2.415	.0010297	.0011952
%RSD	.7519413	.4742333	2.280135	2.477524	.1192293	1.971639	.6834949
#1	-.087900	1788.068	.0357042	-.093012	2023.676	.0512446	.1755998
#2	-.086818	1785.725	.0373265	-.094797	2028.457	.0521302	.1734832
#3	-.086718	1772.400	.0362084	-.090240	2025.467	.0532975	.1755035

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1290.465**	**-.032961**	**.0058609**	**-.001867**	**-.051049**	**.1493664**	**.0880396**
Stddev	6.659	.017101	.0008987	.002518	.000458	.0077354	.0110703
%RSD	.5160494	51.88139	15.33326	134.8839	.8968807	5.178838	12.57427
#1	1285.361	-.014106	.0060196	-.000205	-.050616	.1502668	.0944087
#2	1297.998	-.047469	.0048934	-.004763	-.051528	.1412201	.0944535
#3	1288.037	-.037307	.0066696	-.000632	-.051003	.1566122	.0752567

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: LR1 Acquired: 2/12/2025 18:24:56 Type: Unk
Method: NON EPA-6010-200.7(v2690) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**-.191525**	**-.303632**	**-.917868**
Stddev	.013974	.000932	.007194
%RSD	7.296374	.3069171	.7837919
#1	-.187903	-.303147	-.925283
#2	-.179719	-.304706	-.910918
#3	-.206954	-.303042	-.917403

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1839.971**	**37242.33**	**8617.415**	**1195.409**	**2627.318**
Stddev	8.216	33.16	28.550	6.909	7.606
%RSD	.4465385	.0890420	.3313082	.5779331	.2894797
#1	1848.074	37239.82	8645.796	1189.008	2633.955
#2	1840.195	37276.67	8588.698	1202.732	2628.981
#3	1831.646	37210.49	8617.750	1194.487	2619.019

Sample Name: LR2 Acquired: 2/12/2025 18:29:54 Type: Unk
Method: NON EPA-6010-200.7(v2690) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0068739**	**.0288122**	**225.6029**	**.0012364**	**-.001803**	**.1946278**	**108.4684**
Stddev	.0027598	.0016080	.3470	.0003981	.001946	.0157813	.7465
%RSD	40.14841	5.581038	.1538282	32.20188	107.8854	8.108429	.6882399
#1	.0047463	.0270414	225.3148	.0012293	-.000706	.1773650	108.8098
#2	.0058831	.0292141	225.5057	.0016380	-.004050	.1982051	108.9831
#3	.0099923	.0301812	225.9882	.0008418	-.000654	.2083133	107.6122

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003501**	**-.006016**	**.2082386**	**.0123483**	**-.020753**	**252.2780**	**-.007969**
Stddev	.000082	.000059	.0167891	.0004702	.000319	2.2327	.006126
%RSD	2.333142	.9820972	8.062418	3.807934	1.537932	.8850075	76.87105
#1	-.003414	-.005957	.1973073	.0121122	-.020959	250.6919	-.010899
#2	-.003576	-.006018	.1998387	.0128898	-.020916	251.3109	-.012081
#3	-.003513	-.006075	.2275697	.0120429	-.020386	254.8312	-.000929

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.07372**	**-.025269**	**45.23656**	**.0015218**	**.3076129**	**-.014165**	**32.54798**
Stddev	.39731	.015677	.10042	.0002870	.0131275	.000506	.11973
%RSD	.8264666	62.04022	.2219888	18.85578	4.267551	3.572219	.3678495
#1	48.34124	-.035590	45.15751	.0012680	.3021938	-.013862	32.51603
#2	47.61719	-.032988	45.20262	.0018332	.2980625	-.013884	32.44747
#3	48.26273	-.007229	45.34955	.0014642	.3225825	-.014749	32.68045

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1931674**	**-.005875**	**-.008564**	**-.008195**	**-.045867**	**-.015293**	**2.313179**
Stddev	.0233532	.000212	.000229	.000925	.001326	.008946	.017676
%RSD	12.08961	3.603453	2.672158	11.28683	2.891452	58.49692	.7641496
#1	.1662016	-.005792	-.008474	-.009262	-.047184	-.004967	2.293411
#2	.2065744	-.006116	-.008824	-.007711	-.044532	-.020217	2.327463
#3	.2067261	-.005718	-.008394	-.007613	-.045885	-.020696	2.318663

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: LR2 Acquired: 2/12/2025 18:29:54 Type: Unk
Method: NON EPA-6010-200.7(v2690) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.035678	.0001864	.0014846
Stddev	.000349	.0015729	.0000657
%RSD	.9791743	843.6853	4.426732
#1	-.036010	-.000502	.0014840
#2	-.035313	.001986	.0015506
#3	-.035710	-.000925	.0014192

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2361.830	53757.28	10350.82	1663.816	4332.632
Stddev	9.357	166.89	65.28	10.160	9.526
%RSD	.3961841	.3104521	.6306300	.6106677	.2198562
#1	2369.324	53681.60	10306.24	1664.252	4338.703
#2	2364.823	53948.60	10320.48	1673.752	4337.539
#3	2351.342	53641.63	10425.75	1653.445	4321.653

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCV07 Acquired: 2/12/2025 18:34:06 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	**5.017484**	**4.800417**	**5.023441**	**4.999712**	**4.998645**	**9.919672**	**9.967095**
Stddev	.036886	.024688	.020190	.020656	.026016	.030610	.084999
%RSD	.7351440	.5142933	.4019178	.4131457	.5204565	.3085794	.8528002
#1	4.985189	4.772397	5.018421	4.984315	4.973243	9.934145	9.974074
#2	5.009583	4.818970	5.006235	4.991635	4.997459	9.940362	10.04839
#3	5.057680	4.809885	5.045668	5.023186	5.025234	9.884509	9.87882

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2449423**	**2.516633**	**24.90437**	**1.024946**	**2.498289**	**1.269551**	**5.159494**
Stddev	.0004749	.010872	.09968	.001991	.011283	.005882	.013694
%RSD	.1938687	.4319886	.4002661	.1942530	.4516170	.4633034	.2654228
#1	.2454833	2.515385	24.97273	1.025628	2.494031	1.266065	5.162400
#2	.2445944	2.506440	24.95040	1.022704	2.489755	1.266246	5.144580
#3	.2447493	2.528075	24.78999	1.026507	2.511081	1.276342	5.171503

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.479466**	**25.09878**	**2.513418**	**1.260036**	**26.14275**	**2.494434**	**2.471733**
Stddev	.013571	.08792	.010083	.000260	.01643	.011558	.001029
%RSD	.5473458	.3502892	.4011669	.0206583	.0628517	.4633409	.0416315
#1	2.490188	25.06258	2.511984	1.259831	26.12707	2.504066	2.472921
#2	2.484001	25.19902	2.504129	1.259948	26.14133	2.497618	2.471120
#3	2.464207	25.03474	2.524141	1.260329	26.15984	2.481618	2.471158

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.43557**	**4.818390**	**5.011444**	**5.021180**	**4.968217**	**5.175918**	**4.984947**
Stddev	.06995	.014354	.017935	.021017	.020417	.007035	.021692
%RSD	.2750269	.2979040	.3578739	.4185716	.4109614	.1359113	.4351510
#1	25.51533	4.834870	5.000245	5.011586	4.984456	5.169301	4.967660
#2	25.40677	4.808613	5.001958	5.006671	4.974900	5.175146	4.977893
#3	25.38462	4.811688	5.032130	5.045282	4.945296	5.183307	5.009288

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCV07 Acquired: 2/12/2025 18:34:06 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV07 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.961824**	**4.974555**	**4.959195**
Stddev	.032003	.022802	.021941
%RSD	.6449862	.4583674	.4424376
#1	4.951414	4.998966	4.933877
#2	4.936323	4.970894	4.971034
#3	4.997737	4.953806	4.972674

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2589.216**	**52549.17**	**9960.922**	**1678.244**	**4186.658**
Stddev	8.743	137.57	18.356	1.038	15.334
%RSD	.3376608	.2617908	.1842793	.0618711	.3662653
#1	2587.525	52707.93	9965.357	1679.340	4179.801
#2	2598.680	52464.97	9940.755	1678.117	4204.225
#3	2581.442	52474.63	9976.655	1677.275	4175.949

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCB07 Acquired: 2/12/2025 18:38:17 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	**.0010910**	**.0023706**	**.0000515**	**-.000816**	**.0013796**	**-.000933**	**.0034056**
Stddev	.0004413	.0002642	.0005038	.000969	.0005509	.005128	.0007435
%RSD	40.44602	11.14301	977.3665	118.7361	39.93200	549.7941	21.83071
#1	.0007311	.0026579	.0000309	.000042	.0020152	.003858	.0042610
#2	.0009585	.0021382	.0005653	-.000624	.0010419	-.000315	.0029145
#3	.0015833	.0023158	-.000442	-.001867	.0010815	-.006341	.0030414

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000027**	**-.000025**	**.0006495**	**-.000040**	**-.000062**	**.0010913**	**.0017041**
Stddev	.000025	.000135	.0027386	.000561	.000175	.0005746	.0053729
%RSD	94.24366	543.0010	421.6730	1415.501	283.9211	52.64938	315.2913
#1	-.000048	-.000096	.0027377	-.000562	.000113	.0006260	-.001839
#2	-.000034	-.000109	-.002451	.000553	-.000237	.0009145	.007886
#3	.000001	.000131	.001662	-.000111	-.000061	.0017336	-.000935

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000017**	**-.005390**	**.0003911**	**-.000442**	**.2449671**	**-.000723**	**.0000968**
Stddev	.000633	.002734	.0002282	.000577	.0068183	.001418	.0000924
%RSD	3791.394	50.72202	58.35619	130.5005	2.783364	196.0342	95.46764
#1	-.000271	-.002375	.0002159	-.000870	.2401692	-.001928	-.000010
#2	.000704	-.006089	.0006492	-.000672	.2419601	.000839	.000152
#3	-.000483	-.007707	.0003082	.000214	.2527721	-.001081	.000148

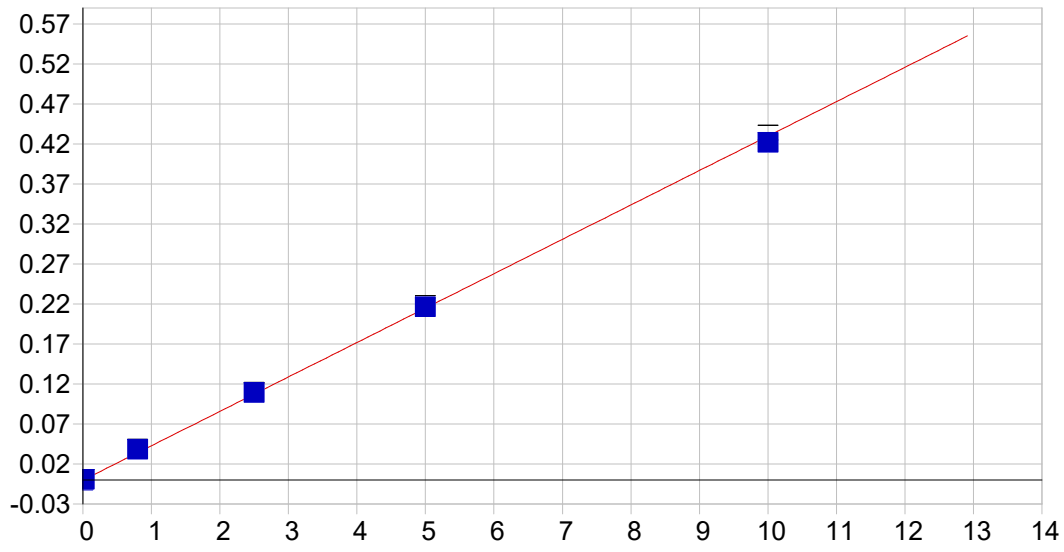
Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0972802**	**-.001120**	**.0002113**	**.0003192**	**-.000438**	**.0148808**	**.0043096**
Stddev	.0105427	.000299	.0001587	.0006153	.000392	.0153249	.0008104
%RSD	10.83746	26.72513	75.11973	192.7695	89.51239	102.9845	18.80340
#1	.1040446	-.001187	.0000684	.0003418	-.000875	.0200917	.0037400
#2	.0851327	-.001381	.0003821	.0009229	-.000322	.0269207	.0052373
#3	.1026633	-.000793	.0001833	-.000307	-.000117	-.002370	.0039516

Reviewed By:JANVI
On:2/13/2025 5:07:41 PM
Inst Id :P4
LB :LB134704

Sample Name: CCB07 Acquired: 2/12/2025 18:38:17 Type: Unk
Method: NON EPA-6010-200.7(v2536) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB07 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0073871	.0010469	.0000520
Stddev	.0033085	.0005128	.0000223
%RSD	44.78762	48.98315	42.96108
#1	.0101779	.0005218	.0000395
#2	.0082511	.0010725	.0000777
#3	.0037323	.0015465	.0000387

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2700.265	54301.39	10590.38	1759.272	4605.170
Stddev	9.307	103.62	15.87	1.038	8.560
%RSD	.3446521	.1908315	.1498491	.0590171	.1858735
#1	2709.428	54318.60	10579.38	1758.392	4614.243
#2	2700.546	54190.24	10583.18	1759.008	4604.027
#3	2690.821	54395.33	10608.57	1760.417	4597.239

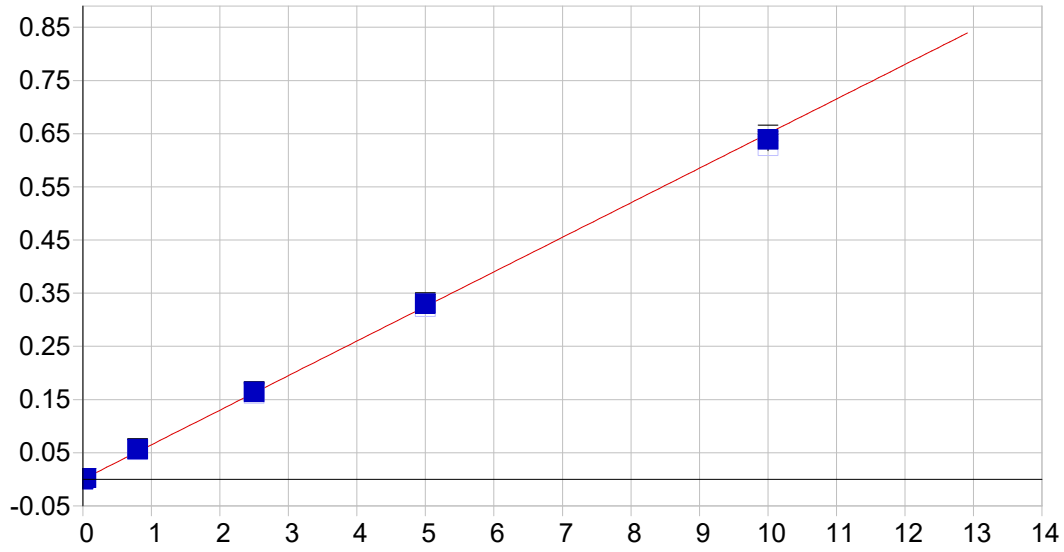


As 189.042 {479}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000229	Re-Slope:	1.000000
A1 (Gain):	0.043009	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999556	Status:	OK.
Std Error of Est:	0.000030		
Predicted MDL:	0.003262		
Predicted MQL:	0.010875		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00023	.000	1
S1	.02000	.02333	.003	16.6	.00077	.000	1
S3	2.5000	2.5474	.047	1.90	.10922	.000	1
S4	5.0000	5.0391	.039	.782	.21626	.002	1
S5	10.000	9.8160	-.184	-1.84	.42148	.009	1
S2	.80000	.89415	.094	11.8	.03819	.000	1

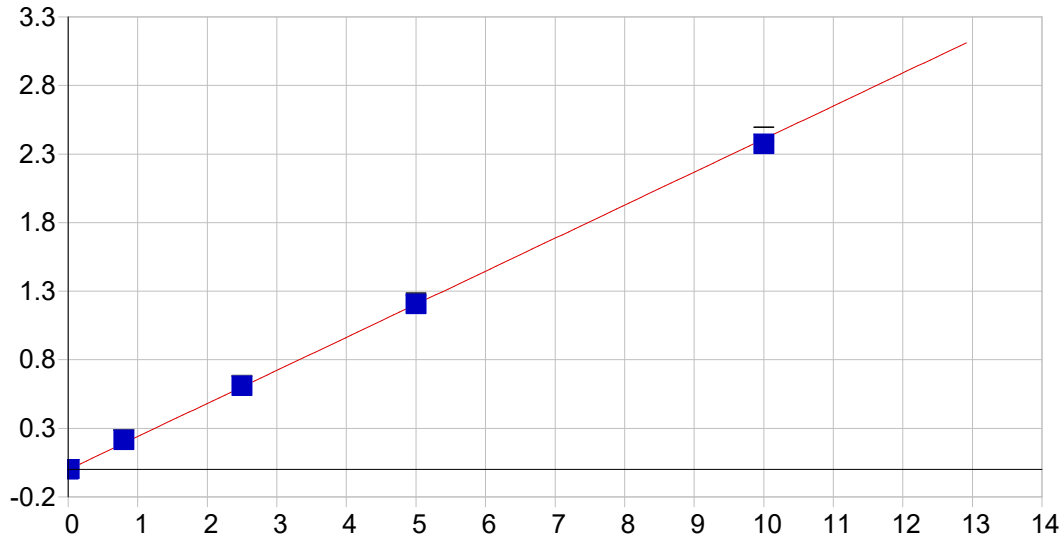


Tl 190.856 {477}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000030	Re-Slope:	1.000000
A1 (Gain):	0.065012	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999694	Status:	OK.
Std Error of Est:	0.000052		
Predicted MDL:	0.001956		
Predicted MQL:	0.006521		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00003	.000	1
S1	.04000	.03634	-.004	-9.16	.00222	.000	1
S3	2.5000	2.5248	.025	.993	.16118	.001	1
S4	5.0000	5.0834	.083	1.67	.32452	.001	1
S5	10.000	9.8269	-.173	-1.73	.62692	.009	1
S2	.80000	.86844	.068	8.56	.05553	.001	1

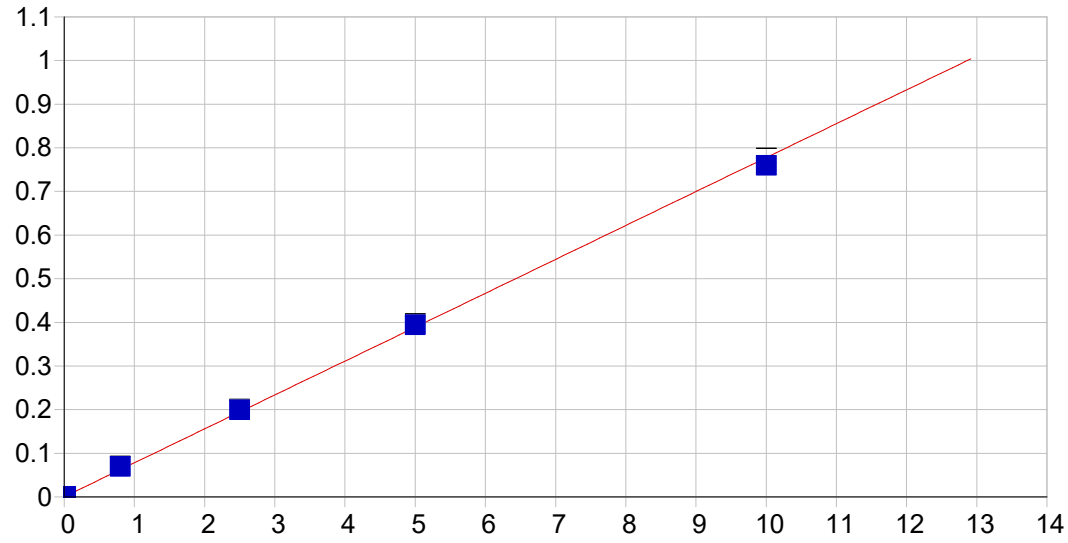


Pb 220.353 {453}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000415	Re-Slope:	1.000000
A1 (Gain):	0.240968	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999606	Status:	OK.
Std Error of Est:	0.000123		
Predicted MDL:	0.001151		
Predicted MQL:	0.003838		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00041	.000	1
S1	.01200	.01243	.000	3.57	.00252	.000	1
S3	2.5000	2.5359	.036	1.44	.60999	.003	1
S4	5.0000	5.0101	.010	.203	1.2055	.008	1
S5	10.000	9.8564	-.144	-1.44	2.3720	.051	1
S2	.80000	.89715	.097	12.1	.21556	.001	1

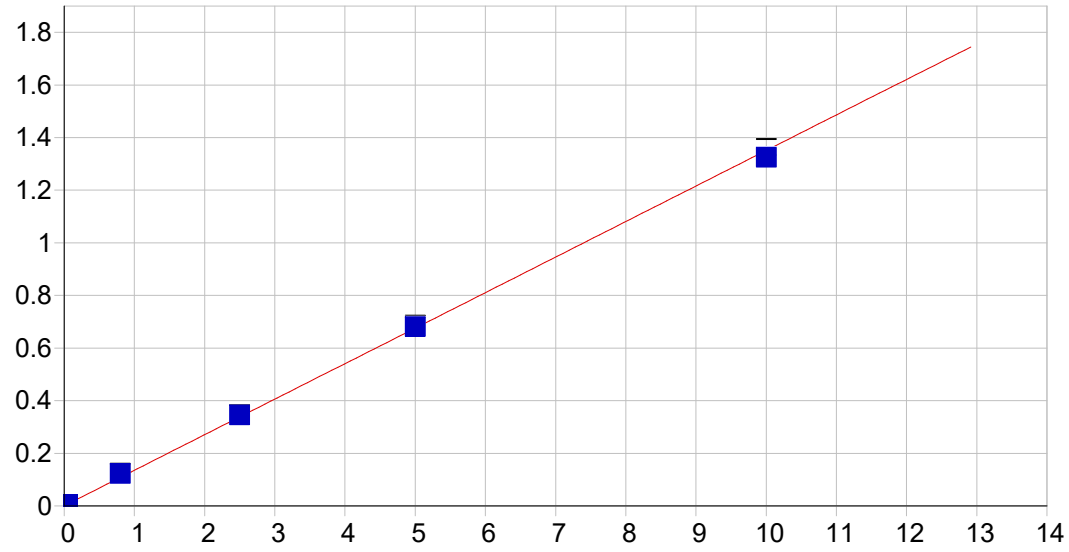


Se 196.090 {472}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000416	Re-Slope:	1.000000
A1 (Gain):	0.077702	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999477	Status:	OK.
Std Error of Est:	0.000059		
Predicted MDL:	0.002527		
Predicted MQL:	0.008424		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00042	.000	1
S1	.02000	.02077	.001	3.86	.00203	.000	1
S3	2.5000	2.5635	.063	2.54	.19955	.001	1
S4	5.0000	5.0683	.068	1.37	.39413	.003	1
S5	10.000	9.7720	-.228	-2.28	.75952	.017	1
S2	.80000	.89548	.095	11.9	.06998	.000	1

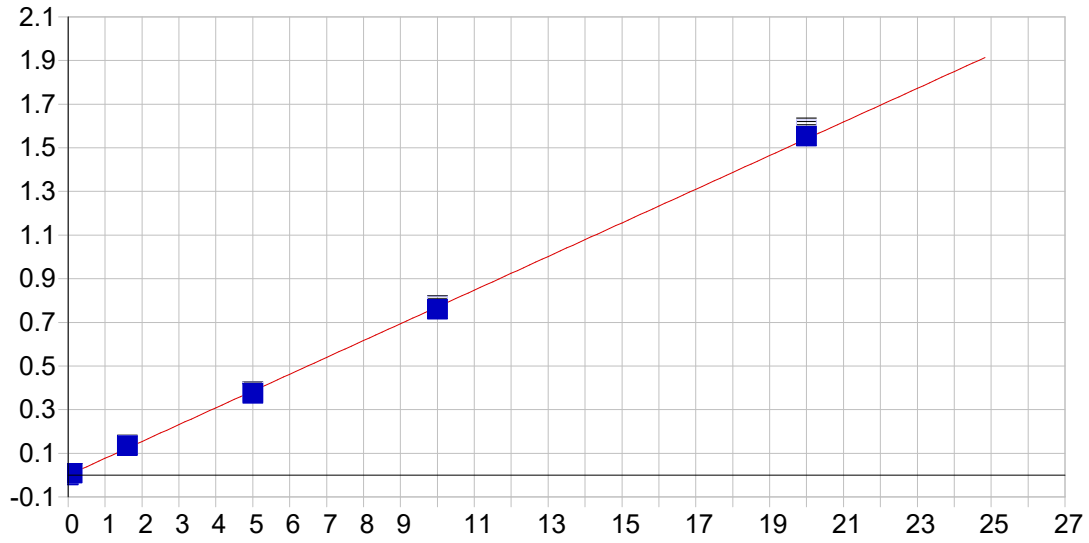


Sb 206.833 {463}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000467	Re-Slope:	1.000000
A1 (Gain):	0.135053	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999492	Status:	OK.
Std Error of Est:	0.000160		
Predicted MDL:	0.001692		
Predicted MQL:	0.005640		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00047	.000	1
S1	.05000	.05057	.001	1.14	.00731	.000	1
S3	2.5000	2.5510	.051	2.04	.34591	.001	1
S4	5.0000	5.0418	.042	.836	.68321	.004	1
S5	10.000	9.8028	-.197	-1.97	1.3280	.031	1
S2	.80000	.90379	.104	13.0	.12282	.001	1

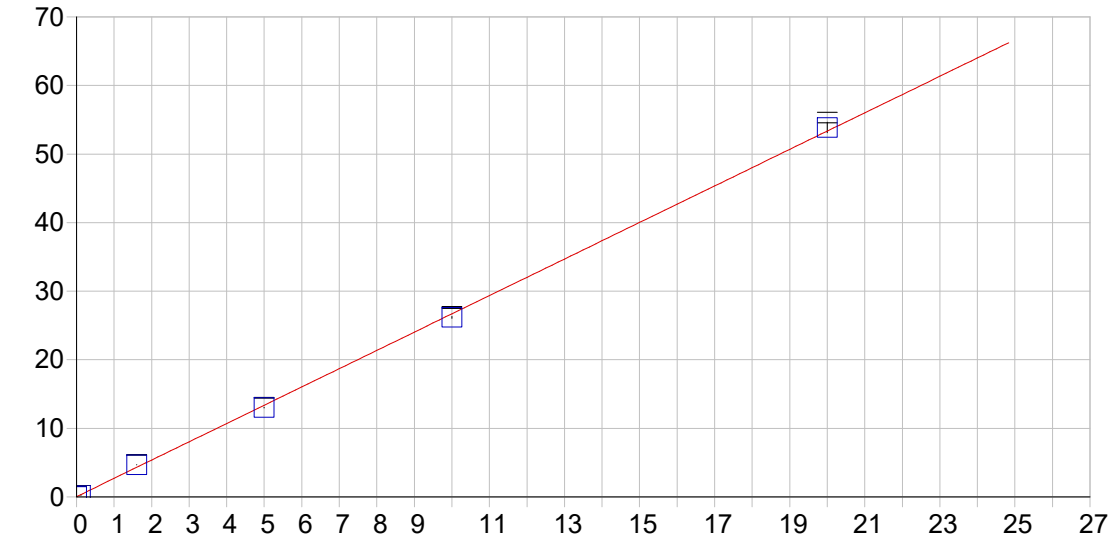


Al 396.152 { 85}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000003	Re-Slope:	1.000000
A1 (Gain):	0.077067	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999728	Status:	OK.
Std Error of Est:	0.000136		
Predicted MDL:	0.007603		
Predicted MQL:	0.025344		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00000	.000	1
S1	.10000	.10192	.002	1.92	.00845	.000	1
S3	5.0000	4.8490	-.151	-3.02	.38117	.001	1
S4	10.000	9.8583	-.142	-1.42	.77470	.002	1
S5	20.000	20.146	.146	.728	1.5825	.008	1
S2	1.6000	1.7449	.145	9.06	.13686	.001	1

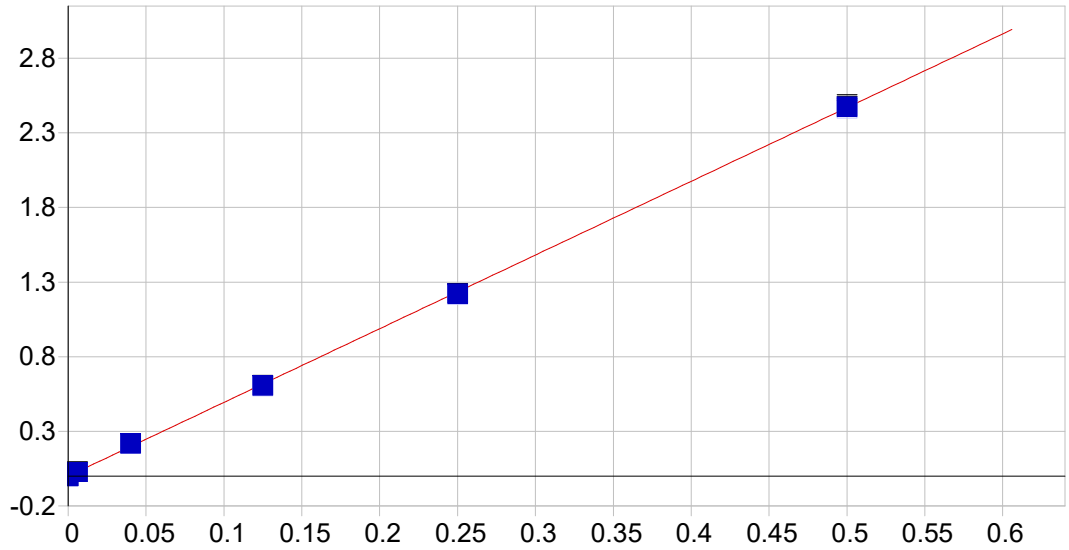


Ba 493.409 { 68}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.043109	Re-Slope:	1.000000
A1 (Gain):	2.665289	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999698	Status:	OK.
Std Error of Est:	0.004857		
Predicted MDL:	0.000778		
Predicted MQL:	0.002593		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.04311	.001	1
S1	.10000	.09324	-.007	-6.76	.29162	.001	1
S3	5.0000	4.8628	-.137	-2.74	13.004	.053	1
S4	10.000	9.8072	-.193	-1.93	26.182	.136	1
S5	20.000	20.197	.197	.983	53.873	.763	1
S2	1.6000	1.7402	.140	8.76	4.6813	.033	1

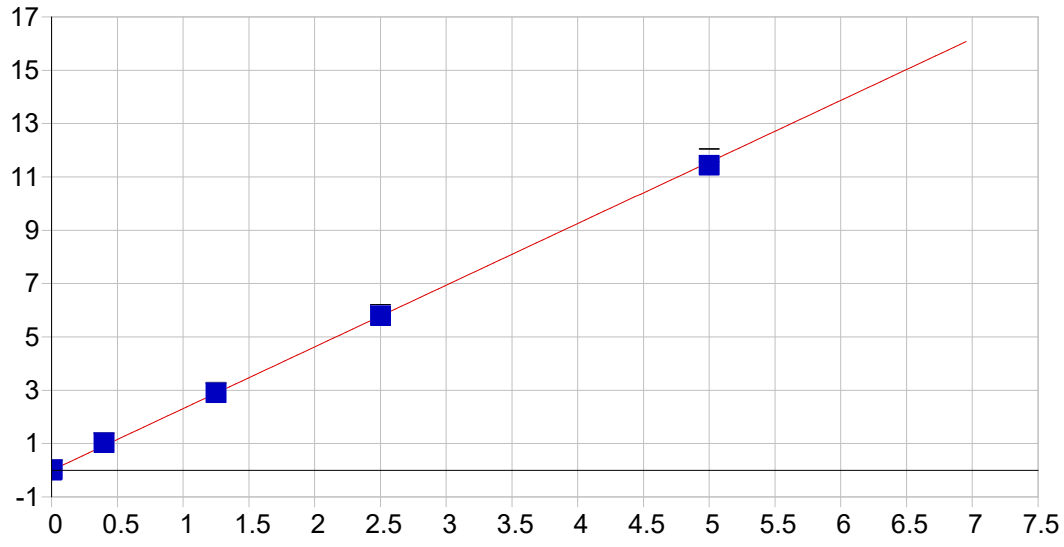


Be 234.861 {144}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000233	Re-Slope:	1.000000
A1 (Gain):	4.939272	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999728	Status:	OK.
Std Error of Est:	0.000330		
Predicted MDL:	0.000054		
Predicted MQL:	0.000180		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00023	.000	1
S1	.00600	.00575	-.000	-4.17	.02795	.000	1
S3	.12500	.12267	-.002	-1.86	.60293	.003	1
S4	.25000	.24741	-.003	-1.04	1.2163	.003	1
S5	.50000	.50110	.001	.219	2.4638	.014	1
S2	.04000	.04407	.004	10.2	.21653	.001	1

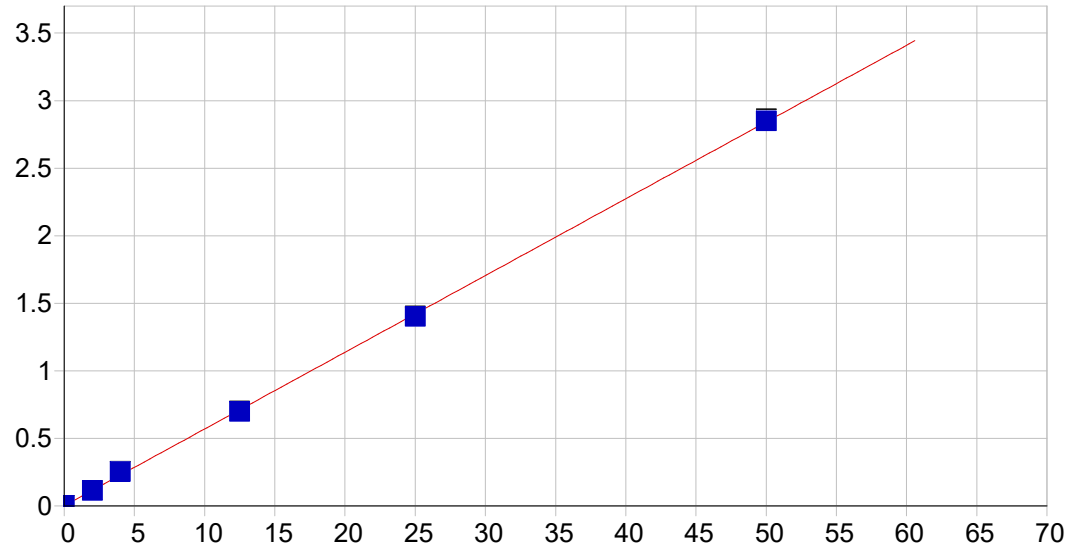


Cd 226.502 {449}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000058	Re-Slope:	1.000000
A1 (Gain):	2.312044	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999723	Status:	OK.
Std Error of Est:	0.000495		
Predicted MDL:	0.000091		
Predicted MQL:	0.000304		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00006	.000	1
S1	.00600	.00611	.000	1.77	.01412	.000	1
S3	1.2500	1.2556	.006	.448	2.9053	.015	1
S4	2.5000	2.5072	.007	.289	5.8015	.034	1
S5	5.0000	4.9450	-.055	-1.10	11.442	.241	1
S2	.40000	.44212	.042	10.5	1.0229	.005	1

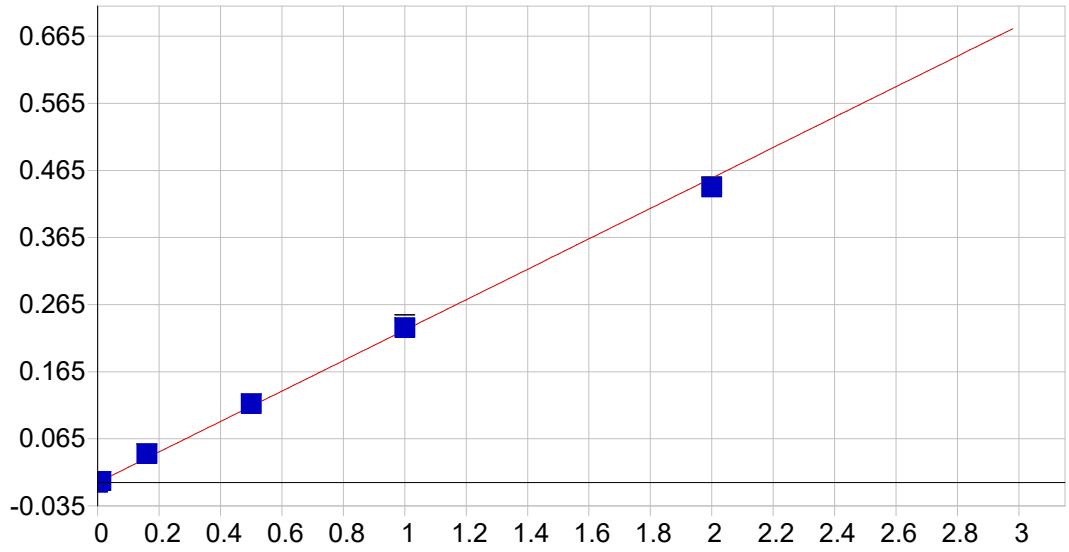


Ca 373.690 { 90}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001364	Re-Slope:	1.000000
A1 (Gain):	0.056803	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999668	Status:	OK.
Std Error of Est:	0.000774		
Predicted MDL:	0.009768		
Predicted MQL:	0.032560		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00013	-.000	.000	.00136	.000	1
S2	4.0000	4.4565	.456	11.4	.25450	.002	1
S3	12.500	12.285	-.215	-1.72	.69916	.001	1
S4	25.000	24.645	-.355	-1.42	1.4013	.003	1
S5	50.000	50.151	.151	.302	2.8501	.014	1
S1	2.0000	1.9630	-.037	-1.85	.11287	.001	1

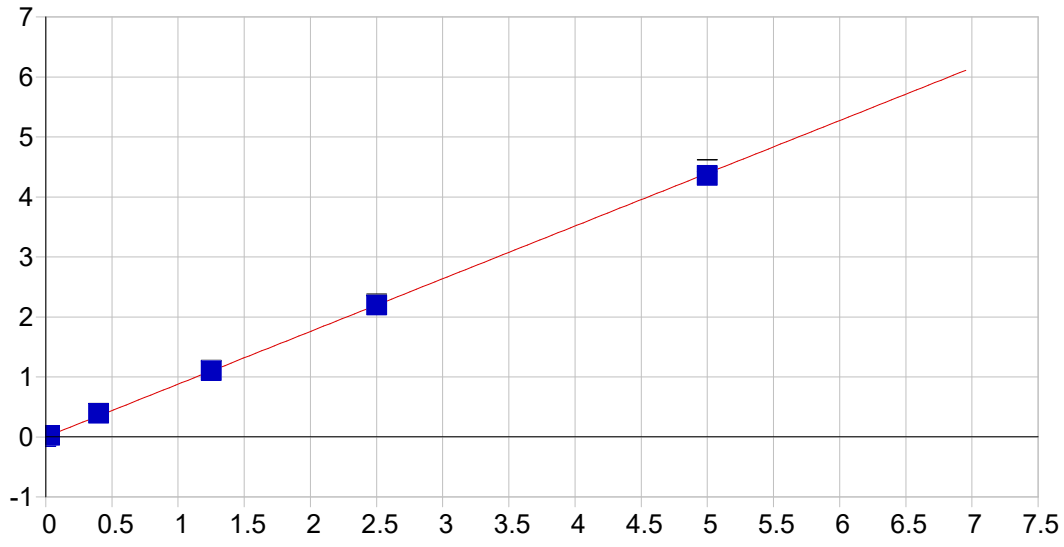


Cr 267.716 {126}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000014	Re-Slope:	1.000000
A1 (Gain):	0.226918	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999002	Status:	OK.
Std Error of Est:	0.000075		
Predicted MDL:	0.000388		
Predicted MQL:	0.001294		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00001	.000	1
S1	.01000	.01024	.000	2.42	.00234	.000	1
S3	.50000	.51566	.016	3.13	.11706	.000	1
S4	1.0000	1.0170	.017	1.70	.23087	.004	1
S5	2.0000	1.9396	-.060	-3.02	.44027	.000	1
S2	.16000	.18750	.028	17.2	.04257	.000	1

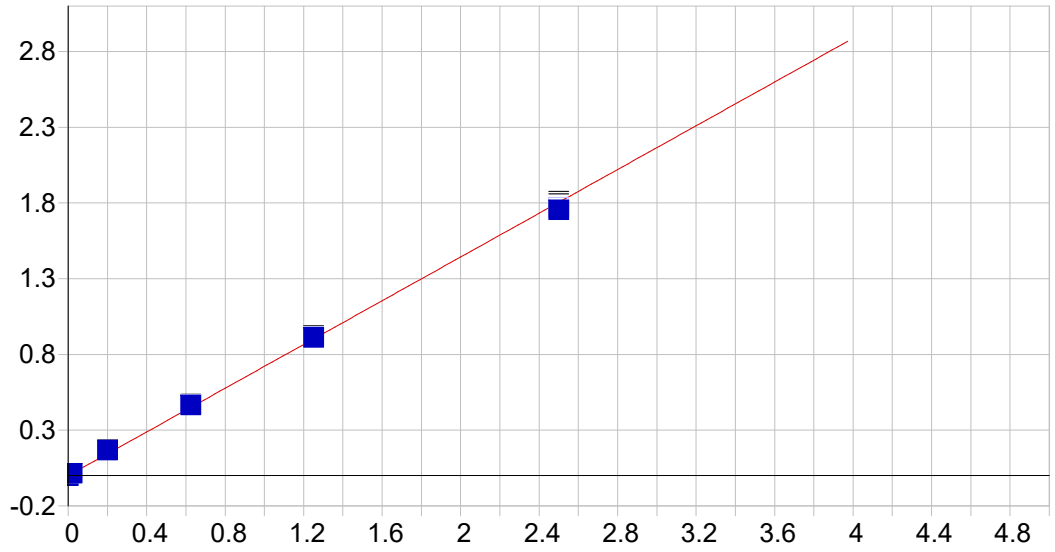


Co 228.616 {448}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000002	Re-Slope:	1.000000
A1 (Gain):	0.878772	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999699	Status:	OK.
Std Error of Est:	0.000439		
Predicted MDL:	0.000213		
Predicted MQL:	0.000709		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00000	.000	1
S1	.03000	.02935	-.001	-2.17	.02568	.000	1
S3	1.2500	1.2547	.005	.375	1.1045	.006	1
S4	2.5000	2.4982	-.002	-.073	2.1991	.015	1
S5	5.0000	4.9527	-.047	-.946	4.3598	.098	1
S2	.40000	.44506	.045	11.3	.39170	.002	1

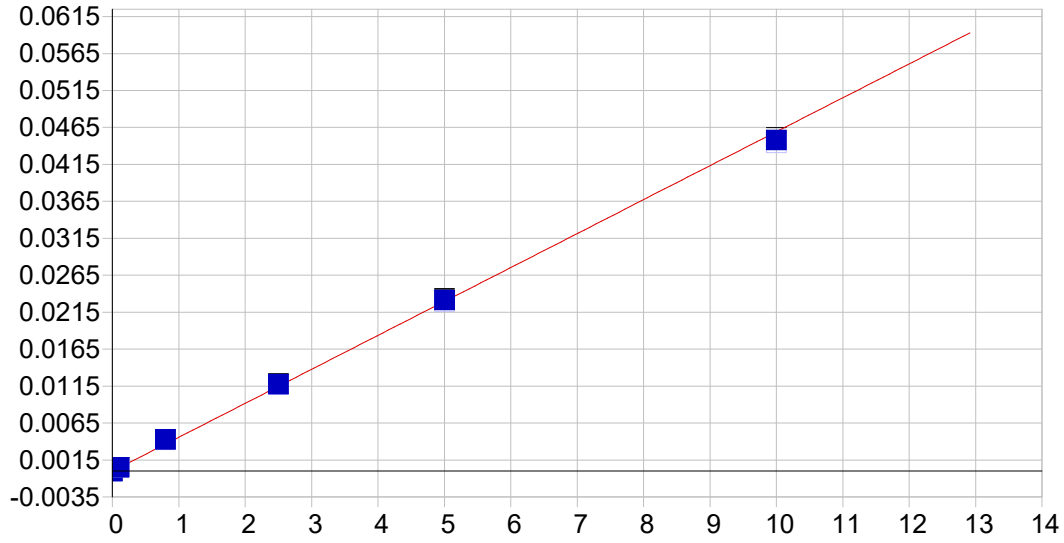


Cu 224.700 {450}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000452	Re-Slope:	1.000000
A1 (Gain):	0.721892	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999079	Status:	OK.
Std Error of Est:	0.000367		
Predicted MDL:	0.000437		
Predicted MQL:	0.001458		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00046	.000	1
S1	.02000	.02209	.002	10.4	.01568	.000	1
S3	.62500	.64625	.021	3.40	.47037	.002	1
S4	1.2500	1.2623	.012	.981	.91936	.005	1
S5	2.5000	2.4308	-.069	-2.77	1.7715	.040	1
S2	.20000	.23364	.034	16.8	.16959	.001	1

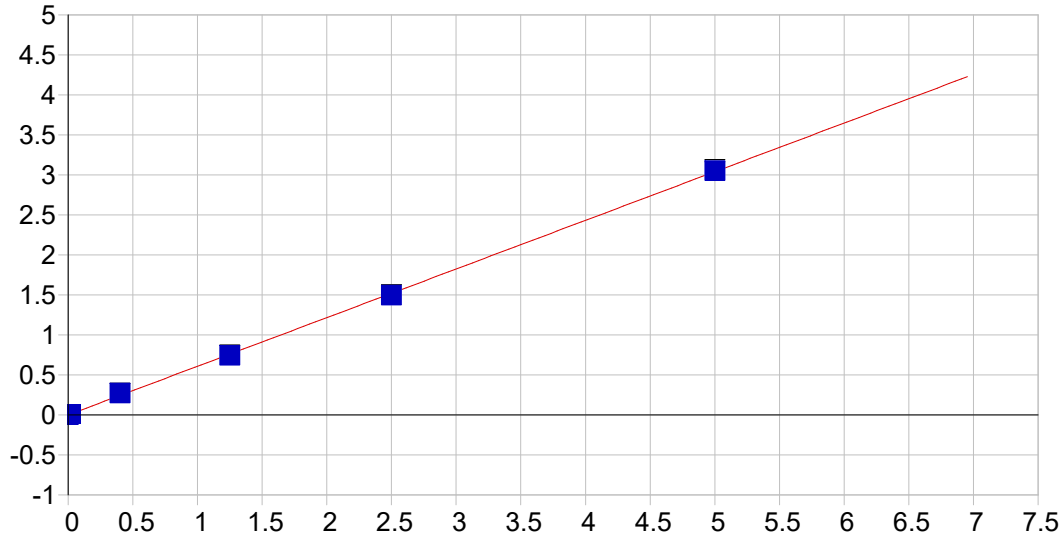


Fe 240.488 {140}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000023	Re-Slope:	1.000000
A1 (Gain):	0.004594	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999179	Status:	OK.
Std Error of Est:	0.000010		
Predicted MDL:	0.005977		
Predicted MQL:	0.019925		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00003	-.000	.000	-.00002	.000	1
S1	.10000	.10866	.009	8.66	.00047	.000	1
S3	2.5000	2.5650	.065	2.60	.01166	.000	1
S4	5.0000	5.0380	.038	.761	.02293	.000	1
S5	10.000	9.7583	-.242	-2.42	.04442	.000	1
S2	.80000	.93009	.130	16.3	.00422	.000	1

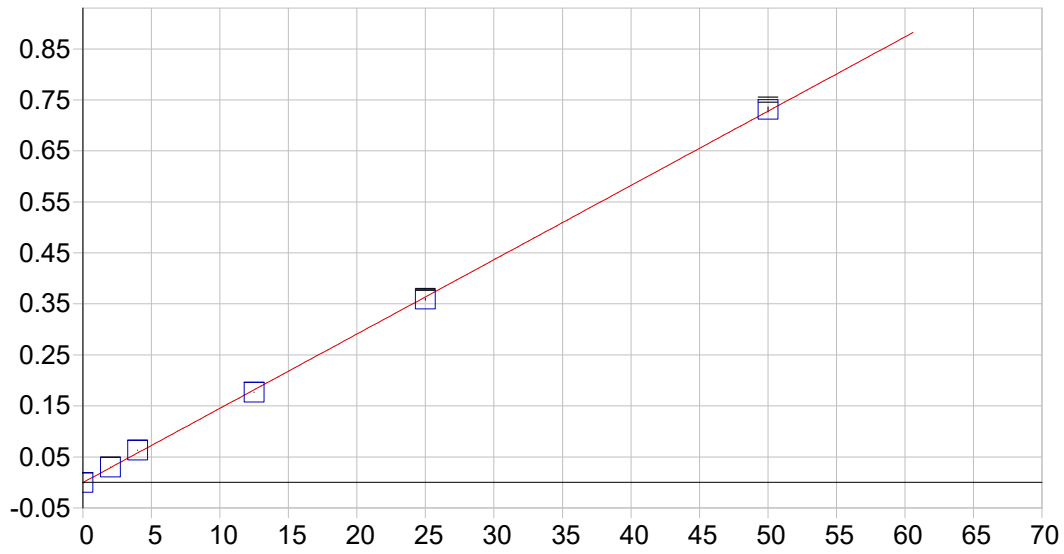


Mn 257.610 {131}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000045	Re-Slope:	1.000000
A1 (Gain):	0.608004	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999669	Status:	OK.
Std Error of Est:	0.000260		
Predicted MDL:	0.000364		
Predicted MQL:	0.001214		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00005	.000	1
S1	.02000	.02051	.001	2.57	.01243	.000	1
S3	1.2500	1.2258	-.024	-1.94	.74540	.002	1
S4	2.5000	2.4597	-.040	-1.61	1.4958	.007	1
S5	5.0000	5.0198	.020	.396	3.0526	.014	1
S2	.40000	.44415	.044	11.0	.27005	.001	1

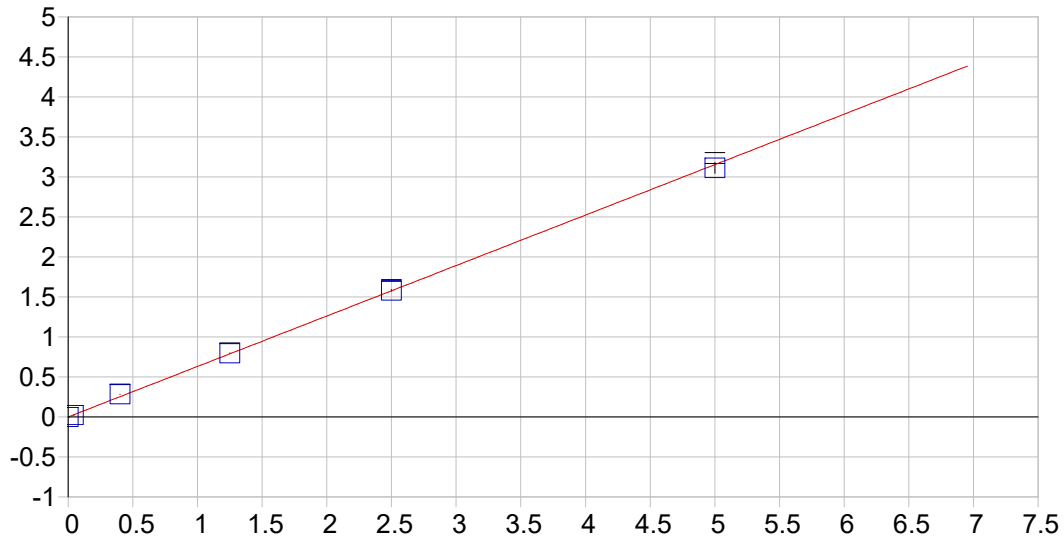


Mg 279.079 {121}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000365	Re-Slope:	1.000000
A1 (Gain):	0.014563	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999738	Status:	OK.
Std Error of Est:	0.000176		
Predicted MDL:	0.017303		
Predicted MQL:	0.057677		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00018	-.000	.000	-.00037	.000	1
S2	4.0000	4.3587	.359	8.97	.06311	.000	1
S3	12.500	12.161	-.339	-2.71	.17674	.000	1
S4	25.000	24.684	-.316	-1.26	.35912	.002	1
S5	50.000	50.225	.225	.450	.73108	.005	1
S1	2.0000	2.0711	.071	3.55	.02980	.000	1

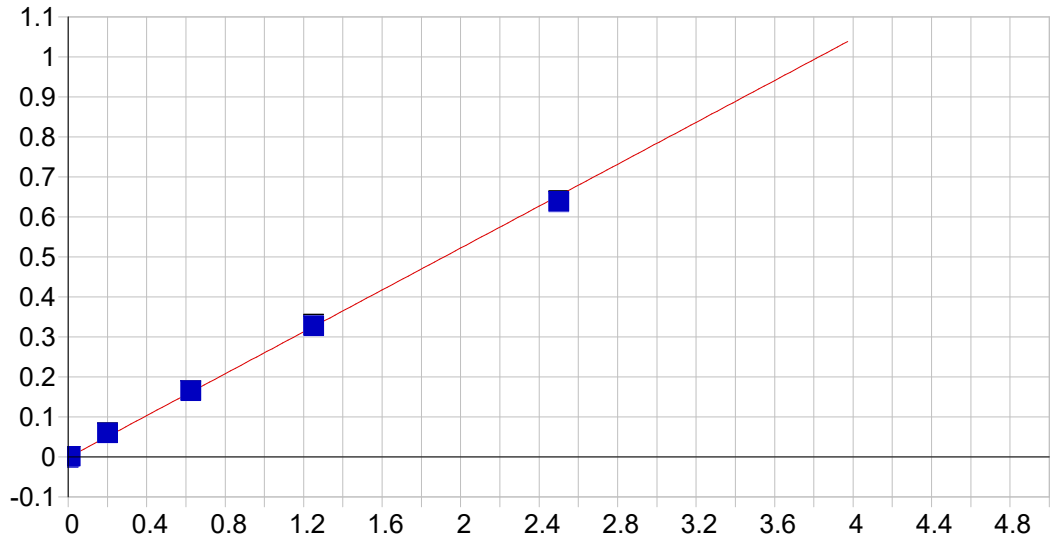


Ni 231.604 {446}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000099	Re-Slope:	1.000000
A1 (Gain):	0.630671	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999620	Status:	OK.
Std Error of Est:	0.000408		
Predicted MDL:	0.000331		
Predicted MQL:	0.001104		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00010	.000	1
S1	.04000	.03921	-.001	-1.97	.02483	.000	1
S3	1.2500	1.2630	.013	1.04	.79662	.004	1
S4	2.5000	2.5063	.006	.252	1.5807	.010	1
S5	5.0000	4.9328	-.067	-1.34	3.1111	.069	1
S2	.40000	.44867	.049	12.2	.28306	.002	1

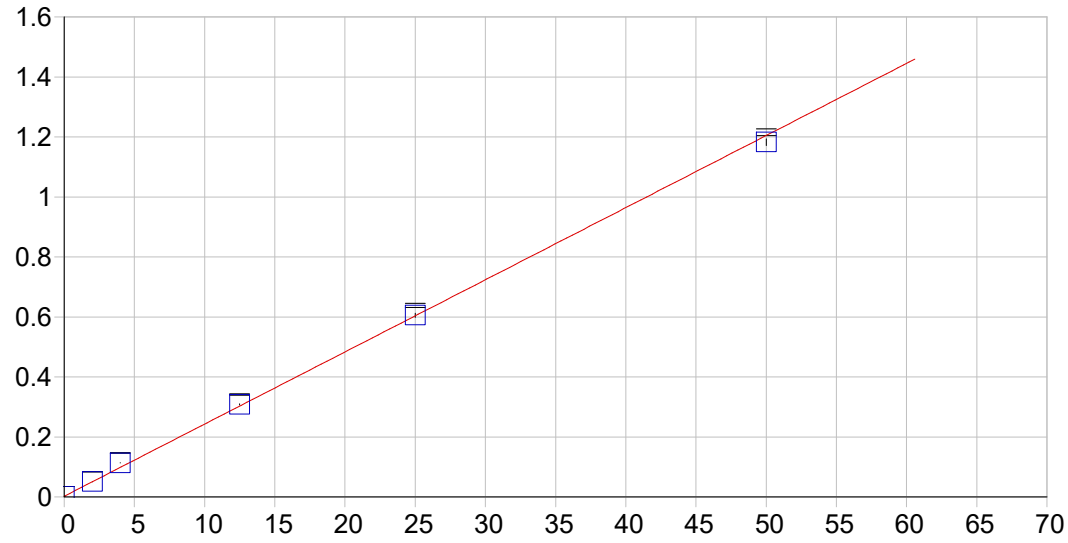


Ag 328.068 {103}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001477	Re-Slope:	1.000000
A1 (Gain):	0.261793	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999200	Status:	OK.
Std Error of Est:	0.000087		
Predicted MDL:	0.000433		
Predicted MQL:	0.001443		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00148	.000	1
S1	.01000	.01053	.001	5.26	.00126	.000	1
S3	.62500	.63730	.012	1.97	.16471	.001	1
S4	1.2500	1.2575	.007	.596	.32642	.004	1
S5	2.5000	2.4457	-.054	-2.17	.63619	.002	1
S2	.20000	.23404	.034	17.0	.05959	.000	1

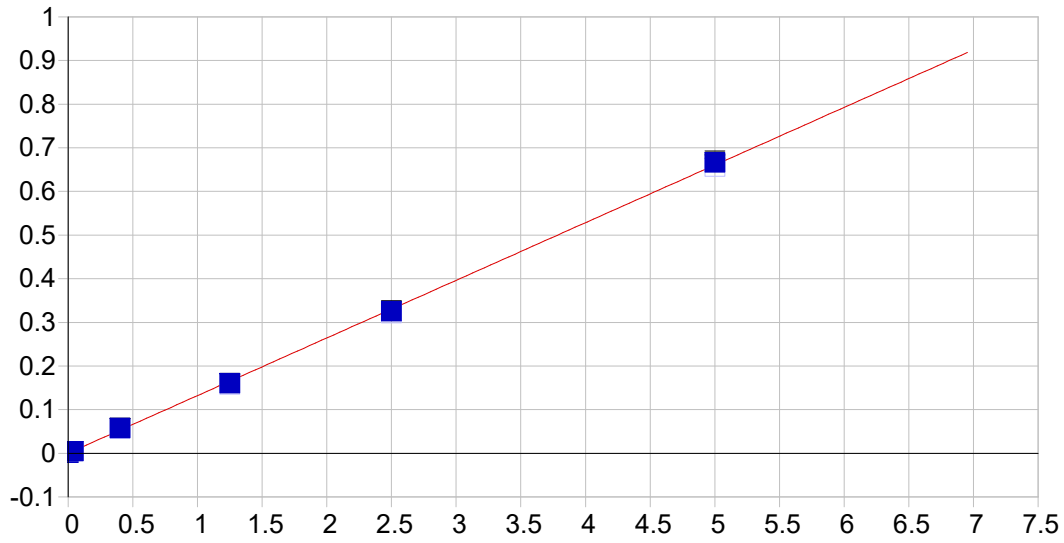


Na 589.592 { 57}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002377	Re-Slope:	1.000000
A1 (Gain):	0.024045	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999388	Status:	OK.
Std Error of Est:	0.000445		
Predicted MDL:	0.008093		
Predicted MQL:	0.026977		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00032	-.000	.000	.00237	.000	1
S2	4.0000	4.6115	.611	15.3	.11326	.000	1
S3	12.500	12.718	.218	1.75	.30819	.002	1
S4	25.000	25.078	.078	.313	.60540	.007	1
S5	50.000	49.082	-.918	-1.84	1.1826	.011	1
S1	2.0000	2.0096	.010	.479	.05070	.000	1

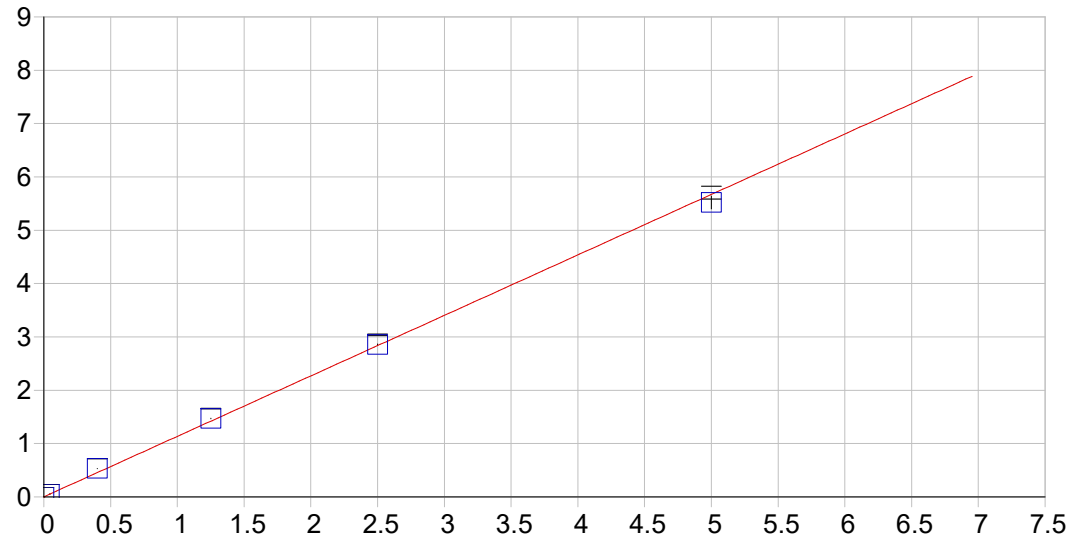


V 292.402 {115}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000146	Re-Slope:	1.000000
A1 (Gain):	0.132067	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999720	Status:	OK.
Std Error of Est:	0.000072		
Predicted MDL:	0.001922		
Predicted MQL:	0.006407		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00015	.000	1
S1	.04000	.03712	-.003	-7.21	.00485	.000	1
S3	1.2500	1.2113	-.039	-3.10	.15771	.000	1
S4	2.5000	2.4643	-.036	-1.43	.32079	.001	1
S5	5.0000	5.0444	.044	.888	.65672	.003	1
S2	.40000	.43282	.033	8.20	.05654	.000	1

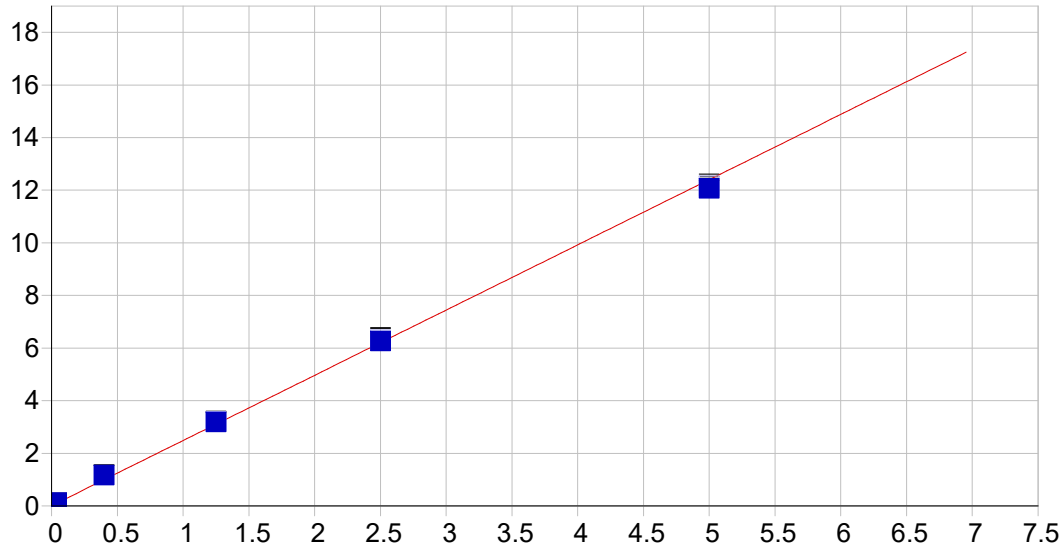


Zn 206.200 {464}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001337	Re-Slope:	1.000000
A1 (Gain):	1.134027	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999057	Status:	OK.
Std Error of Est:	0.001157		
Predicted MDL:	0.000185		
Predicted MQL:	0.000616		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00132	.000	1
S1	.04000	.04494	.005	12.4	.05230	.000	1
S3	1.2500	1.2953	.045	3.63	1.4703	.007	1
S4	2.5000	2.5155	.016	.621	2.8540	.016	1
S5	5.0000	4.8665	-.133	-2.67	5.5201	.120	1
S2	.40000	.46764	.068	16.9	.53165	.002	1

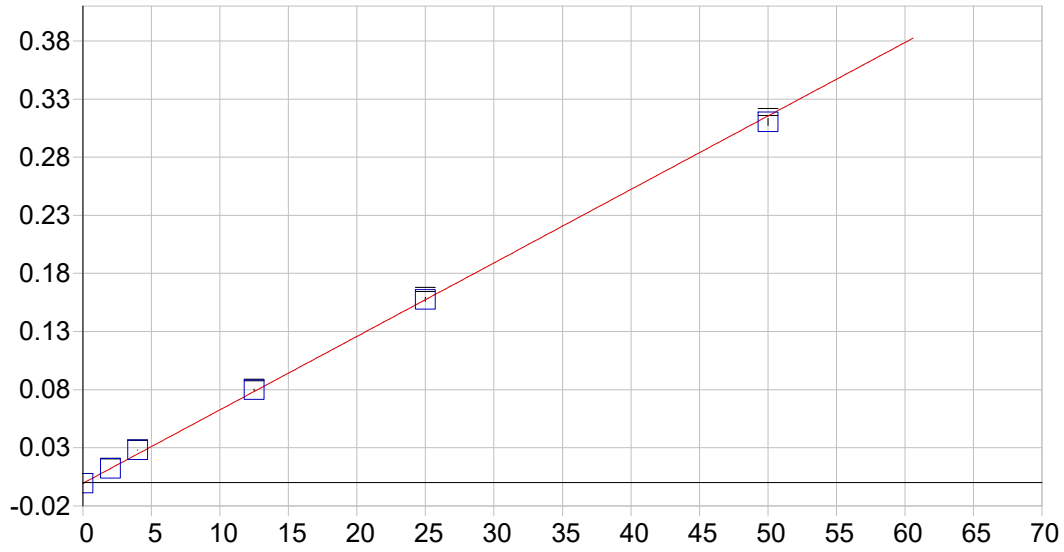


Zn 213.856 {158}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.005450	Re-Slope:	1.000000
A1 (Gain):	2.479418	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999094	Status:	OK.
Std Error of Est:	0.002496		
Predicted MDL:	0.000339		
Predicted MQL:	0.001129		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00542	.001	1
S1	.04000	.04501	.005	12.5	.11775	.001	1
S3	1.2500	1.2843	.034	2.75	3.2114	.012	1
S4	2.5000	2.5260	.026	1.04	6.3115	.090	1
S5	5.0000	4.8668	-.133	-2.66	12.159	.076	1
S2	.40000	.46785	.068	17.0	1.1724	.010	1

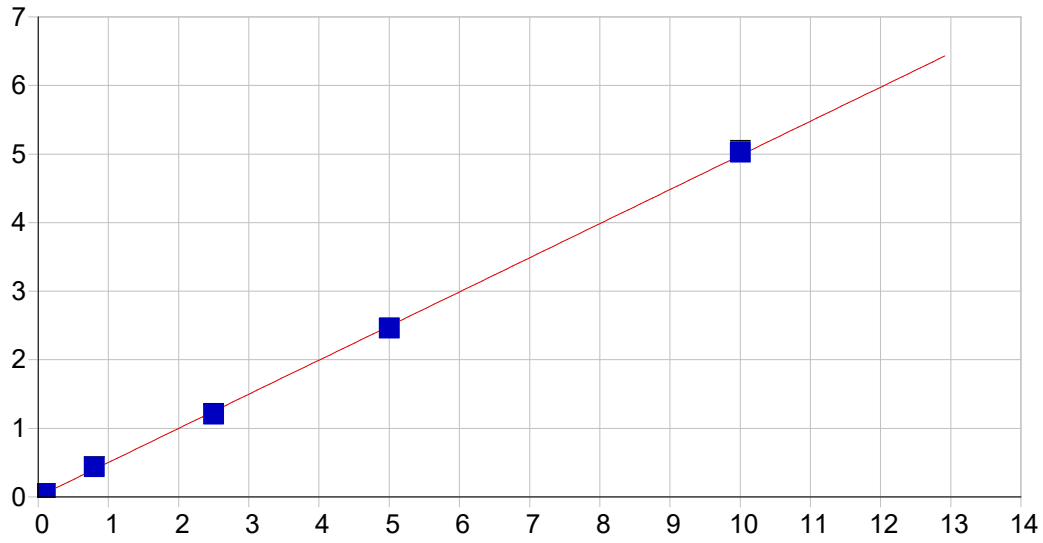


K 766.490 { 44}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000587	Re-Slope:	1.000000
A1 (Gain):	0.006321	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999515	Status:	OK.
Std Error of Est:	0.000104		
Predicted MDL:	0.037077		
Predicted MQL:	0.123589		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00030	-.000	.000	-.00059	.000	1
S2	4.0000	4.5413	.541	13.5	.02812	.000	1
S3	12.500	12.721	.221	1.77	.07982	.001	1
S4	25.000	25.029	.029	.114	.15761	.002	1
S5	50.000	49.185	-.815	-1.63	.31030	.003	1
S1	2.0000	2.0236	.024	1.18	.01220	.000	1

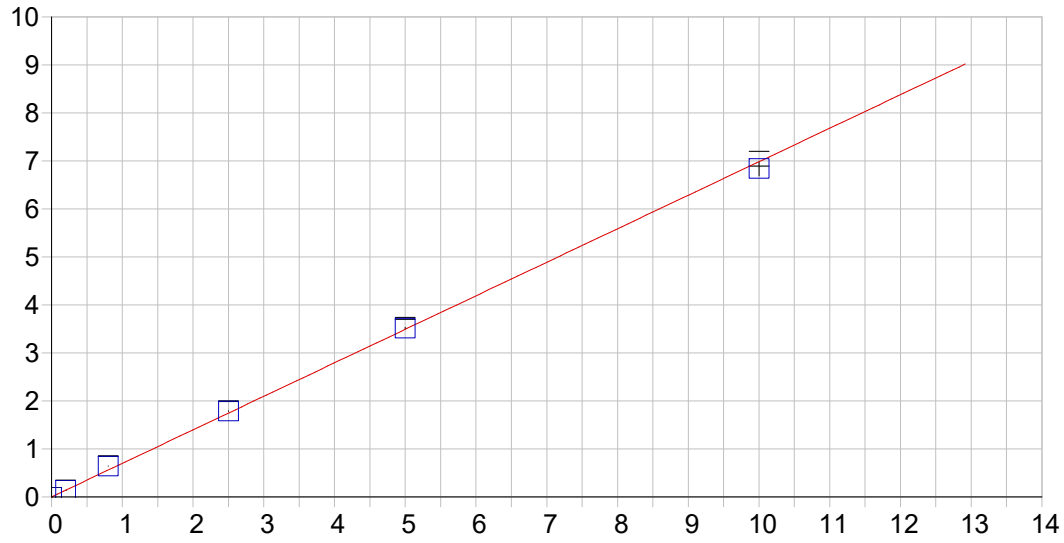


B 249.678 {135}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.004017	Re-Slope:	1.000000
A1 (Gain):	0.497596	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999704	Status:	OK.
Std Error of Est:	0.000635		
Predicted MDL:	0.000665		
Predicted MQL:	0.002217		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00402	.000	1
S1	.10000	.09547	-.005	-4.53	.05131	.001	1
S3	2.5000	2.4144	-.086	-3.42	1.2030	.011	1
S4	5.0000	4.9305	-.069	-1.39	2.4526	.007	1
S5	10.000	10.091	.091	.907	5.0154	.030	1
S2	.80000	.86889	.069	8.61	.43560	.003	1

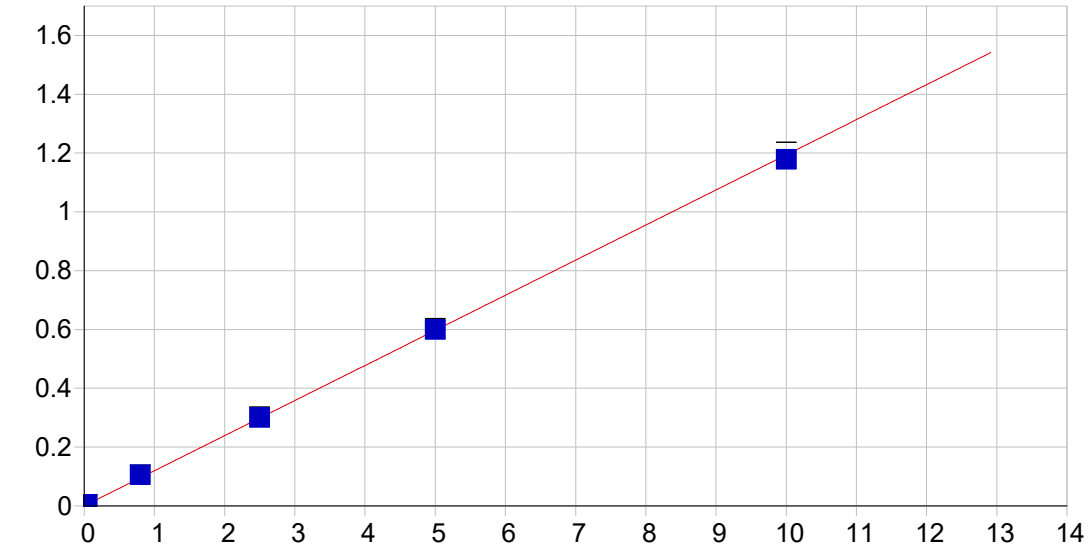


Mo 202.030 {467}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000366	Re-Slope:	1.000000
A1 (Gain):	0.698256	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999357	Status:	OK.
Std Error of Est:	0.001865		
Predicted MDL:	0.000293		
Predicted MQL:	0.000976		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00003	-.000	.000	.00034	.000	1
S1	.20000	.20172	.002	.858	.14121	.000	1
S3	2.5000	2.5542	.054	2.17	1.7838	.006	1
S4	5.0000	5.0330	.033	.660	3.5147	.020	1
S5	10.000	9.7910	-.209	-2.09	6.8370	.154	1
S2	.80000	.92009	.120	15.0	.64282	.004	1

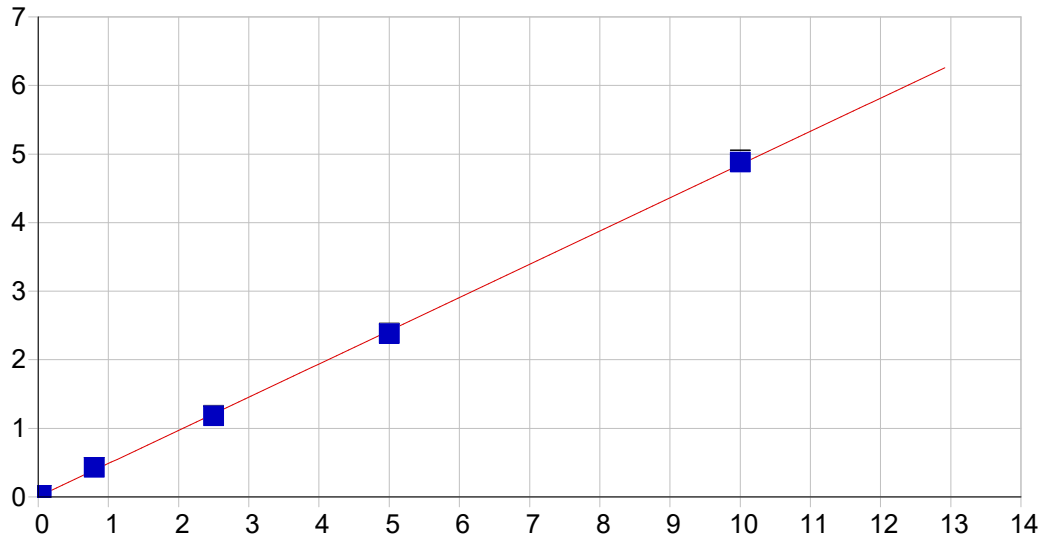


Sn 189.989 {478}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000161	Re-Slope:	1.000000
A1 (Gain):	0.119385	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999718	Status:	OK.
Std Error of Est:	0.000094		
Predicted MDL:	0.000813		
Predicted MQL:	0.002711		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00016	.000	1
S1	.04000	.03864	-.001	-3.41	.00477	.000	1
S3	2.5000	2.5187	.019	.747	.30055	.002	1
S4	5.0000	5.0251	.025	.503	.59947	.004	1
S5	10.000	9.8753	-.125	-1.25	1.1779	.024	1
S2	.80000	.88224	.082	10.3	.10539	.001	1

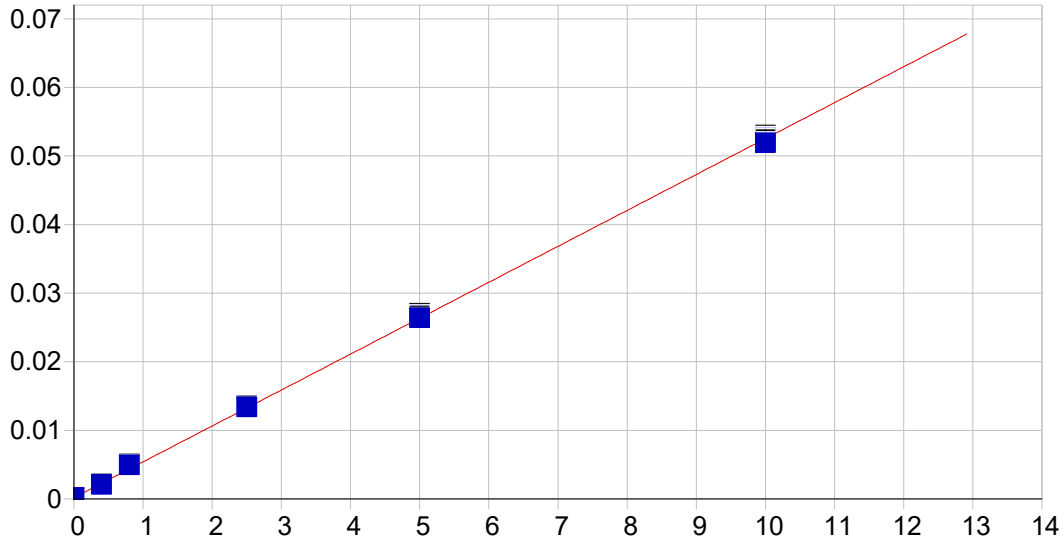


Ti 336.121 {100}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002566	Re-Slope:	1.000000
A1 (Gain):	0.484398	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999672	Status:	OK.
Std Error of Est:	0.000411		
Predicted MDL:	0.000757		
Predicted MQL:	0.002523		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00257	.000	1
S1	.04000	.03838	-.002	-4.06	.02114	.000	1
S3	2.5000	2.4367	-.063	-2.53	1.1825	.005	1
S4	5.0000	4.9091	-.091	-1.82	2.3797	.007	1
S5	10.000	10.075	.075	.752	4.8812	.030	1
S2	.80000	.88063	.081	10.1	.42900	.002	1

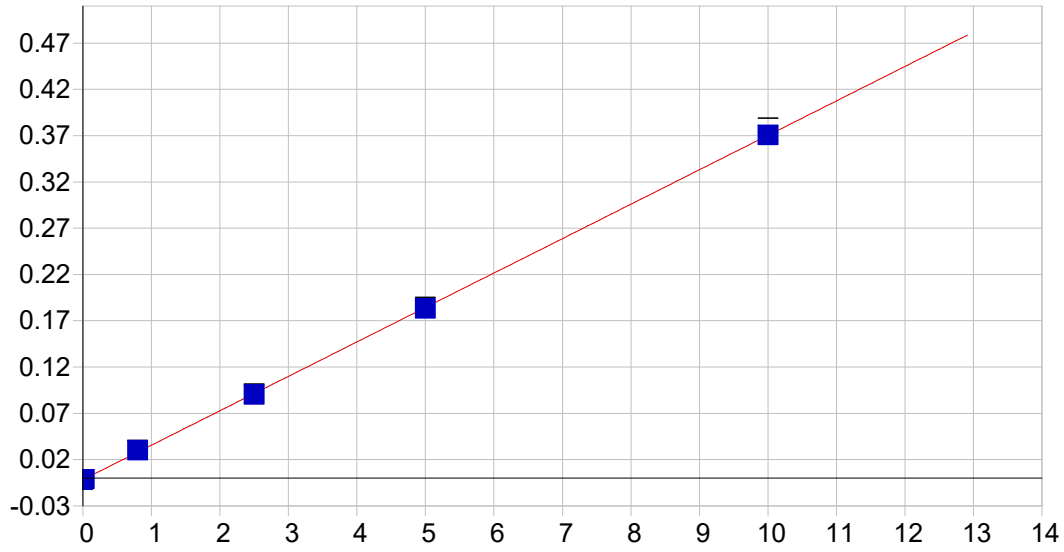


Si 288.158 {117}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000164	Re-Slope:	1.000000
A1 (Gain):	0.005237	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999493	Status:	OK.
Std Error of Est:	0.000018		
Predicted MDL:	0.009472		
Predicted MQL:	0.031572		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00003	-.000	.000	.00016	.000	1
S1	.40000	.37036	-.030	-7.41	.00211	.000	1
S3	2.5000	2.5219	.022	.878	.01357	.000	1
S4	5.0000	5.0130	.013	.259	.02681	.000	1
S5	10.000	9.8822	-.118	-1.18	.05271	.000	1
S2	.80000	.91210	.112	14.0	.00500	.000	1

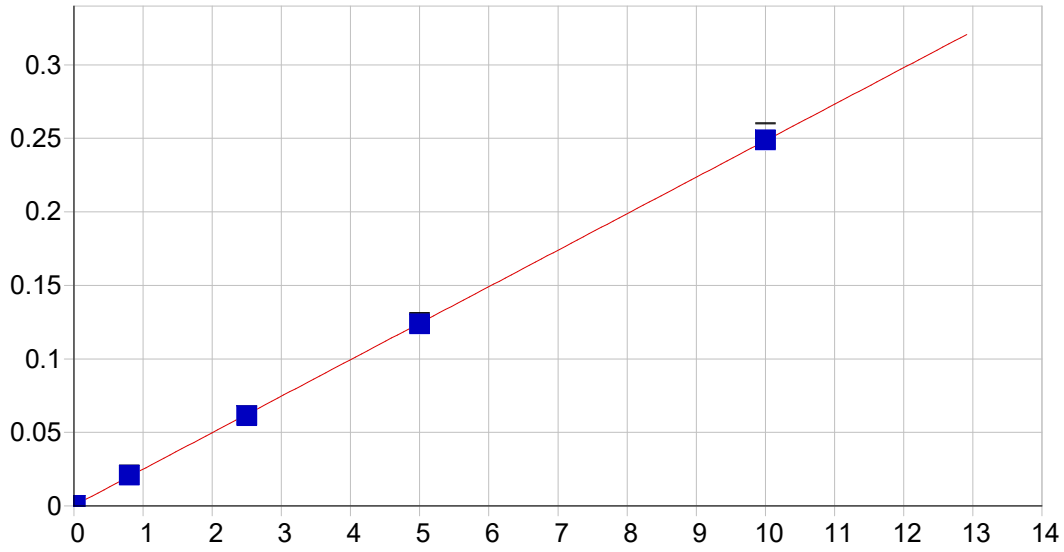


P 177.495 {490}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001605	Re-Slope:	1.000000
A1 (Gain):	0.037195	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999894	Status:	OK.
Std Error of Est:	0.000013		
Predicted MDL:	0.002530		
Predicted MQL:	0.008432		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00161	.000	1
S1	.02000	.01801	-.002	-9.94	-.00093	.000	1
S3	2.5000	2.4745	-.025	-1.02	.09042	.000	1
S4	5.0000	4.9694	-.031	-.613	.18320	.001	1
S5	10.000	10.007	.007	.073	.37056	.008	1
S2	.80000	.85082	.051	6.35	.03004	.000	1

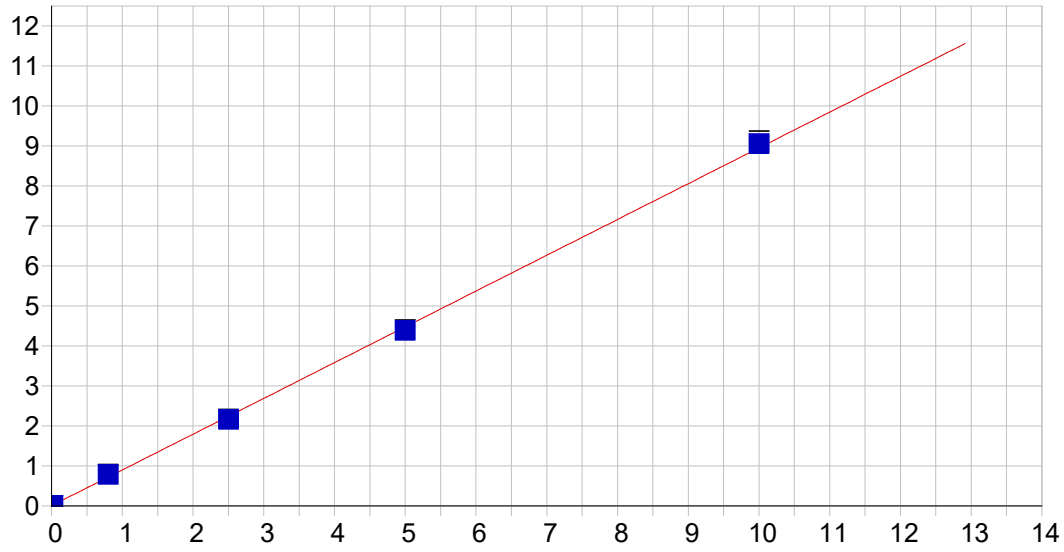


S 182.034 {485}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000178	Re-Slope:	1.000000
A1 (Gain):	0.024821	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999945	Status:	OK.
Std Error of Est:	0.000006		
Predicted MDL:	0.003596		
Predicted MQL:	0.011987		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00018	.000	1
S1	.02000	.01984	-.000	-.777	.00065	.000	1
S3	2.5000	2.4616	-.038	-1.54	.06112	.000	1
S4	5.0000	4.9794	-.021	-.411	.12345	.001	1
S5	10.000	10.028	.028	.275	.24843	.005	1
S2	.80000	.83161	.032	3.95	.02077	.000	1

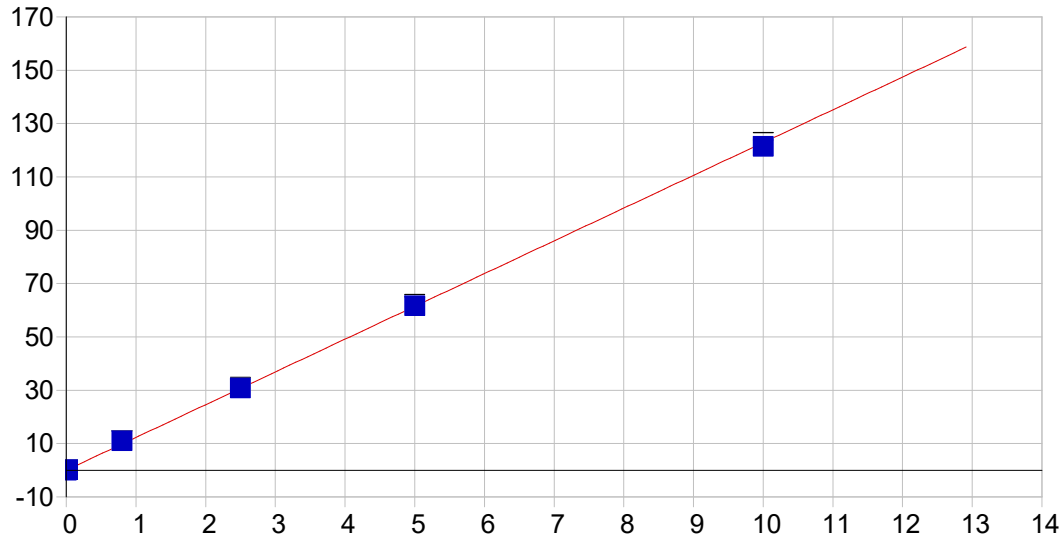


Li 670.784 { 50}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003764	Re-Slope:	1.000000
A1 (Gain):	0.894934	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999620	Status:	OK.
Std Error of Est:	0.000578		
Predicted MDL:	0.001218		
Predicted MQL:	0.004062		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00376	.001	1
S5	10.000	10.119	.119	1.19	9.0676	.065	1
S4	5.0000	4.8994	-.101	-2.01	4.3924	.018	1
S3	2.5000	2.4067	-.093	-3.73	2.1596	.009	1
S1	.02000	.02000	-.000	-.010	.02198	.001	1
S2	.80000	.87494	.075	9.37	.78742	.006	1

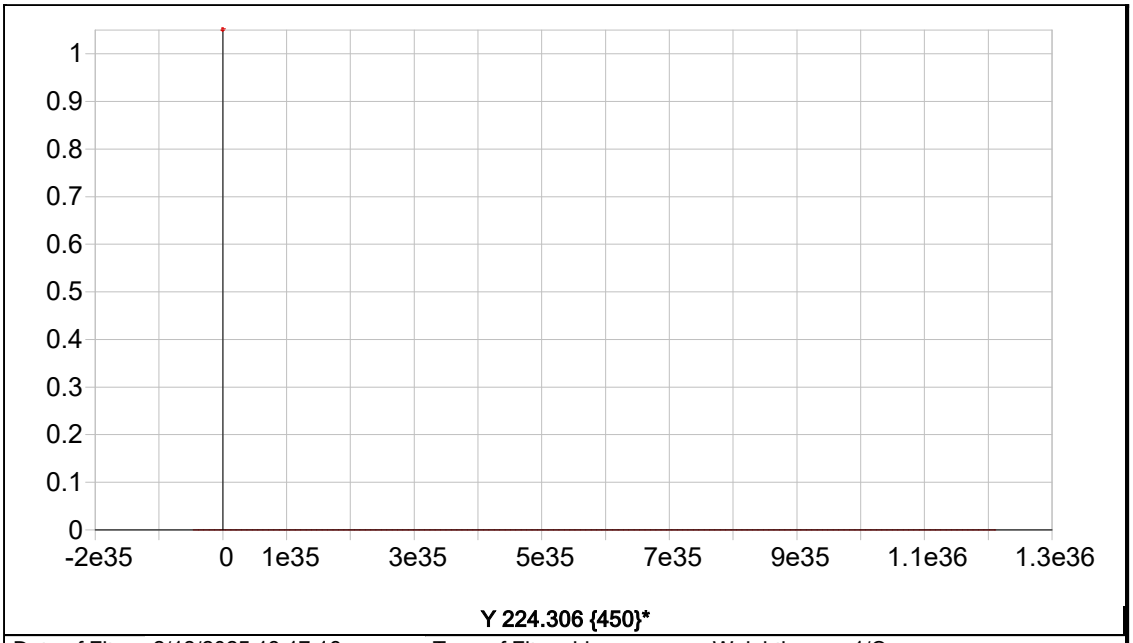


Sr 407.771 { 83}

Date of Fit:	2/18/2025 13:17:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000043	Re-Slope:	1.000000
A1 (Gain):	12.287185	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999644	Status:	OK.
Std Error of Est:	0.007696		
Predicted MDL:	0.000051		
Predicted MQL:	0.000171		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00007	.000	1
S1	.02000	.01960	-.000	-1.99	.24203	.001	1
S3	2.5000	2.5043	.004	.171	30.801	.310	1
S4	5.0000	5.0150	.015	.299	61.681	.540	1
S5	10.000	9.8844	-.116	-1.16	121.57	1.36	1
S2	.80000	.89672	.097	12.1	11.028	.067	1

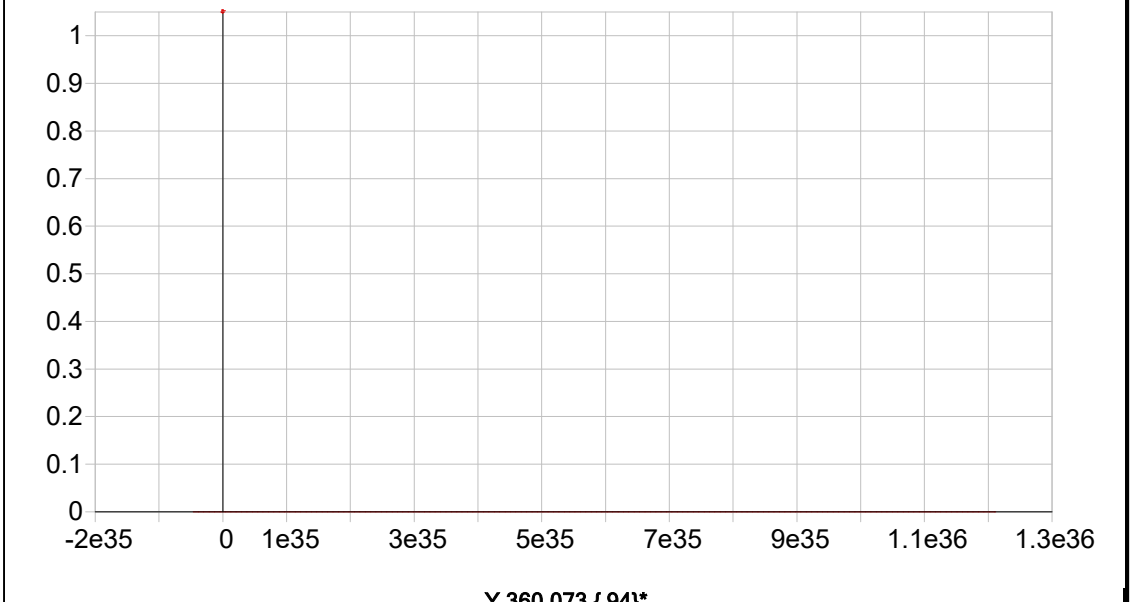


Y 224.306 {450}*

Date of Fit:	2/18/2025 13:17:16	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



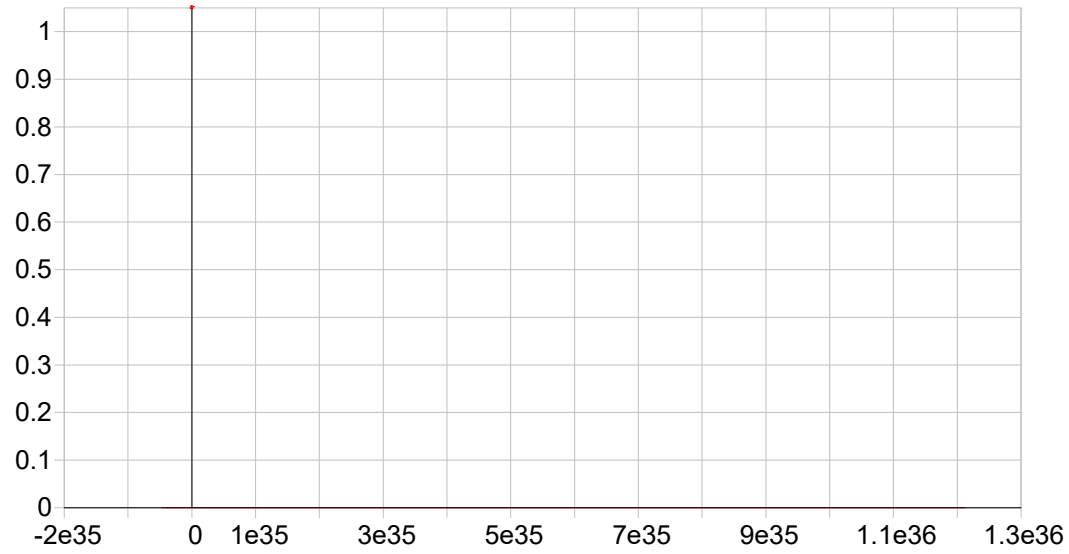
Y 360.073 { 94}*

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					

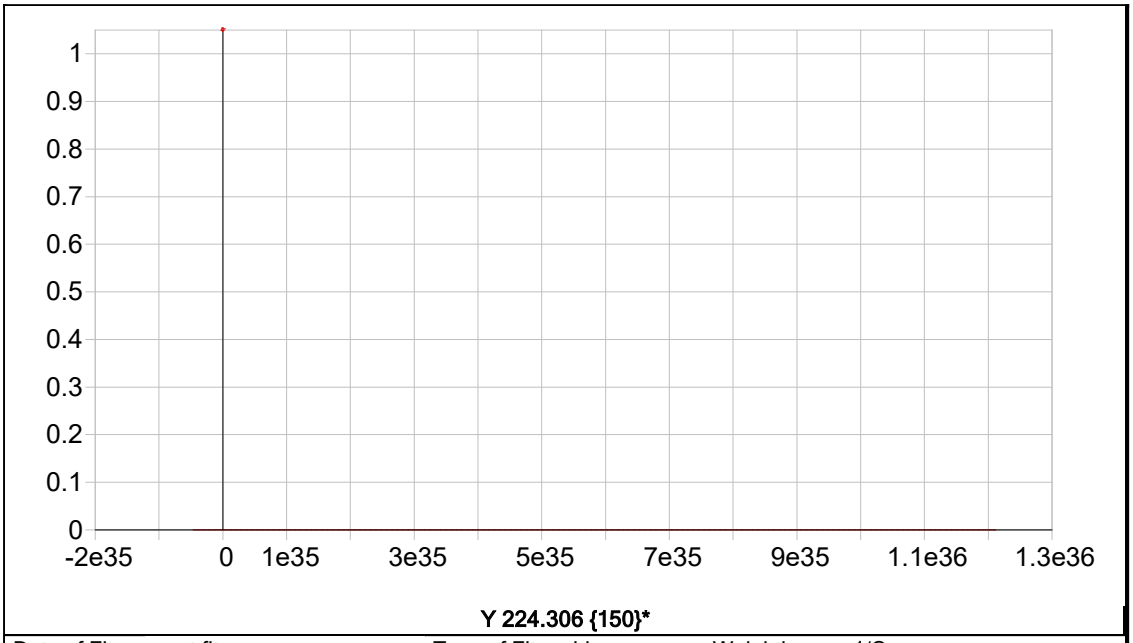
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



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				

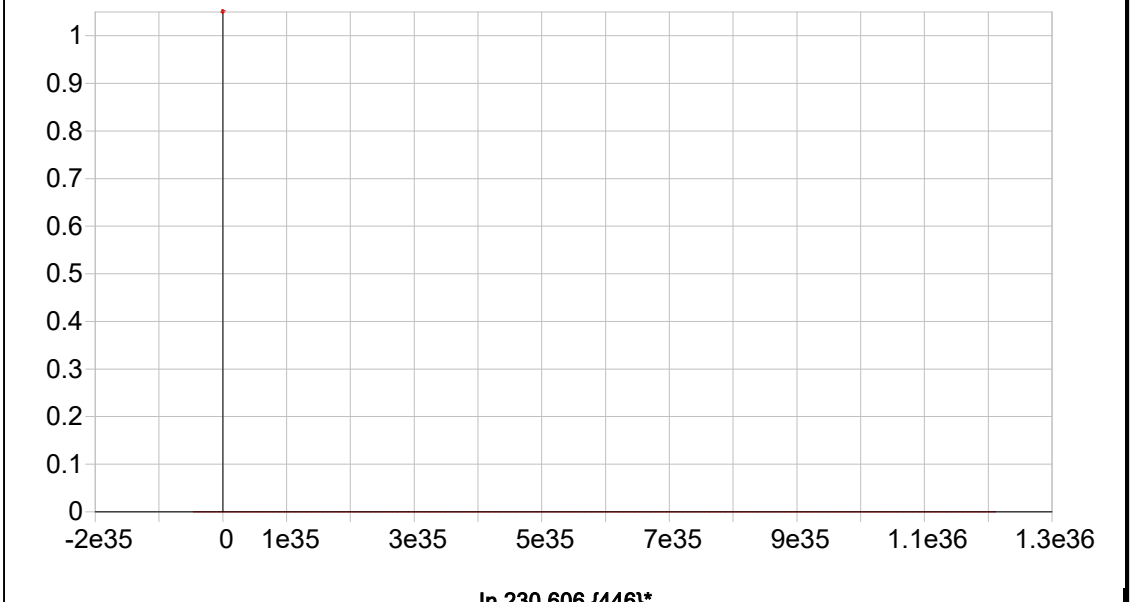
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



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:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: S0 Acquired: 2/18/2025 11:19:45 Type: Cal
Method: NON EPA-6010-200.7(v2521) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	-.00023	.00003	-.00041	.00042	.00047	-.00000	.04311	-.00023
Stddev	.00007	.00004	.00009	.00010	.00007	.00045	.00080	.00002
%RSD	30.509	131.27	20.660	24.885	15.152	12237.	1.8553	8.5444
#1	-.00031	.00005	-.00036	.00042	.00041	.00030	.04368	-.00023
#2	-.00021	.00005	-.00037	.00052	.00045	.00022	.04347	-.00026
#3	-.00017	-.00002	-.00051	.00031	.00055	-.00052	.04220	-.00022

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	-.00006	.00136	.00001	.00000	-.00046	-.00002	-.00005	-.00037
Stddev	.00009	.00013	.00005	.00009	.00022	.00001	.00012	.00017
%RSD	158.42	9.3752	357.42	33485.	48.644	59.898	264.39	47.373
#1	-.00012	.00144	-.00004	-.00010	-.00071	-.00004	-.00011	-.00022
#2	.00005	.00142	.00002	.00004	-.00033	-.00001	.00009	-.00056
#3	-.00011	.00121	.00006	.00006	-.00032	-.00002	-.00012	-.00032

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	.00010	-.00148	.00237	.00015	.00542	-.00059	.00402	.00034
Stddev	.00017	.00002	.00013	.00022	.00051	.00008	.00030	.00007
%RSD	172.31	1.3472	5.6688	151.53	9.3213	12.839	7.4333	20.573
#1	.00023	-.00150	.00235	.00026	.00565	-.00055	.00433	.00026
#2	-.00009	-.00146	.00251	-.00011	.00577	-.00068	.00398	.00037
#3	.00016	-.00148	.00225	.00029	.00484	-.00055	.00374	.00039

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	.00016	.00257	.00016	-.00161	.00018	.00376	-.00007
Stddev	.00009	.00024	.00003	.00010	.00006	.00123	.00046
%RSD	58.341	9.2302	19.347	6.0225	31.796	32.635	699.69
#1	.00024	.00268	.00018	-.00162	.00024	.00291	.00039
#2	.00006	.00273	.00013	-.00150	.00016	.00517	-.00006
#3	.00018	.00229	.00018	-.00169	.00013	.00321	-.00053

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: S0 Acquired: 2/18/2025 11:19:45 Type: Cal
Method: NON EPA-6010-200.7(v2521) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	2774.1	56783.	10309.	1819.5	4381.5
Stddev	.3	140.	43.	4.1	7.9
%RSD	.00975	.24688	.41339	.22806	.18134
#1	2774.4	56724.	10261.	1814.7	4381.3
#2	2774.1	56681.	10324.	1821.8	4389.5
#3	2773.8	56943.	10342.	1821.9	4373.6

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: S1 Acquired: 2/18/2025 11:24:13 Type: Cal
Method: NON EPA-6010-200.7(v2521) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	.00077	.00222	.00252	.00203	.00731	.00845	.29162	.02795
Stddev	.00006	.00007	.00013	.00006	.00012	.00029	.00130	.00027
%RSD	7.5797	3.2498	5.1036	2.9243	1.6335	3.4609	.44458	.97148
#1	.00071	.00231	.00267	.00196	.00720	.00858	.29094	.02813
#2	.00076	.00220	.00243	.00207	.00743	.00812	.29312	.02807
#3	.00083	.00217	.00247	.00206	.00730	.00866	.29081	.02763

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	.01412	.11287	.00234	.02568	.01568	.00047	.01243	.02980
Stddev	.00023	.00094	.00007	.00023	.00027	.00004	.00012	.00039
%RSD	1.6614	.83011	3.1666	.88068	1.7209	7.5381	.98369	1.3239
#1	.01386	.11222	.00240	.02571	.01599	.00043	.01229	.02953
#2	.01431	.11394	.00237	.02589	.01553	.00051	.01252	.03025
#3	.01420	.11244	.00226	.02544	.01551	.00047	.01249	.02961

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	.02483	.00126	.05070	.00485	.11775	.01220	.05131	.14121
Stddev	.00006	.00003	.00022	.00011	.00072	.00016	.00055	.00016
%RSD	.24646	2.0739	.43284	2.3571	.60721	1.2973	1.0696	.11534
#1	.02482	.00128	.05093	.00487	.11805	.01223	.05117	.14133
#2	.02477	.00123	.05050	.00473	.11694	.01203	.05192	.14129
#3	.02489	.00127	.05067	.00495	.11827	.01235	.05085	.14103

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	.00477	.02114	.00211	-.00093	.00065	.02198	.24203
Stddev	.00010	.00034	.00003	.00002	.00006	.00104	.00122
%RSD	2.1753	1.6048	1.3430	1.8824	9.6346	4.7105	.50608
#1	.00467	.02075	.00210	-.00091	.00072	.02149	.24228
#2	.00476	.02134	.00214	-.00095	.00061	.02129	.24311
#3	.00488	.02134	.00208	-.00094	.00062	.02317	.24070

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: S1 Acquired: 2/18/2025 11:24:13 Type: Cal
Method: NON EPA-6010-200.7(v2521) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	2736.6	56168.	10388.	1783.8	4264.5
Stddev	5.4	75.	91.	5.7	15.2
%RSD	.19669	.13414	.87882	.32118	.35533
#1	2733.8	56254.	10431.	1789.2	4247.7
#2	2733.1	56115.	10283.	1777.8	4268.5
#3	2742.8	56135.	10451.	1784.4	4277.2

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: S2 Acquired: 2/18/2025 11:28:40 Type: Cal
Method: NON EPA-6010-200.7(v2521) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	.03819	.05553	.21556	.06998	.12282	.13686	4.6813	.21653
Stddev	.00034	.00109	.00095	.00036	.00098	.00094	.0329	.00140
%RSD	.88132	1.9710	.44088	.51196	.79855	.68904	.70247	.64500
#1	.03827	.05653	.21565	.06987	.12292	.13644	4.6594	.21582
#2	.03782	.05436	.21457	.06969	.12179	.13620	4.6653	.21563
#3	.03848	.05570	.21646	.07038	.12375	.13794	4.7191	.21814

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.0229	.25450	.04257	.39170	.16959	.00422	.27005	.06311
Stddev	.0048	.00203	.00010	.00171	.00086	.00002	.00146	.00037
%RSD	.46585	.79919	.24503	.43627	.50566	.52421	.53884	.58799
#1	1.0248	.25281	.04269	.39189	.17028	.00420	.26926	.06271
#2	1.0175	.25394	.04251	.38991	.16863	.00422	.26916	.06318
#3	1.0264	.25676	.04251	.39331	.16985	.00424	.27173	.06345

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	.28306	.05959	.11326	.05654	1.1724	.02812	.43560	.64282
Stddev	.00164	.00023	.00047	.00028	.0097	.00009	.00265	.00366
%RSD	.57859	.38144	.41894	.49529	.83065	.32563	.60912	.56888
#1	.28371	.05978	.11378	.05621	1.1805	.02820	.43272	.64516
#2	.28120	.05964	.11285	.05672	1.1751	.02802	.43611	.63861
#3	.28427	.05934	.11315	.05668	1.1615	.02813	.43796	.64470

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	.10539	.42900	.00500	.03004	.02077	.78742	11.028
Stddev	.00061	.00190	.00007	.00019	.00016	.00645	.067
%RSD	.58210	.44177	1.4712	.63404	.77248	.81871	.60961
#1	.10538	.42708	.00509	.03010	.02090	.78414	10.984
#2	.10478	.42905	.00498	.02982	.02059	.78328	10.994
#3	.10601	.43087	.00494	.03019	.02081	.79485	11.105

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: S2 Acquired: 2/18/2025 11:28:40 Type: Cal
Method: NON EPA-6010-200.7(v2521) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	2715.4	56009.	10402.	1762.3	4175.0
Stddev	10.2	195.	52.	13.9	14.9
%RSD	.37433	.34795	.50335	.78800	.35660
#1	2708.5	55792.	10445.	1747.4	4163.9
#2	2727.1	56067.	10417.	1764.7	4191.9
#3	2710.8	56169.	10344.	1774.9	4169.1

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: S3 Acquired: 2/18/2025 11:32:51 Type: Cal
Method: NON EPA-6010-200.7(v2521) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	.10922	.16118	.60999	.19955	.34591	.38117	13.004	.60293
Stddev	.00041	.00070	.00294	.00126	.00105	.00137	.053	.00262
%RSD	.37728	.43692	.48141	.63127	.30492	.35927	.40495	.43485
#1	.10887	.16045	.60714	.19825	.34481	.37960	13.011	.60340
#2	.10911	.16124	.60984	.19964	.34599	.38206	12.948	.60528
#3	.10967	.16185	.61301	.20076	.34692	.38187	13.052	.60010

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	2.9053	.69916	.11706	1.1045	.47037	.01166	.74540	.17674
Stddev	.0148	.00115	.00037	.0057	.00210	.00006	.00170	.00044
%RSD	.50806	.16499	.31556	.51322	.44565	.53059	.22800	.25089
#1	2.8913	.70049	.11748	1.0992	.46820	.01168	.74714	.17722
#2	2.9040	.69837	.11678	1.1037	.47052	.01159	.74375	.17665
#3	2.9207	.69863	.11692	1.1105	.47239	.01171	.74532	.17634

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	.79662	.16471	.30819	.15771	3.2114	.07982	1.2030	1.7838
Stddev	.00375	.00052	.00174	.00020	.0120	.00067	.0105	.0063
%RSD	.47051	.31321	.56428	.12459	.37427	.84230	.87632	.35346
#1	.79319	.16528	.30908	.15764	3.2251	.08010	1.2027	1.7771
#2	.79605	.16459	.30619	.15793	3.2028	.07905	1.2137	1.7847
#3	.80062	.16427	.30931	.15755	3.2063	.08031	1.1926	1.7896

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	.30055	1.1825	.01357	.09042	.06112	2.1596	30.801
Stddev	.00210	.0049	.00002	.00046	.00004	.0089	.310
%RSD	.69779	.41600	.12377	.50626	.05877	.41287	1.0062
#1	.29856	1.1858	.01359	.08992	.06113	2.1589	30.683
#2	.30033	1.1768	.01356	.09051	.06108	2.1511	31.153
#3	.30274	1.1848	.01356	.09082	.06115	2.1689	30.568

Sample Name: S3 Acquired: 2/18/2025 11:32:51 Type: Cal
Method: NON EPA-6010-200.7(v2521) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	2643.5	55355.	10308.	1727.9	3966.4
Stddev	7.6	217.	41.	9.2	14.4
%RSD	.28571	.39128	.39735	.53493	.36214
#1	2649.0	55125.	10303.	1717.4	3977.8
#2	2646.7	55554.	10270.	1734.6	3971.1
#3	2634.9	55386.	10351.	1731.8	3950.2

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: S4 Acquired: 2/18/2025 11:37:04 Type: Cal
Method: NON EPA-6010-200.7(v2521) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	.21626	.32452	1.2055	.39413	.68321	.77470	26.182	1.2163
Stddev	.00161	.00142	.0077	.00272	.00423	.00227	.137	.0033
%RSD	.74620	.43906	.64126	.69072	.61897	.29299	.52134	.27097
#1	.21575	.32297	1.2020	.39311	.68190	.77212	26.323	1.2188
#2	.21497	.32484	1.2003	.39207	.67980	.77559	26.172	1.2125
#3	.21807	.32576	1.2144	.39722	.68794	.77639	26.051	1.2175

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	5.8015	1.4013	.23087	2.1991	.91936	.02293	1.4958	.35912
Stddev	.0338	.0028	.00397	.0147	.00545	.00023	.0070	.00168
%RSD	.58184	.19757	1.7176	.66733	.59301	1.0081	.46620	.46693
#1	5.7845	1.4000	.23519	2.1924	.91823	.02319	1.4925	.36009
#2	5.7796	1.3994	.23002	2.1889	.91457	.02283	1.4911	.35719
#3	5.8404	1.4045	.22739	2.2159	.92529	.02276	1.5038	.36009

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	1.5807	.32642	.60540	.32079	6.3115	.15761	2.4526	3.5147
Stddev	.0099	.00450	.00700	.00118	.0901	.00181	.0072	.0198
%RSD	.62549	1.3783	1.1565	.36631	1.4268	1.1471	.29469	.56458
#1	1.5767	.33140	.61331	.31977	6.4149	.15970	2.4544	3.5094
#2	1.5735	.32519	.60290	.32053	6.2695	.15664	2.4446	3.4980
#3	1.5920	.32266	.59999	.32207	6.2502	.15649	2.4587	3.5366

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	.59947	2.3797	.02681	.18320	.12345	4.3924	61.681
Stddev	.00389	.0068	.00026	.00132	.00090	.0184	.540
%RSD	.64831	.28545	.97420	.71957	.72894	.41809	.87557
#1	.59750	2.3761	.02709	.18230	.12269	4.3867	62.259
#2	.59697	2.3753	.02678	.18259	.12322	4.3776	61.597
#3	.60395	2.3875	.02657	.18471	.12444	4.4129	61.189

Sample Name: S4 Acquired: 2/18/2025 11:37:04 Type: Cal
Method: NON EPA-6010-200.7(v2521) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	2609.6	54579.	9894.6	1684.6	3839.4
Stddev	10.8	742.	25.1	20.8	15.4
%RSD	.41412	1.3604	.25379	1.2352	.40152
#1	2608.0	53748.	9891.2	1660.7	3842.7
#2	2621.1	54812.	9921.3	1694.2	3852.9
#3	2599.6	55178.	9871.4	1698.8	3822.6

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: S5 Acquired: 2/18/2025 11:41:24 Type: Cal
Method: NON EPA-6010-200.7(v2521) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	.42148	.62692	2.3720	.75952	1.3280	1.5825	53.873	2.4638
Stddev	.00921	.00882	.0510	.01654	.0307	.0079	.763	.0140
%RSD	2.1845	1.4077	2.1518	2.1778	2.3099	.50182	1.4169	.56775
#1	.41538	.61871	2.3454	.74748	1.3083	1.5876	54.724	2.4567
#2	.41699	.62579	2.3397	.75269	1.3125	1.5864	53.645	2.4799
#3	.43207	.63625	2.4309	.77838	1.3634	1.5733	53.250	2.4547

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	11.442	2.8501	.44027	4.3598	1.7715	.04442	3.0526	.73108
Stddev	.241	.0135	.00013	.0977	.0404	.00033	.0137	.00489
%RSD	2.1033	.47515	.02864	2.2407	2.2797	.74147	.44780	.66922
#1	11.312	2.8597	.44034	4.3066	1.7454	.04479	3.0672	.73422
#2	11.295	2.8560	.44035	4.3002	1.7510	.04418	3.0505	.73358
#3	11.720	2.8346	.44012	4.4725	1.8180	.04427	3.0401	.72544

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	3.1111	.63619	1.1826	.65672	12.159	.31030	5.0154	6.8370
Stddev	.0686	.00163	.0112	.00344	.076	.00300	.0303	.1537
%RSD	2.2033	.25579	.94307	.52372	.62247	.96551	.60502	2.2475
#1	3.0730	.63794	1.1955	.65870	12.245	.31375	5.0086	6.7356
#2	3.0701	.63591	1.1757	.65870	12.104	.30833	5.0485	6.7616
#3	3.1902	.63472	1.1766	.65275	12.127	.30882	4.9890	7.0138

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	1.1779	4.8812	.05271	.37056	.24843	9.0676	121.57
Stddev	.0244	.0301	.00035	.00758	.00478	.0648	1.36
%RSD	2.0743	.61703	.67137	2.0467	1.9222	.71454	1.1197
#1	1.1641	4.9087	.05310	.36527	.24580	9.1379	120.49
#2	1.1635	4.8860	.05242	.36716	.24554	9.0546	123.10
#3	1.2061	4.8490	.05260	.37925	.25394	9.0103	121.13

Sample Name: S5 Acquired: 2/18/2025 11:41:24 Type: Cal
Method: NON EPA-6010-200.7(v2521) Mode: IR Corr. Factor: 1.000000
User: Kareem 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	2571.7	54253.	9341.5	1664.1	3699.1
Stddev	52.5	177.	46.6	7.5	71.9
%RSD	2.0425	.32586	.49832	.45028	1.9447
#1	2603.7	54057.	9353.6	1655.6	3735.6
#2	2600.3	54303.	9290.1	1669.8	3745.4
#3	2511.1	54399.	9380.8	1667.0	3616.2

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: ICV01 Acquired: 2/18/2025 11:58:16 Type: Unk
Method: NON EPA-6010-200.7(v2706) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.022860	1.023360	.9922029	1.015293	.9981878	2.586273
Stddev	.006305	.006630	.0040317	.002682	.0047607	.014390
%RSD	.6164169	.6478274	.4063399	.2641611	.4769303	.5563925
#1	1.021759	1.015930	.9907709	1.015367	.9977344	2.594541
#2	1.017177	1.025480	.9890826	1.012575	.9936700	2.594622
#3	1.029643	1.028670	.9967551	1.017937	1.003159	2.569657

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5128177	.5189601	.4961817	9.963402	.5140947	.4980965
Stddev	.0030736	.0059648	.0020563	.092827	.0007783	.0021351
%RSD	.5993601	1.149371	.4144209	.9316754	.1513882	.4286608
#1	.5158009	.5237985	.4951504	10.05499	.5146678	.4970542
#2	.5129912	.5207860	.4948452	9.96583	.5132087	.4966826
#3	.5096610	.5122958	.4985496	9.86938	.5144076	.5005525

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5139892	9.603380	.5227719	5.736452	.5518097	.2500852
Stddev	.0021134	.054264	.0043417	.045513	.0021523	.0010715
%RSD	.4111706	.5650541	.8305153	.7934079	.3900459	.4284474
#1	.5139571	9.597556	.5267884	5.776941	.5516397	.2511140
#2	.5118921	9.552263	.5233621	5.745224	.5497474	.2501659
#3	.5161184	9.660321	.5181654	5.687191	.5540419	.2489756

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.43271	.5182336	.9848750	9.436577	F 2.185567	2.476151
Stddev	.03894	.0016008	.0040556	.005419	.028299	.010449
%RSD	.3732833	.3088990	.4117866	.0574300	1.294808	.4219716
#1	10.39959	.5186840	.9882518	9.431143	2.207987	2.477789
#2	10.42293	.5195610	.9859965	9.441981	2.194944	2.464980
#3	10.47561	.5164559	.9803766	9.436607	2.153770	2.485683

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: ICV01 Acquired: 2/18/2025 11:58:16 Type: Unk
Method: NON EPA-6010-200.7(v2706) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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 2.260569	F 2.118974	2.600902	F .0043766	F -.005050	F -.002127
Stddev	.010003	.014631	.020157	.0021918	.003413	.001203
%RSD	.4424815	.6904858	.7750029	50.08039	67.57490	56.59486
#1	2.255489	2.131440	2.587426	.0028162	-.001419	-.001850
#2	2.254125	2.122616	2.591204	.0034311	-.008191	-.003444
#3	2.272092	2.102866	2.624074	.0068825	-.005541	-.001085

Elem	Sr4077
Units	ppm
Avg	F -.008536
Stddev	.000040
%RSD	.4678785
#1	-.008525
#2	-.008503
#3	-.008580

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2695.749	56815.47	10364.92	1763.169	4106.678
Stddev	10.608	10.22	116.49	7.224	16.221
%RSD	.3934934	.0179923	1.123908	.4097236	.3949799
#1	2695.879	56818.72	10261.99	1754.862	4113.442
#2	2706.292	56823.68	10341.38	1766.663	4118.422
#3	2685.078	56804.02	10491.38	1767.982	4088.170

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: LLICV01 Acquired: 2/18/2025 12:10:07 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	.0232885	.0375919	.0119928	.0198027	.0503824	.0996327	.0917584
Stddev	.0019841	.0011291	.0009376	.0016865	.0026612	.0016040	.0004614
%RSD	8.519648	3.003636	7.817906	8.516360	5.281918	1.609949	.5028649
#1	.0226142	.0363186	.0112311	.0195296	.0514466	.0983205	.0922315
#2	.0255219	.0384714	.0117075	.0182695	.0473538	.0991567	.0917343
#3	.0217295	.0379857	.0130399	.0216091	.0523467	.1014209	.0913096

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0056187	.0060059	1.942083	.0102114	.0290989	.0217936	.1083196
Stddev	.0000329	.0000328	.005185	.0002017	.0001708	.0003559	.0059421
%RSD	.5852515	.5455309	.2669572	1.975650	.5869226	1.633116	5.485713
#1	.0055816	.0060430	1.936244	.0099858	.0291128	.0217029	.1092436
#2	.0056302	.0059807	1.946146	.0102739	.0289216	.0214919	.1137456
#3	.0056443	.0059940	1.943859	.0103745	.0292624	.0221861	.1019697

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0197562	2.000446	.0386231	.0104357	2.004466	.0366533	.0451690
Stddev	.0003426	.011519	.0002028	.0002196	.021064	.0016502	.0007222
%RSD	1.734339	.5758447	.5251819	2.104106	1.050842	4.502052	1.598800
#1	.0193824	2.008147	.0384473	.0104705	2.028418	.0370428	.0446412
#2	.0198311	1.987203	.0385768	.0106357	1.988830	.0380739	.0459920
#3	.0200553	2.005989	.0388450	.0102008	1.996149	.0348433	.0448738

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.007321	.0921236	.2008721	.0386345	.0380387	.3725681	.0188542
Stddev	.035244	.0004001	.0004403	.0006346	.0004402	.0138736	.0009756
%RSD	1.755793	.4343508	.2192086	1.642604	1.157156	3.723788	5.174355
#1	2.044228	.0925166	.2007184	.0393446	.0383186	.3880621	.0192444
#2	2.003721	.0917167	.2005293	.0384361	.0382661	.3612956	.0177439
#3	1.974016	.0921376	.2013687	.0381228	.0375313	.3683464	.0195743

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: LLICV01 Acquired: 2/18/2025 12:10:07 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0199208	.0174367	.0193536
Stddev	.0034632	.0006504	.0000520
%RSD	17.38503	3.729916	.2686996
#1	.0160606	.0171265	.0193721
#2	.0209460	.0181841	.0192949
#3	.0227556	.0169996	.0193939

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2776.056	56698.61	10744.71	1781.187	4346.213
Stddev	5.660	465.90	29.92	12.876	3.181
%RSD	.2038810	.8217045	.2784678	.7228625	.0731855
#1	2775.801	56164.29	10725.34	1767.707	4345.613
#2	2781.839	56911.62	10729.60	1782.494	4349.652
#3	2770.528	57019.92	10779.17	1793.359	4343.376

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: ICB01 Acquired: 2/18/2025 12:14:30 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	-.000491	-.002577	.0009823	-.001265	-.000777	.0020338	-.000769
Stddev	.001856	.001471	.0001886	.001669	.002423	.0050328	.000902
%RSD	377.7400	57.09012	19.19896	131.9085	311.9683	247.4619	117.3222
#1	.001216	-.001592	.0008690	-.002375	.000714	.0077735	-.001646
#2	-.000223	-.004269	.0008779	.000654	-.003572	-.000048	-.000819
#3	-.002467	-.001871	.0012000	-.002073	.000528	-.001624	.000157

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000320	.0000205	-.014136	.0000908	.0000068	.0001238	.0056995
Stddev	.0000030	.0000312	.009588	.0000940	.0000844	.0003074	.0003400
%RSD	9.305067	152.4932	67.82363	103.5241	1230.765	248.2235	5.965782
#1	.0000306	.0000441	-.024642	.0001864	.0000704	-.000225	.0060037
#2	.0000354	.0000322	-.011907	-.000002	-.000089	.000240	.0053324
#3	.0000299	-.000015	-.005860	.000088	.000039	.000356	.0057623

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000045	-.000682	.0002932	.0003127	-.001419	.0002126	-.000714
Stddev	.000188	.015747	.0001493	.0000954	.007985	.0011251	.000296
%RSD	414.2417	2308.934	50.91644	30.50925	562.5545	529.1416	41.46418
#1	.000171	.014343	.0004575	.0004184	-.007581	.0010309	-.001012
#2	-.000171	-.017063	.0002560	.0002328	.007602	-.001070	-.000709
#3	-.000136	.000674	.0001660	.0002870	-.004279	.000677	-.000420

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0332912	-.003643	-.000404	-.000626	-.000001	.0004402	.0015032
Stddev	.0135905	.000601	.000151	.000740	.000267	.0026786	.0012655
%RSD	40.82307	16.51157	37.44509	118.1960	20555.61	608.5182	84.18309
#1	.0342171	-.003577	-.000352	-.000890	.000241	.0034820	.0020639
#2	.0192614	-.003076	-.000286	-.001199	-.000288	-.000596	.0023915
#3	.0463950	-.004274	-.000575	.000210	.000044	-.001566	.0000543

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: ICB01 Acquired: 2/18/2025 12:14:30 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.001594	-.001360	-.000057
Stddev	.003466	.000619	.000023
%RSD	217.4333	45.52836	40.17411
#1	-.005384	-.002049	-.000077
#2	.001415	-.000848	-.000032
#3	-.000814	-.001184	-.000062

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2724.448	57071.17	10373.78	1798.324	4263.918
Stddev	7.185	269.95	30.21	9.722	11.325
%RSD	.2637277	.4730013	.2912213	.5406256	.2656080
#1	2717.902	56759.61	10407.60	1787.612	4254.389
#2	2723.307	57235.38	10364.29	1806.590	4260.927
#3	2732.136	57218.53	10349.46	1800.769	4276.439

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CRI01 Acquired: 2/18/2025 12:18:52 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	.0228914	.0370658	.0133656	.0195779	.0509066	.0924552	.0913033
Stddev	.0036023	.0001579	.0009789	.0036714	.0004221	.0046969	.0004442
%RSD	15.73636	.4260453	7.323815	18.75284	.8292564	5.080151	.4864953
#1	.0214384	.0372427	.0122460	.0162141	.0505811	.0969099	.0908483
#2	.0202426	.0369391	.0140597	.0190252	.0513836	.0929069	.0917358
#3	.0269933	.0370156	.0137910	.0234943	.0507552	.0875488	.0913258

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0056096	.0061076	1.926833	.0102846	.0291125	.0219384	.1065675
Stddev	.0000110	.0000602	.006766	.0000639	.0002023	.0001163	.0015922
%RSD	.1967093	.9862743	.3511488	.6210013	.6949038	.5302430	1.494102
#1	.0056124	.0060453	1.931071	.0102628	.0292588	.0220661	.1082913
#2	.0055975	.0061120	1.930398	.0102344	.0288816	.0218385	.1051520
#3	.0056190	.0061655	1.919030	.0103565	.0291971	.0219107	.1062592

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0199310	1.993877	.0390177	.0102873	1.979302	.0368243	.0442616
Stddev	.0005854	.014087	.0005286	.0000842	.006284	.0017711	.0001575
%RSD	2.937351	.7064919	1.354897	.8186902	.3174932	4.809568	.3557316
#1	.0205785	1.981326	.0385382	.0102602	1.972418	.0380404	.0444383
#2	.0197754	2.009113	.0389304	.0103817	1.984731	.0376401	.0442105
#3	.0194391	1.991192	.0395846	.0102199	1.980757	.0347923	.0441361

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.975840	.0910548	.2015796	.0381293	.0373597	.3642960	.0188640
Stddev	.042133	.0002384	.0006541	.0002873	.0005010	.0115675	.0029415
%RSD	2.132404	.2618384	.3244704	.7535028	1.340957	3.175294	15.59318
#1	1.928617	.0909431	.2021617	.0380605	.0368257	.3767618	.0217028
#2	2.009583	.0913285	.2008718	.0378827	.0378193	.3622172	.0158296
#3	1.989320	.0908927	.2017053	.0384448	.0374340	.3539088	.0190597

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CRI01 Acquired: 2/18/2025 12:18:52 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0208924	.0181541	.0191661
Stddev	.0026816	.0008448	.0001181
%RSD	12.83508	4.653505	.6160876
#1	.0221906	.0171787	.0192354
#2	.0226777	.0186534	.0192332
#3	.0178088	.0186302	.0190298

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2729.393	57036.11	10676.79	1792.170	4252.993
Stddev	7.497	221.84	44.36	1.800	13.067
%RSD	.2746824	.3889490	.4154645	.1004151	.3072366
#1	2725.282	57037.91	10670.52	1792.228	4256.904
#2	2738.046	56813.37	10635.90	1790.342	4263.657
#3	2724.850	57257.04	10723.95	1793.940	4238.417

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: ICSA01 Acquired: 2/18/2025 12:23:11 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000102	.0058480	.0069112	-.016808	-.002153	235.4481
Stddev	.005177	.0000869	.0001990	.004768	.001572	1.0013
%RSD	5078.884	1.486558	2.878714	28.36639	72.98567	.4252762
#1	-.005303	.0059460	.0066818	-.017383	-.003157	234.2984
#2	-.000053	.0057801	.0070365	-.021263	-.000342	235.9168
#3	.005050	.0058179	.0070154	-.011779	-.002961	236.1291

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006980	.0012366	-.000107	220.9237	.0564489	.0015506
Stddev	.0010042	.0000235	.000162	1.0060	.0003191	.0001673
%RSD	143.8612	1.896242	151.3348	.4553457	.5653387	10.78949
#1	.0018091	.0012150	-.000210	219.9260	.0566115	.0017132
#2	-.000145	.0012616	-.000191	221.9377	.0566538	.0013790
#3	.000430	.0012332	.000080	220.9074	.0560812	.0015597

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0177413	96.24662	.0039060	241.2512	.0024012	-.001820
Stddev	.0011249	.43906	.0003317	.9650	.0004519	.000278
%RSD	6.340550	.4561775	8.491071	.4000098	18.82046	15.24788
#1	.0176001	96.46331	.0041837	240.1952	.0019203	-.001539
#2	.0166937	96.53520	.0039954	242.0873	.0028170	-.002094
#3	.0189302	95.74134	.0035388	241.4710	.0024662	-.001826

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0458398	.0067731	.0038788	.0716791	.0334528	-.000855
Stddev	.0061552	.0004173	.0006874	.0171734	.0001971	.000473
%RSD	13.42760	6.161517	17.72263	23.95873	.5891258	55.36936
#1	.0399542	.0068770	.0046408	.0584875	.0333822	-.001356
#2	.0522331	.0063136	.0033053	.0654525	.0336754	-.000416
#3	.0453319	.0071286	.0036903	.0910972	.0333007	-.000792

Sample Name: ICSA01 Acquired: 2/18/2025 12:23:11 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	-.004255	-.001968	.0084757	.0018270	-.018869	F -.034800
Stddev	.001526	.001293	.0040942	.0036274	.004933	.001336
%RSD	35.85455	65.71477	48.30517	198.5448	26.14568	3.837963
#1	-.004867	-.003024	.0081204	-.000690	-.022328	-.035593
#2	-.002518	-.002353	.0045707	.005985	-.013220	-.033258
#3	-.005380	-.000526	.0127359	.000186	-.021060	-.035550

Elem	Sr4077
Units	ppm
Avg	-.006309
Stddev	.000870
%RSD	13.79345
#1	-.007280
#2	-.006047
#3	-.005599

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2414.924	50466.44	9959.027	1565.665	3429.455
Stddev	11.920	313.11	11.710	16.217	15.110
%RSD	.4935808	.6204379	.1175829	1.035775	.4405890
#1	2419.616	50110.26	9951.143	1550.165	3429.872
#2	2423.784	50590.75	9953.456	1564.315	3444.352
#3	2401.373	50698.32	9972.483	1582.514	3414.141

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: ICSAB01 Acquired: 2/18/2025 12:29:11 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1187336	.0935407	.0557860	.0330206	.6185655	243.2094
Stddev	.0026604	.0025869	.0009512	.0035488	.0052171	.5193
%RSD	2.240667	2.765491	1.705080	10.74732	.8434123	.2135393
#1	.1177966	.0964750	.0552135	.0326950	.6165781	243.0379
#2	.1166684	.0925576	.0568840	.0296457	.6146343	243.7929
#3	.1217357	.0915895	.0552605	.0367210	.6244842	242.7976

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4517424	.4762117	1.007180	227.2254	.5660936	.5062790
Stddev	.0035527	.0039815	.004672	1.2419	.0031890	.0021151
%RSD	.7864385	.8360867	.4638321	.5465464	.5633403	.4177746
#1	.4489230	.4721901	1.007842	226.1909	.5627081	.5058217
#2	.4557328	.4801519	1.002213	228.6027	.5690409	.5044300
#3	.4505713	.4762931	1.011486	226.8825	.5665317	.5085854

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5053231	101.1691	.4553084	246.6744	1.002188	.2172180
Stddev	.0028304	.4644	.0039507	.8275	.005385	.0008483
%RSD	.5601188	.4590295	.8676913	.3354726	.5373167	.3905370
#1	.5051749	100.7547	.4522352	245.9730	1.000654	.2163200
#2	.5025696	101.6710	.4597647	247.5871	.997737	.2173282
#3	.5082246	101.0815	.4539255	246.4631	1.008174	.2180058

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0491381	.4551966	1.043169	.0614571	1.016910	1.103756
Stddev	.0084367	.0011963	.002879	.0171547	.006099	.006723
%RSD	17.16940	.2628052	.2760317	27.91325	.5997832	.6091139
#1	.0401169	.4557465	1.039885	.0428674	1.010339	1.102778
#2	.0568333	.4538242	1.045264	.0648274	1.022390	1.097575
#3	.0504642	.4560189	1.044357	.0766765	1.018001	1.110914

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: ICSAB01 Acquired: 2/18/2025 12:29:11 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.097577	.9949981	.9978795	F .0067215	F -.021740	F -.036551
Stddev	.003486	.0052912	.0072284	.0011172	.003350	.000707
%RSD	.3175932	.5317774	.7243740	16.62206	15.41028	1.933716
#1	1.096910	.9902922	1.002933	.0055234	-.021500	-.036231
#2	1.094473	1.000726	.989600	.0069061	-.025204	-.037361
#3	1.101348	.993977	1.001106	.0077349	-.018517	-.036060

Elem	Sr4077
Units	ppm
Avg	F -.007855
Stddev	.000164
%RSD	2.083086
#1	-.007963
#2	-.007667
#3	-.007936

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2382.351	49612.36	10045.53	1546.413	3389.330
Stddev	14.805	161.67	59.12	3.170	17.063
%RSD	.6214365	.3258740	.5884810	.2049928	.5034232
#1	2384.872	49783.05	10102.59	1547.132	3391.016
#2	2395.734	49461.53	9984.55	1542.946	3405.488
#3	2366.448	49592.52	10049.44	1549.162	3371.487

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: ICSADLX20 Acquired: 2/18/2025 12:33:13 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	.0011492	-.003442	.0005440	-.001786	-.000079	11.79219	-.001247
Stddev	.0004431	.001240	.0012723	.001455	.001413	.05748	.000773
%RSD	38.55768	36.03114	233.8852	81.43391	1788.180	.4874153	62.04661
#1	.0009360	-.002752	.0019096	-.002705	.001353	11.74663	-.000791
#2	.0016587	-.002700	.0003301	-.002545	-.001472	11.85676	-.002139
#3	.0008531	-.004873	-.000608	-.000109	-.000118	11.77318	-.000809

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000918	-.000047	11.64130	.0029630	-.000030	.0011638	5.019652
Stddev	.0000286	.000101	.01682	.0000848	.000215	.0003553	.056923
%RSD	31.14255	216.3831	.1444806	2.861096	725.4319	30.53195	1.133994
#1	.0000677	-.000002	11.65479	.0030604	.000159	.0013447	4.975980
#2	.0000842	-.000163	11.64665	.0029232	.000016	.0007545	5.084029
#3	.0001234	.000024	11.62245	.0029055	-.000263	.0013924	4.998946

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000360	11.92156	.0002707	-.000129	.0192679	.0004787	-.000539
Stddev	.0002167	.04387	.0001115	.000203	.0024305	.0015174	.000352
%RSD	602.1541	.3680149	41.19118	158.2375	12.61434	317.0147	65.25258
#1	.0001497	11.93148	.0003125	-.000315	.0168158	.0018500	-.000538
#2	.0001721	11.95962	.0003552	.000088	.0216763	-.001152	-.000892
#3	-.000214	11.87358	.0001443	-.000159	.0193115	.000737	-.000188

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0375409	-.000970	-.000055	-.000775	.0001394	.0001535	-.002202
Stddev	.0045058	.000281	.000056	.000724	.0003760	.0021216	.001534
%RSD	12.00248	28.94535	102.0564	93.47911	269.7111	1381.686	69.65325
#1	.0328166	-.000764	-.000081	-.001390	.0004812	-.002058	-.000460
#2	.0417908	-.000856	.000009	-.000958	-.000263	.000346	-.002796
#3	.0380153	-.001290	-.000094	.000023	.000200	.002172	-.003350

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: ICSADLX20 Acquired: 2/18/2025 12:33:13 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSADLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.001929	-.003336	-.000328
Stddev	.002403	.000728	.000045
%RSD	124.5538	21.81224	13.78310
#1	.000645	-.002782	-.000279
#2	-.002321	-.003066	-.000368
#3	-.004112	-.004161	-.000337

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2696.163	55529.98	10627.21	1742.301	4122.313
Stddev	5.474	330.50	64.34	11.593	8.671
%RSD	.2030275	.5951748	.6054514	.6653704	.2103376
#1	2691.959	55755.32	10562.05	1752.777	4112.476
#2	2702.353	55150.58	10628.87	1729.846	4128.846
#3	2694.178	55684.05	10690.70	1744.280	4125.617

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: ICSABDLX20 Acquired: 2/18/2025 12:37:30 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	.0073659	.0038060	.0034755	.0034455	.0355563	11.72193	.0257830
Stddev	.0002868	.0010064	.0011478	.0021873	.0012183	.02410	.0004367
%RSD	3.892932	26.44186	33.02567	63.48322	3.426443	.2055876	1.693733
#1	.0075524	.0042148	.0047416	.0012191	.0345225	11.74121	.0253419
#2	.0070357	.0045436	.0031820	.0055914	.0352469	11.72966	.0257920
#3	.0075096	.0026595	.0025029	.0035259	.0368995	11.69491	.0262151

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0310039	.0609552	11.59373	.0350345	.0302850	.0323395	4.851128
Stddev	.0001673	.0002291	.03567	.0001970	.0000768	.0003292	.054526
%RSD	.5395189	.3758670	.3076860	.5624549	.2535296	1.017948	1.123976
#1	.0311702	.0608827	11.57008	.0348471	.0302450	.0323185	4.804162
#2	.0308357	.0607712	11.57634	.0350164	.0302365	.0320213	4.910925
#3	.0310059	.0612118	11.63476	.0352400	.0303735	.0326787	4.838297

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0299043	11.84419	.0613299	.0127044	.0160401	.0291743	.0623785
Stddev	.0002117	.03277	.0008207	.0005249	.0078219	.0013565	.0003403
%RSD	.7079024	.2766376	1.338136	4.131378	48.76447	4.649644	.5456085
#1	.0300918	11.82300	.0607495	.0132702	.0070940	.0279029	.0623368
#2	.0296747	11.82764	.0609714	.0126098	.0194379	.0290176	.0620609
#3	.0299465	11.88193	.0622688	.0122333	.0215886	.0306023	.0627377

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0105801	.0334143	.0372469	.0349021	.0349970	.0316603	-.001438
Stddev	.0066337	.0010449	.0003443	.0013116	.0008267	.0017844	.002209
%RSD	62.69980	3.127087	.9244464	3.758004	2.362275	5.636071	153.6448
#1	.0135084	.0335143	.0368507	.0358459	.0341152	.0297282	.000488
#2	.0029861	.0323231	.0374159	.0334044	.0357546	.0320063	-.000951
#3	.0152457	.0344057	.0374741	.0354560	.0351212	.0332463	-.003850

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: ICSABDLX20 Acquired: 2/18/2025 12:37:30 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSABDLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0017416	-.003309	-.000148
Stddev	.0026275	.000668	.000071
%RSD	150.8651	20.19891	48.24063
#1	-.000874	-.003496	-.000106
#2	.004381	-.003865	-.000230
#3	.001718	-.002567	-.000108

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2726.510	56102.01	10242.91	1787.057	4160.832
Stddev	8.977	325.34	43.29	7.897	15.492
%RSD	.3292365	.5799079	.4226311	.4419149	.3723243
#1	2724.955	56232.02	10196.67	1786.870	4156.094
#2	2736.163	55731.76	10282.48	1779.256	4178.139
#3	2718.413	56342.24	10249.58	1795.047	4148.262

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CCV01 Acquired: 2/18/2025 12:41:44 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.939483	4.958689	4.937633	4.960287	4.969019	9.744082	9.793896
Stddev	.015282	.027494	.020795	.014578	.027839	.027653	.072940
%RSD	.3093858	.5544615	.4211512	.2938884	.5602450	.2837879	.7447532
#1	4.928714	4.960165	4.926870	4.956071	4.951326	9.753307	9.866336
#2	4.932761	4.930486	4.924426	4.948283	4.954624	9.765942	9.720466
#3	4.956974	4.985415	4.961604	4.976509	5.001108	9.712996	9.794885

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2436357	2.468501	24.43649	1.001777	2.466278	1.249851	5.045414
Stddev	.0010614	.008524	.04987	.002506	.008504	.004674	.030236
%RSD	.4356439	.3453036	.2040972	.2501593	.3448165	.3739660	.5992828
#1	.2444931	2.465516	24.47124	1.003029	2.463185	1.248418	5.024449
#2	.2424486	2.461871	24.45889	.998891	2.459753	1.246061	5.080075
#3	.2439655	2.478116	24.37935	1.003410	2.475896	1.255073	5.031718

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.454033	24.04494	2.472834	1.247705	25.08979	2.441619	2.489275
Stddev	.009114	.07195	.009842	.001276	.12271	.011926	.002913
%RSD	.3714091	.2992508	.3979908	.1022970	.4890771	.4884536	.1170286
#1	2.453510	23.98105	2.468489	1.248276	24.97008	2.430734	2.492320
#2	2.463398	24.03087	2.465911	1.246243	25.21529	2.454367	2.488989
#3	2.445191	24.12289	2.484100	1.248596	25.08400	2.439757	2.486515

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.11829	4.843226	4.989759	4.943134	4.901966	4.961500	4.961439
Stddev	.17729	.015667	.020546	.014541	.019886	.026822	.010057
%RSD	.7058201	.3234826	.4117568	.2941607	.4056747	.5406087	.2027079
#1	24.97392	4.858259	4.975402	4.938851	4.895390	4.933595	4.968246
#2	25.31617	4.826994	4.980581	4.931216	4.924307	4.987089	4.949887
#3	25.06477	4.844425	5.013294	4.959335	4.886201	4.963818	4.966184

Sample Name: CCV01 Acquired: 2/18/2025 12:41:44 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	4.898544	4.909374	4.920315
Stddev	.017296	.029168	.020171
%RSD	.3530831	.5941194	.4099579
#1	4.896196	4.894488	4.903493
#2	4.882543	4.942981	4.914774
#3	4.916894	4.890654	4.942678

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2626.141	54805.64	10005.82	1706.519	3872.290
Stddev	9.430	199.70	64.75	2.371	13.882
%RSD	.3590742	.3643852	.6471250	.1389223	.3584959
#1	2632.538	54634.99	9943.54	1703.784	3876.347
#2	2630.573	55025.28	10072.79	1707.981	3883.692
#3	2615.312	54756.65	10001.13	1707.792	3856.832

Sample Name: CCB01 Acquired: 2/18/2025 12:45:56 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	.0007735	-.004498	-.000417	-.000772	-.001409	-.004730	-.000384
Stddev	.0029929	.001092	.000620	.002559	.000406	.000721	.000787
%RSD	386.9449	24.26873	148.5965	331.5716	28.83447	15.24423	205.0031
#1	.0030778	-.005627	-.000493	.001442	-.001657	-.003912	.000188
#2	.0018518	-.003448	.000237	-.000184	-.000940	-.005272	-.000058
#3	-.002609	-.004420	-.000995	-.003574	-.001630	-.005005	-.001281

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000026	.0001224	-.015066	.0001195	.0000401	.0001778	.0017414
Stddev	.000022	.0000371	.003107	.0000336	.0002599	.0004556	.0047811
%RSD	82.44934	30.34904	20.62529	28.09193	647.9333	256.2370	274.5617
#1	-.000050	.0001406	-.017010	.0001521	-.000203	.0001830	.0068648
#2	-.000006	.0001469	-.016704	.0000851	.000009	-.000280	.0009608
#3	-.000023	.0000797	-.011482	.0001212	.000314	.000631	-.002601

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000022	.0041397	.0000448	.0001895	.0204155	.0013238	-.001058
Stddev	.000084	.0091095	.0001049	.0001646	.0050510	.0017077	.000165
%RSD	387.4532	220.0515	234.1430	86.86441	24.74077	128.9960	15.61918
#1	-.000032	-.006296	.0000243	.0003411	.0257821	.0028848	-.000979
#2	-.000100	.008216	.0001585	.0002132	.0157544	-.000500	-.000947
#3	.000067	.010499	-.000048	.0000143	.0197101	.001587	-.001248

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0175283	.0034132	-.000065	.0002267	.0005102	.0038516	.0000602
Stddev	.0224646	.0005101	.000175	.0007279	.0006133	.0013457	.0015343
%RSD	128.1617	14.94465	266.7627	321.0207	120.2110	34.93981	2548.815
#1	.0407209	.0031125	-.000115	.0002897	.0008017	.0034722	-.001684
#2	.0159936	.0040021	-.000210	.0009211	.0009234	.0027363	.000662
#3	-.004130	.0031248	.000129	-.000531	-.000195	.0053463	.001202

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CCB01 Acquired: 2/18/2025 12:45:56 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0001155	-.001085	.0000244
Stddev	.0022843	.001051	.0000265
%RSD	1977.968	96.79152	108.5279
#1	-.000546	.000075	.0000476
#2	.002658	-.001972	-.000004
#3	-.001765	-.001359	.000030

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2676.516	56400.81	10613.04	1741.357	4209.577
Stddev	9.685	154.52	45.05	5.783	18.115
%RSD	.3618695	.2739679	.4244779	.3320720	.4303244
#1	2672.371	56258.34	10606.36	1745.849	4208.470
#2	2687.584	56565.07	10571.71	1743.388	4228.219
#3	2669.593	56379.01	10661.06	1734.833	4192.040

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1322-01 Acquired: 2/18/2025 12:50:17 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016608	-.004971	.0021790	-.002522	-.001584	.0470330
Stddev	.0010669	.002071	.0001799	.000269	.001854	.0081756
%RSD	64.23946	41.66790	8.253608	10.66305	117.0290	17.38275
#1	.0021166	-.004082	.0019741	-.002498	-.003359	.0416687
#2	.0024242	-.007338	.0023107	-.002265	.000339	.0564426
#3	.0004417	-.003492	.0022523	-.002801	-.001732	.0429876

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0366786	.0000125	.0000246	24.38357	.0005261	-.000127
Stddev	.0011101	.0000641	.0000741	.28531	.0003897	.000098
%RSD	3.026491	512.5207	300.6159	1.170079	74.06647	77.35145
#1	.0367918	.0000064	.0001022	24.45955	.0000908	-.000019
#2	.0377277	-.000048	.0000170	24.62320	.0008423	-.000149
#3	.0355163	.000079	-.000045	24.06797	.0006451	-.000212

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1125105	.3449883	.0346167	7.833113	.0020269	.0001306
Stddev	.0006285	.0026891	.0004794	.108071	.0001018	.0001131
%RSD	.5586147	.7794848	1.384732	1.379670	5.023673	86.58039
#1	.1120716	.3426015	.0343781	7.858943	.0019135	.0001061
#2	.1122294	.3444616	.0351685	7.925928	.0020567	.0002540
#3	.1132305	.3479018	.0343035	7.714467	.0021105	.0000318

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	201.2801	-.000403	.2803135	14.97099	.0705388	.0009844
Stddev	2.4623	.000186	.0027622	.10241	.0012694	.0002428
%RSD	1.223298	46.17708	.9854022	.6840367	1.799583	24.66645
#1	198.4824	-.000359	.2780892	14.90844	.0717674	.0009444
#2	202.2406	-.000243	.2794459	14.91535	.0706169	.0012447
#3	203.1174	-.000607	.2834054	15.08917	.0692322	.0007640

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1322-01 Acquired: 2/18/2025 12:50:17 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001489	.0006874	3.113723	2.825127	F 12.62989	-.003757
Stddev	.000403	.0002461	.006910	.019523	.10473	.000243
%RSD	27.09227	35.79422	.2219159	.6910562	.8292303	6.471558
#1	-.001436	.0004062	3.108085	2.803457	12.53111	-.003485
#2	-.001114	.0008630	3.111653	2.830582	12.61885	-.003831
#3	-.001916	.0007931	3.121431	2.841343	12.73970	-.003954

Elem	Sr4077
Units	ppm
Avg	.0893281
Stddev	.0008754
%RSD	.9799272
#1	.0896399
#2	.0900048
#3	.0883395

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2580.390	54322.56	10994.40	1691.136	3815.175
Stddev	16.817	301.85	139.92	19.472	26.907
%RSD	.6517183	.5556584	1.272684	1.151435	.7052739
#1	2597.663	54661.95	10987.09	1710.845	3843.838
#2	2579.437	54221.57	10858.28	1690.654	3811.226
#3	2564.070	54084.15	11137.84	1671.909	3790.460

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1322-01DUP Acquired: 2/18/2025 12:54:39 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017056	-.004359	.0021647	-.000885	-.001669	.0445674
Stddev	.0022829	.001259	.0004680	.001192	.001735	.0046057
%RSD	133.8474	28.89239	21.61991	134.7241	103.9708	10.33423
#1	.0038058	-.003262	.0016890	-.000142	-.002643	.0405843
#2	-.000724	-.004081	.0021805	-.002260	.000334	.0496108
#3	.002035	-.005735	.0026246	-.000252	-.002699	.0435072

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0352877	.0000184	.0000184	24.53121	.0004486	.0000040
Stddev	.0004516	.0000173	.0001322	.04121	.0003549	.0002548
%RSD	1.279778	93.73593	718.2558	.1679729	79.12367	6406.173
#1	.0354925	.0000314	-.000119	24.55483	.0004284	-.000215
#2	.0356007	-.000001	.000030	24.48363	.0001042	-.000056
#3	.0347700	.000025	.000145	24.55516	.0008132	.000283

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1117456	.3533526	.0346787	7.785737	.0020227	.0000362
Stddev	.0009768	.0017852	.0000531	.047748	.0002981	.0002679
%RSD	.8741227	.5052175	.1529968	.6132775	14.73694	739.5593
#1	.1128247	.3514097	.0347047	7.763064	.0023376	-.000223
#2	.1109219	.3549206	.0346177	7.753549	.0019854	.000312
#3	.1114900	.3537275	.0347137	7.840597	.0017450	.000019

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	203.7977	.0005087	.2834663	15.22192	.0692199	.0007903
Stddev	1.0619	.0001808	.0034499	.03690	.0003463	.0000846
%RSD	.5210711	35.53694	1.217050	.2423860	.5003041	10.70700
#1	204.3222	.0004040	.2805101	15.26451	.0691262	.0007903
#2	202.5755	.0007174	.2826319	15.19966	.0689300	.0007058
#3	204.4953	.0004046	.2872569	15.20160	.0696034	.0008750

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1322-01DUP Acquired: 2/18/2025 12:54:39 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001505	.0001647	3.131606	2.790424	F 12.42127	-.003510
Stddev	.000341	.0008929	.012463	.028726	.15477	.000351
%RSD	22.65237	542.1994	.3979799	1.029438	1.246014	10.00758
#1	-.001284	-.000662	3.117377	2.821315	12.59608	-.003458
#2	-.001334	.001111	3.136856	2.764515	12.30170	-.003884
#3	-.001898	.000045	3.140585	2.785442	12.36602	-.003187

Elem	Sr4077
Units	ppm
Avg	.0904434
Stddev	.0006498
%RSD	.7184260
#1	.0911748
#2	.0899329
#3	.0902225

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2591.112	54136.38	11016.83	1682.567	3847.638
Stddev	19.168	469.36	73.09	10.475	27.712
%RSD	.7397534	.8670039	.6634353	.6225802	.7202430
#1	2569.295	54623.70	11082.84	1691.215	3815.641
#2	2598.791	54098.12	11029.37	1685.568	3863.276
#3	2605.250	53687.31	10938.29	1670.919	3863.997

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1322-01LX5 Acquired: 2/18/2025 12:59:01 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005443	-.005097	.0009619	-.001091	-.002223	.0106097	.0068288
Stddev	.0021473	.001104	.0005007	.001244	.001386	.0028379	.0003885
%RSD	394.5285	21.65136	52.05747	113.9892	62.34992	26.74818	5.688848
#1	-.001556	-.003929	.0015400	-.001381	-.000814	.0078665	.0070757
#2	.002735	-.005240	.0006662	-.002165	-.002269	.0104289	.0070297
#3	.000454	-.006123	.0006795	.000272	-.003585	.0135337	.0063810

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000470	-.000006	5.066473	.0004765	-.000188	.0227146	.0744923
Stddev	.0000439	.000110	.005929	.0002900	.000349	.0002045	.0050113
%RSD	93.60468	1796.708	.1170272	60.85671	185.6009	.9000995	6.727250
#1	.0000169	.000120	5.070331	.0001681	.000079	.0224972	.0738229
#2	.0000265	-.000056	5.059646	.0005178	-.000583	.0229029	.0798046
#3	.0000974	-.000082	5.069442	.0007436	-.000060	.0227439	.0698493

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0074911	1.597994	.0005944	-.000043	39.31703	-.000251	.0550141
Stddev	.0001086	.027585	.0002372	.000164	.18618	.000626	.0008327
%RSD	1.449514	1.726211	39.91066	380.3409	.4735346	248.9938	1.513666
#1	.0074078	1.589305	.0005220	-.000003	39.20492	.000011	.0549142
#2	.0076139	1.628878	.0004018	.000097	39.21422	-.000965	.0558923
#3	.0074516	1.575801	.0008594	-.000223	39.53194	.000201	.0542358

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.880449	.0111040	.0000041	-.000740	.0002559	.6089282	.5422846
Stddev	.043095	.0004135	.0001077	.001153	.0003472	.0033625	.0018597
%RSD	1.496124	3.723598	2621.714	155.8075	135.7173	.5521963	.3429294
#1	2.857422	.0115241	.0000399	-.001621	.0003260	.6066460	.5435680
#2	2.853759	.0110902	-.000117	-.001165	.0005627	.6073490	.5431339
#3	2.930166	.0106975	.000089	.000565	-.000121	.6127896	.5401519

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1322-01LX5 Acquired: 2/18/2025 12:59:01 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	2.379796	-.002158	.0186397
Stddev	.011031	.000224	.0000290
%RSD	.4635336	10.39214	.1554069
#1	2.373739	-.002360	.0186334
#2	2.392528	-.001917	.0186713
#3	2.373119	-.002197	.0186144

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2685.838	55980.13	10833.35	1758.164	4096.002
Stddev	3.172	204.25	31.45	8.256	7.745
%RSD	.1180961	.3648696	.2903355	.4696077	.1890859
#1	2689.447	56215.25	10846.78	1764.297	4103.298
#2	2683.491	55878.57	10797.41	1748.776	4087.875
#3	2684.576	55846.56	10855.87	1761.418	4096.832

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1322-01MS Acquired: 2/18/2025 13:03:20 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7801794	1.864706	.9242838	1.834939	.7680708	1.788724
Stddev	.0016352	.013699	.0014383	.007258	.0030104	.010500
%RSD	.2095871	.7346286	.1556108	.3955523	.3919436	.5870207
#1	.7783298	1.873421	.9231710	1.837381	.7707428	1.800654
#2	.7807755	1.848917	.9237726	1.826775	.7648092	1.784633
#3	.7814328	1.871781	.9259079	1.840662	.7686604	1.780885

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2067743	.1761882	.1856626	24.01961	.3730063	.1874209
Stddev	.0021499	.0017699	.0001323	.10083	.0047046	.0001635
%RSD	1.039707	1.004545	.0712757	.4198010	1.261275	.0872330
#1	.2083316	.1775618	.1855098	24.09456	.3701605	.1872549
#2	.2043215	.1741909	.1857387	23.90497	.3704217	.1875817
#3	.2076699	.1768120	.1857393	24.05931	.3784366	.1874262

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3848586	3.126050	.2126987	9.002208	.4715861	.0699783
Stddev	.0008056	.039024	.0007733	.039281	.0003284	.0012527
%RSD	.2093266	1.248354	.3635739	.4363472	.0696471	1.790081
#1	.3857366	3.091618	.2128655	9.044712	.4712335	.0689412
#2	.3841533	3.118092	.2118556	8.967244	.4718833	.0696237
#3	.3846860	3.168439	.2133751	8.994667	.4716416	.0713700

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	178.3562	.2671205	.4461374	22.59990	.3184735	.3888825
Stddev	1.1203	.0013276	.0042969	.28140	.0027518	.0001790
%RSD	.6281470	.4970066	.9631321	1.245132	.8640687	.0460227
#1	178.6093	.2686291	.4456928	22.34613	.3203828	.3888604
#2	177.1310	.2666016	.4420802	22.55105	.3153192	.3890714
#3	179.3283	.2661307	.4506393	22.90253	.3197186	.3887156

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1322-01MS Acquired: 2/18/2025 13:03:20 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6582828	.1787591	3.490251	8.260469	F 11.59499	.1796721
Stddev	.0012380	.0010983	.053843	.030165	.02635	.0022713
%RSD	.1880628	.6143845	1.542664	.3651788	.2272318	1.264158
#1	.6590930	.1791935	3.437235	8.255047	11.60507	.1791678
#2	.6568577	.1775101	3.488631	8.233382	11.56509	.1776953
#3	.6588976	.1795738	3.544885	8.292978	11.61481	.1821532

Elem	Sr4077
Units	ppm
Avg	.2603303
Stddev	.0012845
%RSD	.4933948
#1	.2607813
#2	.2588812
#3	.2613284

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2641.890	56269.60	10561.33	1757.330	3884.813
Stddev	1.541	486.34	70.69	12.541	4.987
%RSD	.0583138	.8643023	.6693282	.7136181	.1283765
#1	2643.660	56571.43	10489.23	1760.430	3890.401
#2	2640.850	56528.81	10630.52	1768.030	3880.815
#3	2641.159	55708.57	10564.26	1743.530	3883.222

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1322-01MSD Acquired: 2/18/2025 13:07:29 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7895538	1.806072	.9266972	1.871945	.7801668	1.805873
Stddev	.0033743	.042684	.0026660	.004751	.0031466	.012846
%RSD	.4273657	2.363378	.2876868	.2537740	.4033250	.7113306
#1	.7857987	1.760924	.9296846	1.867434	.7776085	1.801197
#2	.7905310	1.811524	.9258472	1.871499	.7836803	1.820401
#3	.7923316	1.845769	.9245599	1.876903	.7792116	1.796020

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2054819	.1769120	.1861407	24.13400	.3807044	.1881615
Stddev	.0014035	.0011955	.0006115	.12404	.0004718	.0003563
%RSD	.6830445	.6757819	.3284930	.5139506	.1239251	.1893653
#1	.2050420	.1756959	.1868436	24.11251	.3801938	.1884793
#2	.2070527	.1780859	.1857311	24.26738	.3807952	.1882290
#3	.2043511	.1769542	.1858475	24.02212	.3811242	.1877763

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3886145	3.220468	.2125606	9.069943	.4720626	.0718052
Stddev	.0005111	.026889	.0022644	.105223	.0013631	.0003628
%RSD	.1315266	.8349286	1.065295	1.160134	.2887564	.5052672
#1	.3886928	3.250893	.2125854	9.011704	.4736350	.0718256
#2	.3880687	3.210617	.2148125	9.191410	.4713391	.0714326
#3	.3890820	3.199894	.2102839	9.006714	.4712139	.0721574

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	187.4796	.2674723	.4606144	23.36470	.3200688	.3924932
Stddev	1.4145	.0022102	.0017809	.06107	.0029066	.0011717
%RSD	.7544845	.8263182	.3866462	.2613605	.9081128	.2985343
#1	188.2715	.2684573	.4587183	23.43406	.3167376	.3929223
#2	185.8465	.2690187	.4608729	23.34104	.3220891	.3911675
#3	188.3208	.2649408	.4622519	23.31901	.3213795	.3933900

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1322-01MSD Acquired: 2/18/2025 13:07:29 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6601779	.1799973	3.632284	8.217450	F 11.63308	.1796537
Stddev	.0028061	.0009599	.028176	.032065	.03476	.0005077
%RSD	.4250439	.5332853	.7757117	.3902061	.2987680	.2825819
#1	.6632929	.1789724	3.664195	8.251261	11.59495	.1794603
#2	.6593926	.1808753	3.610837	8.187477	11.64132	.1802296
#3	.6578481	.1801441	3.621821	8.213612	11.66298	.1792710

Elem	Sr4077
Units	ppm
Avg	.2607369
Stddev	.0012758
%RSD	.4892980
#1	.2610019
#2	.2618594
#3	.2593495

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2598.005	54625.22	10580.54	1691.220	3840.731
Stddev	2.365	71.33	66.52	.816	4.629
%RSD	.0910392	.1305863	.6287035	.0482617	.1205220
#1	2599.827	54552.90	10628.04	1691.820	3835.390
#2	2598.857	54695.52	10504.51	1691.550	3843.234
#3	2595.332	54627.25	10609.06	1690.291	3843.570

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1322-01A Acquired: 2/18/2025 13:11:37 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8149018	1.900077	.9410110	1.924856	.7981691	1.824352
Stddev	.0030061	.007153	.0025000	.006745	.0040411	.015926
%RSD	.3688886	.3764394	.2656757	.3504247	.5062925	.8729641
#1	.8138730	1.907879	.9425756	1.931121	.8014444	1.839254
#2	.8125451	1.898521	.9423299	1.917716	.7936532	1.826233
#3	.8182872	1.893830	.9381277	1.925731	.7994098	1.807569

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1982588	.1886528	.1893782	24.10543	.3860682	.1905851
Stddev	.0006545	.0009510	.0003822	.09076	.0019078	.0005560
%RSD	.3301186	.5040931	.2018375	.3764921	.4941532	.2917210
#1	.1975155	.1875662	.1897438	24.06624	.3875182	.1912006
#2	.1987486	.1890584	.1894096	24.20919	.3839070	.1901194
#3	.1985123	.1893337	.1889813	24.04085	.3867794	.1904352

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3957226	3.106216	.2129570	9.197956	.4796397	.0729621
Stddev	.0011706	.021696	.0014450	.023250	.0010069	.0004909
%RSD	.2958113	.6984627	.6785222	.2527782	.2099212	.6728238
#1	.3968215	3.130137	.2113144	9.192355	.4804411	.0735040
#2	.3944916	3.087810	.2140320	9.223496	.4785096	.0725471
#3	.3958547	3.100702	.2135245	9.178018	.4799685	.0728353

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	178.5649	.2700691	.4701172	21.89913	.3406730	.3976284
Stddev	.8401	.0009338	.0031800	.13214	.0020767	.0024442
%RSD	.4705011	.3457681	.6764204	.6033984	.6095932	.6146860
#1	178.7410	.2700948	.4684021	22.02515	.3382782	.3996454
#2	179.3031	.2709898	.4681630	21.91062	.3417639	.3949103
#3	177.6507	.2691227	.4737865	21.76162	.3419770	.3983296

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1322-01A Acquired: 2/18/2025 13:11:37 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6711800	.1792145	3.481758	8.439386	F 11.98891	.1779333
Stddev	.0021471	.0005317	.028345	.020312	.02823	.0012451
%RSD	.3199010	.2966874	.8140984	.2406800	.2354881	.6997362
#1	.6716020	.1791341	3.512417	8.452135	12.02007	.1789467
#2	.6730847	.1797819	3.476350	8.415962	11.98160	.1783098
#3	.6688532	.1787276	3.456506	8.450061	11.96504	.1765434

Elem	Sr4077
Units	ppm
Avg	.2568907
Stddev	.0012590
%RSD	.4900931
#1	.2568088
#2	.2581886
#3	.2556746

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2549.518	53606.26	9921.226	1643.286	3768.658
Stddev	11.064	241.31	34.709	8.989	12.797
%RSD	.4339608	.4501570	.3498444	.5470376	.3395697
#1	2538.562	53330.33	9956.234	1638.898	3754.917
#2	2560.687	53777.82	9886.824	1653.626	3780.237
#3	2549.304	53710.62	9920.620	1637.333	3770.820

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: PB166737BL Acquired: 2/18/2025 13:15:45 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015356	-.002946	.0022045	-.001040	-.001609	.0242259
Stddev	.0035179	.000137	.0006491	.002201	.001417	.0070344
%RSD	229.0980	4.653578	29.44346	211.5036	88.05950	29.03650
#1	-.001342	-.002816	.0027461	-.001309	-.000074	.0179285
#2	.005457	-.002933	.0023823	-.003094	-.002866	.0318175
#3	.000492	-.003089	.0014850	.001282	-.001887	.0229318

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002409	.0000169	-.000021	.0334004	.0010404	.0001107
Stddev	.001115	.0000183	.000037	.0034696	.0003498	.0001867
%RSD	46.27364	107.9336	178.6615	10.38787	33.62002	168.6289
#1	-.001132	.0000380	-.000063	.0312826	.0006697	-.000066
#2	-.003188	.0000067	-.000006	.0315140	.0013646	.000092
#3	-.002906	.0000061	.000007	.0374045	.0010867	.000306

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005656	.0359399	.0011671	.0713509	.0002102	.0001030
Stddev	.0001159	.0014131	.0000924	.0171856	.0004715	.0002391
%RSD	20.48806	3.931753	7.916950	24.08599	224.2763	232.1589
#1	.0004348	.0343217	.0011337	.0526951	.0005260	.0003603
#2	.0006555	.0369300	.0010961	.0865367	-.000332	.0000612
#3	.0006065	.0365681	.0012716	.0748208	.000436	-.000112

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.021057	-.001749	.0030347	.0136305	-.004697	-.000121
Stddev	.004822	.001394	.0001918	.0125078	.000272	.000206
%RSD	22.90069	79.67083	6.319980	91.76329	5.794028	170.4638
#1	-.015823	-.000470	.0031292	.0021301	-.004877	.000079
#2	-.022031	-.001543	.0028140	.0118143	-.004384	-.000109
#3	-.025319	-.003234	.0031609	.0269470	-.004829	-.000333

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: PB166737BL Acquired: 2/18/2025 13:15:45 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001373	-.000202	.0239913	.0063642	F .0147177	-.003626
Stddev	.0013881	.000434	.0012170	.0014602	.0006270	.001143
%RSD	1010.974	214.4699	5.072884	22.94446	4.260424	31.52655
#1	.0017237	-.000551	.0239470	.0047504	.0147156	-.004902
#2	-.000854	-.000341	.0252299	.0067482	.0153458	-.002697
#3	-.000457	.000284	.0227970	.0075941	.0140917	-.003277

Elem	Sr4077
Units	ppm
Avg	-.000009
Stddev	.000046
%RSD	492.2957
#1	-.000016
#2	-.000052
#3	.000040

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2697.357	57560.65	11078.90	1750.672	4286.984
Stddev	6.606	111.41	46.35	7.368	5.157
%RSD	.2449127	.1935490	.4183948	.4208455	.1202938
#1	2704.736	57531.11	11032.93	1750.010	4292.651
#2	2691.992	57683.85	11125.62	1758.348	4282.568
#3	2695.344	57466.99	11078.15	1743.658	4285.734

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: PB166737BS Acquired: 2/18/2025 13:20:06 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8280502	2.038494	.9808421	1.998031	.8244816	1.924603
Stddev	.0024934	.027741	.0020688	.003030	.0031434	.001809
%RSD	.3011126	1.360846	.2109181	.1516270	.3812638	.0939984
#1	.8262630	2.015037	.9799361	2.000239	.8221686	1.923597
#2	.8269890	2.031331	.9793808	1.994577	.8232155	1.923520
#3	.8308986	2.069114	.9832093	1.999278	.8280606	1.926691

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1848421	.1881051	.1928381	1.002511	.4077961	.1955108
Stddev	.0013300	.0004810	.0005258	.003600	.0010536	.0008714
%RSD	.7195511	.2557274	.2726460	.3590787	.2583761	.4457024
#1	.1835905	.1885035	.1923992	.999713	.4086250	.1949435
#2	.1862387	.1875707	.1926943	1.006572	.4081529	.1950747
#3	.1846972	.1882411	.1934208	1.001248	.4066104	.1965142

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3168719	3.057851	.1961187	1.899954	.4972183	.0759100
Stddev	.0012363	.024058	.0010804	.014537	.0016383	.0002335
%RSD	.3901523	.7867563	.5508819	.7651254	.3294903	.3075591
#1	.3161258	3.044205	.1948755	1.889147	.4969175	.0757732
#2	.3161910	3.085629	.1968294	1.916481	.4957512	.0761796
#3	.3182989	3.043718	.1966513	1.894233	.4989861	.0757773

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.018813	.2847282	.2091027	9.863001	.2662158	.4121940
Stddev	.030181	.0006630	.0009758	.073291	.0005173	.0012015
%RSD	.9997693	.2328688	.4666819	.7430897	.1943272	.2914819
#1	3.011297	.2841456	.2102016	9.822816	.2662030	.4116066
#2	3.052042	.2845895	.2083376	9.947594	.2667395	.4113992
#3	2.993100	.2854497	.2087689	9.818591	.2657051	.4135762

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: PB166737BS Acquired: 2/18/2025 13:20:06 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6771655	.1891945	.8248670	5.475346	F .0008011	.1912279
Stddev	.0022761	.0019162	.0073341	.025361	.0025506	.0018037
%RSD	.3361166	1.012829	.8891265	.4631784	318.3742	.9432153
#1	.6768440	.1875424	.8255154	5.458444	.0036379	.1891582
#2	.6750672	.1912953	.8318553	5.463088	-.001303	.1924643
#3	.6795852	.1887459	.8172301	5.504507	.000068	.1920612

Elem	Sr4077
Units	ppm
Avg	.1888710
Stddev	.0011512
%RSD	.6094957
#1	.1878383
#2	.1901122
#3	.1886624

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2657.986	56910.17	10614.58	1740.421	4163.406
Stddev	3.485	204.71	17.69	10.334	6.952
%RSD	.1311007	.3597061	.1666881	.5937826	.1669815
#1	2658.226	56764.55	10599.41	1746.905	4162.991
#2	2661.345	56821.73	10634.02	1728.503	4170.557
#3	2654.388	57144.24	10610.33	1745.854	4156.671

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1366-01 Acquired: 2/18/2025 13:24:06 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0753666	-.067829	.1337092	-.078324	-.007397	209.8542
Stddev	.0003498	.006428	.0030105	.002537	.001753	2.2565
%RSD	.4641052	9.476919	2.251542	3.239092	23.69686	1.075278
#1	.0755728	-.063477	.1355396	-.081225	-.005395	210.4384
#2	.0749627	-.064798	.1353534	-.076517	-.008141	211.7611
#3	.0755642	-.075212	.1302346	-.077232	-.008655	207.3630

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6666343	.0125883	.0398184	42.50533	.2239728	.2841501
Stddev	.0029823	.0000469	.0003903	.17652	.0007606	.0009644
%RSD	.4473724	.3723399	.9802568	.4152972	.3395959	.3393942
#1	.6663379	.0125375	.0394077	42.30675	.2244261	.2830724
#2	.6638112	.0126298	.0401845	42.56480	.2230947	.2844462
#3	.6697537	.0125978	.0398630	42.64443	.2243976	.2849317

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4218973	393.1809	4.198096	34.45485	.2514973	-.006525
Stddev	.0031664	1.5919	.013442	.22977	.0019138	.000252
%RSD	.7505225	.4048784	.3201904	.6668593	.7609535	3.859669
#1	.4183870	394.7035	4.184066	34.18971	.2499405	-.006728
#2	.4245384	391.5277	4.199360	34.57936	.2509173	-.006243
#3	.4227664	393.3115	4.210860	34.59549	.2536339	-.006603

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.998691	.6090545	.3803567	11.60130	1.287181	.0040234
Stddev	.029671	.0018386	.0018898	.05360	.002019	.0000893
%RSD	.5935733	.3018732	.4968418	.4620531	.1568298	2.219577
#1	5.006065	.6107201	.3825335	11.57879	1.289167	.0039997
#2	4.966028	.6070817	.3794004	11.56262	1.285131	.0041222
#3	5.023979	.6093617	.3791363	11.66249	1.287243	.0039485

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1366-01 Acquired: 2/18/2025 13:24:06 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.011673	F 10.23264	5.571153	9.605990	2.924591	.0945850
Stddev	.001272	.02739	.018737	.039839	.007812	.0011481
%RSD	10.89431	.2676438	.3363156	.4147357	.2671250	1.213806
#1	-.013003	10.21714	5.563046	9.560963	2.920412	.0943663
#2	-.010469	10.21651	5.557835	9.636666	2.919756	.0935619
#3	-.011547	10.26426	5.592578	9.620340	2.933604	.0958266

Elem	Sr4077
Units	ppm
Avg	-.254826
Stddev	.001338
%RSD	.5251012
#1	-.256323
#2	-.253747
#3	-.254408

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4204.802	88003.78	17954.37	2737.934	3555.317
Stddev	6.722	121.16	84.53	16.965	3.497
%RSD	.1598593	.1376815	.4707890	.6196120	.0983533
#1	4198.219	88070.40	18002.10	2735.915	3555.105
#2	4204.532	87863.93	17856.78	2722.070	3551.930
#3	4211.654	88077.02	18004.24	2755.818	3558.914

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1366-01DUP Acquired: 2/18/2025 13:28:26 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0757681	-.069191	.1352962	-.077726	-.007347	209.1470
Stddev	.0028679	.004493	.0027918	.001043	.001635	2.0563
%RSD	3.785113	6.493477	2.063442	1.341431	22.26015	.9831668
#1	.0783432	-.074267	.1347216	-.076552	-.008956	211.0233
#2	.0726773	-.067582	.1383306	-.078544	-.005687	206.9488
#3	.0762837	-.065725	.1328365	-.078083	-.007398	209.4687

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6605863	.0128054	.0414937	42.40377	.2261297	.2856994
Stddev	.0016718	.0000337	.0008228	.01871	.0003451	.0011679
%RSD	.2530707	.2630986	1.982985	.0441225	.1525971	.4087756
#1	.6612002	.0127773	.0409708	42.41755	.2263808	.2845710
#2	.6618643	.0128428	.0410682	42.41130	.2257362	.2869031
#3	.6586944	.0127962	.0424422	42.38247	.2262720	.2856239

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4291976	390.0752	4.185583	34.35915	.2526959	-.008198
Stddev	.0042620	3.4046	.004276	.04607	.0010031	.000394
%RSD	.9930148	.8728031	.1021520	.1340978	.3969740	4.807343
#1	.4259616	392.2155	4.189174	34.31677	.2521756	-.008049
#2	.4276046	391.8609	4.186722	34.40819	.2538523	-.007901
#3	.4340266	386.1493	4.180853	34.35249	.2520598	-.008645

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.925230	.6064221	.3820729	11.44687	1.295551	.0041306
Stddev	.003436	.0012991	.0011841	.02535	.003757	.0002577
%RSD	.0697693	.2142300	.3099108	.2214216	.2899930	6.238938
#1	4.921303	.6053316	.3829185	11.46791	1.298442	.0042413
#2	4.927687	.6060752	.3825806	11.41873	1.296907	.0043146
#3	4.926699	.6078594	.3807196	11.45397	1.291304	.0038361

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1366-01DUP Acquired: 2/18/2025 13:28:26 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.011314	F 10.18007	5.499057	9.717171	2.958932	.0940586
Stddev	.000379	.00730	.005101	.044784	.015884	.0005153
%RSD	3.346861	.0717029	.0927552	.4608711	.5368108	.5478255
#1	-.011491	10.18505	5.493168	9.712014	2.947889	.0935727
#2	-.011571	10.18346	5.501898	9.764310	2.977136	.0945989
#3	-.010879	10.17169	5.502104	9.675190	2.951772	.0940043

Elem	Sr4077
Units	ppm
Avg	-.252729
Stddev	.003104
%RSD	1.228118
#1	-.254826
#2	-.254197
#3	-.249163

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4171.769	87620.12	17769.46	2716.131	3529.562
Stddev	9.949	126.69	44.45	8.262	11.754
%RSD	.2384826	.1445863	.2501612	.3041738	.3330217
#1	4183.191	87506.27	17724.28	2707.694	3541.116
#2	4164.994	87756.60	17813.15	2716.494	3517.617
#3	4167.122	87597.50	17770.93	2724.205	3529.951

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CCV02 Acquired: 2/18/2025 13:32:46 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	5.030001	5.045730	4.951178	5.044030	5.060132	9.688902	9.437835
Stddev	.018455	.075619	.008314	.020989	.013432	.028879	.157860
%RSD	.3668996	1.498680	.1679270	.4161165	.2654508	.2980649	1.672633
#1	5.018767	4.972436	4.958753	5.025871	5.052527	9.665390	9.615904
#2	5.019937	5.041274	4.942283	5.039209	5.052229	9.721137	9.382540
#3	5.051301	5.123478	4.952498	5.067010	5.075642	9.680179	9.315060

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2441899	2.473085	23.73294	1.003730	2.475826	1.268832	4.876798
Stddev	.0016523	.005418	.02784	.002945	.005069	.002994	.024379
%RSD	.6766352	.2190745	.1172969	.2934108	.2047494	.2359386	.4999076
#1	.2460041	2.474684	23.76236	1.006757	2.478540	1.268717	4.868820
#2	.2427712	2.467047	23.72942	1.003558	2.469977	1.265897	4.904167
#3	.2437945	2.477523	23.70702	1.000874	2.478959	1.271881	4.857407

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.359831	23.44820	2.484032	1.250785	24.53353	2.403043	2.508779
Stddev	.002264	.09122	.003166	.004104	.16534	.007823	.007203
%RSD	.0959457	.3890434	.1274428	.3281276	.6739367	.3255301	.2871133
#1	2.360076	23.55192	2.485931	1.255425	24.38565	2.398395	2.513211
#2	2.361963	23.41224	2.480378	1.249302	24.71205	2.398659	2.512657
#3	2.357455	23.38044	2.485788	1.247629	24.50288	2.412074	2.500467

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.21399	4.878224	5.047125	4.959294	4.783234	4.858321	4.933985
Stddev	.22327	.032033	.012241	.018057	.008436	.032305	.013367
%RSD	.9220750	.6566460	.2425389	.3641113	.1763669	.6649422	.2709103
#1	23.98462	4.910768	5.038941	4.955658	4.778908	4.828500	4.929091
#2	24.43061	4.846729	5.041236	4.943331	4.792956	4.892639	4.923756
#3	24.22674	4.877177	5.061197	4.978892	4.777839	4.853825	4.949109

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CCV02 Acquired: 2/18/2025 13:32:46 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	4.930171	4.724332	4.806734
Stddev	.026321	.019507	.025103
%RSD	.5338704	.4129032	.5222555
#1	4.910671	4.702235	4.828959
#2	4.919731	4.739166	4.811738
#3	4.960110	4.731593	4.779506

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2575.468	54267.19	9866.702	1656.726	3818.753
Stddev	3.731	213.89	71.761	7.223	6.021
%RSD	.1448576	.3941386	.7273084	.4359584	.1576780
#1	2575.277	54065.10	9785.033	1649.750	3816.505
#2	2571.836	54245.28	9919.673	1656.256	3814.179
#3	2579.290	54491.19	9895.400	1664.172	3825.575

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CCB02 Acquired: 2/18/2025 13:36:57 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	.0007889	-.003823	.0004445	.0000609	.0012510	-.002893	-.002250
Stddev	.0045167	.001567	.0006421	.0006022	.0009095	.000968	.000159
%RSD	572.5024	40.99347	144.4706	988.5685	72.69751	33.45905	7.071068
#1	.0026344	-.005160	.0011853	.0006353	.0021253	-.001831	-.002433
#2	.0040907	-.004211	.0001001	.0001131	.0003100	-.003727	-.002148
#3	-.004358	-.002098	.0000480	-.000566	.0013177	-.003121	-.002168

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000712	.0000452	-.014328	.0001132	-.000057	.0007083	.0089557
Stddev	.0000298	.0000423	.004518	.0000867	.000201	.0003919	.0015890
%RSD	41.83953	93.58823	31.53258	76.63374	354.0980	55.33206	17.74268
#1	.0000815	.0000656	-.019126	.0000184	-.000068	.0008078	.0107905
#2	.0000945	.0000735	-.010154	.0001324	.000150	.0002762	.0080283
#3	.0000376	-.000003	-.013706	.0001886	-.000252	.0010409	.0080484

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001079	.0155447	.0000351	.0000728	.0258035	-.000901	-.001091
Stddev	.0003551	.0059365	.0001971	.0003791	.0115335	.001782	.000159
%RSD	328.9987	38.18978	561.6038	521.0047	44.69747	197.7071	14.61088
#1	.0004048	.0175733	-.000189	.0004330	.0169084	-.000142	-.000910
#2	-.000286	.0202008	.000115	-.000323	.0216673	-.002938	-.001213
#3	.000205	.0088598	.000179	.000108	.0388347	.000375	-.001149

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1070517	.0054838	-.000314	-.000671	.0002981	.0028416	-.000230
Stddev	.0147141	.0007309	.000354	.000328	.0003753	.0066539	.001502
%RSD	13.74489	13.32880	112.7526	48.95684	125.8733	234.1562	652.9483
#1	.0989114	.0046916	-.000423	-.000586	-.000053	.0103676	.001047
#2	.1240372	.0056277	-.000602	-.000393	.000253	.0004183	-.001886
#3	.0982063	.0061320	.000082	-.001033	.000694	-.002261	.000149

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CCB02 Acquired: 2/18/2025 13:36:57 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0019261	-.000885	-.000001
Stddev	.0024395	.000859	.000046
%RSD	126.6559	97.02890	4681.715
#1	.0045376	-.001597	.000044
#2	.0015350	.000069	.000001
#3	-.000294	-.001128	-.000048

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2638.610	55473.66	10598.38	1707.115	4163.740
Stddev	5.690	73.18	32.49	1.124	10.182
%RSD	.2156422	.1319117	.3066001	.0658471	.2445288
#1	2641.139	55534.10	10563.21	1707.702	4168.403
#2	2642.596	55392.30	10627.29	1705.819	4170.756
#3	2632.094	55494.58	10604.63	1707.824	4152.063

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1366-01LX5 Acquired: 2/18/2025 13:41:18 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0210915	-.009956	.0314695	-.021270	-.003664	64.02969	.1962607
Stddev	.0028680	.003226	.0023258	.002291	.000890	.04154	.0005787
%RSD	13.59781	32.40631	7.390505	10.77326	24.29917	.0648780	.2948748
#1	.0193337	-.013471	.0294026	-.018947	-.002687	64.04228	.1969233
#2	.0195399	-.009270	.0310180	-.023529	-.004429	63.98331	.1958539
#3	.0244011	-.007128	.0339879	-.021335	-.003877	64.06347	.1960050

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0040558	-.000343	13.33236	.0712905	.0575993	.1421466	123.0339
Stddev	.0000988	.000065	.02612	.0001923	.0002651	.0003489	.1853
%RSD	2.436977	19.07952	.1958826	.2697153	.4602970	.2454168	.1505883
#1	.0041020	-.000419	13.35788	.0714467	.0575132	.1419348	122.9140
#2	.0041232	-.000302	13.33351	.0713491	.0578968	.1425492	122.9405
#3	.0039423	-.000309	13.30569	.0710757	.0573879	.1419557	123.2473

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.294785	10.76098	.0536575	-.001323	1.484492	.1882121	.1162190
Stddev	.003476	.00554	.0003210	.000311	.006468	.0009836	.0006223
%RSD	.2684382	.0515117	.5981480	23.49338	.4356824	.5225873	.5354889
#1	1.298587	10.76162	.0534959	-.001337	1.478921	.1893394	.1159708
#2	1.291770	10.76618	.0540272	-.001626	1.491585	.1875291	.1169272
#3	1.293997	10.75515	.0534495	-.001005	1.482970	.1877678	.1157591

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.380428	.4262547	.0008247	-.003128	3.130208	1.757366	1.955982
Stddev	.021332	.0021316	.0004225	.000047	.005179	.005143	.003156
%RSD	.6310298	.5000835	51.23151	1.503155	.1654674	.2926706	.1613361
#1	3.362365	.4286565	.0004489	-.003087	3.136186	1.756513	1.952365
#2	3.403962	.4255202	.0007432	-.003119	3.127087	1.752702	1.958170
#3	3.374958	.4245875	.0012821	-.003179	3.127349	1.762882	1.957412

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1366-01LX5 Acquired: 2/18/2025 13:41:18 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.5875714	.0272304	-.081336
Stddev	.0026390	.0004876	.000394
%RSD	.4491331	1.790711	.4844321
#1	.5848885	.0277784	-.081041
#2	.5876614	.0268444	-.081183
#3	.5901642	.0270682	-.081783

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2977.682	61937.31	12258.60	1923.849	3905.520
Stddev	2.629	101.94	34.02	2.279	1.344
%RSD	.0882879	.1645932	.2775033	.1184468	.0344241
#1	2977.606	62002.32	12221.50	1925.987	3905.651
#2	2975.092	61989.78	12288.33	1924.108	3904.115
#3	2980.348	61819.81	12265.98	1921.452	3906.794

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1366-01MS Acquired: 2/18/2025 13:45:28 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5458760	1.761414	1.061236	1.024942	.4541936	216.2640
Stddev	.0046143	.010371	.001343	.000871	.0002367	.4167
%RSD	.8452984	.5887703	.1265274	.0850286	.0521221	.1926584
#1	.5507282	1.754184	1.059694	1.024040	.4544323	216.6316
#2	.5453560	1.773296	1.061871	1.025780	.4541897	215.8114
#3	.5415437	1.756762	1.062145	1.025007	.4539589	216.3490

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7840690	.1167527	.2282123	43.44553	.4520282	.4752779
Stddev	.0015368	.0009579	.0007270	.21994	.0010322	.0011204
%RSD	.1960043	.8204802	.3185755	.5062459	.2283441	.2357450
#1	.7834324	.1175720	.2287481	43.66828	.4529932	.4765651
#2	.7829528	.1156995	.2273847	43.22851	.4521517	.4745216
#3	.7858218	.1169867	.2285040	43.43980	.4509399	.4747470

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5931345	391.7866	4.315434	35.82353	.7284403	.0378626
Stddev	.0038378	2.3635	.014132	.24635	.0009173	.0004542
%RSD	.6470368	.6032599	.3274788	.6876665	.1259257	1.199576
#1	.5921237	392.5066	4.320368	36.07157	.7290052	.0380913
#2	.5899033	393.7064	4.299496	35.57891	.7289337	.0381570
#3	.5973765	389.1469	4.326437	35.82011	.7273819	.0373395

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.925313	.7767466	.4921907	17.97485	1.435164	.2368694
Stddev	.040124	.0029221	.0014973	.14657	.007866	.0009418
%RSD	.5793795	.3761972	.3042140	.8153916	.5480793	.3976140
#1	6.897121	.7794682	.4937626	17.83386	1.443309	.2374575
#2	6.971250	.7736586	.4907813	18.12642	1.427611	.2373674
#3	6.907569	.7771132	.4920281	17.96426	1.434573	.2357831

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1366-01MS Acquired: 2/18/2025 13:45:28 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6498897	F 10.43920	6.528261	F 15.34801	2.943370	.2141235
Stddev	.0013008	.02471	.041082	.01743	.007074	.0008332
%RSD	.2001594	.2366758	.6293023	.1135820	.2403330	.3891263
#1	.6513916	10.46137	6.523598	15.32822	2.936334	.2133882
#2	.6491210	10.41257	6.571475	15.36111	2.943295	.2139538
#3	.6491564	10.44365	6.489708	15.35469	2.950481	.2150285

Elem	Sr4077
Units	ppm
Avg	-.139680
Stddev	.002772
%RSD	1.984651
#1	-.140513
#2	-.141940
#3	-.136586

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4117.608	86983.25	17521.31	2693.198	3495.536
Stddev	8.555	206.25	135.42	7.798	9.095
%RSD	.2077676	.2371126	.7729009	.2895443	.2601755
#1	4111.456	86768.65	17403.39	2684.286	3488.911
#2	4113.990	87001.12	17669.21	2696.538	3491.792
#3	4127.377	87179.99	17491.32	2698.769	3505.905

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1366-01MSD Acquired: 2/18/2025 13:49:43 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5254536	1.669927	1.018769	.9827330	.4341961	217.4769
Stddev	.0027771	.011263	.003528	.0083591	.0032940	2.5537
%RSD	.5285229	.6744848	.3463091	.8506012	.7586401	1.174229
#1	.5275414	1.679361	1.021297	.9825119	.4377786	218.1673
#2	.5223018	1.657457	1.020273	.9744865	.4312983	214.6490
#3	.5265176	1.672964	1.014739	.9912004	.4335113	219.6143

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7857318	.1159116	.2192975	43.56267	.4439942	.4599667
Stddev	.0021862	.0002648	.0007081	.13857	.0008481	.0011308
%RSD	.2782390	.2284549	.3229022	.3181039	.1910120	.2458532
#1	.7881803	.1159373	.2201151	43.65943	.4449730	.4612554
#2	.7839753	.1156350	.2188954	43.40393	.4435304	.4595043
#3	.7850398	.1161627	.2188819	43.62467	.4434792	.4591403

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5770581	387.4621	4.315221	35.68090	.7052204	.0375033
Stddev	.0017007	3.0012	.017797	.08436	.0021277	.0007794
%RSD	.2947126	.7745842	.4124209	.2364395	.3017062	2.078313
#1	.5787742	389.2265	4.328756	35.68473	.7076643	.0379114
#2	.5770268	383.9968	4.295062	35.59469	.7042162	.0366045
#3	.5753733	389.1630	4.321845	35.76329	.7037806	.0379939

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.877809	.7735239	.4868186	17.89146	1.451673	.2292741
Stddev	.026565	.0014914	.0017782	.04179	.008435	.0004352
%RSD	.3862367	.1928038	.3652614	.2335849	.5810503	.1898084
#1	6.869719	.7732194	.4862624	17.91782	1.453562	.2297224
#2	6.907477	.7722082	.4888084	17.91327	1.442454	.2288533
#3	6.856229	.7751440	.4853851	17.84327	1.459003	.2292466

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1366-01MSD Acquired: 2/18/2025 13:49:43 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6152351	F 10.86012	F 12.75472	F 14.70040	2.825614	.2148607
Stddev	.0017481	.02460	.11536	.08494	.022246	.0007982
%RSD	.2841390	.2265348	.9044140	.5778389	.7873020	.3714860
#1	.6167806	10.88252	12.62152	14.79795	2.849531	.2157439
#2	.6133379	10.83379	12.82092	14.64277	2.805540	.2146470
#3	.6155867	10.86403	12.82173	14.66047	2.821771	.2141910

Elem	Sr4077
Units	ppm
Avg	-.135726
Stddev	.002649
%RSD	1.951810
#1	-.136838
#2	-.132702
#3	-.137638

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4227.201	88652.60	17619.89	2767.038	3628.393
Stddev	8.546	197.93	68.02	4.966	12.153
%RSD	.2021781	.2232703	.3860202	.1794864	.3349335
#1	4217.658	88427.14	17569.11	2765.395	3614.476
#2	4234.150	88732.85	17697.17	2763.101	3633.794
#3	4229.795	88797.80	17593.40	2772.617	3636.909

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1366-01A Acquired: 2/18/2025 13:53:57 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5349131	1.689339	1.022645	1.003640	.4468813	213.4408
Stddev	.0005458	.006994	.004703	.001974	.0039008	1.4876
%RSD	.1020289	.4140026	.4598739	.1966861	.8728983	.6969735
#1	.5352551	1.694853	1.018556	1.005897	.4512587	213.4369
#2	.5352006	1.681472	1.027784	1.002235	.4456120	211.9551
#3	.5342837	1.691691	1.021594	1.002788	.4437733	214.9304

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7710098	.1127988	.2216436	42.93900	.4429820	.4627352
Stddev	.0029021	.0009507	.0010143	.13942	.0003906	.0016931
%RSD	.3764002	.8427890	.4576383	.3246989	.0881791	.3658863
#1	.7707182	.1138965	.2205475	43.06330	.4431658	.4608130
#2	.7682645	.1122429	.2225491	42.78825	.4425334	.4640052
#3	.7740466	.1122570	.2218342	42.96545	.4432468	.4633873

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5822825	384.0452	4.229672	35.42856	.7086311	.0371340
Stddev	.0026601	1.5246	.011525	.12686	.0022406	.0005485
%RSD	.4568478	.3969911	.2724863	.3580674	.3161892	1.477133
#1	.5792938	385.7780	4.234229	35.57116	.7060497	.0377644
#2	.5843908	382.9096	4.216564	35.32824	.7100724	.0368720
#3	.5831630	383.4479	4.238221	35.38630	.7097711	.0367656

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.893065	.7639661	.4847667	17.79820	1.408128	.2320439
Stddev	.051499	.0008509	.0020227	.19785	.011076	.0005096
%RSD	.7471134	.1113774	.4172503	1.111653	.7865960	.2196266
#1	6.840082	.7643597	.4868625	17.60623	1.420916	.2316573
#2	6.896175	.7629897	.4828260	17.78693	1.401930	.2318531
#3	6.942939	.7645489	.4846117	18.00145	1.401538	.2326214

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1366-01A Acquired: 2/18/2025 13:53:57 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6244173	F 10.52141	F 10.11720	F 14.74248	2.859459	.2109196
Stddev	.0011751	.01824	.07422	.01265	.008598	.0012904
%RSD	.1881831	.1734029	.7335806	.0858179	.3006871	.6117845
#1	.6231367	10.52912	10.05521	14.75674	2.852162	.2107731
#2	.6246693	10.50058	10.09694	14.73813	2.857277	.2097087
#3	.6254459	10.53453	10.19944	14.73258	2.868937	.2122769

Elem	Sr4077
Units	ppm
Avg	-.135983
Stddev	.001773
%RSD	1.303738
#1	-.137878
#2	-.135705
#3	-.134365

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4165.343	88590.07	17887.15	2712.686	3580.003
Stddev	7.637	188.15	136.72	1.522	4.683
%RSD	.1833575	.2123848	.7643492	.0561231	.1308110
#1	4161.530	88721.77	17729.28	2712.832	3581.400
#2	4160.362	88673.85	17965.73	2714.130	3574.780
#3	4174.136	88374.58	17966.45	2711.096	3583.828

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: PB166731BL Acquired: 2/18/2025 13:58:11 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018318	-.004720	.0000159	-.000682	-.002404	-.000083	-.001309
Stddev	.0007763	.000747	.0002281	.001655	.000308	.003569	.000836
%RSD	42.38005	15.82378	1436.990	242.4916	12.79415	4321.231	63.88788
#1	.0025350	-.004880	-.000247	.001198	-.002202	-.001833	-.001956
#2	.0019615	-.005374	.000137	-.001329	-.002252	.004024	-.000365
#3	.0009988	-.003906	.000158	-.001917	-.002758	-.002438	-.001605

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000553	.0000265	-.020844	.0000757	.0000796	-.000169	.0074430
Stddev	.0000305	.0000486	.008643	.0003477	.0002183	.000177	.0020881
%RSD	55.09355	183.4358	41.46597	458.9497	274.1971	105.1032	28.05396
#1	.0000604	-.000021	-.030550	-.000324	.0001094	-.000348	.0082460
#2	.0000830	.000024	-.018000	.000305	-.000152	.000007	.0050726
#3	.0000227	.000077	-.013980	.000246	.000282	-.000166	.0090104

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000015	.0037887	.0000502	-.000052	-.002071	-.000913	-.000734
Stddev	.000129	.0049619	.0002840	.000260	.012974	.000291	.000437
%RSD	844.4219	130.9668	566.0979	495.9448	626.3101	31.83806	59.47788
#1	.000111	.0013602	-.000278	.000219	-.017052	-.001249	-.000357
#2	-.000146	.0005088	.000221	-.000298	.005530	-.000736	-.000633
#3	-.000011	.0094970	.000207	-.000077	.005308	-.000755	-.001213

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0795363	.0016742	-.000329	-.000919	-.000039	.0010063	.0023138
Stddev	.0216213	.0001223	.000143	.000390	.000333	.0071377	.0008221
%RSD	27.18422	7.304739	43.43383	42.39293	844.6337	709.2863	35.53085
#1	.0994483	.0017328	-.000182	-.000684	.000344	.0022570	.0013690
#2	.0826232	.0015337	-.000466	-.000705	-.000207	.0074360	.0027056
#3	.0565375	.0017562	-.000338	-.001369	-.000255	-.006674	.0028667

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: PB166731BL Acquired: 2/18/2025 13:58:11 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0020377	-.002186	-.000062
Stddev	.0019708	.000874	.000027
%RSD	96.71454	39.96795	43.71966
#1	.0018043	-.003192	-.000093
#2	.0041148	-.001619	-.000045
#3	.0001941	-.001746	-.000047

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2726.759	55980.34	10695.82	1725.851	4359.841
Stddev	13.404	257.35	39.94	6.425	12.162
%RSD	.4915854	.4597112	.3733868	.3722760	.2789571
#1	2731.462	55751.17	10675.48	1721.511	4361.989
#2	2737.178	55931.09	10670.14	1722.811	4370.785
#3	2711.637	56258.75	10741.83	1733.232	4346.748

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: PB166731BS Acquired: 2/18/2025 14:02:31 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7986933	1.969244	.9629024	1.956001	.7831657	1.814449
Stddev	.0056587	.011057	.0006954	.009078	.0023929	.012890
%RSD	.7084992	.5614598	.0722226	.4641203	.3055463	.7104130
#1	.7991744	1.969233	.9631928	1.960699	.7829019	1.801402
#2	.7928094	1.958193	.9621088	1.945537	.7809156	1.814768
#3	.8040961	1.980306	.9634056	1.961767	.7856796	1.827177

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1697602	.1872651	.1903368	.9217276	.3957044	.1913125
Stddev	.0005216	.0007713	.0002073	.0037328	.0012269	.0003177
%RSD	.3072710	.4118849	.1088899	.4049844	.3100438	.1660520
#1	.1694510	.1863803	.1903043	.9249524	.3957259	.1910149
#2	.1694671	.1876199	.1901477	.9176384	.3944669	.1916470
#3	.1703624	.1877953	.1905584	.9225921	.3969204	.1912755

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3038067	2.840575	.1814705	1.764673	.4813709	.0733541
Stddev	.0010453	.009250	.0013847	.023901	.0007613	.0003462
%RSD	.3440723	.3256462	.7630510	1.354408	.1581523	.4719631
#1	.3038794	2.838093	.1800018	1.738506	.4806432	.0729546
#2	.3027270	2.832818	.1827523	1.785353	.4821618	.0735674
#3	.3048138	2.850813	.1816572	1.770159	.4813078	.0735402

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.832235	.2707731	.1983028	9.143814	.2778075	.3930506
Stddev	.011225	.0019297	.0000649	.050031	.0012187	.0022349
%RSD	.3963221	.7126548	.0327415	.5471548	.4386831	.5685984
#1	2.841204	.2685494	.1982603	9.186486	.2764216	.3935859
#2	2.819647	.2720080	.1983775	9.088752	.2787119	.3905967
#3	2.835854	.2717618	.1982705	9.156204	.2782890	.3949692

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: PB166731BS Acquired: 2/18/2025 14:02:31 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6551160	.1784065	.7563067	5.424531	F -.006178	.1825134
Stddev	.0014196	.0006882	.0027578	.017556	.001936	.0008029
%RSD	.2166967	.3857624	.3646444	.3236444	31.33362	.4398955
#1	.6550924	.1791810	.7588549	5.409627	-.008153	.1822808
#2	.6537083	.1778652	.7566865	5.420083	-.006096	.1834069
#3	.6565472	.1781732	.7533786	5.443884	-.004284	.1818526

Elem	Sr4077
Units	ppm
Avg	.1778329
Stddev	.0002294
%RSD	.1289983
#1	.1779867
#2	.1779428
#3	.1775692

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2702.632	57093.95	10503.67	1759.497	4193.122
Stddev	5.789	121.97	36.45	1.333	3.003
%RSD	.2142097	.2136369	.3470379	.0757526	.0716192
#1	2700.366	57029.58	10545.39	1760.252	4191.368
#2	2709.212	57234.63	10477.98	1757.958	4196.589
#3	2698.319	57017.65	10487.64	1760.281	4191.408

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1172-03 Acquired: 2/18/2025 14:06:33 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0045751	.0003028	.0005554	-.000422	-.002023	-.038075	.0014737
Stddev	.0019621	.0009066	.0008157	.000615	.001460	.001741	.0005021
%RSD	42.88580	299.3677	146.8605	145.8211	72.15864	4.572890	34.07332
#1	.0042616	.0000665	-.000364	-.001122	-.003542	-.039596	.0019982
#2	.0066751	.0013042	.001194	.000029	-.001898	-.038455	.0014255
#3	.0027887	-.000462	.000836	-.000172	-.000630	-.036176	.0009974

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000907	-.000035	50.90186	-.000492	.0000289	-.000445	.0040273
Stddev	.0000197	.000033	.18657	.000300	.0000114	.000234	.0055602
%RSD	21.75121	96.19568	.3665328	60.90390	39.51860	52.58139	138.0636
#1	.0001054	-.000063	50.73713	-.000765	.0000383	-.000328	.0097547
#2	.0000984	-.000044	51.10446	-.000539	.0000321	-.000292	-.001349
#3	.0000683	.000002	50.86399	-.000171	.0000162	-.000714	.003676

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000971	5.703343	-.000127	.0000150	24.11593	-.001293	-.001226
Stddev	.0002285	.076309	.000106	.0002269	.19039	.000912	.000334
%RSD	235.3097	1.337967	83.44202	1514.870	.7894580	70.57235	27.22842
#1	.0003472	5.677795	-.000248	.0001368	24.05170	-.002014	-.000933
#2	.0000452	5.789148	-.000079	-.000247	23.96596	-.001596	-.001589
#3	-.000101	5.643086	-.000053	.000155	24.33012	-.000267	-.001156

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	32.81276	-.004295	.0032541	-.002907	-.001021	-.012128	.0001933
Stddev	.16046	.000133	.0004678	.001088	.000763	.002195	.0008025
%RSD	.4890097	3.085158	14.37522	37.43201	74.78042	18.09958	415.2483
#1	32.75889	-.004153	.0036786	-.002609	-.001781	-.014534	-.000408
#2	32.68617	-.004316	.0033311	-.001999	-.001028	-.010234	.001105
#3	32.99322	-.004416	.0027526	-.004113	-.000254	-.011615	-.000117

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1172-03 Acquired: 2/18/2025 14:06:33 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0203185	-.012011	.0045878
Stddev	.0021202	.000478	.0000283
%RSD	10.43501	3.981415	.6171066
#1	.0218050	-.012167	.0046037
#2	.0178906	-.012392	.0046046
#3	.0212599	-.011474	.0045551

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2692.703	56451.72	11059.65	1769.292	4091.033
Stddev	4.826	196.28	57.43	5.142	13.136
%RSD	.1792077	.3477017	.5192837	.2906255	.3211031
#1	2697.114	56606.48	11076.77	1769.377	4105.872
#2	2693.446	56517.75	10995.61	1774.392	4086.334
#3	2687.549	56230.94	11106.57	1764.109	4080.891

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1172-06 Acquired: 2/18/2025 14:10:52 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0034315	-.000441	.0011092	-.001707	-.002626	-.000509	.0016713
Stddev	.0011207	.002009	.0004971	.000812	.000161	.006479	.0007351
%RSD	32.65923	455.5588	44.81508	47.55099	6.122643	1273.301	43.98150
#1	.0046674	-.002328	.0007353	-.001182	-.002596	-.002558	.0011098
#2	.0024812	.001671	.0009191	-.001298	-.002482	.006747	.0014008
#3	.0031461	-.000666	.0016733	-.002643	-.002800	-.005716	.0025033

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001351	.0000350	-.026376	-.000299	.0001158	-.000502	-.002994
Stddev	.0000460	.0000201	.006353	.000226	.0001113	.000185	.001279
%RSD	34.04789	57.57803	24.08781	75.44516	96.09416	36.82244	42.71237
#1	.0001880	.0000543	-.019649	-.000087	.0000450	-.000378	-.004465
#2	.0001041	.0000141	-.027205	-.000275	.0000584	-.000714	-.002159
#3	.0001133	.0000366	-.032275	-.000536	.0002441	-.000413	-.002356

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000197	.0065321	-.000377	-.000139	9.522489	-.001916	-.001593
Stddev	.000261	.0081532	.000068	.000165	.161501	.000776	.000233
%RSD	132.4682	124.8180	18.04008	118.6272	1.695992	40.51454	14.64946
#1	-.000402	-.001505	-.000399	-.000156	9.619390	-.001213	-.001451
#2	-.000286	.006305	-.000301	-.000295	9.612024	-.001786	-.001467
#3	.000097	.014796	-.000431	.000033	9.336052	-.002749	-.001863

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.028250	-.004477	-.000132	-.002033	.0002807	5.113814	.0024550
Stddev	.009410	.000835	.000372	.000222	.0004609	.030188	.0015895
%RSD	33.30916	18.65299	281.0392	10.92765	164.2250	.5903268	64.74581
#1	-.038778	-.003584	-.000559	-.002246	-.000238	5.109620	.0008743
#2	-.020658	-.005238	.000043	-.002050	.000645	5.145880	.0024376
#3	-.025314	-.004609	.000120	-.001803	.000435	5.085943	.0040532

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1172-06 Acquired: 2/18/2025 14:10:52 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0265523	-.004443	-.000059
Stddev	.0046461	.001090	.000038
%RSD	17.49812	24.53233	63.99444
#1	.0223902	-.005016	-.000055
#2	.0315649	-.003186	-.000023
#3	.0257017	-.005127	-.000098

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2831.914	58658.72	10974.27	1852.245	4498.828
Stddev	17.062	198.71	109.00	3.872	14.220
%RSD	.6025065	.3387550	.9932303	.2090504	.3160809
#1	2850.230	58438.71	10903.92	1848.342	4513.249
#2	2829.044	58825.14	11099.83	1856.085	4498.418
#3	2816.469	58712.31	10919.06	1852.309	4484.818

Sample Name: Q1372-01 Acquired: 2/18/2025 14:15:12 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0766698	.0021002	.3377661	-.044465	-.001265	89.59207	.3890698
Stddev	.0041155	.0011525	.0012910	.002694	.001680	.07157	.0017915
%RSD	5.367886	54.87814	.3822199	6.058121	132.7814	.0798846	.4604682
#1	.0758820	.0011890	.3363677	-.045300	-.000590	89.59337	.3905056
#2	.0811222	.0017157	.3389124	-.041453	-.003177	89.51985	.3870621
#3	.0730050	.0033958	.3380183	-.046643	-.000028	89.66298	.3896416

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0086786	-.001263	42.97143	.2239820	.0676416	.2180544	233.8023
Stddev	.0001519	.000146	.12715	.0008340	.0002265	.0003508	.6492
%RSD	1.749835	11.58357	.2958877	.3723696	.3348736	.1608974	.2776658
#1	.0086668	-.001281	43.02937	.2236434	.0677286	.2183597	234.3640
#2	.0085330	-.001400	42.82564	.2249321	.0678117	.2181324	233.9513
#3	.0088360	-.001109	43.05930	.2233705	.0673844	.2176711	233.0916

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.848154	20.77605	.0945508	-.003009	3.496862	.2984526	.4691196
Stddev	.006509	.02994	.0000445	.000418	.021846	.0013391	.0006937
%RSD	.3521788	.1441227	.0471218	13.90127	.6247261	.4486671	.1478816
#1	1.852463	20.74556	.0945048	-.002813	3.494769	.2973630	.4690279
#2	1.840667	20.77718	.0945937	-.003489	3.519679	.2980473	.4698547
#3	1.851333	20.80541	.0945537	-.002725	3.476139	.2999475	.4684763

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.960008	.1388208	.0058143	.0110383	1.376062	5.729544	4.983430
Stddev	.041018	.0024366	.0003956	.0007715	.003139	.042094	.008877
%RSD	.4577855	1.755178	6.803501	6.988913	.2280962	.7346754	.1781269
#1	8.940605	.1399272	.0056263	.0110268	1.379338	5.699854	4.984520
#2	9.007128	.1405079	.0055477	.0102726	1.373081	5.777717	4.991712
#3	8.932293	.1360274	.0062688	.0118154	1.375766	5.711061	4.974059

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1372-01 Acquired: 2/18/2025 14:15:12 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.806762	.0569459	-.036142
Stddev	.008659	.0013185	.000675
%RSD	.4792282	2.315292	1.867919
#1	1.810571	.0572054	-.036416
#2	1.796852	.0581154	-.036637
#3	1.812862	.0555170	-.035373

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2794.913	58561.00	11504.44	1802.179	3872.485
Stddev	4.456	114.91	50.68	6.246	4.770
%RSD	.1594356	.1962187	.4405166	.3465662	.1231723
#1	2791.097	58576.27	11488.78	1799.890	3868.577
#2	2793.833	58439.22	11561.10	1797.400	3871.077
#3	2799.810	58667.51	11463.44	1809.246	3877.800

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1374-01 Acquired: 2/18/2025 14:19:18 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0418805	-.004428	.1969564	-.023853	-.001190	46.35646	.1674282
Stddev	.0042175	.002100	.0021377	.003377	.001878	.08524	.0000480
%RSD	10.07024	47.42382	1.085394	14.15622	157.8914	.1838814	.0286436
#1	.0373697	-.004609	.1961839	-.021308	-.003238	46.45407	.1674601
#2	.0457255	-.002244	.1993730	-.022568	.000453	46.31862	.1674515
#3	.0425461	-.006433	.1953122	-.027684	-.000785	46.29669	.1673731

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0050869	-.000746	31.16254	.1716049	.0392532	.1313437	124.7797
Stddev	.0001549	.000076	.05156	.0002549	.0000673	.0004993	.3360
%RSD	3.045079	10.13990	.1654535	.1485388	.1713724	.3801350	.2692818
#1	.0049080	-.000723	31.17308	.1718384	.0391911	.1309657	125.1078
#2	.0051742	-.000685	31.20801	.1713330	.0393247	.1319097	124.4363
#3	.0051784	-.000831	31.10652	.1716433	.0392439	.1311557	124.7950

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.121553	22.60982	.0795702	-.001595	2.527933	.1800007	.4393259
Stddev	.000377	.10425	.0001310	.000411	.022440	.0004493	.0018098
%RSD	.0335954	.4610899	.1645917	25.74659	.8876866	.2496111	.4119535
#1	1.121933	22.49077	.0795462	-.001851	2.550482	.1795888	.4376062
#2	1.121180	22.65389	.0797115	-.001812	2.527714	.1799333	.4412140
#3	1.121545	22.68479	.0794529	-.001121	2.505604	.1804798	.4391576

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.675400	.0756831	.0025600	.0075221	1.201066	3.694089	2.621929
Stddev	.028203	.0015240	.0000975	.0009248	.002279	.016054	.011866
%RSD	.2914907	2.013636	3.808661	12.29471	.1897603	.4345854	.4525556
#1	9.704992	.0769854	.0024928	.0064825	1.203597	3.712625	2.634863
#2	9.648829	.0740070	.0026718	.0082534	1.200424	3.685026	2.619379
#3	9.672381	.0760568	.0025153	.0078304	1.199177	3.684616	2.611546

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1374-01 Acquired: 2/18/2025 14:19:18 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.205943	.0601041	-.019151
Stddev	.004297	.0006300	.000422
%RSD	.3562806	1.048239	2.205556
#1	1.201715	.0593845	-.019011
#2	1.205810	.0603713	-.018817
#3	1.210305	.0605565	-.019626

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2738.760	57877.33	11095.88	1773.987	3920.046
Stddev	1.363	189.75	22.54	6.361	4.266
%RSD	.0497677	.3278485	.2031040	.3585943	.1088197
#1	2738.741	57799.51	11112.42	1773.420	3920.714
#2	2737.407	58093.61	11105.01	1780.613	3915.485
#3	2740.133	57738.85	11070.21	1767.928	3923.938

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CCV03 Acquired: 2/18/2025 14:23:27 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	5.003793	4.977329	4.907503	5.044895	5.042447	9.761331	9.688064
Stddev	.013720	.046793	.021097	.018671	.007447	.022088	.044033
%RSD	.2742016	.9401215	.4299009	.3701036	.1476937	.2262765	.4545100
#1	5.019409	5.016862	4.930642	5.061872	5.049516	9.749858	9.681517
#2	4.993670	4.925665	4.902535	5.024897	5.034672	9.786794	9.735005
#3	4.998299	4.989459	4.889334	5.047915	5.043152	9.747340	9.647671

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2347932	2.453421	24.13780	.9927762	2.455470	1.256082	4.992106
Stddev	.0017137	.012943	.08445	.0014438	.009840	.004052	.016590
%RSD	.7298698	.5275464	.3498494	.1454299	.4007334	.3226226	.3323304
#1	.2364524	2.467577	24.19777	.9939342	2.466779	1.260444	4.974823
#2	.2348974	2.450493	24.17441	.9932359	2.450769	1.255367	5.007904
#3	.2330297	2.442193	24.04123	.9911585	2.448863	1.252434	4.993590

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.375393	23.66848	2.463013	1.237466	25.74539	2.425897	2.471947
Stddev	.009416	.19144	.009690	.000612	.15664	.003196	.011480
%RSD	.3964069	.8088462	.3934358	.0494259	.6084054	.1317367	.4644144
#1	2.382587	23.77110	2.474036	1.238151	25.59292	2.427544	2.473332
#2	2.378855	23.78672	2.459169	1.237273	25.73737	2.427933	2.459837
#3	2.364735	23.44760	2.455835	1.236975	25.90589	2.422213	2.482671

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.34683	4.690920	5.006776	4.916104	4.831343	5.060605	4.875892
Stddev	.12995	.032551	.013466	.027831	.008696	.044488	.025370
%RSD	.5126879	.6939223	.2689478	.5661148	.1799942	.8791014	.5203203
#1	25.24375	4.725468	5.022309	4.947409	4.835501	5.009235	4.905060
#2	25.30395	4.686469	4.998396	4.906740	4.837180	5.086361	4.858945
#3	25.49281	4.660823	4.999624	4.894162	4.821348	5.086219	4.863672

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CCV03 Acquired: 2/18/2025 14:23:27 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	4.902057	4.823623	4.838584
Stddev	.024711	.005756	.029139
%RSD	.5040980	.1193342	.6022271
#1	4.929890	4.823699	4.853779
#2	4.893587	4.829340	4.856986
#3	4.882695	4.817829	4.804988

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2591.928	54842.96	10247.17	1671.061	3848.689
Stddev	5.753	94.88	69.66	10.008	14.152
%RSD	.2219719	.1729999	.6798241	.5989233	.3677146
#1	2585.301	54919.04	10190.90	1671.610	3832.533
#2	2594.842	54736.65	10225.53	1680.784	3854.639
#3	2595.641	54873.17	10325.09	1660.790	3858.895

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CCB03 Acquired: 2/18/2025 14:27:39 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	-.000510	-.004727	.0008863	-.000278	.0004308	.0021488	-.002794
Stddev	.004233	.000730	.0005145	.001195	.0001837	.0024415	.000504
%RSD	829.9457	15.43707	58.05442	430.3039	42.65133	113.6244	18.04592
#1	-.004944	-.004596	.0014439	-.001059	.0005892	-.000665	-.002222
#2	-.000074	-.005514	.0007852	.001098	.0002294	.003713	-.002984
#3	.003488	-.004073	.0004298	-.000872	.0004738	.003398	-.003176

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000304	.0000126	-.015598	.0001898	.0000407	-.000150	.0100320
Stddev	.0000163	.0000186	.009157	.0001436	.0000979	.000368	.0052076
%RSD	53.52271	148.0889	58.70814	75.67856	240.5263	245.7378	51.91012
#1	.0000416	.0000246	-.024314	.0002340	.0001523	.000134	.0068600
#2	.0000378	-.000009	-.016423	.0000292	-.000031	-.000565	.0071938
#3	.0000117	.000022	-.006056	.0003060	.000000	-.000017	.0160422

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001320	.0078211	.0003633	.0000227	.0060626	-.002166	-.000630
Stddev	.0001699	.0116049	.0001021	.0002599	.0034617	.000176	.000306
%RSD	128.7175	148.3796	28.09985	1144.865	57.09882	8.132831	48.49291
#1	-.000060	-.000542	.0004028	-.000257	.0020731	-.002266	-.000710
#2	.000264	.002936	.0004396	.000256	.0082714	-.002269	-.000293
#3	.000192	.021070	.0002473	.000069	.0078435	-.001962	-.000888

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0884232	.0022987	-.000074	-.000123	.0000413	.0082895	.0025604
Stddev	.0202619	.0008383	.000201	.000198	.0002749	.0032321	.0020123
%RSD	22.91472	36.46945	271.6750	161.1505	665.0240	38.99006	78.59196
#1	.0655757	.0032403	-.000050	-.000319	.0000568	.0050652	.0007241
#2	.1042105	.0020227	-.000286	-.000126	-.000241	.0082740	.0022456
#3	.0954835	.0016332	.000114	.000077	.000308	.0115294	.0047115

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CCB03 Acquired: 2/18/2025 14:27:39 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0005193	-.001787	-.000031
Stddev	.0038639	.000561	.000021
%RSD	744.0218	31.38271	68.42207
#1	-.003876	-.001262	-.000009
#2	.003380	-.002378	-.000051
#3	.002054	-.001723	-.000034

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2671.274	56404.38	10920.10	1737.490	4222.679
Stddev	4.491	695.65	55.13	17.544	3.543
%RSD	.1681131	1.233329	.5048508	1.009711	.0839007
#1	2666.898	57204.41	10877.67	1757.493	4221.864
#2	2671.053	55942.00	10900.22	1730.261	4219.615
#3	2675.871	56066.72	10982.41	1724.715	4226.558

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1374-01DUP Acquired: 2/18/2025 14:32:00 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0422157	-.004629	.1986255	-.022329	-.003304	46.88585	.1746856
Stddev	.0009748	.002021	.0007011	.000935	.001248	.07053	.0007402
%RSD	2.308991	43.65429	.3529598	4.188860	37.75539	.1504322	.4237185
#1	.0413929	-.002498	.1981430	-.021570	-.004143	46.84909	.1751211
#2	.0432922	-.006517	.1983039	-.022042	-.001871	46.96716	.1751047
#3	.0419621	-.004872	.1994297	-.023374	-.003900	46.84129	.1738310

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0050397	-.001513	31.71619	.1728852	.0394062	.1303114	129.1876
Stddev	.0000478	.000291	.06027	.0006789	.0000333	.0012500	.5104
%RSD	.9490517	19.21376	.1900442	.3926667	.0844241	.9592350	.3950647
#1	.0050555	-.001738	31.64671	.1726706	.0394172	.1294552	129.2975
#2	.0049860	-.001616	31.75439	.1736455	.0393689	.1297331	129.6341
#3	.0050776	-.001185	31.74749	.1723396	.0394326	.1317458	128.6312

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.149637	22.64741	.0799962	-.001649	2.640036	.1821129	.4436081
Stddev	.001031	.14308	.0004069	.000270	.008682	.0005824	.0007684
%RSD	.0896833	.6317759	.5086423	16.34396	.3288693	.3198220	.1732174
#1	1.149047	22.48230	.0801407	-.001444	2.645307	.1816088	.4433943
#2	1.150827	22.73510	.0795367	-.001549	2.644785	.1827505	.4444608
#3	1.149035	22.72482	.0803111	-.001954	2.630015	.1819795	.4429693

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.07706	.0857187	.0027608	.0069885	1.229346	3.792144	2.629972
Stddev	.08068	.0013044	.0001477	.0004476	.002491	.029808	.003089
%RSD	.8006374	1.521702	5.348172	6.405196	.2026465	.7860502	.1174551
#1	10.10281	.0856898	.0029164	.0070979	1.230445	3.804782	2.631890
#2	10.14173	.0870374	.0027434	.0064963	1.231100	3.813550	2.626409
#3	9.98665	.0844291	.0026226	.0073712	1.226495	3.758099	2.631618

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1374-01DUP Acquired: 2/18/2025 14:32:00 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.201005	.0619644	-.020214
Stddev	.005073	.0002082	.000094
%RSD	.4224155	.3359424	.4646360
#1	1.199775	.0621951	-.020187
#2	1.196660	.0617906	-.020319
#3	1.206580	.0619076	-.020137

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2759.222	57721.81	11213.50	1791.691	3932.886
Stddev	2.829	128.13	68.85	10.855	10.415
%RSD	.1025337	.2219716	.6139854	.6058496	.2648294
#1	2761.108	57853.57	11267.96	1801.096	3942.002
#2	2760.588	57714.19	11236.42	1794.164	3935.121
#3	2755.969	57597.66	11136.11	1779.813	3921.534

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1374-01LX5 Acquired: 2/18/2025 14:36:07 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0096109	-.002794	.0402809	-.005337	.0004329	9.839524	.0354368
Stddev	.0019945	.000818	.0007909	.002934	.0010800	.016456	.0003930
%RSD	20.75285	29.26099	1.963520	54.96481	249.4901	.1672458	1.109006
#1	.0115220	-.002454	.0393815	-.004189	.0014913	9.820698	.0349844
#2	.0097685	-.003727	.0405931	-.008672	-.000668	9.846707	.0356320
#3	.0075423	-.002202	.0408680	-.003151	.000475	9.851168	.0356940

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011560	-.000613	6.727669	.0360053	.0076775	.0276183	26.83748
Stddev	.0000511	.000061	.005624	.0001048	.0002187	.0005321	.09408
%RSD	4.420575	9.893720	.0835901	.2909771	2.849162	1.926588	.3505612
#1	.0012110	-.000564	6.722948	.0360654	.0075622	.0281123	26.92510
#2	.0011472	-.000681	6.733891	.0358843	.0079298	.0270549	26.84929
#3	.0011099	-.000593	6.726167	.0360662	.0075405	.0276876	26.73805

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2454155	4.805337	.0161779	-.000154	.5290739	.0375595	.0925012
Stddev	.0012433	.022678	.0002634	.000093	.0058221	.0000922	.0002897
%RSD	.5065926	.4719372	1.628395	60.50197	1.100443	.2455297	.3131284
#1	.2467365	4.780263	.0159634	-.000048	.5226981	.0376628	.0921746
#2	.2452417	4.811333	.0160984	-.000223	.5341083	.0374854	.0927272
#3	.2442683	4.824415	.0164719	-.000192	.5304152	.0375304	.0926016

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.114649	.0144115	.0001412	.0005176	.2573554	.7789124	.5241526
Stddev	.001340	.0005774	.0002610	.0011428	.0009026	.0122611	.0038245
%RSD	.0633878	4.006904	184.8752	220.7842	.3507047	1.574128	.7296435
#1	2.113253	.0146140	.0002622	.0011334	.2574271	.7682840	.5260623
#2	2.115926	.0148604	-.000158	-.000801	.2564191	.7761265	.5266462
#3	2.114768	.0137600	.000320	.001220	.2582199	.7923267	.5197494

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1374-01LX5 Acquired: 2/18/2025 14:36:07 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2382156	.0112458	-.003679
Stddev	.0019192	.0004331	.000087
%RSD	.8056713	3.851362	2.355779
#1	.2399113	.0114516	-.003659
#2	.2386034	.0107481	-.003603
#3	.2361321	.0115376	-.003773

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2752.900	57364.84	10950.92	1797.941	4194.809
Stddev	8.293	98.61	11.80	5.568	18.934
%RSD	.3012317	.1718971	.1077108	.3096953	.4513706
#1	2743.958	57262.29	10953.36	1797.637	4175.355
#2	2754.403	57458.96	10961.31	1803.655	4195.896
#3	2760.338	57373.25	10938.10	1792.531	4213.177

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1374-01MS Acquired: 2/18/2025 14:40:23 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8023772	1.973343	1.530220	1.709735	.3808200	86.75323	.5101527
Stddev	.0032878	.031939	.000961	.012373	.0005322	.27544	.0017548
%RSD	.4097559	1.618510	.0627869	.7236533	.1397524	.3174938	.3439659
#1	.8026170	1.946066	1.530926	1.697605	.3803055	86.93425	.5095095
#2	.7989761	1.965486	1.529126	1.709264	.3807864	86.43625	.5088104
#3	.8055386	2.008477	1.530608	1.722336	.3813683	86.88918	.5121383

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1866395	.2026490	63.49875	.5380840	.2793237	.5130615	155.8089
Stddev	.0023071	.0007609	.39251	.0015748	.0006990	.0009057	.6129
%RSD	1.236128	.3754939	.6181404	.2926664	.2502442	.1765367	.3933601
#1	.1890712	.2025344	63.86778	.5398939	.2788390	.5123697	155.1248
#2	.1844814	.2019519	63.08636	.5370266	.2790070	.5127283	155.9936
#3	.1863660	.2034608	63.54211	.5373315	.2801249	.5140867	156.3081

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.083022	45.31344	.6442242	.0704144	7.526736	.4712383	1.101913
Stddev	.011883	.26386	.0018824	.0003178	.055818	.0022117	.004451
%RSD	.5704458	.5822905	.2921910	.4512876	.7416025	.4693438	.4039565
#1	2.091786	45.56733	.6435331	.0700486	7.462395	.4734882	1.106551
#2	2.069497	45.04063	.6427850	.0706221	7.562207	.4690668	1.101512
#3	2.087782	45.33236	.6463544	.0705724	7.555606	.4711598	1.097675

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.07847	.3112863	.3886952	.6976390	1.735686	7.199695	9.090327
Stddev	.14411	.0005345	.0015747	.0031939	.006957	.021925	.048654
%RSD	.7553797	.1716968	.4051324	.4578166	.4008493	.3045274	.5352229
#1	18.91366	.3117885	.3871530	.6959678	1.738526	7.185315	9.057268
#2	19.14092	.3107246	.3886320	.6956274	1.727758	7.224930	9.067518
#3	19.18083	.3113459	.3903005	.7013218	1.740775	7.188840	9.146194

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1374-01MS Acquired: 2/18/2025 14:40:23 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.879521	.2936779	.2015509
Stddev	.004295	.0017346	.0007884
%RSD	.2285199	.5906622	.3911815
#1	1.875912	.2917108	.2019395
#2	1.878380	.2949882	.2006436
#3	1.884272	.2943346	.2020696

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2782.709	58388.81	11024.49	1789.138	3786.484
Stddev	3.693	144.89	121.53	4.004	6.040
%RSD	.1326979	.2481543	1.102354	.2237700	.1595239
#1	2785.390	58223.65	10890.90	1784.520	3787.325
#2	2784.240	58494.52	11128.50	1791.270	3792.060
#3	2778.497	58448.27	11054.06	1791.625	3780.067

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1374-01MSD Acquired: 2/18/2025 14:44:22 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8013357	1.963130	1.511754	1.710836	.3786467	85.88195	.5201654
Stddev	.0016845	.023020	.000768	.008369	.0018543	.20991	.0024206
%RSD	.2102048	1.172619	.0507946	.4891538	.4897236	.2444191	.4653524
#1	.7997491	1.952532	1.512297	1.701752	.3780903	85.69441	.5202857
#2	.8011546	1.947317	1.512091	1.712523	.3771343	85.84274	.5176868
#3	.8031034	1.989540	1.510876	1.718232	.3807156	86.10870	.5225236

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1719784	.1990387	62.92217	.5284520	.2752170	.5005749	160.9311
Stddev	.0007413	.0008034	.11189	.0015688	.0009465	.0023141	.5662
%RSD	.4310392	.4036604	.1778238	.2968731	.3439250	.4622803	.3518358
#1	.1711383	.1985039	62.91100	.5276969	.2741261	.4995141	161.5736
#2	.1725406	.1986495	62.81628	.5302556	.2757037	.4989815	160.7148
#3	.1722564	.1999626	63.03922	.5274035	.2758212	.5032292	160.5049

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.045433	44.45893	.6362357	.0703011	8.020451	.4695091	1.079567
Stddev	.004409	.07713	.0018051	.0001725	.002311	.0016473	.005528
%RSD	.2155726	.1734939	.2837220	.2453372	.0288088	.3508444	.5120435
#1	2.048327	44.37402	.6347897	.0701820	8.020393	.4687630	1.082065
#2	2.040358	44.52467	.6356586	.0702224	8.022790	.4683669	1.083405
#3	2.047614	44.47812	.6382589	.0704988	8.018170	.4713974	1.073231

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.42963	.3060889	.3818796	.6906826	1.722799	7.740767	9.021697
Stddev	.05709	.0003783	.0013101	.0032216	.003956	.023173	.038009
%RSD	.2794622	.1235815	.3430619	.4664305	.2296525	.2993592	.4213032
#1	20.46433	.3057968	.3811669	.6871684	1.721672	7.762309	9.002735
#2	20.36373	.3065162	.3810803	.6913831	1.719528	7.716251	8.996900
#3	20.46082	.3059538	.3833915	.6934963	1.727196	7.743742	9.065457

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1374-01MSD Acquired: 2/18/2025 14:44:22 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.867034	.2982577	.1991249
Stddev	.012419	.0008759	.0011027
%RSD	.6651803	.2936870	.5537630
#1	1.859479	.2982597	.1985966
#2	1.860256	.2973808	.1983858
#3	1.881367	.2991326	.2003923

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2804.123	59499.03	11918.29	1813.870	3808.055
Stddev	5.572	200.93	25.62	11.160	7.252
%RSD	.1987233	.3376983	.2150033	.6152550	.1904277
#1	2806.381	59517.91	11944.89	1808.258	3815.323
#2	2808.212	59289.33	11893.76	1806.630	3808.024
#3	2797.776	59689.85	11916.22	1826.722	3800.820

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1374-01A Acquired: 2/18/2025 14:48:21 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8166271	1.999153	1.548624	1.749135	.3855339	87.13281	.5134156
Stddev	.0127711	.038808	.023629	.025237	.0049441	.96762	.0049609
%RSD	1.563883	1.941238	1.525797	1.442829	1.282409	1.110506	.9662570
#1	.8019409	1.954745	1.521381	1.720146	.3798367	87.70810	.5160128
#2	.8228139	2.016159	1.563551	1.761055	.3880653	86.01567	.5076953
#3	.8251265	2.026555	1.560939	1.766204	.3886997	87.67466	.5165388

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1813698	.2053464	63.42604	.5323449	.2824193	.5188471	155.6851
Stddev	.0013424	.0046785	.70911	.0067271	.0058324	.0126753	2.5247
%RSD	.7401542	2.278351	1.118017	1.263678	2.065170	2.442973	1.621696
#1	.1824080	.1999719	63.93511	.5399770	.2756854	.5042840	158.4665
#2	.1798539	.2085072	62.61610	.5272768	.2858767	.5273932	153.5379
#3	.1818476	.2075603	63.72690	.5297810	.2856957	.5248642	155.0510

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.064545	45.22716	.6517508	.0695500	7.580427	.4729668	1.084398
Stddev	.025759	.49902	.0124846	.0008147	.104134	.0021980	.015332
%RSD	1.247681	1.103357	1.915550	1.171427	1.373725	.4647197	1.413880
#1	2.083231	45.55747	.6373860	.0702825	7.694116	.4749462	1.102101
#2	2.035160	44.65312	.6599852	.0686725	7.489671	.4706014	1.075385
#3	2.075243	45.47090	.6578810	.0696948	7.557494	.4733528	1.075708

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.32552	.3064933	.3896062	.7068464	1.775427	8.471973	9.234263
Stddev	.23845	.0030272	.0064296	.0128425	.014726	.115013	.152497
%RSD	1.233857	.9876873	1.650269	1.816867	.8294339	1.357567	1.651424
#1	19.57155	.3099818	.3821839	.6920576	1.786175	8.600131	9.058228
#2	19.09545	.3045568	.3934608	.7151887	1.758642	8.377735	9.326004
#3	19.30957	.3049413	.3931740	.7132928	1.781463	8.438052	9.318559

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1374-01A Acquired: 2/18/2025 14:48:21 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.909309	.2936770	.2022994
Stddev	.040189	.0021593	.0024901
%RSD	2.104881	.7352734	1.230919
#1	1.862914	.2950157	.2022399
#2	1.931622	.2911860	.1998395
#3	1.933391	.2948294	.2048187

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2756.556	59348.47	11276.74	1799.983	3737.052
Stddev	34.430	700.05	83.29	28.116	58.696
%RSD	1.249023	1.179558	.7386254	1.562016	1.570640
#1	2796.305	58563.82	11217.11	1767.760	3804.654
#2	2735.997	59909.06	11371.91	1819.525	3699.052
#3	2737.368	59572.53	11241.20	1812.665	3707.451

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: PB166747BL Acquired: 2/18/2025 14:52:20 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010006	-.003471	.0008318	-.002564	-.001343	.0035829	-.005464
Stddev	.0014344	.000782	.0007793	.000023	.000270	.0021888	.000865
%RSD	143.3559	22.52287	93.69387	.8928687	20.08075	61.09210	15.83764
#1	-.000324	-.003587	.0016182	-.002585	-.001623	.0059639	-.004495
#2	.002524	-.002638	.0000597	-.002540	-.001320	.0016583	-.005740
#3	.000801	-.004188	.0008175	-.002568	-.001085	.0031264	-.006158

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000445	.0000547	-.011569	.0002638	-.000081	-.000429	.0102145
Stddev	.0000153	.0000328	.003201	.0004632	.000109	.000117	.0063409
%RSD	34.48420	59.88386	27.66563	175.6097	135.2274	27.29176	62.07742
#1	.0000616	.0000688	-.008007	.0006901	-.000005	-.000417	.0095230
#2	.0000321	.0000782	-.012497	-.000229	-.000206	-.000318	.0042477
#3	.0000397	.0000173	-.014204	.000330	-.000032	-.000551	.0168727

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000025	.0051227	.0000470	.0000254	-.022126	-.000092	-.000889
Stddev	.000305	.0079268	.0001149	.0001011	.007087	.001384	.000314
%RSD	1228.769	154.7380	244.4499	397.3307	32.02828	1502.414	35.31171
#1	-.000213	-.003055	-.000025	.0000639	-.028226	-.001470	-.000859
#2	-.000189	.005651	-.000013	.0001017	-.014353	-.000106	-.000591
#3	.000327	.012772	.000180	-.000089	-.023799	.001299	-.001217

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0614048	-.004160	-.000414	-.000624	.0001182	.0020741	.0014434
Stddev	.0264169	.000199	.000290	.000927	.0005238	.0054614	.0030597
%RSD	43.02097	4.780336	70.03901	148.5295	442.9885	263.3094	211.9798
#1	.0317423	-.004131	-.000479	-.000788	-.000182	.0066617	.0045715
#2	.0700751	-.004371	-.000097	.000374	-.000187	.0035277	.0013016
#3	.0823969	-.003977	-.000665	-.001457	.000723	-.003967	-.001543

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: PB166747BL Acquired: 2/18/2025 14:52:20 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0004039	-.002049	-.000047
Stddev	.0016906	.000791	.000033
%RSD	418.5737	38.58786	70.17295
#1	.0020271	-.001378	-.000036
#2	-.001347	-.002921	-.000021
#3	.000531	-.001849	-.000084

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2768.948	57604.29	10398.06	1784.295	4369.465
Stddev	.503	317.78	21.52	30.420	3.959
%RSD	.0181831	.5516671	.2069971	1.704855	.0906120
#1	2768.395	57701.02	10398.59	1791.820	4372.877
#2	2769.380	57862.46	10376.27	1810.246	4370.394
#3	2769.070	57249.38	10419.31	1750.819	4365.124

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: PB166747BS Acquired: 2/18/2025 15:01:52 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7865028	1.972382	.9489873	1.920487	.7712315	1.815179
Stddev	.0022487	.012972	.0035071	.010178	.0054834	.005267
%RSD	.2859166	.6576619	.3695603	.5299723	.7109887	.2901560
#1	.7853784	1.962135	.9468283	1.914526	.7676327	1.810471
#2	.7850380	1.968045	.9470996	1.914697	.7685194	1.820867
#3	.7890920	1.986967	.9530339	1.932240	.7775424	1.814199

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1753077	.1824334	.1876719	.9096027	.3904975	.1886298
Stddev	.0013847	.0013822	.0006867	.0097726	.0008604	.0008138
%RSD	.7898468	.7576682	.3659326	1.074385	.2203442	.4314059
#1	.1759156	.1820766	.1871644	.9162545	.3910482	.1884134
#2	.1762845	.1839590	.1873979	.8983826	.3909382	.1879460
#3	.1737231	.1812645	.1884533	.9141711	.3895059	.1895298

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2985949	2.877417	.1832194	1.771894	.4755625	.0722944
Stddev	.0010676	.018803	.0008381	.006749	.0018051	.0001930
%RSD	.3575354	.6534569	.4574474	.3808908	.3795688	.2669357
#1	.2974384	2.898843	.1837568	1.771798	.4742318	.0724600
#2	.2988035	2.863668	.1836478	1.765195	.4748384	.0723408
#3	.2995427	2.869738	.1822537	1.778691	.4776172	.0720825

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.881677	.2716006	.1961389	9.401015	.2635112	.3875434
Stddev	.017779	.0007325	.0004952	.035218	.0017819	.0011777
%RSD	.6169620	.2696891	.2524685	.3746189	.6761993	.3038928
#1	2.898361	.2709860	.1966664	9.440389	.2621397	.3868018
#2	2.862975	.2714047	.1960662	9.390138	.2655252	.3869271
#3	2.883695	.2724111	.1956841	9.372519	.2628687	.3889014

Sample Name: PB166747BS Acquired: 2/18/2025 15:01:52 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6476206	.1781187	.7793548	5.503378	F -.009116	.1832784
Stddev	.0045666	.0012215	.0069390	.024710	.001920	.0011465
%RSD	.7051357	.6857632	.8903534	.4490044	21.06102	.6255394
#1	.6454678	.1793760	.7873570	5.485900	-.006909	.1844764
#2	.6445283	.1780435	.7757051	5.492586	-.010034	.1831672
#3	.6528656	.1769365	.7750022	5.531649	-.010405	.1821915

Elem	Sr4077
Units	ppm
Avg	.1796788
Stddev	.0004135
%RSD	.2301086
#1	.1799680
#2	.1798631
#3	.1792052

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2733.080	57505.44	10743.83	1787.905	4232.917
Stddev	4.305	288.14	62.54	3.652	4.314
%RSD	.1575224	.5010600	.5821377	.2042369	.1019085
#1	2738.034	57244.67	10749.38	1783.911	4236.239
#2	2730.246	57456.88	10678.70	1788.732	4234.470
#3	2730.958	57814.77	10803.42	1791.073	4228.042

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: PB166735TB Acquired: 2/18/2025 15:05:53 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005942	-.009710	-.000137	.0026282	.0001128	-.000773
Stddev	.003336	.001462	.001149	.0033556	.0003267	.006685
%RSD	56.13959	15.05692	837.7631	127.6770	289.6040	864.5122
#1	-.009385	-.009257	.000566	.0054349	.0004724	.006927
#2	-.005714	-.011345	.000486	-.001089	.0000320	-.005094
#3	-.002726	-.008528	-.001463	.003538	-.000166	-.004152

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002837	-.000110	-.000169	-.002750	.0009946	-.000117
Stddev	.000662	.000050	.000050	.002034	.0002219	.000115
%RSD	23.32519	45.48314	29.39661	73.98509	22.31413	98.37596
#1	-.003553	-.000052	-.000225	-.004560	.0007800	-.000224
#2	-.002248	-.000138	-.000152	-.003141	.0012232	-.000130
#3	-.002711	-.000140	-.000130	-.000548	.0009807	.000004

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005126	.0303029	F .0140875	.0102834	.0006838	-.000143
Stddev	.0002197	.0030179	.0001330	.0115046	.0003760	.000181
%RSD	42.85618	9.959079	.9441251	111.8756	54.98636	126.7695
#1	.0006001	.0270582	.0140084	.0126410	.0006735	-.000018
#2	.0002626	.0330260	.0140130	.0204265	.0003131	-.000060
#3	.0006750	.0308244	.0142410	-.002217	.0010648	-.000350

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 288.9481	-.001769	.0014915	.0907993	-.005941	.0000482
Stddev	2.4592	.000792	.0001852	.0146258	.000167	.0003751
%RSD	.8511042	44.73799	12.41608	16.10781	2.816625	777.7899
#1	290.5736	-.001793	.0014250	.0859544	-.005912	.0004290
#2	290.1518	-.002549	.0017007	.1072328	-.006120	.0000366
#3	286.1188	-.000966	.0013487	.0792107	-.005789	-.000321

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: PB166735TB Acquired: 2/18/2025 15:05:53 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001395	-.000141	.0084250	.0054467	F .0405794	-.003757
Stddev	.0007293	.000507	.0068822	.0012932	.0012507	.000929
%RSD	522.7597	358.3379	81.68870	23.74321	3.082051	24.72695
#1	.0000066	-.000072	.0129084	.0062328	.0393438	-.004616
#2	.0009261	-.000679	.0118655	.0039541	.0418446	-.003882
#3	-.000514	.000327	.0005009	.0061532	.0405496	-.002771

Elem	Sr4077
Units	ppm
Avg	-.000052
Stddev	.000013
%RSD	24.14783
#1	-.000067
#2	-.000043
#3	-.000047

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2534.218	53253.60	10921.82	1642.519	3773.231
Stddev	4.520	136.21	51.30	4.363	5.658
%RSD	.1783701	.2557829	.4696669	.2656572	.1499607
#1	2529.012	53099.95	10905.00	1644.437	3766.750
#2	2537.153	53359.55	10979.41	1645.595	3777.190
#3	2536.488	53301.29	10881.04	1637.525	3775.753

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1373-01 Acquired: 2/18/2025 15:10:22 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.008378	-.009551	-.000909	.0015495	.0038020	-.007099	.3174084
Stddev	.000589	.001923	.001257	.0004088	.0012070	.001759	.0008006
%RSD	7.026449	20.13365	138.2539	26.38392	31.74547	24.77824	.2522306
#1	-.009058	-.010237	-.002175	.0012825	.0051088	-.008554	.3183027
#2	-.008023	-.011037	-.000891	.0020201	.0035681	-.007599	.3167584
#3	-.008054	-.007379	.000339	.0013458	.0027291	-.005144	.3171641

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000102	-.000062	11.32660	.0008339	.0057065	.0078510	3.077187
Stddev	.000039	.000032	.00739	.0003265	.0000064	.0006599	.025410
%RSD	38.46958	52.06499	.0652795	39.15244	.1119871	8.404762	.8257457
#1	-.000086	-.000094	11.32868	.0005422	.0057065	.0081159	3.064909
#2	-.000073	-.000063	11.31840	.0007729	.0057000	.0083373	3.060249
#3	-.000147	-.000029	11.33274	.0011866	.0057128	.0070999	3.106404

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2102713	.1478309	.0033416	.0000192	276.2649	-.000436	12.10202
Stddev	.0007101	.0087133	.0001206	.0003657	4.2692	.000842	.06588
%RSD	.3376840	5.894083	3.609227	1907.695	1.545339	193.2804	.5443815
#1	.2109327	.1552354	.0032275	.0004000	280.4890	-.001343	12.03975
#2	.2103601	.1500278	.0034678	-.000329	271.9519	.000320	12.17100
#3	.2095210	.1382294	.0033294	-.000013	276.3537	-.000284	12.09532

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2115145	.0072139	-.002061	-.000331	-.000329	.1513842	1.246327
Stddev	.0049498	.0002737	.000125	.000817	.000496	.0065821	.002486
%RSD	2.340181	3.793887	6.046966	247.0745	150.8433	4.347966	.1994787
#1	.2151069	.0071301	-.002066	-.000154	-.000811	.1588763	1.249161
#2	.2135682	.0069919	-.002183	-.001222	.000179	.1465311	1.244514
#3	.2058684	.0075197	-.001934	.000384	-.000354	.1487451	1.245306

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1373-01 Acquired: 2/18/2025 15:10:22 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.3390029	-.004825	.0161425
Stddev	.0036832	.000517	.0000768
%RSD	1.086495	10.72087	.4759748
#1	.3354488	-.004631	.0162025
#2	.3387569	-.004433	.0160559
#3	.3428029	-.005411	.0161691

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2505.898	53450.94	10904.03	1647.367	3726.799
Stddev	8.928	127.94	24.78	11.938	9.828
%RSD	.3562743	.2393594	.2272529	.7246853	.2637037
#1	2512.934	53575.02	10932.50	1659.906	3734.676
#2	2508.905	53458.33	10887.32	1636.138	3729.935
#3	2495.855	53319.46	10892.26	1646.058	3715.786

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1373-02 Acquired: 2/18/2025 15:14:47 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005827	-.007531	.0005246	-.002534	.0032367	-.003222	.2532275
Stddev	.002151	.001756	.0007061	.001425	.0013395	.003514	.0012352
%RSD	36.92187	23.31361	134.6071	56.24023	41.38375	109.0859	.4877694
#1	-.003388	-.007940	.0000162	-.002522	.0016904	-.002042	.2518013
#2	-.007454	-.009045	.0002267	-.003964	.0040403	-.007174	.2539405
#3	-.006640	-.005606	.0013308	-.001115	.0039793	-.000449	.2539407

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001598	-.000959	12.62772	.0009406	.0098561	.0109092	22.03656
Stddev	.0000528	.000048	.05030	.0000558	.0002066	.0006140	.01477
%RSD	33.01969	5.028402	.3983268	5.932464	2.095993	5.628323	.0670386
#1	.0001167	-.000908	12.59564	.0008935	.0098133	.0103213	22.03578
#2	.0002187	-.001004	12.68569	.0009261	.0100807	.0108598	22.02219
#3	.0001440	-.000964	12.60182	.0010022	.0096743	.0115464	22.05171

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2081858	.1312788	.0045090	-.000019	261.3296	.0004982	10.50067
Stddev	.0004672	.0022415	.0002693	.000345	.6367	.0016476	.02646
%RSD	.2244075	1.707430	5.971555	1859.180	.2436254	330.7006	.2519921
#1	.2086801	.1331375	.0043773	-.000389	262.0553	.0015455	10.52238
#2	.2081257	.1319093	.0043309	.000295	261.0686	-.001401	10.47119
#3	.2077515	.1287896	.0048187	.000038	260.8649	.001350	10.50843

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2561490	.0179557	-.002457	-.001180	-.000485	.2081512	2.146204
Stddev	.0260475	.0001175	.000432	.000416	.000243	.0042724	.014480
%RSD	10.16887	.6542090	17.56996	35.26236	49.96057	2.052554	.6746800
#1	.2478484	.0178659	-.002810	-.000838	-.000490	.2046662	2.152170
#2	.2853352	.0180887	-.002584	-.001058	-.000726	.2068696	2.129695
#3	.2352635	.0179127	-.001975	-.001643	-.000241	.2129177	2.156749

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1373-02 Acquired: 2/18/2025 15:14:47 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2762420	-.005959	-.006475
Stddev	.0011854	.000204	.000051
%RSD	.4291099	3.429729	.7915662
#1	.2776039	-.005997	-.006534
#2	.2756794	-.006141	-.006449
#3	.2754427	-.005738	-.006441

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2568.813	53753.89	10865.48	1669.350	3813.675
Stddev	1.975	6.62	28.83	7.631	5.427
%RSD	.0768978	.0123182	.2653298	.4571052	.1422940
#1	2570.617	53751.05	10884.72	1669.062	3816.989
#2	2566.702	53761.45	10832.33	1677.121	3816.625
#3	2569.118	53749.15	10879.39	1661.867	3807.413

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CCV04 Acquired: 2/18/2025 15:19:11 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.681165	4.828709	4.696103	4.700103	4.736065	9.374762	9.376706
Stddev	.008473	.014421	.006317	.015734	.010014	.026540	.018151
%RSD	.1810032	.2986585	.1345056	.3347564	.2114473	.2830990	.1935785
#1	4.690537	4.840067	4.700947	4.717765	4.747537	9.399242	9.356527
#2	4.678910	4.812484	4.688959	4.687585	4.729074	9.346556	9.391703
#3	4.674047	4.833577	4.698403	4.694959	4.731584	9.378488	9.381887

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2392659	2.344389	23.34669	.9597272	2.358204	1.198263	4.715675
Stddev	.0010429	.002342	.04814	.0015336	.002752	.000155	.028667
%RSD	.4358806	.0998770	.2062157	.1597923	.1167066	.0129001	.6079076
#1	.2400305	2.344112	23.36641	.9607273	2.357196	1.198438	4.723606
#2	.2380778	2.342198	23.29182	.9579616	2.356099	1.198204	4.683877
#3	.2396892	2.346856	23.38185	.9604927	2.361318	1.198145	4.739540

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.342514	22.61405	2.359595	1.205008	23.51633	2.341666	2.379746
Stddev	.008862	.09817	.003395	.001809	.06749	.012377	.006221
%RSD	.3782975	.4340925	.1439015	.1501254	.2869749	.5285501	.2614308
#1	2.346609	22.56660	2.358964	1.203539	23.48898	2.347289	2.373366
#2	2.332345	22.54862	2.356559	1.204457	23.46681	2.327476	2.385796
#3	2.348588	22.72692	2.363262	1.207029	23.59320	2.350233	2.380076

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.35893	4.792882	4.816721	4.695279	4.698567	4.642890	4.673703
Stddev	.09987	.018662	.008103	.005501	.020643	.022584	.017414
%RSD	.4275261	.3893602	.1682327	.1171659	.4393518	.4864261	.3725940
#1	23.33599	4.806879	4.825723	4.700274	4.707451	4.617594	4.690884
#2	23.27253	4.771695	4.810008	4.689383	4.674969	4.661028	4.656066
#3	23.46827	4.800072	4.814434	4.696180	4.713281	4.650047	4.674160

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CCV04 Acquired: 2/18/2025 15:19:11 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	4.631532	4.647148	4.751338
Stddev	.002258	.023971	.036688
%RSD	.0487471	.5158154	.7721642
#1	4.631682	4.656267	4.711801
#2	4.629204	4.619955	4.757929
#3	4.633712	4.665220	4.784284

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2732.901	56848.04	10112.04	1779.531	4045.654
Stddev	6.122	30.69	26.31	5.682	3.136
%RSD	.2240222	.0539848	.2602174	.3192879	.0775209
#1	2725.890	56874.90	10088.42	1776.893	4042.375
#2	2735.624	56854.63	10140.40	1786.052	4048.625
#3	2737.190	56814.59	10107.31	1775.648	4045.962

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CCB04 Acquired: 2/18/2025 15:23:24 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	.0040320	-.003881	.0007088	-.001845	-.000647	.0040249	-.006913
Stddev	.0006333	.002263	.0004706	.002966	.000549	.0036866	.000356
%RSD	15.70575	58.32057	66.39853	160.8190	84.91266	91.59474	5.152082
#1	.0044386	-.003632	.0009927	.001125	-.000296	.0013397	-.006508
#2	.0033024	-.006258	.0001655	-.001850	-.000365	.0082282	-.007178
#3	.0043551	-.001752	.0009681	-.004808	-.001280	.0025069	-.007052

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000035	.0000267	-.014248	.0002264	.0000410	.0002189	.0075807
Stddev	.0000423	.0000610	.004971	.0001275	.0001102	.0000751	.0015862
%RSD	1191.527	228.4077	34.89215	56.32748	268.6994	34.31189	20.92490
#1	.0000085	.0000271	-.009442	.0000887	.0000105	.0003002	.0089265
#2	.0000431	-.000034	-.019370	.0002500	-.000051	.0002044	.0079836
#3	-.000041	.000087	-.013932	.0003405	.000163	.0001521	.0058318

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000913	.0003840	.0001157	.0001607	.0050037	-.000997	-.000892
Stddev	.0002873	.0077515	.0001698	.0000986	.0067703	.000508	.000070
%RSD	314.6685	2018.787	146.8048	61.37731	135.3042	50.92525	7.877809
#1	.0003687	-.007511	.0002371	.0000688	-.002709	-.001401	-.000810
#2	.0001102	.007984	-.000078	.0001484	.007753	-.000427	-.000931
#3	-.000205	.000678	.000188	.0002649	.009967	-.001161	-.000933

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0449339	.0014148	-.000268	-.000716	-.000551	-.003737	-.001104
Stddev	.0277833	.0007490	.000158	.000605	.000475	.001288	.001860
%RSD	61.83148	52.94082	59.14118	84.47803	86.23954	34.48228	168.5338
#1	.0255924	.0019415	-.000085	-.000137	-.000706	-.003923	-.001959
#2	.0324384	.0017455	-.000362	-.001343	-.000018	-.002365	-.002382
#3	.0767708	.0005573	-.000355	-.000667	-.000930	-.004922	.001030

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CCB04 Acquired: 2/18/2025 15:23:24 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.002469	.0007665	-.000009
Stddev	.002306	.0008447	.000050
%RSD	93.37081	110.2046	567.8548
#1	-.002975	-.000019	-.000008
#2	.000047	.001660	-.000059
#3	-.004480	.000659	.000040

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2772.724	58513.42	10239.68	1817.315	4374.521
Stddev	3.462	109.24	48.12	2.177	6.535
%RSD	.1248735	.1867002	.4699787	.1198155	.1493859
#1	2771.424	58415.20	10185.18	1817.642	4370.528
#2	2776.648	58493.98	10276.33	1814.993	4382.062
#3	2770.099	58631.08	10257.53	1819.311	4370.972

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1373-02DUP Acquired: 2/18/2025 15:27:44 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.010118	-.007095	-.000352	-.002734	.0033575	-.007621	.2418166
Stddev	.001058	.000433	.001040	.001595	.0002199	.002740	.0009430
%RSD	10.45636	6.101293	295.3183	58.32216	6.549125	35.95556	.3899795
#1	-.009019	-.007091	-.001335	-.002106	.0031448	-.007342	.2423999
#2	-.010205	-.007529	-.000459	-.001550	.0033439	-.005032	.2407286
#3	-.011130	-.006664	.000737	-.004548	.0035839	-.010491	.2423212

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001054	-.000852	12.28916	.0005528	.0102127	.0113648	21.44170
Stddev	.0000633	.000144	.02458	.0004547	.0001008	.0004106	.16203
%RSD	60.00328	16.90867	.1999963	82.24126	.9871741	3.612751	.7556784
#1	.0001342	-.000973	12.30964	.0001492	.0101011	.0109312	21.42518
#2	.0001492	-.000692	12.29595	.0010454	.0102401	.0114156	21.28856
#3	.0000329	-.000891	12.26191	.0004639	.0102971	.0117476	21.61135

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2022215	.1293435	.0040770	.0003138	253.3846	.0004961	10.40651
Stddev	.0017715	.0063197	.0001768	.0002009	.5993	.0005303	.03210
%RSD	.8760185	4.885971	4.337662	64.00941	.2365082	106.8863	.3084374
#1	.2013925	.1263089	.0038730	.0002893	252.6949	.0006004	10.37022
#2	.2010166	.1366081	.0041711	.0001264	253.6802	-.000079	10.43116
#3	.2042556	.1251134	.0041870	.0005259	253.7786	.000967	10.41815

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2756557	.0189102	-.002366	-.000532	-.000117	.1998752	2.159136
Stddev	.0165077	.0003557	.000164	.000906	.000254	.0101034	.004574
%RSD	5.988532	1.881016	6.941268	170.2389	216.7694	5.054851	.2118210
#1	.2604128	.0193077	-.002552	-.001268	.000142	.1985846	2.154804
#2	.2931891	.0188011	-.002242	.000480	-.000366	.1904791	2.158686
#3	.2733651	.0186218	-.002304	-.000809	-.000127	.2105618	2.163918

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1373-02DUP Acquired: 2/18/2025 15:27:44 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2820570	-.004612	-.006334
Stddev	.0065086	.000800	.000178
%RSD	2.307542	17.33642	2.809148
#1	.2775743	-.003849	-.006268
#2	.2790743	-.005444	-.006198
#3	.2895224	-.004544	-.006535

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2548.365	54082.27	10969.55	1661.308	3785.028
Stddev	12.306	141.61	52.82	5.426	16.418
%RSD	.4829101	.2618413	.4815106	.3266041	.4337526
#1	2556.781	54226.24	10972.44	1667.218	3794.005
#2	2554.072	54077.44	10915.35	1660.154	3794.999
#3	2534.241	53943.14	11020.87	1656.552	3766.079

Sample Name: Q1373-02LX5 Acquired: 2/18/2025 15:32:08 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005849	-.005318	.0002978	-.003409	.0004348	.0008350	.0402933
Stddev	.001239	.000027	.0006404	.001432	.0003434	.0082457	.0003221
%RSD	21.17736	.5107381	215.0184	42.01026	78.97323	987.5426	.7993462
#1	-.004659	-.005340	.0005973	-.003230	.0000655	-.001819	.0399793
#2	-.005758	-.005327	-.000437	-.004922	.0007444	.010081	.0406229
#3	-.007132	-.005288	.000734	-.002075	.0004947	-.005757	.0402777

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000626	-.000149	2.462429	.0001175	.0019145	.0029696	3.961019
Stddev	.0000201	.000013	.016754	.0002365	.0001723	.0002141	.006558
%RSD	32.18475	8.954754	.6803813	201.2999	8.999270	7.210322	.1655663
#1	.0000818	-.000144	2.450015	-.000001	.0020192	.0030121	3.968179
#2	.0000642	-.000163	2.481485	.000390	.0020087	.0027375	3.959575
#3	.0000417	-.000138	2.455785	-.000037	.0017157	.0031594	3.955303

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0407367	.0353962	.0008927	.0002084	44.82080	-.000112	2.236259
Stddev	.0002922	.0087691	.0000839	.0002351	.16642	.000547	.015316
%RSD	.7173894	24.77406	9.402026	112.8564	.3713064	489.2346	.6848935
#1	.0407290	.0419258	.0007973	.0001823	44.65058	-.000635	2.220948
#2	.0410327	.0254292	.0009550	.0004554	44.82869	.000456	2.236250
#3	.0404484	.0388336	.0009258	-.000013	44.98314	-.000156	2.251580

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0672391	-.000281	-.000626	-.000477	.0000153	.0333468	.4227819
Stddev	.0075184	.000578	.000122	.000169	.0003295	.0022785	.0042576
%RSD	11.18164	205.9611	19.47702	35.37879	2149.807	6.832880	1.007037
#1	.0598284	-.000335	-.000760	-.000323	.0003868	.0328720	.4232251
#2	.0748608	.000323	-.000599	-.000658	-.000099	.0358254	.4183201
#3	.0670282	-.000830	-.000520	-.000451	-.000242	.0313431	.4268006

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1373-02LX5 Acquired: 2/18/2025 15:32:08 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0564689	.0001004	-.001048
Stddev	.0015560	.0007743	.000063
%RSD	2.755551	771.3709	5.994972
#1	.0573257	.0009085	-.001051
#2	.0574081	.0000274	-.000984
#3	.0546727	-.000635	-.001110

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2659.554	56556.21	10287.06	1724.268	4065.390
Stddev	7.308	189.13	31.69	12.445	9.808
%RSD	.2747654	.3344114	.3081042	.7217655	.2412494
#1	2651.183	56764.12	10305.97	1734.406	4055.715
#2	2664.660	56510.13	10250.47	1728.018	4075.325
#3	2662.818	56394.37	10304.75	1710.378	4065.129

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1373-02MS Acquired: 2/18/2025 15:36:24 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8079616	1.790135	.9234996	1.936257	.8115117	1.824009	.4595542
Stddev	.0017415	.027000	.0018886	.000621	.0008999	.003328	.0003086
%RSD	.2155357	1.508255	.2045007	.0320487	.1108920	.1824457	.0671604
#1	.8059716	1.758975	.9256795	1.936694	.8121109	1.820752	.4598127
#2	.8092068	1.804832	.9223589	1.936530	.8104768	1.827403	.4592125
#3	.8087064	1.806598	.9224603	1.935547	.8119472	1.823872	.4596374

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1674784	.1903189	14.57992	.3934191	.2034801	.2969578	27.07360
Stddev	.0011893	.0007798	.05437	.0020959	.0005201	.0011353	.20710
%RSD	.7101389	.4097536	.3729104	.5327473	.2556011	.3822995	.7649508
#1	.1686477	.1904730	14.62992	.3935191	.2037065	.2965891	26.95263
#2	.1662700	.1894735	14.52204	.3954633	.2028852	.2960528	27.31273
#3	.1675173	.1910101	14.58781	.3912750	.2038486	.2982316	26.95543

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3853022	1.841444	.4851191	.0733600	289.4464	.2790847	11.39824
Stddev	.0011494	.014866	.0007706	.0003076	4.2209	.0010853	.02503
%RSD	.2983131	.8073165	.1588397	.4192932	1.458257	.3888798	.2195528
#1	.3850581	1.855958	.4856810	.0737045	288.9935	.2791614	11.41255
#2	.3842945	1.826249	.4842407	.0732627	293.8755	.2801297	11.41281
#3	.3865541	1.842125	.4854356	.0731129	285.4702	.2779631	11.36934

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.21338	.2544678	.4092950	.6706605	.1868050	1.109694	7.873375
Stddev	.11689	.0014488	.0007273	.0024459	.0006189	.014149	.008998
%RSD	1.042447	.5693365	.1776872	.3647011	.3312836	1.275025	.1142872
#1	11.18078	.2557125	.4100707	.6729612	.1875196	1.098996	7.863850
#2	11.34312	.2528774	.4086286	.6680915	.1864472	1.125737	7.874543
#3	11.11625	.2548133	.4091858	.6709289	.1864482	1.104350	7.881733

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1373-02MS Acquired: 2/18/2025 15:36:24 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2909077	.1881556	.1761557
Stddev	.0023263	.0003800	.0003268
%RSD	.7996521	.2019438	.1855149
#1	.2887014	.1885269	.1765300
#2	.2933377	.1881725	.1760103
#3	.2906838	.1877675	.1759269

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2501.129	52943.72	10874.07	1608.781	3712.491
Stddev	6.495	276.99	62.81	1.856	9.799
%RSD	.2596985	.5231834	.5776551	.1153479	.2639435
#1	2493.874	53000.53	10813.27	1610.906	3704.907
#2	2506.404	52642.73	10938.73	1607.482	3723.555
#3	2503.109	53187.91	10870.21	1607.955	3709.011

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1373-02MSD Acquired: 2/18/2025 15:40:33 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7915134	1.782961	.9090309	1.888935	.7888241	1.813068	.4591424
Stddev	.0033352	.013513	.0042276	.002606	.0008123	.002636	.0011291
%RSD	.4213724	.7578962	.4650651	.1379512	.1029753	.1453803	.2459232
#1	.7949423	1.768059	.9132973	1.886635	.7889602	1.810180	.4602168
#2	.7913174	1.786407	.9089522	1.888406	.7879524	1.815344	.4579655
#3	.7882805	1.794418	.9048432	1.891765	.7895598	1.813681	.4592447

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1678201	.1877720	14.56051	.3864646	.2006434	.2927591	26.56796
Stddev	.0010179	.0006214	.01676	.0008570	.0005796	.0018232	.02559
%RSD	.6065492	.3309365	.1150748	.2217649	.2888646	.6227540	.0963332
#1	.1677816	.1884863	14.55926	.3870783	.2013113	.2940180	26.59732
#2	.1668220	.1874733	14.54442	.3854854	.2002734	.2906684	26.55620
#3	.1688567	.1873563	14.57786	.3868301	.2003455	.2935909	26.55036

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3870363	1.817041	.4783861	.0718085	281.5453	.2758462	11.13560
Stddev	.0014618	.032881	.0015051	.0006356	2.3576	.0005579	.02554
%RSD	.3776825	1.809573	.3146205	.8851515	.8373904	.2022378	.2293938
#1	.3884868	1.790356	.4798906	.0712687	284.1425	.2759350	11.10622
#2	.3855635	1.806993	.4768804	.0716477	280.9532	.2763543	11.14806
#3	.3870586	1.853773	.4783873	.0725090	279.5401	.2752492	11.15253

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.86069	.2544639	.4026052	.6613984	.1863113	1.082130	7.880249
Stddev	.05807	.0018674	.0013671	.0031882	.0008940	.012269	.016110
%RSD	.5346961	.7338559	.3395724	.4820448	.4798553	1.133755	.2044332
#1	10.89596	.2530489	.4031732	.6650788	.1872614	1.091905	7.890260
#2	10.89245	.2537623	.4010456	.6594827	.1854867	1.068363	7.861665
#3	10.79367	.2565805	.4035967	.6596336	.1861858	1.086123	7.888821

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1373-02MSD Acquired: 2/18/2025 15:40:33 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2870974	.1873761	.1761301
Stddev	.0020036	.0006960	.0004815
%RSD	.6978629	.3714342	.2733713
#1	.2872298	.1881453	.1765911
#2	.2850309	.1871928	.1756304
#3	.2890314	.1867901	.1761689

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2549.412	54160.76	10868.56	1670.121	3771.702
Stddev	9.556	109.62	72.74	2.699	10.320
%RSD	.3748212	.2023920	.6692645	.1616128	.2736059
#1	2540.530	54188.62	10897.19	1673.185	3760.951
#2	2559.522	54253.76	10922.63	1668.096	3781.528
#3	2548.183	54039.90	10785.86	1669.081	3772.625

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1373-02A Acquired: 2/18/2025 15:44:43 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7760853	1.764555	.8981545	1.854359	.7784725	1.785163	.4593197
Stddev	.0035776	.021381	.0034648	.008529	.0031940	.007830	.0024160
%RSD	.4609773	1.211698	.3857747	.4599489	.4102950	.4386160	.5260066
#1	.7739892	1.741590	.8950322	1.848039	.7756717	1.776833	.4595303
#2	.7740506	1.768188	.8975491	1.850977	.7777948	1.792372	.4616236
#3	.7802162	1.783886	.9018822	1.864060	.7819510	1.786285	.4568053

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1671879	.1851715	14.49079	.3814476	.1985339	.2892892	25.92422
Stddev	.0005108	.0010385	.01418	.0006625	.0006722	.0014271	.06566
%RSD	.3055528	.5608490	.0978892	.1736904	.3385983	.4932975	.2532828
#1	.1666654	.1841737	14.48098	.3807361	.1978463	.2889351	25.94649
#2	.1672119	.1850943	14.48432	.3815599	.1985659	.2880726	25.97584
#3	.1676863	.1862465	14.50705	.3820468	.1991896	.2908600	25.85031

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3879827	1.825826	.4721468	.0699891	273.2490	.2756328	10.94558
Stddev	.0010779	.021772	.0027999	.0001661	.9596	.0011745	.02992
%RSD	.2778253	1.192452	.5930081	.2372791	.3511998	.4261194	.2733207
#1	.3890291	1.811789	.4701130	.0698811	272.1505	.2767479	10.96115
#2	.3880433	1.814781	.4709871	.0699059	273.9247	.2744067	10.91108
#3	.3868758	1.850906	.4753401	.0701803	273.6716	.2757436	10.96449

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.55079	.2516698	.3999557	.6539214	.1859648	1.048591	7.790933
Stddev	.04454	.0011750	.0021611	.0036751	.0012499	.005616	.045484
%RSD	.4221544	.4668795	.5403270	.5620171	.6721403	.5355759	.5838123
#1	10.51989	.2504723	.3987295	.6499424	.1873728	1.043201	7.748270
#2	10.60184	.2528209	.3986866	.6546333	.1849862	1.048164	7.785737
#3	10.53063	.2517161	.4024509	.6571886	.1855353	1.054408	7.838792

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: Q1373-02A Acquired: 2/18/2025 15:44:43 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2847132	.1871345	.1760961
Stddev	.0055897	.0010783	.0005249
%RSD	1.963270	.5761891	.2980696
#1	.2785224	.1876074	.1759285
#2	.2893898	.1878955	.1766843
#3	.2862275	.1859006	.1756754

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2581.542	55591.19	10869.28	1710.856	3821.445
Stddev	5.825	80.76	30.76	2.859	15.328
%RSD	.2256450	.1452791	.2830322	.1671309	.4011123
#1	2587.532	55675.56	10903.71	1708.433	3837.553
#2	2581.197	55514.60	10844.50	1714.010	3819.743
#3	2575.898	55583.40	10859.64	1710.124	3807.039

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: PB166757BL Acquired: 2/18/2025 15:48:52 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000361	-.007542	.0005395	.0004448	.0005703	.0014065	-.004776
Stddev	.002984	.001687	.0004290	.0032946	.0007222	.0026285	.000563
%RSD	826.7395	22.36653	79.52204	740.7287	126.6330	186.8761	11.79295
#1	.001507	-.009177	.0005318	.0016078	.0002066	.0023822	-.004323
#2	-.003802	-.007643	.0001144	-.003274	.0014021	.0034076	-.005406
#3	.001213	-.005807	.0009724	.003000	.0001023	-.001570	-.004597

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000095	-.000114	-.018404	.0006208	-.000233	.0000458	.0088156
Stddev	.000073	.000047	.003575	.0001500	.000088	.0001885	.0040610
%RSD	76.62030	41.42655	19.42600	24.16263	37.80026	411.7862	46.06632
#1	-.000177	-.000098	-.021693	.0007667	-.000133	-.000137	.0041800
#2	-.000065	-.000168	-.018920	.0006285	-.000268	.000035	.0105205
#3	-.000042	-.000077	-.014599	.0004671	-.000297	.000239	.0117463

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007950	.0167875	.0003447	.0003390	-.041005	.0000487	.0002363
Stddev	.0004835	.0022208	.0001951	.0001452	.002085	.0007963	.0001654
%RSD	60.81335	13.22898	56.58200	42.83641	5.085900	1633.516	70.00617
#1	.0009366	.0170870	.0002498	.0001781	-.038661	.0008244	.0001198
#2	.0002566	.0144321	.0002153	.0004604	-.041700	.0000885	.0004257
#3	.0011919	.0188433	.0005691	.0003785	-.042654	-.000767	.0001634

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000665	-.005336	.0001182	-.000342	-.000308	.0105770	.0051667
Stddev	.011980	.000413	.0000484	.000756	.000510	.0036315	.0021782
%RSD	1801.214	7.747643	40.96048	220.7997	165.4629	34.33372	42.15880
#1	.006366	-.005729	.0001407	-.000819	-.000731	.0072088	.0031940
#2	.006137	-.005374	.0000627	.000529	.000258	.0144241	.0075043
#3	-.014498	-.004905	.0001513	-.000736	-.000451	.0100980	.0048016

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: PB166757BL Acquired: 2/18/2025 15:48:52 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0017984	-.003694	-.000057
Stddev	.0017193	.001694	.000003
%RSD	95.59988	45.85373	5.870310
#1	.0020772	-.003262	-.000054
#2	.0033612	-.005563	-.000060
#3	-.000043	-.002259	-.000056

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2727.695	59308.49	11373.02	1799.611	4347.216
Stddev	11.999	162.30	97.83	2.039	21.447
%RSD	.4399077	.2736542	.8602167	.1132807	.4933522
#1	2735.564	59398.08	11455.62	1801.850	4363.803
#2	2733.637	59121.14	11398.47	1799.122	4354.847
#3	2713.884	59406.24	11264.98	1797.861	4322.996

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: PB166757BS Acquired: 2/18/2025 15:53:12 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7869856	1.867322	.9258704	1.847082	.7917964	1.843366	.1702686
Stddev	.0020572	.009820	.0005456	.004402	.0017070	.005419	.0004533
%RSD	.2614072	.5259140	.0589278	.2383206	.2155861	.2939884	.2662448
#1	.7866574	1.865604	.9259221	1.844405	.7928469	1.839268	.1707691
#2	.7891873	1.858473	.9253008	1.844678	.7898267	1.849511	.1698855
#3	.7851122	1.877887	.9263883	1.852162	.7927154	1.841319	.1701514

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1775773	.1831829	.9167214	.3982762	.1890426	.3020561	2.833960
Stddev	.0009827	.0000939	.0079659	.0011657	.0002648	.0000580	.010752
%RSD	.5534231	.0512483	.8689562	.2926855	.1400662	.0192047	.3794083
#1	.1771663	.1831576	.9212803	.3972576	.1888908	.3019913	2.845159
#2	.1786988	.1831043	.9213607	.3980234	.1888887	.3021032	2.823718
#3	.1768667	.1832869	.9075233	.3995475	.1893483	.3020739	2.833003

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1832060	1.762350	.4740310	.0709496	2.794533	.2760393	.1930504
Stddev	.0003952	.011557	.0009585	.0000685	.022759	.0027840	.0003958
%RSD	.2157091	.6557795	.2021968	.0965771	.8144188	1.008547	.2050301
#1	.1828739	1.758890	.4734390	.0709110	2.805997	.2748631	.1933792
#2	.1836431	1.775242	.4735172	.0710287	2.768322	.2792184	.1931609
#3	.1831011	1.752918	.4751369	.0709090	2.809281	.2740365	.1926110

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.097441	.2448660	.4135359	.6502499	.1824936	.7570552	5.111354
Stddev	.085352	.0022583	.0007894	.0013557	.0007101	.0069969	.020699
%RSD	.9382001	.9222563	.1909003	.2084915	.3891331	.9242258	.4049711
#1	9.154293	.2449641	.4138850	.6505123	.1822220	.7599448	5.096334
#2	8.999295	.2470736	.4126321	.6487821	.1819593	.7490763	5.102762
#3	9.138735	.2425602	.4140905	.6514552	.1832994	.7621445	5.134966

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: PB166757BS Acquired: 2/18/2025 15:53:12 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.009218	.1813119	.1809987
Stddev	.001117	.0016953	.0003501
%RSD	12.11408	.9350040	.1934342
#1	-.009463	.1794065	.1813590
#2	-.007999	.1818757	.1806597
#3	-.010192	.1826534	.1809775

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2672.523	58349.70	10648.16	1757.314	4222.290
Stddev	6.111	177.73	48.72	4.277	6.810
%RSD	.2286643	.3045879	.4575540	.2433637	.1612930
#1	2668.445	58410.68	10672.52	1758.944	4221.022
#2	2679.549	58488.92	10592.06	1760.535	4229.645
#3	2669.574	58149.52	10679.90	1752.462	4216.202

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: LR1 Acquired: 2/18/2025 15:57:09 Type: Unk
Method: NON EPA-6010-200.7(v2707) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0158387	.0831954	.0333355	-.165208	-.006885	2010.997	.0194554
Stddev	.0091571	.0014328	.0013655	.006391	.004519	19.873	.0001838
%RSD	57.81480	1.722222	4.096318	3.868544	65.62694	.9882000	.9447281
#1	.0124622	.0815972	.0335329	-.169290	-.011813	1988.307	.0194678
#2	.0088492	.0836237	.0318820	-.157842	-.005906	2019.379	.0192657
#3	.0262046	.0843652	.0345916	-.168491	-.002937	2025.306	.0196326

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0084686	-.001860	1829.926	.0034772	.0265013	-.173475	1081.349
Stddev	.0003213	.000680	7.952	.0006252	.0007854	.003859	2.345
%RSD	3.794019	36.56503	.4345525	17.97916	2.963719	2.224597	.2168747
#1	.0081434	-.002541	1821.057	.0028507	.0258939	-.174460	1083.738
#2	.0084764	-.001859	1836.420	.0041010	.0262217	-.176746	1081.257
#3	.0087859	-.001180	1832.299	.0034799	.0273882	-.169219	1079.051

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.085804	1635.199	.0211655	.0041472	2020.359	.0462322	.1601771
Stddev	.001287	7.221	.0016876	.0011686	31.048	.0016664	.0011999
%RSD	1.500309	.4416162	7.973487	28.17894	1.536760	3.604300	.7490928
#1	-.086106	1634.895	.0229097	.0050217	2049.888	.0479577	.1614600
#2	-.084393	1628.135	.0195408	.0045999	2023.203	.0446321	.1599890
#3	-.086914	1642.568	.0210461	.0028199	1987.987	.0461067	.1590824

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1289.933	.6363715	.0049753	.0057992	-.039172	.1582150	.0661289
Stddev	22.943	.0052068	.0020959	.0020104	.000393	.0158470	.0083992
%RSD	1.778637	.8182041	42.12520	34.66611	1.002421	10.01610	12.70131
#1	1278.228	.6409009	.0073451	.0051361	-.039185	.1748940	.0618086
#2	1316.367	.6375308	.0033655	.0042041	-.039557	.1563934	.0607692
#3	1275.202	.6306827	.0042153	.0080573	-.038772	.1433575	.0758090

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: LR1 Acquired: 2/18/2025 15:57:09 Type: Unk
Method: NON EPA-6010-200.7(v2707) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.251822	-.284864	-1.07006
Stddev	.007053	.002238	.00240
%RSD	2.800664	.7858051	.2243679
#1	-.256733	-.282924	-1.07253
#2	-.243741	-.287313	-1.06990
#3	-.254992	-.284356	-1.06774

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1793.442	38463.08	8872.231	1141.548	2329.331
Stddev	2.986	74.17	47.884	3.597	3.053
%RSD	.1665157	.1928388	.5397075	.3151334	.1310840
#1	1793.011	38545.04	8913.025	1141.929	2331.547
#2	1796.621	38400.58	8884.157	1137.775	2330.599
#3	1790.695	38443.61	8819.511	1144.939	2325.848

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: LR2 Acquired: 2/18/2025 16:02:08 Type: Unk
Method: NON EPA-6010-200.7(v2707) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0089604	-.024667	248.2719	.0053983	-.003834	.1585369	107.3256
Stddev	.0033583	.001232	.7751	.0046593	.002374	.0045076	.6440
%RSD	37.47942	4.995497	.3122044	86.30956	61.90628	2.843269	.6000069
#1	.0097786	-.023476	248.2572	.0079854	-.003511	.1533959	107.4554
#2	.0052686	-.024590	247.5043	.0081900	-.006352	.1618120	107.8947
#3	.0118341	-.025937	249.0543	.0000196	-.001638	.1604028	106.6266

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002624	-.004936	.1764353	.0113057	-.017278	244.8289	.0080672
Stddev	.000090	.000146	.0042774	.0000472	.000449	1.3039	.0044624
%RSD	3.431857	2.967036	2.424326	.4172932	2.598280	.5325574	55.31590
#1	-.002614	-.004903	.1715947	.0113490	-.017659	246.0869	.0036297
#2	-.002540	-.004810	.1780057	.0113127	-.017393	243.4836	.0080176
#3	-.002719	-.005097	.1797055	.0112555	-.016783	244.9162	.0125542

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.91010	-.043679	50.21994	.0038204	.2992862	-.015012	32.61928
Stddev	.37535	.014993	.05476	.0004422	.0067649	.001779	.22914
%RSD	.8747305	34.32567	.1090338	11.57609	2.260347	11.85013	.7024768
#1	42.70061	-.035420	50.25521	.0039715	.2935065	-.016959	32.39446
#2	42.68626	-.060986	50.15686	.0041672	.2976253	-.014605	32.61088
#3	43.34343	-.034632	50.24776	.0033224	.3067269	-.013471	32.85251

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3263219	-.006207	-.008264	-.004379	-.037486	-.003285	2.493122
Stddev	.0247378	.000214	.000505	.000782	.000458	.006619	.033956
%RSD	7.580787	3.447800	6.105035	17.86579	1.221356	201.5161	1.361978
#1	.3470497	-.006440	-.008398	-.003951	-.036963	-.002927	2.486152
#2	.2989367	-.006161	-.008688	-.005282	-.037675	-.010076	2.463192
#3	.3329793	-.006019	-.007706	-.003904	-.037818	.003149	2.530022

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: LR2 Acquired: 2/18/2025 16:02:08 Type: Unk
Method: NON EPA-6010-200.7(v2707) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.020155	-.001539	.0013987
Stddev	.002973	.001299	.0000328
%RSD	14.74944	84.39600	2.347576
#1	-.019118	-.002933	.0013660
#2	-.023507	-.000361	.0014317
#3	-.017840	-.001324	.0013983

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2398.212	56948.24	11085.15	1707.312	4063.251
Stddev	1.676	88.27	61.75	1.744	5.352
%RSD	.0699048	.1549917	.5570419	.1021305	.1317171
#1	2398.455	56923.13	11139.40	1708.624	4059.030
#2	2399.754	57046.34	11017.95	1705.334	4069.271
#3	2396.427	56875.25	11098.10	1707.979	4061.453

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CCV05 Acquired: 2/18/2025 16:06:50 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.891362	4.850113	4.787682	4.932590	4.946942	9.433913	9.723273
Stddev	.031294	.014063	.019066	.033241	.038715	.018020	.078756
%RSD	.6397757	.2899580	.3982336	.6739141	.7826146	.1910179	.8099716
#1	4.860680	4.839040	4.770295	4.902482	4.911782	9.454555	9.646324
#2	4.890174	4.845362	4.784681	4.927025	4.940609	9.425863	9.803719
#3	4.923233	4.865936	4.808071	4.968263	4.988433	9.421320	9.719776

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2294791	2.386492	23.29547	.9569814	2.398581	1.238011	4.828315
Stddev	.0004468	.009051	.02281	.0061761	.010378	.006245	.016881
%RSD	.1946941	.3792515	.0979146	.6453739	.4326800	.5044412	.3496190
#1	.2291023	2.378170	23.31047	.9520698	2.389629	1.232227	4.821359
#2	.2299727	2.385178	23.26922	.9549592	2.396157	1.237173	4.816023
#3	.2293625	2.396128	23.30672	.9639151	2.409956	1.244633	4.847562

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.321406	22.70077	2.402356	1.206633	24.68764	2.344179	2.356097
Stddev	.001675	.11057	.009210	.004472	.10284	.004966	.013315
%RSD	.0721359	.4870870	.3833604	.3705874	.4165468	.2118272	.5651115
#1	2.323171	22.58763	2.393623	1.202057	24.66573	2.346832	2.344064
#2	2.319839	22.70612	2.401468	1.206850	24.59752	2.338450	2.353824
#3	2.321208	22.80858	2.411978	1.210992	24.79966	2.347254	2.370401

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.53749	4.621483	4.897599	4.783596	4.702526	4.833278	4.822147
Stddev	.13717	.018721	.027284	.013882	.010570	.029345	.017568
%RSD	.5590130	.4050826	.5570898	.2902061	.2247672	.6071543	.3643218
#1	24.48867	4.622349	4.873625	4.775946	4.713474	4.809968	4.810456
#2	24.43142	4.639756	4.891885	4.775222	4.701725	4.823634	4.813636
#3	24.69239	4.602344	4.927288	4.799620	4.692380	4.866231	4.842350

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CCV05 Acquired: 2/18/2025 16:06:50 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	4.819143	4.737848	4.793566
Stddev	.023223	.009004	.049285
%RSD	.4818889	.1900342	1.028143
#1	4.804456	4.746332	4.818711
#2	4.807057	4.738810	4.736780
#3	4.845917	4.728402	4.825206

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2641.387	56968.00	10535.11	1742.677	3924.794
Stddev	12.659	264.59	12.40	12.999	11.532
%RSD	.4792432	.4644511	.1177358	.7459052	.2938283
#1	2653.682	57109.72	10527.35	1748.963	3936.752
#2	2642.085	57131.54	10528.57	1751.338	3923.887
#3	2628.394	56662.74	10549.42	1727.730	3913.741

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CCB05 Acquired: 2/18/2025 16:11:01 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem 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	.0005287	-.003239	.0010168	-.000555	-.001384	.0004823	-.004667
Stddev	.0005409	.000748	.0007433	.001062	.000858	.0063095	.000672
%RSD	102.3088	23.09874	73.10368	191.2347	61.98612	1308.271	14.40553
#1	.0000056	-.002929	.0016052	.000048	-.000407	.0001651	-.005384
#2	.0010858	-.002696	.0001814	.000068	-.001729	-.005663	-.004565
#3	.0004948	-.004093	.0012639	-.001782	-.002016	.006944	-.004051

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000121	-.000018	-.008287	.0002245	.0000409	.0009617	.0072065
Stddev	.0000382	.000035	.006277	.0001206	.0000571	.0002897	.0016115
%RSD	315.2184	194.2565	75.74864	53.69472	139.5063	30.11892	22.36186
#1	.0000507	.000012	-.002853	.0000916	.0000655	.0012432	.0090031
#2	.0000112	-.000056	-.015159	.0002551	.0000816	.0006645	.0058886
#3	-.000026	-.000010	-.006850	.0003268	-.000024	.0009775	.0067276

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007007	.0095610	.0000836	.0001756	.1603000	-.001414	-.000934
Stddev	.0001568	.0061249	.0005021	.0000991	.0097682	.001294	.000141
%RSD	22.37925	64.06076	600.3473	56.44797	6.093694	91.53052	15.12814
#1	.0008519	.0029980	-.000234	.0000915	.1574051	-.001290	-.000844
#2	.0005388	.0105603	.000663	.0001504	.1523064	-.002766	-.000860
#3	.0007113	.0151248	-.000177	.0002848	.1711884	-.000186	-.001096

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1477404	-.001334	-.000183	-.000564	.0001363	.0036158	.0008678
Stddev	.0032092	.000027	.000110	.000112	.0004348	.0050339	.0013241
%RSD	2.172197	2.055288	59.90778	19.88852	319.0847	139.2206	152.5835
#1	.1462337	-.001313	-.000087	-.000685	-.000348	.0042648	-.000444
#2	.1514257	-.001324	-.000303	-.000463	.000493	.0082937	.002204
#3	.1455618	-.001365	-.000160	-.000543	.000264	-.001711	.000844

Reviewed By:Janvi
On:2/21/2025 4:44:58 PM
Inst Id :P4
LB :LB134743

Sample Name: CCB05 Acquired: 2/18/2025 16:11:01 Type: Unk
Method: NON EPA-6010-200.7(v2521) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

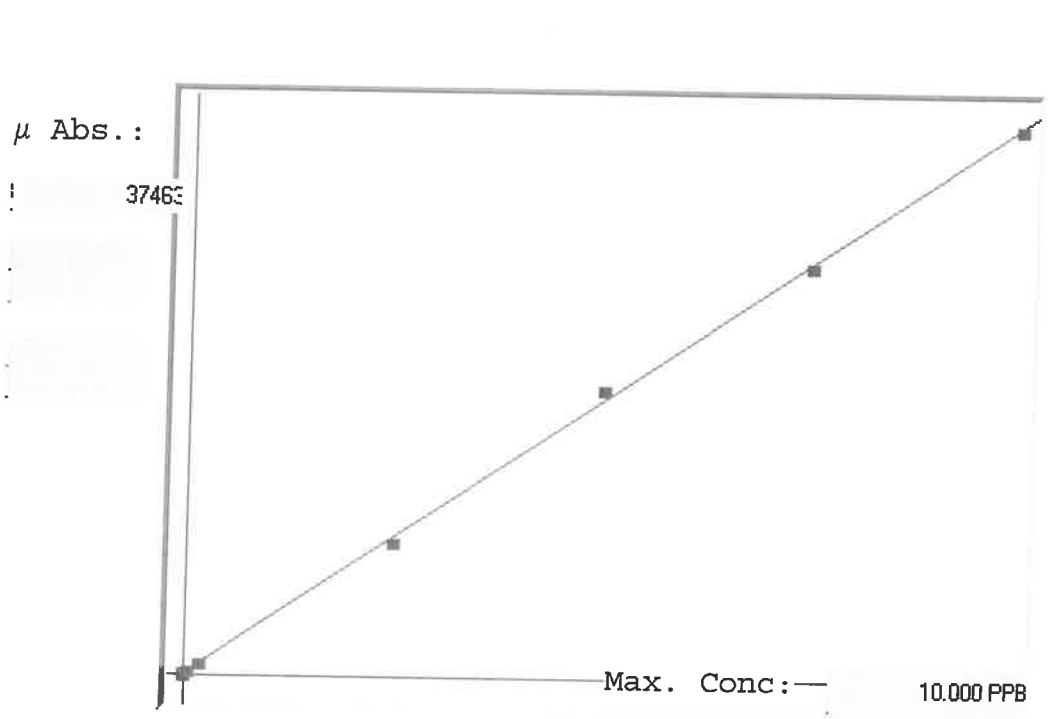
Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.002351	.0008897	.0000175
Stddev	.000484	.0003232	.0000438
%RSD	20.57295	36.32908	250.0331
#1	-.002019	.0010444	-.000014
#2	-.002129	.0005182	-.000001
#3	-.002906	.0011065	.000068

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2755.333	58830.78	11271.02	1802.170	4368.859
Stddev	6.153	103.19	43.11	.441	11.580
%RSD	.2233192	.1753965	.3824891	.0244971	.2650483
#1	2749.814	58713.26	11224.15	1802.662	4362.348
#2	2761.968	58906.55	11279.96	1801.809	4382.229
#3	2754.219	58872.53	11308.97	1802.039	4362.001

Reviewed By:Mohan
On:2/12/2025 11:24:41 AM
Inst Id :CV1
LB :LB134671

LB134671

245.1 / INSTRUMENT ID: CV1



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	%
0.0	0.000	0.000	0.000	123	0.000	123					
0.05	0.050	0.043	-0.007	285	0.0 %	285	0				-14
0.2	0.200	0.198	-0.002	865	0.0 %	865					-1
2.5	2.500	2.406	-0.094	9142	0.0 %	9142					-4
5.0	5.000	5.194	0.194	19591	0.0 %	19591					4
7.5	7.500	7.446	-0.054	28031	0.0 %	28031					-1
10.0	10.000	9.962	-0.038	37463	0.0 %	37463					0

Reviewed By:Mohan
On:2/12/2025 11:24:41 AM
Inst Id :CV1
LB :LB134671

LB134671 INSTRUMENT ID : CV1

Method: 245.1 Operator: Admin Date of Analysis: 11 Feb 2025 14:53:35

Sample ID	Extended ID	µ Abs.	Conc.	Stnd Conc	Method	Units	Date	Type	Type
0.0 - 1	S0	123	-	0.0000	245.1	PPB	11 Feb 2025 15:00:02	S	Std
0.05 - 1	S0.05	285	-	0.0500	245.1	PPB	11 Feb 2025 15:02:19	S	Std
0.2 - 1	S0.2	865	-	0.2000	245.1	PPB	11 Feb 2025 15:04:36	S	Std
2.5 - 1	S2.5	9142	-	2.5000	245.1	PPB	11 Feb 2025 15:06:53	S	Std
5.0 - 1	S5	19591	-	5.0000	245.1	PPB	11 Feb 2025 15:09:10	S	Std
7.5 - 1	S7.5	28031	-	7.5000	245.1	PPB	11 Feb 2025 15:11:26	S	Std
10.0 - 1	S10	37463	-	10.0000	245.1	PPB	11 Feb 2025 15:13:45	S	Std
ICV96 - 1	ICV96	14545	3.8478		245.1	PPB	11 Feb 2025 15:17:18	U	SMPL
ICB96 - 1	ICB96	-55	-0.0473		245.1	PPB	11 Feb 2025 15:19:33	U	SMPL
CCV56 - 1	CCV56	19756	5.2381		245.1	PPB	11 Feb 2025 15:21:50	U	SMPL
CCB56 - 1	CCB56	-164	-0.0764		245.1	PPB	11 Feb 2025 15:24:05	U	SMPL
CRA - 1	CRA	330	0.0554		245.1	PPB	11 Feb 2025 15:28:58	U	SMPL
HighStd - 1	HighStd	38522	10.2446		245.1	PPB	11 Feb 2025 15:31:12	U	SMPL
ChkStd - 1	ChkStd	26155	6.9452		245.1	PPB	11 Feb 2025 15:33:28	U	SMPL
PB166684BL - 1	PBW	76	-0.0123		245.1	PPB	11 Feb 2025 15:35:46	U	SMPL
Q1300-02 - 1	COMP	455	0.0888		245.1	PPB	11 Feb 2025 15:47:46	U	SMPL
Q1322-01 - 1	MANHOLE	28	-0.0251		245.1	PPB	11 Feb 2025 15:50:03	U	SMPL
Q1322-01DUP - 1	MANHOLEDUP	171	0.0130		245.1	PPB	11 Feb 2025 15:52:20	U	SMPL
Q1322-01MS - 1	MANHOLEMS	13426	3.5493		245.1	PPB	11 Feb 2025 15:57:34	U	SMPL
CCV57 - 1	CCV57	18914	5.0134		245.1	PPB	11 Feb 2025 15:59:49	U	SMPL
CCB57 - 1	CCB57	-131	-0.0676		245.1	PPB	11 Feb 2025 16:02:05	U	SMPL
Q1322-01MSD - 1	MANHOLEMSD	14313	3.7859		245.1	PPB	11 Feb 2025 16:04:23	U	SMPL
Q1172-05 - 1	PT-HG-WS	29881	7.9393		245.1	PPB	11 Feb 2025 16:06:39	U	SMPL
Q1322-01LX5 - 1		-482	-0.1612		245.1	PPB	11 Feb 2025 16:13:35	U	SMPL
Q1322-01A - 1		14626	3.8694		245.1	PPB	11 Feb 2025 16:15:53	U	SMPL
PB166684BS - 1	LCSW	14190	3.7531		245.1	PPB	11 Feb 2025 16:18:10	U	SMPL
CCV58 - 1	CCV58	19510	5.1724		245.1	PPB	11 Feb 2025 16:20:28	U	SMPL
CCB58 - 1	CCB58	-137	-0.0692		245.1	PPB	11 Feb 2025 16:22:46	U	SMPL

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB166688

SOP ID : M200.7-Trace Elements-22

SDG No : N/A

Matrix : WATER

Pippete ID: ICP A

Balance ID : N/A

Filter paper ID : N/A

pH Strip ID : M6069

Hood ID : #3

Block ID: 1. HOT BLOCK #1 2. N/A

Start Digest Date: 02/12/2025 **Time :** 10:00 **Temp :** 96 °C

End Digest Date: 02/12/2025 **Time :** 13:05 **Temp :** 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: SKD.

Supervisor Signature: JD

Temp : 1. 96°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
LFS-1	0.25	M6002
LFS-2	0.25	M6011
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
1:1 HNO3	1.00	MP84041
1:1 HCL	0.50	MP84297
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 # 55 : 96 C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
02/12/25 14:05	SKD. met.dig.	JD / Prep Dig
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB166688

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
PB166688BL	PBW688	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	1
PB166688BS	LCS688	<2	50	50	Colorless	Colorless	Clear	Clear	M6002,M6011	2
Q1172-03	PT-MIN-WS	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	3
Q1172-04	PT-TM-WS	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	4
Q1172-06	PT-SIO2-WS	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	5

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB166688 **WorkList ID :** 187646 **Department :** Digestion **Date :** 02-11-2025 15:49:32

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1172-03	PT-MIN-WS	Water	Metals Group3	1:1 HNO3 to pH < 2	CHEM02	QA Of	01/13/2025	200.7
Q1172-04	PT-TM-WS	Water	Metals Group6	1:1 HNO3 to pH < 2	CHEM02	QA Of	01/13/2025	200.7
Q1172-06	PT-SIO2-WS	Water	Silica	1:1 HNO3 to pH < 2	CHEM02	QA Of	01/13/2025	200.7

Date/Time 2/12/25 9:10
Raw Sample Received by: jgp (Metdig)
Raw Sample Relinquished by: SJ (QAO)

Date/Time 2/12/25 10:30
Raw Sample Received by: SJ (QAO)
Raw Sample Relinquished by: jgp (Metdig)

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB166684

SOP ID : M245.1-Mercury-19

SDG No : NA

Matrix : WATER

Pippete ID: HG A

Balance ID : N/A

Filter paper ID : NA

pH Strip ID : M6069

Hood ID : #1

Block ID: 1. HG HOT BLOCK#3 2. N/A

Start Digest Date: 02/11/2025 **Time :** 11:50 **Temp :** 95 °C

End Digest Date: 02/11/2025 **Time :** 13:50 **Temp :** 96 °C

Digestion tube ID: M5595

Block thermometer ID: HG-DIG#3

Dig Technician Signature: MB

Supervisor Signature: [signature]

Temp : 1. 95°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
ICV	30mL	MP84458
CCV	30mL	MP84460
CRA	30mL	MP84462
Blank Spike	0.48mL	MP84449
Matrix Spike	0.48mL	MP84449

Chemical Used	ML/SAMPLE USED	Lot Number
HNO3/H2SO4(1:2)	2.5mL	MP83691
KMnO4 (5%)	4.5mL	MP83692
K2S2O8 (5%)	2.5mL	MP83693
Hydroxylamine HCL (12%)	2.0mL	MP83694
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
0.0 ppb	S0	30mL	MP84450
0.05 ppb	S0.05	30mL	MP84451
0.2 ppb	S0.2	30mL	MP84452
2.5 ppb	S2.5	30mL	MP84453
5.0 ppb	S5.0	30mL	MP84454
7.5 ppb	S7.5	30mL	MP84456
10.0 ppb	S10.0	30mL	MP84457
ICV	ICV	30mL	MP84458
ICB	ICB	30mL	MP84459
CCV	CCV	30mL	MP84460
CCB	CCB	30mL	MP84461
CRI	CRI	30mL	MP84462
CHK STD	CHK STD	30mL	MP84463

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
2/11/25 @ 14:05	MB - Dig. Lab	MB Metal Lab
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB166684

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Comment	Prep Pos
PB166684BL	PBW684	30	30	<2	N/A	3-1
PB166684BS	LCS684	30	30	<2	MP84449	2
Q1172-05	PT-HG-WS	30	30	<2	N/A	3
Q1300-02	COMP	30	30	<2	N/A	4
Q1322-01	MANHOLE	30	30	<2	N/A	5
Q1322-01DUP	MANHOLEDUP	30	30	<2	N/A	6
Q1322-01MS	MANHOLEMS	30	30	<2	MP84449	7
Q1322-01MSD	MANHOLEMSD	30	30	<2	MP84449	8

WORKLIST(Hardcopy Internal Chain)

WorkList Name : 021125_245.1 **WorkList ID :** 187637 **Department :** Digestion **Date :** 02-11-2025 10:45:22

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1300-02	COMP	Water	Mercury	1:1 HNO3 to pH < 2	ARAM01	D11	02/05/2025	245.1
Q1172-05	PT-HG-WS	Water	Mercury	1:1 HNO3 to pH < 2	CHEM02	QA Of	01/13/2025	245.1
Q1322-01	MANHOLE	Water	Mercury	1:1 HNO3 to pH < 2	SPEC01	N41	02/06/2025	245.1

Date/Time 2/11/25 @ 11:25

Raw Sample Received by: [illegible]

Raw Sample Relinquished by: [illegible]

Date/Time 2/11/25 @ 12:35

Raw Sample Received by: [illegible]

Raw Sample Relinquished by: [illegible]

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

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB134671

Review By	jaswal	Review On	2/11/2025 10:37:57 PM
Supervise By	Mohan	Supervise On	2/12/2025 11:24:41 AM

STD. NAME	STD REF.#
ICAL Standard	MP84450,MP84451,MP84452,MP84453,MP84454,MP84456,MP84457
ICV Standard	MP84458
CCV Standard	MP84460
ICSA Standard	
CRI Standard	MP84462
LCS Standard	
Chk Standard	MP84459,MP84461,MP84463,MP84447

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	02/11/25 15:00		Mohan	OK
2	S0.05	S0.05	CAL2	02/11/25 15:02		Mohan	OK
3	S0.2	S0.2	CAL3	02/11/25 15:04		Mohan	OK
4	S2.5	S2.5	CAL4	02/11/25 15:06		Mohan	OK
5	S5	S5	CAL5	02/11/25 15:09		Mohan	OK
6	S7.5	S7.5	CAL6	02/11/25 15:11		Mohan	OK
7	S10	S10	CAL7	02/11/25 15:13		Mohan	OK
8	ICV96	ICV96	ICV	02/11/25 15:17		Mohan	OK
9	ICB96	ICB96	ICB	02/11/25 15:19		Mohan	OK
10	CCV56	CCV56	CCV	02/11/25 15:21		Mohan	OK
11	CCB56	CCB56	CCB	02/11/25 15:24		Mohan	OK
12	CRA	CRA	CRDL	02/11/25 15:28		Mohan	OK
13	HighStd	HighStd	HIGH STD	02/11/25 15:31		Mohan	OK
14	ChkStd	ChkStd	SAM	02/11/25 15:33		Mohan	OK
15	PB166684BL	PB166684BL	MB	02/11/25 15:35		Mohan	OK
16	Q1300-02	COMP	SAM	02/11/25 15:47		Mohan	OK
17	Q1322-01	MANHOLE	SAM	02/11/25 15:50		Mohan	OK
18	Q1322-01DUP	MANHOLEDUP	DUP	02/11/25 15:52		Mohan	OK

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

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB134671

Review By	jaswal	Review On	2/11/2025 10:37:57 PM
Supervise By	Mohan	Supervise On	2/12/2025 11:24:41 AM

STD. NAME	STD REF.#
ICAL Standard	MP84450,MP84451,MP84452,MP84453,MP84454,MP84456,MP84457
ICV Standard	MP84458
CCV Standard	MP84460
ICSA Standard	
CRI Standard	MP84462
LCS Standard	
Chk Standard	MP84459,MP84461,MP84463,MP84447

19	Q1322-01MS	MANHOLEMS	MS	02/11/25 15:57		Mohan	OK
20	CCV57	CCV57	CCV	02/11/25 15:59		Mohan	OK
21	CCB57	CCB57	CCB	02/11/25 16:02		Mohan	OK
22	Q1322-01MSD	MANHOLEMSD	MSD	02/11/25 16:04		Mohan	OK
23	Q1172-05	PT-HG-WS	SAM	02/11/25 16:06		Mohan	OK
24	Q1322-01L	MANHOLEL	SD	02/11/25 16:13		Mohan	OK
25	Q1322-01A	MANHOLEA	PS	02/11/25 16:15		Mohan	OK
26	PB166684BS	PB166684BS	LCS	02/11/25 16:18		Mohan	OK
27	CCV58	CCV58	CCV	02/11/25 16:20		Mohan	OK
28	CCB58	CCB58	CCB	02/11/25 16:22		Mohan	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB134704

Review By	kareem	Review On	2/13/2025 5:06:02 PM
Supervise By	JANVI	Supervise On	2/13/2025 5:07:41 PM

STD. NAME	STD REF.#
ICAL Standard	MP84204,MP84381,MP84383,MP84384,MP84385,MP84386,MP84388
ICV Standard	MP84446
CCV Standard	MP84392
ICSA Standard	MP84230,MP84231
CRI Standard	
LCS Standard	MP84387
Chk Standard	MP84218,MP84219

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	02/12/25 11:47		Kareem	OK
2	S1	S1	CAL2	02/12/25 11:52		Kareem	OK
3	S2	S2	CAL3	02/12/25 11:56		Kareem	OK
4	S3	S3	CAL4	02/12/25 12:00		Kareem	OK
5	S4	S4	CAL5	02/12/25 12:04		Kareem	OK
6	S5	S5	CAL6	02/12/25 12:09		Kareem	OK
7	ICV01	ICV01	ICV	02/12/25 12:59		Kareem	OK
8	LLICV01	LLICV01	LLICV	02/12/25 13:08		Kareem	OK
9	ICB01	ICB01	ICB	02/12/25 13:12		Kareem	OK
10	CRI01	CRI01	CRDL	02/12/25 13:17		Kareem	OK
11	ICSA01	ICSA01	ICSA	02/12/25 13:21		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	02/12/25 13:25		Kareem	OK
13	ICSADL	ICSADL	ICSA	02/12/25 13:31		Kareem	OK
14	ICSABDL	ICSABDL	ICSAB	02/12/25 13:35		Kareem	OK
15	CCV01	CCV01	CCV	02/12/25 13:39		Kareem	OK
16	CCB01	CCB01	CCB	02/12/25 13:43		Kareem	OK
17	Q1341-01	HAR-ROLLOFFS	SAM	02/12/25 13:48		Kareem	OK
18	Q1343-01	WC-9	SAM	02/12/25 13:52		Kareem	OK

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Fax : 908 789 8922

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB134704

Review By	kareem	Review On	2/13/2025 5:06:02 PM
Supervise By	JANVI	Supervise On	2/13/2025 5:07:41 PM

STD. NAME	STD REF.#
ICAL Standard	MP84204,MP84381,MP84383,MP84384,MP84385,MP84386,MP84388
ICV Standard	MP84446
CCV Standard	MP84392
ICSA Standard	MP84230,MP84231
CRI Standard	
LCS Standard	MP84387
Chk Standard	MP84218,MP84219

19	Q1343-05	WC-10	SAM	02/12/25 13:56		Kareem	OK
20	Q1343-09	WC-7	SAM	02/12/25 14:00		Kareem	OK
21	Q1343-09DUP	WC-7DUP	DUP	02/12/25 14:04		Kareem	OK
22	Q1343-09L	WC-7L	SD	02/12/25 14:08		Kareem	OK
23	Q1343-09MS	WC-7MS	MS	02/12/25 14:13	0.1 ML M6010 AND M6001 WERE ADDED	Kareem	OK
24	Q1343-09MSD	WC-7MSD	MSD	02/12/25 14:17	0.1 ML M6010 AND M6001 WERE ADDED	Kareem	OK
25	Q1343-09A	WC-7A	PS	02/12/25 14:21	0.1 ML M6010 AND M6001 WERE ADDED	Kareem	OK
26	Q1343-13	WC-13	SAM	02/12/25 14:25		Kareem	OK
27	CCV02	CCV02	CCV	02/12/25 14:29		Kareem	OK
28	CCB02	CCB02	CCB	02/12/25 14:33		Kareem	OK
29	Q1343-17	WC-14	SAM	02/12/25 14:37		Kareem	OK
30	PB166634BL	PB166634BL	MB	02/12/25 14:41		Kareem	OK
31	PB166634BS	PB166634BS	LCS	02/12/25 14:46	0.1 ML M6010 AND M6001 WERE ADDED	Kareem	OK
32	Q1324-01	WATER TREATMENT	SAM	02/12/25 14:50		Kareem	OK
33	Q1324-01DUP	WATER TREATMENT	DUP	02/12/25 14:55		Kareem	OK
34	Q1324-01L	WATER TREATMENT	SD	02/12/25 14:59		Kareem	OK
35	Q1324-01MS	WATER TREATMENT	MS	02/12/25 15:03	0.1 ML M6010 AND M6001 WERE ADDED	Kareem	OK
36	Q1324-01MSD	WATER TREATMENT	MSD	02/12/25 15:07	0.1 ML M6010 AND M6001 WERE ADDED	Kareem	OK

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Supervise By	JANVI	Supervise On	2/13/2025 5:07:41 PM

STD. NAME	STD REF.#
ICAL Standard	MP84204,MP84381,MP84383,MP84384,MP84385,MP84386,MP84388
ICV Standard	MP84446
CCV Standard	MP84392
ICSA Standard	MP84230,MP84231
CRI Standard	
LCS Standard	MP84387
Chk Standard	MP84218,MP84219

37	Q1324-01A	WATER TREATMENT	PS	02/12/25 15:12	0.1 ML M6010 AND M6001 WERE ADDED	Kareem	OK
38	PB166635BL	PB166635BL	MB	02/12/25 15:16		Kareem	OK
39	CCV03	CCV03	CCV	02/12/25 15:20		Kareem	OK
40	CCB03	CCB03	CCB	02/12/25 15:24		Kareem	OK
41	PB166635BS	PB166635BS	LCS	02/12/25 15:29	0.1 ML M6010 AND M6001 WERE ADDED	Kareem	OK
42	PB166651TB	PB166651TB	MB	02/12/25 15:33		Kareem	OK
43	Q1343-04	WC-9	SAM	02/12/25 15:37		Kareem	OK
44	Q1343-08	WC-10	SAM	02/12/25 15:42		Kareem	OK
45	Q1343-12	WC-7	SAM	02/12/25 15:46		Kareem	OK
46	Q1343-16	WC-13	SAM	02/12/25 15:51		Kareem	OK
47	Q1343-20	WC-14	SAM	02/12/25 15:55		Kareem	OK
48	Q1344-02	SOIL-1	SAM	02/12/25 15:59		Kareem	OK
49	Q1344-04	SOIL-2	SAM	02/12/25 16:04		Kareem	OK
50	Q1346-02	SOIL-COMP	SAM	02/12/25 16:08		Kareem	OK
51	CCV04	CCV04	CCV	02/12/25 16:13		Kareem	OK
52	CCB04	CCB04	CCB	02/12/25 16:17		Kareem	OK
53	Q1346-02DUP	SOIL-COMPDUP	DUP	02/12/25 16:21		Kareem	OK
54	Q1346-02L	SOIL-COMPL	SD	02/12/25 16:26		Kareem	OK
55	Q1346-02MS	SOIL-COMPMS	MS	02/12/25 16:30	0.1 ML M6010 AND M6001 WERE ADDED	Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB134704

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Supervise By	JANVI	Supervise On	2/13/2025 5:07:41 PM

STD. NAME	STD REF.#
ICAL Standard	MP84204,MP84381,MP84383,MP84384,MP84385,MP84386,MP84388
ICV Standard	MP84446
CCV Standard	MP84392
ICSA Standard	MP84230,MP84231
CRI Standard	
LCS Standard	MP84387
Chk Standard	MP84218,MP84219

56	Q1346-02MSD	SOIL-COMPMSD	MSD	02/12/25 16:34	0.1 ML M6010 AND M6001 WERE ADDED	Kareem	OK
57	Q1346-02A	SOIL-COMPA	PS	02/12/25 16:39	0.1 ML M6010 AND M6001 WERE ADDED	Kareem	OK
58	PB166680BL	PB166680BL	MB	02/12/25 16:43		Kareem	OK
59	PB166680BS	PB166680BS	LCS	02/12/25 16:47	0.1 ML M6010 AND M6001 WERE ADDED	Kareem	OK
60	Q1172-04	PT-TM-WS	SAM	02/12/25 16:55		Kareem	OK
61	Q1346-01	SOIL-COMP	SAM	02/12/25 17:00		Kareem	OK
62	CCV05	CCV05	CCV	02/12/25 17:04		Kareem	OK
63	CCB05	CCB05	CCB	02/12/25 17:08		Kareem	OK
64	PB166704BL	PB166704BL	MB	02/12/25 17:12		Kareem	OK
65	PB166704BS	PB166704BS	LCS	02/12/25 17:17	0.1 ML M6010 AND M6001 WERE ADDED	Kareem	OK
66	Q1346-03	CONCRETE	SAM	02/12/25 17:21		Kareem	OK
67	Q1353-01	346	SAM	02/12/25 17:25		Kareem	OK
68	Q1353-01DUP	346DUP	DUP	02/12/25 17:29		Kareem	OK
69	Q1353-01L	346L	SD	02/12/25 17:34		Kareem	OK
70	Q1353-01MS	346MS	MS	02/12/25 17:38	0.1 ML M6010 AND M6001 WERE ADDED	Kareem	OK
71	Q1353-01MSD	346MSD	MSD	02/12/25 17:42	0.1 ML M6010 AND M6001 WERE ADDED	Kareem	OK
72	Q1353-01A	346A	PS	02/12/25 17:46	0.1 ML M6010 AND M6001 WERE ADDED	Kareem	OK
73	Q1354-01	NB-08-021125	SAM	02/12/25 17:50		Kareem	OK

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Daily Analysis Runlog For Sequence/QCBatch ID # LB134704

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Supervise By	JANVI	Supervise On	2/13/2025 5:07:41 PM

STD. NAME	STD REF.#
ICAL Standard	MP84204,MP84381,MP84383,MP84384,MP84385,MP84386,MP84388
ICV Standard	MP84446
CCV Standard	MP84392
ICSA Standard	MP84230,MP84231
CRI Standard	
LCS Standard	MP84387
Chk Standard	MP84218,MP84219

74	CCV06	CCV06	CCV	02/12/25 17:55		Kareem	OK
75	CCB06	CCB06	CCB	02/12/25 17:59		Kareem	OK
76	PB166414BL	PB166414BL	MB	02/12/25 18:08		Kareem	OK
77	PB166414BS	PB166414BS	LCS	02/12/25 18:12	0.1 ML M6010 AND M6001 WERE ADDED	Kareem	OK
78	PB166688BL	PB166688BL	MB	02/12/25 18:16		Kareem	OK
79	PB166688BS	PB166688BS	LCS	02/12/25 18:20	0.1 ML M6010 AND M6001 WERE ADDED	Kareem	OK
80	LR1	LR1	HIGH STD	02/12/25 18:24		Kareem	OK
81	LR2	LR2	HIGH STD	02/12/25 18:29		Kareem	OK
82	CCV07	CCV07	CCV	02/12/25 18:34		Kareem	OK
83	CCB07	CCB07	CCB	02/12/25 18:38		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB134743

Review By	kareem	Review On	2/19/2025 10:19:34 AM
Supervise By	Janvi	Supervise On	2/21/2025 4:44:58 PM

STD. NAME	STD REF.#
ICAL Standard	MP84204,MP84223,MP84224,MP84225,MP84226,MP84228
ICV Standard	MP84446
CCV Standard	MP84232
ICSA Standard	MP84230,MP84231
CRI Standard	MP84228
LCS Standard	
Chk Standard	MP84218,MP84219

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	02/18/25 11:19		Kareem	OK
2	S1	S1	CAL2	02/18/25 11:24		Kareem	OK
3	S2	S2	CAL3	02/18/25 11:28		Kareem	OK
4	S3	S3	CAL4	02/18/25 11:32		Kareem	OK
5	S4	S4	CAL5	02/18/25 11:37		Kareem	OK
6	S5	S5	CAL6	02/18/25 11:41		Kareem	OK
7	ICV01	ICV01	ICV	02/18/25 11:58		Kareem	OK
8	LLICV01	LLICV01	LLICV	02/18/25 12:10		Kareem	OK
9	ICB01	ICB01	ICB	02/18/25 12:14		Kareem	OK
10	CRI01	CRI01	CRDL	02/18/25 12:18		Kareem	OK
11	ICSA01	ICSA01	ICSA	02/18/25 12:23		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	02/18/25 12:29		Kareem	OK
13	ICSADL	ICSADL	ICSA	02/18/25 12:33		Kareem	OK
14	ICSABDL	ICSABDL	ICSAB	02/18/25 12:37		Kareem	OK
15	CCV01	CCV01	CCV	02/18/25 12:41		Kareem	OK
16	CCB01	CCB01	CCB	02/18/25 12:45		Kareem	OK
17	Q1322-01	MANHOLE	SAM	02/18/25 12:50		Kareem	OK
18	Q1322-01DUP	MANHOLEDUP	DUP	02/18/25 12:54		Kareem	OK

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Supervise By	Janvi	Supervise On	2/21/2025 4:44:58 PM

STD. NAME	STD REF.#
ICAL Standard	MP84204,MP84223,MP84224,MP84225,MP84226,MP84228
ICV Standard	MP84446
CCV Standard	MP84232
ICSA Standard	MP84230,MP84231
CRI Standard	MP84228
LCS Standard	
Chk Standard	MP84218,MP84219

19	Q1322-01L	MANHOLEL	SD	02/18/25 12:59		Kareem	OK
20	Q1322-01MS	MANHOLEMS	MS	02/18/25 13:03	0.1 ML M6010 AND M6001 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
21	Q1322-01MSD	MANHOLEMSD	MSD	02/18/25 13:07	0.1 ML M6010 AND M6001 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
22	Q1322-01A	MANHOLEA	PS	02/18/25 13:11	0.1 ML M6010 AND M6001 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
23	PB166737BL	PB166737BL	MB	02/18/25 13:15		Kareem	OK
24	PB166737BS	PB166737BS	LCS	02/18/25 13:20	0.1 ML M6010 AND M6001 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
25	Q1366-01	HD-01-2132025	SAM	02/18/25 13:24		Kareem	OK
26	Q1366-01DUP	HD-01-2132025DUP	DUP	02/18/25 13:28		Kareem	OK
27	CCV02	CCV02	CCV	02/18/25 13:32		Kareem	OK
28	CCB02	CCB02	CCB	02/18/25 13:36		Kareem	OK
29	Q1366-01L	HD-01-2132025L	SD	02/18/25 13:41		Kareem	OK
30	Q1366-01MS	HD-01-2132025MS	MS	02/18/25 13:45	0.1 ML M6010 AND M6001 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
31	Q1366-01MSD	HD-01-2132025MSD	MSD	02/18/25 13:49	0.1 ML M6010 AND M6001 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
32	Q1366-01A	HD-01-2132025A	PS	02/18/25 13:53	0.1 ML M6010 AND M6001 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK

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Instrument ID: P4

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Supervise By	Janvi	Supervise On	2/21/2025 4:44:58 PM

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ICV Standard	MP84446
CCV Standard	MP84232
ICSA Standard	MP84230,MP84231
CRI Standard	MP84228
LCS Standard	
Chk Standard	MP84218,MP84219

33	PB166731BL	PB166731BL	MB	02/18/25 13:58		Kareem	OK
34	PB166731BS	PB166731BS	LCS	02/18/25 14:02	0.1 ML M6010 AND M6001 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
35	Q1172-03	PT-MIN-WS	SAM	02/18/25 14:06		Kareem	OK
36	Q1172-06	PT-SIO2-WS	SAM	02/18/25 14:10		Kareem	OK
37	Q1372-01	AU-05-021425	SAM	02/18/25 14:15		Kareem	OK
38	Q1374-01	TR-05-02142025	SAM	02/18/25 14:19		Kareem	OK
39	CCV03	CCV03	CCV	02/18/25 14:23		Kareem	OK
40	CCB03	CCB03	CCB	02/18/25 14:27		Kareem	OK
41	Q1374-01DUP	TR-05-02142025DUP	DUP	02/18/25 14:32		Kareem	OK
42	Q1374-01L	TR-05-02142025L	SD	02/18/25 14:36		Kareem	OK
43	Q1374-01MS	TR-05-02142025MS	MS	02/18/25 14:40	0.1 ML M6010 AND M6001 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
44	Q1374-01MSD	TR-05-02142025MSD	MSD	02/18/25 14:44	0.1 ML M6010 AND M6001 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
45	Q1374-01A	TR-05-02142025A	PS	02/18/25 14:48	0.1 ML M6010 AND M6001 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
46	PB166747BL	PB166747BL	MB	02/18/25 14:52		Kareem	OK
47	PB166747BS	PB166747BS	LCS	02/18/25 15:01	0.1 ML M6010 AND M6001 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
48	PB166735TB	PB166735TB	MB	02/18/25 15:05		Kareem	OK

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Instrument ID: P4

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Supervise By	Janvi	Supervise On	2/21/2025 4:44:58 PM

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ICV Standard	MP84446
CCV Standard	MP84232
ICSA Standard	MP84230,MP84231
CRI Standard	MP84228
LCS Standard	
Chk Standard	MP84218,MP84219

49	Q1373-01	VB27161	SAM	02/18/25 15:10		Kareem	OK
50	Q1373-02	VDR25992	SAM	02/18/25 15:14		Kareem	OK
51	CCV04	CCV04	CCV	02/18/25 15:19		Kareem	OK
52	CCB04	CCB04	CCB	02/18/25 15:23		Kareem	OK
53	Q1373-02DUP	VDR25992DUP	DUP	02/18/25 15:27		Kareem	OK
54	Q1373-02L	VDR25992L	SD	02/18/25 15:32		Kareem	OK
55	Q1373-02MS	VDR25992MS	MS	02/18/25 15:36	0.1 ML M6010 AND M6001 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
56	Q1373-02MSD	VDR25992MSD	MSD	02/18/25 15:40	0.1 ML M6010 AND M6001 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
57	Q1373-02A	VDR25992A	PS	02/18/25 15:44	0.1 ML M6010 AND M6001 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
58	PB166757BL	PB166757BL	MB	02/18/25 15:48		Kareem	OK
59	PB166757BS	PB166757BS	LCS	02/18/25 15:53	0.1 ML M6010 AND M6001 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
60	LR1	LR1	HIGH STD	02/18/25 15:57		Kareem	OK
61	LR2	LR2	HIGH STD	02/18/25 16:02		Kareem	OK
62	CCV05	CCV05	CCV	02/18/25 16:06		Kareem	OK
63	CCB05	CCB05	CCB	02/18/25 16:11		Kareem	OK

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Prep Standard - Chemical Standard Summary

Order ID : Q1172

Test : Hardness, Calcium,Hardness, Total,Mercury,Metals Group3,Metals Group6,Silica

Prepbatch ID : PB166684,PB166688,

Sequence ID/Qc Batch ID: LB134671,LB134704,LB134743,LB134743,

Standard ID :
MP83691,MP83692,MP83693,MP83694,MP84041,MP84204,MP84218,MP84219,MP84223,MP84224,MP84225,MP84226,MP84227,MP84228,MP84230,MP84231,MP84232,MP84297,MP84381,MP84382,MP84383,MP84384,MP84385,MP84386,MP84387,MP84388,MP84392,MP84446,MP84447,MP84449,MP84450,MP84451,MP84452,MP84453,MP84454,MP84456,MP84457,MP84458,MP84459,MP84460,MP84461,MP84462,MP84463,

Chemical ID :
M4371,M4465,M4884,M4916,M5062,M5130,M5192,M5218,M5223,M5288,M5289,M5298,M5393,M5429,M5467,M5472,M5476,M5496,M5497,M5498,M5513,M5519,M5532,M5658,M5697,M5747,M5748,M5798,M5799,M5800,M5801,M5802,M5811,M5814,M5815,M5816,M5817,M5819,M5820,M5875,M5882,M5884,M5959,M5961,M5962,M5970,M5977,M5978,M5985,M6002,M6011,M6021,M6023,M6025,M6028,M6030,M6032,M6041,M6077,M6121,M6126,M6127,M6128,M6144,M6145,M6146,M6150,W3112,

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3965	2:1 H2SO4 : HNO3	MP83691	12/18/2024	06/03/2025	Mohan Bera	None	None	Sarabjit Jaswal 12/18/2024

FROM 1600.00000ml of M6041 + 800.00000ml of M6126 = Final Quantity: 3200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
65	POTASSIUM PERMANGANATE SOLUTION 5 %	MP83692	12/18/2024	06/18/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 12/18/2024

FROM 100.00000gram of M4916 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
66	POTASSIUM PERSULFATE SOLUTION 5 %	MP83693	12/18/2024	06/18/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 12/18/2024

FROM 100.00000ml of M4465 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
67	SODIUM CHLORIDE - HYDROXYL- CHLORIDE SOLUTION	MP83694	12/18/2024	06/18/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 12/18/2024

FROM 2000.00000ml of W3112 + 240.00000gram of M4371 + 240.00000gram of M5884 = Final Quantity: 2000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
169	1:1HNO3	MP84041	01/14/2025	07/14/2025	Eman Mughal	None	None	Sarabjit Jaswal 01/16/2025

FROM 1250.00000ml of M6126 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
902	ICP AES CAL BLK (SO/ICB/CCB)	MP84204	01/24/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 01/27/2025

FROM 125.00000ml of M6121 + 2350.00000ml of W3112 + 25.00000ml of M6126 = 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
919	ICP AES INTERNAL STD	MP84218	01/24/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 01/27/2025

FROM 1.00000ml of M5959 + 10.00000ml of M5985 + 1969.00000ml of W3112 + 20.00000ml of M6126 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
903	ICP AES RINSE SOLN	MP84219	01/24/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 01/27/2025

FROM 200.00000ml of M6126 + 9800.00000ml of W3112 = Final Quantity: 10000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
907	ICP AES STD S (S5)	MP84223	01/24/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 01/28/2025

FROM 5.00000ml of M5393 + 5.00000ml of M5467 + 5.00000ml of M5472 + 5.00000ml of M5802 + 5.00000ml of M5816 + 5.00000ml of M5820 + 5.00000ml of M5875 + 5.00000ml of M5970 + 5.00000ml of M6077 + 455.00000ml of MP84204 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
910	ICP AES STD S4	MP84224	01/24/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 01/28/2025

FROM 50.00000ml of MP84204 + 50.00000ml of MP84223 = 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	MP84225	01/24/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 01/28/2025

FROM 25.00000ml of MP84223 + 75.00000ml of MP84204 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3913	ICP AES STD S2	MP84226	01/24/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 01/28/2025

FROM 16.00000ml of MP84223 + 184.00000ml of MP84204 = Final Quantity: 200.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2950	ICP AES S1/CRI STOCK STD	MP84227	01/24/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 01/28/2025

FROM 0.00200ml of M5816 + 0.00400ml of M5978 + 0.03000ml of M5798 + 0.03000ml of M6028 + 0.05000ml of M5298 + 0.05000ml of M5496 + 0.05000ml of M5658 + 0.05000ml of M6030 + 0.06000ml of M5747 + 0.10000ml of M5472 + 0.10000ml of M5697 + 0.10000ml of M5801 + 0.10000ml of M5962 + 0.10000ml of M5970 + 0.10000ml of M6128 + 0.15000ml of M5800 + 0.20000ml of M5748 + 0.20000ml of M5799 + 0.20000ml of M5819 + 0.20000ml of M6021 + 0.20000ml of M6023 + 0.25000ml of M5467 + 0.25000ml of M5802 + 0.50000ml of M5814 + 0.50000ml of M6032 + 1.00000ml of M5192 + 1.00000ml of M5288 + 1.00000ml of M5497 + 1.00000ml of M6127 + 1.00000ml of M6144 + 2.00000ml of M4884 + 77.68000ml of MP84204 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2951	ICP AES S1/CRI WORK STD	MP84228	01/24/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 01/28/2025

FROM 2.00000ml of MP84227 + 98.00000ml of MP84204 = 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	MP84230	01/24/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 01/28/2025

FROM 25.00000ml of M5130 + 225.00000ml of MP84204 = 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	MP84231	01/24/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 01/28/2025

FROM 0.01000ml of M5815 + 0.01000ml of M5817 + 0.10000ml of M5472 + 0.10000ml of M5970 + 0.10000ml of M6077 + 10.00000ml of M5130 + 10.00000ml of M5223 + 79.50000ml of MP84204 = 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	MP84232	01/24/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 01/28/2025

FROM 50.00000ml of MP84204 + 50.00000ml of MP84223 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
170	1:1HCL	MP84297	01/31/2025	02/28/2025	Eman Mughal	None	None	Sarabjit Jaswal 01/31/2025

FROM 1250.00000ml of M6121 + 1250.00000ml of W3112 = 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
2480	ICP AES STD 6 ISM01.3	MP84381	01/27/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/10/2025

FROM 4.00000ml of M5289 + 4.00000ml of M5497 + 4.00000ml of M5811 + 4.00000ml of M6127 + 4.00000ml of M6144 + 30.00000ml of MP84204 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1004	ICPAES ISM01.2 (S5)	MP84382	01/27/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/10/2025

FROM 0.25000ml of M5798 + 0.50000ml of M5429 + 0.50000ml of M5476 + 0.50000ml of M5815 + 0.50000ml of M5817 + 12.50000ml of M5519 + 12.50000ml of M6128 + 12.50000ml of M6144 + 13.75000ml of M5697 + 14.50000ml of M5496 + 14.50000ml of M5658 + 14.50000ml of M5811 + 2.00000ml of M5513 + 22.50000ml of M5497 + 22.50000ml of M6127 + 5.00000ml of M4884 + 5.00000ml of M5393 + 5.00000ml of M5875 + 5.00000ml of M6077 + 5.00000ml of M6146 + 303.50000ml of MP84204 = Final Quantity: 500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1004	ICPAES ISM01.2 (S5)	MP84383	01/27/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/10/2025

FROM 0.25000ml of M5798 + 0.50000ml of M5429 + 0.50000ml of M5476 + 0.50000ml of M5815 + 0.50000ml of M5817 + 12.50000ml of M5519 + 12.50000ml of M6128 + 12.50000ml of M6144 + 12.50000ml of M6145 + 13.75000ml of M5697 + 14.50000ml of M5496 + 14.50000ml of M5658 + 14.50000ml of M5811 + 2.00000ml of M5513 + 22.50000ml of M5497 + 22.50000ml of M6127 + 5.00000ml of M4884 + 5.00000ml of M5393 + 5.00000ml of M5875 + 5.00000ml of M6077 + 5.00000ml of M6146 + 303.50000ml of MP84204 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1005	ICPAES ISM01.2(S4)	MP84384	01/27/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/10/2025

FROM 250.00000ml of MP84204 + 250.00000ml of MP84382 = Final Quantity: 500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1007	ICPAES ISM01.2(S3)	MP84385	01/27/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/10/2025

FROM 25.00000ml of MP84382 + 75.00000ml of MP84204 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1008	ICPAES ISM01.2(S2)	MP84386	01/27/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/10/2025

FROM 12.50000ml of MP84382 + 87.50000ml of MP84204 = 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
994	ICPAES ISM01.2 S1 (CONC.)	MP84387	01/27/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/10/2025

FROM 0.02000ml of M5815 + 0.03000ml of M5429 + 0.10000ml of M5798 + 0.10000ml of M6028 + 0.14000ml of M5799 + 0.20000ml of M5476 + 0.20000ml of M5658 + 0.20000ml of M5801 + 0.20000ml of M5811 + 0.20000ml of M5817 + 0.20000ml of M5977 + 0.20000ml of M6025 + 0.20000ml of M6030 + 0.30000ml of M6128 + 0.40000ml of M5496 + 0.50000ml of M5697 + 0.50000ml of M6023 + 0.70000ml of M5962 + 0.80000ml of M5961 + 1.00000ml of M5800 + 1.00000ml of M6021 + 1.20000ml of M6145 + 1.20000ml of M6146 + 10.00000ml of M4884 + 10.00000ml of M5498 + 10.00000ml of M5519 + 10.00000ml of M6127 + 10.00000ml of M6144 + 2.00000ml of M5978 + 4.00000ml of M6032 + 34.24000ml of MP84204 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1003	ICPAES ISM01.2 S1	MP84388	01/27/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/10/2025

FROM 0.50000ml of MP84387 + 99.50000ml of MP84204 = 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
1119	ICPAES ISM01.2(CCV)	MP84392	01/27/2025	02/24/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/10/2025

FROM 0.75000ml of M5498 + 0.75000ml of M6127 + 1.22500ml of M5496 + 1.25000ml of M5811 + 1.25000ml of M6144 + 19.77500ml of MP84204 + 25.00000ml of MP84382 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
912	ICP AES ICV SOLN	MP84446	01/27/2025	02/24/2025	Kareem Khairalla	None	None	Janvi Patel 02/12/2025

FROM 0.02500ml of M5429 + 0.02500ml of M5815 + 0.02500ml of M5817 + 0.10000ml of M5467 + 0.25000ml of M5218 + 0.25000ml of M5472 + 10.00000ml of M6150 + 87.77500ml of MP84204 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
68	STANNOUS CHLORIDE SOLUTION	MP84447	02/11/2025	02/12/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Janvi Patel 02/12/2025

FROM 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6121 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP84449	02/11/2025	02/12/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Janvi Patel 02/12/2025

FROM 1.00000ml of M6126 + 2.50000ml of M5062 + 96.50000ml of W3112 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1340	Hg 0.00 PPB STD	MP84450	02/11/2025	02/12/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Janvi Patel 02/12/2025

FROM 2.50000ml of M6126 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2750	Hg 0.05ppb	MP84451	02/11/2025	02/12/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Janvi Patel 02/12/2025

FROM 2.50000ml of M6126 + 247.45000ml of W3112 + 0.05000ml of MP84449 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1341	Hg 0.2 PPB STD	MP84452	02/11/2025	02/12/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Janvi Patel 02/12/2025

FROM 2.50000ml of M6126 + 247.30000ml of W3112 + 0.20000ml of MP84449 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1342	Hg 2.5 PPB STD	MP84453	02/11/2025	02/12/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Janvi Patel 02/12/2025

FROM 2.50000ml of M6126 + 245.00000ml of W3112 + 2.50000ml of MP84449 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1343	Hg 5.0 PPB STD	MP84454	02/11/2025	02/12/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Janvi Patel 02/12/2025

FROM 2.50000ml of M6126 + 242.50000ml of W3112 + 5.00000ml of MP84449 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1344	Hg 7.5 PPB STD	MP84456	02/11/2025	02/12/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Janvi Patel 02/12/2025

FROM 2.50000ml of M6126 + 240.00000ml of W3112 + 7.50000ml of MP84449 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1345	Hg 10.0 PPB STD	MP84457	02/11/2025	02/12/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Janvi Patel 02/12/2025

FROM 2.50000ml of M6126 + 237.50000ml of W3112 + 10.00000ml of MP84449 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1346	Hg ICV SOLUTION	MP84458	02/11/2025	02/12/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Janvi Patel 02/12/2025

FROM 2.50000ml of M5532 + 2.50000ml of M6126 + 245.00000ml of W3112 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1351	ICB (Hg 0.00 PPB SOLUTION)	MP84459	02/11/2025	02/12/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Janvi Patel 02/12/2025

FROM 2.50000ml of M6126 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1358	CCV (Hg 5.0 PPB SOLUTION)	MP84460	02/11/2025	02/12/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Janvi Patel 02/12/2025

FROM 485.00000ml of W3112 + 5.00000ml of M6126 + 10.00000ml of MP84449 = Final Quantity: 500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1352	CCB (Hg 0.00 PPB SOLUTION)	MP84461	02/11/2025	02/12/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Janvi Patel 02/12/2025

FROM 495.00000ml of W3112 + 5.00000ml of M6126 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1349	CRA/CRI (Hg 0.2 PPB SOLUTION)	MP84462	02/11/2025	02/12/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Janvi Patel 02/12/2025

FROM 2.50000ml of M6126 + 247.30000ml of W3112 + 0.20000ml of MP84449 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1350	CHK STD (Hg 7.0 PPB SOLUTION)	MP84463	02/11/2025	02/12/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Janvi Patel 02/12/2025

FROM 2.50000ml of M6126 + 240.50000ml of W3112 + 7.00000ml of MP84449 = Final Quantity: 250.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-2196-01 / Hydroxylamine Hydrochloride, Crystal (cs/4x500g)	0000215387	06/25/2025	07/01/2019 / RICHARD	06/07/2019 / RICHARD	M4371

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3238-05 / Potassium Persulfate (2.5kg)	0000234156	08/06/2025	07/23/2019 / jaswal	07/25/2019 / manojkumar	M4465

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57014 / Si, 1000 PPM, 125 ml	030921	03/09/2025	08/06/2021 / jaswal	08/05/2021 / jaswal	M4884

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3227-05 / Potassium Permanganate (2.5kg)	210800	03/31/2026	11/30/2022 / mohan	07/28/2021 / mohan	M4916

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	MSHG-10PPM / MERCURY HCl 125mL 10ug/mL	S2-HG709270	09/22/2026	05/28/2022 / mohan	01/27/2022 / mohan	M5062

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART A / ICSA (ICP) STOCK SOLN	ICSA-1211	01/31/2025	05/20/2024 / jaswal	04/20/2021 / bin	M5130

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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.	57042 / Mo, 1000 PPM, 125 ml	051722	05/17/2025	07/01/2022 / bin	06/17/2022 / jaswal	M5192

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CHEM-QC-4 / CHEM-QC-4, Second Source, 1000 ug/ml, B, Mo, Si, Sn, Ti	S2-MEB711674	11/02/2026	07/01/2022 / bin	09/10/2021 / bin	M5218

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	01/31/2025	05/20/2024 / jaswal	04/20/2021 / bin	M5223

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	071122	07/11/2025	09/01/2022 / jaswal	07/21/2022 / jaswal	M5288

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / Aluminum (Al) 10,000PPM	070622	07/06/2025	09/02/2022 / jaswal	07/12/2022 / jaswal	M5289

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	020422	02/04/2025	05/02/2023 / jaswal	06/15/2022 / jaswal	M5298

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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-MEB714159	01/13/2027	10/12/2022 / bin	09/19/2022 / bin	M5393

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57103 / Li, 10000 PPM, 125 ml	070622	07/06/2025	01/30/2023 / bin	01/26/2023 / bin	M5429

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	01/14/2025 / Jaswal	03/16/2023 / jaswal	M5472

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57138 / Sr, 10000 PPM, 125 ml	082922	08/29/2025	07/29/2024 / jaswal	03/16/2023 / jaswal	M5476

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	011623	01/16/2026	08/15/2023 / jaswal	03/17/2023 / bin	M5496

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	031523	03/15/2026	03/18/2023 / bin	03/17/2023 / bin	M5497

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	031523	03/15/2026	08/15/2023 / jaswal	03/17/2023 / bin	M5498

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57182 / Pb, 10000 PPM, 125 ml	061522	06/15/2025	03/19/2023 / bin	03/17/2023 / bin	M5513

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57119 / Potassium (K) 10,000PPM	120822	12/08/2025	01/08/2024 / bin	03/17/2023 / bin	M5519

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-5 / ICV (HG) STOCK SOLN	ICV5-0415	02/28/2025	01/02/2025 / jaswal	03/30/2023 / mohan	M5532

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

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	102523	10/25/2026	04/03/2024 / jaswal	10/27/2023 / jaswal	M5697

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ Lead (Pb) 1000PPM	100923	10/09/2026	05/20/2024 / Jaswal	12/20/2023 / jaswal	M5747

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ Nickel (Ni) 1000PPM	091223	09/12/2026	01/02/2024 / bin	12/20/2023 / jaswal	M5748

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

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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.	57051 / Sb, 1000 PPM, 125 ml	120523	12/05/2026	08/07/2024 / jaswal	01/03/2024 / jaswal	M5802

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58126 / Fe, 10000 PPM, 500 ml	051523	05/15/2026	02/06/2025 / kareem	01/03/2024 / jaswal	M5811

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57005 / B, 1000 PPM, 125 ml	071123	07/11/2026	03/26/2024 / Sohil	01/03/2024 / jaswal	M5814

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57115 / P, 10000 PPM, 125 ml	041723	04/17/2026	05/21/2024 / Jaswal	02/09/2024 / jaswal	M5815

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57016 / S, 1000 PPM, 125 ml	122923	12/29/2026	05/20/2024 / Jaswal	02/09/2024 / jaswal	M5816

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57116 / S, 10000 PPM, 125 ml	071123	07/11/2026	03/01/2024 / jaswal	02/09/2024 / jaswal	M5817

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	111623	11/16/2026	03/20/2024 / jaswal	02/09/2024 / jaswal	M5819

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	CLPP-CAL-1 / CLP CAL SOLUTION #1, 125mL	T2-MEB714417	01/27/2027	04/19/2024 / jaswal	02/22/2024 / jaswal	M5875

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3980-01 / Stannous Chloride (cs/4x500g)	232820	08/31/2028	04/30/2024 / mohan	04/25/2024 / mohan	M5882

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000281938	07/06/2026	04/30/2024 / mohan	04/25/2024 / mohan	M5884

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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	07/01/2024 / Jaswal	06/14/2024 / Jaswal	M5959

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57028 / Ni, 1000 PPM, 125 ml	041124	04/11/2027	07/02/2024 / Jaswal	06/11/2024 / Jaswal	M5961

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57034 / Se, 1000 PPM, 125 ml	060624	06/06/2027	07/02/2024 / Jaswal	06/14/2024 / Jaswal	M5962

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57003 / Li, 1000 PPM, 125 ml	061224	06/21/2027	07/01/2024 / Jaswal	07/01/2024 / Jaswal	M5970

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGMO1-1 / MOLYBDENUM 125mL 1000ug/mL	T2-MO720876	07/17/2027	01/16/2025 / JANVI	02/22/2024 / Jaswal	M5977

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	08/07/2024 / jaswal	02/22/2024 / Jaswal	M5978

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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	WW-LFS-1 / Laboratory Fortified Stock Solution 1, 125 ml	T2-MEB723367	07/14/2025	01/14/2025 / Eman	05/14/2024 / Jaswal	M6002

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	07/14/2025	01/14/2025 / Eman	05/14/2024 / Jaswal	M6011

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.	57082 / Pb, 1000 PPM, 125 ml	061224	11/09/2026	08/05/2024 / Jaswal	08/05/2024 / Jaswal	M6025

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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 #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	08/16/2024 / mohan	08/16/2024 / mohan	M6041

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	Z9651Q / CHEM-CLP-4/.25L	V2-MEB746762	09/06/2029	01/23/2025 / kareem	09/19/2024 / kareem	M6077

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	0000275677	05/13/2025	11/13/2024 / Eman	10/13/2024 / Eman	M6121

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	06/03/2025	12/03/2024 / Janvi	11/12/2024 / Janvi	M6126

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	112124	11/21/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6127

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58025 / Mn, 1000 PPM, 500 ml	101124	10/11/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6128

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58111 / Na, 10000 PPM, 500 ml	072424	07/24/2027	01/23/2025 / kareem	01/13/2025 / Jaswal	M6144

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58030 / Zinc, Zn, 500 ml, 1000 PPM	121724	12/17/2027	02/04/2025 / jaswal	01/13/2025 / Jaswal	M6145

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57051 / Sb, 1000 PPM, 125 ml	071724	07/17/2027	01/31/2025 / kareem	10/18/2024 / kareem	M6146

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-1 / ICV (ICP/ICPMS) STOCK SOLN	ICV1-1014	07/07/2025	02/07/2025 / JANVI	04/20/2021 / JANVI	M6150

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

ThermoFisher SCIENTIFIC

M5882 M3

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	T142	Quality Test / Release Date	08/17/2023
Lot Number	232820		
Description	STANNOUS CHLORIDE, DIHYDRATE CERTIFIED ACS (Suitable for Mercury Determination)		
Country of Origin	United States	Suggested Retest Date	Aug/2028
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear crystals
ASSAY	%	Inclusive Between 98 - 103	100.65
CALCIUM	%	<= 0.005	0.0017
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IRON (Fe)	%	<= 0.003	0.0011
LEAD (Pb)	%	<= 0.01	0.0006
MERCURY (Hg)	ppm	<= 0.05	<0.05
POTASSIUM (K)	%	<= 0.005	0.0001
SODIUM (Na)	%	<= 0.01	<0.01
SOLUBILITY IN HCL	PASS/FAIL	= PASS TEST	PASS TEST
SULFATE (SO4)	PASS/FAIL	= P.T. (ABOUT 0.003%)	P.T. (ABOUT 0.003%)

Harout Sahagian - Quality Control Supervisor - Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Absolute Standards, Inc.
800-368-1131
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Certified Reference Material CRM

M6032

R: 8/5/24

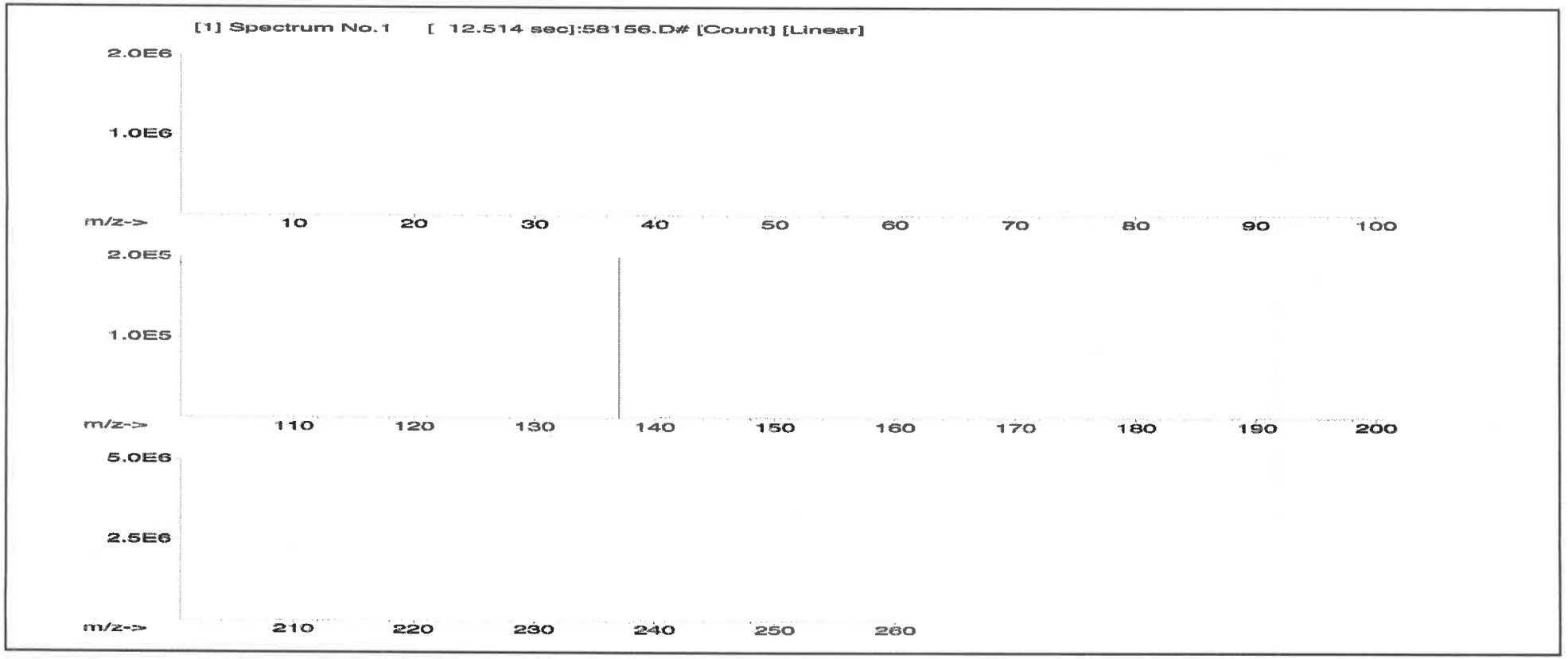
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57056**		**Lot #**		
Lot Number:	**010924**	**Solvent:**	24002546	Nitric Acid	
Description:	**Barium (Ba)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	010927				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Giovanni Esposito		
Formulated By:	Giovanni Esposito	010924
Pedro Rentas		
Reviewed By:	Pedro L. Rentas	010924

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Barium nitrate (Ba)	IN023	BAD022019A1	1000	99.999	0.10	52.3	3.82417	3.82441	**1000.1**	**2.0**	10022-31-8	0.5 mg/m3	orl-rat 355 mg/kg	3104a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

M6028

R 8/5/24

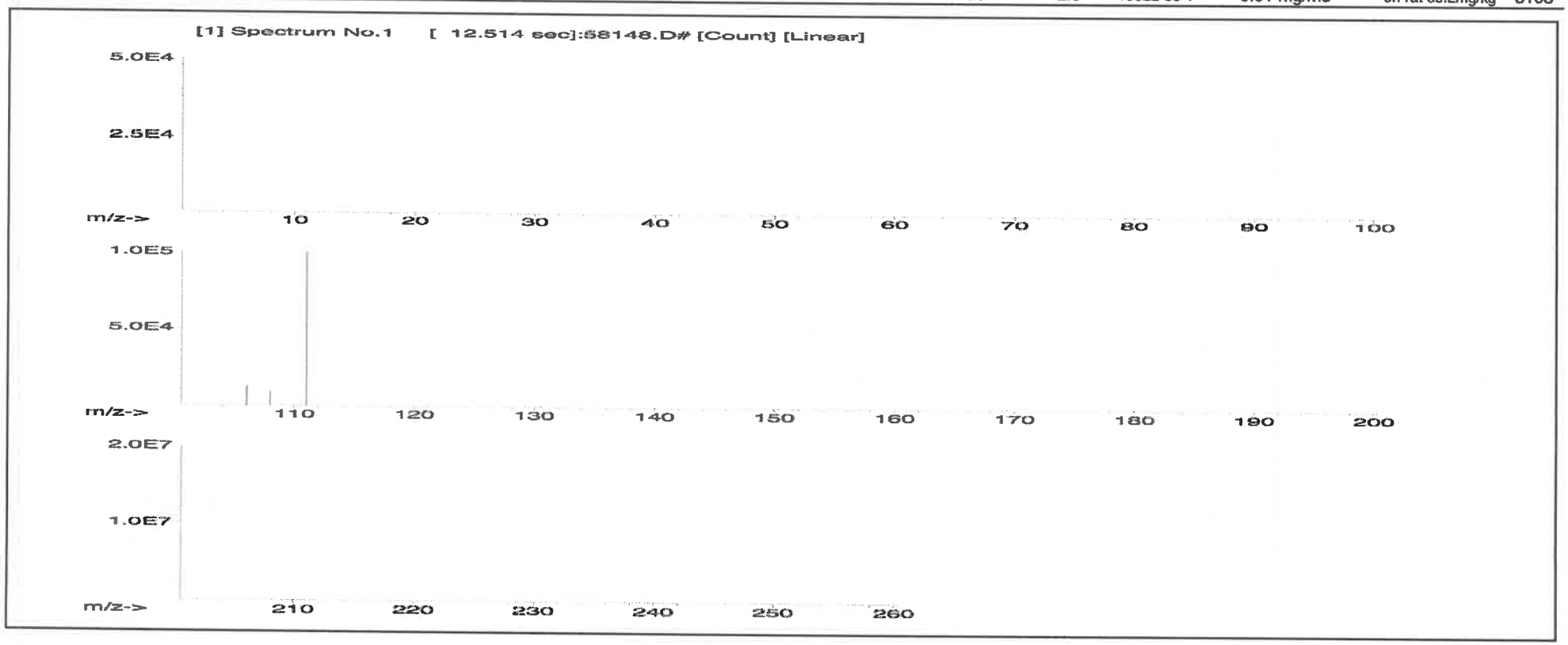
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https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57048**			**Lot #**	
Lot Number:	**070124**		**Solvent:**	24002546	Nitric Acid
Description:	**Cadmium (Cd)**				
			2%	40.0 (mL)	Nitric Acid
Expiration Date:	070127				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty		

Aleah O'Brady		
Formulated By:	Aleah O'Brady	070124
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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ANAB ISO 17034 Accredited
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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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Certificate of Analysis

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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 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 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
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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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

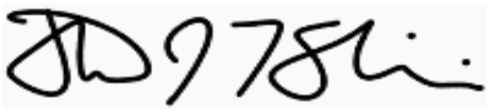
- Sealed TCT Bag Open Date: _____

- 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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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-MEB714159
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 ± 8 µg/mL**	**Cadmium, Cd**	**500.0 ± 2.1 µg/mL**
Lead, Pb	**1 000 ± 5 µg/mL**	**Selenium, Se**	**1 000 ± 8 µg/mL**
Thallium, Tl	**1 000 ± 7 µg/mL**		

Density: 1.043 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	ICP Assay	3103a	100818
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Tl	ICP Assay	3158	151215

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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**

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 13, 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 13, 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

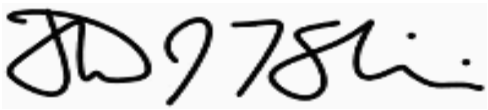
- Sealed TCT Bag Open Date: _____

- 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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R : 01/03/24. M5810, M5811

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CERTIFIED WEIGHT REPORT:

				Lot #	
Part Number:	**58126**		**Solvent:**	21110221	Nitric Acid
Lot Number:	**051523**				
Description:	**Iron (Fe)**		5.0%	250.0 (mL)	Nitric Acid
Expiration Date:	051526				
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):	5000.1	0.12	Flask Uncertainty		

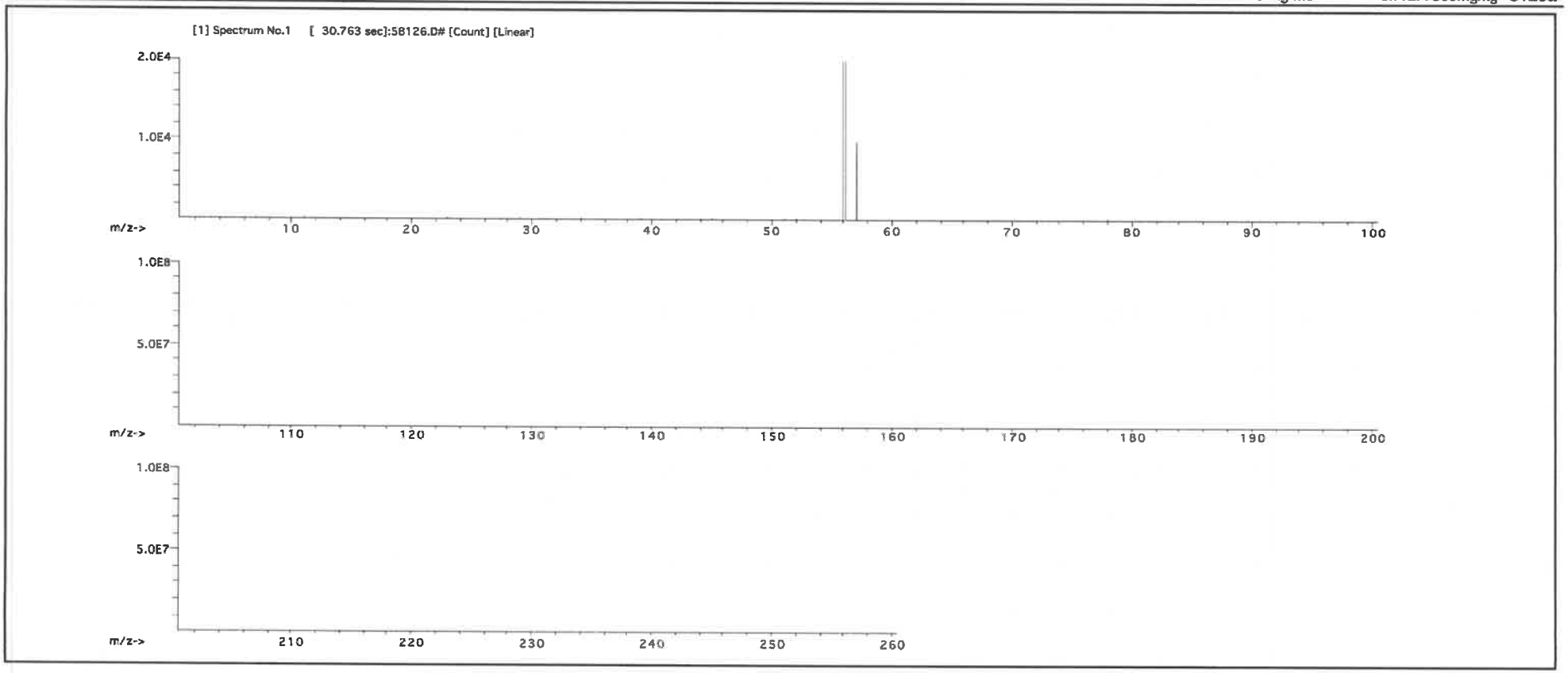
Giovanni Esposito

Formulated By:	Giovanni Esposito	051523

Pedro Rentas

Reviewed By:	Pedro L. Rentas	051523

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Iron (Fe)	IN346	2302010-500	10000	99.995	0.10	100.0	50.0034	50.0111	**10001.5**	**20.0**	7439-89-6	5 mg/m3	orl-rat 7500mg/kg	3126a



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ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 8/5/24 M6025

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

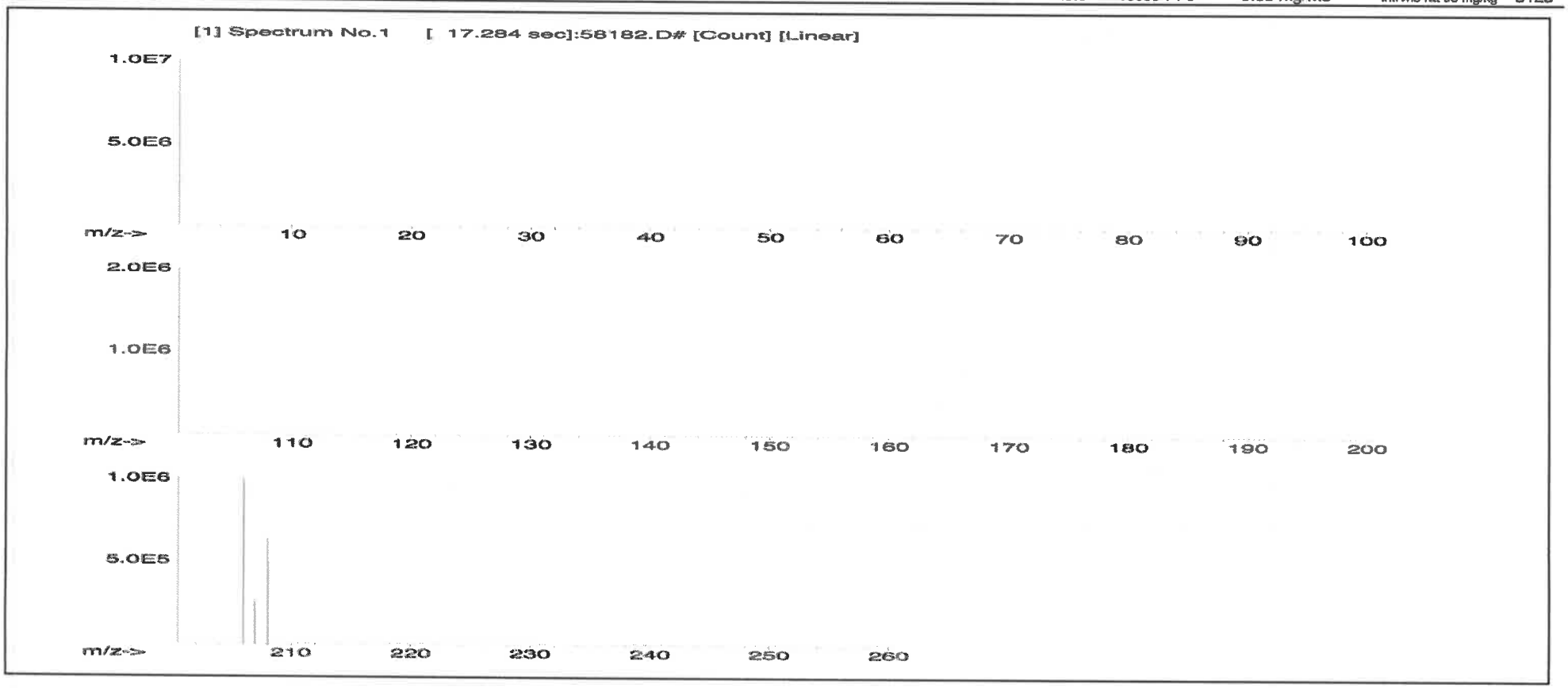
Part Number: 57182
Lot Number: 110923
Description: Lead (Pb)

Expiration Date: 110926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Formulated By:	Lawence Barry	110923
Reviewed By:	Pedro L. Rentas	110923

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lead(II) nitrate (Pb)	IN029	PBD122016A1	10000	99.999	0.10	62.5	32.0006	32.0040	**10001.1**	**20.0**	10099-74-8	0.05 mg/m3	intrvns-rat 93 mg/kg	3128



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	T	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES

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Certificate of Analysis

RD:05/14/2024

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-1
Lot Number:	T2-MEB723367
Matrix:	5% (v/v) HNO3

Value / Analyte(s):	1 000 µg/mL ea: Potassium,	
	600 µg/mL ea: Phosphorus,	
	300 µg/mL ea: Sodium,	Iron,
	200 µg/mL ea: Magnesium, Cerium, Thallium,	Aluminum, Selenium,
	100 µg/mL ea: Lead,	Calcium,
	80 µg/mL ea: Arsenic,	
	70 µg/mL ea: Mercury,	
	50 µg/mL ea: Nickel,	
	40 µg/mL ea: Chromium,	
	30 µg/mL ea: Copper, Vanadium,	Boron,
	20 µg/mL ea: Zinc, Barium, Cadmium, Manganese,	Strontium, Beryllium, Cobalt, Lithium,
	7.5 µg/mL ea: Silver	

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	200.0 ± 0.7 µg/mL	Arsenic, As	80.0 ± 0.7 µg/mL
Barium, Ba	20.00 ± 0.09 µg/mL	Beryllium, Be	20.00 ± 0.13 µg/mL
Boron, B	30.00 ± 0.18 µg/mL	Cadmium, Cd	20.00 ± 0.09 µg/mL
Calcium, Ca	100.0 ± 0.4 µg/mL	Cerium, Ce	200.0 ± 0.8 µg/mL
Chromium, Cr	40.00 ± 0.30 µg/mL	Cobalt, Co	20.00 ± 0.10 µg/mL
Copper, Cu	30.00 ± 0.13 µg/mL	Iron, Fe	300.0 ± 1.3 µg/mL
Lead, Pb	100.0 ± 0.4 µg/mL	Lithium, Li	20.00 ± 0.08 µg/mL
Magnesium, Mg	200.0 ± 0.8 µg/mL	Manganese, Mn	20.00 ± 0.08 µg/mL
Mercury, Hg	70.0 ± 0.3 µg/mL	Nickel, Ni	50.00 ± 0.22 µg/mL
Phosphorus, P	600.0 ± 2.7 µg/mL	Potassium, K	1 000 ± 4 µg/mL
Selenium, Se	200.0 ± 1.3 µg/mL	Silver, Ag	7.50 ± 0.03 µg/mL
Sodium, Na	300.0 ± 1.4 µg/mL	Strontium, Sr	20.01 ± 0.08 µg/mL
Thallium, Tl	200.0 ± 1.4 µg/mL	Vanadium, V	30.00 ± 0.13 µg/mL
Zinc, Zn	20.00 ± 0.09 µg/mL		

Density: 1.034 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
B	ICP Assay	3107	190605
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Ce	ICP Assay	3110	090504
Ce	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	Traceable to 3152A	S2-NA700842
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Tl	ICP Assay	3158	151215
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 30, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 30, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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Christiansburg, VA 24073 USA
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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01 ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-2
Lot Number:	U2-MEB731108
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	200 µg/mL ea: Silica, 80 µg/mL ea: Antimony, 70 µg/mL ea: Tin, 40 µg/mL ea: Molybdenum, 20 µg/mL ea: Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	80.1 ± 0.6 µg/mL	Molybdenum, Mo	40.03 ± 0.18 µg/mL
Silica, SiO2	200.2 ± 1.3 µg/mL	Tin, Sn	70.0 ± 0.4 µg/mL
Titanium, Ti	20.01 ± 0.13 µg/mL		

Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
SiO2	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925
Ti	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 17, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- March 17, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



M4371

Hydroxylamine Hydrochloride, Crystal
BAKER ANALYZED® A.C.S. Reagent
Suitable for Mercury Determination
(hydroxylammonium chloride)

Rec – 06.07.19

J.T.Baker® | avantor™

Material No.: 2196-01
Batch No.: 0000215387
Manufactured Date: 2018/06/27
Retest Date: 2025/06/25
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay ($NH_2OH \cdot HCl$) (by $KMnO_4$ titrn)	>= 96.0 %	99.1
Clarity of Alcohol Solution	Passes Test	PT
Residue after Ignition	<= 0.050 %	0.017
Titrable Free Acid (meq/g)	<= 0.25	0.19
Ammonium (NH_4)	Passes Test	PT
Sulfur Compounds (as SO_4)	<= 0.005 %	< 0.003
Trace Impurities - ACS - Heavy Metals (as Pb)	<= 5 ppm	4
Trace Impurities - Iron (Fe)	<= 5 ppm	< 3
Trace Impurities - Mercury (Hg)	<= 0.050 ppm	< 0.005

For Laboratory, Research or Manufacturing Use

Country of Origin: CN
Packaging Site: Paris Mfg Ctr & DC

ISO
Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

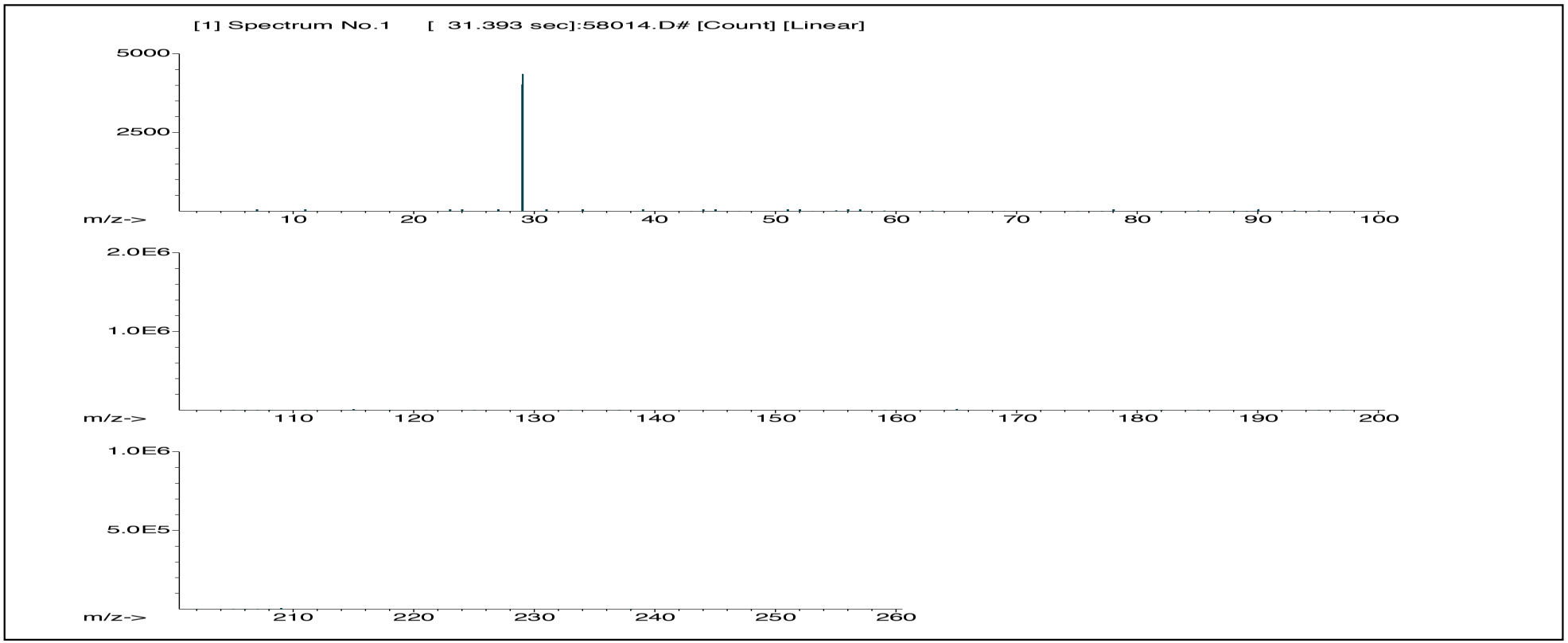
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57014**	19410105	Nitric Acid	
Lot Number:	**030921**			
Description:	**Silicon (Si)**			
		2.0%	60.0	Nitric Acid
Expiration Date:	030924		(mL)	
Recommended Storage:	Ambient (20 ºC)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	3000.41	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry 030921
Reviewed By:	Pedro L. Rentas 030921

	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 hexafluorosilicate (Si)	58114	070120	0.1000	300.0	0.084	1000	10000.0	**1000.0**	**2.1**	16919-19-0	2.50 mg/m3	orl-rat 70 mg/kg	NA



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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	T	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).

ThermoFisher SCIENTIFIC

M4913-16

MB

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	P279	Quality Test / Release Date	01/12/2021
Lot Number	210306		
Description	POTASSIUM PERMANGANATE, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Jan/2026

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Dark purple to purple green crystals
ASSAY	%	>= 99	99.3
CHLORIDE & CHLORATE	%	<= 0.005	<0.005
IDENTIFICATION	PASS/FAIL	= PASS TEST	pass test
INSOLUBLE MATTER	%	<= 0.2	<0.2
MERCURY (Hg)	ppm	<= 0.05	<0.004
SULFATE (SO4)	%	<= 0.02	<0.02

Julian Burton

Julian Burton - Quality Control Manager – Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

M5062
M5063
M3

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Mass Spec Solution
Catalog Number:	MSHG-10PPM
Lot Number:	S2-HG709270
Matrix:	10% (v/v) HCl
Value / Analyte(s):	10 µg/mL ea: Mercury
Starting Material:	Hg metal
Starting Material Lot#:	1959
Starting Material Purity:	99.9994%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10.001 ± 0.053 µg/mL

Density: 1.020 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
Hg	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance.

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag		0.000011	M	Eu	<	0.000201	O	Na		0.000004	M	Se	<	0.015915	O	Zn	<	0.001510
O	Al		0.000001	O	Fe		0.000001	M	Nb	<	0.000201	O	Si		0.000005	M	Zr	<	0.000201
M	As	<	0.000402	M	Ga	<	0.000201	M	Nd	<	0.000201	M	Sm	<	0.000201				
M	Au	<	0.003631	M	Gd	<	0.000201	M	Ni	<	0.000402	M	Sn	<	0.001007				
M	B	<	0.001208	M	Ge	<	0.000201	M	Os	<	0.000605	M	Sr	<	0.000201				
M	Ba	<	0.000201	M	Hf	<	0.000201	O	P	<	0.032370	M	Ta	<	0.000201				
M	Be	<	0.000201	s	Hg	<		M	Pb	<	0.000201	M	Tb	<	0.000201				
M	Bi	<	0.000201	M	Ho	<	0.000201	M	Pd	<	0.000403	M	Te	<	0.002216				
O	Ca		0.000007	M	In	<	0.000201	M	Pr	<	0.000201	M	Th	<	0.000201				
M	Cd	<	0.000201	M	Ir	<	0.000201	M	Pt	<	0.000402	M	Ti	<	0.000402				
M	Ce	<	0.000201	O	K		0.000020	M	Rb	<	0.000201	O	Tl	<	0.016508				
M	Co	<	0.000201	M	La	<	0.000201	M	Re	<	0.000201	M	Tm	<	0.000201				
O	Cr	<	0.003021	O	Li	<	0.000107	M	Rh	<	0.000201	M	U	<	0.008058				
M	Cs	<	0.001208	M	Lu	<	0.000201	M	Ru	<	0.000201	M	V	<	0.000201				
M	Cu	<	0.000402	O	Mg		0.000001	O	S	<	0.053950	M	W	<	0.000604				
M	Dy	<	0.000201	M	Mn	<	0.000604	M	Sb	<	0.001208	M	Y	<	0.000201				
M	Er	<	0.000201	M	Mo		0.000009	M	Sc	<	0.000201	M	Yb	<	0.000201				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+

Chemical Compatibility - Stable in HNO_3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.

Stability - 2-100 ppb levels not stable in 1% HNO_3 / LDPE container, stable in 10% HNO_3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO_3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO_3 / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxide (Soluble in HNO_3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- September 22, 2026

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (ICSA WITH ICSB)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. **For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

ICSA M5126 M5127 M5128 M5129 M5130

ICSB M5219 M5220 M5221 M5222 M5223

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

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Certified Reference Material CRM

M5192 R: 06/17/22

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57042
Lot Number: 051722
Description: Molybdenum (Mo)

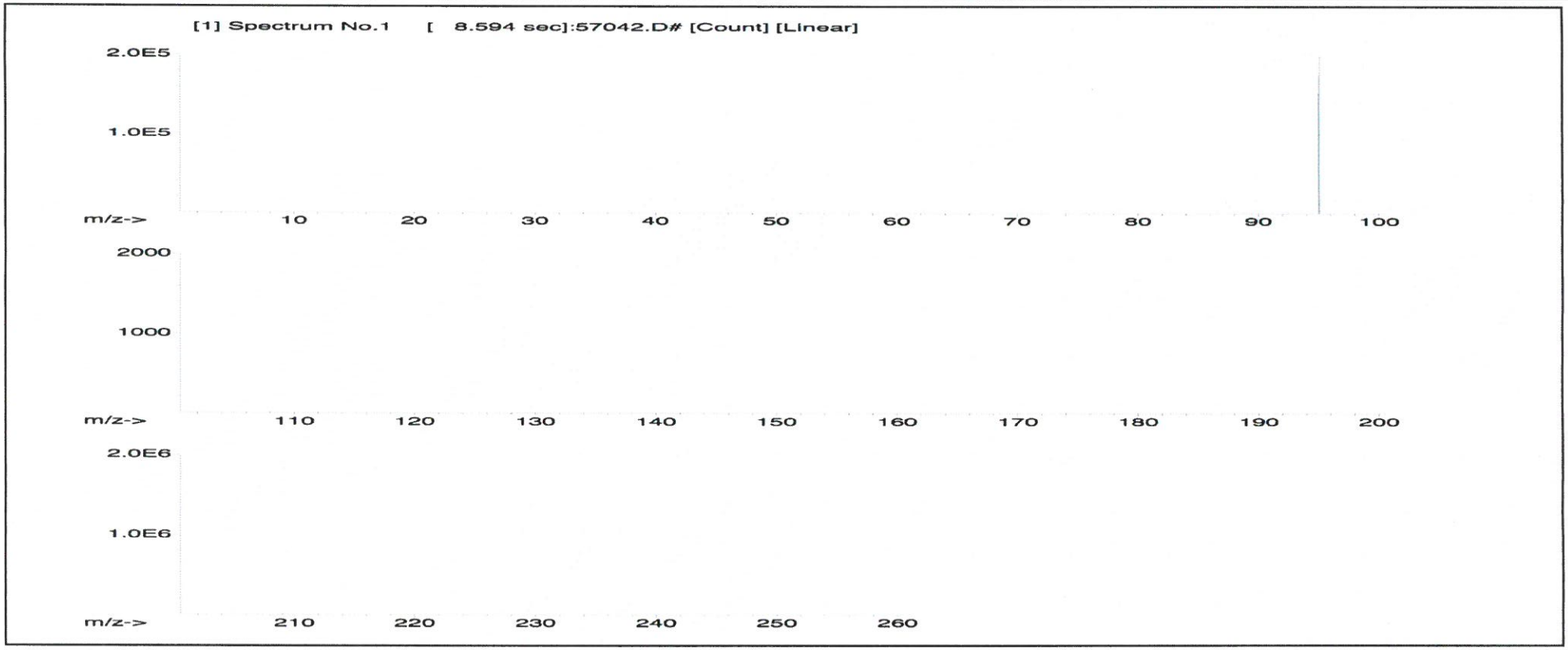
Expiration Date: 051725
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 3000.41

Lot #	Solvent:		
MKBQ8597V	Ammonium hydroxide		
0.5%	15.0 (mL)	Ammonium hydroxide	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Formulated By: Lawrence Barry 051722

Reviewed By: Pedro L. Rentas 051722

	Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1.	Ammonium molybdate (Mo)	58142	022222	0.1000	300.0	0.084	1000	10001.0	**1000.0**	**2.1**	13106-76-8	5 mg(Mo)/m3	orl-rat 333 mg/kg	3134



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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	T	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

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-QC-4
Lot Number:	S2-MEB711674
Matrix:	3% (v/v) HNO3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

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
Boron, B	**1 000 ± 7 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	**1 001 ± 6 µg/mL**		

Density: 1.032 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	110830
Mo	ICP Assay	3134	130418
Si	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925

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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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**

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

November 02, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 02, 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:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (ICSA WITH ICSB)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. **For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

ICSA M5126 M5127 M5128 M5129 M5130

ICSB M5219 M5220 M5221 M5222 M5223

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

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Certified Reference Material CRM

M5288 R: 07/21/2022

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CERTIFIED WEIGHT REPORT:

Part Number: 58119
Lot Number: 071122
Description: Potassium (K)

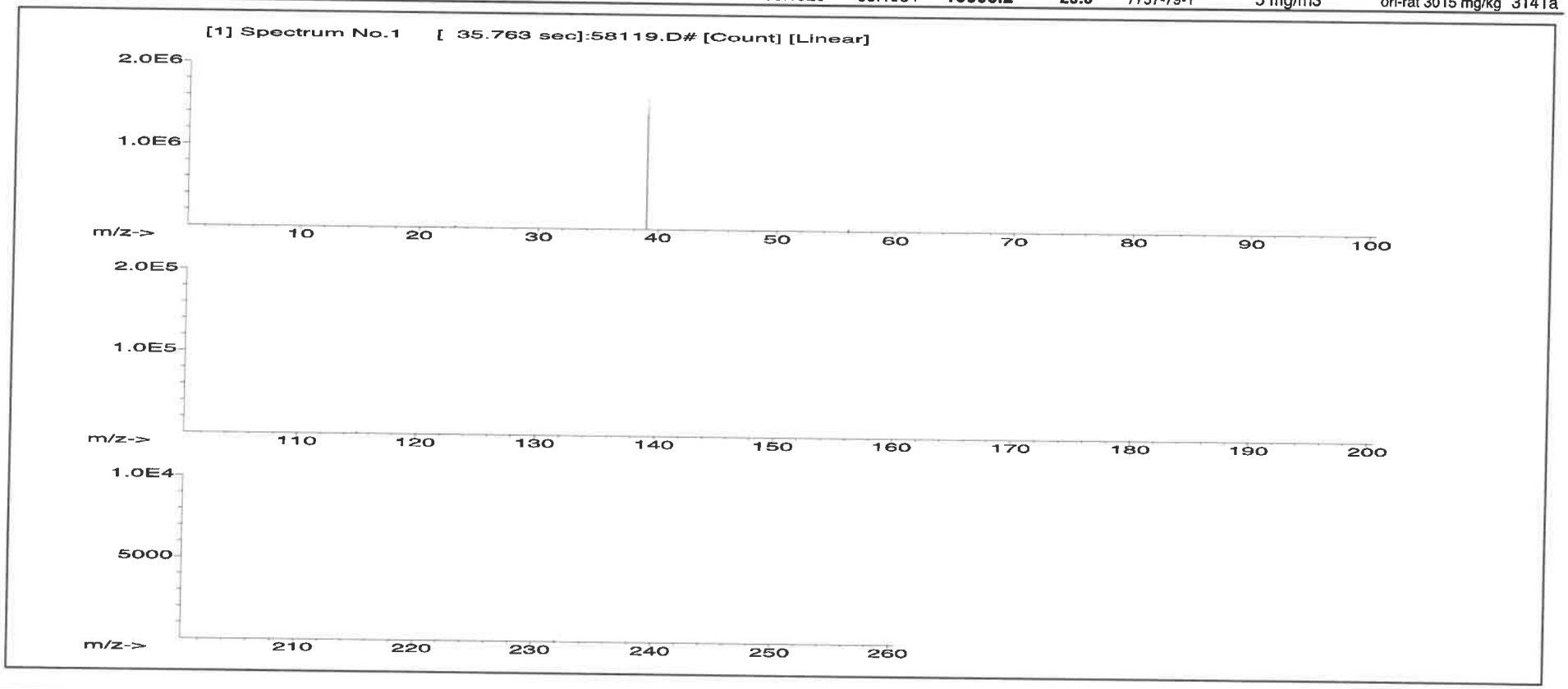
Expiration Date: 071125
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Formulated By: Lawrence Barry 071122

Reviewed By: Pedro L. Rentas 071122

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	KD022021A1	10000	99.999	0.10	37.6	53.1925	53.1934	**10000.2**	**20.0**	7757-79-1	5 mg/m3	orl-rat 3015 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.
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M5289 R: 07/12/22 BH

Certified Reference Material CRM

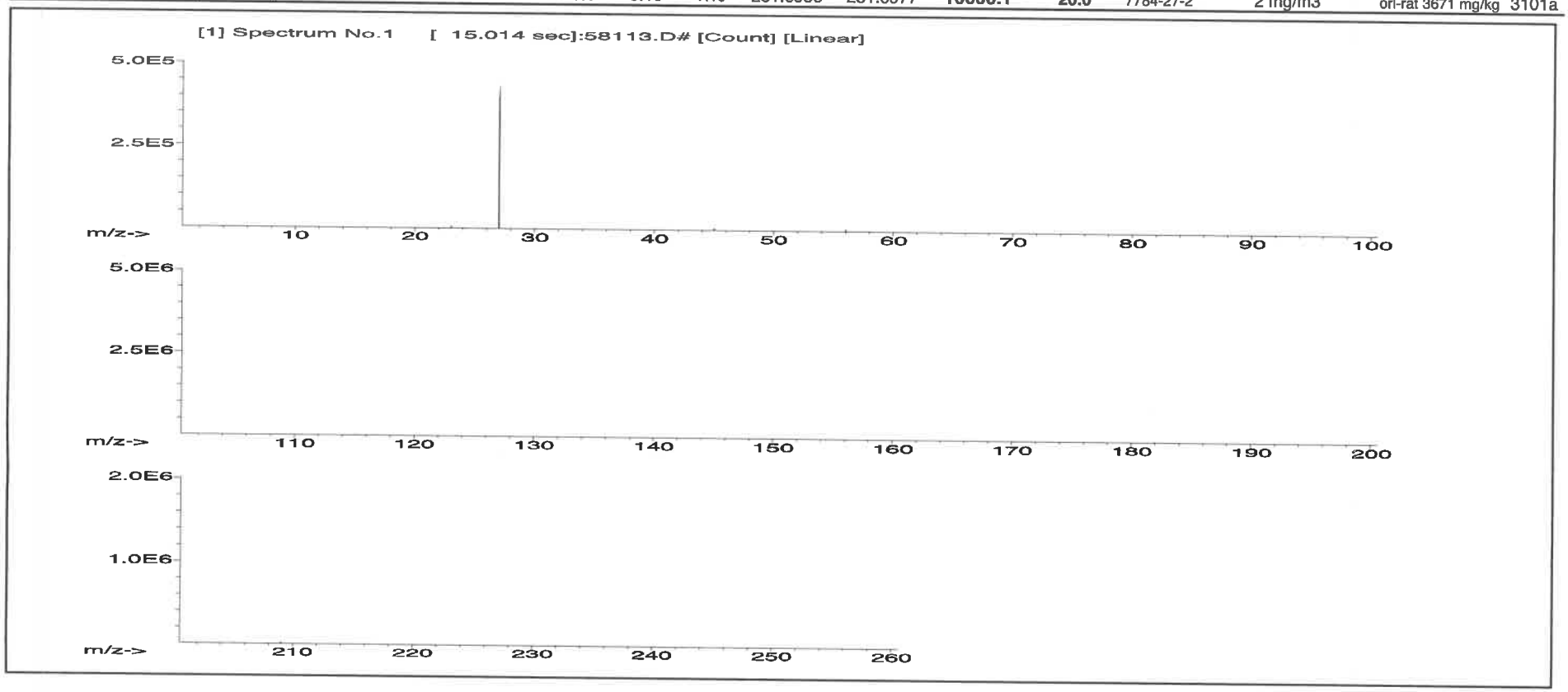
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CERTIFIED WEIGHT REPORT:

Part Number:	**58113**		**Lot #**		
Lot Number:	**070622**	**Solvent:**	20370011	Nitric Acid	
Description:	**Aluminum (Al)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	070625				
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):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	070622
Reviewed By:	Pedro L. Rentas	070622

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. Aluminum nitrate nonahydrate (Al)	IN022	ALD012021A1	10000	99.999	0.10	7.10	281.6956	281.6977	**10000.1**	**20.0**	7784-27-2	2 mg/m3	orl-rat 3671 mg/kg	3101a



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Trace Metals Verification by ICP-MS (µg/mL)																	
Al	T	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	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
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* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
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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).

SJ 6/15/22

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CERTIFIED WEIGHT REPORT:

Part Number: 58126
Lot Number: 020422 M5298
Description: Iron (Fe)

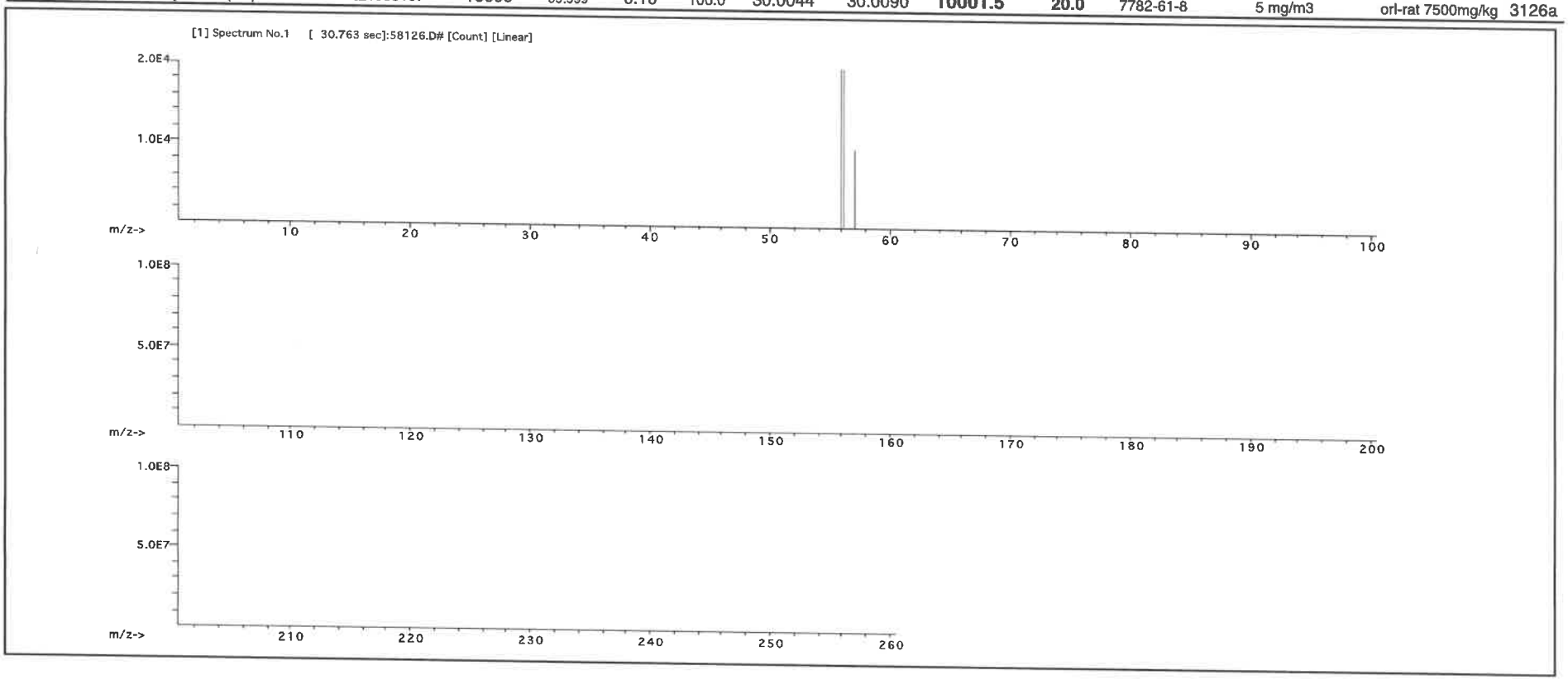
Expiration Date: 020425
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41 0.058 Flask Uncertainty

		Lot #	
Solvent:	20370011		Nitric Acid
	5.0%	150.0 (mL)	Nitric Acid

5E-05 Balance Uncertainty

Giovanni Esposito
Formulated By: Giovanni Esposito 020422
Pedro Rentas
Reviewed By: Pedro L. Rentas 020422

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Iron(III) nitrate nonahydrate (Fe)	IN346	221035107	10000	99.999	0.10	100.0	30.0044	30.0090	**10001.5**	**20.0**	7782-61-8	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	<0.5	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	<0.02
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).

Part # **58126** Lot # **020422**

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M5429 R1 01/26/23 BH

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CERTIFIED WEIGHT REPORT:

Part Number: 57103
Lot Number: 070622
Description: Lithium (Li)

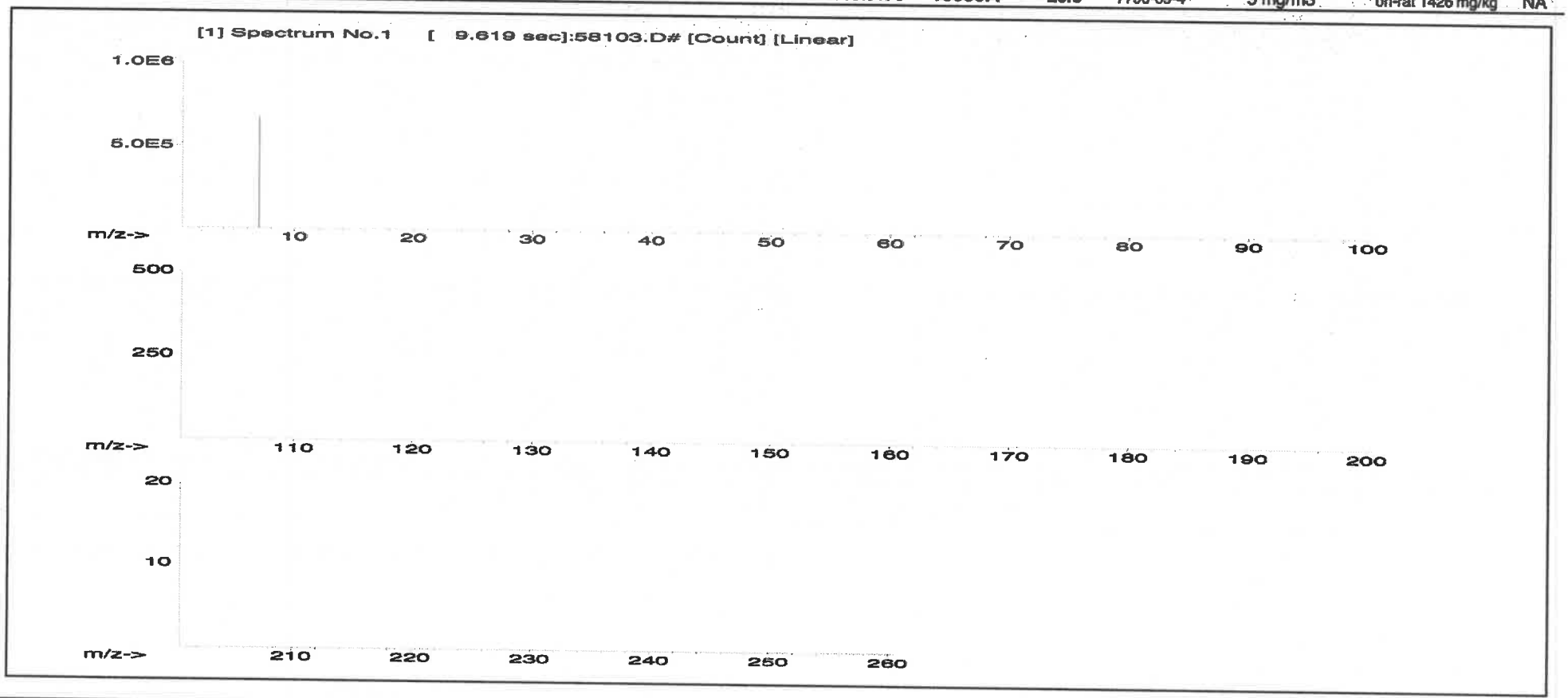
Expiration Date: 070625
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	20.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Lawrence Barry	070622
Reviewed By:	Pedro L. Rentas	070622

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. Lithium nitrate (Li)	IN019	LIZ042018A1	10000	99.999	0.10	10.0	100.0134	100.0173	**10000.4**	**20.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/kg	NA



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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	T	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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M5467 R: 03/01/23 (LA)

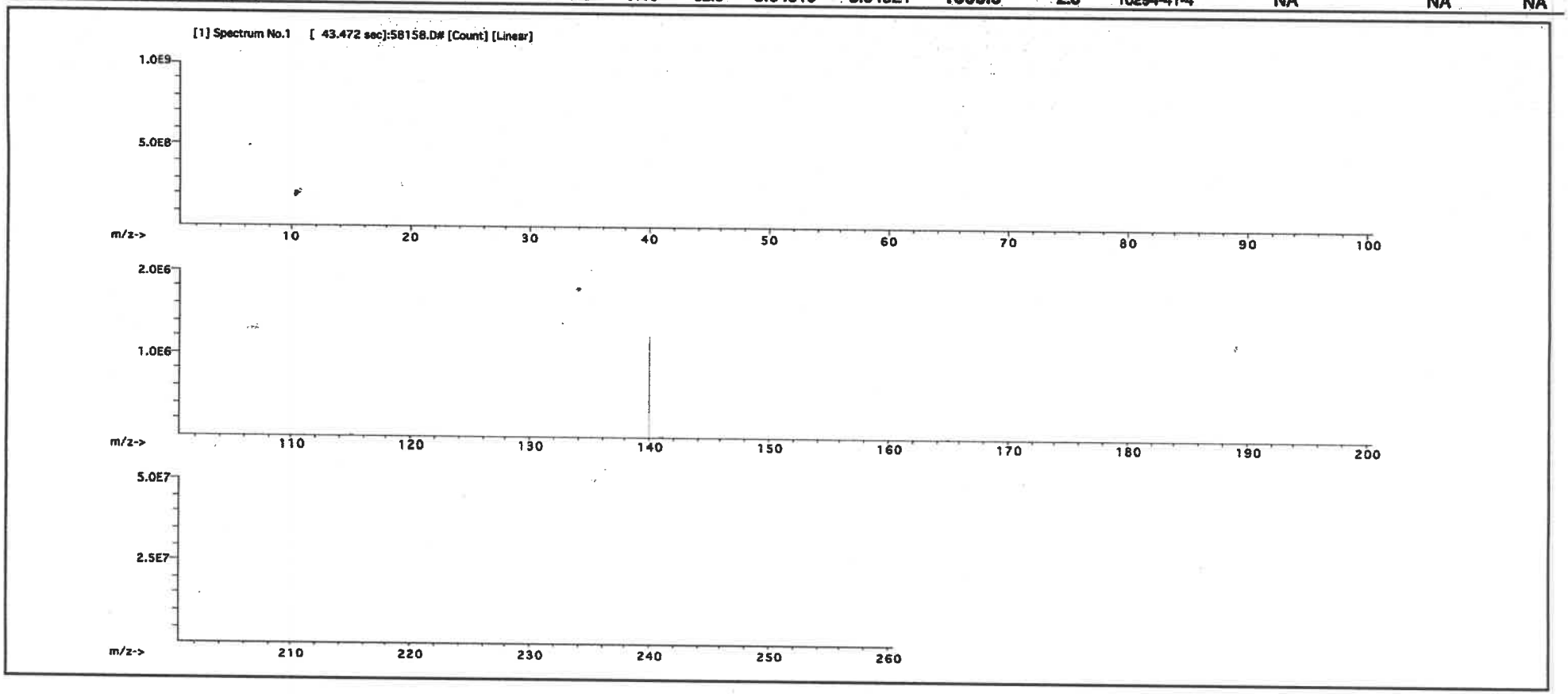
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CERTIFIED WEIGHT REPORT:

			Lot #	
Part Number:	57058	**Solvent:**	21110221	Nitric Acid
Lot Number:	020623			
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



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.
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* 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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M5496 R 7/20/23

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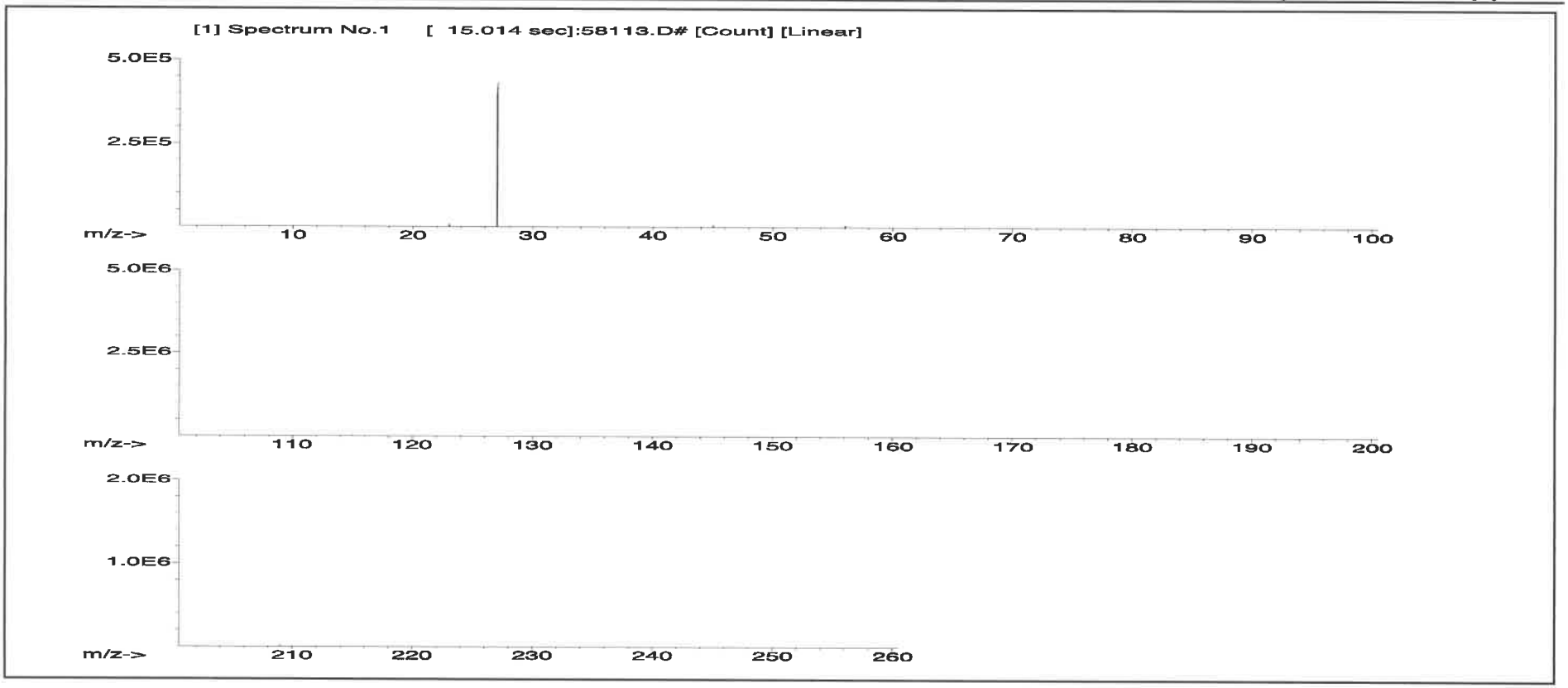
CERTIFIED WEIGHT REPORT:

Part Number:	**58113**		**Lot #**		
Lot Number:	**011623**	**Solvent:**	20510011	Nitric Acid	
Description:	**Aluminum (Al)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	011626				
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):	2000.02	0.058	Flask Uncertainty		

Giovanni Esposito

Formulated By:	Giovanni Esposito	011623
Reviewed By:	Pedro L. Rentas	011623

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. Aluminum nitrate nonahydrate (Al)	IN022	ALM112021A1	10000	99.999	0.10	7.30	273.9779	274.0078	**10001.1**	**20.0**	7784-27-2	2 mg/m3	orl-rat 3671 mg/kg	3101a



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M5497 - M5498 R: 03/17/23 (BF)

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CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 031523
Description: Calcium (Ca)

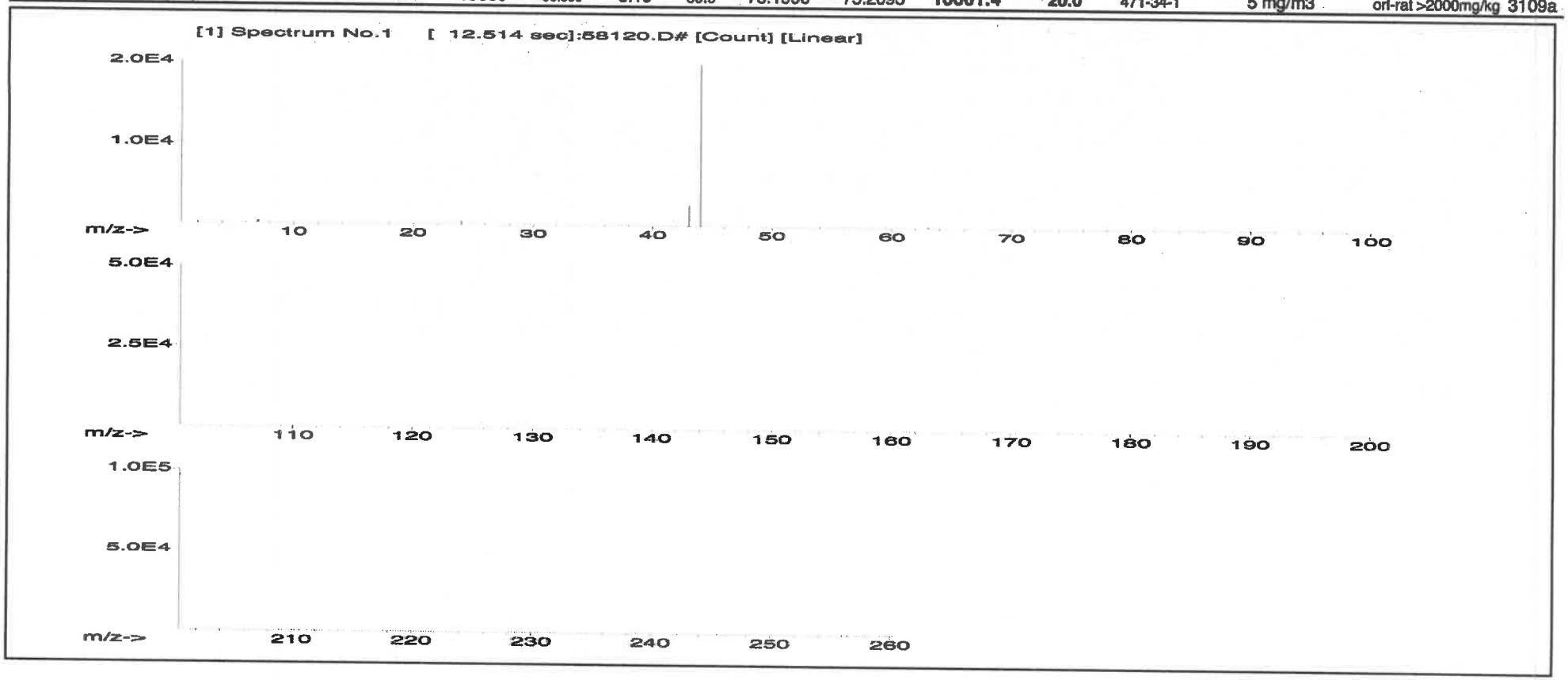
Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41

	Lot #		
Solvent:	21110221	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Giovanni Esposito

Formulated By:	Giovanni Esposito	031523
Reviewed By:	Pedro L. Rentas	031523

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	CAD072022A1	10000	99.999	0.10	39.9	75.1990	75.2093	**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	<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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M5497 - M5498 R: 03/17/23 (BF)

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CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 031523
Description: Calcium (Ca)

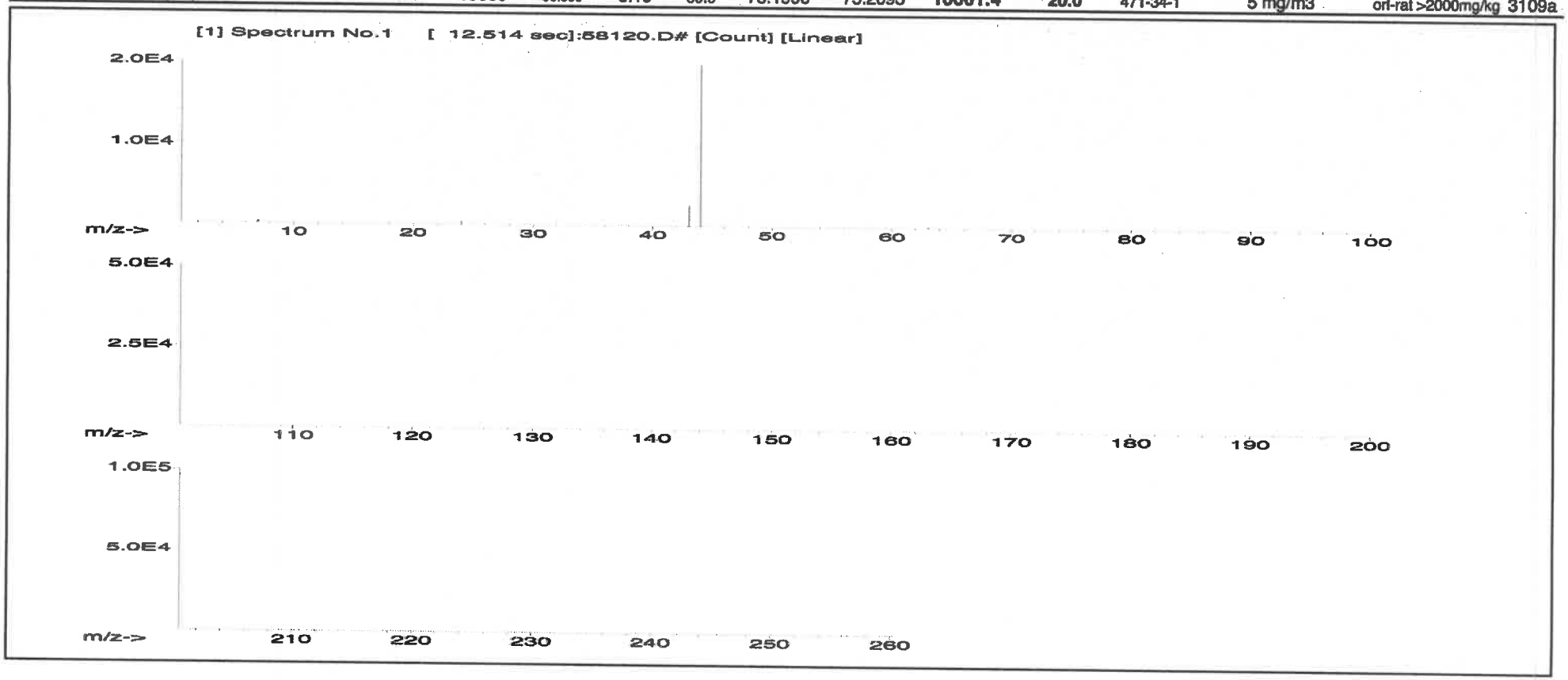
Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41

	Lot #		
Solvent:	21110221	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Giovanni Esposito

Formulated By:	Giovanni Esposito	031523
Reviewed By:	Pedro L. Rentas	031523

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	CAD072022A1	10000	99.999	0.10	39.9	75.1990	75.2093	**10001.4**	**20.0**	471-34-1	5 mg/m3	orl-rat >2000mg/kg	3109a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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MS513 R:03/17/23 BE

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CERTIFIED WEIGHT REPORT:

Part Number: 57182
Lot Number: 061522
Description: Lead (Pb)

Expiration Date: 061525
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

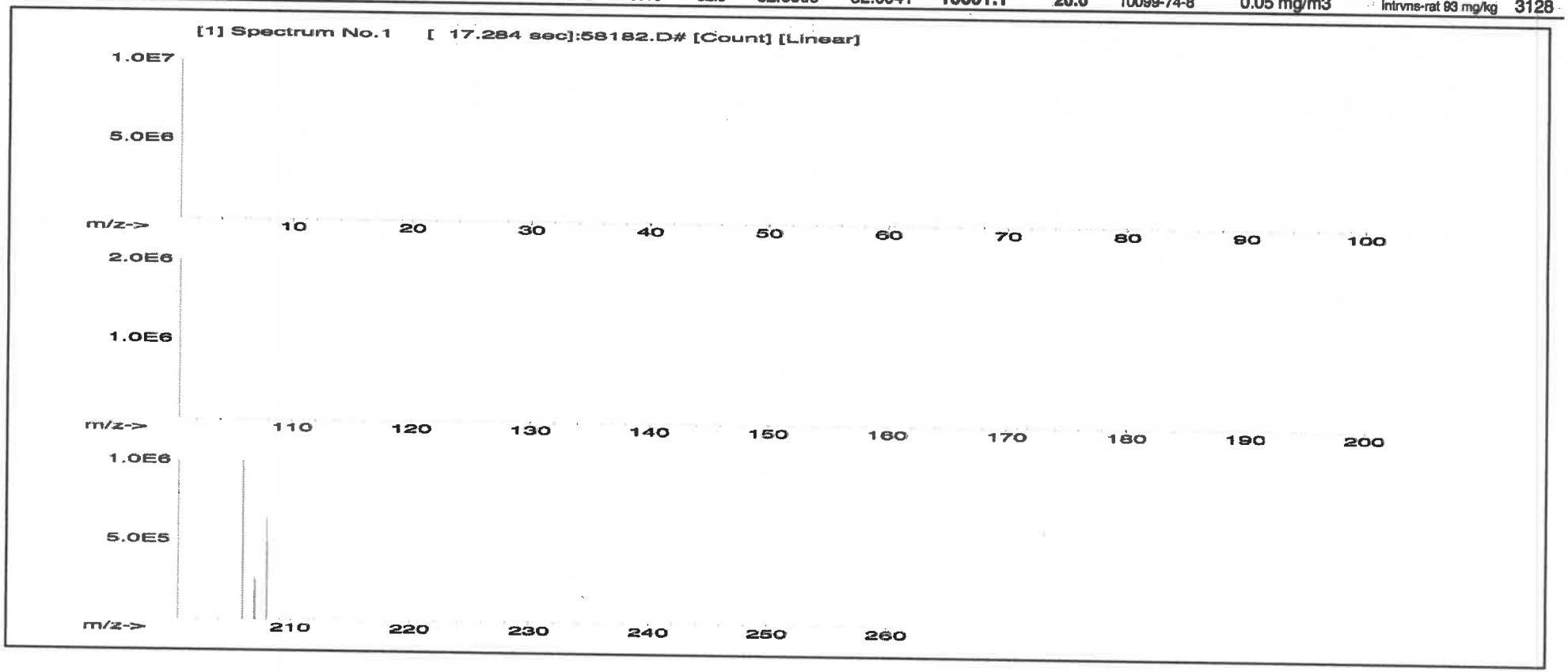
	Lot #		
Solvent:	20510011	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Giovanni Esposito

Formulated By:	Giovanni Esposito	061522
Reviewed By:	Pedro L. Rentas	061522

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lead(II) nitrate (Pb)	IN029	PBD122016A1	10000	99.999	0.10	62.5	32.0006	32.0041	**10001.1**	**20.0**	10099-74-8	0.05 mg/m3	Intrvns-rat 93 mg/kg	3128



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	T	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* 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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M519. M520 (BH) R:03/17/23

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CERTIFIED WEIGHT REPORT:

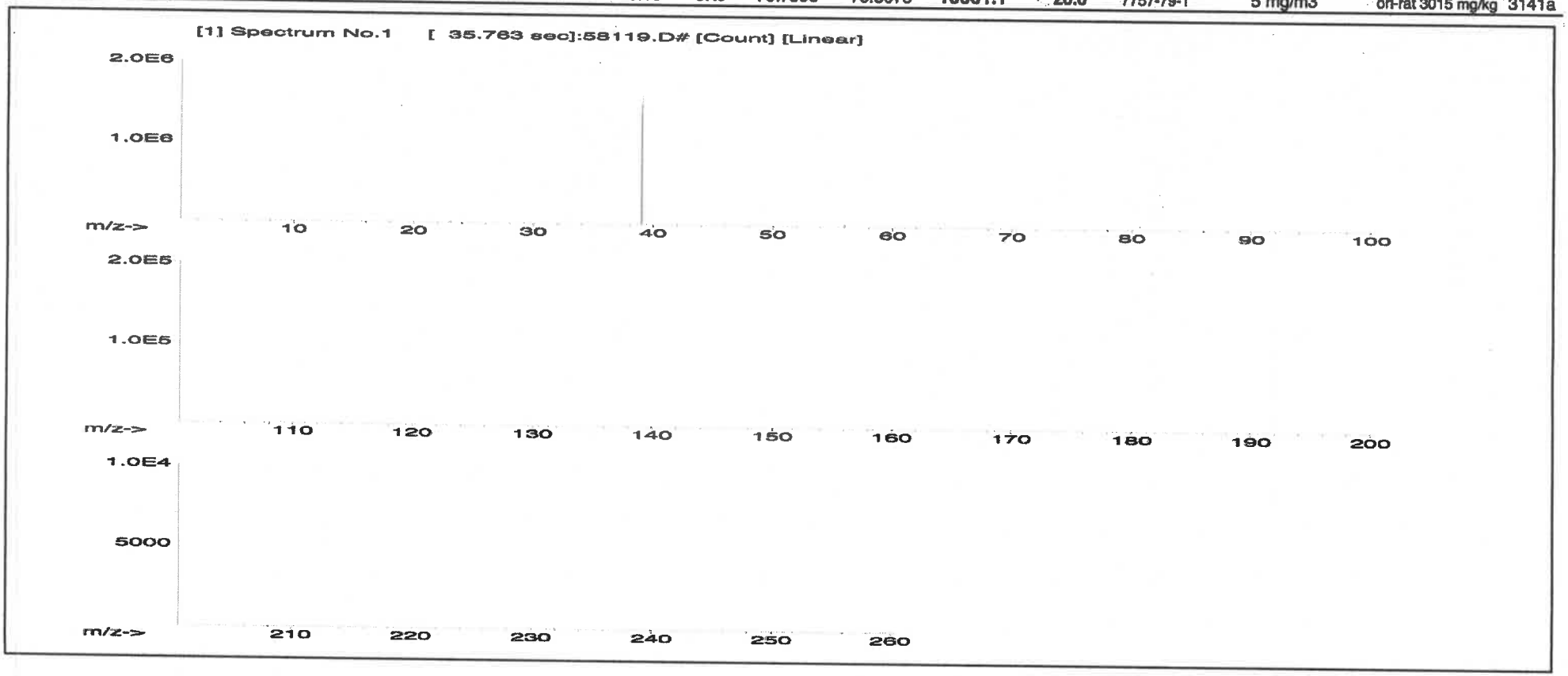
Part Number: 58119
Lot Number: 120822
Description: Potassium (K)

Expiration Date: 120825
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.4

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.06	Flask Uncertainty	

Giovanni Esposito
Formulated By: Giovanni Esposito 120822
Pedro Rentas
Reviewed By: Pedro L. Rentas 120822

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	KD022021A1	10000	99.999	0.10	37.6	79.7990	79.8075	**10001.1**	**20.0**	7757-79-1	5 mg/m3	orl-rat 3015 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.
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* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
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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).

QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

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.

MSS28-37
MB

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

Instructions for QATS Reference Material: *Inorganic ICV Solutions*

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	**CN^-**	99

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M5658 R ! 8/25/23

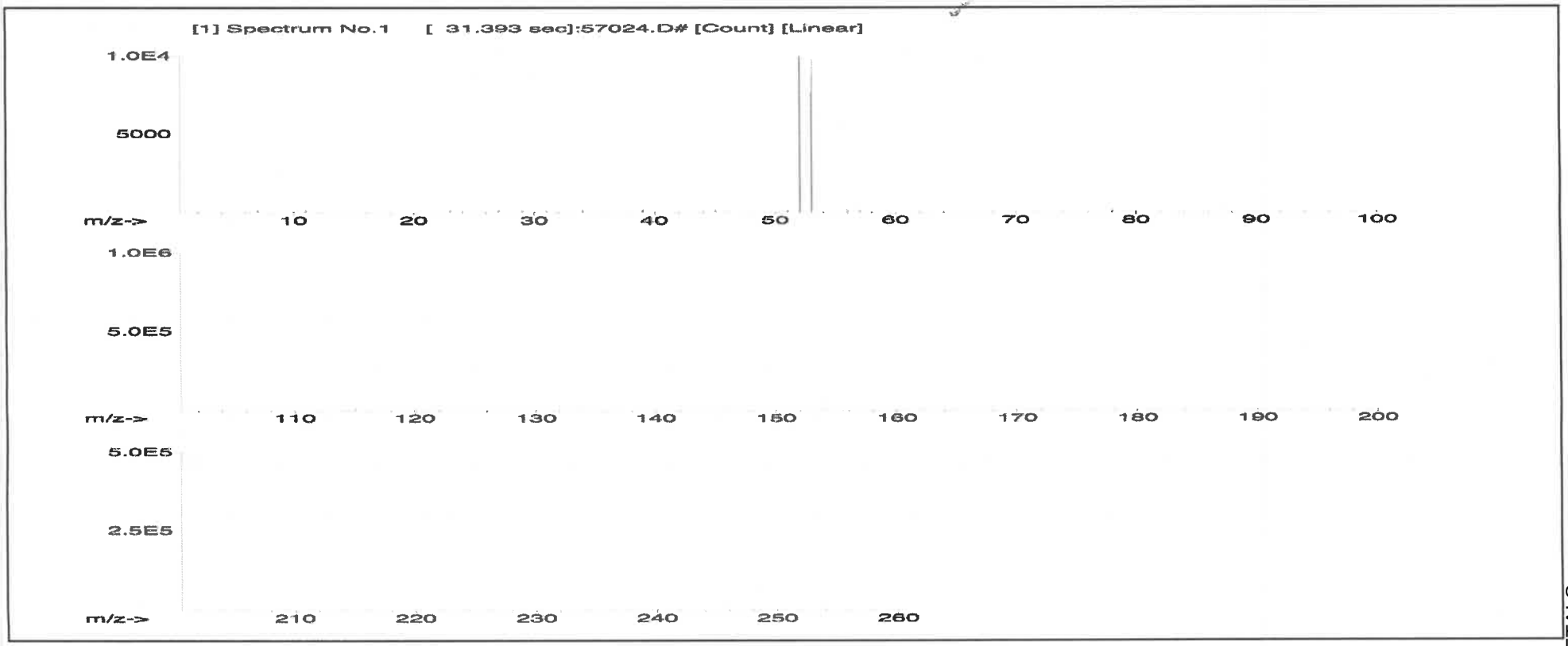
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58024**	21110221	Nitric Acid	
Lot Number:	**060523**			
Description:	**Chromium (Cr)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	060523
Reviewed By:	Pedro L. Rentas	060523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Chromium(III) nitrate nonahydrate (Cr)	58124	071122	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	7789-02-8	0.5 mg(Cr)/m3	orl-rat 3250 mg/kg	3112a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	T	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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M5697 R: 10/27/23

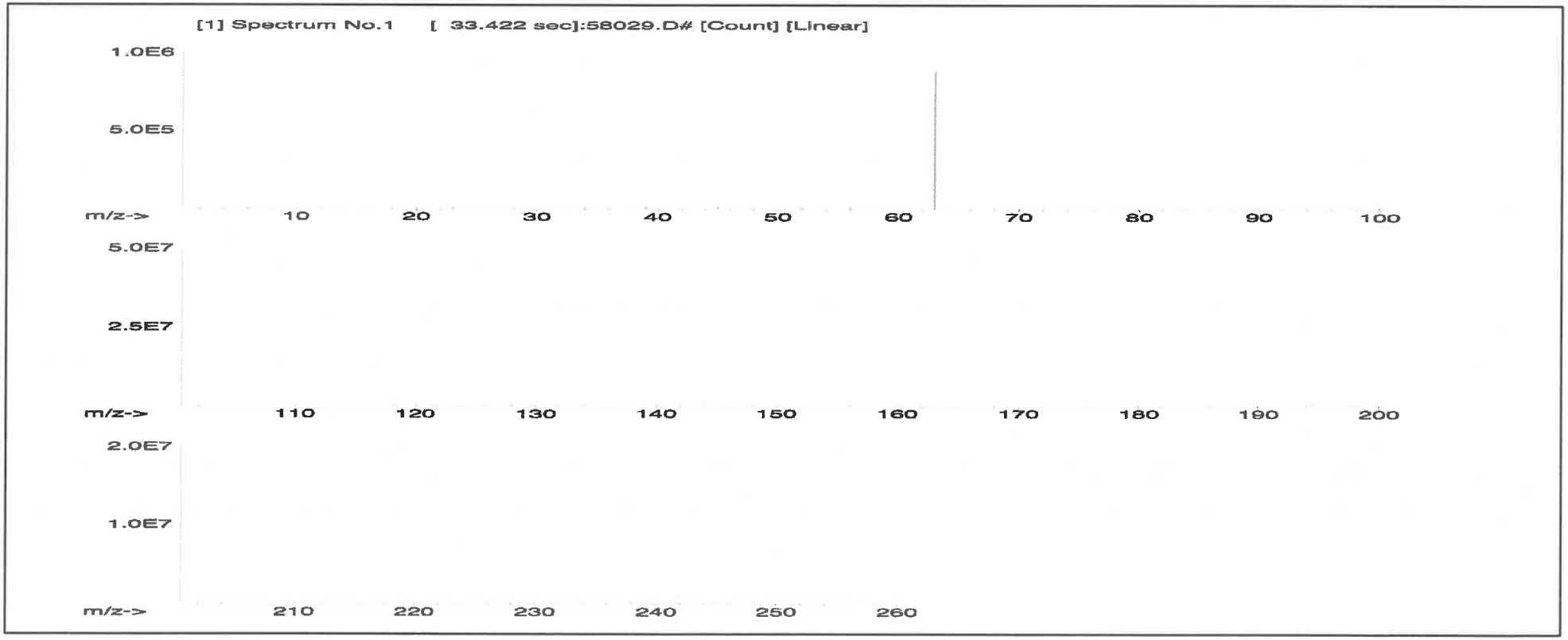
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CERTIFIED WEIGHT REPORT:

		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.
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R: 12/20/23 M5747

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CERTIFIED WEIGHT REPORT:

Part Number: 57082
Lot Number: 100923
Description: Lead (Pb)

Expiration Date: 100926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

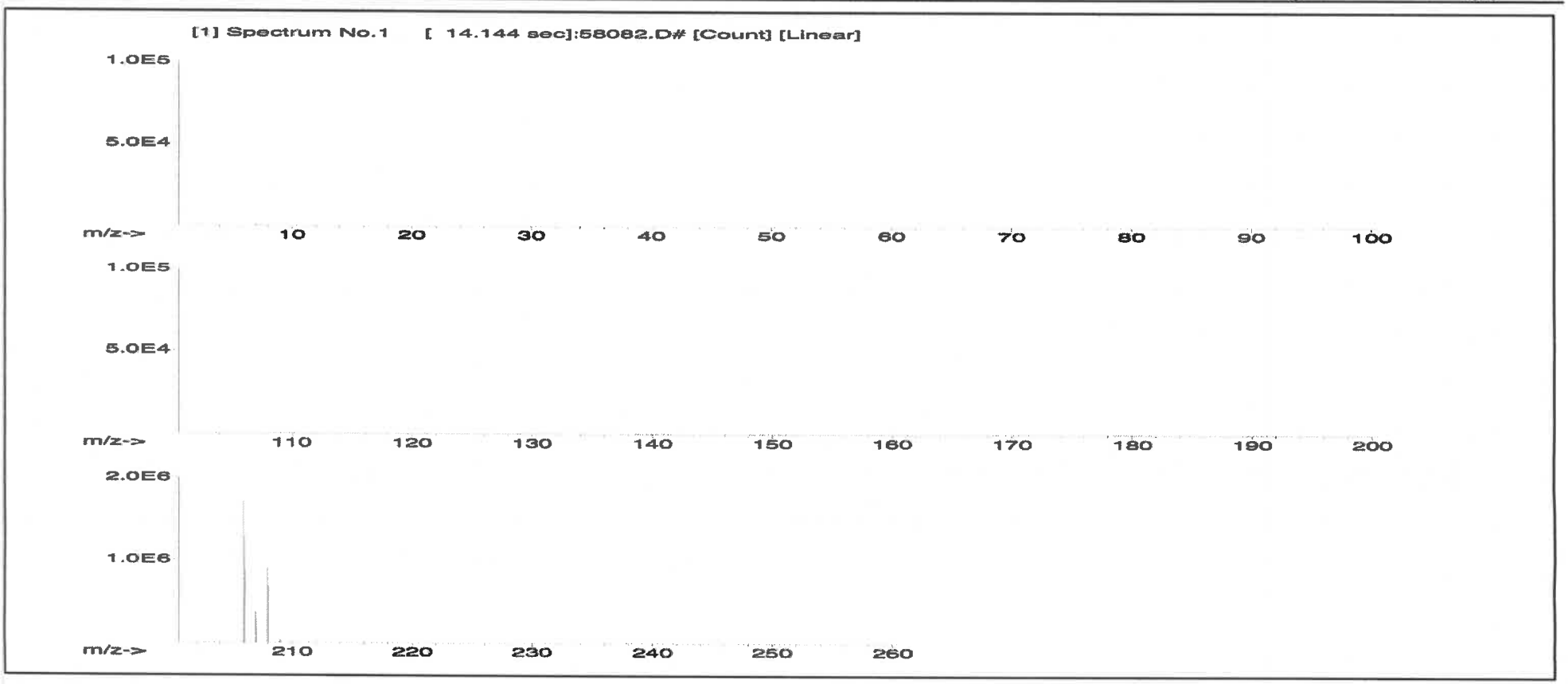
Weight shown below was diluted to (mL): 3000.41 0.06 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Lawrence Barry	100923
Reviewed By:	Pedro L. Rentas	100923

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lead(II) nitrate (Pb)	IN029	PBD122016A1	1000	99.999	0.10	62.5	4.80071	4.80077	**1000.0**	**2.0**	10099-74-8	0.05 mg/m3	intrvns-rat 93 mg/kg	3128



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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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* 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: 12/20/23 M5748

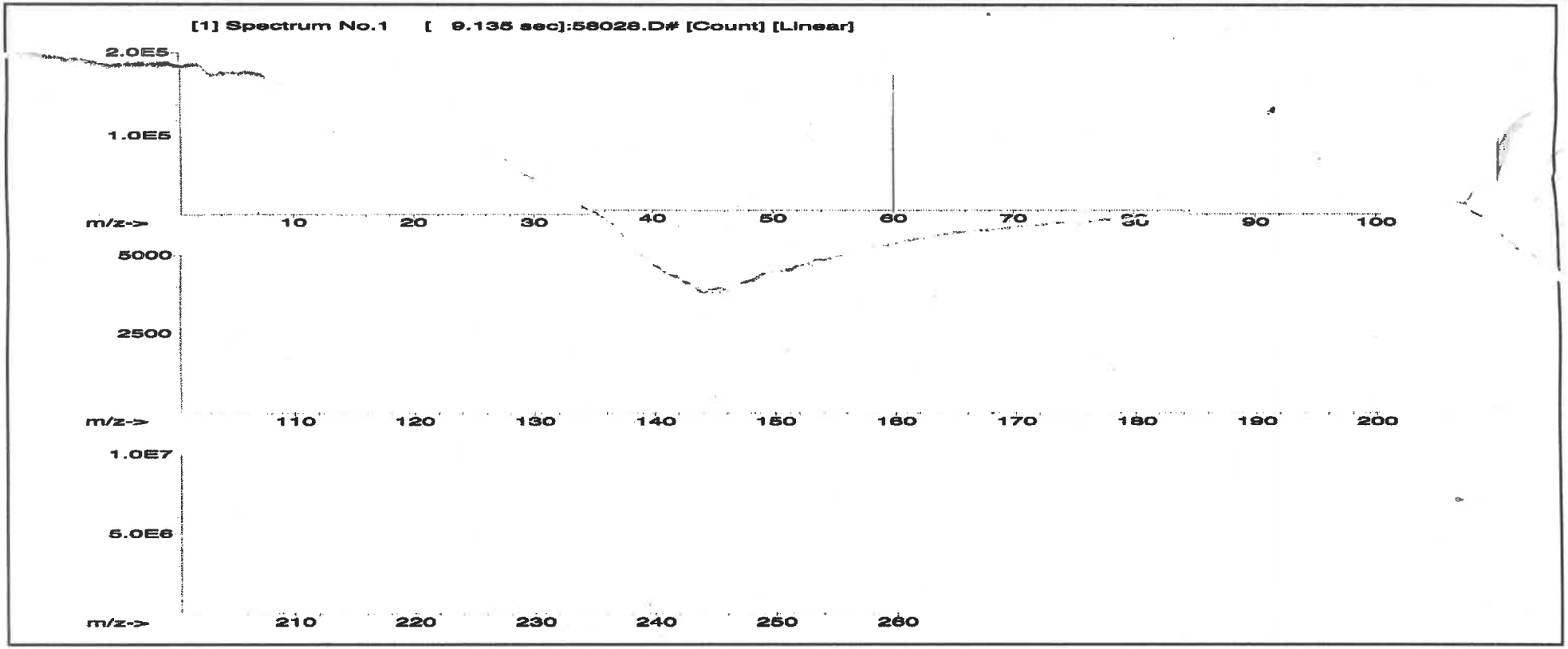
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57028**	24002546	Nitric Acid	
Lot Number:	**091223**			
Description:	**Nickel (Ni)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	091226			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	091223
Reviewed By:	Pedro L. Rentas	091223

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Nickel(II) nitrate hexahydrate (Ni)	58128	062023	0.1000	200.0	0.084	1000	10000.4	**1000.0**	2.2	13478-00-7	1 mg/m3	orl-rat 1620 mg/kg	3136



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	T	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* 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 M5798

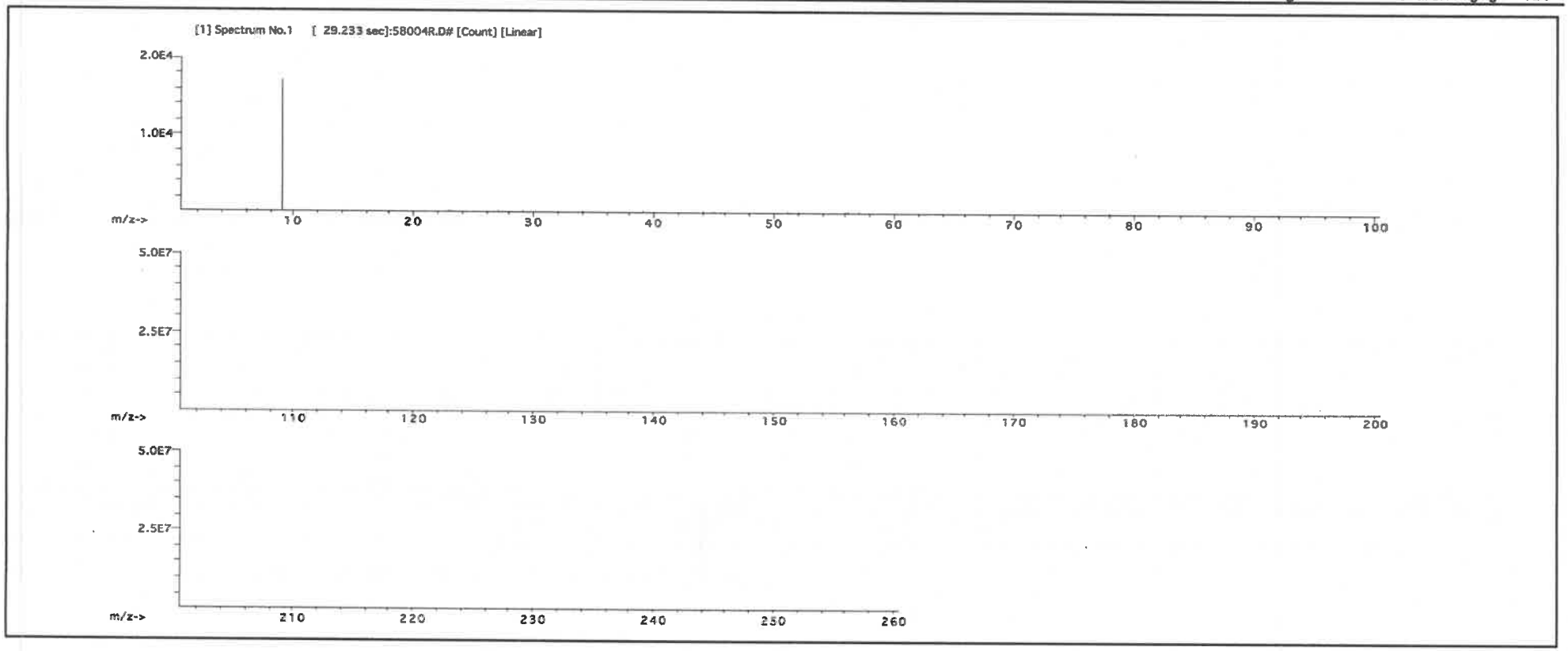
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CERTIFIED WEIGHT REPORT:

		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



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	T	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* 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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CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

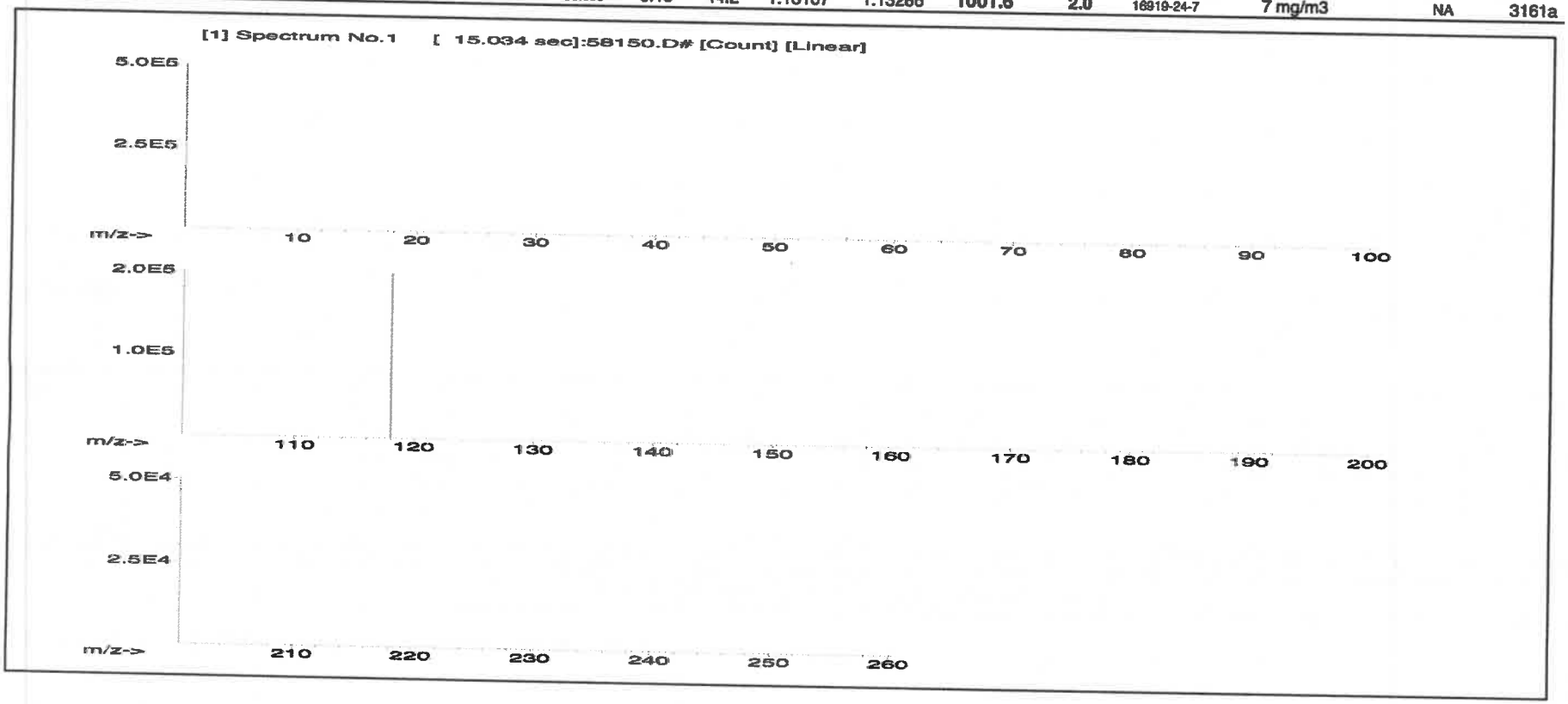
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

Solvents:	Lot #	
	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.
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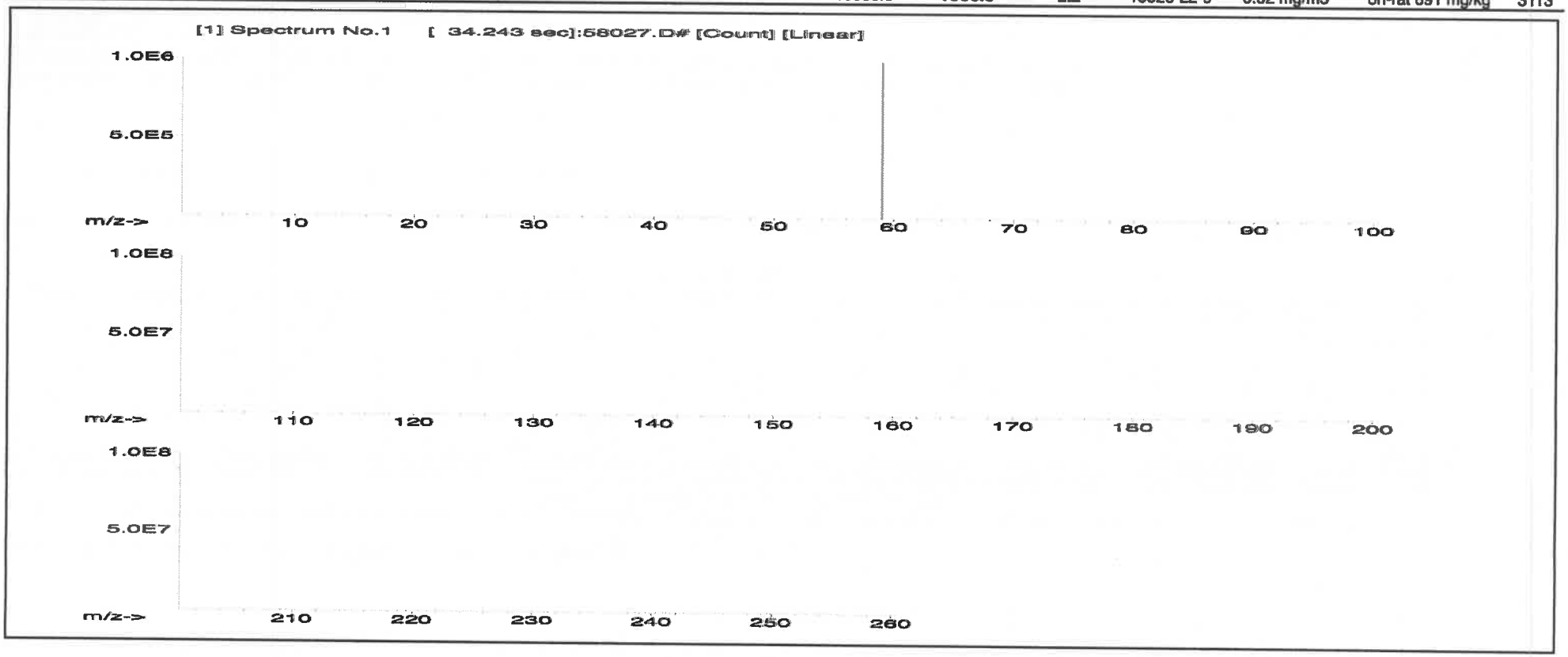
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57027**	24002546	Nitric Acid		
Lot Number:	**091923**				
Description:	**Cobalt (Co)**	2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	091926				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	091923
Reviewed By:	Pedro L. Rentas	091923

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cobalt(II) nitrate hexahydrate (Co)	58127	050923	0.1000	200.0	0.084	1000	10000.0	**1000.0**	2.2	10026-22-9	0.02 mg/m3	orl-rat 691 mg/kg	3113



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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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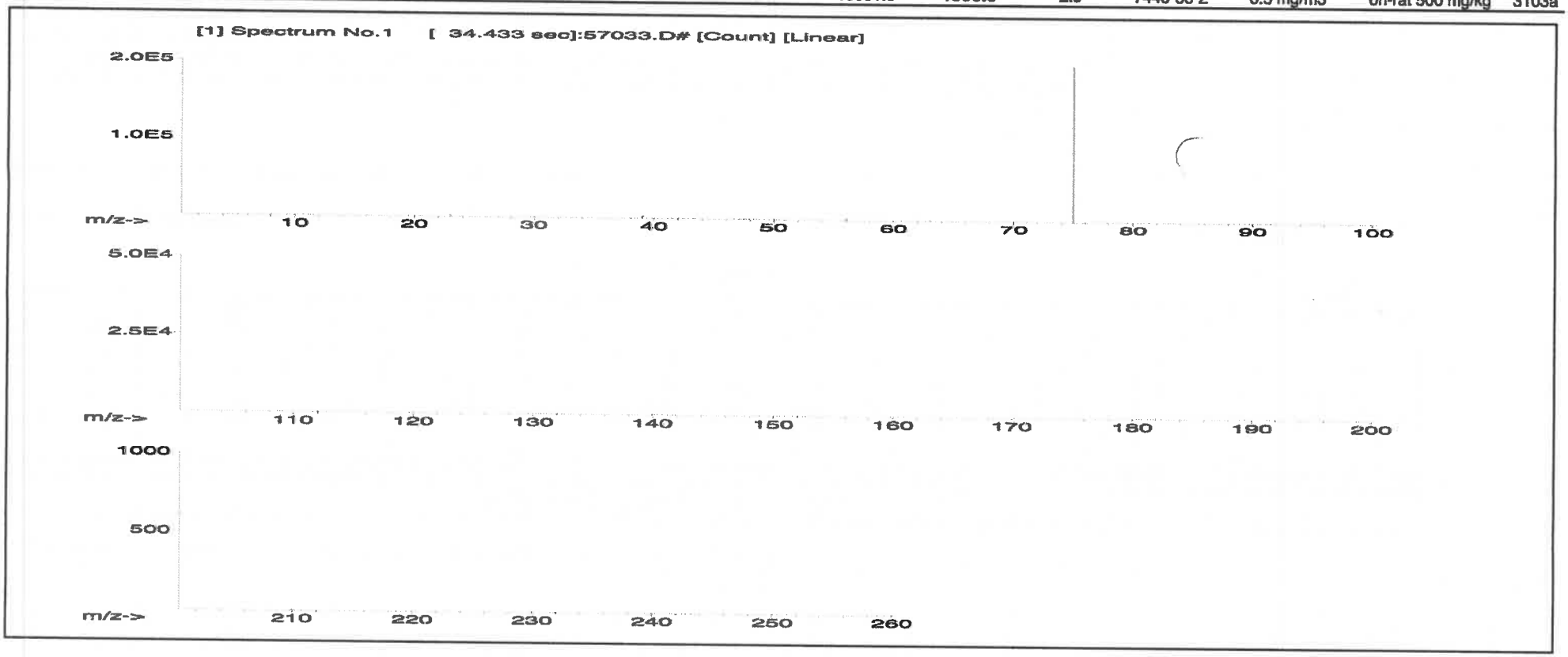
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CERTIFIED **WEIGHT** REPORT:

		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

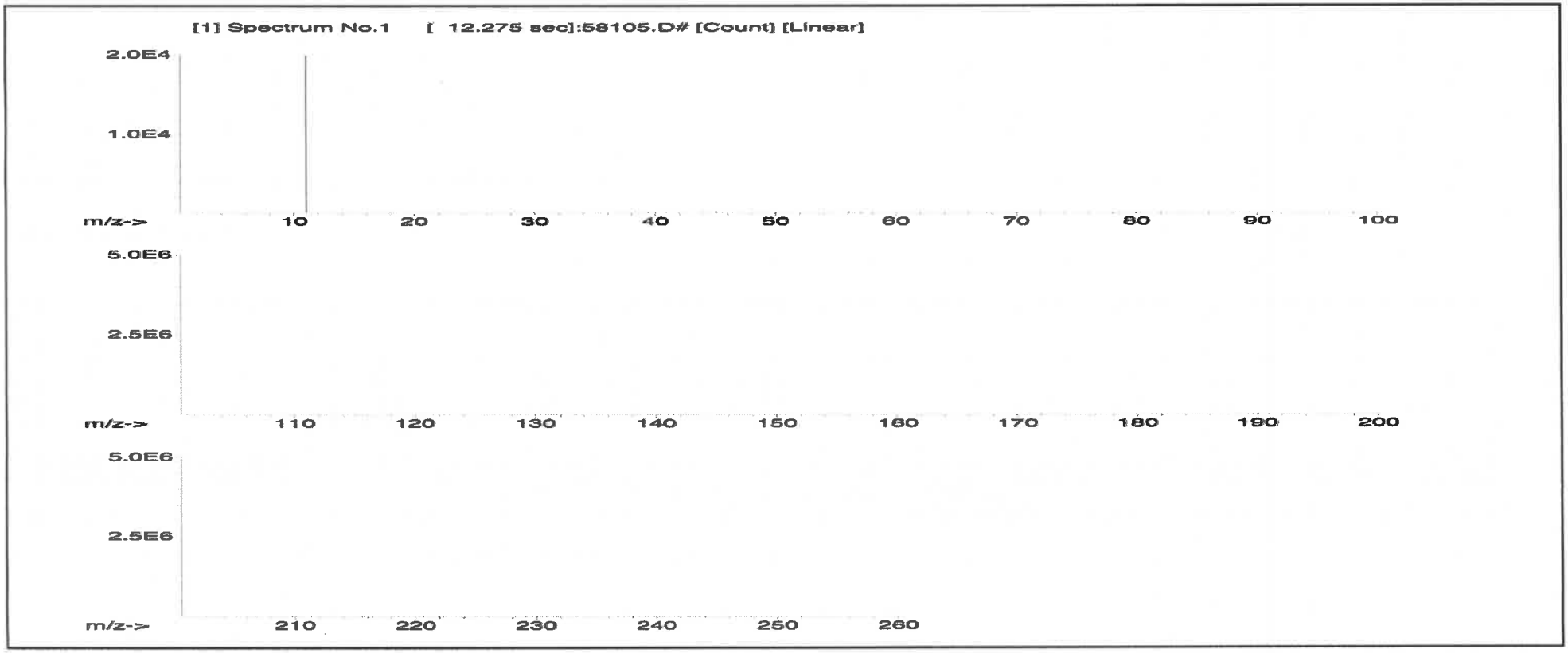
Weight shown below was diluted to (mL): 1999.48 0.058 Flask Uncertainty

	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:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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R1 02/09/24. M5815

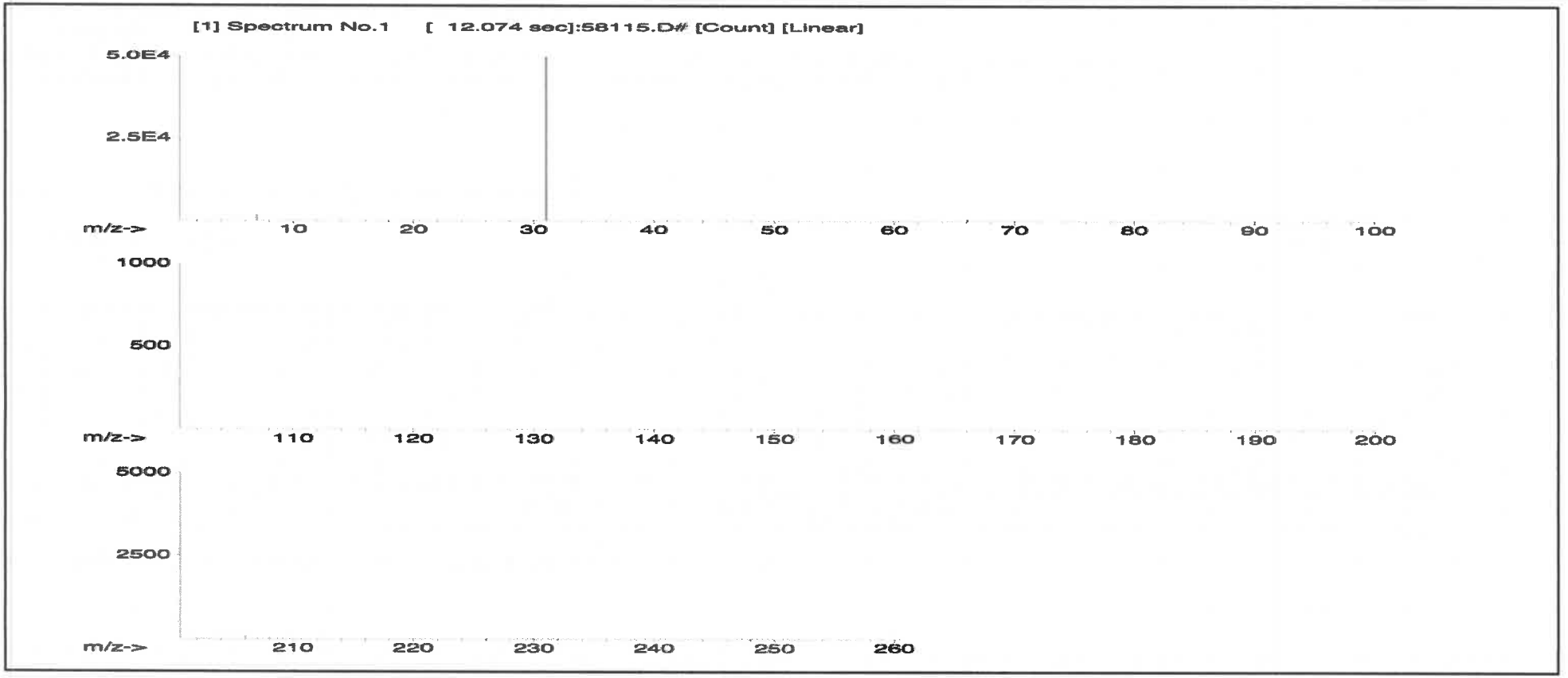
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CERTIFIED WEIGHT REPORT:

Part Number:	**57115**			**Lot #**	
Lot Number:	**041723**		**Solvent:**	21110221	Nitric Acid
Description:	**Phosphorous (P)**				
			2%	40.0 (mL)	Nitric Acid
Expiration Date:	041726				
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):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	041723
Reviewed By:	Pedro L. Rentas	041723

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	10000	99.999	0.10	27.5	72.7287	72.7289	**10000.0**	**20.0**	7722-76-1	5 mg/m3	orl-rat >2000mg/kg	3186



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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	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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Certified Reference Material CRM

R: 02/09/24 M5816

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CERTIFIED WEIGHT REPORT:

Part Number: 57016
Lot Number: 122923
Description: Sulfur (S)

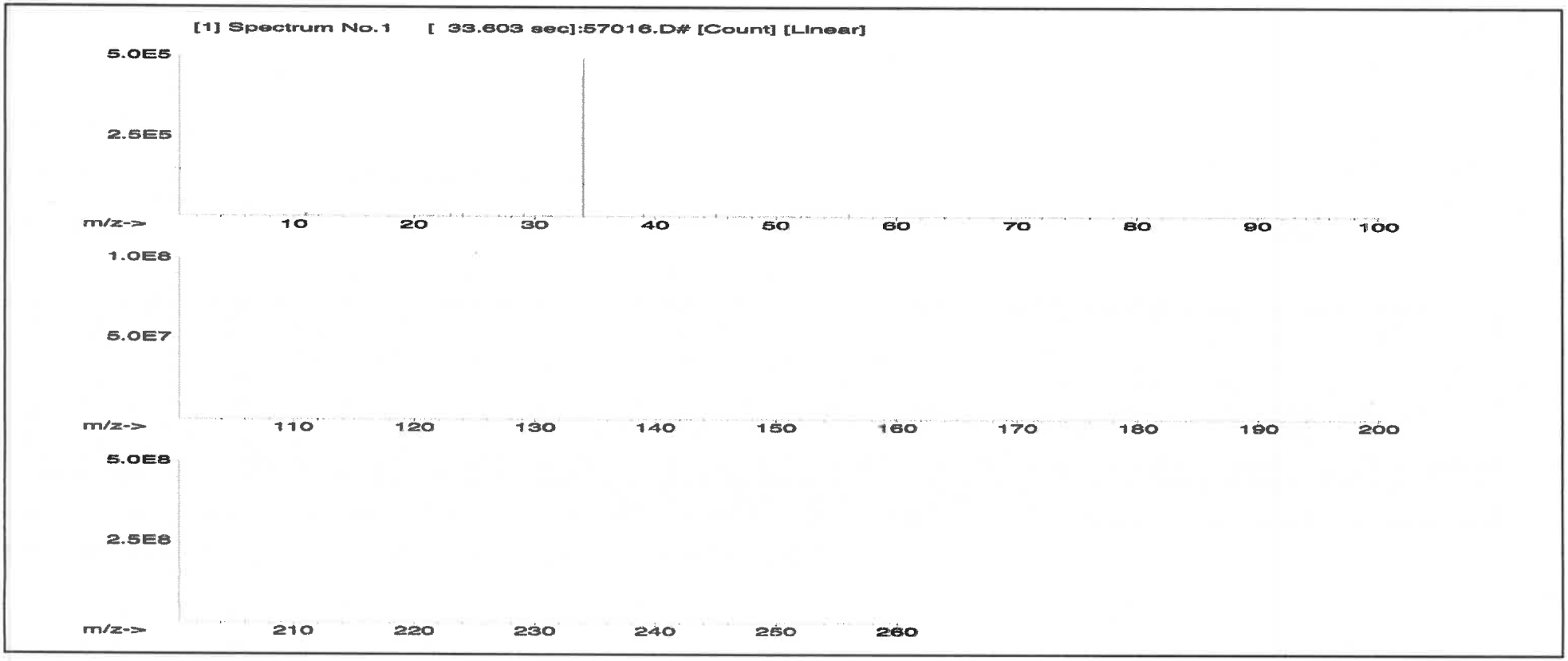
Expiration Date: 122926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 4000.0

Lot #		
Solvent:	122923	ASTM Type 1 Water
	5E-05	Balance Uncertainty
	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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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	T	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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R: 02/09/24 M5817

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CERTIFIED WEIGHT REPORT:

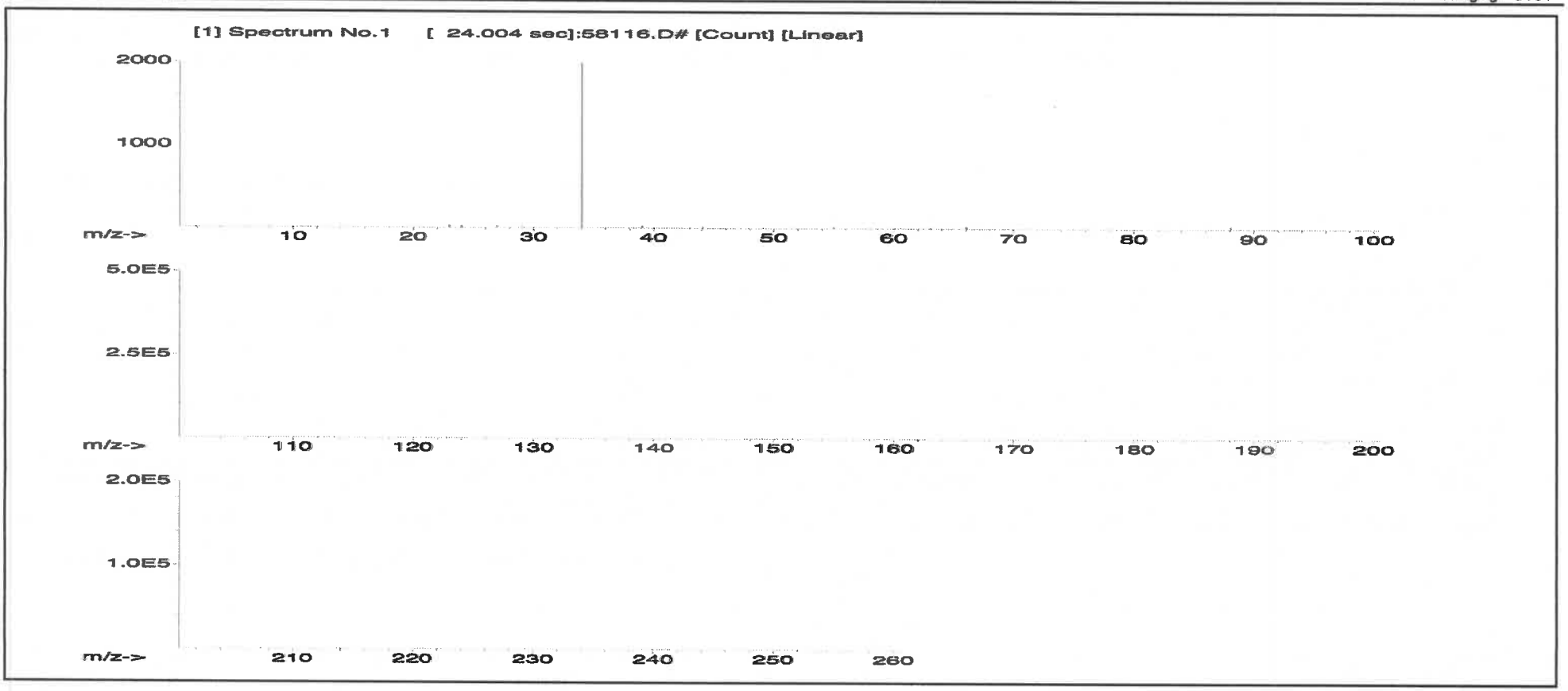
Part Number: 57116
Lot Number: 071123
Description: Sulfur (S)

Expiration Date: 071126
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): 1999.48 0.058 Flask Uncertainty

Lot #
Solvent: 071123 ASTM Type 1 Water

Formulated By:	Lawrence Barry	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 sulfate (S)	IN117	SLBR7225V	10000	99.9	0.10	24.3	82.4675	82.4682	**10000.1**	**20.0**	7783-20-2	NA	ori-rat 4250mg/kg	3181



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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	T	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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Certified Reference Material CRM

R: 02/09/24 M5819

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CERTIFIED WEIGHT REPORT:

Part Number: 58030
Lot Number: 111623
Description: Zinc (Zn)

Expiration Date: 111626
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

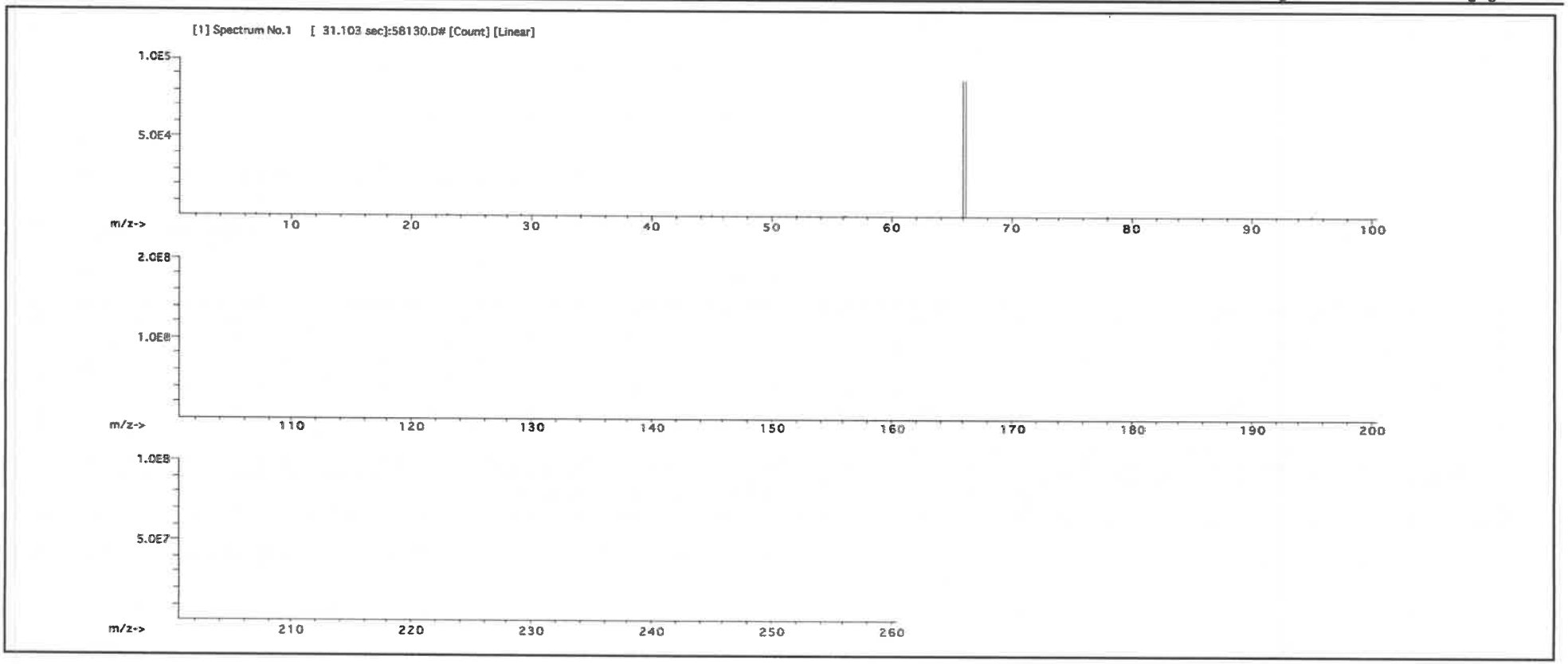
Weight shown below was diluted to (mL): 3000.4 0.06 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Benson Chan	111623
Reviewed By:	Pedro L. Rentas	111623

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	12.3475	12.3502	**1000.2**	**2.0**	10196-18-6	1 mg/m3	orl-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:

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Certified by:

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R: 02/09/24 M5820

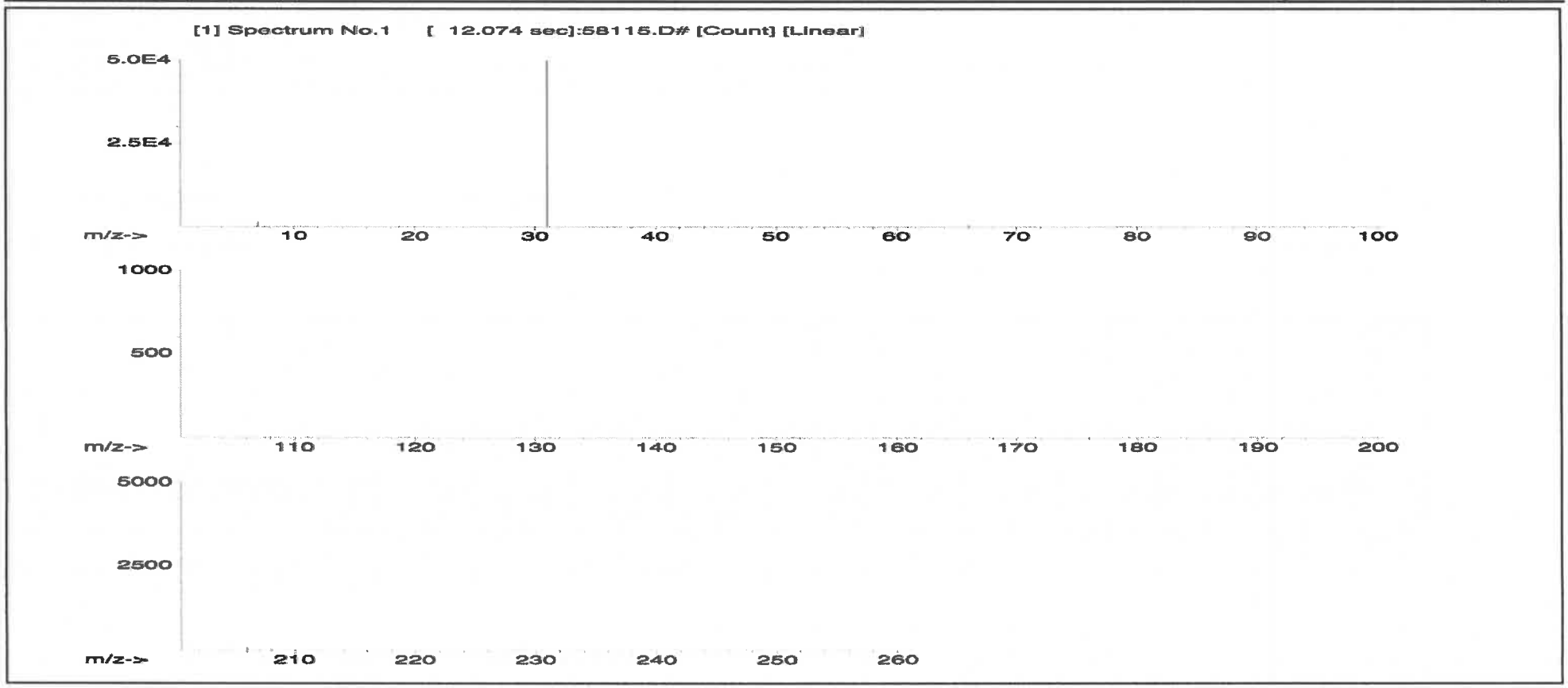
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CERTIFIED WEIGHT REPORT:

Part Number:	**57015**		**Solvent:**	24002546	Nitric Acid
Lot Number:	**091123**				
Description:	**Phosphorous (P)**		2%	40.0 (mL)	Nitric Acid
Expiration Date:	091126				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry 091123
Reviewed By:	Pedro L. Rentas 091123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium dihydrogen phosphate (P)	IN008	PV082019A1	1000	99.999	0.10	27.5	7.2729	7.2730	**1000.0**	**2.0**	7722-76-1	5 mg/m3	orl-rat >2000mg/k	3186



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Trace Metals Verification by ICP-MS (µg/mL)

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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:

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Sodium Chloride, Crystal
BAKER ANALYZED® A.C.S. Reagent

MF884
MB

avantor™ | J.T.Baker®

Material No.: 3624-01
Batch No.: 0000281938
Manufactured Date: 2021-06-07
Retest Date: 2026-06-07
Revision No.: 1

Certificate of Analysis

Test	Specification	Result
Assay (NaCl) (by Ag titrn)	≥ 99.0 %	100.0 %
pH of 5% Solution at 25°C	5.0 - 9.0	6.3
Insoluble Matter	≤ 0.005 %	0.003 %
Iodide (I)	≤ 0.002 %	< 0.002 %
Bromide (Br)	≤ 0.01 %	< 0.01 %
Chlorate and Nitrate (as NO_3)	≤ 0.003 %	< 0.001 %
ACS - Phosphate (PO_4)	≤ 5 ppm	< 5 ppm
Sulfate (SO_4)	≤ 0.004 %	< 0.004 %
Barium (Ba)	Passes Test	Passes Test
ACS - Heavy Metals (as Pb)	≤ 5 ppm	< 5 ppm
Iron (Fe)	≤ 2 ppm	< 1 ppm
Calcium (Ca)	≤ 0.002 %	< 0.001 %
Magnesium (Mg)	≤ 0.001 %	< 0.001 %
Potassium (K)	≤ 0.005 %	0.001 %

For Laboratory,Research,or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs
Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC

James T Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Mansford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

INORGANIC VENTURES
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Certificate of Analysis

M5959 R: 6/14/24.

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:	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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Certified Reference Material CRM

M5961 R: 6/11/24

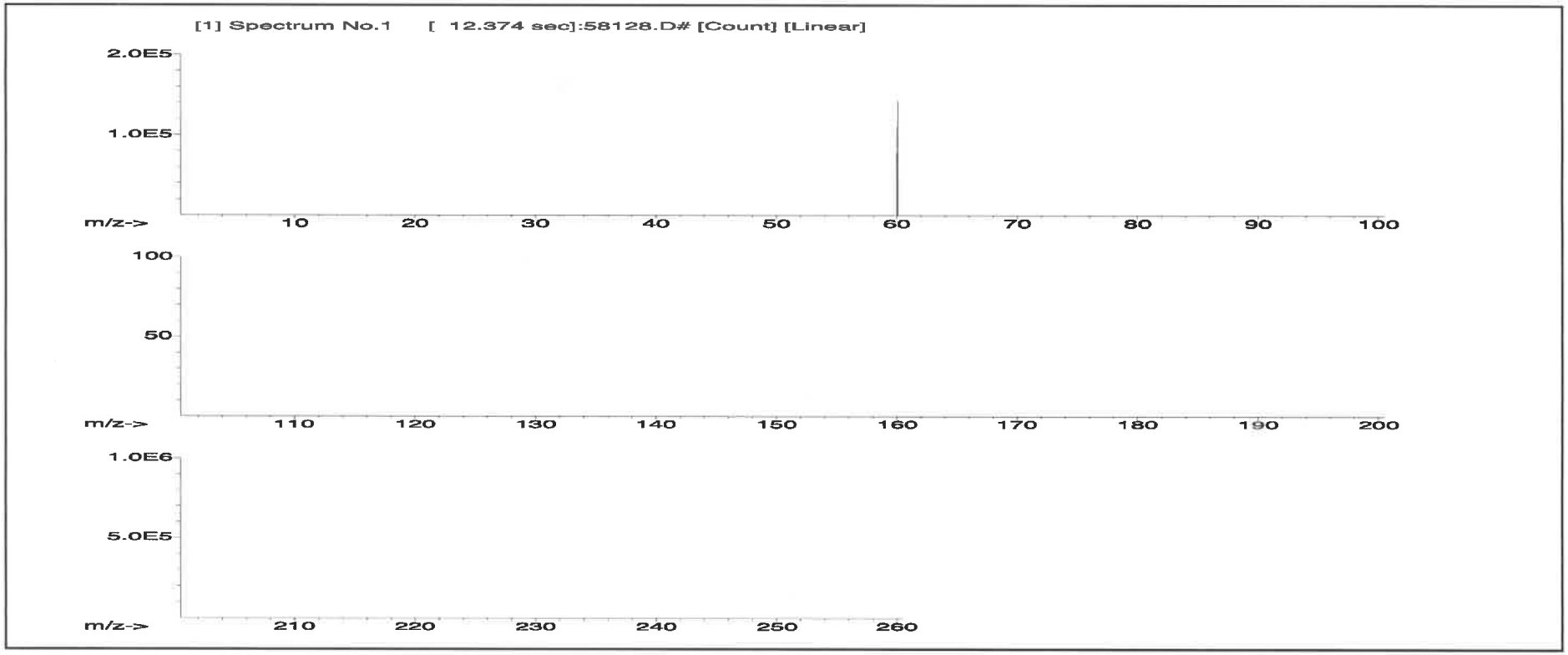
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https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57028**		**Lot #**		
Lot Number:	**041124**	**Solvent:**	24002546	Nitric Acid	
Description:	**Nickel (Ni)**				
		2%	5.0 (mL)	Nitric Acid	
Expiration Date:	041127				
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):	249.85	0.002	Flask Uncertainty		

Formulated By:	Brian Geddes	041124
Reviewed By:	Pedro L. Rentas	041124

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. Nickel(II) nitrate hexahydrate (Ni)	IN033	NIM052023A1	1000	99.999	0.10	20.2	1.2369	1.2369	**1000.0**	**2.0**	13478-00-7	1 mg/m3	orl-rat 1620 mg/kg	3136



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	T	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M5962 R! 06/14/24.

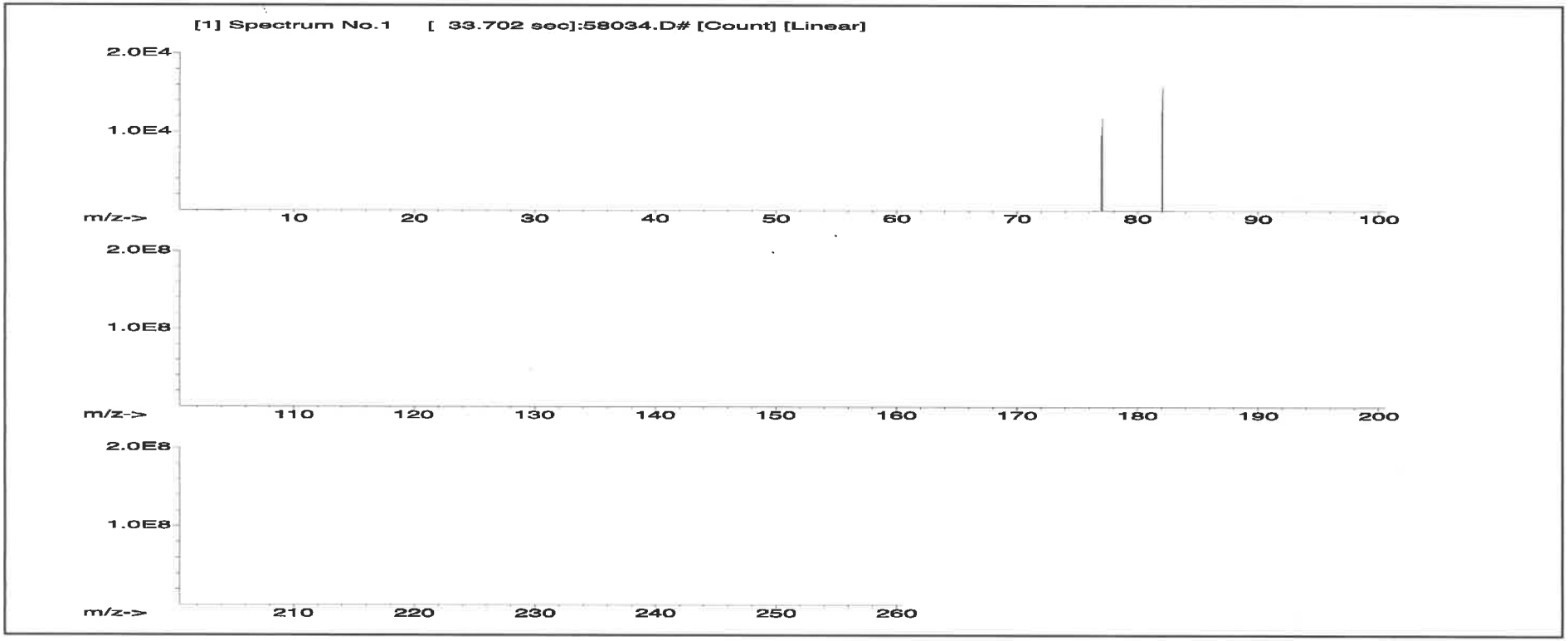
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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

M5970, M5971 R: 7/01/24

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CERTIFIED WEIGHT REPORT:

Part Number: 57003
Lot Number: 062124
Description: Lithium (Li)
Expiration Date: 062127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 250.11

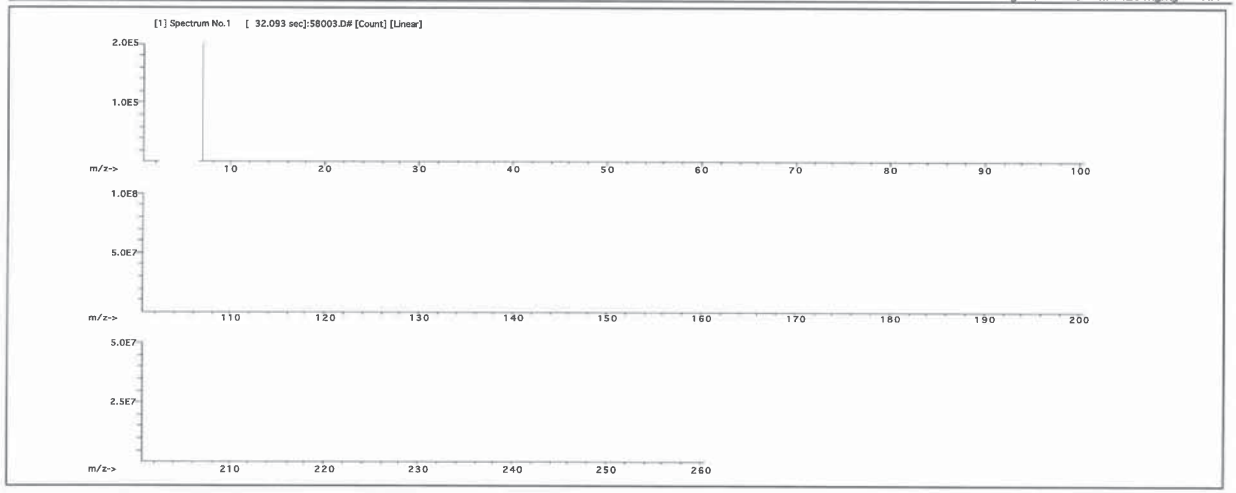
Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	5.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.016 Flask Uncertainty

Giovanni Esposito
Formulated By: Giovanni Esposito 062124

Pedro Rentas
Reviewed By: Pedro L. Rentas 062124

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lithium nitrate (Li)	58103	070622	0.1000	25.0	0.004	1000	10000.4	**1000.0**	**2.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/kg	NA



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AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	T	Ni	<0.02	Pr	<0.02	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certificate of Analysis

M5976, M5977
R: 02/22/24

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F: 540-585-3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMO1
Lot Number:	T2-MO720876
Matrix:	H2O tr. NH4OH
Value / Analyte(s):	1 000 µg/mL ea: Molybdenum
Starting Material:	Ammonium Molybdate
Starting Material Lot#:	2361
Starting Material Purity:	99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 998 ± 7 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 3134 Lot Number: 130418

- 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	<	0.000590	M	Eu	<	0.000300	M	Na		0.000879	M	Se	<	0.008000	M	Zn		0.000598
M	Al		0.000563	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.000175				
M	Ba		0.001689	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.006334	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Tl	<	0.032000				
M	Ce	<	0.008300	M	K		0.130213	M	Rb		0.004575	M	Tl		0.001266				
M	Co		0.000598	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.000527	O	Li		0.000059	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.000527	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.002252	M	Mg		0.000563	i	S	<		M	W		0.087982				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.001513	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

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 - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or 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 95 amu	3 ppt	n/a	40Ar39K16O,79Br1 6O,190Os2+,190Pt 2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

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

July 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

- July 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 Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



MS978, MS979

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R: 2/22/24

Certificate of Analysis

Refine your results. Redefine your industry.

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 865.01

ACCREDITED Reference Material Producer Certificate 865.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTI1
Lot Number:	T2-TI719972
Matrix:	2% (v/v) HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Titanium TI Metal
Starting Material:	
Starting Material Lot#:	2094
Starting Material Purity:	99.9975%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 5 µg/mL

Density: 1.012 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**1002 ± 4 µg/mL**
	ICP Assay NIST SRM 3162a Lot Number: 130925

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/MM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \Sigma(w_i)\,(x_i)$$

x_i = mean of Assay Method i with standard uncertainty $u_{Char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance

$$w_i = (1/u_{Char\ i})^2 \,/\, (\Sigma(1/u_{Char\ i})^2)$$

CRM/RM Expanded Uncertainty ($\pm$) = $U_{CRM/RM} = k\,(u^2_{Char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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:

$$X_{CRM/RM} = (\Sigma x_a)\,(v_{Char\ a})$$

X_a = mean of Assay Method A with $v_{Char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty ($\pm$) = $U_{CRM/RM} = k\,(u^2_{Char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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 for months in 1% 2-5% HNO3 / trace HF in an LDPE container.

Ti Containing Samples (Preparation and Solution) - Metal (Soluble in H2O / HF caution -powder reacts violently); Oxide - low temperature history anatase or rutile (Dissolved by heating in 1:1:1 H2O / HF / H2SO4); Oxide - high temperature history (~800EC) brookite (fuse in Pt0 with K2S2O7); Ores (fuse in Pt0 with KF + K2S2O7 - no KF if silica not present); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve by heating with 1:1:1 H2O / HF / H2SO4 or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite crystalline form).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 48 amu	14 ppt	N/A	32S16O, 32S14N, 14N16O18O, 14N17N2, 36Ar12C, 48Ca, [96X=Zr, Mo, (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

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 17, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on property stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozlkowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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R: 6/14/24

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGIN10
Lot Number:	U2-IN729349
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Indium
Starting Material:	Indium Metal
Starting Material Lot#:	2511
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.044 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10021 ± 56 µg/mL** ICP Assay NIST SRM 3124a Lot Number: 110516
Assay Method #2	**10035 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	**10001 ± 33 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000760	M	Eu	<	0.000760	O	Na		0.012771	M	Se	<	0.023000	M	Zn	<	0.006100
M	Al		0.003385	O	Fe		0.004462	M	Nb	<	0.000760	O	Si		0.024619	M	Zr	<	0.000760
M	As	<	0.004600	M	Ga	<	0.000760	M	Nd	<	0.000760	M	Sm	<	0.000760				
M	Au	<	0.002300	M	Gd	<	0.000760	O	Ni	<	0.005100	M	Sn	<	0.000760				
O	B		0.003692	M	Ge	<	0.001600	M	Os	<	0.000760	O	Sr	<	0.000610				
M	Ba	<	0.001600	M	Hf	<	0.000760	n	P	<		M	Ta	<	0.000760				
O	Be	<	0.000130	M	Hg	<	0.003100	M	Pb		0.001400	M	Tb	<	0.000760				
M	Bi	<	0.000760	M	Ho	<	0.000760	M	Pd	<	0.001600	M	Te	<	0.000760				
O	Ca		0.004616	s	In	<		M	Pr	<	0.000760	M	Th	<	0.000760				
M	Cd	<	0.000760	M	Ir	<	0.000760	M	Pt	<	0.000760	O	Ti	<	0.001100				
M	Ce	<	0.000760	O	K		0.007078	M	Rb	<	0.000760	M	Tl	<	0.000760				
M	Co	<	0.000760	M	La	<	0.000760	M	Re	<	0.000760	M	Tm	<	0.000760				
O	Cr	<	0.001300	O	Li	<	0.000130	M	Rh	<	0.000760	M	U	<	0.000760				
M	Cs	<	0.000760	M	Lu	<	0.000760	M	Ru	<	0.000760	M	V	<	0.001600				
M	Cu	<	0.003800	O	Mg		0.000707	n	S	<		M	W	<	0.001600				
M	Dy	<	0.000760	O	Mn		0.000149	M	Sb	<	0.000760	M	Y	<	0.000760				
M	Er	<	0.000760	M	Mo	<	0.002300	M	Sc	<	0.000760	M	Yb	<	0.000760				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 114.82 +3 6 In(H2O)6+3

Chemical Compatibility -Soluble in HCl, HNO3, and H2SO4. Avoid neutral and basic media. Stable with most metals and inorganic anions. The oxalate, sulfide, carbonate, hydroxide and phosphate are insoluble in water.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

In Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); Oxide (Soluble in mineral acids); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 115 amu	1 ppt	n/a	115Sn, 99Ru16O
ICP-OES 158.583 nm	0.05 / 0.002 µg/mL	1	
ICP-OES 230.606 nm	0.1 / 0.03 µg/mL	1	Ni, Os
ICP-OES 325.609 nm	0.2 / 0.05 µg/mL	1	Mn, Mo, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 21, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- February 21, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

M 6041-46
MS

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010
Manufactured Date: 2023-03-22
Retest Date: 2028-03-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H_2SO_4)	95.0 – 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Substances Reducing Permanganate (as SO2)	≤ 2 ppm	< 2 ppm
Ammonium (NH_4)	≤ 1 ppm	1 ppm
Chloride (Cl)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO_3)	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO_4)	≤ 0.5 ppm	< 0.1 ppm
Trace Impurities – Aluminum (Al)	≤ 30.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities – Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities – Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities – Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities – Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
Trace Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010

Test	Specification	Result
Trace Impurities - Sodium (Na)	≤ 500.0 ppb	5.4 ppb
Trace Impurities - Strontium (Sr)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities - Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities - Zinc (Zn)	≤ 5.0 ppb	0.4 ppb

For Laboratory,Research,or Manufacturing Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier
Jamie Ethier
Vice President Global Quality

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

M6074
M6075
M6076
M6077

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

EXP.: 9/6/2029

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CHEM-CLP-4
Lot Number:	V2-MEB746762
Matrix:	3% (v/v) HNO_3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	1 000 ± 5 µg/mL	Molybdenum, Mo	1 000 ± 5 µg/mL
Silicon, Si	1 000 ± 7 µg/mL	Tin, Sn	1 000 ± 5 µg/mL
Titanium, Ti	1 000 ± 6 µg/mL		

Density: 1.033 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	190605
B	Calculated		See Sec. 4.2
Mo	ICP Assay	traceable to 3134	U2-MO739068
Si	ICP Assay	Traceable to 3150	S2-SI702546
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	traceable to 3162a	T2-TI725816

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 06, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- September 06, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Joseph Burns
Custom VS Manager



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

R → 10/13/24
Met dig

M 6121

Material No.: 9530-33
Batch No.: 0000275677
Manufactured Date: 2020/12/16
Retest Date: 2025/12/15
Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.6
ACS – Color (APHA)	<= 10	5
ACS – Residue after Ignition	<= 3 ppm	1
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.190
ACS – Bromide (Br)	<= 0.005 %	< 0.005
ACS – Extractable Organic Substances	<= 5 ppm	1
ACS – Free Chlorine (as Cl_2)	<= 0.5 ppm	< 0.5
Phosphate (PO_4)	<= 0.05 ppm	< 0.03
Sulfate (SO_4)	<= 0.5 ppm	< 0.3
Sulfite (SO_3)	<= 0.8 ppm	0.3
Ammonium (NH_4)	<= 3 ppm	< 1
Trace Impurities – Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities – Aluminum (Al)	<= 10.0 ppb	< 0.2
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities – Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities – Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities – Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities – Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities – Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities – Calcium (Ca)	<= 50.0 ppb	29.7
Trace Impurities – Chromium (Cr)	<= 1.0 ppb	< 0.4
Trace Impurities – Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities – Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities – Gallium (Ga)	<= 1.0 ppb	< 0.2

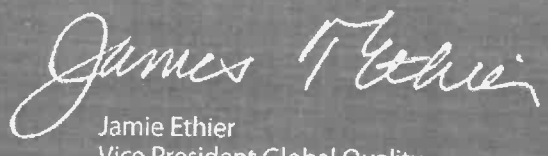
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Material No.: 9530-33
Batch No.: 0000275677

Test	Specification	Result
Trace Impurities - Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities - Gold (Au)	<= 4.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities - Iron (Fe)	<= 15.0 ppb	<1
Trace Impurities - Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities - Lithium (Li)	<= 1.0 ppb	0.2
Trace Impurities - Magnesium (Mg)	<= 10.0 ppb	0.4
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	0.1
Trace Impurities - Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities - Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities - Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities - Potassium (K)	<= 9.0 ppb	< 2.0
Trace Impurities - Selenium (Se), For Information Only	ppb	1.0
Trace Impurities - Silicon (Si)	<= 100.0 ppb	< 10.0
Trace Impurities - Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities - Sodium (Na)	<= 100.0 ppb	< 5.0
Trace Impurities - Strontium (Sr)	<= 1.0 ppb	< 0.2
Trace Impurities - Tantalum (Ta)	<= 1.0 ppb	< 0.9
Trace Impurities - Thallium (Tl)	<= 5.0 ppb	< 2.0
Trace Impurities - Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities - Titanium (Ti)	<= 1.0 ppb	0.2
Trace Impurities - Vanadium (V)	<= 1.0 ppb	< 0.2
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	0.3
Trace Impurities - Zirconium (Zr)	<= 1.0 ppb	< 0.1

For Laboratory, Research or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

R -> 11/12/24

M6126

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

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800-368-1131
www.absolutestandards.com

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CERTIFIED WEIGHT REPORT:

R -> 1/13/25

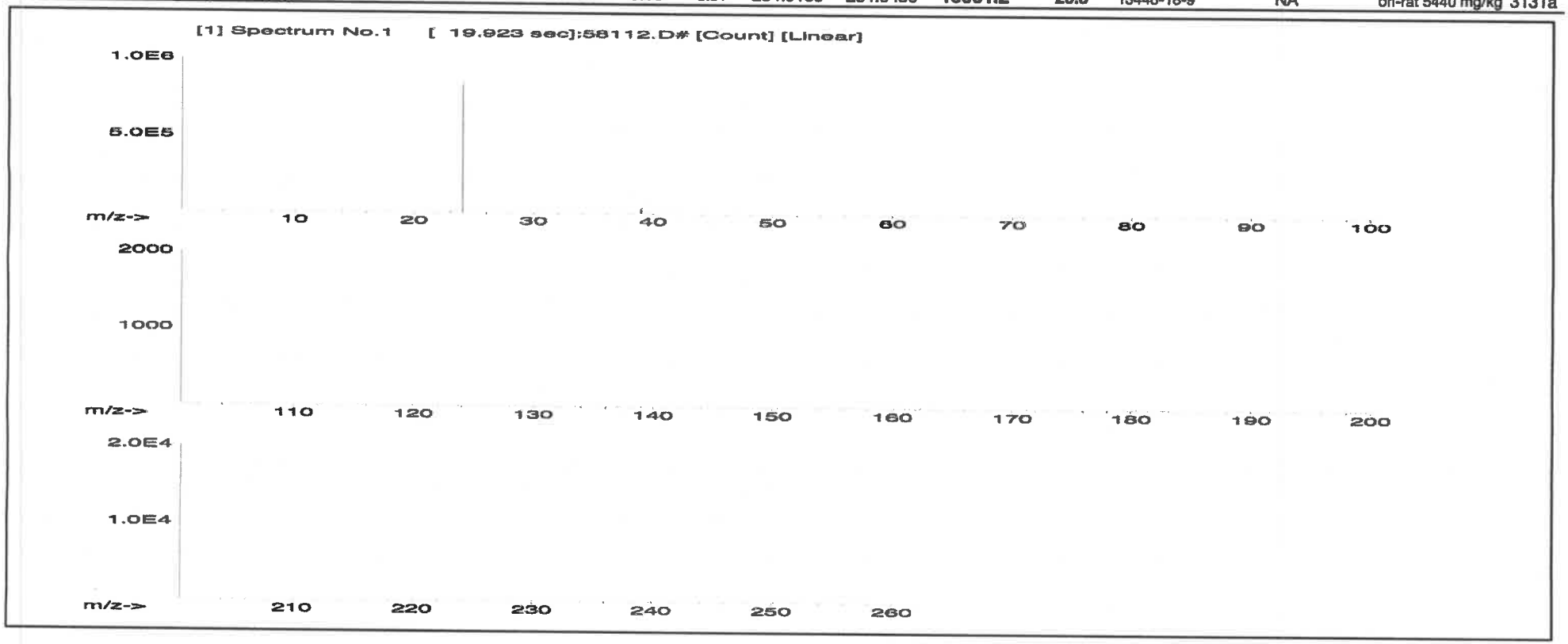
M 6127

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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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.

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CERTIFIED WEIGHT REPORT:

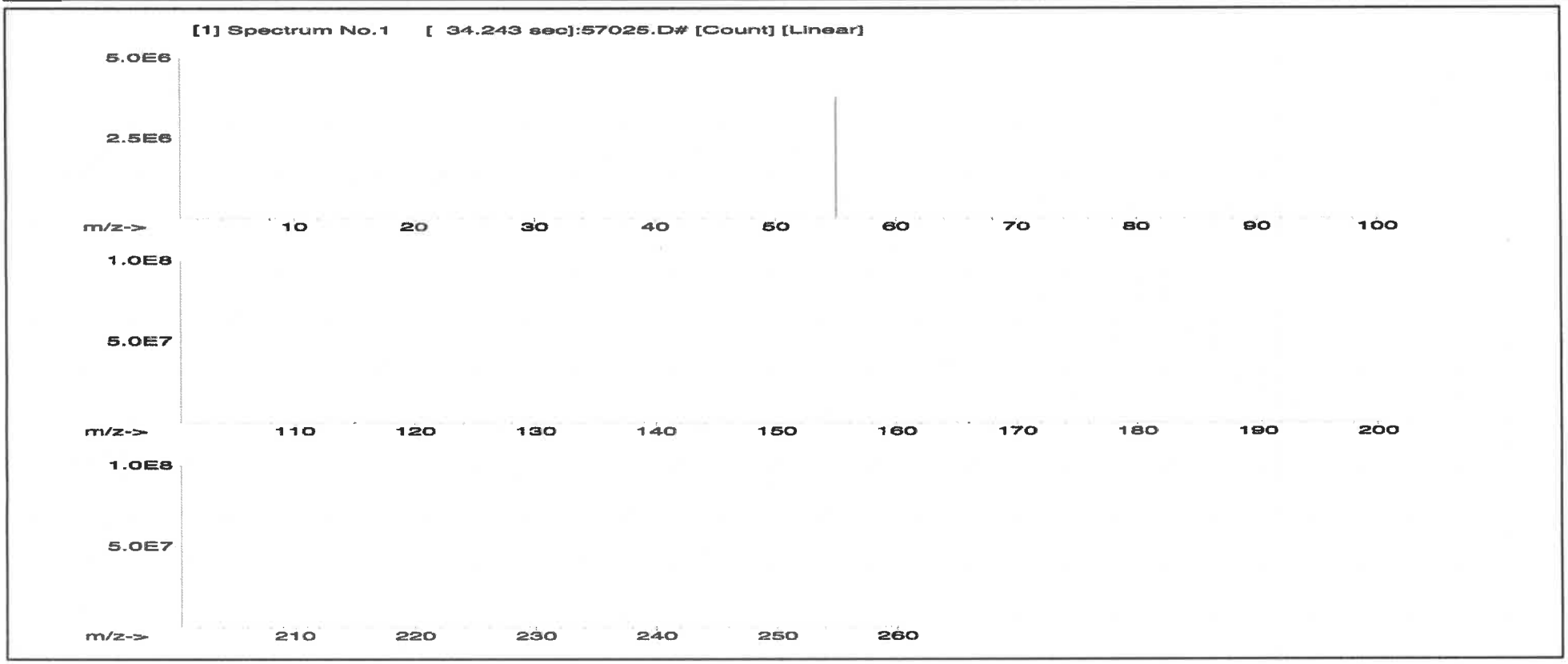
R->1/13/25
M6128

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
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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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:

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CERTIFIED WEIGHT REPORT:

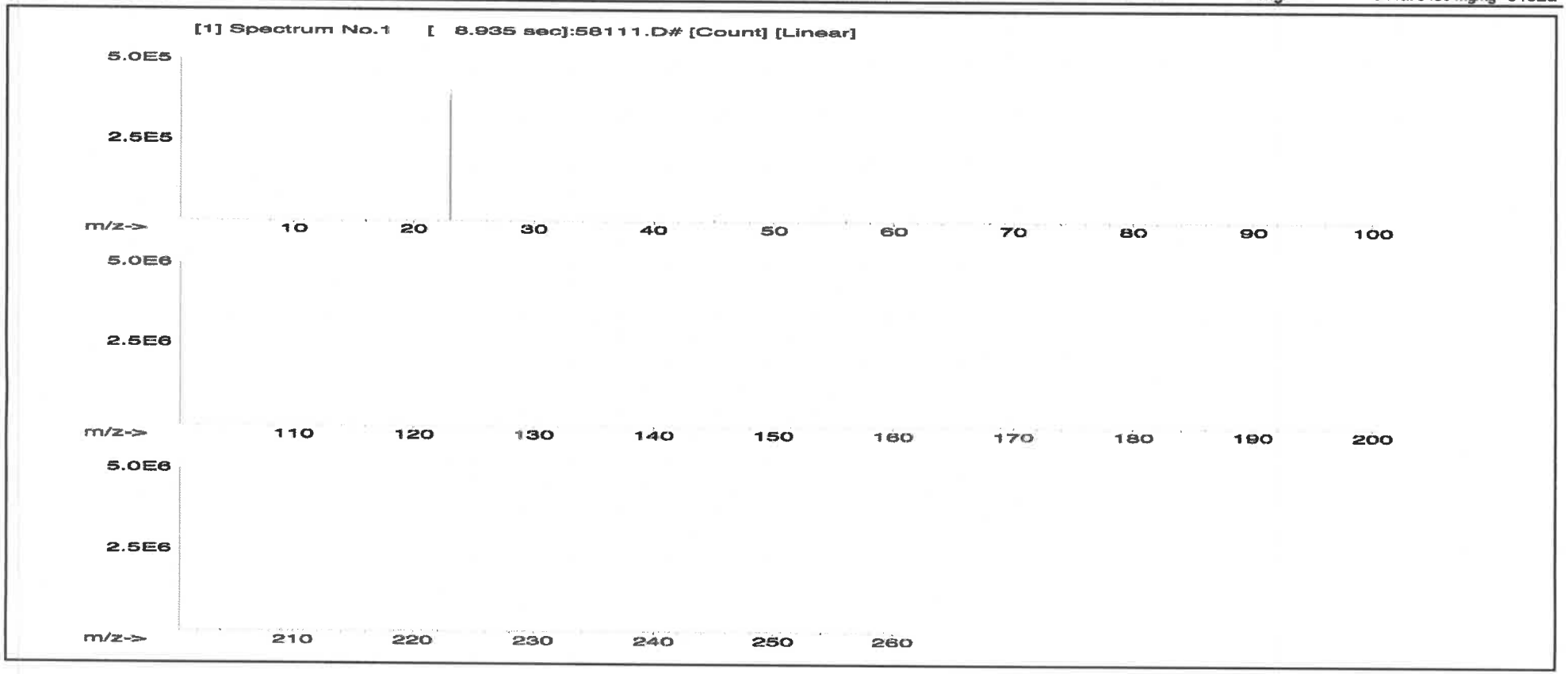
R->1/13/25

M6144

Part Number:	**58111**		**Lot #**		
Lot Number:	**072424**	**Solvent:**	24002546	Nitric Acid	
Description:	**Sodium (Na)**				
		2%	80.0 (mL)	Nitric Acid	
Expiration Date:	072427				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	4000.2	0.10	Flask Uncertainty		

Formulated By:	Benson Chan 072424
Reviewed By:	Pedro L. Rentas 072424

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Sodium nitrate (Na)	IN036	NAV012015I1	10000	99.999	0.10	26.9	148.7096	######	**10000.0**	**20.0**	7631-99-4	5 mg/m3	orl-rat 3430 mg/kg	3152a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	T	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

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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

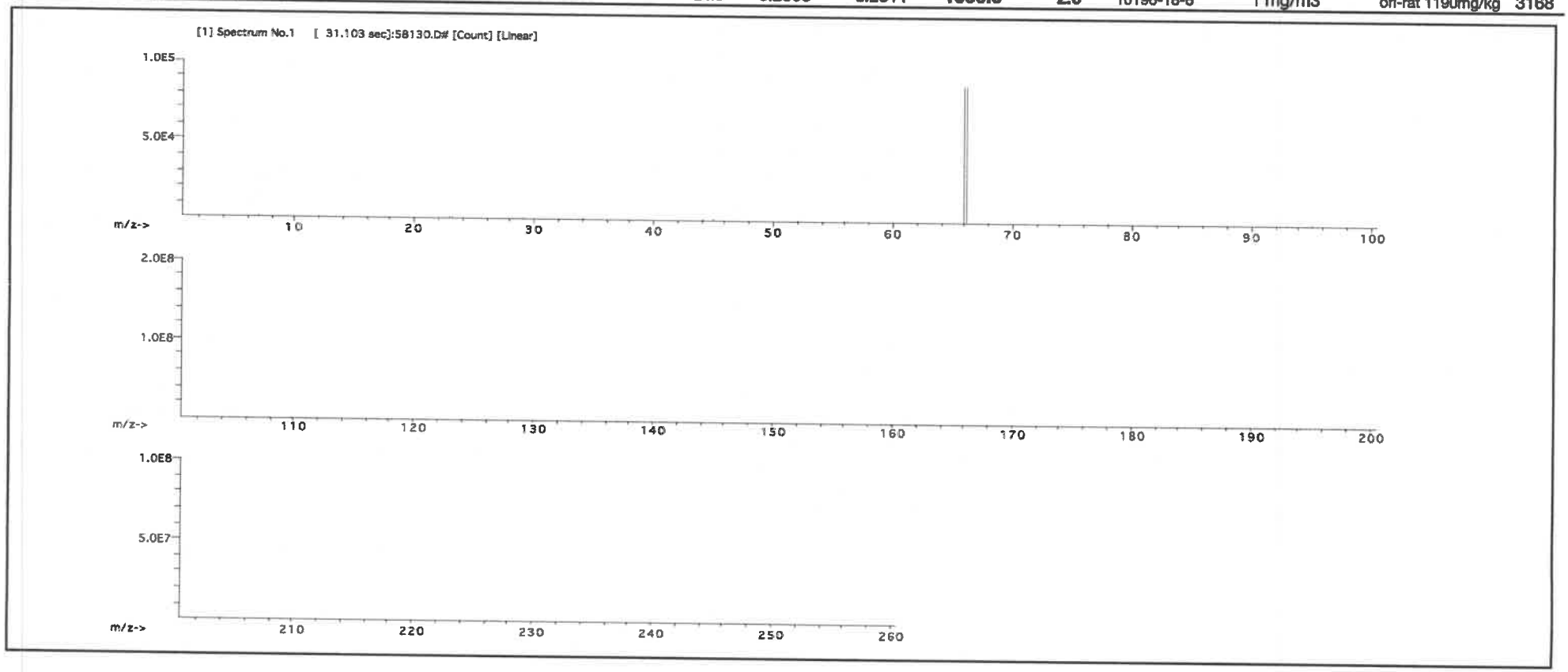
		Lot #	
Solvent:	24012496	Nitric Acid	
	2%	40.0 (mL)	Nitric Acid

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

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R : 4/20/21

QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

M6150

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) ***CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS***

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	CN^-	99

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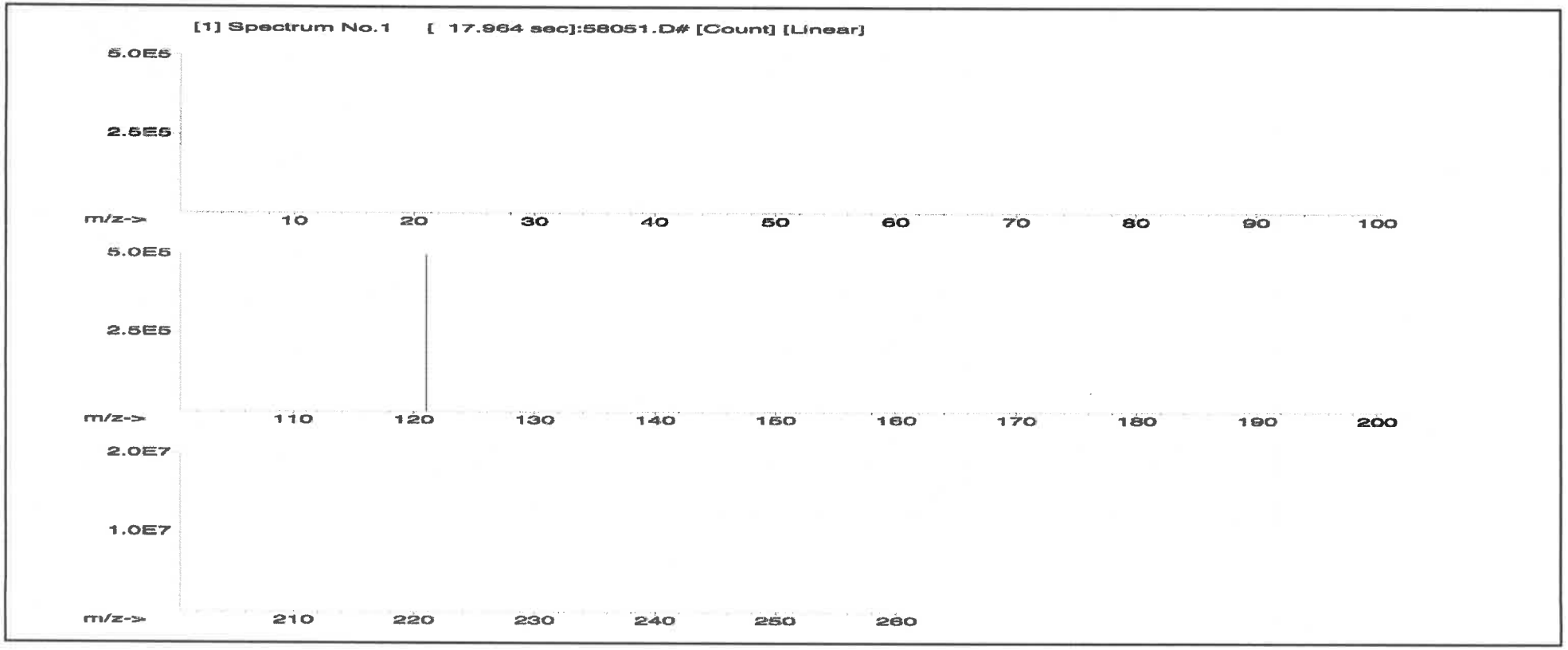
R: 01/03/24 M5802, M5803

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57051**	24002546	Nitric Acid	
Lot Number:	**120523**			
Description:	**Antimony (Sb)**			
		2.0%	60.0 (mL)	Nitric Acid
Expiration Date:	120526			
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):	3000.41	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	120523
Reviewed By:	Pedro L. Rentas	120523

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	100923	0.1000	300.0	0.084	1000	10001.4	**1000.0**	2.1	7440-36-0	0.5 mg/m3	orl-rat 7000 mg/kg	3102a



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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).

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Certified Reference Material CRM

M6030

R: 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57047
Lot Number: 122823
Description: Silver (Ag)

Expiration Date: 122826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

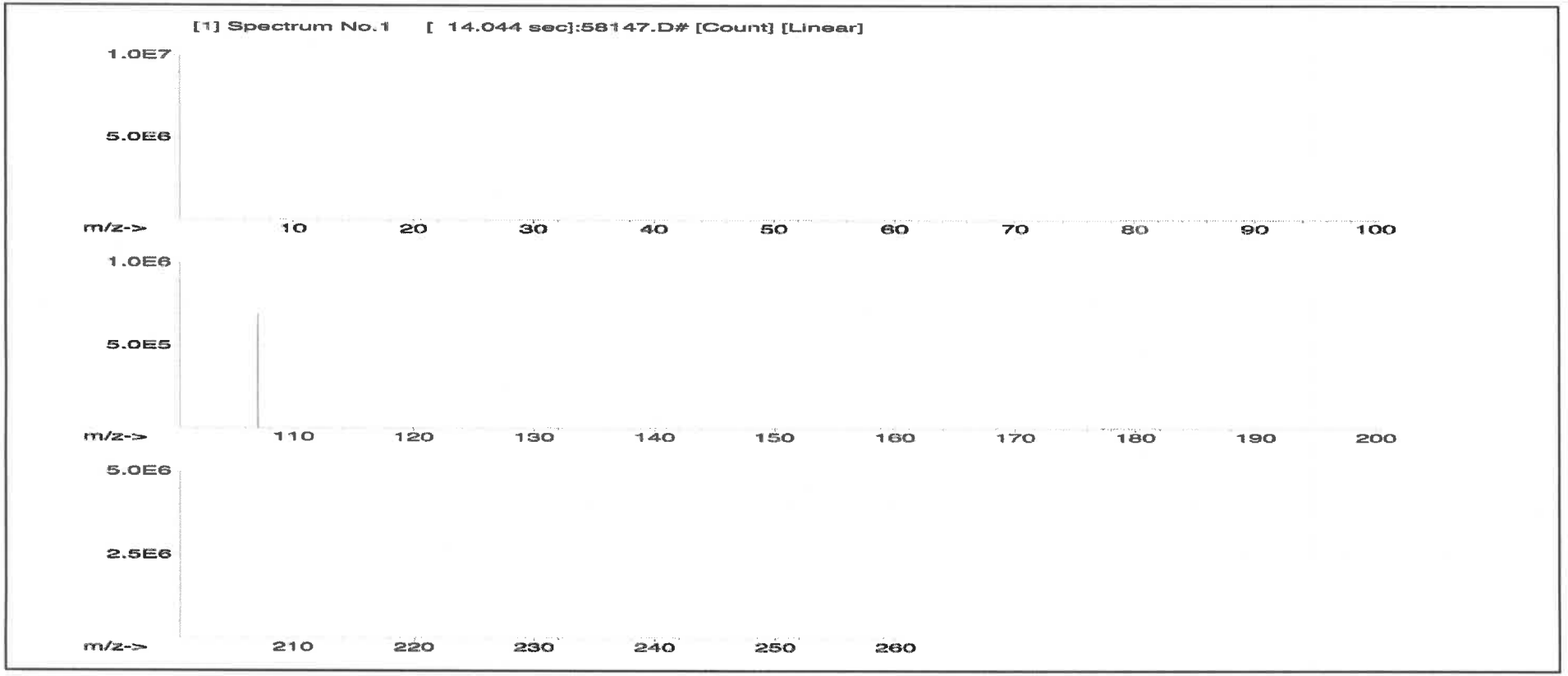
Weight shown below was diluted to (mL): 4000.30 0.058 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	80.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Benson Chan	122823
Reviewed By:	Pedro L. Rentas	122823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Silver nitrate (Ag)	IN035	J0612AGA1	1000.0	99.9999	0.10	63.7	6.27992	6.27998	**1000.0**	**2.0**	7761-88-8	10 ug/m3	NA	3151



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	T	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
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* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

R: 10/18/24

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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

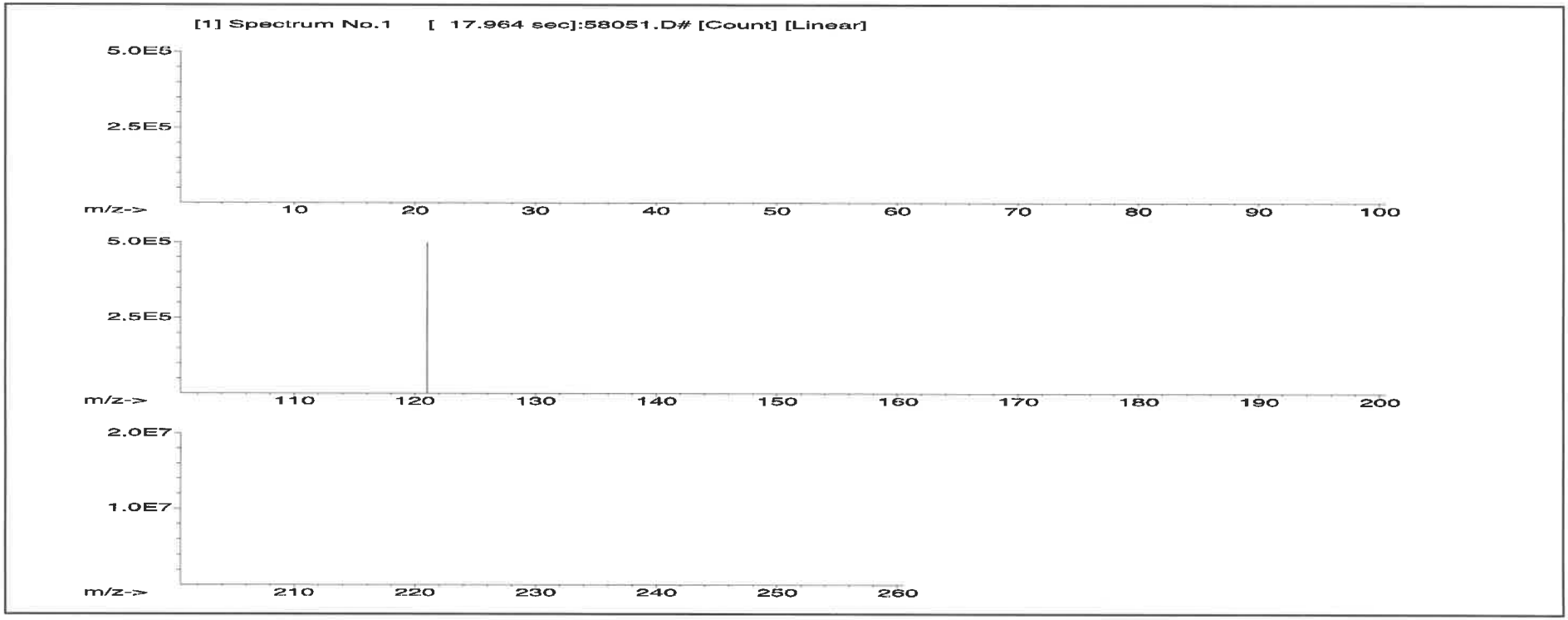
Giovanni Esposito

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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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.
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R: 8/5/24 M6019

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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 888.01
ACCREDITED Reference Material Producer Certificate 888.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSR1
Lot Number:	U2-SR730227
Matrix:	0.1% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Strontium
Starting Material:	SrCO3
Starting Material Lot#:	M2-2192
Starting Material Purity:	99.9993%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1001 ± 3 µg/mL

Density: 1.000 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **998 ± 4 µg/mL**
ICP Assay NIST SRM Traceable to 3153a Lot Number: K2-SR650985

Assay Method #2 **1001 ± 3 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **1001 ± 2 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001980	M	Eu	<	0.000495	O	Na		0.000200	M	Se	<	0.013862	O	Zn		0.000143
O	Al		0.000370	O	Fe		0.000410	M	Nb	<	0.000495	i	Si	<		M	Zr	<	0.000495
M	As	<	0.000495	M	Ga	<	0.000495	M	Nd	<	0.000495	M	Sm	<	0.000495				
M	Au	<	0.000989	M	Gd	<	0.000495	O	Ni	<	0.007631	M	Sn	<	0.000990				
M	B	<	0.039606	M	Ge	<	0.000495	M	Os	<	0.000494	s	Sr	<					
M	Ba		0.006486	M	Hf	<	0.000495	i	P	<		M	Ta	<	0.000495				
M	Be	<	0.000990	M	Hg	<	0.000989	M	Pb	<	0.002970	M	Tb	<	0.000495				
M	Bi	<	0.000495	M	Ho	<	0.000495	M	Pd	<	0.003957	M	Te	<	0.027724				
O	Ca		0.004255	M	In	<	0.000495	M	Pr	<	0.000495	M	Th	<	0.000990				
M	Cd		0.001339	M	Ir	<	0.000494	M	Pt	<	0.002970	M	Ti	<	0.005940				
M	Ce	<	0.004950	O	K	<	0.008184	M	Rb	<	0.002970	M	Tl	<	0.000495				
M	Co	<	0.000495	M	La	<	0.000495	M	Re	<	0.000495	M	Tm	<	0.000495				
O	Cr	<	0.003207	O	Li	<	0.000884	O	Rh	<	0.012829	M	U	<	0.001485				
M	Cs	<	0.000990	M	Lu	<	0.002970	M	Ru	<	0.000989	M	V	<	0.001980				
M	Cu		0.000099	O	Mg		0.000064	i	S	<		M	W	<	0.003960				
M	Dy	<	0.000495	O	Mn		0.000066	M	Sb	<	0.014852	O	Y	<	0.000995				
M	Er	<	0.000495	M	Mo	<	0.001980	M	Sc	<	0.001980	M	Yb	<	0.000495				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 87.62 +2 6 $Sr(H_2O)_{6}^{+2}$

Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1 - 3.5% HNO_3 / LDPE container.

Sr Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO_3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 88 amu	1200 ppt	N/A	72Ge16O, 176Yb+2, 176Lu+2 , 176Hf+2
ICP-OES 407.771 nm	0.0004 / 0.00006 µg/mL	1	U, Ce
ICP-OES 421.552 nm	0.0008 / 0.00004 µg/mL	1	Rb
ICP-OES 460.733 nm	0.07 / 0.003 µg/mL	1	Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 03, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 03, 2028**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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Certified Reference Material CRM

R: 03/16/23 M5473, M5474, M5475, M5476

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

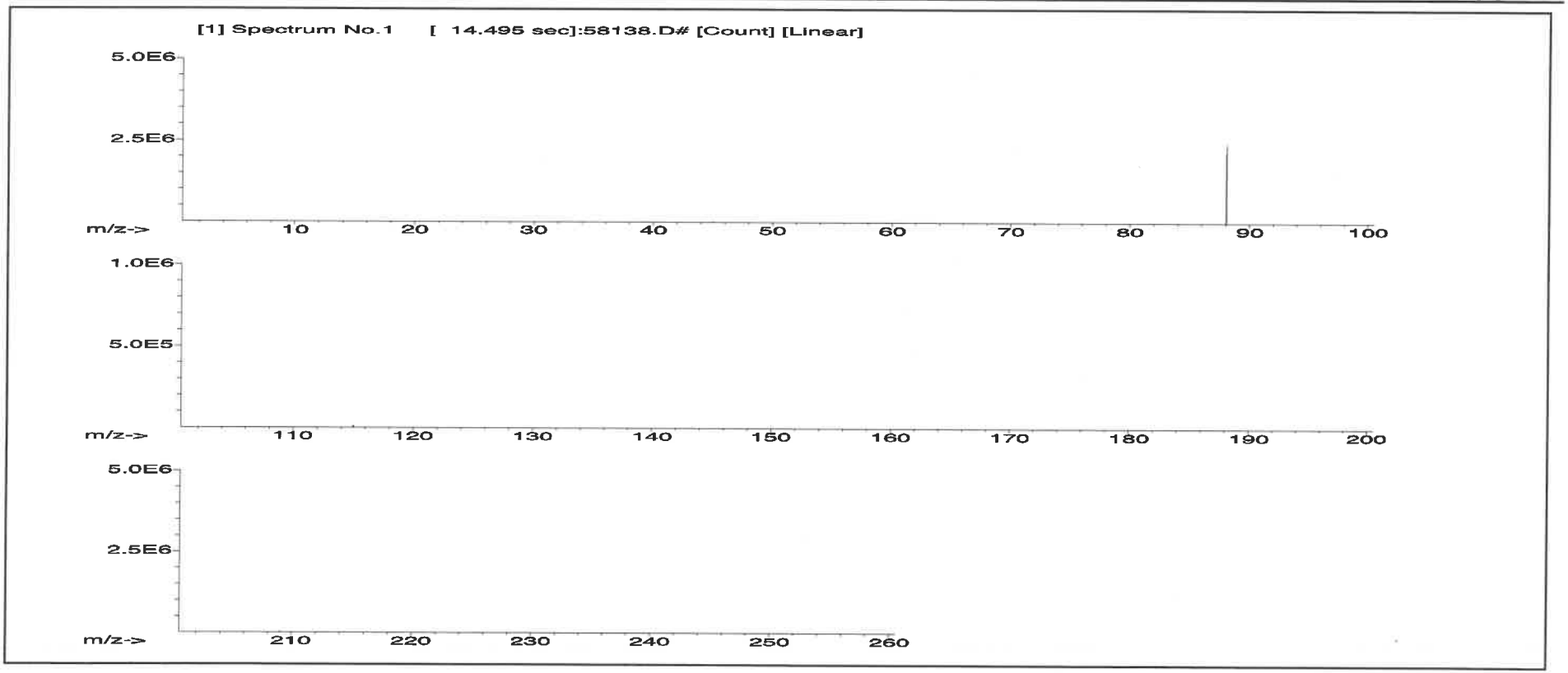
Part Number: 56138
Lot Number: 082922
Description: Strontium (Sr)

Expiration Date: 082925
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	20.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	082922
Reviewed By:	Pedro L. Rentas	082922

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	**Actual Conc. (µg/mL)**	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Strontium nitrate (Sr)	IN017	SRZ022018A1	10000	99.997	0.10	41.2	24.2756	24.2758	**10000.1**	**20.0**	10042-76-9	NA	orl-rat >2000mg/kg	3153a



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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	T	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

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M6023

R ! 8/5/24

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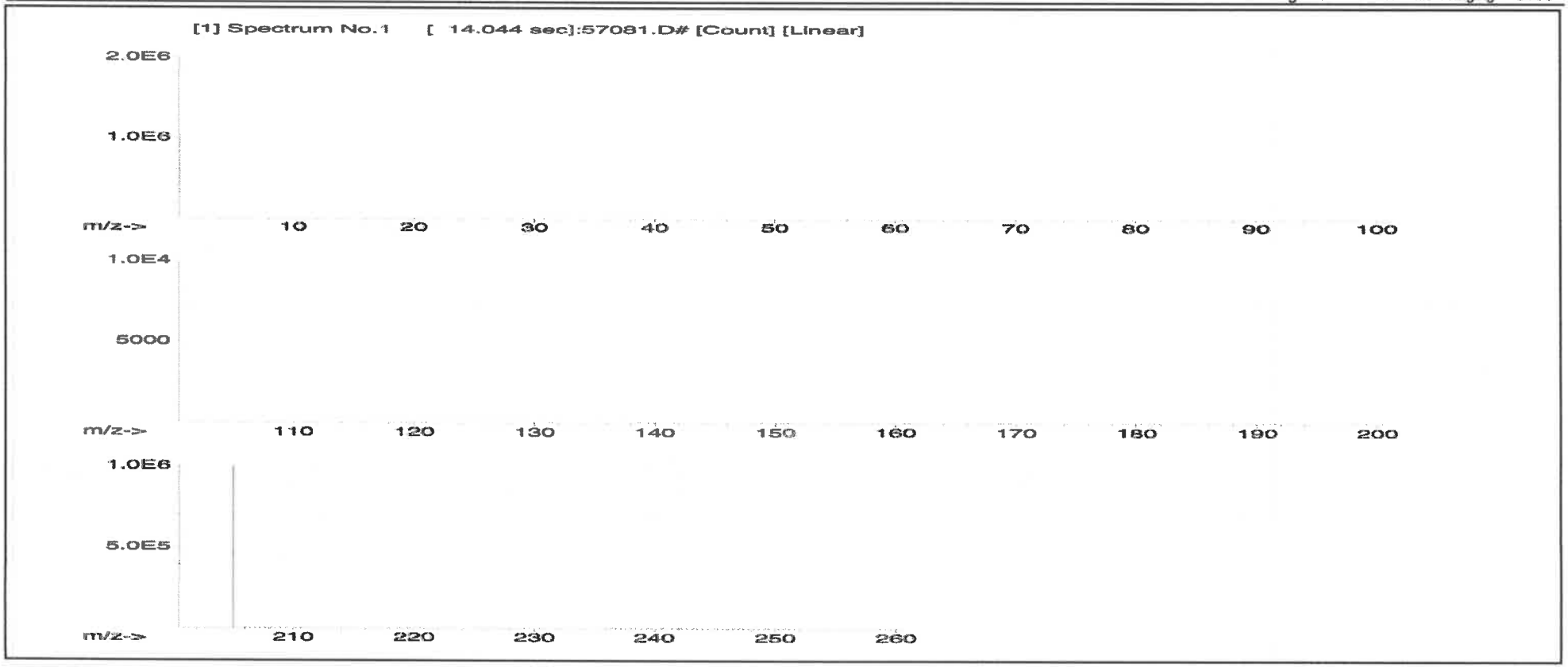
CERTIFIED WEIGHT REPORT:

Part Number:	**57081**		**Lot #**		
Lot Number:	**062724**	**Solvent:**	24002546	Nitric Acid	
Description:	**Thallium (Tl)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	062727				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.1	0.10	Flask Uncertainty		

Aleah O'Brady

Formulated By:	Aleah O'Brady	062724
Reviewed By:	Pedro L. Rentas	062724

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Thallium nitrate (Tl)	IN037	BCCF4399	1000	99.999	0.10	77.0	2.5975	2.5977	**1000.1**	**2.0**	10102-45-1	0.1 mg/m3	orl-mus 15mg/kg	3158



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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

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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57023**			
Lot Number:	**062424**	24002546	Nitric Acid	
Description:	**Vanadium (V)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	062427			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.3	0.06	Flask Uncertainty	

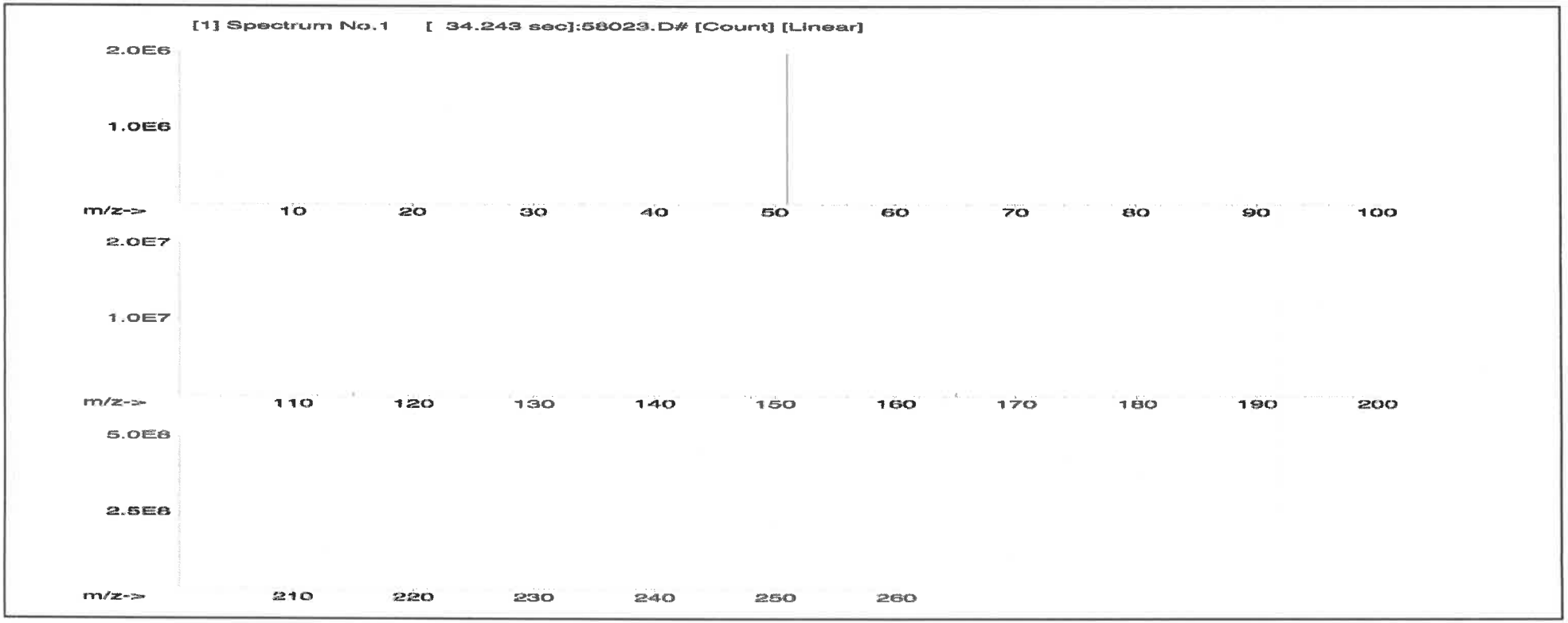
Aleah O'Brady

Formulated By:	Aleah O'Brady	062424

Pedro Rentas

Reviewed By:	Pedro L. Rentas	062424

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium metavanadate (V)	58123	021224	0.1000	200.0	0.084	1000	10000.3	**1000.0**	**2.2**	7803-55-6	0.05 mg/m3	orl-rat 58.1mg/kg	3165



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Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
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As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	T
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

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SHIPPING DOCUMENTS

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Packing List

Date	Order #
01/13/2025	333291

6390 Joyce Dr., #100
Golden, CO 80403

Tel: +1-303-940-0033
Fax: +1-303-940-0043
info@phenova.com
www.phenova.com

For terms and conditions of your order, please visit:
www.phenova.com/home/termsofsale

Ship To

Alliance Tech Group - Newark
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Received by: MA
01/15/2025 10:00

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
PO2-974	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
			PT-TMSET-WS	WS Trace Metals Set : (TM and HG)		
1	1	0	PT-TM-WS	WS Trace Metals 1	WS0125	9099-04B
1	1	0	PT-HG-WS	WS Trace Metals Mercury	WS0125	9099-05
1	1	0	PT-MIN-WS	WS Minerals Only	WS0125	9099-51
1	1	0	PT-TURB-WS	WS Turbidity	WS0125	9099-13
1	1	0	PT-SIO2-WS	WS Silica	WS0125	9099-17
1	1	0	PT-RVOA-WS	WS Regulated Volatiles	WS0125	9099-21
1	1	0	PT-UNRVOA-WS	WS Unregulated Volatiles	WS0125	9099-22
1	1	0	PT-THM-WS	WS Trihalomethanes	WS0125	9099-23
1	1	0	PT-EDBCP-WS	WS EDB/DBCP/TCP	WS0125	9099-27
1	1	0	PT-ADD-WS	WS Gasoline Additives	WS0125	9099-36

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