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

METALS

PROJECT NAME : NJ WASTE WATER PT

ALLIANCE TECHNICAL GROUP, LLC - NEWARK

284 Sheffiled Stree

Suite 1

Mountainside, NJ - 07092

Phone No: 908-789-8900

ORDER ID : Q1503

ATTENTION : Mohammad Ahmed

Laboratory Certification ID # 20012

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Cover Page

Order ID : Q1503

Project ID : NJ Waste Water PT

Client : Alliance Technical Group, LLC - Newark

Lab Sample Number	Client Sample Number
Q1503-01	PT-TM1-WP
Q1503-02	PT-TM1-WP
Q1503-03	PT-SNTI-WP
Q1503-04	PT-SNTI-WP
Q1503-05	PT-MIN2-WP
Q1503-06	PT-MIN2-WP
Q1503-07	PT-SIO2-WP
Q1503-08	PT-HG-WP

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 10:52 am, Apr 22, 2025

Date: 4/22/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Alliance Technical Group, LLC - Newark
Project Name: NJ Waste Water PT
Project # N/A
Chemtech Project # Q1503
Test Name: Metals Group3,Metals Group4,Metals Group5,Mercury,Silica

A. Number of Samples and Date of Receipt:
8 Water samples were received on 03/05/2025.

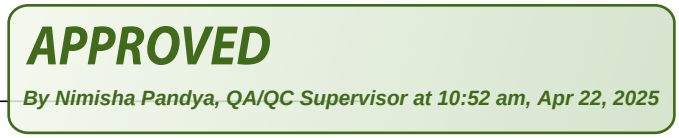
B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Hardness, Calcium, Hardness, Total, Mercury, Metals Group3, Metals Group4, Metals Group5 and Silica. This data package contains results for Metals Group3,Metals Group4,Metals Group5,Mercury,Silica.

C. Analytical Techniques:
The analysis and digestion of Metals Group3,Metals Group4,Metals Group5,Silica was based on 200.7, The analysis and digestion of Metals Group3,Metals Group4,Metals Group5 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.
Sample PT-SIO2-WP was diluted due to high concentrations for Dissolved Silica &
Sample PT-HG-WP was diluted due to high concentrations for Mercury.
The Blank Spike met requirements for all samples.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the 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 

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

DATA REPORTING QUALIFIERS- INORGANIC

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

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

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1503 MATRIX: Water

METHOD: 200.7, 245.1

		NA	NO	YES
1.	Calibration Summary met criteria.			✓
2.	ICP Interference Check Sample Results Summary Submitted.			✓
3.	Laboratory Control Sample Summary (if applicable) Submitted.			✓
4.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
5.	Digestion Holding Time Met		✓	
	If not met, list number of days exceeded for each sample:			
6.	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 9:19 am, Apr 22, 2025

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1503

	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:** 04/22/2025

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LAB CHRONICLE

OrderID:	Q1503	**OrderDate:**	3/6/2025 10:15:06 AM
Client:	Alliance Technical Group, LLC - Newark	**Project:**	NJ Waste Water PT
Contact:	Mohammad Ahmed	**Location:**	QA Office

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1503-01	**PT-TM1-WP**	**Water**			**03/03/25**			**03/05/25**
			Metals Group3	200.7		03/21/25	04/02/25	
Q1503-02	**PT-TM1-WP**	**Water**			**03/03/25**			**03/05/25**
			Metals Group3	200.8		03/31/25	04/01/25	
Q1503-03	**PT-SNTI-WP**	**Water**			**03/03/25**			**03/05/25**
			Metals Group4	200.7		03/21/25	04/02/25	
Q1503-04	**PT-SNTI-WP**	**Water**			**03/03/25**			**03/05/25**
			Metals Group4	200.8		03/31/25	04/01/25	
Q1503-05	**PT-MIN2-WP**	**Water**			**03/03/25**			**03/05/25**
			Hardness, Calcium	SM2340B		03/21/25	04/02/25	
			Metals Group5	200.7		03/21/25	04/02/25	
Q1503-06	**PT-MIN2-WP**	**Water**			**03/03/25**			**03/05/25**
			Metals Group5	200.8		03/31/25	04/01/25	
Q1503-07	**PT-SIO2-WP**	**Water**			**03/03/25**			**03/05/25**
			Silica	200.7		03/21/25	04/03/25	
Q1503-08	**PT-HG-WP**	**Water**			**03/03/25**			**03/05/25**
			Mercury	245.1		04/03/25	04/03/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1503 **Order ID:** Q1503

Client: Alliance Technical Group, LLC - Newark **Project ID:** NJ Waste Water PT

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : PT-TM1-WP								
Q1503-01	PT-TM1-WP	Water	Aluminum	2550		30.8	100	ug/L
Q1503-01	PT-TM1-WP	Water	Antimony	279		5.44	50.0	ug/L
Q1503-01	PT-TM1-WP	Water	Arsenic	545		3.70	20.0	ug/L
Q1503-01	PT-TM1-WP	Water	Barium	620		19.5	100	ug/L
Q1503-01	PT-TM1-WP	Water	Beryllium	317		0.54	6.00	ug/L
Q1503-01	PT-TM1-WP	Water	Boron	1380		13.8	100	ug/L
Q1503-01	PT-TM1-WP	Water	Cadmium	648		0.62	6.00	ug/L
Q1503-01	PT-TM1-WP	Water	Chromium	219		1.06	10.0	ug/L
Q1503-01	PT-TM1-WP	Water	Cobalt	614		2.32	30.0	ug/L
Q1503-01	PT-TM1-WP	Water	Copper	688		3.78	20.0	ug/L
Q1503-01	PT-TM1-WP	Water	Iron	3440		36.0	100	ug/L
Q1503-01	PT-TM1-WP	Water	Lead	978		2.42	12.0	ug/L
Q1503-01	PT-TM1-WP	Water	Manganese	1620		4.92	20.0	ug/L
Q1503-01	PT-TM1-WP	Water	Molybdenum	477		17.6	200	ug/L
Q1503-01	PT-TM1-WP	Water	Nickel	503		3.80	40.0	ug/L
Q1503-01	PT-TM1-WP	Water	Selenium	834		5.04	20.0	ug/L
Q1503-01	PT-TM1-WP	Water	Silver	796		1.62	10.0	ug/L
Q1503-01	PT-TM1-WP	Water	Thallium	194		5.02	40.0	ug/L
Q1503-01	PT-TM1-WP	Water	Vanadium	1340		4.98	40.0	ug/L
Q1503-01	PT-TM1-WP	Water	Zinc	1090		4.00	40.0	ug/L
Client ID : PT-SNTI-WP								
Q1503-03	PT-SNTI-WP	Water	Tin	1570		5.36	40.0	ug/L
Q1503-03	PT-SNTI-WP	Water	Titanium	217		7.82	40.0	ug/L
Client ID : PT-MIN2-WP								
Q1503-05	PT-MIN2-WP	Water	Calcium	50200		173	2000	ug/L
Q1503-05	PT-MIN2-WP	Water	Calcium Hardness	125000		432	4990	ug/L
Q1503-05	PT-MIN2-WP	Water	Magnesium	17000		208	2000	ug/L
Q1503-05	PT-MIN2-WP	Water	Potassium	20500		618	2000	ug/L
Q1503-05	PT-MIN2-WP	Water	Sodium	49700		734	2000	ug/L
Q1503-05	PT-MIN2-WP	Water	Hardness, Total	195000		1290	13200	ug/L
Client ID : PT-SIO2-WP								
Q1503-07	PT-SIO2-WP	Water	Dissolved Silica	199000	D	800	8560	ug/L
Client ID : PT-HG-WP								
Q1503-08	PT-HG-WP	Water	Mercury	17.1	D	0.14	1.00	ug/L

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Hit Summary Sheet
SW-846

SDG No.:	Q1503	**Order ID:**	Q1503
Client:	Alliance Technical Group, LLC - Newark	**Project ID:**	NJ Waste Water PT

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units

SAMPLE DATA

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Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	03/03/25
Project:	NJ Waste Water PT	Date Received:	03/05/25
Client Sample ID:	PT-TM1-WP	SDG No.:	Q1503
Lab Sample ID:	Q1503-01	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	2550		1	30.8	100	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7440-36-0	Antimony	279		1	5.44	50.0	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7440-38-2	Arsenic	545		1	3.70	20.0	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7440-39-3	Barium	620		1	19.5	100	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7440-41-7	Beryllium	317		1	0.54	6.00	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7440-42-8	Boron	1380		1	13.8	100	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7440-43-9	Cadmium	648		1	0.62	6.00	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7440-47-3	Chromium	219		1	1.06	10.0	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7440-48-4	Cobalt	614		1	2.32	30.0	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7440-50-8	Copper	688		1	3.78	20.0	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7439-89-6	Iron	3440		1	36.0	100	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7439-92-1	Lead	978		1	2.42	12.0	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7439-96-5	Manganese	1620		1	4.92	20.0	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7439-98-7	Molybdenum	477		1	17.6	200	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7440-02-0	Nickel	503		1	3.80	40.0	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7782-49-2	Selenium	834		1	5.04	20.0	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7440-22-4	Silver	796		1	1.62	10.0	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7440-28-0	Thallium	194		1	5.02	40.0	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7440-62-2	Vanadium	1340		1	4.98	40.0	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	
7440-66-6	Zinc	1090		1	4.00	40.0	ug/L	03/21/25 08:30	04/02/25 17:31	EPA 200.7	

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

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:	Alliance Technical Group, LLC - Newark	Date Collected:	03/03/25
Project:	NJ Waste Water PT	Date Received:	03/05/25
Client Sample ID:	PT-SNTI-WP	SDG No.:	Q1503
Lab Sample ID:	Q1503-03	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.
7440-31-5	Tin	1570		1	5.36	40.0	ug/L	03/21/25 08:30	04/02/25 17:22	EPA 200.7	
7440-32-6	Titanium	217		1	7.82	40.0	ug/L	03/21/25 08:30	04/02/25 17:22	EPA 200.7	

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

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

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

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Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	03/03/25
Project:	NJ Waste Water PT	Date Received:	03/05/25
Client Sample ID:	PT-MIN2-WP	SDG No.:	Q1503
Lab Sample ID:	Q1503-05	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.
7440-70-2	Calcium	50200		1	173	2000	ug/L	03/21/25 08:30	04/02/25 17:13	EPA 200.7	
Calcium Hardness	Calcium Hardness	125000		1	432	4990	ug/L	03/21/25 08:30	04/02/25 17:13	EPA 200.7	
Hardness	Hardness, Total	195000		1	1290	13200	ug/L	03/21/25 08:30	04/02/25 17:13	EPA 200.7	
7439-95-4	Magnesium	17000		1	208	2000	ug/L	03/21/25 08:30	04/02/25 17:13	EPA 200.7	
7440-09-7	Potassium	20500		1	618	2000	ug/L	03/21/25 08:30	04/02/25 17:13	EPA 200.7	
7440-23-5	Sodium	49700		1	734	2000	ug/L	03/21/25 08:30	04/02/25 17:13	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:	Alliance Technical Group, LLC - Newark	Date Collected:	03/03/25
Project:	NJ Waste Water PT	Date Received:	03/05/25
Client Sample ID:	PT-SIO2-WP	SDG No.:	Q1503
Lab Sample ID:	Q1503-07	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	199000	D	10	800	8560	ug/L	03/21/25 08:30	04/03/25 13:45	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

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Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	03/03/25
Project:	NJ Waste Water PT	Date Received:	03/05/25
Client Sample ID:	PT-HG-WP	SDG No.:	Q1503
Lab Sample ID:	Q1503-08	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	17.1	D	5	0.14	1.00	ug/L	04/03/25 12:26	04/03/25 13:00	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

METAL CALIBRATION DATA

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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
ICV74	Mercury	3.84	4.0	96	95 - 105	CV	04/03/2025	12:12	LB135283

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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
CCV25	Mercury	5.04	5.0	101	90 - 110	CV	04/03/2025	12:17	LB135283
CCV26	Mercury	4.75	5.0	95	90 - 110	CV	04/03/2025	12:56	LB135283
CCV27	Mercury	4.52	5.0	90	90 - 110	CV	04/03/2025	13:10	LB135283

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	2450	2500	98	95 - 105	P	04/02/2025	15:20	LB135273
	Antimony	983	1000	98	95 - 105	P	04/02/2025	15:20	LB135273
	Arsenic	1040	1000	104	95 - 105	P	04/02/2025	15:20	LB135273
	Barium	513	520	99	95 - 105	P	04/02/2025	15:20	LB135273
	Beryllium	526	510	103	95 - 105	P	04/02/2025	15:20	LB135273
	Boron	2490	2500	100	95 - 105	P	04/02/2025	15:20	LB135273
	Cadmium	522	510	102	95 - 105	P	04/02/2025	15:20	LB135273
	Calcium	10100	10000	101	95 - 105	P	04/02/2025	15:20	LB135273
	Chromium	502	520	96	95 - 105	P	04/02/2025	15:20	LB135273
	Cobalt	523	520	101	95 - 105	P	04/02/2025	15:20	LB135273
	Copper	507	510	99	95 - 105	P	04/02/2025	15:20	LB135273
	Iron	10000	10000	100	95 - 105	P	04/02/2025	15:20	LB135273
	Lead	1020	1000	102	95 - 105	P	04/02/2025	15:20	LB135273
	Magnesium	5940	6000	99	95 - 105	P	04/02/2025	15:20	LB135273
	Manganese	545	520	105	95 - 105	P	04/02/2025	15:20	LB135273
	Molybdenum	2470	2500	99	95 - 105	P	04/02/2025	15:20	LB135273
	Nickel	548	530	103	95 - 105	P	04/02/2025	15:20	LB135273
	Potassium	10000	9900	101	95 - 105	P	04/02/2025	15:20	LB135273
	Selenium	1010	1000	101	95 - 105	P	04/02/2025	15:20	LB135273
	Silver	259	250	104	95 - 105	P	04/02/2025	15:20	LB135273
	Sodium	10100	10000	102	95 - 105	P	04/02/2025	15:20	LB135273
	Thallium	995	1000	100	95 - 105	P	04/02/2025	15:20	LB135273
	Tin	2610	2500	104	95 - 105	P	04/02/2025	15:20	LB135273
	Titanium	2550	2500	102	95 - 105	P	04/02/2025	15:20	LB135273
	Vanadium	481	500	96	95 - 105	P	04/02/2025	15:20	LB135273
	Zinc	991	1000	99	95 - 105	P	04/02/2025	15:20	LB135273

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	97.8	100	98	80 - 120	P	04/02/2025	15:41	LB135273
	Antimony	51.2	50.0	102	80 - 120	P	04/02/2025	15:41	LB135273
	Arsenic	19.8	20.0	99	80 - 120	P	04/02/2025	15:41	LB135273
	Barium	89.7	100	90	80 - 120	P	04/02/2025	15:41	LB135273
	Beryllium	5.70	6.0	95	80 - 120	P	04/02/2025	15:41	LB135273
	Boron	81.2	100	81	80 - 120	P	04/02/2025	15:41	LB135273
	Cadmium	5.68	6.0	95	80 - 120	P	04/02/2025	15:41	LB135273
	Calcium	1960	2000	98	80 - 120	P	04/02/2025	15:41	LB135273
	Chromium	9.84	10.0	98	80 - 120	P	04/02/2025	15:41	LB135273
	Cobalt	28.4	30.0	95	80 - 120	P	04/02/2025	15:41	LB135273
	Copper	22.5	20.0	112	80 - 120	P	04/02/2025	15:41	LB135273
	Iron	95.5	100	96	80 - 120	P	04/02/2025	15:41	LB135273
	Lead	10.8	12.0	90	80 - 120	P	04/02/2025	15:41	LB135273
	Magnesium	2060	2000	103	80 - 120	P	04/02/2025	15:41	LB135273
	Manganese	17.8	20.0	89	80 - 120	P	04/02/2025	15:41	LB135273
	Molybdenum	207	200	104	80 - 120	P	04/02/2025	15:41	LB135273
	Nickel	38.8	40.0	97	80 - 120	P	04/02/2025	15:41	LB135273
	Potassium	1830	2000	91	80 - 120	P	04/02/2025	15:41	LB135273
	Selenium	21.7	20.0	108	80 - 120	P	04/02/2025	15:41	LB135273
	Silver	10.4	10.0	104	80 - 120	P	04/02/2025	15:41	LB135273
	Sodium	1900	2000	95	80 - 120	P	04/02/2025	15:41	LB135273
	Thallium	40.7	40.0	102	80 - 120	P	04/02/2025	15:41	LB135273
	Tin	38.4	40.0	96	80 - 120	P	04/02/2025	15:41	LB135273
	Titanium	39.1	40.0	98	80 - 120	P	04/02/2025	15:41	LB135273
	Vanadium	39.5	40.0	99	80 - 120	P	04/02/2025	15:41	LB135273
	Zinc	41.4	40.0	104	80 - 120	P	04/02/2025	15:41	LB135273

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	9990	10000	100	90 - 110	P	04/02/2025	16:39	LB135273
	Antimony	5060	5000	101	90 - 110	P	04/02/2025	16:39	LB135273
	Arsenic	5080	5000	102	90 - 110	P	04/02/2025	16:39	LB135273
	Barium	9870	10000	99	90 - 110	P	04/02/2025	16:39	LB135273
	Beryllium	255	250	102	90 - 110	P	04/02/2025	16:39	LB135273
	Boron	5100	5000	102	90 - 110	P	04/02/2025	16:39	LB135273
	Cadmium	2570	2500	103	90 - 110	P	04/02/2025	16:39	LB135273
	Calcium	24800	25000	99	90 - 110	P	04/02/2025	16:39	LB135273
	Chromium	1040	1000	104	90 - 110	P	04/02/2025	16:39	LB135273
	Cobalt	2560	2500	102	90 - 110	P	04/02/2025	16:39	LB135273
	Copper	1290	1250	103	90 - 110	P	04/02/2025	16:39	LB135273
	Iron	5020	5000	100	90 - 110	P	04/02/2025	16:39	LB135273
	Lead	5110	5000	102	90 - 110	P	04/02/2025	16:39	LB135273
	Magnesium	25000	25000	100	90 - 110	P	04/02/2025	16:39	LB135273
	Manganese	2510	2500	100	90 - 110	P	04/02/2025	16:39	LB135273
	Molybdenum	5040	5000	101	90 - 110	P	04/02/2025	16:39	LB135273
	Nickel	2550	2500	102	90 - 110	P	04/02/2025	16:39	LB135273
	Potassium	25000	25000	100	90 - 110	P	04/02/2025	16:39	LB135273
	Selenium	5050	5000	101	90 - 110	P	04/02/2025	16:39	LB135273
	Silver	1280	1250	102	90 - 110	P	04/02/2025	16:39	LB135273
	Sodium	25000	25000	100	90 - 110	P	04/02/2025	16:39	LB135273
	Thallium	4910	5000	98	90 - 110	P	04/02/2025	16:39	LB135273
	Tin	5080	5000	102	90 - 110	P	04/02/2025	16:39	LB135273
	Titanium	4970	5000	99	90 - 110	P	04/02/2025	16:39	LB135273
	Vanadium	2500	2500	100	90 - 110	P	04/02/2025	16:39	LB135273
	Zinc	2570	2500	103	90 - 110	P	04/02/2025	16:39	LB135273
CCV02	Aluminum	9900	10000	99	90 - 110	P	04/02/2025	17:35	LB135273
	Antimony	4990	5000	100	90 - 110	P	04/02/2025	17:35	LB135273
	Arsenic	4970	5000	100	90 - 110	P	04/02/2025	17:35	LB135273
	Barium	9840	10000	98	90 - 110	P	04/02/2025	17:35	LB135273
	Beryllium	247	250	99	90 - 110	P	04/02/2025	17:35	LB135273
	Boron	5000	5000	100	90 - 110	P	04/02/2025	17:35	LB135273
	Cadmium	2540	2500	102	90 - 110	P	04/02/2025	17:35	LB135273
	Calcium	24600	25000	98	90 - 110	P	04/02/2025	17:35	LB135273

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	Chromium	1020	1000	102	90 - 110	P	04/02/2025	17:35	LB135273
	Cobalt	2550	2500	102	90 - 110	P	04/02/2025	17:35	LB135273
	Copper	1270	1250	102	90 - 110	P	04/02/2025	17:35	LB135273
	Iron	4860	5000	97	90 - 110	P	04/02/2025	17:35	LB135273
	Lead	5050	5000	101	90 - 110	P	04/02/2025	17:35	LB135273
	Magnesium	24800	25000	99	90 - 110	P	04/02/2025	17:35	LB135273
	Manganese	2500	2500	100	90 - 110	P	04/02/2025	17:35	LB135273
	Molybdenum	4970	5000	100	90 - 110	P	04/02/2025	17:35	LB135273
	Nickel	2520	2500	101	90 - 110	P	04/02/2025	17:35	LB135273
	Potassium	24300	25000	97	90 - 110	P	04/02/2025	17:35	LB135273
	Selenium	4950	5000	99	90 - 110	P	04/02/2025	17:35	LB135273
	Silver	1240	1250	99	90 - 110	P	04/02/2025	17:35	LB135273
	Sodium	24200	25000	97	90 - 110	P	04/02/2025	17:35	LB135273
	Thallium	4900	5000	98	90 - 110	P	04/02/2025	17:35	LB135273
	Tin	4990	5000	100	90 - 110	P	04/02/2025	17:35	LB135273
	Titanium	4960	5000	99	90 - 110	P	04/02/2025	17:35	LB135273
	Vanadium	2500	2500	100	90 - 110	P	04/02/2025	17:35	LB135273
	Zinc	2490	2500	100	90 - 110	P	04/02/2025	17:35	LB135273
CCV03	Aluminum	9550	10000	96	90 - 110	P	04/02/2025	17:53	LB135273
	Antimony	4850	5000	97	90 - 110	P	04/02/2025	17:53	LB135273
	Arsenic	4850	5000	97	90 - 110	P	04/02/2025	17:53	LB135273
	Barium	9480	10000	95	90 - 110	P	04/02/2025	17:53	LB135273
	Beryllium	245	250	98	90 - 110	P	04/02/2025	17:53	LB135273
	Boron	4910	5000	98	90 - 110	P	04/02/2025	17:53	LB135273
	Cadmium	2470	2500	99	90 - 110	P	04/02/2025	17:53	LB135273
	Calcium	23600	25000	94	90 - 110	P	04/02/2025	17:53	LB135273
	Chromium	1010	1000	101	90 - 110	P	04/02/2025	17:53	LB135273
	Cobalt	2480	2500	99	90 - 110	P	04/02/2025	17:53	LB135273
	Copper	1240	1250	99	90 - 110	P	04/02/2025	17:53	LB135273
	Iron	4890	5000	98	90 - 110	P	04/02/2025	17:53	LB135273
	Lead	4900	5000	98	90 - 110	P	04/02/2025	17:53	LB135273
	Magnesium	23700	25000	95	90 - 110	P	04/02/2025	17:53	LB135273
	Manganese	2400	2500	96	90 - 110	P	04/02/2025	17:53	LB135273
	Molybdenum	4790	5000	96	90 - 110	P	04/02/2025	17:53	LB135273

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	Nickel	2440	2500	98	90 - 110	P	04/02/2025	17:53	LB135273
	Potassium	24500	25000	98	90 - 110	P	04/02/2025	17:53	LB135273
	Selenium	4840	5000	97	90 - 110	P	04/02/2025	17:53	LB135273
	Silver	1250	1250	100	90 - 110	P	04/02/2025	17:53	LB135273
	Sodium	24400	25000	97	90 - 110	P	04/02/2025	17:53	LB135273
	Thallium	4820	5000	96	90 - 110	P	04/02/2025	17:53	LB135273
	Tin	4840	5000	97	90 - 110	P	04/02/2025	17:53	LB135273
	Titanium	4780	5000	96	90 - 110	P	04/02/2025	17:53	LB135273
	Vanadium	2410	2500	96	90 - 110	P	04/02/2025	17:53	LB135273
	Zinc	2510	2500	100	90 - 110	P	04/02/2025	17:53	LB135273

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	2600	2500	104	95 - 105	P	04/03/2025	12:06	LB135289
	Antimony	1070	1000	107	95 - 105	P	04/03/2025	12:06	LB135289
	Arsenic	1040	1000	104	95 - 105	P	04/03/2025	12:06	LB135289
	Barium	495	520	95	95 - 105	P	04/03/2025	12:06	LB135289
	Beryllium	494	510	97	95 - 105	P	04/03/2025	12:06	LB135289
	Cadmium	511	510	100	95 - 105	P	04/03/2025	12:06	LB135289
	Calcium	10000	10000	100	95 - 105	P	04/03/2025	12:06	LB135289
	Chromium	529	520	102	95 - 105	P	04/03/2025	12:06	LB135289
	Cobalt	520	520	100	95 - 105	P	04/03/2025	12:06	LB135289
	Copper	516	510	101	95 - 105	P	04/03/2025	12:06	LB135289
	Iron	10300	10000	103	95 - 105	P	04/03/2025	12:06	LB135289
	Lead	1010	1000	101	95 - 105	P	04/03/2025	12:06	LB135289
	Magnesium	5780	6000	96	95 - 105	P	04/03/2025	12:06	LB135289
	Manganese	501	520	96	95 - 105	P	04/03/2025	12:06	LB135289
	Nickel	549	530	104	95 - 105	P	04/03/2025	12:06	LB135289
	Potassium	10200	9900	103	95 - 105	P	04/03/2025	12:06	LB135289
	Selenium	1050	1000	105	95 - 105	P	04/03/2025	12:06	LB135289
	Silver	261	250	104	95 - 105	P	04/03/2025	12:06	LB135289
	Sodium	10500	10000	105	95 - 105	P	04/03/2025	12:06	LB135289
	Thallium	1100	1000	110	95 - 105	P	04/03/2025	12:06	LB135289
	Vanadium	497	500	100	95 - 105	P	04/03/2025	12:06	LB135289
	Zinc	1030	1000	103	95 - 105	P	04/03/2025	12:06	LB135289

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	108	100	108	80 - 120	P	04/03/2025	12:11	LB135289
	Antimony	50.7	50.0	101	80 - 120	P	04/03/2025	12:11	LB135289
	Arsenic	20.6	20.0	103	80 - 120	P	04/03/2025	12:11	LB135289
	Barium	88.9	100	89	80 - 120	P	04/03/2025	12:11	LB135289
	Beryllium	5.78	6.0	96	80 - 120	P	04/03/2025	12:11	LB135289
	Cadmium	5.76	6.0	96	80 - 120	P	04/03/2025	12:11	LB135289
	Calcium	1970	2000	99	80 - 120	P	04/03/2025	12:11	LB135289
	Chromium	9.76	10.0	98	80 - 120	P	04/03/2025	12:11	LB135289
	Cobalt	28.7	30.0	96	80 - 120	P	04/03/2025	12:11	LB135289
	Copper	22.8	20.0	114	80 - 120	P	04/03/2025	12:11	LB135289
	Iron	102	100	102	80 - 120	P	04/03/2025	12:11	LB135289
	Lead	11.1	12.0	93	80 - 120	P	04/03/2025	12:11	LB135289
	Magnesium	2010	2000	100	80 - 120	P	04/03/2025	12:11	LB135289
	Manganese	16.8	20.0	84	80 - 120	P	04/03/2025	12:11	LB135289
	Nickel	38.6	40.0	96	80 - 120	P	04/03/2025	12:11	LB135289
	Potassium	1900	2000	95	80 - 120	P	04/03/2025	12:11	LB135289
	Selenium	17.6	20.0	88	80 - 120	P	04/03/2025	12:11	LB135289
	Silver	10.4	10.0	104	80 - 120	P	04/03/2025	12:11	LB135289
	Sodium	1990	2000	99	80 - 120	P	04/03/2025	12:11	LB135289
	Thallium	39.8	40.0	100	80 - 120	P	04/03/2025	12:11	LB135289
	Vanadium	39.2	40.0	98	80 - 120	P	04/03/2025	12:11	LB135289
	Zinc	45.4	40.0	114	80 - 120	P	04/03/2025	12:11	LB135289

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	9890	10000	99	90 - 110	P	04/03/2025	12:41	LB135289
	Antimony	5130	5000	103	90 - 110	P	04/03/2025	12:41	LB135289
	Arsenic	5050	5000	101	90 - 110	P	04/03/2025	12:41	LB135289
	Barium	9400	10000	94	90 - 110	P	04/03/2025	12:41	LB135289
	Beryllium	240	250	96	90 - 110	P	04/03/2025	12:41	LB135289
	Cadmium	2440	2500	98	90 - 110	P	04/03/2025	12:41	LB135289
	Calcium	23900	25000	96	90 - 110	P	04/03/2025	12:41	LB135289
	Chromium	1020	1000	102	90 - 110	P	04/03/2025	12:41	LB135289
	Cobalt	2440	2500	98	90 - 110	P	04/03/2025	12:41	LB135289
	Copper	1270	1250	102	90 - 110	P	04/03/2025	12:41	LB135289
	Iron	4870	5000	97	90 - 110	P	04/03/2025	12:41	LB135289
	Lead	4930	5000	99	90 - 110	P	04/03/2025	12:41	LB135289
	Magnesium	23600	25000	94	90 - 110	P	04/03/2025	12:41	LB135289
	Manganese	2320	2500	93	90 - 110	P	04/03/2025	12:41	LB135289
	Nickel	2430	2500	97	90 - 110	P	04/03/2025	12:41	LB135289
	Potassium	24800	25000	99	90 - 110	P	04/03/2025	12:41	LB135289
	Selenium	5110	5000	102	90 - 110	P	04/03/2025	12:41	LB135289
	Silver	1260	1250	101	90 - 110	P	04/03/2025	12:41	LB135289
	Sodium	25700	25000	103	90 - 110	P	04/03/2025	12:41	LB135289
	Thallium	5150	5000	103	90 - 110	P	04/03/2025	12:41	LB135289
	Vanadium	2410	2500	96	90 - 110	P	04/03/2025	12:41	LB135289
	Zinc	2530	2500	101	90 - 110	P	04/03/2025	12:41	LB135289
CCV02	Aluminum	9620	10000	96	90 - 110	P	04/03/2025	13:53	LB135289
	Antimony	5080	5000	102	90 - 110	P	04/03/2025	13:53	LB135289
	Arsenic	5030	5000	100	90 - 110	P	04/03/2025	13:53	LB135289
	Barium	9400	10000	94	90 - 110	P	04/03/2025	13:53	LB135289
	Beryllium	228	250	91	90 - 110	P	04/03/2025	13:53	LB135289
	Cadmium	2410	2500	97	90 - 110	P	04/03/2025	13:53	LB135289
	Calcium	23200	25000	93	90 - 110	P	04/03/2025	13:53	LB135289
	Chromium	995	1000	100	90 - 110	P	04/03/2025	13:53	LB135289
	Cobalt	2420	2500	97	90 - 110	P	04/03/2025	13:53	LB135289
	Copper	1260	1250	101	90 - 110	P	04/03/2025	13:53	LB135289
	Iron	4860	5000	97	90 - 110	P	04/03/2025	13:53	LB135289
	Lead	4860	5000	97	90 - 110	P	04/03/2025	13:53	LB135289

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV02	Magnesium	22900	25000	91	90 - 110	P	04/03/2025	13:53	LB135289
	Manganese	2260	2500	90	90 - 110	P	04/03/2025	13:53	LB135289
	Nickel	2420	2500	97	90 - 110	P	04/03/2025	13:53	LB135289
	Potassium	24800	25000	99	90 - 110	P	04/03/2025	13:53	LB135289
	Selenium	5060	5000	101	90 - 110	P	04/03/2025	13:53	LB135289
	Silver	1230	1250	98	90 - 110	P	04/03/2025	13:53	LB135289
	Sodium	25600	25000	102	90 - 110	P	04/03/2025	13:53	LB135289
	Thallium	5010	5000	100	90 - 110	P	04/03/2025	13:53	LB135289
	Vanadium	2350	2500	94	90 - 110	P	04/03/2025	13:53	LB135289
	Zinc	2490	2500	100	90 - 110	P	04/03/2025	13:53	LB135289
CCV03	Aluminum	9770	10000	98	90 - 110	P	04/03/2025	14:39	LB135289
	Antimony	5090	5000	102	90 - 110	P	04/03/2025	14:39	LB135289
	Arsenic	5030	5000	101	90 - 110	P	04/03/2025	14:39	LB135289
	Barium	9580	10000	96	90 - 110	P	04/03/2025	14:39	LB135289
	Beryllium	242	250	97	90 - 110	P	04/03/2025	14:39	LB135289
	Cadmium	2440	2500	98	90 - 110	P	04/03/2025	14:39	LB135289
	Calcium	23700	25000	95	90 - 110	P	04/03/2025	14:39	LB135289
	Chromium	1010	1000	101	90 - 110	P	04/03/2025	14:39	LB135289
	Cobalt	2450	2500	98	90 - 110	P	04/03/2025	14:39	LB135289
	Copper	1270	1250	102	90 - 110	P	04/03/2025	14:39	LB135289
	Iron	4880	5000	98	90 - 110	P	04/03/2025	14:39	LB135289
	Lead	4910	5000	98	90 - 110	P	04/03/2025	14:39	LB135289
	Magnesium	23900	25000	96	90 - 110	P	04/03/2025	14:39	LB135289
	Manganese	2320	2500	93	90 - 110	P	04/03/2025	14:39	LB135289
	Nickel	2450	2500	98	90 - 110	P	04/03/2025	14:39	LB135289
	Potassium	24600	25000	99	90 - 110	P	04/03/2025	14:39	LB135289
	Selenium	5080	5000	102	90 - 110	P	04/03/2025	14:39	LB135289
	Silver	1250	1250	100	90 - 110	P	04/03/2025	14:39	LB135289
	Sodium	25300	25000	101	90 - 110	P	04/03/2025	14:39	LB135289
	Thallium	5200	5000	104	90 - 110	P	04/03/2025	14:39	LB135289
	Vanadium	2410	2500	96	90 - 110	P	04/03/2025	14:39	LB135289
	Zinc	2520	2500	101	90 - 110	P	04/03/2025	14:39	LB135289
CCV04	Aluminum	9360	10000	94	90 - 110	P	04/03/2025	15:32	LB135289
	Antimony	4900	5000	98	90 - 110	P	04/03/2025	15:32	LB135289

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV04	Arsenic	4890	5000	98	90 - 110	P	04/03/2025	15:32	LB135289
	Barium	9580	10000	96	90 - 110	P	04/03/2025	15:32	LB135289
	Beryllium	231	250	92	90 - 110	P	04/03/2025	15:32	LB135289
	Cadmium	2430	2500	97	90 - 110	P	04/03/2025	15:32	LB135289
	Calcium	23100	25000	92	90 - 110	P	04/03/2025	15:32	LB135289
	Chromium	990	1000	99	90 - 110	P	04/03/2025	15:32	LB135289
	Cobalt	2440	2500	98	90 - 110	P	04/03/2025	15:32	LB135289
	Copper	1250	1250	100	90 - 110	P	04/03/2025	15:32	LB135289
	Iron	4970	5000	99	90 - 110	P	04/03/2025	15:32	LB135289
	Lead	4850	5000	97	90 - 110	P	04/03/2025	15:32	LB135289
	Magnesium	23700	25000	95	90 - 110	P	04/03/2025	15:32	LB135289
	Manganese	2300	2500	92	90 - 110	P	04/03/2025	15:32	LB135289
	Nickel	2470	2500	99	90 - 110	P	04/03/2025	15:32	LB135289
	Potassium	25000	25000	100	90 - 110	P	04/03/2025	15:32	LB135289
	Selenium	4900	5000	98	90 - 110	P	04/03/2025	15:32	LB135289
	Silver	1230	1250	98	90 - 110	P	04/03/2025	15:32	LB135289
	Sodium	25200	25000	101	90 - 110	P	04/03/2025	15:32	LB135289
	Thallium	5110	5000	102	90 - 110	P	04/03/2025	15:32	LB135289
	Vanadium	2390	2500	96	90 - 110	P	04/03/2025	15:32	LB135289
	Zinc	2460	2500	98	90 - 110	P	04/03/2025	15:32	LB135289
CCV05	Aluminum	9300	10000	93	90 - 110	P	04/03/2025	16:36	LB135289
	Antimony	4940	5000	99	90 - 110	P	04/03/2025	16:36	LB135289
	Arsenic	4900	5000	98	90 - 110	P	04/03/2025	16:36	LB135289
	Barium	9610	10000	96	90 - 110	P	04/03/2025	16:36	LB135289
	Beryllium	227	250	91	90 - 110	P	04/03/2025	16:36	LB135289
	Cadmium	2440	2500	98	90 - 110	P	04/03/2025	16:36	LB135289
	Calcium	23000	25000	92	90 - 110	P	04/03/2025	16:36	LB135289
	Chromium	994	1000	99	90 - 110	P	04/03/2025	16:36	LB135289
	Cobalt	2450	2500	98	90 - 110	P	04/03/2025	16:36	LB135289
	Copper	1250	1250	100	90 - 110	P	04/03/2025	16:36	LB135289
	Iron	4900	5000	98	90 - 110	P	04/03/2025	16:36	LB135289
	Lead	4860	5000	97	90 - 110	P	04/03/2025	16:36	LB135289
	Magnesium	23700	25000	95	90 - 110	P	04/03/2025	16:36	LB135289
	Manganese	2260	2500	91	90 - 110	P	04/03/2025	16:36	LB135289

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV05	Nickel	2480	2500	99	90 - 110	P	04/03/2025	16:36	LB135289
	Potassium	24700	25000	99	90 - 110	P	04/03/2025	16:36	LB135289
	Selenium	4900	5000	98	90 - 110	P	04/03/2025	16:36	LB135289
	Silver	1220	1250	98	90 - 110	P	04/03/2025	16:36	LB135289
	Sodium	25100	25000	100	90 - 110	P	04/03/2025	16:36	LB135289
	Thallium	5060	5000	101	90 - 110	P	04/03/2025	16:36	LB135289
	Vanadium	2380	2500	95	90 - 110	P	04/03/2025	16:36	LB135289
	Zinc	2440	2500	98	90 - 110	P	04/03/2025	16:36	LB135289
CCV06	Aluminum	9570	10000	96	90 - 110	P	04/03/2025	17:48	LB135289
	Antimony	5050	5000	101	90 - 110	P	04/03/2025	17:48	LB135289
	Arsenic	5010	5000	100	90 - 110	P	04/03/2025	17:48	LB135289
	Barium	9640	10000	96	90 - 110	P	04/03/2025	17:48	LB135289
	Beryllium	239	250	96	90 - 110	P	04/03/2025	17:48	LB135289
	Cadmium	2480	2500	99	90 - 110	P	04/03/2025	17:48	LB135289
	Calcium	23600	25000	94	90 - 110	P	04/03/2025	17:48	LB135289
	Chromium	1010	1000	101	90 - 110	P	04/03/2025	17:48	LB135289
	Cobalt	2490	2500	100	90 - 110	P	04/03/2025	17:48	LB135289
	Copper	1280	1250	103	90 - 110	P	04/03/2025	17:48	LB135289
	Iron	4880	5000	98	90 - 110	P	04/03/2025	17:48	LB135289
	Lead	4940	5000	99	90 - 110	P	04/03/2025	17:48	LB135289
	Magnesium	24100	25000	97	90 - 110	P	04/03/2025	17:48	LB135289
	Manganese	2310	2500	92	90 - 110	P	04/03/2025	17:48	LB135289
	Nickel	2520	2500	101	90 - 110	P	04/03/2025	17:48	LB135289
	Potassium	25300	25000	101	90 - 110	P	04/03/2025	17:48	LB135289
	Selenium	5020	5000	100	90 - 110	P	04/03/2025	17:48	LB135289
	Silver	1250	1250	100	90 - 110	P	04/03/2025	17:48	LB135289
	Sodium	27000	25000	108	90 - 110	P	04/03/2025	17:48	LB135289
	Thallium	5220	5000	104	90 - 110	P	04/03/2025	17:48	LB135289
	Vanadium	2430	2500	97	90 - 110	P	04/03/2025	17:48	LB135289
	Zinc	2530	2500	101	90 - 110	P	04/03/2025	17:48	LB135289
CCV07	Aluminum	9840	10000	98	90 - 110	P	04/03/2025	18:29	LB135289
	Antimony	5050	5000	101	90 - 110	P	04/03/2025	18:29	LB135289
	Arsenic	5020	5000	100	90 - 110	P	04/03/2025	18:29	LB135289
	Barium	9620	10000	96	90 - 110	P	04/03/2025	18:29	LB135289

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV07	Beryllium	253	250	101	90 - 110	P	04/03/2025	18:29	LB135289
	Cadmium	2490	2500	100	90 - 110	P	04/03/2025	18:29	LB135289
	Calcium	24200	25000	97	90 - 110	P	04/03/2025	18:29	LB135289
	Chromium	1050	1000	104	90 - 110	P	04/03/2025	18:29	LB135289
	Cobalt	2500	2500	100	90 - 110	P	04/03/2025	18:29	LB135289
	Copper	1280	1250	103	90 - 110	P	04/03/2025	18:29	LB135289
	Iron	4960	5000	99	90 - 110	P	04/03/2025	18:29	LB135289
	Lead	4980	5000	100	90 - 110	P	04/03/2025	18:29	LB135289
	Magnesium	24700	25000	99	90 - 110	P	04/03/2025	18:29	LB135289
	Manganese	2360	2500	94	90 - 110	P	04/03/2025	18:29	LB135289
	Nickel	2520	2500	101	90 - 110	P	04/03/2025	18:29	LB135289
	Potassium	25300	25000	101	90 - 110	P	04/03/2025	18:29	LB135289
	Selenium	5010	5000	100	90 - 110	P	04/03/2025	18:29	LB135289
	Silver	1290	1250	103	90 - 110	P	04/03/2025	18:29	LB135289
	Sodium	26600	25000	106	90 - 110	P	04/03/2025	18:29	LB135289
	Thallium	5310	5000	106	90 - 110	P	04/03/2025	18:29	LB135289
	Vanadium	2470	2500	99	90 - 110	P	04/03/2025	18:29	LB135289
	Zinc	2590	2500	104	90 - 110	P	04/03/2025	18:29	LB135289

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	2400	2500	96	95 - 105	P	04/07/2025	12:35	LB135333
	Antimony	1020	1000	102	95 - 105	P	04/07/2025	12:35	LB135333
	Arsenic	999	1000	100	95 - 105	P	04/07/2025	12:35	LB135333
	Barium	505	520	97	95 - 105	P	04/07/2025	12:35	LB135333
	Beryllium	535	510	105	95 - 105	P	04/07/2025	12:35	LB135333
	Boron	2530	2500	101	95 - 105	P	04/07/2025	12:35	LB135333
	Cadmium	495	510	97	95 - 105	P	04/07/2025	12:35	LB135333
	Calcium	10300	10000	103	95 - 105	P	04/07/2025	12:35	LB135333
	Chromium	523	520	101	95 - 105	P	04/07/2025	12:35	LB135333
	Cobalt	506	520	97	95 - 105	P	04/07/2025	12:35	LB135333
	Copper	521	510	102	95 - 105	P	04/07/2025	12:35	LB135333
	Iron	9720	10000	97	95 - 105	P	04/07/2025	12:35	LB135333
	Lead	977	1000	98	95 - 105	P	04/07/2025	12:35	LB135333
	Magnesium	6160	6000	103	95 - 105	P	04/07/2025	12:35	LB135333
	Manganese	515	520	99	95 - 105	P	04/07/2025	12:35	LB135333
	Molybdenum	2460	2500	98	95 - 105	P	04/07/2025	12:35	LB135333
	Nickel	508	530	96	95 - 105	P	04/07/2025	12:35	LB135333
	Potassium	9430	9900	95	95 - 105	P	04/07/2025	12:35	LB135333
	Selenium	1030	1000	103	95 - 105	P	04/07/2025	12:35	LB135333
	Silver	242	250	97	95 - 105	P	04/07/2025	12:35	LB135333
	Sodium	10400	10000	104	95 - 105	P	04/07/2025	12:35	LB135333
	Thallium	1040	1000	104	95 - 105	P	04/07/2025	12:35	LB135333
	Tin	2500	2500	100	95 - 105	P	04/07/2025	12:35	LB135333
	Titanium	2510	2500	101	95 - 105	P	04/07/2025	12:35	LB135333
	Vanadium	507	500	101	95 - 105	P	04/07/2025	12:35	LB135333
	Zinc	1010	1000	101	95 - 105	P	04/07/2025	12:35	LB135333

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	105	100	105	80 - 120	P	04/07/2025	13:00	LB135333
	Antimony	52.7	50.0	105	80 - 120	P	04/07/2025	13:00	LB135333
	Arsenic	23.6	20.0	118	80 - 120	P	04/07/2025	13:00	LB135333
	Barium	89.6	100	90	80 - 120	P	04/07/2025	13:00	LB135333
	Beryllium	5.68	6.0	95	80 - 120	P	04/07/2025	13:00	LB135333
	Boron	89.4	100	89	80 - 120	P	04/07/2025	13:00	LB135333
	Cadmium	5.74	6.0	96	80 - 120	P	04/07/2025	13:00	LB135333
	Calcium	1910	2000	95	80 - 120	P	04/07/2025	13:00	LB135333
	Chromium	9.71	10.0	97	80 - 120	P	04/07/2025	13:00	LB135333
	Cobalt	29.2	30.0	97	80 - 120	P	04/07/2025	13:00	LB135333
	Copper	22.1	20.0	110	80 - 120	P	04/07/2025	13:00	LB135333
	Iron	93.7	100	94	80 - 120	P	04/07/2025	13:00	LB135333
	Lead	11.1	12.0	93	80 - 120	P	04/07/2025	13:00	LB135333
	Magnesium	2010	2000	100	80 - 120	P	04/07/2025	13:00	LB135333
	Manganese	20.7	20.0	104	80 - 120	P	04/07/2025	13:00	LB135333
	Molybdenum	208	200	104	80 - 120	P	04/07/2025	13:00	LB135333
	Nickel	39.3	40.0	98	80 - 120	P	04/07/2025	13:00	LB135333
	Potassium	1750	2000	87	80 - 120	P	04/07/2025	13:00	LB135333
	Selenium	19.6	20.0	98	80 - 120	P	04/07/2025	13:00	LB135333
	Silver	10.4	10.0	104	80 - 120	P	04/07/2025	13:00	LB135333
	Sodium	1990	2000	100	80 - 120	P	04/07/2025	13:00	LB135333
	Thallium	40.7	40.0	102	80 - 120	P	04/07/2025	13:00	LB135333
	Tin	39.0	40.0	98	80 - 120	P	04/07/2025	13:00	LB135333
	Titanium	37.6	40.0	94	80 - 120	P	04/07/2025	13:00	LB135333
	Vanadium	38.8	40.0	97	80 - 120	P	04/07/2025	13:00	LB135333
	Zinc	41.5	40.0	104	80 - 120	P	04/07/2025	13:00	LB135333

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	9830	10000	98	90 - 110	P	04/07/2025	13:42	LB135333
	Antimony	5040	5000	101	90 - 110	P	04/07/2025	13:42	LB135333
	Arsenic	5000	5000	100	90 - 110	P	04/07/2025	13:42	LB135333
	Barium	9860	10000	99	90 - 110	P	04/07/2025	13:42	LB135333
	Beryllium	249	250	100	90 - 110	P	04/07/2025	13:42	LB135333
	Boron	5000	5000	100	90 - 110	P	04/07/2025	13:42	LB135333
	Cadmium	2480	2500	99	90 - 110	P	04/07/2025	13:42	LB135333
	Calcium	24500	25000	98	90 - 110	P	04/07/2025	13:42	LB135333
	Chromium	1010	1000	101	90 - 110	P	04/07/2025	13:42	LB135333
	Cobalt	2480	2500	99	90 - 110	P	04/07/2025	13:42	LB135333
	Copper	1260	1250	101	90 - 110	P	04/07/2025	13:42	LB135333
	Iron	4980	5000	100	90 - 110	P	04/07/2025	13:42	LB135333
	Lead	4970	5000	100	90 - 110	P	04/07/2025	13:42	LB135333
	Magnesium	24400	25000	98	90 - 110	P	04/07/2025	13:42	LB135333
	Manganese	2450	2500	98	90 - 110	P	04/07/2025	13:42	LB135333
	Molybdenum	5090	5000	102	90 - 110	P	04/07/2025	13:42	LB135333
	Nickel	2490	2500	100	90 - 110	P	04/07/2025	13:42	LB135333
	Potassium	24900	25000	100	90 - 110	P	04/07/2025	13:42	LB135333
	Selenium	5030	5000	101	90 - 110	P	04/07/2025	13:42	LB135333
	Silver	1260	1250	101	90 - 110	P	04/07/2025	13:42	LB135333
	Sodium	24800	25000	99	90 - 110	P	04/07/2025	13:42	LB135333
	Thallium	5100	5000	102	90 - 110	P	04/07/2025	13:42	LB135333
	Tin	4990	5000	100	90 - 110	P	04/07/2025	13:42	LB135333
	Titanium	4910	5000	98	90 - 110	P	04/07/2025	13:42	LB135333
	Vanadium	2460	2500	98	90 - 110	P	04/07/2025	13:42	LB135333
	Zinc	2520	2500	101	90 - 110	P	04/07/2025	13:42	LB135333
CCV02	Aluminum	9500	10000	95	90 - 110	P	04/07/2025	15:07	LB135333
	Antimony	4900	5000	98	90 - 110	P	04/07/2025	15:07	LB135333
	Arsenic	4840	5000	97	90 - 110	P	04/07/2025	15:07	LB135333
	Barium	9880	10000	99	90 - 110	P	04/07/2025	15:07	LB135333
	Beryllium	236	250	94	90 - 110	P	04/07/2025	15:07	LB135333
	Boron	4800	5000	96	90 - 110	P	04/07/2025	15:07	LB135333
	Cadmium	2420	2500	97	90 - 110	P	04/07/2025	15:07	LB135333
	Calcium	23900	25000	96	90 - 110	P	04/07/2025	15:07	LB135333

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	Chromium	976	1000	98	90 - 110	P	04/07/2025	15:07	LB135333
	Cobalt	2410	2500	96	90 - 110	P	04/07/2025	15:07	LB135333
	Copper	1230	1250	98	90 - 110	P	04/07/2025	15:07	LB135333
	Iron	4990	5000	100	90 - 110	P	04/07/2025	15:07	LB135333
	Lead	4830	5000	97	90 - 110	P	04/07/2025	15:07	LB135333
	Magnesium	23500	25000	94	90 - 110	P	04/07/2025	15:07	LB135333
	Manganese	2390	2500	96	90 - 110	P	04/07/2025	15:07	LB135333
	Molybdenum	4920	5000	98	90 - 110	P	04/07/2025	15:07	LB135333
	Nickel	2420	2500	97	90 - 110	P	04/07/2025	15:07	LB135333
	Potassium	25000	25000	100	90 - 110	P	04/07/2025	15:07	LB135333
	Selenium	4870	5000	97	90 - 110	P	04/07/2025	15:07	LB135333
	Silver	1230	1250	98	90 - 110	P	04/07/2025	15:07	LB135333
	Sodium	25200	25000	101	90 - 110	P	04/07/2025	15:07	LB135333
	Thallium	4910	5000	98	90 - 110	P	04/07/2025	15:07	LB135333
	Tin	4850	5000	97	90 - 110	P	04/07/2025	15:07	LB135333
	Titanium	4800	5000	96	90 - 110	P	04/07/2025	15:07	LB135333
	Vanadium	2410	2500	96	90 - 110	P	04/07/2025	15:07	LB135333
	Zinc	2450	2500	98	90 - 110	P	04/07/2025	15:07	LB135333
CCV03	Aluminum	9610	10000	96	90 - 110	P	04/07/2025	15:41	LB135333
	Antimony	5080	5000	102	90 - 110	P	04/07/2025	15:41	LB135333
	Arsenic	5040	5000	101	90 - 110	P	04/07/2025	15:41	LB135333
	Barium	9810	10000	98	90 - 110	P	04/07/2025	15:41	LB135333
	Beryllium	234	250	94	90 - 110	P	04/07/2025	15:41	LB135333
	Boron	4680	5000	94	90 - 110	P	04/07/2025	15:41	LB135333
	Cadmium	2470	2500	99	90 - 110	P	04/07/2025	15:41	LB135333
	Calcium	23700	25000	95	90 - 110	P	04/07/2025	15:41	LB135333
	Chromium	1020	1000	102	90 - 110	P	04/07/2025	15:41	LB135333
	Cobalt	2470	2500	99	90 - 110	P	04/07/2025	15:41	LB135333
	Copper	1270	1250	101	90 - 110	P	04/07/2025	15:41	LB135333
	Iron	5170	5000	103	90 - 110	P	04/07/2025	15:41	LB135333
	Lead	4970	5000	99	90 - 110	P	04/07/2025	15:41	LB135333
	Magnesium	23600	25000	94	90 - 110	P	04/07/2025	15:41	LB135333
	Manganese	2350	2500	94	90 - 110	P	04/07/2025	15:41	LB135333
	Molybdenum	5080	5000	102	90 - 110	P	04/07/2025	15:41	LB135333

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	Nickel	2480	2500	99	90 - 110	P	04/07/2025	15:41	LB135333
	Potassium	26100	25000	104	90 - 110	P	04/07/2025	15:41	LB135333
	Selenium	5100	5000	102	90 - 110	P	04/07/2025	15:41	LB135333
	Silver	1270	1250	102	90 - 110	P	04/07/2025	15:41	LB135333
	Sodium	25900	25000	104	90 - 110	P	04/07/2025	15:41	LB135333
	Thallium	5060	5000	101	90 - 110	P	04/07/2025	15:41	LB135333
	Tin	4980	5000	100	90 - 110	P	04/07/2025	15:41	LB135333
	Titanium	4780	5000	96	90 - 110	P	04/07/2025	15:41	LB135333
	Vanadium	2400	2500	96	90 - 110	P	04/07/2025	15:41	LB135333
	Zinc	2530	2500	101	90 - 110	P	04/07/2025	15:41	LB135333
CCV04	Aluminum	9620	10000	96	90 - 110	P	04/07/2025	17:00	LB135333
	Antimony	4990	5000	100	90 - 110	P	04/07/2025	17:00	LB135333
	Arsenic	4920	5000	98	90 - 110	P	04/07/2025	17:00	LB135333
	Barium	9750	10000	98	90 - 110	P	04/07/2025	17:00	LB135333
	Beryllium	245	250	98	90 - 110	P	04/07/2025	17:00	LB135333
	Boron	4970	5000	100	90 - 110	P	04/07/2025	17:00	LB135333
	Cadmium	2450	2500	98	90 - 110	P	04/07/2025	17:00	LB135333
	Calcium	24100	25000	96	90 - 110	P	04/07/2025	17:00	LB135333
	Chromium	991	1000	99	90 - 110	P	04/07/2025	17:00	LB135333
	Cobalt	2440	2500	98	90 - 110	P	04/07/2025	17:00	LB135333
	Copper	1250	1250	100	90 - 110	P	04/07/2025	17:00	LB135333
	Iron	4960	5000	99	90 - 110	P	04/07/2025	17:00	LB135333
	Lead	4900	5000	98	90 - 110	P	04/07/2025	17:00	LB135333
	Magnesium	23800	25000	95	90 - 110	P	04/07/2025	17:00	LB135333
	Manganese	2420	2500	97	90 - 110	P	04/07/2025	17:00	LB135333
	Molybdenum	5010	5000	100	90 - 110	P	04/07/2025	17:00	LB135333
	Nickel	2450	2500	98	90 - 110	P	04/07/2025	17:00	LB135333
	Potassium	25000	25000	100	90 - 110	P	04/07/2025	17:00	LB135333
	Selenium	4990	5000	100	90 - 110	P	04/07/2025	17:00	LB135333
	Silver	1250	1250	100	90 - 110	P	04/07/2025	17:00	LB135333
	Sodium	25300	25000	101	90 - 110	P	04/07/2025	17:00	LB135333
	Thallium	4940	5000	99	90 - 110	P	04/07/2025	17:00	LB135333
	Tin	4900	5000	98	90 - 110	P	04/07/2025	17:00	LB135333
	Titanium	4850	5000	97	90 - 110	P	04/07/2025	17:00	LB135333

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	Vanadium	2420	2500	97	90 - 110	P	04/07/2025	17:00	LB135333
	Zinc	2490	2500	100	90 - 110	P	04/07/2025	17:00	LB135333
CCV05	Aluminum	9600	10000	96	90 - 110	P	04/07/2025	17:43	LB135333
	Antimony	4920	5000	98	90 - 110	P	04/07/2025	17:43	LB135333
	Arsenic	4880	5000	98	90 - 110	P	04/07/2025	17:43	LB135333
	Barium	9580	10000	96	90 - 110	P	04/07/2025	17:43	LB135333
	Beryllium	251	250	100	90 - 110	P	04/07/2025	17:43	LB135333
	Boron	5120	5000	102	90 - 110	P	04/07/2025	17:43	LB135333
	Cadmium	2430	2500	97	90 - 110	P	04/07/2025	17:43	LB135333
	Calcium	23700	25000	95	90 - 110	P	04/07/2025	17:43	LB135333
	Chromium	989	1000	99	90 - 110	P	04/07/2025	17:43	LB135333
	Cobalt	2420	2500	97	90 - 110	P	04/07/2025	17:43	LB135333
	Copper	1240	1250	99	90 - 110	P	04/07/2025	17:43	LB135333
	Iron	4760	5000	95	90 - 110	P	04/07/2025	17:43	LB135333
	Lead	4840	5000	97	90 - 110	P	04/07/2025	17:43	LB135333
	Magnesium	23800	25000	95	90 - 110	P	04/07/2025	17:43	LB135333
	Manganese	2370	2500	95	90 - 110	P	04/07/2025	17:43	LB135333
	Molybdenum	4950	5000	99	90 - 110	P	04/07/2025	17:43	LB135333
	Nickel	2430	2500	97	90 - 110	P	04/07/2025	17:43	LB135333
	Potassium	23700	25000	95	90 - 110	P	04/07/2025	17:43	LB135333
	Selenium	4900	5000	98	90 - 110	P	04/07/2025	17:43	LB135333
	Silver	1240	1250	99	90 - 110	P	04/07/2025	17:43	LB135333
	Sodium	23500	25000	94	90 - 110	P	04/07/2025	17:43	LB135333
	Thallium	4910	5000	98	90 - 110	P	04/07/2025	17:43	LB135333
	Tin	4870	5000	97	90 - 110	P	04/07/2025	17:43	LB135333
	Titanium	4750	5000	95	90 - 110	P	04/07/2025	17:43	LB135333
	Vanadium	2400	2500	96	90 - 110	P	04/07/2025	17:43	LB135333
	Zinc	2470	2500	99	90 - 110	P	04/07/2025	17:43	LB135333
CCV06	Aluminum	9570	10000	96	90 - 110	P	04/07/2025	18:51	LB135333
	Antimony	5000	5000	100	90 - 110	P	04/07/2025	18:51	LB135333
	Arsenic	4930	5000	99	90 - 110	P	04/07/2025	18:51	LB135333
	Barium	9840	10000	98	90 - 110	P	04/07/2025	18:51	LB135333
	Beryllium	235	250	94	90 - 110	P	04/07/2025	18:51	LB135333
	Boron	4750	5000	95	90 - 110	P	04/07/2025	18:51	LB135333

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	Cadmium	2450	2500	98	90 - 110	P	04/07/2025	18:51	LB135333
	Calcium	23900	25000	96	90 - 110	P	04/07/2025	18:51	LB135333
	Chromium	997	1000	100	90 - 110	P	04/07/2025	18:51	LB135333
	Cobalt	2440	2500	98	90 - 110	P	04/07/2025	18:51	LB135333
	Copper	1260	1250	100	90 - 110	P	04/07/2025	18:51	LB135333
	Iron	5120	5000	102	90 - 110	P	04/07/2025	18:51	LB135333
	Lead	4890	5000	98	90 - 110	P	04/07/2025	18:51	LB135333
	Magnesium	23600	25000	94	90 - 110	P	04/07/2025	18:51	LB135333
	Manganese	2370	2500	95	90 - 110	P	04/07/2025	18:51	LB135333
	Molybdenum	4990	5000	100	90 - 110	P	04/07/2025	18:51	LB135333
	Nickel	2450	2500	98	90 - 110	P	04/07/2025	18:51	LB135333
	Potassium	25700	25000	103	90 - 110	P	04/07/2025	18:51	LB135333
	Selenium	4970	5000	99	90 - 110	P	04/07/2025	18:51	LB135333
	Silver	1240	1250	99	90 - 110	P	04/07/2025	18:51	LB135333
	Sodium	25800	25000	103	90 - 110	P	04/07/2025	18:51	LB135333
	Thallium	4940	5000	99	90 - 110	P	04/07/2025	18:51	LB135333
	Tin	4910	5000	98	90 - 110	P	04/07/2025	18:51	LB135333
	Titanium	4800	5000	96	90 - 110	P	04/07/2025	18:51	LB135333
	Vanadium	2410	2500	96	90 - 110	P	04/07/2025	18:51	LB135333
	Zinc	2470	2500	99	90 - 110	P	04/07/2025	18:51	LB135333

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Metals

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CRDL STANDARD FOR AA & ICP

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	Aluminum	97.3	100	97	40 - 160	P	04/02/2025	15:55	LB135273
	Antimony	49.4	50.0	99	40 - 160	P	04/02/2025	15:55	LB135273
	Arsenic	19.0	20.0	95	40 - 160	P	04/02/2025	15:55	LB135273
	Barium	91.3	100	91	40 - 160	P	04/02/2025	15:55	LB135273
	Beryllium	6.02	6.0	100	40 - 160	P	04/02/2025	15:55	LB135273
	Boron	85.8	100	86	40 - 160	P	04/02/2025	15:55	LB135273
	Cadmium	5.72	6.0	95	40 - 160	P	04/02/2025	15:55	LB135273
	Calcium	1960	2000	98	40 - 160	P	04/02/2025	15:55	LB135273
	Chromium	9.75	10.0	98	40 - 160	P	04/02/2025	15:55	LB135273
	Cobalt	28.8	30.0	96	40 - 160	P	04/02/2025	15:55	LB135273
	Copper	22.1	20.0	110	40 - 160	P	04/02/2025	15:55	LB135273
	Iron	94.6	100	95	40 - 160	P	04/02/2025	15:55	LB135273
	Lead	11.9	12.0	99	40 - 160	P	04/02/2025	15:55	LB135273
	Magnesium	2070	2000	104	40 - 160	P	04/02/2025	15:55	LB135273
	Manganese	17.5	20.0	87	40 - 160	P	04/02/2025	15:55	LB135273
	Molybdenum	204	200	102	40 - 160	P	04/02/2025	15:55	LB135273
	Nickel	38.7	40.0	97	40 - 160	P	04/02/2025	15:55	LB135273
	Potassium	1760	2000	88	40 - 160	P	04/02/2025	15:55	LB135273
	Selenium	21.7	20.0	109	40 - 160	P	04/02/2025	15:55	LB135273
	Silver	9.98	10.0	100	40 - 160	P	04/02/2025	15:55	LB135273
	Sodium	1810	2000	91	40 - 160	P	04/02/2025	15:55	LB135273
	Thallium	39.6	40.0	99	40 - 160	P	04/02/2025	15:55	LB135273
	Tin	38.1	40.0	95	40 - 160	P	04/02/2025	15:55	LB135273
	Titanium	38.3	40.0	96	40 - 160	P	04/02/2025	15:55	LB135273
	Vanadium	38.9	40.0	97	40 - 160	P	04/02/2025	15:55	LB135273
	Zinc	41.8	40.0	104	40 - 160	P	04/02/2025	15:55	LB135273
CRI01	Aluminum	108	100	108	40 - 160	P	04/03/2025	12:20	LB135289
	Antimony	52.6	50.0	105	40 - 160	P	04/03/2025	12:20	LB135289
	Arsenic	21.0	20.0	105	40 - 160	P	04/03/2025	12:20	LB135289
	Barium	82.8	100	83	40 - 160	P	04/03/2025	12:20	LB135289
	Beryllium	5.91	6.0	98	40 - 160	P	04/03/2025	12:20	LB135289
	Cadmium	5.76	6.0	96	40 - 160	P	04/03/2025	12:20	LB135289
	Calcium	1940	2000	97	40 - 160	P	04/03/2025	12:20	LB135289
	Chromium	10.00	10.0	100	40 - 160	P	04/03/2025	12:20	LB135289
	Cobalt	28.9	30.0	96	40 - 160	P	04/03/2025	12:20	LB135289
	Copper	22.8	20.0	114	40 - 160	P	04/03/2025	12:20	LB135289

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Metals

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CRDL STANDARD FOR AA & ICP

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRI01	Iron	110	100	110	40 - 160	P	04/03/2025	12:20	LB135289
	Lead	11.6	12.0	96	40 - 160	P	04/03/2025	12:20	LB135289
	Magnesium	2020	2000	101	40 - 160	P	04/03/2025	12:20	LB135289
	Manganese	16.4	20.0	82	40 - 160	P	04/03/2025	12:20	LB135289
	Nickel	38.7	40.0	97	40 - 160	P	04/03/2025	12:20	LB135289
	Potassium	1850	2000	92	40 - 160	P	04/03/2025	12:20	LB135289
	Selenium	20.4	20.0	102	40 - 160	P	04/03/2025	12:20	LB135289
	Silver	10.7	10.0	107	40 - 160	P	04/03/2025	12:20	LB135289
	Sodium	1950	2000	97	40 - 160	P	04/03/2025	12:20	LB135289
	Thallium	41.1	40.0	103	40 - 160	P	04/03/2025	12:20	LB135289
	Vanadium	38.5	40.0	96	40 - 160	P	04/03/2025	12:20	LB135289
	Zinc	42.8	40.0	107	40 - 160	P	04/03/2025	12:20	LB135289
CRA	Mercury	0.039	0.05	78	40 - 160	CV	04/03/2025	12:24	LB135283
CRI01	Aluminum	103	100	103	40 - 160	P	04/07/2025	13:10	LB135333
	Antimony	53.8	50.0	108	40 - 160	P	04/07/2025	13:10	LB135333
	Arsenic	22.8	20.0	114	40 - 160	P	04/07/2025	13:10	LB135333
	Barium	90.6	100	91	40 - 160	P	04/07/2025	13:10	LB135333
	Beryllium	5.67	6.0	94	40 - 160	P	04/07/2025	13:10	LB135333
	Boron	89.0	100	89	40 - 160	P	04/07/2025	13:10	LB135333
	Cadmium	5.78	6.0	96	40 - 160	P	04/07/2025	13:10	LB135333
	Calcium	1920	2000	96	40 - 160	P	04/07/2025	13:10	LB135333
	Chromium	9.85	10.0	98	40 - 160	P	04/07/2025	13:10	LB135333
	Cobalt	29.8	30.0	99	40 - 160	P	04/07/2025	13:10	LB135333
	Copper	22.4	20.0	112	40 - 160	P	04/07/2025	13:10	LB135333
	Iron	99.8	100	100	40 - 160	P	04/07/2025	13:10	LB135333
	Lead	11.7	12.0	98	40 - 160	P	04/07/2025	13:10	LB135333
	Magnesium	2030	2000	102	40 - 160	P	04/07/2025	13:10	LB135333
	Manganese	21.2	20.0	106	40 - 160	P	04/07/2025	13:10	LB135333
	Molybdenum	210	200	105	40 - 160	P	04/07/2025	13:10	LB135333
	Nickel	39.7	40.0	99	40 - 160	P	04/07/2025	13:10	LB135333
	Potassium	1870	2000	94	40 - 160	P	04/07/2025	13:10	LB135333
	Selenium	21.0	20.0	105	40 - 160	P	04/07/2025	13:10	LB135333
	Silver	10.9	10.0	109	40 - 160	P	04/07/2025	13:10	LB135333
	Sodium	1460	2000	73	40 - 160	P	04/07/2025	13:10	LB135333
	Thallium	40.7	40.0	102	40 - 160	P	04/07/2025	13:10	LB135333
	Tin	39.6	40.0	99	40 - 160	P	04/07/2025	13:10	LB135333
	Titanium	38.5	40.0	96	40 - 160	P	04/07/2025	13:10	LB135333
	Vanadium	38.2	40.0	95	40 - 160	P	04/07/2025	13:10	LB135333

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Metals

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CRDL STANDARD FOR AA & ICP

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	Zinc	41.4	40.0	104	40 - 160	P	04/07/2025	13:10	LB135333

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB74	Mercury	0.20	+/-0.20	U	0.20	CV	04/03/2025	12:14	LB135283

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB25	Mercury	0.20	+/-0.20	U	0.20	CV	04/03/2025	12:19	LB135283
CCB26	Mercury	0.20	+/-0.20	U	0.20	CV	04/03/2025	12:58	LB135283
CCB27	Mercury	0.20	+/-0.20	U	0.20	CV	04/03/2025	13:12	LB135283

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	04/02/2025	15:51	LB135273
	Antimony	50.0	+/-50.0	U	50.0	P	04/02/2025	15:51	LB135273
	Arsenic	20.0	+/-20.0	U	20.0	P	04/02/2025	15:51	LB135273
	Barium	100	+/-100	U	100	P	04/02/2025	15:51	LB135273
	Beryllium	6.00	+/-6.00	U	6.00	P	04/02/2025	15:51	LB135273
	Boron	100	+/-100	U	100	P	04/02/2025	15:51	LB135273
	Cadmium	6.00	+/-6.00	U	6.00	P	04/02/2025	15:51	LB135273
	Calcium	2000	+/-2000	U	2000	P	04/02/2025	15:51	LB135273
	Chromium	10.0	+/-10.0	U	10.0	P	04/02/2025	15:51	LB135273
	Cobalt	30.0	+/-30.0	U	30.0	P	04/02/2025	15:51	LB135273
	Copper	20.0	+/-20.0	U	20.0	P	04/02/2025	15:51	LB135273
	Iron	100	+/-100	U	100	P	04/02/2025	15:51	LB135273
	Lead	12.0	+/-12.0	U	12.0	P	04/02/2025	15:51	LB135273
	Magnesium	2000	+/-2000	U	2000	P	04/02/2025	15:51	LB135273
	Manganese	20.0	+/-20.0	U	20.0	P	04/02/2025	15:51	LB135273
	Molybdenum	200	+/-200	U	200	P	04/02/2025	15:51	LB135273
	Nickel	40.0	+/-40.0	U	40.0	P	04/02/2025	15:51	LB135273
	Potassium	2000	+/-2000	U	2000	P	04/02/2025	15:51	LB135273
	Selenium	20.0	+/-20.0	U	20.0	P	04/02/2025	15:51	LB135273
	Silver	10.0	+/-10.0	U	10.0	P	04/02/2025	15:51	LB135273
	Sodium	2000	+/-2000	U	2000	P	04/02/2025	15:51	LB135273
	Thallium	40.0	+/-40.0	U	40.0	P	04/02/2025	15:51	LB135273
	Tin	40.0	+/-40.0	U	40.0	P	04/02/2025	15:51	LB135273
	Titanium	40.0	+/-40.0	U	40.0	P	04/02/2025	15:51	LB135273
	Vanadium	40.0	+/-40.0	U	40.0	P	04/02/2025	15:51	LB135273
	Zinc	40.0	+/-40.0	U	40.0	P	04/02/2025	15:51	LB135273

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	04/02/2025	16:43	LB135273
	Antimony	50.0	+/-50.0	U	50.0	P	04/02/2025	16:43	LB135273
	Arsenic	20.0	+/-20.0	U	20.0	P	04/02/2025	16:43	LB135273
	Barium	100	+/-100	U	100	P	04/02/2025	16:43	LB135273
	Beryllium	6.00	+/-6.00	U	6.00	P	04/02/2025	16:43	LB135273
	Boron	100	+/-100	U	100	P	04/02/2025	16:43	LB135273
	Cadmium	6.00	+/-6.00	U	6.00	P	04/02/2025	16:43	LB135273
	Calcium	2000	+/-2000	U	2000	P	04/02/2025	16:43	LB135273
	Chromium	10.0	+/-10.0	U	10.0	P	04/02/2025	16:43	LB135273
	Cobalt	30.0	+/-30.0	U	30.0	P	04/02/2025	16:43	LB135273
	Copper	20.0	+/-20.0	U	20.0	P	04/02/2025	16:43	LB135273
	Iron	100	+/-100	U	100	P	04/02/2025	16:43	LB135273
	Lead	12.0	+/-12.0	U	12.0	P	04/02/2025	16:43	LB135273
	Magnesium	2000	+/-2000	U	2000	P	04/02/2025	16:43	LB135273
	Manganese	20.0	+/-20.0	U	20.0	P	04/02/2025	16:43	LB135273
	Molybdenum	200	+/-200	U	200	P	04/02/2025	16:43	LB135273
	Nickel	40.0	+/-40.0	U	40.0	P	04/02/2025	16:43	LB135273
	Potassium	2000	+/-2000	U	2000	P	04/02/2025	16:43	LB135273
	Selenium	20.0	+/-20.0	U	20.0	P	04/02/2025	16:43	LB135273
	Silver	10.0	+/-10.0	U	10.0	P	04/02/2025	16:43	LB135273
	Sodium	2000	+/-2000	U	2000	P	04/02/2025	16:43	LB135273
	Thallium	40.0	+/-40.0	U	40.0	P	04/02/2025	16:43	LB135273
	Tin	40.0	+/-40.0	U	40.0	P	04/02/2025	16:43	LB135273
	Titanium	40.0	+/-40.0	U	40.0	P	04/02/2025	16:43	LB135273
	Vanadium	40.0	+/-40.0	U	40.0	P	04/02/2025	16:43	LB135273
	Zinc	40.0	+/-40.0	U	40.0	P	04/02/2025	16:43	LB135273
CCB02	Aluminum	100	+/-100	U	100	P	04/02/2025	17:39	LB135273
	Antimony	50.0	+/-50.0	U	50.0	P	04/02/2025	17:39	LB135273
	Arsenic	20.0	+/-20.0	U	20.0	P	04/02/2025	17:39	LB135273
	Barium	100	+/-100	U	100	P	04/02/2025	17:39	LB135273
	Beryllium	6.00	+/-6.00	U	6.00	P	04/02/2025	17:39	LB135273
	Boron	100	+/-100	U	100	P	04/02/2025	17:39	LB135273
	Cadmium	6.00	+/-6.00	U	6.00	P	04/02/2025	17:39	LB135273
	Calcium	2000	+/-2000	U	2000	P	04/02/2025	17:39	LB135273
	Chromium	10.0	+/-10.0	U	10.0	P	04/02/2025	17:39	LB135273
	Cobalt	30.0	+/-30.0	U	30.0	P	04/02/2025	17:39	LB135273
	Copper	20.0	+/-20.0	U	20.0	P	04/02/2025	17:39	LB135273
	Iron	100	+/-100	U	100	P	04/02/2025	17:39	LB135273
	Lead	12.0	+/-12.0	U	12.0	P	04/02/2025	17:39	LB135273

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Magnesium	2000	+/-2000	U	2000	P	04/02/2025	17:39	LB135273
	Manganese	20.0	+/-20.0	U	20.0	P	04/02/2025	17:39	LB135273
	Molybdenum	200	+/-200	U	200	P	04/02/2025	17:39	LB135273
	Nickel	40.0	+/-40.0	U	40.0	P	04/02/2025	17:39	LB135273
	Potassium	2000	+/-2000	U	2000	P	04/02/2025	17:39	LB135273
	Selenium	20.0	+/-20.0	U	20.0	P	04/02/2025	17:39	LB135273
	Silver	10.0	+/-10.0	U	10.0	P	04/02/2025	17:39	LB135273
	Sodium	2000	+/-2000	U	2000	P	04/02/2025	17:39	LB135273
	Thallium	40.0	+/-40.0	U	40.0	P	04/02/2025	17:39	LB135273
	Tin	40.0	+/-40.0	U	40.0	P	04/02/2025	17:39	LB135273
	Titanium	40.0	+/-40.0	U	40.0	P	04/02/2025	17:39	LB135273
	Vanadium	40.0	+/-40.0	U	40.0	P	04/02/2025	17:39	LB135273
	Zinc	40.0	+/-40.0	U	40.0	P	04/02/2025	17:39	LB135273
CCB03	Aluminum	100	+/-100	U	100	P	04/02/2025	17:58	LB135273
	Antimony	50.0	+/-50.0	U	50.0	P	04/02/2025	17:58	LB135273
	Arsenic	20.0	+/-20.0	U	20.0	P	04/02/2025	17:58	LB135273
	Barium	100	+/-100	U	100	P	04/02/2025	17:58	LB135273
	Beryllium	6.00	+/-6.00	U	6.00	P	04/02/2025	17:58	LB135273
	Boron	100	+/-100	U	100	P	04/02/2025	17:58	LB135273
	Cadmium	6.00	+/-6.00	U	6.00	P	04/02/2025	17:58	LB135273
	Calcium	2000	+/-2000	U	2000	P	04/02/2025	17:58	LB135273
	Chromium	10.0	+/-10.0	U	10.0	P	04/02/2025	17:58	LB135273
	Cobalt	30.0	+/-30.0	U	30.0	P	04/02/2025	17:58	LB135273
	Copper	20.0	+/-20.0	U	20.0	P	04/02/2025	17:58	LB135273
	Iron	100	+/-100	U	100	P	04/02/2025	17:58	LB135273
	Lead	12.0	+/-12.0	U	12.0	P	04/02/2025	17:58	LB135273
	Magnesium	2000	+/-2000	U	2000	P	04/02/2025	17:58	LB135273
	Manganese	20.0	+/-20.0	U	20.0	P	04/02/2025	17:58	LB135273
	Molybdenum	200	+/-200	U	200	P	04/02/2025	17:58	LB135273
	Nickel	40.0	+/-40.0	U	40.0	P	04/02/2025	17:58	LB135273
	Potassium	2000	+/-2000	U	2000	P	04/02/2025	17:58	LB135273
	Selenium	20.0	+/-20.0	U	20.0	P	04/02/2025	17:58	LB135273
	Silver	10.0	+/-10.0	U	10.0	P	04/02/2025	17:58	LB135273
	Sodium	2000	+/-2000	U	2000	P	04/02/2025	17:58	LB135273
	Thallium	40.0	+/-40.0	U	40.0	P	04/02/2025	17:58	LB135273
	Tin	40.0	+/-40.0	U	40.0	P	04/02/2025	17:58	LB135273
	Titanium	40.0	+/-40.0	U	40.0	P	04/02/2025	17:58	LB135273
	Vanadium	40.0	+/-40.0	U	40.0	P	04/02/2025	17:58	LB135273
	Zinc	40.0	+/-40.0	U	40.0	P	04/02/2025	17:58	LB135273

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	04/03/2025	12:15	LB135289
	Antimony	50.0	+/-50.0	U	50.0	P	04/03/2025	12:15	LB135289
	Arsenic	20.0	+/-20.0	U	20.0	P	04/03/2025	12:15	LB135289
	Barium	100	+/-100	U	100	P	04/03/2025	12:15	LB135289
	Beryllium	6.00	+/-6.00	U	6.00	P	04/03/2025	12:15	LB135289
	Cadmium	6.00	+/-6.00	U	6.00	P	04/03/2025	12:15	LB135289
	Calcium	2000	+/-2000	U	2000	P	04/03/2025	12:15	LB135289
	Chromium	10.0	+/-10.0	U	10.0	P	04/03/2025	12:15	LB135289
	Cobalt	30.0	+/-30.0	U	30.0	P	04/03/2025	12:15	LB135289
	Copper	20.0	+/-20.0	U	20.0	P	04/03/2025	12:15	LB135289
	Iron	100	+/-100	U	100	P	04/03/2025	12:15	LB135289
	Lead	12.0	+/-12.0	U	12.0	P	04/03/2025	12:15	LB135289
	Magnesium	2000	+/-2000	U	2000	P	04/03/2025	12:15	LB135289
	Manganese	20.0	+/-20.0	U	20.0	P	04/03/2025	12:15	LB135289
	Nickel	40.0	+/-40.0	U	40.0	P	04/03/2025	12:15	LB135289
	Potassium	2000	+/-2000	U	2000	P	04/03/2025	12:15	LB135289
	Selenium	20.0	+/-20.0	U	20.0	P	04/03/2025	12:15	LB135289
	Silver	10.0	+/-10.0	U	10.0	P	04/03/2025	12:15	LB135289
	Sodium	2000	+/-2000	U	2000	P	04/03/2025	12:15	LB135289
	Thallium	40.0	+/-40.0	U	40.0	P	04/03/2025	12:15	LB135289
	Vanadium	40.0	+/-40.0	U	40.0	P	04/03/2025	12:15	LB135289
	Zinc	40.0	+/-40.0	U	40.0	P	04/03/2025	12:15	LB135289

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	04/03/2025	12:47	LB135289
	Antimony	50.0	+/-50.0	U	50.0	P	04/03/2025	12:47	LB135289
	Arsenic	20.0	+/-20.0	U	20.0	P	04/03/2025	12:47	LB135289
	Barium	100	+/-100	U	100	P	04/03/2025	12:47	LB135289
	Beryllium	6.00	+/-6.00	U	6.00	P	04/03/2025	12:47	LB135289
	Cadmium	6.00	+/-6.00	U	6.00	P	04/03/2025	12:47	LB135289
	Calcium	2000	+/-2000	U	2000	P	04/03/2025	12:47	LB135289
	Chromium	10.0	+/-10.0	U	10.0	P	04/03/2025	12:47	LB135289
	Cobalt	30.0	+/-30.0	U	30.0	P	04/03/2025	12:47	LB135289
	Copper	20.0	+/-20.0	U	20.0	P	04/03/2025	12:47	LB135289
	Iron	100	+/-100	U	100	P	04/03/2025	12:47	LB135289
	Lead	12.0	+/-12.0	U	12.0	P	04/03/2025	12:47	LB135289
	Magnesium	2000	+/-2000	U	2000	P	04/03/2025	12:47	LB135289
	Manganese	20.0	+/-20.0	U	20.0	P	04/03/2025	12:47	LB135289
	Nickel	40.0	+/-40.0	U	40.0	P	04/03/2025	12:47	LB135289
	Potassium	2000	+/-2000	U	2000	P	04/03/2025	12:47	LB135289
	Selenium	20.0	+/-20.0	U	20.0	P	04/03/2025	12:47	LB135289
	Silver	10.0	+/-10.0	U	10.0	P	04/03/2025	12:47	LB135289
	Sodium	2000	+/-2000	U	2000	P	04/03/2025	12:47	LB135289
	Thallium	40.0	+/-40.0	U	40.0	P	04/03/2025	12:47	LB135289
	Vanadium	40.0	+/-40.0	U	40.0	P	04/03/2025	12:47	LB135289
	Zinc	40.0	+/-40.0	U	40.0	P	04/03/2025	12:47	LB135289
CCB02	Aluminum	100	+/-100	U	100	P	04/03/2025	13:57	LB135289
	Antimony	50.0	+/-50.0	U	50.0	P	04/03/2025	13:57	LB135289
	Arsenic	20.0	+/-20.0	U	20.0	P	04/03/2025	13:57	LB135289
	Barium	100	+/-100	U	100	P	04/03/2025	13:57	LB135289
	Beryllium	6.00	+/-6.00	U	6.00	P	04/03/2025	13:57	LB135289
	Cadmium	6.00	+/-6.00	U	6.00	P	04/03/2025	13:57	LB135289
	Calcium	2000	+/-2000	U	2000	P	04/03/2025	13:57	LB135289
	Chromium	10.0	+/-10.0	U	10.0	P	04/03/2025	13:57	LB135289
	Cobalt	30.0	+/-30.0	U	30.0	P	04/03/2025	13:57	LB135289
	Copper	20.0	+/-20.0	U	20.0	P	04/03/2025	13:57	LB135289
	Iron	100	+/-100	U	100	P	04/03/2025	13:57	LB135289
	Lead	12.0	+/-12.0	U	12.0	P	04/03/2025	13:57	LB135289
	Magnesium	2000	+/-2000	U	2000	P	04/03/2025	13:57	LB135289
	Manganese	20.0	+/-20.0	U	20.0	P	04/03/2025	13:57	LB135289
	Nickel	40.0	+/-40.0	U	40.0	P	04/03/2025	13:57	LB135289
	Potassium	2000	+/-2000	U	2000	P	04/03/2025	13:57	LB135289
	Selenium	20.0	+/-20.0	U	20.0	P	04/03/2025	13:57	LB135289

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Silver	10.0	+/-10.0	U	10.0	P	04/03/2025	13:57	LB135289
	Sodium	2000	+/-2000	U	2000	P	04/03/2025	13:57	LB135289
	Thallium	40.0	+/-40.0	U	40.0	P	04/03/2025	13:57	LB135289
	Vanadium	40.0	+/-40.0	U	40.0	P	04/03/2025	13:57	LB135289
	Zinc	40.0	+/-40.0	U	40.0	P	04/03/2025	13:57	LB135289
CCB03	Aluminum	100	+/-100	U	100	P	04/03/2025	14:43	LB135289
	Antimony	50.0	+/-50.0	U	50.0	P	04/03/2025	14:43	LB135289
	Arsenic	20.0	+/-20.0	U	20.0	P	04/03/2025	14:43	LB135289
	Barium	100	+/-100	U	100	P	04/03/2025	14:43	LB135289
	Beryllium	6.00	+/-6.00	U	6.00	P	04/03/2025	14:43	LB135289
	Cadmium	0.26	+/-6.00	J	6.00	P	04/03/2025	14:43	LB135289
	Calcium	2000	+/-2000	U	2000	P	04/03/2025	14:43	LB135289
	Chromium	10.0	+/-10.0	U	10.0	P	04/03/2025	14:43	LB135289
	Cobalt	30.0	+/-30.0	U	30.0	P	04/03/2025	14:43	LB135289
	Copper	20.0	+/-20.0	U	20.0	P	04/03/2025	14:43	LB135289
	Iron	100	+/-100	U	100	P	04/03/2025	14:43	LB135289
	Lead	12.0	+/-12.0	U	12.0	P	04/03/2025	14:43	LB135289
	Magnesium	2000	+/-2000	U	2000	P	04/03/2025	14:43	LB135289
	Manganese	20.0	+/-20.0	U	20.0	P	04/03/2025	14:43	LB135289
	Nickel	40.0	+/-40.0	U	40.0	P	04/03/2025	14:43	LB135289
	Potassium	2000	+/-2000	U	2000	P	04/03/2025	14:43	LB135289
	Selenium	20.0	+/-20.0	U	20.0	P	04/03/2025	14:43	LB135289
	Silver	10.0	+/-10.0	U	10.0	P	04/03/2025	14:43	LB135289
	Sodium	2000	+/-2000	U	2000	P	04/03/2025	14:43	LB135289
	Thallium	40.0	+/-40.0	U	40.0	P	04/03/2025	14:43	LB135289
	Vanadium	40.0	+/-40.0	U	40.0	P	04/03/2025	14:43	LB135289
	Zinc	40.0	+/-40.0	U	40.0	P	04/03/2025	14:43	LB135289
CCB04	Aluminum	100	+/-100	U	100	P	04/03/2025	15:36	LB135289
	Antimony	50.0	+/-50.0	U	50.0	P	04/03/2025	15:36	LB135289
	Arsenic	20.0	+/-20.0	U	20.0	P	04/03/2025	15:36	LB135289
	Barium	100	+/-100	U	100	P	04/03/2025	15:36	LB135289
	Beryllium	6.00	+/-6.00	U	6.00	P	04/03/2025	15:36	LB135289
	Cadmium	6.00	+/-6.00	U	6.00	P	04/03/2025	15:36	LB135289
	Calcium	2000	+/-2000	U	2000	P	04/03/2025	15:36	LB135289
	Chromium	10.0	+/-10.0	U	10.0	P	04/03/2025	15:36	LB135289
	Cobalt	30.0	+/-30.0	U	30.0	P	04/03/2025	15:36	LB135289
	Copper	20.0	+/-20.0	U	20.0	P	04/03/2025	15:36	LB135289
	Iron	100	+/-100	U	100	P	04/03/2025	15:36	LB135289
	Lead	12.0	+/-12.0	U	12.0	P	04/03/2025	15:36	LB135289

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Magnesium	2000	+/-2000	U	2000	P	04/03/2025	15:36	LB135289
	Manganese	20.0	+/-20.0	U	20.0	P	04/03/2025	15:36	LB135289
	Nickel	40.0	+/-40.0	U	40.0	P	04/03/2025	15:36	LB135289
	Potassium	2000	+/-2000	U	2000	P	04/03/2025	15:36	LB135289
	Selenium	20.0	+/-20.0	U	20.0	P	04/03/2025	15:36	LB135289
	Silver	10.0	+/-10.0	U	10.0	P	04/03/2025	15:36	LB135289
	Sodium	2000	+/-2000	U	2000	P	04/03/2025	15:36	LB135289
	Thallium	40.0	+/-40.0	U	40.0	P	04/03/2025	15:36	LB135289
	Vanadium	40.0	+/-40.0	U	40.0	P	04/03/2025	15:36	LB135289
	Zinc	40.0	+/-40.0	U	40.0	P	04/03/2025	15:36	LB135289
CCB05	Aluminum	100	+/-100	U	100	P	04/03/2025	16:40	LB135289
	Antimony	50.0	+/-50.0	U	50.0	P	04/03/2025	16:40	LB135289
	Arsenic	20.0	+/-20.0	U	20.0	P	04/03/2025	16:40	LB135289
	Barium	100	+/-100	U	100	P	04/03/2025	16:40	LB135289
	Beryllium	6.00	+/-6.00	U	6.00	P	04/03/2025	16:40	LB135289
	Cadmium	0.38	+/-6.00	J	6.00	P	04/03/2025	16:40	LB135289
	Calcium	2000	+/-2000	U	2000	P	04/03/2025	16:40	LB135289
	Chromium	10.0	+/-10.0	U	10.0	P	04/03/2025	16:40	LB135289
	Cobalt	30.0	+/-30.0	U	30.0	P	04/03/2025	16:40	LB135289
	Copper	20.0	+/-20.0	U	20.0	P	04/03/2025	16:40	LB135289
	Iron	100	+/-100	U	100	P	04/03/2025	16:40	LB135289
	Lead	12.0	+/-12.0	U	12.0	P	04/03/2025	16:40	LB135289
	Magnesium	2000	+/-2000	U	2000	P	04/03/2025	16:40	LB135289
	Manganese	20.0	+/-20.0	U	20.0	P	04/03/2025	16:40	LB135289
	Nickel	40.0	+/-40.0	U	40.0	P	04/03/2025	16:40	LB135289
	Potassium	2000	+/-2000	U	2000	P	04/03/2025	16:40	LB135289
	Selenium	20.0	+/-20.0	U	20.0	P	04/03/2025	16:40	LB135289
	Silver	10.0	+/-10.0	U	10.0	P	04/03/2025	16:40	LB135289
	Sodium	2000	+/-2000	U	2000	P	04/03/2025	16:40	LB135289
	Thallium	40.0	+/-40.0	U	40.0	P	04/03/2025	16:40	LB135289
	Vanadium	40.0	+/-40.0	U	40.0	P	04/03/2025	16:40	LB135289
	Zinc	40.0	+/-40.0	U	40.0	P	04/03/2025	16:40	LB135289
CCB06	Aluminum	100	+/-100	U	100	P	04/03/2025	18:00	LB135289
	Antimony	50.0	+/-50.0	U	50.0	P	04/03/2025	18:00	LB135289
	Arsenic	20.0	+/-20.0	U	20.0	P	04/03/2025	18:00	LB135289
	Barium	100	+/-100	U	100	P	04/03/2025	18:00	LB135289
	Beryllium	6.00	+/-6.00	U	6.00	P	04/03/2025	18:00	LB135289
	Cadmium	6.00	+/-6.00	U	6.00	P	04/03/2025	18:00	LB135289
	Calcium	2000	+/-2000	U	2000	P	04/03/2025	18:00	LB135289

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Chromium	10.0	+/-10.0	U	10.0	P	04/03/2025	18:00	LB135289
	Cobalt	30.0	+/-30.0	U	30.0	P	04/03/2025	18:00	LB135289
	Copper	20.0	+/-20.0	U	20.0	P	04/03/2025	18:00	LB135289
	Iron	100	+/-100	U	100	P	04/03/2025	18:00	LB135289
	Lead	12.0	+/-12.0	U	12.0	P	04/03/2025	18:00	LB135289
	Magnesium	2000	+/-2000	U	2000	P	04/03/2025	18:00	LB135289
	Manganese	20.0	+/-20.0	U	20.0	P	04/03/2025	18:00	LB135289
	Nickel	40.0	+/-40.0	U	40.0	P	04/03/2025	18:00	LB135289
	Potassium	2000	+/-2000	U	2000	P	04/03/2025	18:00	LB135289
	Selenium	20.0	+/-20.0	U	20.0	P	04/03/2025	18:00	LB135289
	Silver	10.0	+/-10.0	U	10.0	P	04/03/2025	18:00	LB135289
	Sodium	624	+/-2000	J	2000	P	04/03/2025	18:00	LB135289
	Thallium	40.0	+/-40.0	U	40.0	P	04/03/2025	18:00	LB135289
	Vanadium	40.0	+/-40.0	U	40.0	P	04/03/2025	18:00	LB135289
	Zinc	40.0	+/-40.0	U	40.0	P	04/03/2025	18:00	LB135289
CCB07	Aluminum	100	+/-100	U	100	P	04/03/2025	18:33	LB135289
	Antimony	50.0	+/-50.0	U	50.0	P	04/03/2025	18:33	LB135289
	Arsenic	20.0	+/-20.0	U	20.0	P	04/03/2025	18:33	LB135289
	Barium	100	+/-100	U	100	P	04/03/2025	18:33	LB135289
	Beryllium	6.00	+/-6.00	U	6.00	P	04/03/2025	18:33	LB135289
	Cadmium	0.23	+/-6.00	J	6.00	P	04/03/2025	18:33	LB135289
	Calcium	2000	+/-2000	U	2000	P	04/03/2025	18:33	LB135289
	Chromium	10.0	+/-10.0	U	10.0	P	04/03/2025	18:33	LB135289
	Cobalt	30.0	+/-30.0	U	30.0	P	04/03/2025	18:33	LB135289
	Copper	20.0	+/-20.0	U	20.0	P	04/03/2025	18:33	LB135289
	Iron	100	+/-100	U	100	P	04/03/2025	18:33	LB135289
	Lead	12.0	+/-12.0	U	12.0	P	04/03/2025	18:33	LB135289
	Magnesium	2000	+/-2000	U	2000	P	04/03/2025	18:33	LB135289
	Manganese	20.0	+/-20.0	U	20.0	P	04/03/2025	18:33	LB135289
	Nickel	40.0	+/-40.0	U	40.0	P	04/03/2025	18:33	LB135289
	Potassium	2000	+/-2000	U	2000	P	04/03/2025	18:33	LB135289
	Selenium	20.0	+/-20.0	U	20.0	P	04/03/2025	18:33	LB135289
	Silver	10.0	+/-10.0	U	10.0	P	04/03/2025	18:33	LB135289
	Sodium	2000	+/-2000	U	2000	P	04/03/2025	18:33	LB135289
	Thallium	40.0	+/-40.0	U	40.0	P	04/03/2025	18:33	LB135289
	Vanadium	40.0	+/-40.0	U	40.0	P	04/03/2025	18:33	LB135289
	Zinc	40.0	+/-40.0	U	40.0	P	04/03/2025	18:33	LB135289

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	04/07/2025	13:05	LB135333
	Antimony	50.0	+/-50.0	U	50.0	P	04/07/2025	13:05	LB135333
	Arsenic	20.0	+/-20.0	U	20.0	P	04/07/2025	13:05	LB135333
	Barium	100	+/-100	U	100	P	04/07/2025	13:05	LB135333
	Beryllium	6.00	+/-6.00	U	6.00	P	04/07/2025	13:05	LB135333
	Boron	100	+/-100	U	100	P	04/07/2025	13:05	LB135333
	Cadmium	6.00	+/-6.00	U	6.00	P	04/07/2025	13:05	LB135333
	Calcium	2000	+/-2000	U	2000	P	04/07/2025	13:05	LB135333
	Chromium	10.0	+/-10.0	U	10.0	P	04/07/2025	13:05	LB135333
	Cobalt	30.0	+/-30.0	U	30.0	P	04/07/2025	13:05	LB135333
	Copper	20.0	+/-20.0	U	20.0	P	04/07/2025	13:05	LB135333
	Iron	100	+/-100	U	100	P	04/07/2025	13:05	LB135333
	Lead	12.0	+/-12.0	U	12.0	P	04/07/2025	13:05	LB135333
	Magnesium	2000	+/-2000	U	2000	P	04/07/2025	13:05	LB135333
	Manganese	20.0	+/-20.0	U	20.0	P	04/07/2025	13:05	LB135333
	Molybdenum	200	+/-200	U	200	P	04/07/2025	13:05	LB135333
	Nickel	40.0	+/-40.0	U	40.0	P	04/07/2025	13:05	LB135333
	Potassium	2000	+/-2000	U	2000	P	04/07/2025	13:05	LB135333
	Selenium	20.0	+/-20.0	U	20.0	P	04/07/2025	13:05	LB135333
	Silver	10.0	+/-10.0	U	10.0	P	04/07/2025	13:05	LB135333
	Sodium	2000	+/-2000	U	2000	P	04/07/2025	13:05	LB135333
	Thallium	40.0	+/-40.0	U	40.0	P	04/07/2025	13:05	LB135333
	Tin	40.0	+/-40.0	U	40.0	P	04/07/2025	13:05	LB135333
	Titanium	40.0	+/-40.0	U	40.0	P	04/07/2025	13:05	LB135333
	Vanadium	40.0	+/-40.0	U	40.0	P	04/07/2025	13:05	LB135333
	Zinc	40.0	+/-40.0	U	40.0	P	04/07/2025	13:05	LB135333

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	04/07/2025	13:50	LB135333
	Antimony	50.0	+/-50.0	U	50.0	P	04/07/2025	13:50	LB135333
	Arsenic	20.0	+/-20.0	U	20.0	P	04/07/2025	13:50	LB135333
	Barium	100	+/-100	U	100	P	04/07/2025	13:50	LB135333
	Beryllium	6.00	+/-6.00	U	6.00	P	04/07/2025	13:50	LB135333
	Boron	100	+/-100	U	100	P	04/07/2025	13:50	LB135333
	Cadmium	6.00	+/-6.00	U	6.00	P	04/07/2025	13:50	LB135333
	Calcium	2000	+/-2000	U	2000	P	04/07/2025	13:50	LB135333
	Chromium	10.0	+/-10.0	U	10.0	P	04/07/2025	13:50	LB135333
	Cobalt	30.0	+/-30.0	U	30.0	P	04/07/2025	13:50	LB135333
	Copper	20.0	+/-20.0	U	20.0	P	04/07/2025	13:50	LB135333
	Iron	100	+/-100	U	100	P	04/07/2025	13:50	LB135333
	Lead	12.0	+/-12.0	U	12.0	P	04/07/2025	13:50	LB135333
	Magnesium	2000	+/-2000	U	2000	P	04/07/2025	13:50	LB135333
	Manganese	20.0	+/-20.0	U	20.0	P	04/07/2025	13:50	LB135333
	Molybdenum	200	+/-200	U	200	P	04/07/2025	13:50	LB135333
	Nickel	40.0	+/-40.0	U	40.0	P	04/07/2025	13:50	LB135333
	Potassium	2000	+/-2000	U	2000	P	04/07/2025	13:50	LB135333
	Selenium	20.0	+/-20.0	U	20.0	P	04/07/2025	13:50	LB135333
	Silver	10.0	+/-10.0	U	10.0	P	04/07/2025	13:50	LB135333
	Sodium	2000	+/-2000	U	2000	P	04/07/2025	13:50	LB135333
	Thallium	40.0	+/-40.0	U	40.0	P	04/07/2025	13:50	LB135333
	Tin	40.0	+/-40.0	U	40.0	P	04/07/2025	13:50	LB135333
	Titanium	40.0	+/-40.0	U	40.0	P	04/07/2025	13:50	LB135333
	Vanadium	40.0	+/-40.0	U	40.0	P	04/07/2025	13:50	LB135333
	Zinc	40.0	+/-40.0	U	40.0	P	04/07/2025	13:50	LB135333
CCB02	Aluminum	100	+/-100	U	100	P	04/07/2025	15:12	LB135333
	Antimony	50.0	+/-50.0	U	50.0	P	04/07/2025	15:12	LB135333
	Arsenic	20.0	+/-20.0	U	20.0	P	04/07/2025	15:12	LB135333
	Barium	100	+/-100	U	100	P	04/07/2025	15:12	LB135333
	Beryllium	6.00	+/-6.00	U	6.00	P	04/07/2025	15:12	LB135333
	Boron	100	+/-100	U	100	P	04/07/2025	15:12	LB135333
	Cadmium	6.00	+/-6.00	U	6.00	P	04/07/2025	15:12	LB135333
	Calcium	2000	+/-2000	U	2000	P	04/07/2025	15:12	LB135333
	Chromium	10.0	+/-10.0	U	10.0	P	04/07/2025	15:12	LB135333
	Cobalt	30.0	+/-30.0	U	30.0	P	04/07/2025	15:12	LB135333
	Copper	20.0	+/-20.0	U	20.0	P	04/07/2025	15:12	LB135333
	Iron	100	+/-100	U	100	P	04/07/2025	15:12	LB135333
	Lead	12.0	+/-12.0	U	12.0	P	04/07/2025	15:12	LB135333

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Magnesium	2000	+/-2000	U	2000	P	04/07/2025	15:12	LB135333
	Manganese	20.0	+/-20.0	U	20.0	P	04/07/2025	15:12	LB135333
	Molybdenum	200	+/-200	U	200	P	04/07/2025	15:12	LB135333
	Nickel	40.0	+/-40.0	U	40.0	P	04/07/2025	15:12	LB135333
	Potassium	2000	+/-2000	U	2000	P	04/07/2025	15:12	LB135333
	Selenium	20.0	+/-20.0	U	20.0	P	04/07/2025	15:12	LB135333
	Silver	10.0	+/-10.0	U	10.0	P	04/07/2025	15:12	LB135333
	Sodium	2000	+/-2000	U	2000	P	04/07/2025	15:12	LB135333
	Thallium	40.0	+/-40.0	U	40.0	P	04/07/2025	15:12	LB135333
	Tin	40.0	+/-40.0	U	40.0	P	04/07/2025	15:12	LB135333
	Titanium	40.0	+/-40.0	U	40.0	P	04/07/2025	15:12	LB135333
	Vanadium	40.0	+/-40.0	U	40.0	P	04/07/2025	15:12	LB135333
	Zinc	40.0	+/-40.0	U	40.0	P	04/07/2025	15:12	LB135333
CCB03	Aluminum	100	+/-100	U	100	P	04/07/2025	15:45	LB135333
	Antimony	50.0	+/-50.0	U	50.0	P	04/07/2025	15:45	LB135333
	Arsenic	20.0	+/-20.0	U	20.0	P	04/07/2025	15:45	LB135333
	Barium	100	+/-100	U	100	P	04/07/2025	15:45	LB135333
	Beryllium	6.00	+/-6.00	U	6.00	P	04/07/2025	15:45	LB135333
	Boron	100	+/-100	U	100	P	04/07/2025	15:45	LB135333
	Cadmium	6.00	+/-6.00	U	6.00	P	04/07/2025	15:45	LB135333
	Calcium	2000	+/-2000	U	2000	P	04/07/2025	15:45	LB135333
	Chromium	10.0	+/-10.0	U	10.0	P	04/07/2025	15:45	LB135333
	Cobalt	30.0	+/-30.0	U	30.0	P	04/07/2025	15:45	LB135333
	Copper	20.0	+/-20.0	U	20.0	P	04/07/2025	15:45	LB135333
	Iron	100	+/-100	U	100	P	04/07/2025	15:45	LB135333
	Lead	12.0	+/-12.0	U	12.0	P	04/07/2025	15:45	LB135333
	Magnesium	2000	+/-2000	U	2000	P	04/07/2025	15:45	LB135333
	Manganese	20.0	+/-20.0	U	20.0	P	04/07/2025	15:45	LB135333
	Molybdenum	200	+/-200	U	200	P	04/07/2025	15:45	LB135333
	Nickel	40.0	+/-40.0	U	40.0	P	04/07/2025	15:45	LB135333
	Potassium	2000	+/-2000	U	2000	P	04/07/2025	15:45	LB135333
	Selenium	20.0	+/-20.0	U	20.0	P	04/07/2025	15:45	LB135333
	Silver	10.0	+/-10.0	U	10.0	P	04/07/2025	15:45	LB135333
	Sodium	2000	+/-2000	U	2000	P	04/07/2025	15:45	LB135333
	Thallium	40.0	+/-40.0	U	40.0	P	04/07/2025	15:45	LB135333
	Tin	40.0	+/-40.0	U	40.0	P	04/07/2025	15:45	LB135333
	Titanium	40.0	+/-40.0	U	40.0	P	04/07/2025	15:45	LB135333
	Vanadium	40.0	+/-40.0	U	40.0	P	04/07/2025	15:45	LB135333
	Zinc	40.0	+/-40.0	U	40.0	P	04/07/2025	15:45	LB135333

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Aluminum	100	+/-100	U	100	P	04/07/2025	17:04	LB135333
	Antimony	50.0	+/-50.0	U	50.0	P	04/07/2025	17:04	LB135333
	Arsenic	20.0	+/-20.0	U	20.0	P	04/07/2025	17:04	LB135333
	Barium	100	+/-100	U	100	P	04/07/2025	17:04	LB135333
	Beryllium	6.00	+/-6.00	U	6.00	P	04/07/2025	17:04	LB135333
	Boron	100	+/-100	U	100	P	04/07/2025	17:04	LB135333
	Cadmium	6.00	+/-6.00	U	6.00	P	04/07/2025	17:04	LB135333
	Calcium	2000	+/-2000	U	2000	P	04/07/2025	17:04	LB135333
	Chromium	10.0	+/-10.0	U	10.0	P	04/07/2025	17:04	LB135333
	Cobalt	30.0	+/-30.0	U	30.0	P	04/07/2025	17:04	LB135333
	Copper	20.0	+/-20.0	U	20.0	P	04/07/2025	17:04	LB135333
	Iron	100	+/-100	U	100	P	04/07/2025	17:04	LB135333
	Lead	12.0	+/-12.0	U	12.0	P	04/07/2025	17:04	LB135333
	Magnesium	2000	+/-2000	U	2000	P	04/07/2025	17:04	LB135333
	Manganese	20.0	+/-20.0	U	20.0	P	04/07/2025	17:04	LB135333
	Molybdenum	200	+/-200	U	200	P	04/07/2025	17:04	LB135333
	Nickel	40.0	+/-40.0	U	40.0	P	04/07/2025	17:04	LB135333
	Potassium	2000	+/-2000	U	2000	P	04/07/2025	17:04	LB135333
	Selenium	20.0	+/-20.0	U	20.0	P	04/07/2025	17:04	LB135333
	Silver	10.0	+/-10.0	U	10.0	P	04/07/2025	17:04	LB135333
	Sodium	2000	+/-2000	U	2000	P	04/07/2025	17:04	LB135333
	Thallium	40.0	+/-40.0	U	40.0	P	04/07/2025	17:04	LB135333
	Tin	40.0	+/-40.0	U	40.0	P	04/07/2025	17:04	LB135333
	Titanium	40.0	+/-40.0	U	40.0	P	04/07/2025	17:04	LB135333
	Vanadium	40.0	+/-40.0	U	40.0	P	04/07/2025	17:04	LB135333
	Zinc	40.0	+/-40.0	U	40.0	P	04/07/2025	17:04	LB135333
CCB05	Aluminum	100	+/-100	U	100	P	04/07/2025	17:47	LB135333
	Antimony	50.0	+/-50.0	U	50.0	P	04/07/2025	17:47	LB135333
	Arsenic	20.0	+/-20.0	U	20.0	P	04/07/2025	17:47	LB135333
	Barium	100	+/-100	U	100	P	04/07/2025	17:47	LB135333
	Beryllium	6.00	+/-6.00	U	6.00	P	04/07/2025	17:47	LB135333
	Boron	100	+/-100	U	100	P	04/07/2025	17:47	LB135333
	Cadmium	6.00	+/-6.00	U	6.00	P	04/07/2025	17:47	LB135333
	Calcium	2000	+/-2000	U	2000	P	04/07/2025	17:47	LB135333
	Chromium	10.0	+/-10.0	U	10.0	P	04/07/2025	17:47	LB135333
	Cobalt	30.0	+/-30.0	U	30.0	P	04/07/2025	17:47	LB135333
	Copper	20.0	+/-20.0	U	20.0	P	04/07/2025	17:47	LB135333
	Iron	100	+/-100	U	100	P	04/07/2025	17:47	LB135333
	Lead	12.0	+/-12.0	U	12.0	P	04/07/2025	17:47	LB135333

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB05	Magnesium	2000	+/-2000	U	2000	P	04/07/2025	17:47	LB135333
	Manganese	20.0	+/-20.0	U	20.0	P	04/07/2025	17:47	LB135333
	Molybdenum	200	+/-200	U	200	P	04/07/2025	17:47	LB135333
	Nickel	40.0	+/-40.0	U	40.0	P	04/07/2025	17:47	LB135333
	Potassium	2000	+/-2000	U	2000	P	04/07/2025	17:47	LB135333
	Selenium	20.0	+/-20.0	U	20.0	P	04/07/2025	17:47	LB135333
	Silver	10.0	+/-10.0	U	10.0	P	04/07/2025	17:47	LB135333
	Sodium	2000	+/-2000	U	2000	P	04/07/2025	17:47	LB135333
	Thallium	40.0	+/-40.0	U	40.0	P	04/07/2025	17:47	LB135333
	Tin	40.0	+/-40.0	U	40.0	P	04/07/2025	17:47	LB135333
	Titanium	40.0	+/-40.0	U	40.0	P	04/07/2025	17:47	LB135333
	Vanadium	40.0	+/-40.0	U	40.0	P	04/07/2025	17:47	LB135333
	Zinc	40.0	+/-40.0	U	40.0	P	04/07/2025	17:47	LB135333
CCB06	Aluminum	100	+/-100	U	100	P	04/07/2025	18:55	LB135333
	Antimony	50.0	+/-50.0	U	50.0	P	04/07/2025	18:55	LB135333
	Arsenic	20.0	+/-20.0	U	20.0	P	04/07/2025	18:55	LB135333
	Barium	100	+/-100	U	100	P	04/07/2025	18:55	LB135333
	Beryllium	6.00	+/-6.00	U	6.00	P	04/07/2025	18:55	LB135333
	Boron	100	+/-100	U	100	P	04/07/2025	18:55	LB135333
	Cadmium	6.00	+/-6.00	U	6.00	P	04/07/2025	18:55	LB135333
	Calcium	2000	+/-2000	U	2000	P	04/07/2025	18:55	LB135333
	Chromium	10.0	+/-10.0	U	10.0	P	04/07/2025	18:55	LB135333
	Cobalt	30.0	+/-30.0	U	30.0	P	04/07/2025	18:55	LB135333
	Copper	20.0	+/-20.0	U	20.0	P	04/07/2025	18:55	LB135333
	Iron	100	+/-100	U	100	P	04/07/2025	18:55	LB135333
	Lead	12.0	+/-12.0	U	12.0	P	04/07/2025	18:55	LB135333
	Magnesium	2000	+/-2000	U	2000	P	04/07/2025	18:55	LB135333
	Manganese	20.0	+/-20.0	U	20.0	P	04/07/2025	18:55	LB135333
	Molybdenum	200	+/-200	U	200	P	04/07/2025	18:55	LB135333
	Nickel	40.0	+/-40.0	U	40.0	P	04/07/2025	18:55	LB135333
	Potassium	2000	+/-2000	U	2000	P	04/07/2025	18:55	LB135333
	Selenium	20.0	+/-20.0	U	20.0	P	04/07/2025	18:55	LB135333
	Silver	10.0	+/-10.0	U	10.0	P	04/07/2025	18:55	LB135333
	Sodium	2000	+/-2000	U	2000	P	04/07/2025	18:55	LB135333
	Thallium	40.0	+/-40.0	U	40.0	P	04/07/2025	18:55	LB135333
	Tin	40.0	+/-40.0	U	40.0	P	04/07/2025	18:55	LB135333
	Titanium	40.0	+/-40.0	U	40.0	P	04/07/2025	18:55	LB135333
	Vanadium	40.0	+/-40.0	U	40.0	P	04/07/2025	18:55	LB135333
	Zinc	40.0	+/-40.0	U	40.0	P	04/07/2025	18:55	LB135333

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number

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Metals
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PREPARATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Instrument: CV1

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB167449BL		**WATER**		**Batch Number:**	**PB167449**		**Prep Date:**	**04/03/2025**	
	Mercury	0.040	<0.20	J	0.20	CV	04/03/2025	12:36	LB135283

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Metals
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PREPARATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB167491BL		**WATER**		**Batch Number:**	**PB167491**		**Prep Date:**	**03/21/2025**	
	Aluminum	100	<100	U	100	P	04/07/2025	14:03	LB135333
	Antimony	50.0	<50.0	U	50.0	P	04/07/2025	14:03	LB135333
	Arsenic	20.0	<20.0	U	20.0	P	04/07/2025	14:03	LB135333
	Barium	100	<100	U	100	P	04/07/2025	14:03	LB135333
	Beryllium	6.00	<6.00	U	6.00	P	04/07/2025	14:03	LB135333
	Boron	100	<100	U	100	P	04/07/2025	14:03	LB135333
	Cadmium	6.00	<6.00	U	6.00	P	04/07/2025	14:03	LB135333
	Calcium	2000	<2000	U	2000	P	04/07/2025	14:03	LB135333
	Chromium	10.0	<10.0	U	10.0	P	04/07/2025	14:03	LB135333
	Cobalt	30.0	<30.0	U	30.0	P	04/07/2025	14:03	LB135333
	Copper	20.0	<20.0	U	20.0	P	04/07/2025	14:03	LB135333
	Iron	100	<100	U	100	P	04/07/2025	14:03	LB135333
	Lead	12.0	<12.0	U	12.0	P	04/07/2025	14:03	LB135333
	Magnesium	2000	<2000	U	2000	P	04/07/2025	14:03	LB135333
	Manganese	20.0	<20.0	U	20.0	P	04/07/2025	14:03	LB135333
	Molybdenum	200	<200	U	200	P	04/07/2025	14:03	LB135333
	Nickel	40.0	<40.0	U	40.0	P	04/07/2025	14:03	LB135333
	Potassium	2000	<2000	U	2000	P	04/07/2025	14:03	LB135333
	Selenium	20.0	<20.0	U	20.0	P	04/07/2025	14:03	LB135333
	Silver	10.0	<10.0	U	10.0	P	04/07/2025	14:03	LB135333
	Sodium	2000	<2000	U	2000	P	04/07/2025	14:03	LB135333
	Thallium	40.0	<40.0	U	40.0	P	04/07/2025	14:03	LB135333
	Tin	40.0	<40.0	U	40.0	P	04/07/2025	14:03	LB135333
	Titanium	40.0	<40.0	U	40.0	P	04/07/2025	14:03	LB135333
	Vanadium	40.0	<40.0	U	40.0	P	04/07/2025	14:03	LB135333
	Zinc	40.0	<40.0	U	40.0	P	04/07/2025	14:03	LB135333

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	240000	255000	94	216000	294000	04/02/2025	15:59	LB135273
	Antimony	-1.77			-50	50	04/02/2025	15:59	LB135273
	Arsenic	1.08			-20	20	04/02/2025	15:59	LB135273
	Barium	4.05	6.0	68	-94	106	04/02/2025	15:59	LB135273
	Beryllium	1.10			-6	6	04/02/2025	15:59	LB135273
	Boron	96.8	1000	10	-100	100	04/02/2025	15:59	LB135273
	Cadmium	-0.59	1.0	59	-5	7	04/02/2025	15:59	LB135273
	Calcium	225000	245000	92	208000	282000	04/02/2025	15:59	LB135273
	Chromium	54.6	52.0	105	42	62	04/02/2025	15:59	LB135273
	Cobalt	1.37			-30	30	04/02/2025	15:59	LB135273
	Copper	-8.99	2.0	450	-18	22	04/02/2025	15:59	LB135273
	Iron	91300	101000	90	85600	116500	04/02/2025	15:59	LB135273
	Lead	8.38			-12	12	04/02/2025	15:59	LB135273
	Magnesium	245000	255000	96	216000	294000	04/02/2025	15:59	LB135273
	Manganese	4.08	7.0	58	-13	27	04/02/2025	15:59	LB135273
	Molybdenum	-0.56	1000		-200	200	04/02/2025	15:59	LB135273
	Nickel	2.54	2.0	127	-38	42	04/02/2025	15:59	LB135273
	Potassium	-10.1			0	0	04/02/2025	15:59	LB135273
	Selenium	-1.43			-20	20	04/02/2025	15:59	LB135273
	Silver	-3.97			-10	10	04/02/2025	15:59	LB135273
	Sodium	17.0			0	0	04/02/2025	15:59	LB135273
	Thallium	11.7			-40	40	04/02/2025	15:59	LB135273
	Tin	-3.51	1000		-40	40	04/02/2025	15:59	LB135273
	Titanium	-1.66			0	0	04/02/2025	15:59	LB135273
	Vanadium	5.18			-40	40	04/02/2025	15:59	LB135273
	Zinc	4.72			-40	40	04/02/2025	15:59	LB135273
ICSAB01	Aluminum	253000	247000	102	209000	285000	04/02/2025	16:04	LB135273
	Antimony	636	618	103	525	711	04/02/2025	16:04	LB135273
	Arsenic	114	104	110	88.4	120	04/02/2025	16:04	LB135273
	Barium	480	537	89	437	637	04/02/2025	16:04	LB135273
	Beryllium	489	495	99	420	570	04/02/2025	16:04	LB135273
	Boron	1040	1000	104	850	1150	04/02/2025	16:04	LB135273
	Cadmium	1010	972	104	826	1120	04/02/2025	16:04	LB135273
	Calcium	235000	235000	100	199000	271000	04/02/2025	16:04	LB135273
	Chromium	568	542	105	460	624	04/02/2025	16:04	LB135273
	Cobalt	510	476	107	404	548	04/02/2025	16:04	LB135273
	Copper	498	511	98	434	588	04/02/2025	16:04	LB135273
	Iron	100000	99300	101	84400	114500	04/02/2025	16:04	LB135273
	Lead	56.3	49.0	115	37	61	04/02/2025	16:04	LB135273
	Magnesium	255000	248000	103	210000	286000	04/02/2025	16:04	LB135273
	Manganese	490	507	97	430	584	04/02/2025	16:04	LB135273
	Molybdenum	1020	1000	102	850	1150	04/02/2025	16:04	LB135273

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	1020	954	107	810	1100	04/02/2025	16:04	LB135273
	Potassium	-54.4			0	0	04/02/2025	16:04	LB135273
	Selenium	48.4	46.0	105	26	66	04/02/2025	16:04	LB135273
	Silver	189	201	94	170	232	04/02/2025	16:04	LB135273
	Sodium	25.6			0	0	04/02/2025	16:04	LB135273
	Thallium	106	108	98	68	148	04/02/2025	16:04	LB135273
	Tin	1010	1000	101	850	1150	04/02/2025	16:04	LB135273
	Titanium	952			0	0	04/02/2025	16:04	LB135273
	Vanadium	475	491	97	417	565	04/02/2025	16:04	LB135273
	Zinc	1080	952	113	809	1095	04/02/2025	16:04	LB135273
ICSA	Aluminum	273000	255000	107	216000	294000	04/02/2025	16:12	LB135273
	Antimony	-21.1			-50	50	04/02/2025	16:12	LB135273
	Arsenic	-61.9			-20	20	04/02/2025	16:12	LB135273
	Barium	6.91	6.0	115	-94	106	04/02/2025	16:12	LB135273
	Beryllium	3.38			-6	6	04/02/2025	16:12	LB135273
	Boron	-209	1000	21	-100	100	04/02/2025	16:12	LB135273
	Cadmium	-4.42	1.0	442	-5	7	04/02/2025	16:12	LB135273
	Calcium	269000	245000	110	208000	282000	04/02/2025	16:12	LB135273
	Chromium	64.3	52.0	124	42	62	04/02/2025	16:12	LB135273
	Cobalt	3.13			-30	30	04/02/2025	16:12	LB135273
	Copper	-9.38	2.0	469	-18	22	04/02/2025	16:12	LB135273
	Iron	110000	101000	109	85600	116500	04/02/2025	16:12	LB135273
	Lead	5.34			-12	12	04/02/2025	16:12	LB135273
	Magnesium	276000	255000	108	216000	294000	04/02/2025	16:12	LB135273
	Manganese	165	7.0	2357	-13	27	04/02/2025	16:12	LB135273
	Molybdenum	-3.18	1000		-200	200	04/02/2025	16:12	LB135273
	Nickel	5.47	2.0	274	-38	42	04/02/2025	16:12	LB135273
	Potassium	-2320			0	0	04/02/2025	16:12	LB135273
	Selenium	-22.6			-20	20	04/02/2025	16:12	LB135273
	Silver	-1.26			-10	10	04/02/2025	16:12	LB135273
	Sodium	-859			0	0	04/02/2025	16:12	LB135273
	Thallium	30.0			-40	40	04/02/2025	16:12	LB135273
	Tin	22.2	1000	2	-40	40	04/02/2025	16:12	LB135273
	Titanium	-3.40			0	0	04/02/2025	16:12	LB135273
	Vanadium	25.1			-40	40	04/02/2025	16:12	LB135273
	Zinc	130			-40	40	04/02/2025	16:12	LB135273
ICSAB	Aluminum	243000	247000	98	209000	285000	04/02/2025	16:18	LB135273
	Antimony	613	618	99	525	711	04/02/2025	16:18	LB135273
	Arsenic	49.8	104	48	88.4	120	04/02/2025	16:18	LB135273
	Barium	481	537	90	437	637	04/02/2025	16:18	LB135273
	Beryllium	498	495	101	420	570	04/02/2025	16:18	LB135273
	Boron	740	1000	74	850	1150	04/02/2025	16:18	LB135273

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	Cadmium	1000	972	103	826	1120	04/02/2025	16:18	LB135273
	Calcium	243000	235000	103	199000	271000	04/02/2025	16:18	LB135273
	Chromium	579	542	107	460	624	04/02/2025	16:18	LB135273
	Cobalt	502	476	106	404	548	04/02/2025	16:18	LB135273
	Copper	517	511	101	434	588	04/02/2025	16:18	LB135273
	Iron	103000	99300	104	84400	114500	04/02/2025	16:18	LB135273
	Lead	74.5	49.0	152	37	61	04/02/2025	16:18	LB135273
	Magnesium	249000	248000	100	210000	286000	04/02/2025	16:18	LB135273
	Manganese	495	507	98	430	584	04/02/2025	16:18	LB135273
	Molybdenum	1010	1000	101	850	1150	04/02/2025	16:18	LB135273
	Nickel	1010	954	106	810	1100	04/02/2025	16:18	LB135273
	Potassium	-2330			0	0	04/02/2025	16:18	LB135273
	Selenium	66.8	46.0	145	26	66	04/02/2025	16:18	LB135273
	Silver	182	201	90	170	232	04/02/2025	16:18	LB135273
	Sodium	-848			0	0	04/02/2025	16:18	LB135273
	Thallium	129	108	119	68	148	04/02/2025	16:18	LB135273
	Tin	974	1000	97	850	1150	04/02/2025	16:18	LB135273
	Titanium	973			0	0	04/02/2025	16:18	LB135273
	Vanadium	505	491	103	417	565	04/02/2025	16:18	LB135273
	Zinc	1050	952	110	809	1095	04/02/2025	16:18	LB135273
ICSA01	Aluminum	247000	255000	97	216000	294000	04/03/2025	12:24	LB135289
	Antimony	-2.32			-50	50	04/03/2025	12:24	LB135289
	Arsenic	6.02			-20	20	04/03/2025	12:24	LB135289
	Barium	-2.75	6.0	46	-94	106	04/03/2025	12:24	LB135289
	Beryllium	1.20			-6	6	04/03/2025	12:24	LB135289
	Cadmium	-1.36	1.0	136	-5	7	04/03/2025	12:24	LB135289
	Calcium	225000	245000	92	208000	282000	04/03/2025	12:24	LB135289
	Chromium	56.8	52.0	109	42	62	04/03/2025	12:24	LB135289
	Cobalt	1.78			-30	30	04/03/2025	12:24	LB135289
	Copper	3.95	2.0	198	-18	22	04/03/2025	12:24	LB135289
	Iron	93800	101000	93	85600	116500	04/03/2025	12:24	LB135289
	Lead	4.36			-12	12	04/03/2025	12:24	LB135289
	Magnesium	241000	255000	94	216000	294000	04/03/2025	12:24	LB135289
	Manganese	0.72	7.0	10	-13	27	04/03/2025	12:24	LB135289
	Nickel	1.10	2.0	55	-38	42	04/03/2025	12:24	LB135289
	Potassium	1.40			0	0	04/03/2025	12:24	LB135289
	Selenium	-13.7			-20	20	04/03/2025	12:24	LB135289
	Silver	0.24			-10	10	04/03/2025	12:24	LB135289
	Sodium	34.5			0	0	04/03/2025	12:24	LB135289
	Thallium	8.38			-40	40	04/03/2025	12:24	LB135289
	Vanadium	2.84			-40	40	04/03/2025	12:24	LB135289
	Zinc	5.44			-40	40	04/03/2025	12:24	LB135289

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	Aluminum	254000	247000	103	209000	285000	04/03/2025	12:28	LB135289
	Antimony	638	618	103	525	711	04/03/2025	12:28	LB135289
	Arsenic	110	104	106	88.4	120	04/03/2025	12:28	LB135289
	Barium	475	537	88	437	637	04/03/2025	12:28	LB135289
	Beryllium	475	495	96	420	570	04/03/2025	12:28	LB135289
	Cadmium	1000	972	103	826	1120	04/03/2025	12:28	LB135289
	Calcium	232000	235000	99	199000	271000	04/03/2025	12:28	LB135289
	Chromium	573	542	106	460	624	04/03/2025	12:28	LB135289
	Cobalt	511	476	107	404	548	04/03/2025	12:28	LB135289
	Copper	512	511	100	434	588	04/03/2025	12:28	LB135289
	Iron	99000	99300	100	84400	114500	04/03/2025	12:28	LB135289
	Lead	55.2	49.0	113	37	61	04/03/2025	12:28	LB135289
	Magnesium	248000	248000	100	210000	286000	04/03/2025	12:28	LB135289
	Manganese	461	507	91	430	584	04/03/2025	12:28	LB135289
	Nickel	1010	954	106	810	1100	04/03/2025	12:28	LB135289
	Potassium	-37.2			0	0	04/03/2025	12:28	LB135289
	Selenium	35.0	46.0	76	26	66	04/03/2025	12:28	LB135289
	Silver	191	201	95	170	232	04/03/2025	12:28	LB135289
	Sodium	35.8			0	0	04/03/2025	12:28	LB135289
	Thallium	112	108	104	68	148	04/03/2025	12:28	LB135289
	Vanadium	471	491	96	417	565	04/03/2025	12:28	LB135289
	Zinc	1070	952	112	809	1095	04/03/2025	12:28	LB135289
ICSA	Aluminum	236000	255000	92	216000	294000	04/03/2025	12:33	LB135289
	Antimony	-12.1			-50	50	04/03/2025	12:33	LB135289
	Arsenic	-2.16			-20	20	04/03/2025	12:33	LB135289
	Barium	-75.5	6.0	1258	-94	106	04/03/2025	12:33	LB135289
	Beryllium	5.12			-6	6	04/03/2025	12:33	LB135289
	Cadmium	-4.04	1.0	404	-5	7	04/03/2025	12:33	LB135289
	Calcium	226000	245000	92	208000	282000	04/03/2025	12:33	LB135289
	Chromium	52.2	52.0	100	42	62	04/03/2025	12:33	LB135289
	Cobalt	4.43			-30	30	04/03/2025	12:33	LB135289
	Copper	10.4	2.0	522	-18	22	04/03/2025	12:33	LB135289
	Iron	90700	101000	90	85600	116500	04/03/2025	12:33	LB135289
	Lead	8.69			-12	12	04/03/2025	12:33	LB135289
	Magnesium	235000	255000	92	216000	294000	04/03/2025	12:33	LB135289
	Manganese	-37.6	7.0	537	-13	27	04/03/2025	12:33	LB135289
	Nickel	-1.42	2.0	71	-38	42	04/03/2025	12:33	LB135289
	Potassium	-1030			0	0	04/03/2025	12:33	LB135289
	Selenium	-81.6			-20	20	04/03/2025	12:33	LB135289
	Silver	4.98			-10	10	04/03/2025	12:33	LB135289
	Sodium	-410			0	0	04/03/2025	12:33	LB135289
	Thallium	6.66			-40	40	04/03/2025	12:33	LB135289

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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
ICSA	Vanadium	-4.64			-40	40	04/03/2025	12:33	LB135289
	Zinc	-5.86			-40	40	04/03/2025	12:33	LB135289
ICSAB	Aluminum	248000	247000	100	209000	285000	04/03/2025	12:37	LB135289
	Antimony	594	618	96	525	711	04/03/2025	12:37	LB135289
	Arsenic	120	104	115	88.4	120	04/03/2025	12:37	LB135289
	Barium	406	537	76	437	637	04/03/2025	12:37	LB135289
	Beryllium	500	495	101	420	570	04/03/2025	12:37	LB135289
	Cadmium	997	972	103	826	1120	04/03/2025	12:37	LB135289
	Calcium	241000	235000	103	199000	271000	04/03/2025	12:37	LB135289
	Chromium	596	542	110	460	624	04/03/2025	12:37	LB135289
	Cobalt	504	476	106	404	548	04/03/2025	12:37	LB135289
	Copper	538	511	105	434	588	04/03/2025	12:37	LB135289
	Iron	102000	99300	103	84400	114500	04/03/2025	12:37	LB135289
	Lead	56.0	49.0	114	37	61	04/03/2025	12:37	LB135289
	Magnesium	246000	248000	99	210000	286000	04/03/2025	12:37	LB135289
	Manganese	474	507	94	430	584	04/03/2025	12:37	LB135289
	Nickel	1010	954	106	810	1100	04/03/2025	12:37	LB135289
	Potassium	-1560			0	0	04/03/2025	12:37	LB135289
	Selenium	-67.0	46.0	146	26	66	04/03/2025	12:37	LB135289
	Silver	191	201	95	170	232	04/03/2025	12:37	LB135289
	Sodium	-466			0	0	04/03/2025	12:37	LB135289
	Thallium	107	108	99	68	148	04/03/2025	12:37	LB135289
	Vanadium	490	491	100	417	565	04/03/2025	12:37	LB135289
	Zinc	1070	952	112	809	1095	04/03/2025	12:37	LB135289
ICSA01	Aluminum	244000	255000	96	216000	294000	04/07/2025	13:14	LB135333
	Antimony	2.97			-50	50	04/07/2025	13:14	LB135333
	Arsenic	3.15			-20	20	04/07/2025	13:14	LB135333
	Barium	3.18	6.0	53	-94	106	04/07/2025	13:14	LB135333
	Beryllium	1.55			-6	6	04/07/2025	13:14	LB135333
	Boron	-21.5	1000	2	-100	100	04/07/2025	13:14	LB135333
	Cadmium	1.65	1.0	165	-5	7	04/07/2025	13:14	LB135333
	Calcium	231000	245000	94	208000	282000	04/07/2025	13:14	LB135333
	Chromium	58.6	52.0	113	42	62	04/07/2025	13:14	LB135333
	Cobalt	1.78			-30	30	04/07/2025	13:14	LB135333
	Copper	21.3	2.0	1065	-18	22	04/07/2025	13:14	LB135333
	Iron	101000	101000	100	85600	116500	04/07/2025	13:14	LB135333
	Lead	6.94			-12	12	04/07/2025	13:14	LB135333
	Magnesium	248000	255000	97	216000	294000	04/07/2025	13:14	LB135333
	Manganese	2.93	7.0	42	-13	27	04/07/2025	13:14	LB135333
	Molybdenum	-1.75	1000		-200	200	04/07/2025	13:14	LB135333
	Nickel	2.35	2.0	118	-38	42	04/07/2025	13:14	LB135333
	Potassium	-133			0	0	04/07/2025	13:14	LB135333

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	Selenium	-16.6			-20	20	04/07/2025	13:14	LB135333
	Silver	-4.96			-10	10	04/07/2025	13:14	LB135333
	Sodium	-262			0	0	04/07/2025	13:14	LB135333
	Thallium	6.03			-40	40	04/07/2025	13:14	LB135333
	Tin	-4.91	1000		-40	40	04/07/2025	13:14	LB135333
	Titanium	-1.36			0	0	04/07/2025	13:14	LB135333
	Vanadium	5.15			-40	40	04/07/2025	13:14	LB135333
	Zinc	4.53			-40	40	04/07/2025	13:14	LB135333
ICSAB01	Aluminum	238000	247000	96	209000	285000	04/07/2025	13:18	LB135333
	Antimony	619	618	100	525	711	04/07/2025	13:18	LB135333
	Arsenic	109	104	105	88.4	120	04/07/2025	13:18	LB135333
	Barium	478	537	89	437	637	04/07/2025	13:18	LB135333
	Beryllium	456	495	92	420	570	04/07/2025	13:18	LB135333
	Boron	1000	1000	100	850	1150	04/07/2025	13:18	LB135333
	Cadmium	987	972	102	826	1120	04/07/2025	13:18	LB135333
	Calcium	229000	235000	97	199000	271000	04/07/2025	13:18	LB135333
	Chromium	555	542	102	460	624	04/07/2025	13:18	LB135333
	Cobalt	502	476	106	404	548	04/07/2025	13:18	LB135333
	Copper	500	511	98	434	588	04/07/2025	13:18	LB135333
	Iron	106000	99300	107	84400	114500	04/07/2025	13:18	LB135333
	Lead	54.7	49.0	112	37	61	04/07/2025	13:18	LB135333
	Magnesium	243000	248000	98	210000	286000	04/07/2025	13:18	LB135333
	Manganese	459	507	90	430	584	04/07/2025	13:18	LB135333
	Molybdenum	1130	1000	113	850	1150	04/07/2025	13:18	LB135333
	Nickel	991	954	104	810	1100	04/07/2025	13:18	LB135333
	Potassium	-136			0	0	04/07/2025	13:18	LB135333
	Selenium	41.4	46.0	90	26	66	04/07/2025	13:18	LB135333
	Silver	185	201	92	170	232	04/07/2025	13:18	LB135333
	Sodium	-302			0	0	04/07/2025	13:18	LB135333
	Thallium	102	108	94	68	148	04/07/2025	13:18	LB135333
	Tin	1140	1000	114	850	1150	04/07/2025	13:18	LB135333
	Titanium	1050			0	0	04/07/2025	13:18	LB135333
	Vanadium	456	491	93	417	565	04/07/2025	13:18	LB135333
	Zinc	1030	952	108	809	1095	04/07/2025	13:18	LB135333
ICSA	Aluminum	240000	255000	94	216000	294000	04/07/2025	13:23	LB135333
	Antimony	-7.40			-50	50	04/07/2025	13:23	LB135333
	Arsenic	16.4			-20	20	04/07/2025	13:23	LB135333
	Barium	-19.2	6.0	320	-94	106	04/07/2025	13:23	LB135333
	Beryllium	2.49			-6	6	04/07/2025	13:23	LB135333
	Boron	-190	1000	19	-100	100	04/07/2025	13:23	LB135333
	Cadmium	-0.54	1.0	54	-5	7	04/07/2025	13:23	LB135333
	Calcium	238000	245000	97	208000	282000	04/07/2025	13:23	LB135333

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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
ICSA	Chromium	47.7	52.0	92	42	62	04/07/2025	13:23	LB135333
	Cobalt	4.77			-30	30	04/07/2025	13:23	LB135333
	Copper	27.4	2.0	1370	-18	22	04/07/2025	13:23	LB135333
	Iron	104000	101000	103	85600	116500	04/07/2025	13:23	LB135333
	Lead	-2.46			-12	12	04/07/2025	13:23	LB135333
	Magnesium	244000	255000	96	216000	294000	04/07/2025	13:23	LB135333
	Manganese	37.4	7.0	534	-13	27	04/07/2025	13:23	LB135333
	Molybdenum	-8.54	1000	1	-200	200	04/07/2025	13:23	LB135333
	Nickel	1.36	2.0	68	-38	42	04/07/2025	13:23	LB135333
	Potassium	-4020			0	0	04/07/2025	13:23	LB135333
	Selenium	-31.2			-20	20	04/07/2025	13:23	LB135333
	Silver	-1.22			-10	10	04/07/2025	13:23	LB135333
	Sodium	-8840			0	0	04/07/2025	13:23	LB135333
	Thallium	23.5			-40	40	04/07/2025	13:23	LB135333
	Tin	-19.6	1000	2	-40	40	04/07/2025	13:23	LB135333
	Titanium	9.25			0	0	04/07/2025	13:23	LB135333
	Vanadium	17.2			-40	40	04/07/2025	13:23	LB135333
	Zinc	-11.8			-40	40	04/07/2025	13:23	LB135333
ICSAB	Aluminum	243000	247000	98	209000	285000	04/07/2025	13:37	LB135333
	Antimony	594	618	96	525	711	04/07/2025	13:37	LB135333
	Arsenic	147	104	141	88.4	120	04/07/2025	13:37	LB135333
	Barium	433	537	81	437	637	04/07/2025	13:37	LB135333
	Beryllium	517	495	104	420	570	04/07/2025	13:37	LB135333
	Boron	691	1000	69	850	1150	04/07/2025	13:37	LB135333
	Cadmium	996	972	102	826	1120	04/07/2025	13:37	LB135333
	Calcium	240000	235000	102	199000	271000	04/07/2025	13:37	LB135333
	Chromium	575	542	106	460	624	04/07/2025	13:37	LB135333
	Cobalt	502	476	106	404	548	04/07/2025	13:37	LB135333
	Copper	552	511	108	434	588	04/07/2025	13:37	LB135333
	Iron	98600	99300	99	84400	114500	04/07/2025	13:37	LB135333
	Lead	54.3	49.0	111	37	61	04/07/2025	13:37	LB135333
	Magnesium	246000	248000	99	210000	286000	04/07/2025	13:37	LB135333
	Manganese	511	507	101	430	584	04/07/2025	13:37	LB135333
	Molybdenum	1170	1000	117	850	1150	04/07/2025	13:37	LB135333
	Nickel	1010	954	106	810	1100	04/07/2025	13:37	LB135333
	Potassium	-4460			0	0	04/07/2025	13:37	LB135333
	Selenium	34.6	46.0	75	26	66	04/07/2025	13:37	LB135333
	Silver	181	201	90	170	232	04/07/2025	13:37	LB135333
	Sodium	-9290			0	0	04/07/2025	13:37	LB135333
	Thallium	129	108	119	68	148	04/07/2025	13:37	LB135333
	Tin	1110	1000	111	850	1150	04/07/2025	13:37	LB135333
	Titanium	1080			0	0	04/07/2025	13:37	LB135333

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Fax : 908 789 8922

Metals
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INTERFERENCE CHECK SAMPLE

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

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	Vanadium	476	491	97	417	565	04/07/2025	13:37	LB135333
	Zinc	1020	952	107	809	1095	04/07/2025	13:37	LB135333

METAL QC DATA

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB167449BS							
Mercury	ug/L	4.0	4.08		102	85 - 115	CV

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB167491BS							
Aluminum	ug/L	2000	1810		90	85 - 115	P
Antimony	ug/L	800	777		97	85 - 115	P
Arsenic	ug/L	800	749		94	85 - 115	P
Barium	ug/L	200	173		86	85 - 115	P
Beryllium	ug/L	200	187		94	85 - 115	P
Boron	ug/L	300	315		105	85 - 115	P
Cadmium	ug/L	200	182		91	85 - 115	P
Calcium	ug/L	1000	913	J	91	85 - 115	P
Chromium	ug/L	400	380		95	85 - 115	P
Cobalt	ug/L	200	186		93	85 - 115	P
Copper	ug/L	300	297		99	85 - 115	P
Iron	ug/L	3000	2750		92	85 - 115	P
Lead	ug/L	1000	916		92	85 - 115	P
Magnesium	ug/L	2000	1760	J	88	85 - 115	P
Manganese	ug/L	200	184		92	85 - 115	P
Molybdenum	ug/L	400	384		96	85 - 115	P
Nickel	ug/L	500	468		94	85 - 115	P
Potassium	ug/L	10000	8810		88	85 - 115	P
Selenium	ug/L	2000	1920		96	85 - 115	P
Silver	ug/L	75.0	71.6		96	85 - 115	P
Sodium	ug/L	3000	3000		100	85 - 115	P
Thallium	ug/L	2000	1870		94	85 - 115	P
Tin	ug/L	700	652		93	85 - 115	P
Titanium	ug/L	200	179		90	85 - 115	P
Vanadium	ug/L	300	270		90	85 - 115	P
Zinc	ug/L	200	191		96	85 - 115	P

METAL PREPARATION & INSTRUMENT DATA

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ICP INTERELEMENT CORRECTION FACTORS

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Al	Ca	Fe	Mg	Ag
Aluminum	396.100	0.0000000	-0.0002060	0.0000000	0.0000000	0.0000000
Antimony	206.833	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	0.0000000	0.0000000	-0.0000440	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000930	0.0000000	0.0000000
Calcium	373.690	0.0000000	0.0000000	-0.0075970	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0007850	0.0000000	0.0000000
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	-0.0000920	0.0000000	0.0000380	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	-0.0001440	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	-0.0001490	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0001050	0.0000000	0.0000000

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ICP INTERELEMENT CORRECTION FACTORS

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: As	Ba	Be	Cd	Co
Aluminum	396.100	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.833	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0002870
Calcium	373.690	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0000000	0.0009530
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	-0.0039600
Lead	220.353	0.0000000	0.0003170	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	-0.0003570
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0000000	0.0054900
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

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ICP INTERELEMENT CORRECTION FACTORS

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Cr	Cu	K	Mn	Mo
Aluminum	396.100	0.0000000	0.0000000	0.0000590	0.0000000	0.0396900
Antimony	206.833	0.0122000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	-0.0029000	0.0000000	0.0000000	0.0000000	0.0004900
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	-0.0000710	-0.0003400
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	373.690	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000070	0.0002200	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	-0.0007860
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0006510	0.0020500
Iron	240.488	0.0000000	0.0000000	0.0000730	0.0000000	-0.0015250
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0001400	-0.0008600
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0007460	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000120
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0017400	-0.0100400
Vanadium	292.402	-0.0025100	0.0000000	0.0000000	0.0000000	-0.0072000
Zinc	213.800	0.0000000	0.0009010	0.0000000	0.0000000	0.0000000

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ICP INTERELEMENT CORRECTION FACTORS

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Na	Ni	Pb	Sb	Se
Aluminum	396.100	0.0000000	0.0000000	0.0012800	0.0000000	0.0000000
Antimony	206.833	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	373.690	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	-0.0047000	0.0036100	0.0000000	0.0000000
Iron	240.488	0.0000000	-0.0017000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0006580	0.0000000	0.0000000	0.0001290
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0003330	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0067600	0.0000000	0.0000000	0.0000000

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1503 **SAS No.:** Q1503

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Sn	Ti	Tl	V	Zn
Aluminum	396.100	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.833	-0.0035600	-0.0007970	0.0000000	-0.0018900	0.0000000
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000630	0.0001280	0.0000000	0.0000000
Calcium	373.690	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0001110	0.0000000
Cobalt	228.616	0.0000000	0.0018800	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0003840	0.0000000	0.0000000	0.0000000
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	-0.0003610	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	-0.0007420	0.0000000	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	-0.0039700	0.0000000	-0.0115600	0.0000000
Vanadium	292.402	0.0000000	0.0005320	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

METAL PREPARATION & ANALYICAL SUMMARY

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SAMPLE PREPARATION SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Method:**

Case No.: Q1503 **SAS No.:** Q1503

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB167449**						
PB167449BL	PB167449BL	MB	WATER	04/03/2025	30.0	30.0	
PB167449BS	PB167449BS	LCS	WATER	04/03/2025	30.0	30.0	
Q1503-08	PT-HG-WP	SAM	WATER	04/03/2025	30.0	30.0	

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SAMPLE PREPARATION SUMMARY

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1503

Contract: ALLI03 **Lab Code:** CHEM **Method:**

Case No.: Q1503 **SAS No.:** Q1503

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB167491**						
PB167491BL	PB167491BL	MB	WATER	03/21/2025	50.0	50.0	
PB167491BS	PB167491BS	LCS	WATER	03/21/2025	50.0	50.0	
Q1503-01	PT-TM1-WP	SAM	WATER	03/21/2025	50.0	50.0	
Q1503-03	PT-SNTI-WP	SAM	WATER	03/21/2025	50.0	50.0	
Q1503-05	PT-MIN2-WP	SAM	WATER	03/21/2025	50.0	50.0	
Q1503-07	PT-SIO2-WP	SAM	WATER	03/21/2025	50.0	50.0	

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ANALYSIS RUN LOG

Client: Alliance Technical Group, LLC - Newark **Contract:** ALLI03

Lab code: CHEM **Case no.:** Q1503 **Sas no.:** Q1503 **Sdg no.:** Q1503

Instrument id number: **Method:** **Run number:** LB135273

Start date: 04/02/2025 **End date:** 04/02/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1140	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
S1	S1	1	1145	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
S2	S2	1	1149	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
S3	S3	1	1153	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
S4	S4	1	1157	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
S5	S5	1	1202	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
ICV01	ICV01	1	1520	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
LLICV01	LLICV01	1	1541	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
ICB01	ICB01	1	1551	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
CRI01	CRI01	1	1555	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
ICSA01	ICSA01	1	1559	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
ICSAB01	ICSAB01	1	1604	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
ICSA	ICSA	20	1612	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
ICSAB	ICSAB	20	1618	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
CCV01	CCV01	1	1639	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
CCB01	CCB01	1	1643	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
Q1503-05	PT-MIN2-WP	1	1713	Ca,K,Mg,Na
Q1503-03	PT-SNTI-WP	1	1722	Sn,Ti
Q1503-01	PT-TM1-WP	1	1731	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn
CCV02	CCV02	1	1735	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
CCB02	CCB02	1	1739	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
CCV03	CCV03	1	1753	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
CCB03	CCB03	1	1758	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,

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ANALYSIS RUN LOG

Client: Alliance Technical Group, LLC - Newark **Contract:** ALLI03

Lab code: CHEM **Case no.:** Q1503 **Sas no.:** Q1503 **Sdg no.:** Q1503

Instrument id number: **Method:** **Run number:** LB135283

Start date: 04/03/2025 **End date:** 04/03/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1155	HG
S0.05	S0.05	1	1158	HG
S0.2	S0.2	1	1200	HG
S2.5	S2.5	1	1202	HG
S5	S5	1	1204	HG
S7.5	S7.5	1	1207	HG
S10	S10	1	1209	HG
ICV74	ICV74	1	1212	HG
ICB74	ICB74	1	1214	HG
CCV25	CCV25	1	1217	HG
CCB25	CCB25	1	1219	HG
CRA	CRA	1	1224	HG
PB167449BL	PB167449BL	1	1236	HG
PB167449BS	PB167449BS	1	1238	HG
CCV26	CCV26	1	1256	HG
CCB26	CCB26	1	1258	HG
Q1503-08	PT-HG-WP	5	1300	HG
CCV27	CCV27	1	1310	HG
CCB27	CCB27	1	1312	HG

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ANALYSIS RUN LOG

Client: Alliance Technical Group, LLC - Newark **Contract:** ALLI03

Lab code: CHEM **Case no.:** Q1503 **Sas no.:** Q1503 **Sdg no.:** Q1503

Instrument id number: **Method:** **Run number:** LB135289

Start date: 04/03/2025 **End date:** 04/03/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1022	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
S1	S1	1	1026	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
S2	S2	1	1030	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
S3	S3	1	1034	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
S4	S4	1	1039	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
S5	S5	1	1043	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
ICV01	ICV01	1	1206	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
LLICV01	LLICV01	1	1211	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
ICB01	ICB01	1	1215	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
CRI01	CRI01	1	1220	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
ICSA01	ICSA01	1	1224	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
ICSAB01	ICSAB01	1	1228	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
ICSA	ICSA	20	1233	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
ICSAB	ICSAB	20	1237	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
CCV01	CCV01	1	1241	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
CCB01	CCB01	1	1247	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
Q1503-07	PT-SIO2-WP	10	1345	,
CCV02	CCV02	1	1353	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
CCB02	CCB02	1	1357	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
CCV03	CCV03	1	1439	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
CCB03	CCB03	1	1443	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
CCV04	CCV04	1	1532	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
CCB04	CCB04	1	1536	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
CCV05	CCV05	1	1636	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
CCB05	CCB05	1	1640	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
CCV06	CCV06	1	1748	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
CCB06	CCB06	1	1800	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
CCV07	CCV07	1	1829	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na
CCB07	CCB07	1	1833	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn,Ca,K,Mg,Na

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

metals
- 14 -
ANALYSIS RUN LOG

Client: Alliance Technical Group, LLC - Newark **Contract:** ALLI03

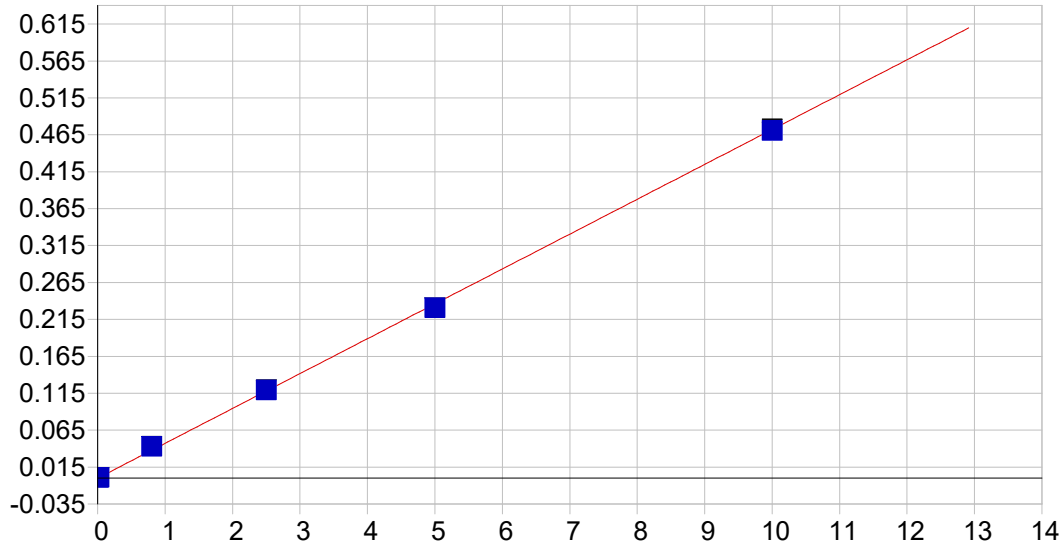
Lab code: CHEM **Case no.:** Q1503 **Sas no.:** Q1503 **Sdg no.:** Q1503

Instrument id number: **Method:** **Run number:** LB135333

Start date: 04/07/2025 **End date:** 04/07/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1051	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
S1	S1	1	1055	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
S2	S2	1	1100	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
S3	S3	1	1104	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
S4	S4	1	1108	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
S5	S5	1	1112	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
ICV01	ICV01	1	1235	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
LLICV01	LLICV01	1	1300	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
ICB01	ICB01	1	1305	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
CRI01	CRI01	1	1310	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
ICSA01	ICSA01	1	1314	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
ICSAB01	ICSAB01	1	1318	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
ICSA	ICSA	20	1323	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
ICSAB	ICSAB	20	1337	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
CCV01	CCV01	1	1342	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
CCB01	CCB01	1	1350	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
PB167491BL	PB167491BL	1	1403	Ag,Al,As,B,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Ti,Tl,V,
PB167491BS	PB167491BS	1	1419	Ag,Al,As,B,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Ti,Tl,V,
CCV02	CCV02	1	1507	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
CCB02	CCB02	1	1512	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
CCV03	CCV03	1	1541	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
CCB03	CCB03	1	1545	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
CCV04	CCV04	1	1700	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
CCB04	CCB04	1	1704	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
CCV05	CCV05	1	1743	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
CCB05	CCB05	1	1747	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
CCV06	CCV06	1	1851	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,
CCB06	CCB06	1	1855	Ag,Al,As,B,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Tl,V,Zn,Sn,Ti,Ca,K,Mg,

METAL
RAW DATA

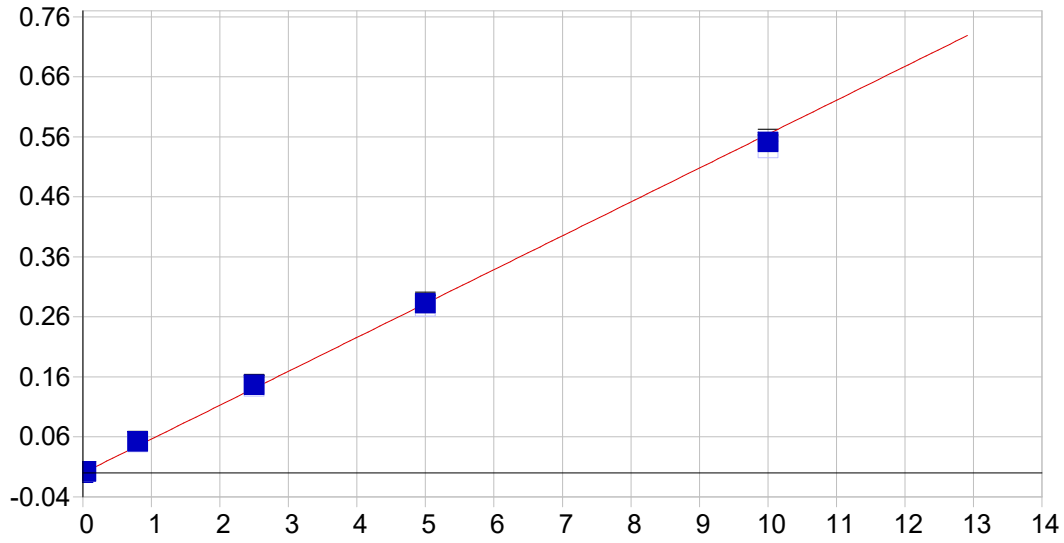


As 189.042 {479}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000069	Re-Slope:	1.000000
A1 (Gain):	0.047225	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999472	Status:	OK.
Std Error of Est:	0.000036		
Predicted MDL:	0.002632		
Predicted MQL:	0.008774		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00007	.000	1
S1	.02000	.01863	-.001	-6.83	.00081	.000	1
S3	2.5000	2.5272	.027	1.09	.11915	.001	1
S4	5.0000	4.8892	-.111	-2.22	.23057	.000	1
S5	10.000	9.9704	-.030	-.296	.47027	.002	1
S2	.80000	.91455	.115	14.3	.04308	.000	1

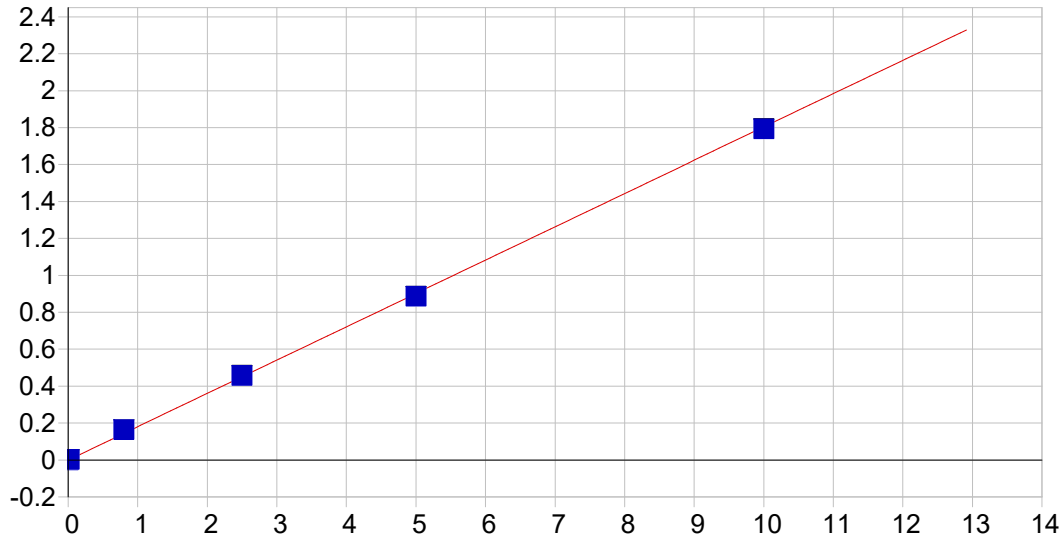


Tl 190.856 {477}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000111	Re-Slope:	1.000000
A1 (Gain):	0.056457	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999172	Status:	OK.
Std Error of Est:	0.000075		
Predicted MDL:	0.001842		
Predicted MQL:	0.006139		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00011	.000	1
S1	.04000	.03875	-.001	-3.13	.00193	.000	1
S3	2.5000	2.5996	.100	3.98	.14406	.001	1
S4	5.0000	5.0032	.003	.065	.27716	.003	1
S5	10.000	9.7716	-.228	-2.28	.54117	.005	1
S2	.80000	.92675	.127	15.8	.05138	.000	1

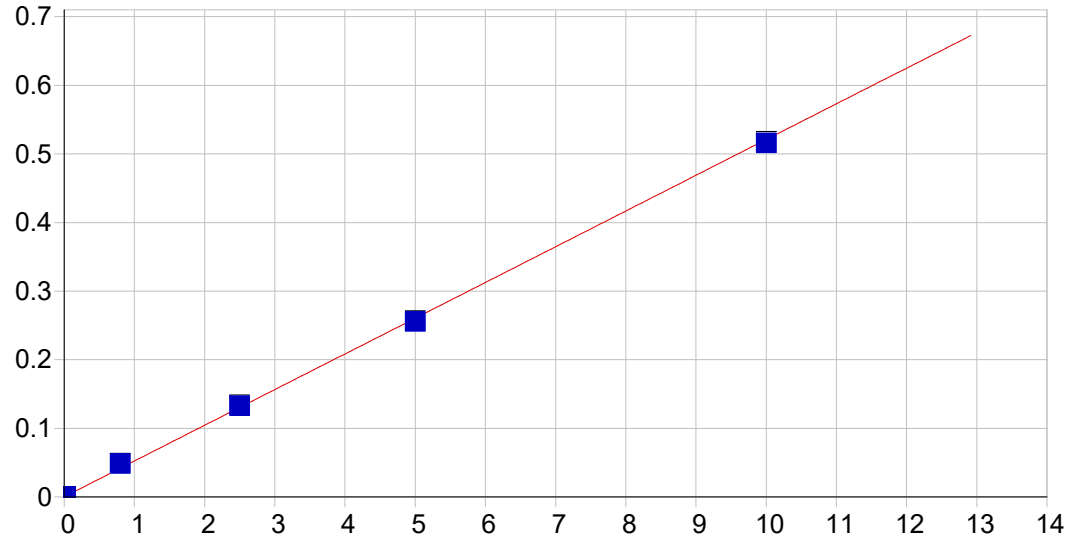


Pb 220.353 {453}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000236	Re-Slope:	1.000000
A1 (Gain):	0.180416	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999513	Status:	OK.
Std Error of Est:	0.000102		
Predicted MDL:	0.001407		
Predicted MQL:	0.004689		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00024	.000	1
S1	.01200	.01233	.000	2.74	.00195	.000	1
S3	2.5000	2.5379	.038	1.52	.45715	.001	1
S4	5.0000	4.9116	-.088	-1.77	.88490	.001	1
S5	10.000	9.9395	-.060	-.605	1.7910	.002	1
S2	.80000	.91062	.111	13.8	.16390	.000	1

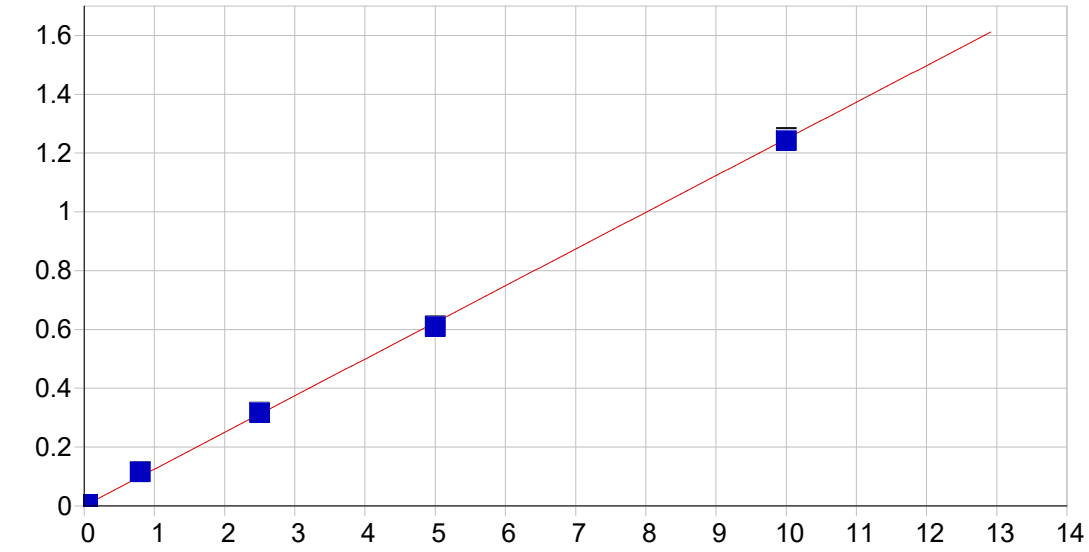


Se 196.090 {472}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000197	Re-Slope:	1.000000
A1 (Gain):	0.052071	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999316	Status:	OK.
Std Error of Est:	0.000045		
Predicted MDL:	0.002878		
Predicted MQL:	0.009594		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00020	.000	1
S1	.02000	.02236	.002	11.8	.00136	.000	1
S3	2.5000	2.5536	.054	2.14	.13312	.001	1
S4	5.0000	4.9056	-.094	-1.89	.25554	.001	1
S5	10.000	9.9087	-.091	-.913	.51596	.002	1
S2	.80000	.92972	.130	16.2	.04859	.000	1

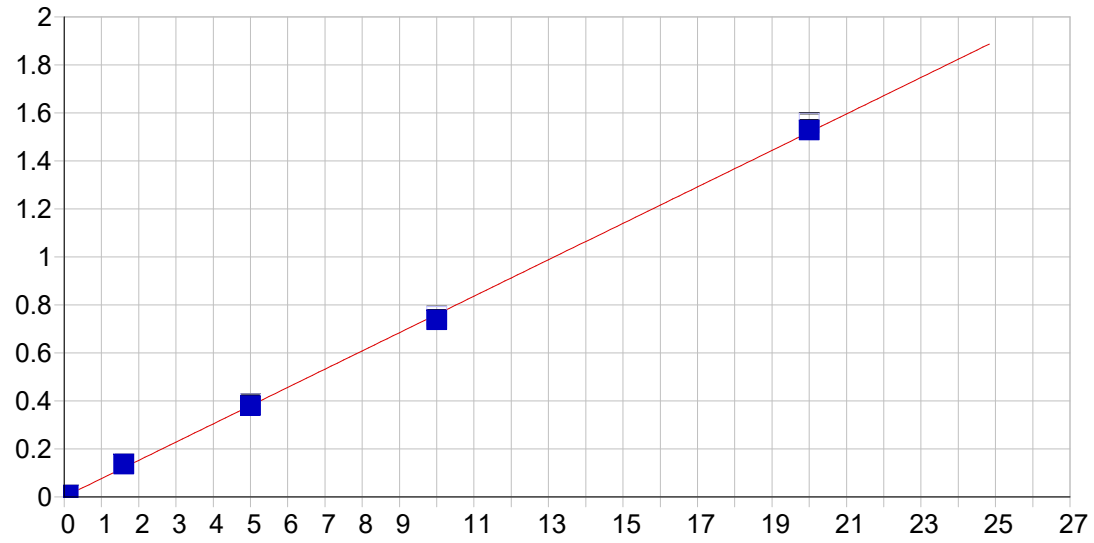


Sb 206.833 {463}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000277	Re-Slope:	1.000000
A1 (Gain):	0.124775	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999413	Status:	OK.
Std Error of Est:	0.000159		
Predicted MDL:	0.001809		
Predicted MQL:	0.006030		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00028	.000	1
S1	.05000	.05227	.002	4.55	.00681	.000	1
S3	2.5000	2.5394	.039	1.58	.31798	.001	1
S4	5.0000	4.8855	-.115	-2.29	.61156	.001	1
S5	10.000	9.9526	-.047	-.474	1.2455	.007	1
S2	.80000	.92032	.120	15.0	.11538	.000	1

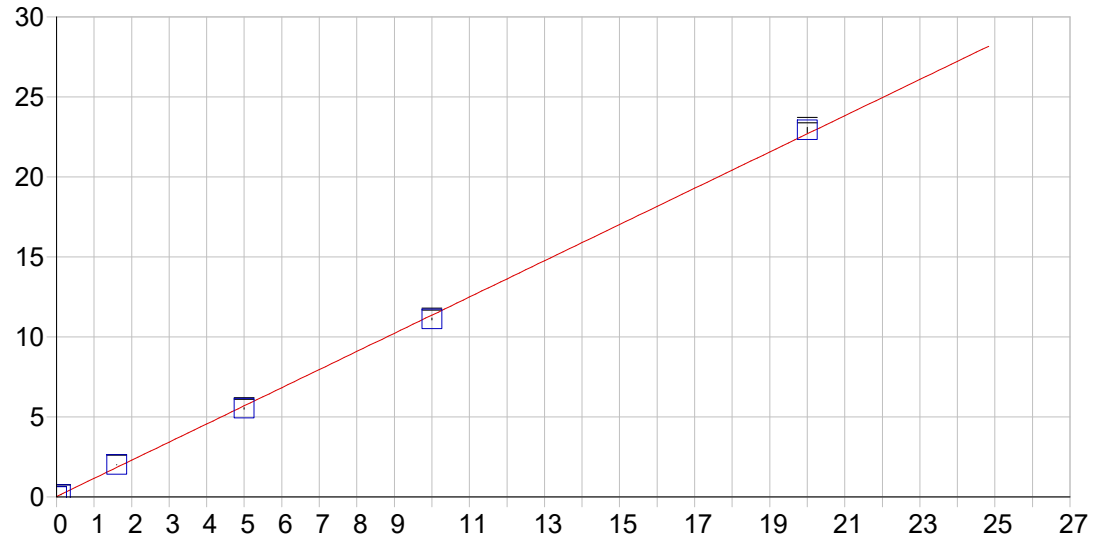


Al 396.152 { 85}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000686	Re-Slope:	1.000000
A1 (Gain):	0.075951	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999605	Status:	OK.
Std Error of Est:	0.000161		
Predicted MDL:	0.005440		
Predicted MQL:	0.018134		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00069	.000	1
S1	.10000	.09883	-.001	-1.17	.00878	.000	1
S3	5.0000	4.9965	-.003	-.069	.38755	.001	1
S4	10.000	9.7067	-.293	-2.93	.75265	.001	1
S5	20.000	20.115	.115	.577	1.5579	.003	1
S2	1.6000	1.7827	.183	11.4	.13844	.000	1

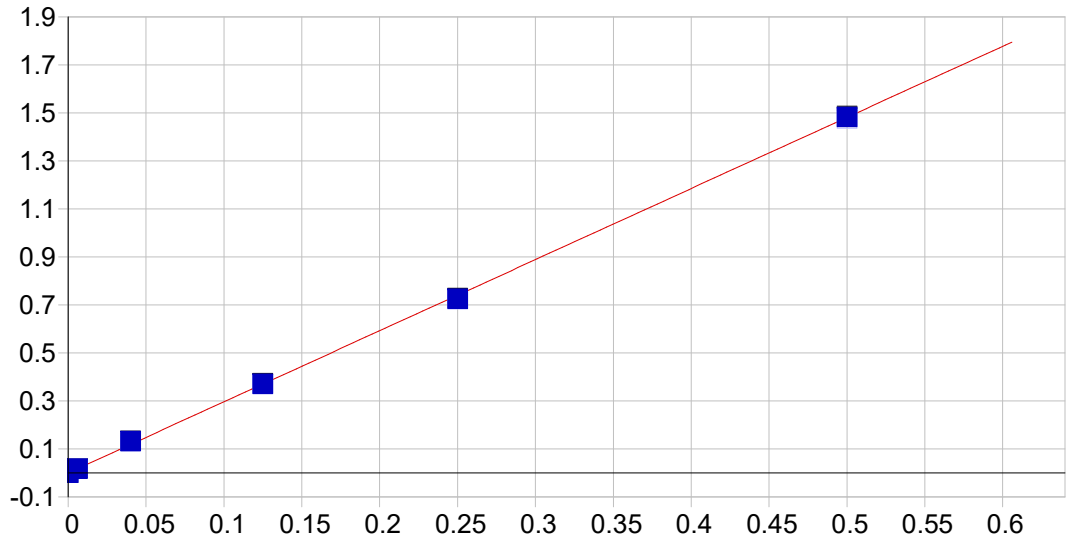


Ba 493.409 { 68}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.027150	Re-Slope:	1.000000
A1 (Gain):	1.133222	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999655	Status:	OK.
Std Error of Est:	0.002208		
Predicted MDL:	0.001371		
Predicted MQL:	0.004571		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.02715	.002	1
S1	.10000	.09474	-.005	-5.26	.13451	.001	1
S3	5.0000	4.8596	-.140	-2.81	5.5342	.050	1
S4	10.000	9.7832	-.217	-2.17	11.114	.060	1
S5	20.000	20.212	.212	1.06	22.932	.178	1
S2	1.6000	1.7506	.151	9.41	2.0109	.001	1

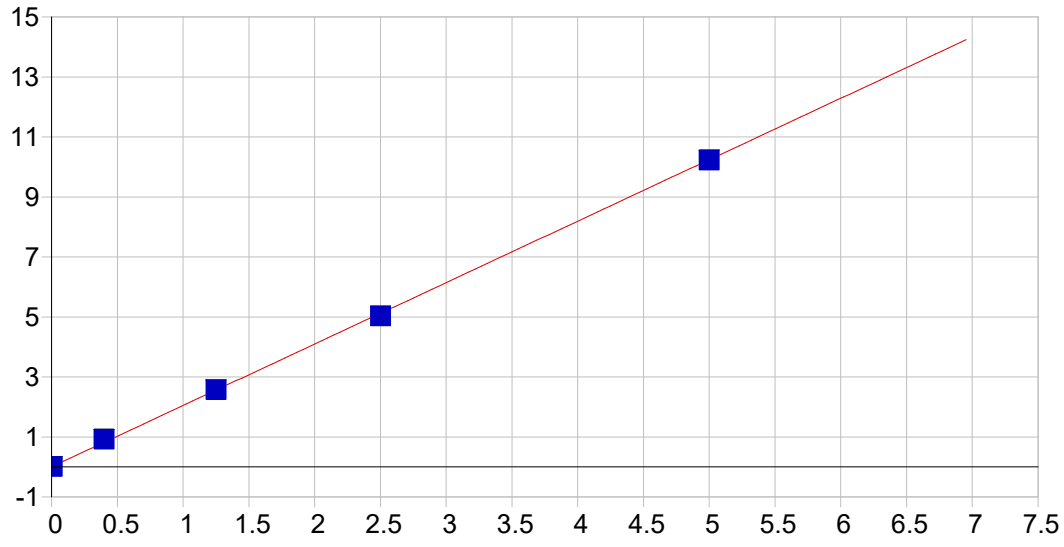


Be 234.861 {144}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000043	Re-Slope:	1.000000
A1 (Gain):	2.962609	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999658	Status:	OK.
Std Error of Est:	0.000222		
Predicted MDL:	0.000071		
Predicted MQL:	0.000237		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00004	.000	1
S1	.00600	.00590	-.000	-1.71	.01730	.000	1
S3	.12500	.12529	.000	.234	.36949	.002	1
S4	.25000	.24495	-.005	-2.02	.72232	.002	1
S5	.50000	.50030	.000	.060	1.4755	.005	1
S2	.04000	.04456	.005	11.4	.13144	.000	1

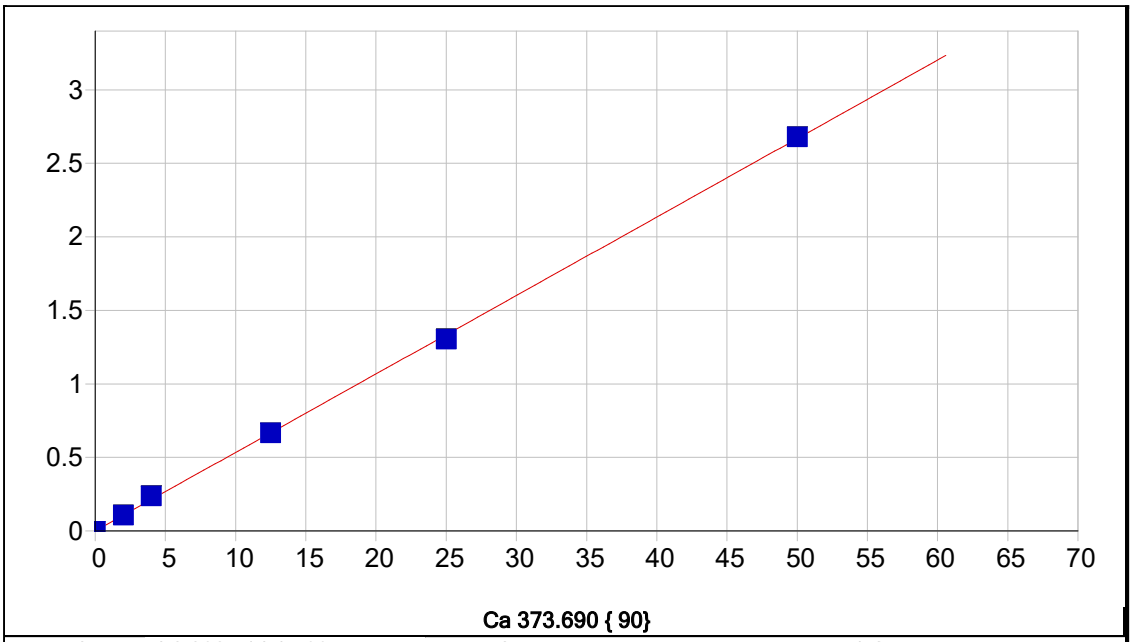


Cd 226.502 {449}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000007	Re-Slope:	1.000000
A1 (Gain):	2.047884	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999639	Status:	OK.
Std Error of Est:	0.000500		
Predicted MDL:	0.000085		
Predicted MQL:	0.000284		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00001	.000	1
S1	.00600	.00586	-.000	-2.35	.01207	.000	1
S3	1.2500	1.2551	.005	.406	2.5725	.008	1
S4	2.5000	2.4553	-.045	-1.79	5.0328	.003	1
S5	5.0000	4.9916	-.008	-.169	10.231	.013	1
S2	.40000	.44815	.048	12.0	.91848	.001	1

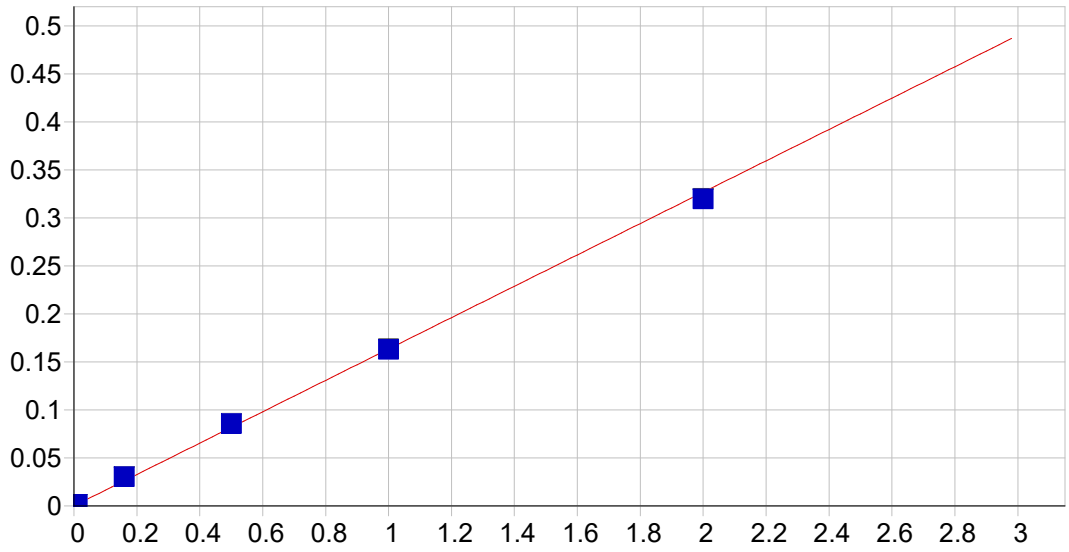


Ca 373.690 { 90}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000369	Re-Slope:	1.000000
A1 (Gain):	0.053361	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999647	Status:	OK.
Std Error of Est:	0.000751		
Predicted MDL:	0.007112		
Predicted MQL:	0.023707		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00016	-.000	.000	.00036	.000	1
S2	4.0000	4.4525	.452	11.3	.23796	.001	1
S3	12.500	12.464	-.036	-.288	.66546	.002	1
S4	25.000	24.410	-.590	-2.36	1.3029	.003	1
S5	50.000	50.191	.191	.381	2.6786	.004	1
S1	2.0000	1.9827	-.017	-.867	.10617	.000	1

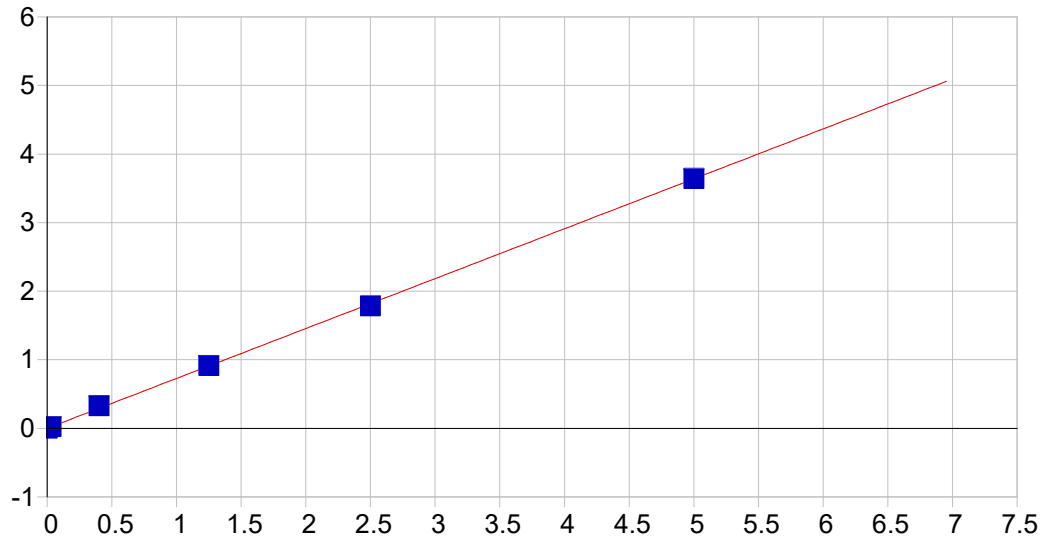


Cr 267.716 {126}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000089	Re-Slope:	1.000000
A1 (Gain):	0.163353	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999214	Status:	OK.
Std Error of Est:	0.000048		
Predicted MDL:	0.000395		
Predicted MQL:	0.001317		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00009	.000	1
S1	.01000	.00976	-.000	-2.44	.00168	.000	1
S3	.50000	.52290	.023	4.58	.08553	.000	1
S4	1.0000	.99638	-.004	-.362	.16290	.001	1
S5	2.0000	1.9564	-.044	-2.18	.31977	.000	1
S2	.16000	.18454	.025	15.3	.03024	.000	1

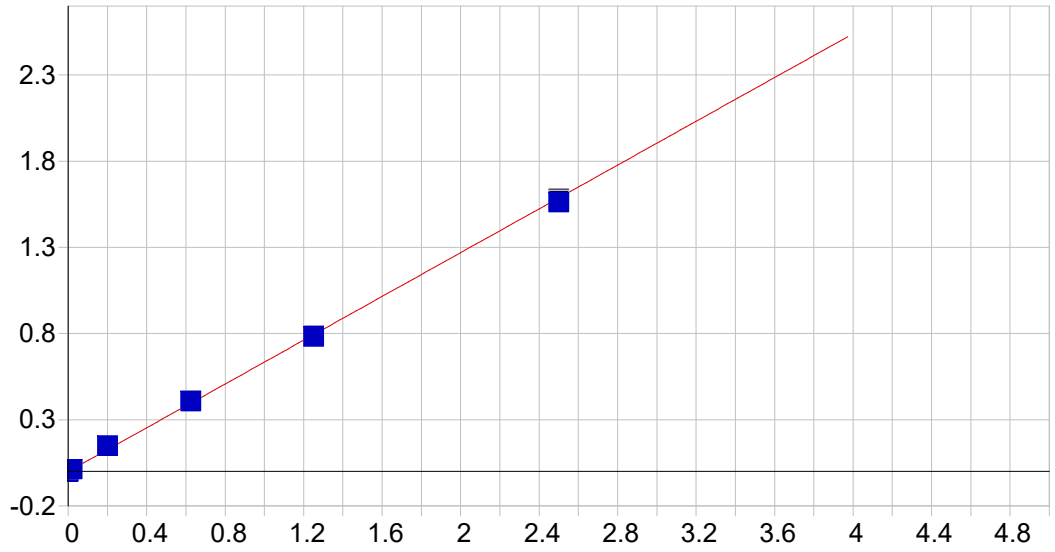


Co 228.616 {448}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000099	Re-Slope:	1.000000
A1 (Gain):	0.727734	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999616	Status:	OK.
Std Error of Est:	0.000410		
Predicted MDL:	0.000252		
Predicted MQL:	0.000841		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00010	.000	1
S1	.03000	.02972	-.000	-.918	.02164	.000	1
S3	1.2500	1.2547	.005	.373	.91471	.003	1
S4	2.5000	2.4477	-.052	-2.09	1.7845	.001	1
S5	5.0000	4.9990	-.001	-.019	3.6442	.005	1
S2	.40000	.44883	.049	12.2	.32722	.001	1

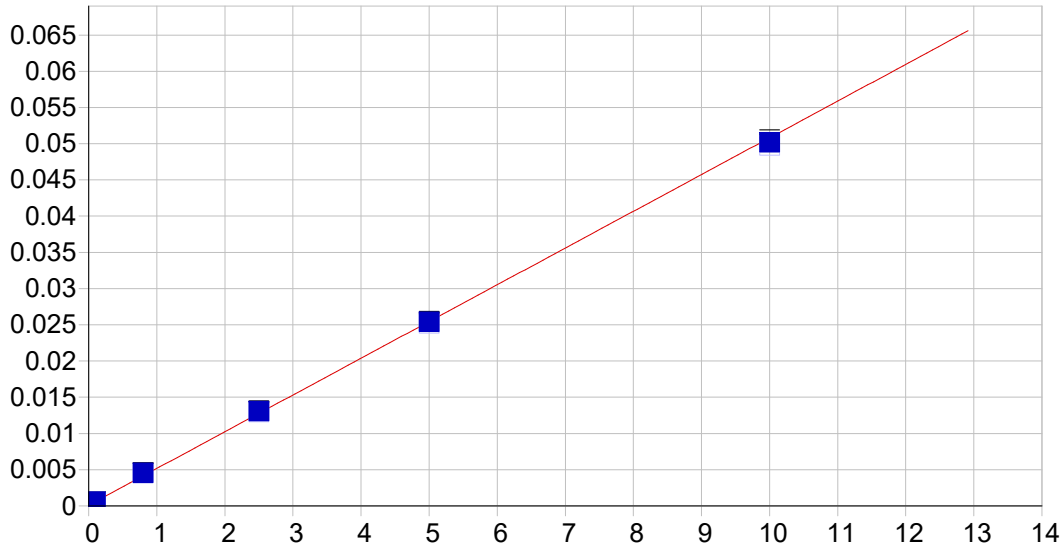


Cu 224.700 {450}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000715	Re-Slope:	1.000000
A1 (Gain):	0.635056	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999073	Status:	OK.
Std Error of Est:	0.000323		
Predicted MDL:	0.000421		
Predicted MQL:	0.001404		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00072	.000	1
S1	.02000	.02277	.003	13.8	.01387	.000	1
S3	.62500	.64302	.018	2.88	.41046	.001	1
S4	1.2500	1.2314	-.019	-1.49	.78692	.000	1
S5	2.5000	2.4608	-.039	-1.57	1.5733	.008	1
S2	.20000	.23703	.037	18.5	.15071	.000	1

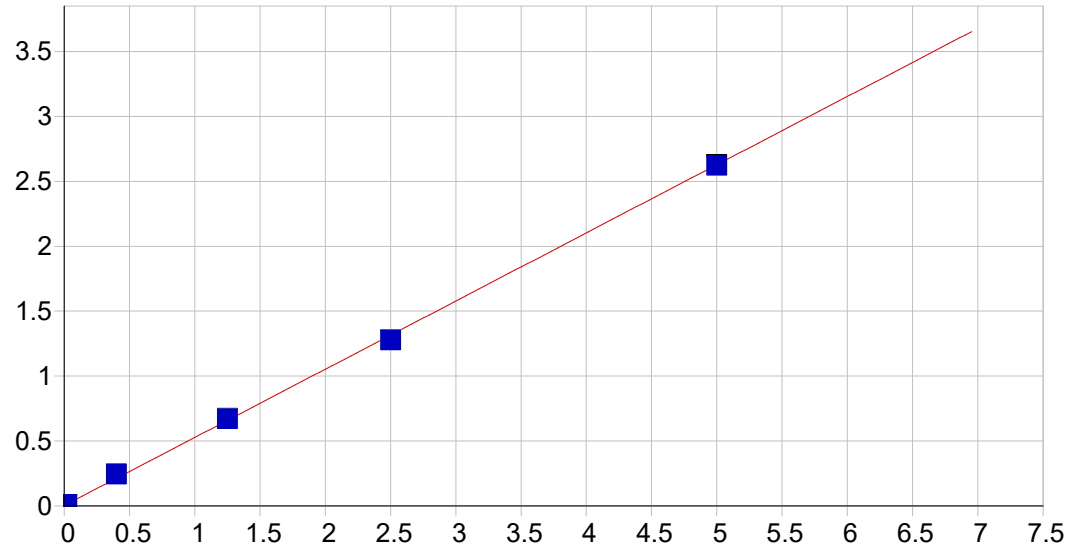


Fe 240.488 {140}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000097	Re-Slope:	1.000000
A1 (Gain):	0.005071	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999705	Status:	OK.
Std Error of Est:	0.000006		
Predicted MDL:	0.004354		
Predicted MQL:	0.014513		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00010	.000	1
S1	.10000	.09441	-.006	-5.59	.00057	.000	1
S3	2.5000	2.5564	.056	2.26	.01295	.000	1
S4	5.0000	4.9926	-.007	-.149	.02520	.000	1
S5	10.000	9.8786	-.121	-1.21	.04976	.000	1
S2	.80000	.87801	.078	9.75	.00452	.000	1

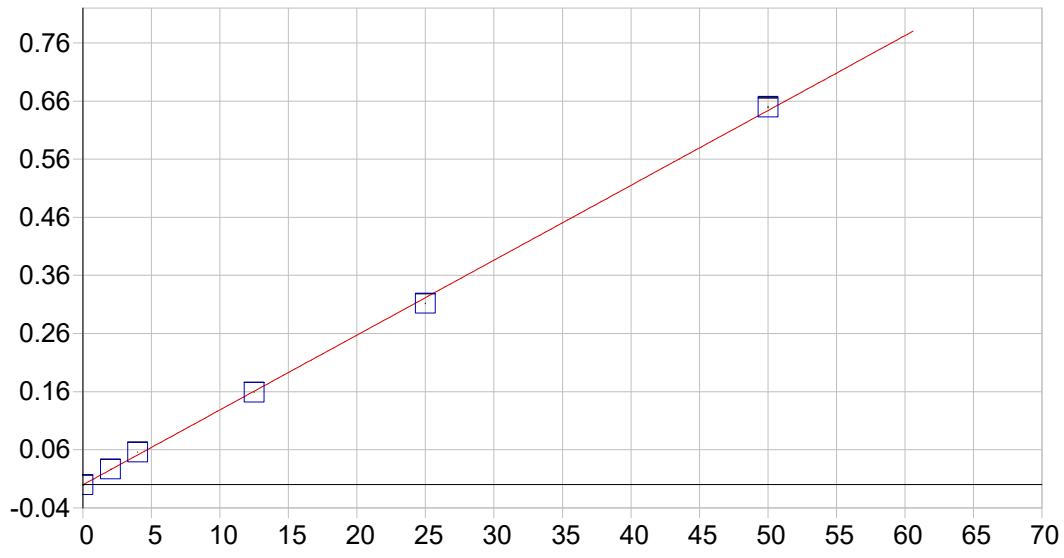


Mn 257.610 {131}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002095	Re-Slope:	1.000000
A1 (Gain):	0.525174	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999342	Status:	OK.
Std Error of Est:	0.000316		
Predicted MDL:	0.000279		
Predicted MQL:	0.000931		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00209	.000	1
S1	.02000	.01770	-.002	-11.5	.01139	.000	1
S3	1.2500	1.2743	.024	1.94	.67145	.003	1
S4	2.5000	2.4291	-.071	-2.84	1.2780	.002	1
S5	5.0000	4.9879	-.012	-.242	2.6221	.007	1
S2	.40000	.46102	.061	15.3	.24425	.001	1

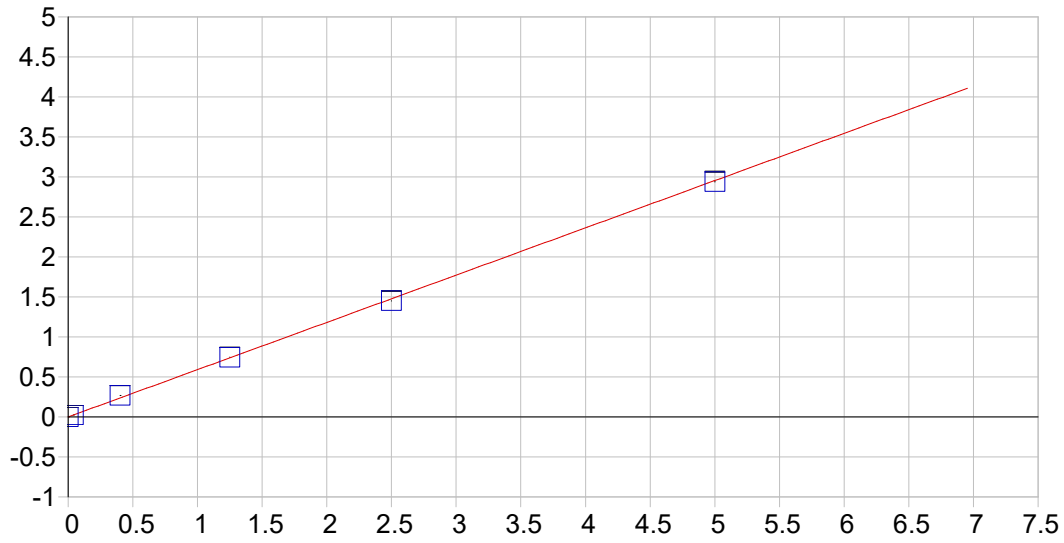


Mg 279.079 {121}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000254	Re-Slope:	1.000000
A1 (Gain):	0.012880	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999648	Status:	OK.
Std Error of Est:	0.000181		
Predicted MDL:	0.012359		
Predicted MQL:	0.041198		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00020	-.000	.000	-.00026	.000	1
S2	4.0000	4.3678	.368	9.19	.05600	.000	1
S3	12.500	12.363	-.137	-1.10	.15897	.000	1
S4	25.000	24.237	-.763	-3.05	.31191	.000	1
S5	50.000	50.454	.454	.908	.64957	.001	1
S1	2.0000	2.0781	.078	3.90	.02651	.000	1

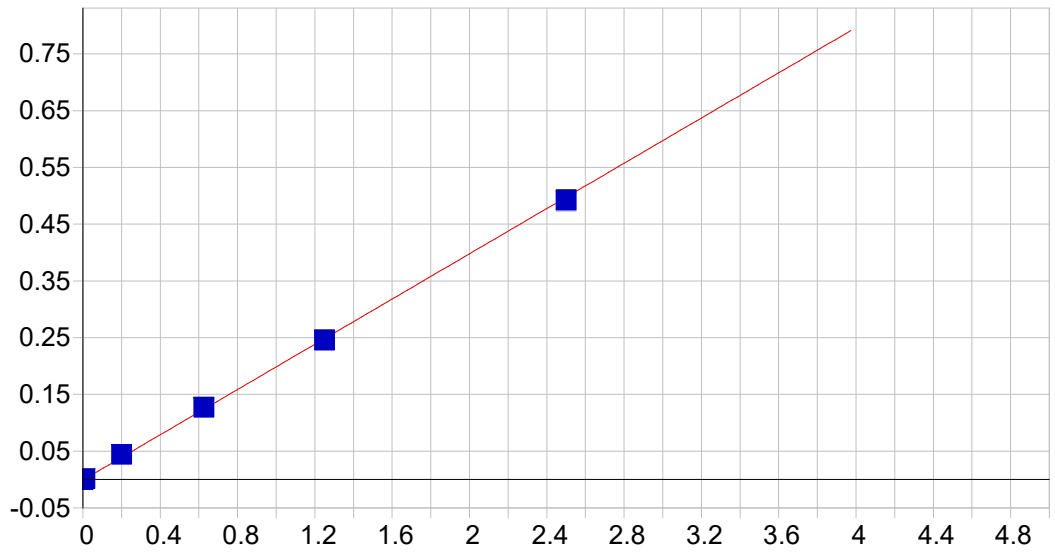


Ni 231.604 {446}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000105	Re-Slope:	1.000000
A1 (Gain):	0.590829	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999548	Status:	OK.
Std Error of Est:	0.000417		
Predicted MDL:	0.000292		
Predicted MQL:	0.000972		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00011	.000	1
S1	.04000	.03954	-.000	-1.14	.02326	.000	1
S3	1.2500	1.2618	.012	.946	.74542	.002	1
S4	2.5000	2.4555	-.044	-1.78	1.4507	.002	1
S5	5.0000	4.9790	-.021	-.420	2.9416	.005	1
S2	.40000	.45411	.054	13.5	.26820	.000	1

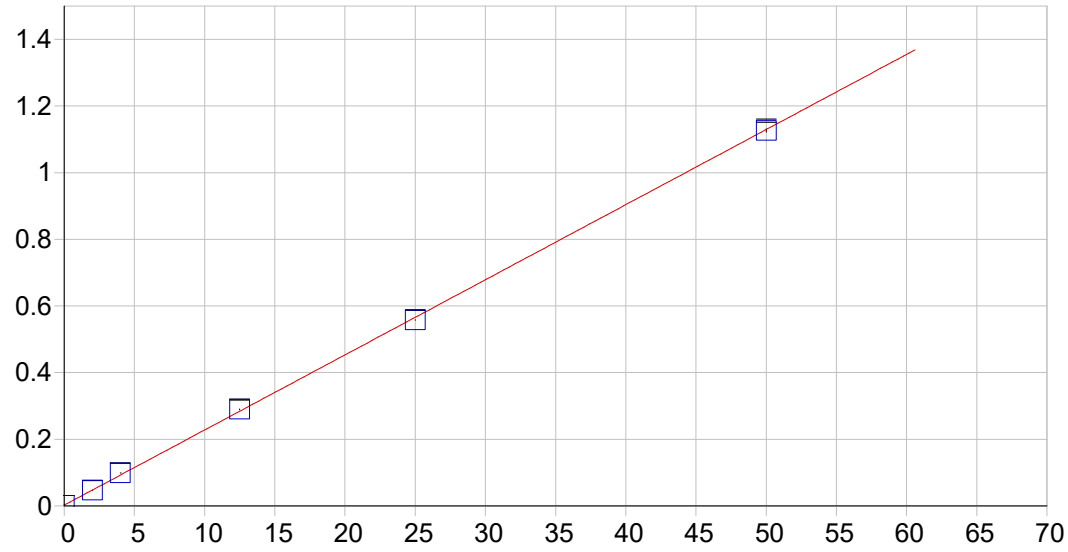


Ag 328.068 {103}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000857	Re-Slope:	1.000000
A1 (Gain):	0.199345	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999524	Status:	OK.
Std Error of Est:	0.000051		
Predicted MDL:	0.000415		
Predicted MQL:	0.001384		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00086	.000	1
S1	.01000	.01026	.000	2.57	.00117	.000	1
S3	.62500	.64153	.017	2.64	.12653	.000	1
S4	1.2500	1.2357	-.014	-1.14	.24448	.001	1
S5	2.5000	2.4714	-.029	-1.14	.48983	.001	1
S2	.20000	.22608	.026	13.0	.04405	.000	1

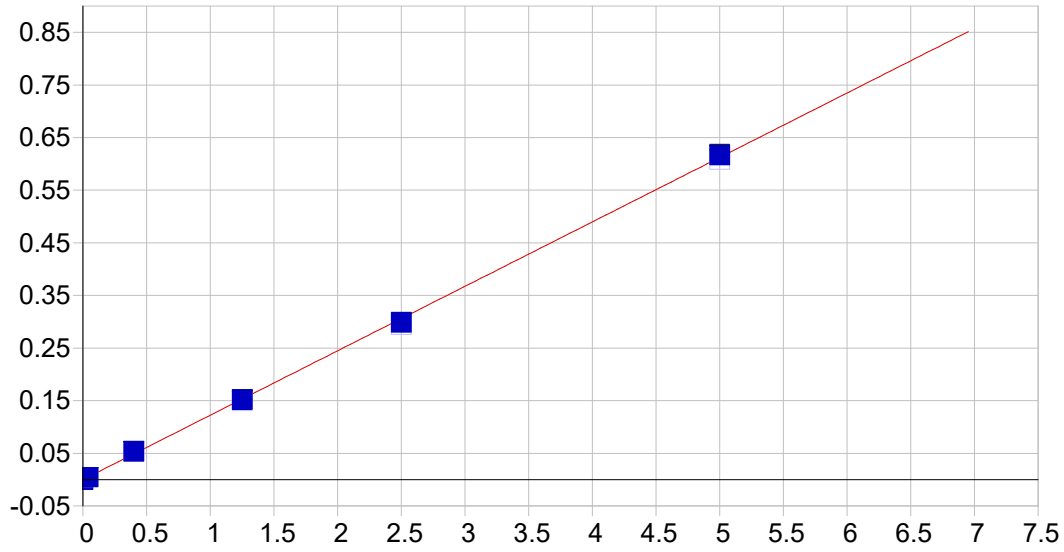


Na 589.592 { 57}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002460	Re-Slope:	1.000000
A1 (Gain):	0.022540	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999834	Status:	OK.
Std Error of Est:	0.000217		
Predicted MDL:	0.008433		
Predicted MQL:	0.028111		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00011	-.000	.000	.00246	.000	1
S2	4.0000	4.2865	.286	7.16	.09908	.000	1
S3	12.500	12.737	.237	1.90	.28955	.002	1
S4	25.000	24.654	-.346	-1.38	.55815	.001	1
S5	50.000	49.865	-.135	-.271	1.1264	.005	1
S1	2.0000	1.9576	-.042	-2.12	.04658	.000	1

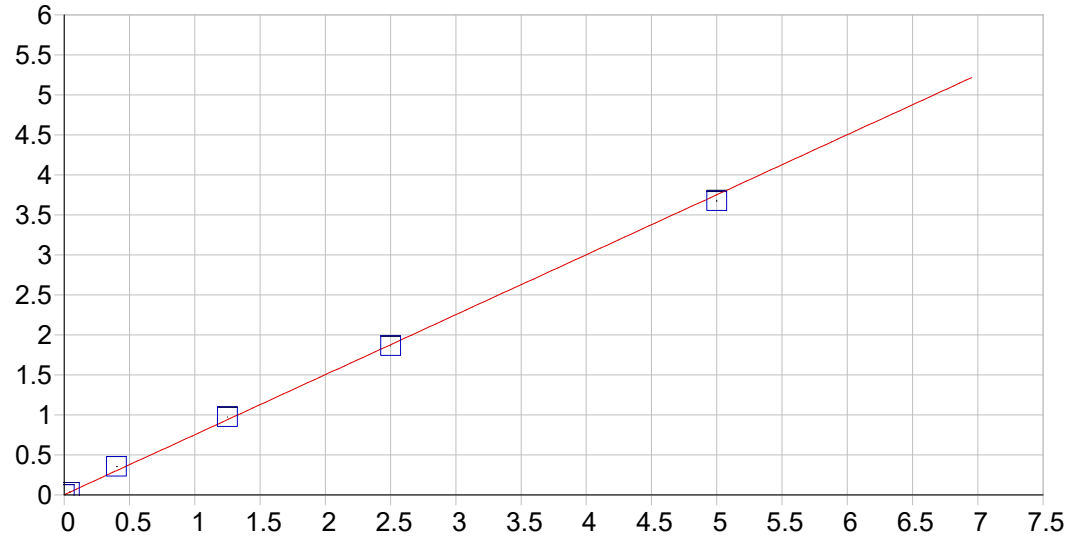


V 292.402 {115}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000139	Re-Slope:	1.000000
A1 (Gain):	0.122492	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999698	Status:	OK.
Std Error of Est:	0.000070		
Predicted MDL:	0.001431		
Predicted MQL:	0.004769		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00014	.000	1
S1	.04000	.03972	-.000	-.688	.00454	.000	1
S3	1.2500	1.2391	-.011	-.869	.14941	.000	1
S4	2.5000	2.4379	-.062	-2.48	.29402	.001	1
S5	5.0000	5.0359	.036	.717	.60778	.001	1
S2	.40000	.43738	.037	9.35	.05272	.000	1

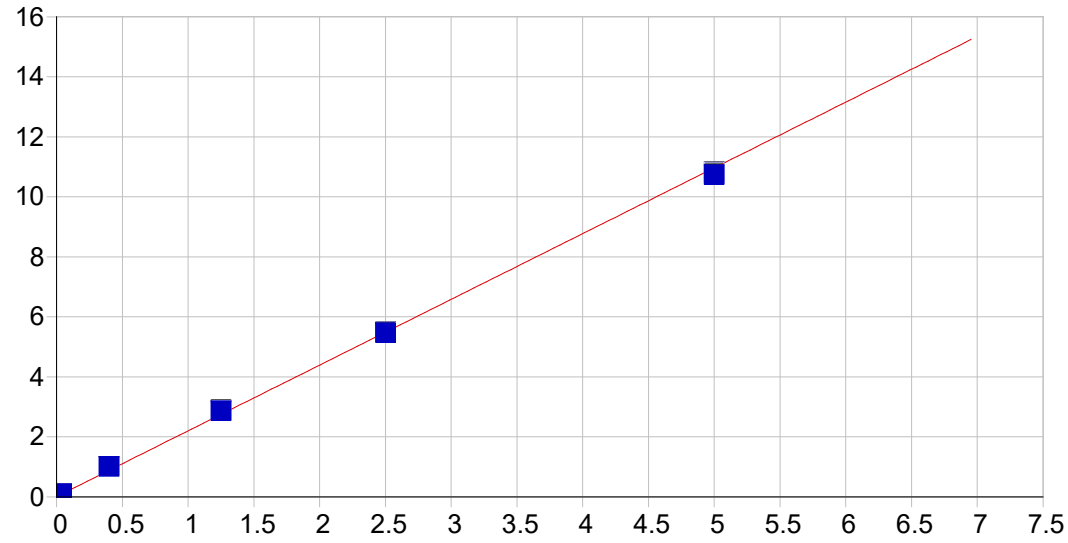


Zn 206.200 {464}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002982	Re-Slope:	1.000000
A1 (Gain):	0.749983	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999073	Status:	OK.
Std Error of Est:	0.000758		
Predicted MDL:	0.000215		
Predicted MQL:	0.000717		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00297	.000	1
S1	.04000	.04284	.003	7.10	.03511	.000	1
S3	1.2500	1.2948	.045	3.58	.97406	.003	1
S4	2.5000	2.4807	-.019	-.771	1.8635	.002	1
S5	5.0000	4.8993	-.101	-2.01	3.6774	.008	1
S2	.40000	.47232	.072	18.1	.35721	.001	1

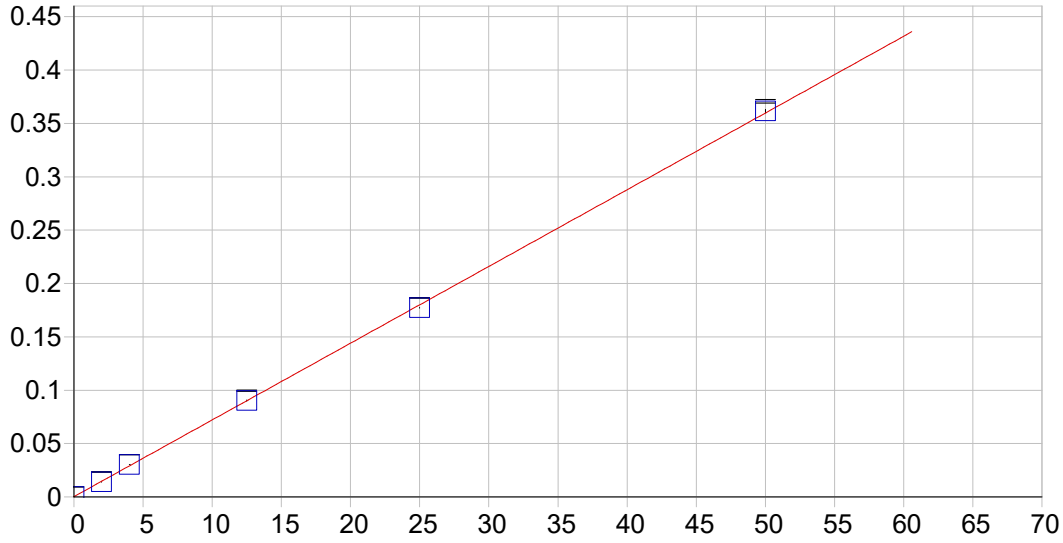


Zn 213.856 {158}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.010322	Re-Slope:	1.000000
A1 (Gain):	2.191482	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999341	Status:	OK.
Std Error of Est:	0.001882		
Predicted MDL:	0.000286		
Predicted MQL:	0.000955		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.01030	.000	1
S1	.04000	.04248	.002	6.20	.10403	.001	1
S3	1.2500	1.3028	.053	4.23	2.8845	.018	1
S4	2.5000	2.4903	-.010	-.388	5.5059	.010	1
S5	5.0000	4.8985	-.101	-2.03	10.822	.017	1
S2	.40000	.45591	.056	14.0	1.0155	.002	1

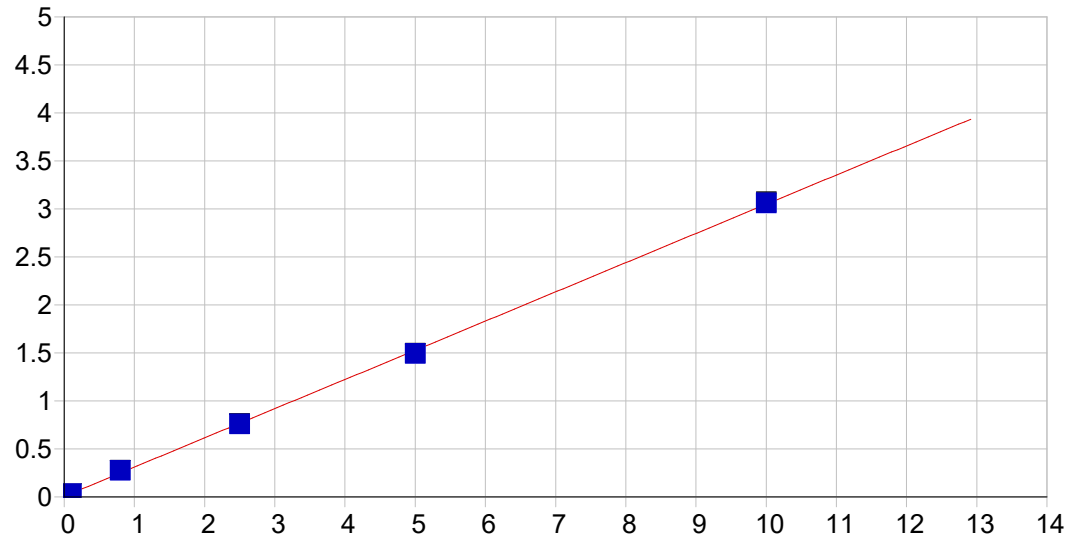


K 766.490 { 44}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000269	Re-Slope:	1.000000
A1 (Gain):	0.007189	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999914	Status:	OK.
Std Error of Est:	0.000050		
Predicted MDL:	0.027903		
Predicted MQL:	0.093012		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00027	.000	1
S2	4.0000	4.1677	.168	4.19	.03023	.000	1
S3	12.500	12.529	.029	.234	.09035	.001	1
S4	25.000	24.618	-.382	-1.53	.17726	.000	1
S5	50.000	50.247	.247	.494	.36151	.002	1
S1	2.0000	1.9379	-.062	-3.10	.01420	.000	1

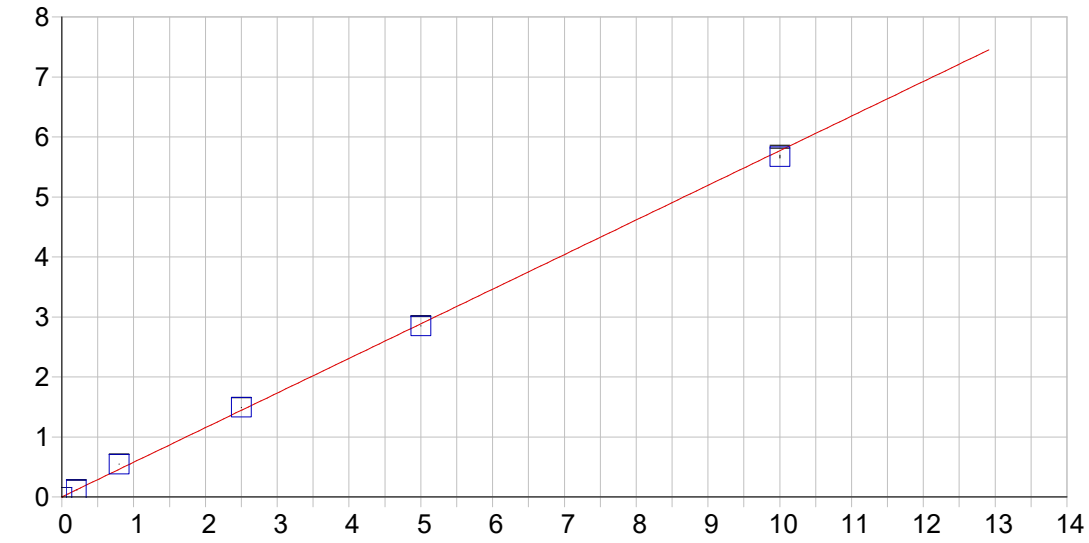


B 249.678 {135}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.006205	Re-Slope:	1.000000
A1 (Gain):	0.304207	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999664	Status:	OK.
Std Error of Est:	0.000413		
Predicted MDL:	0.000669		
Predicted MQL:	0.002231		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00620	.000	1
S1	.10000	.09403	-.006	-5.97	.03464	.000	1
S3	2.5000	2.4783	-.022	-.869	.75752	.003	1
S4	5.0000	4.8924	-.108	-2.15	1.4893	.001	1
S5	10.000	10.050	.050	.496	3.0530	.010	1
S2	.80000	.88574	.086	10.7	.27482	.001	1

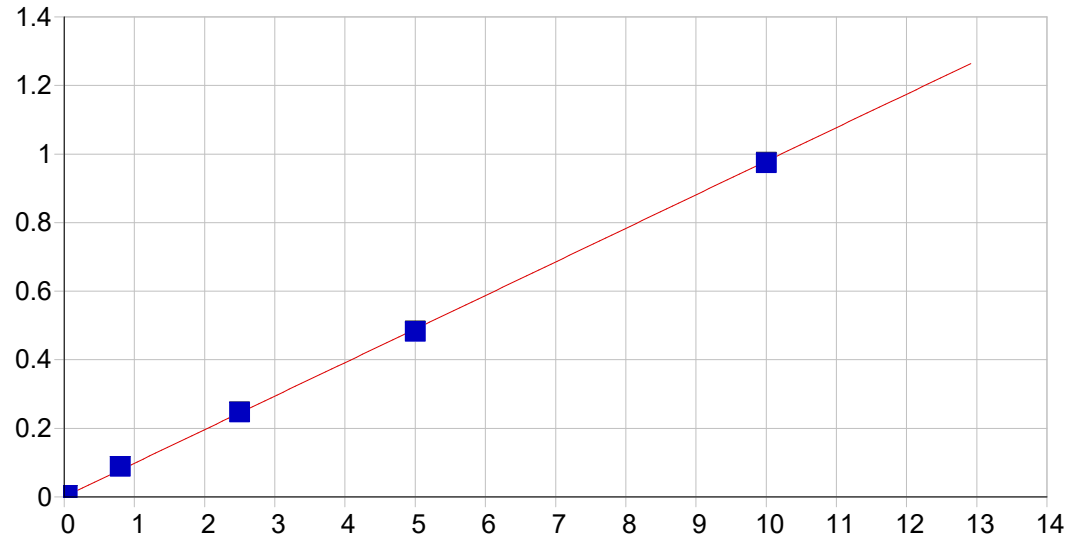


Mo 202.030 {467}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000154	Re-Slope:	1.000000
A1 (Gain):	0.576980	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999124	Status:	OK.
Std Error of Est:	0.001799		
Predicted MDL:	0.000291		
Predicted MQL:	0.000969		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00004	-.000	.000	.00013	.000	1
S1	.20000	.20708	.007	3.54	.11963	.000	1
S3	2.5000	2.5834	.083	3.34	1.4907	.005	1
S4	5.0000	4.9374	-.063	-1.25	2.8489	.002	1
S5	10.000	9.8287	-.171	-1.71	5.6711	.023	1
S2	.80000	.94339	.143	17.9	.54447	.002	1

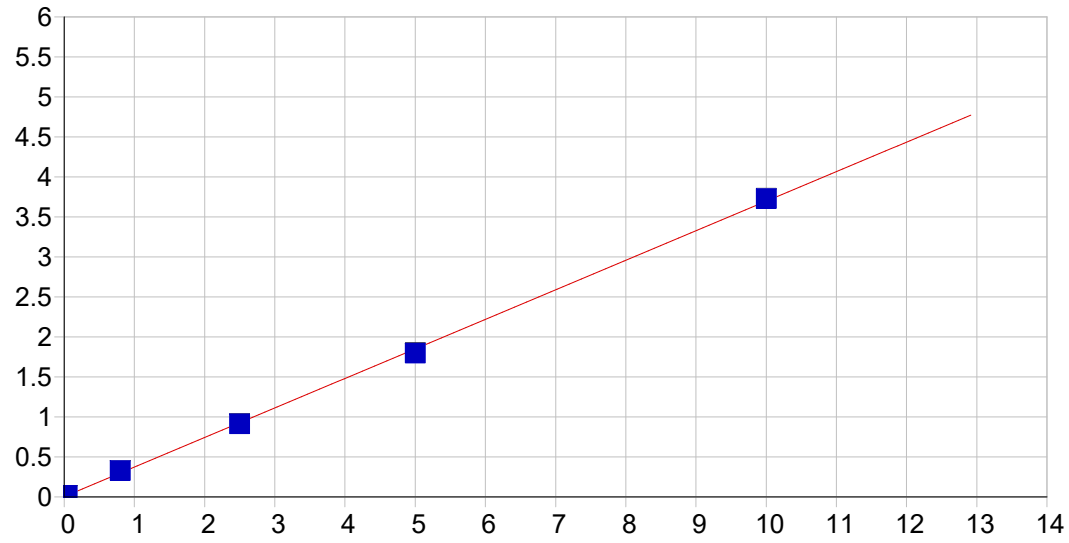


Sn 189.989 {478}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000306	Re-Slope:	1.000000
A1 (Gain):	0.097858	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999616	Status:	OK.
Std Error of Est:	0.000090		
Predicted MDL:	0.000824		
Predicted MQL:	0.002748		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00031	.000	1
S1	.04000	.03932	-.001	-1.71	.00415	.000	1
S3	2.5000	2.5201	.020	.806	.24667	.000	1
S4	5.0000	4.9260	-.074	-1.48	.48186	.001	1
S5	10.000	9.9541	-.046	-.459	.97340	.001	1
S2	.80000	.90037	.100	12.5	.08833	.000	1

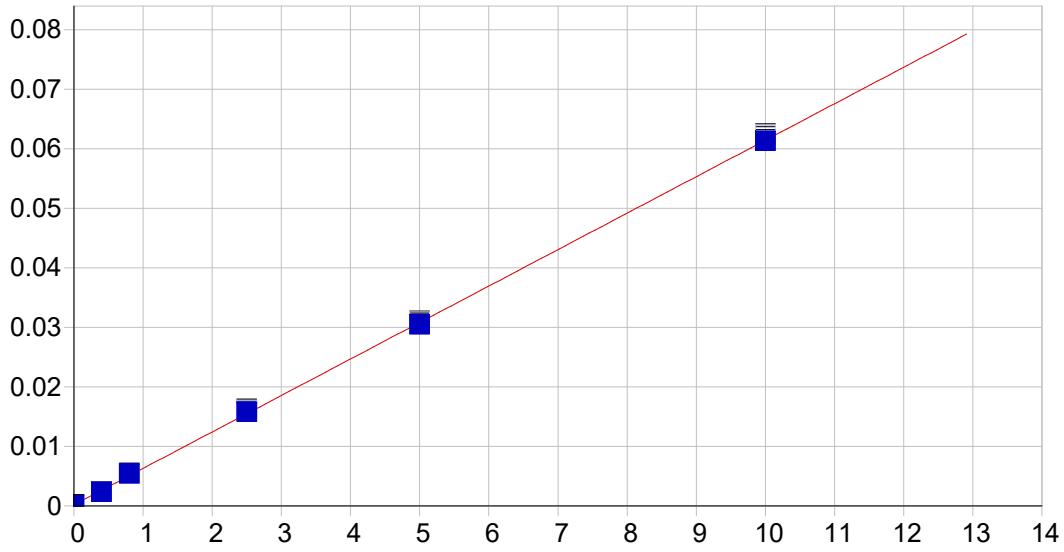


Ti 336.121 {100}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002026	Re-Slope:	1.000000
A1 (Gain):	0.369357	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999601	Status:	OK.
Std Error of Est:	0.000346		
Predicted MDL:	0.000640		
Predicted MQL:	0.002134		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00203	.000	1
S1	.04000	.03949	-.001	-1.28	.01660	.000	1
S3	2.5000	2.4690	-.031	-1.24	.91362	.002	1
S4	5.0000	4.8552	-.145	-2.90	1.7947	.005	1
S5	10.000	10.090	.090	.903	3.7276	.003	1
S2	.80000	.88599	.086	10.7	.32917	.001	1

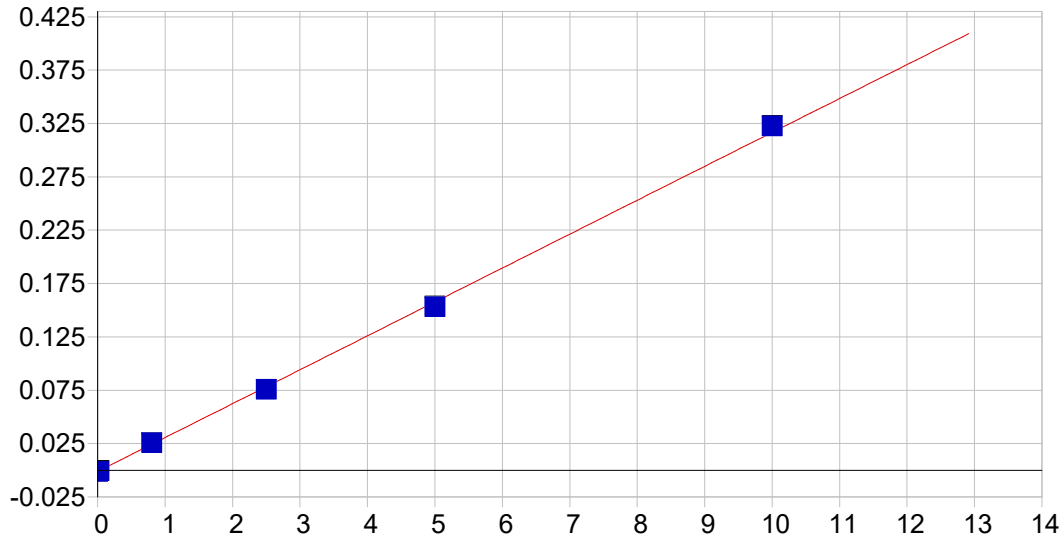


Si 288.158 {117}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000179	Re-Slope:	1.000000
A1 (Gain):	0.006127	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999741	Status:	OK.
Std Error of Est:	0.000015		
Predicted MDL:	0.006600		
Predicted MQL:	0.021999		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00018	.000	1
S1	.40000	.36040	-.040	-9.90	.00239	.000	1
S3	2.5000	2.5530	.053	2.12	.01605	.000	1
S4	5.0000	4.9432	-.057	-1.14	.03093	.000	1
S5	10.000	9.9845	-.016	-.155	.06228	.000	1
S2	.80000	.85837	.058	7.30	.00551	.000	1

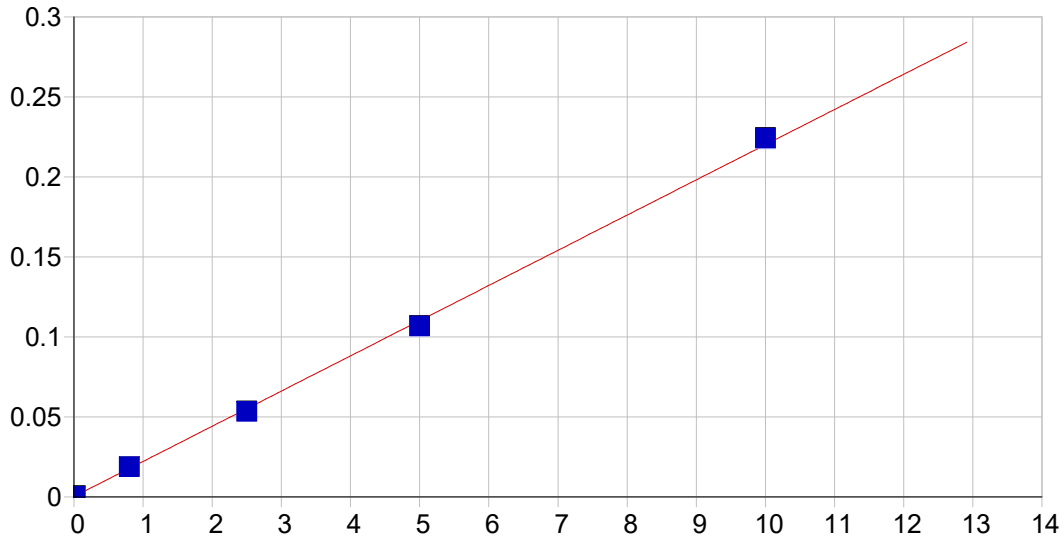


P 177.495 {490}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001165	Re-Slope:	1.000000
A1 (Gain):	0.031779	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999642	Status:	OK.
Std Error of Est:	0.000020		
Predicted MDL:	0.002806		
Predicted MQL:	0.009354		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00116	.000	1
S1	.02000	.01720	-.003	-14.0	-.00062	.000	1
S3	2.5000	2.4207	-.079	-3.17	.07575	.000	1
S4	5.0000	4.8526	-.147	-2.95	.15302	.001	1
S5	10.000	10.185	.185	1.85	.32246	.000	1
S2	.80000	.84406	.044	5.51	.02565	.000	1

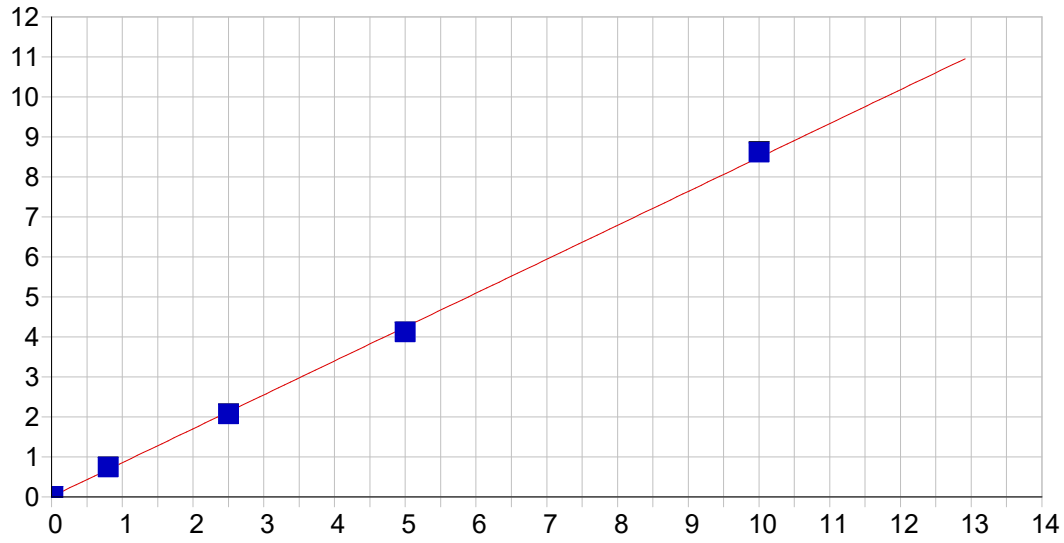


S 182.034 {485}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000183	Re-Slope:	1.000000
A1 (Gain):	0.021994	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999625	Status:	OK.
Std Error of Est:	0.000014		
Predicted MDL:	0.003449		
Predicted MQL:	0.011496		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00018	.000	1
S1	.02000	.02106	.001	5.29	.00063	.000	1
S3	2.5000	2.4197	-.080	-3.21	.05326	.000	1
S4	5.0000	4.8459	-.154	-3.08	.10648	.000	1
S5	10.000	10.185	.185	1.85	.22363	.000	1
S2	.80000	.84788	.048	5.98	.01879	.000	1

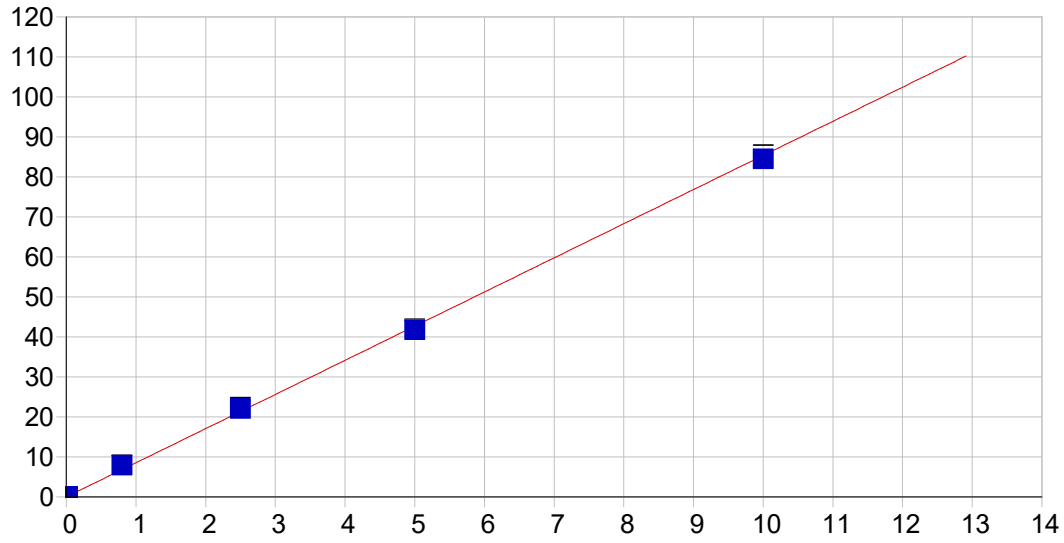


Li 670.784 { 50}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.008056	Re-Slope:	1.000000
A1 (Gain):	0.847660	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999615	Status:	OK.
Std Error of Est:	0.000551		
Predicted MDL:	0.001411		
Predicted MQL:	0.004702		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00806	.000	1
S5	10.000	10.152	.152	1.52	8.6173	.016	1
S4	5.0000	4.8534	-.147	-2.93	4.1242	.007	1
S3	2.5000	2.4307	-.069	-2.77	2.0695	.007	1
S1	.02000	.01831	-.002	-8.47	.02384	.000	1
S2	.80000	.86608	.066	8.26	.74254	.002	1

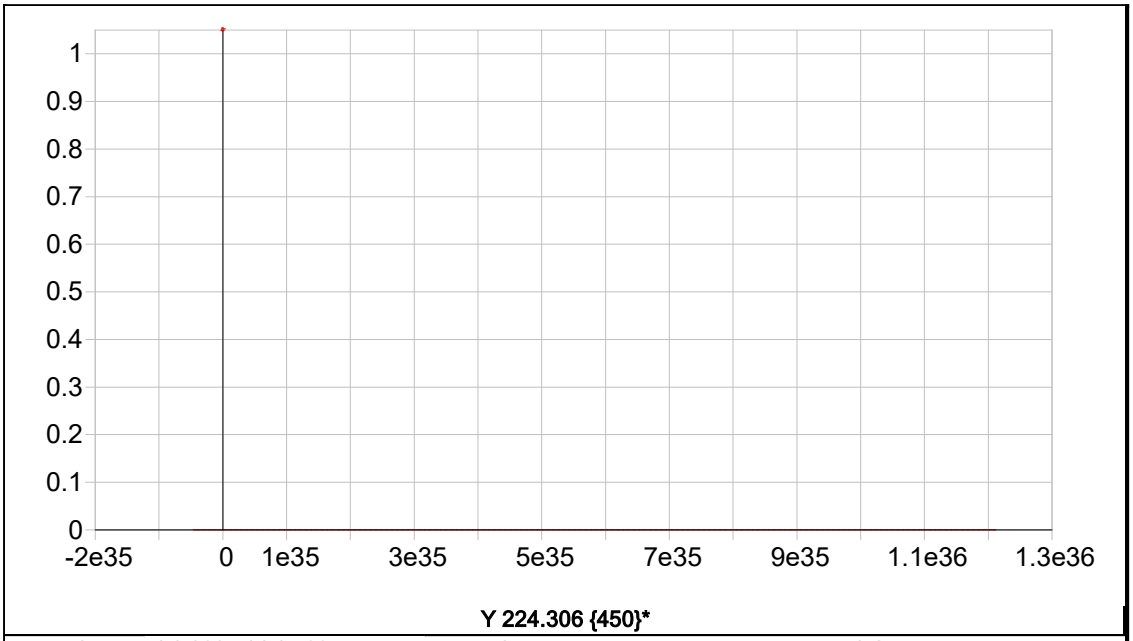


Sr 407.771 { 83}

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000656	Re-Slope:	1.000000
A1 (Gain):	8.536549	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999256	Status:	OK.
Std Error of Est:	0.007725		
Predicted MDL:	0.000057		
Predicted MQL:	0.000189		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00063	.000	1
S1	.02000	.01972	-.000	-1.38	.16978	.000	1
S3	2.5000	2.5874	.087	3.50	22.107	.310	1
S4	5.0000	4.8883	-.112	-2.23	41.768	.202	1
S5	10.000	9.8959	-.104	-1.04	84.552	.996	1
S2	.80000	.92865	.129	16.1	7.9341	.011	1

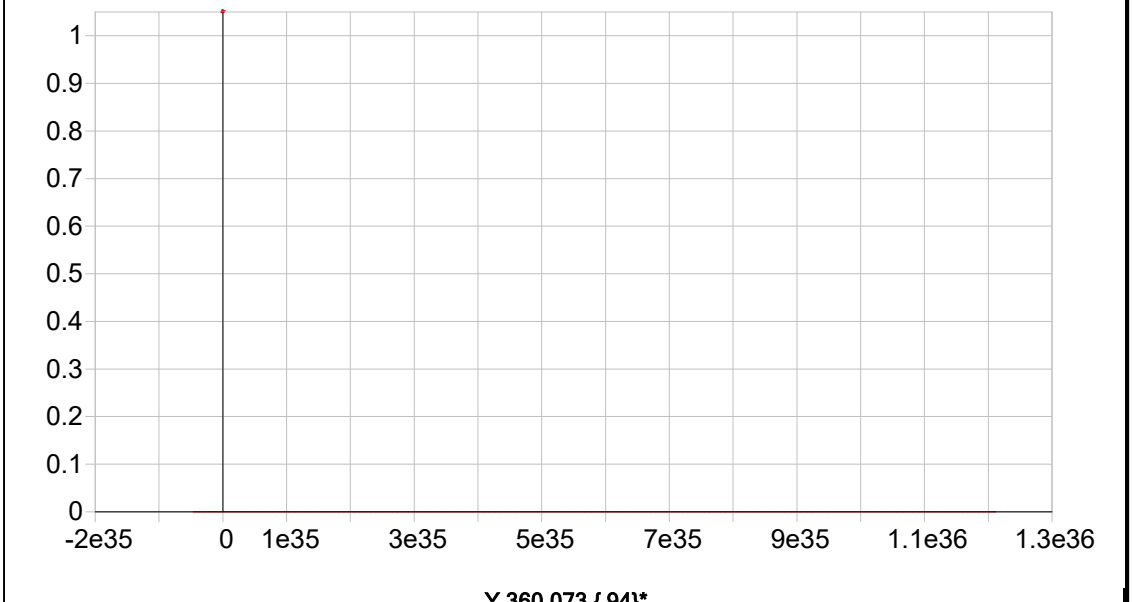


Y 224.306 {450}*

Date of Fit:	4/2/2025 14:15:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.000000	Status:	Warning Zero Gain
Std Error of Est:	0.000000		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

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



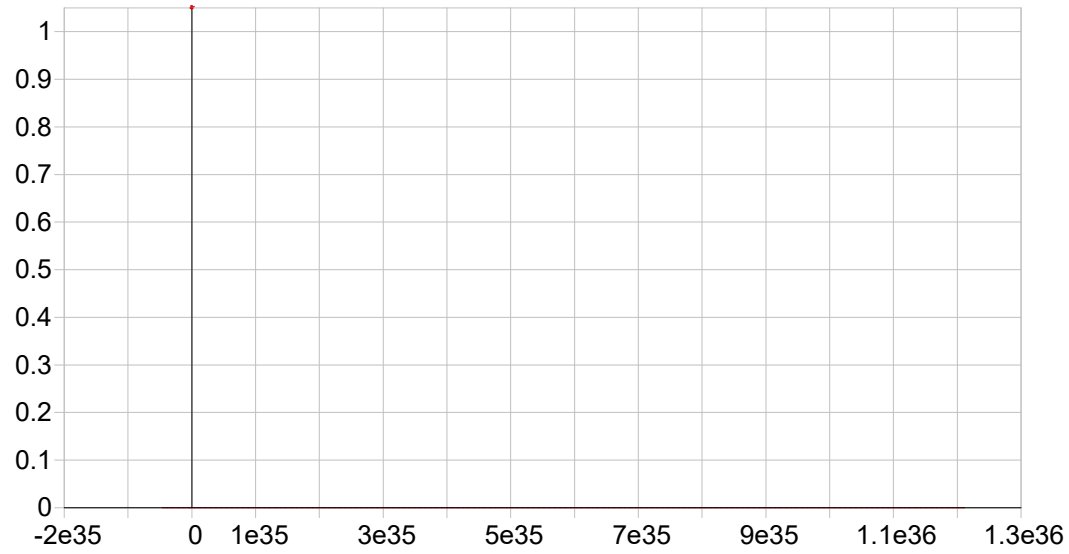
Y 360.073 { 94}*

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

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

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

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

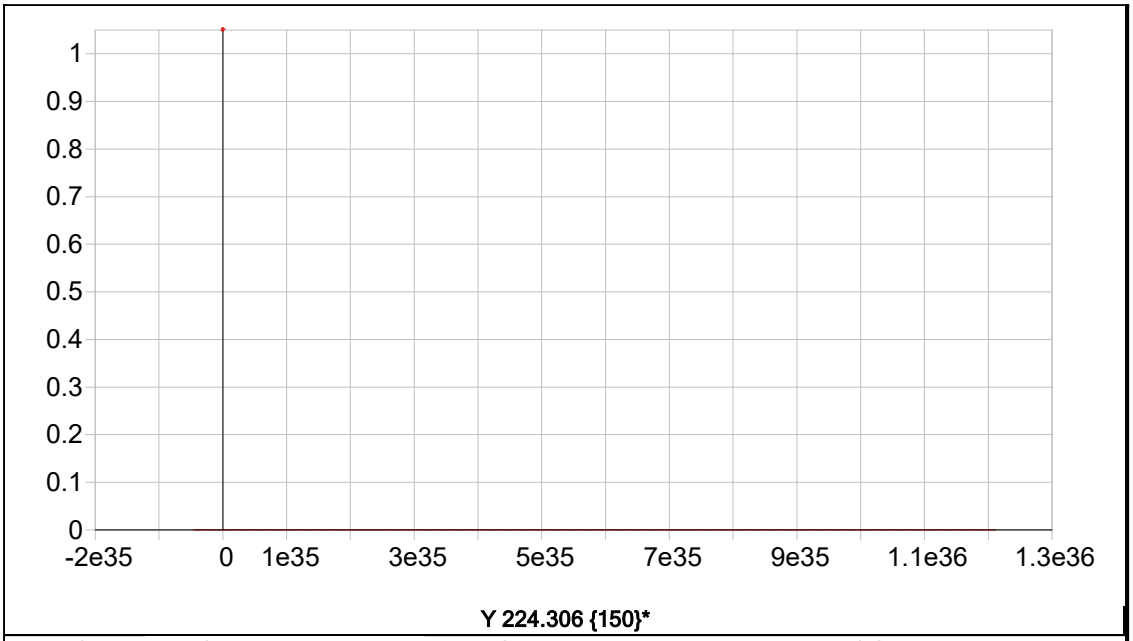


Y 371.030 { 91}*

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

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.000000	Status:	Warning Zero Gain
Std Error of Est:	0.000000		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

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

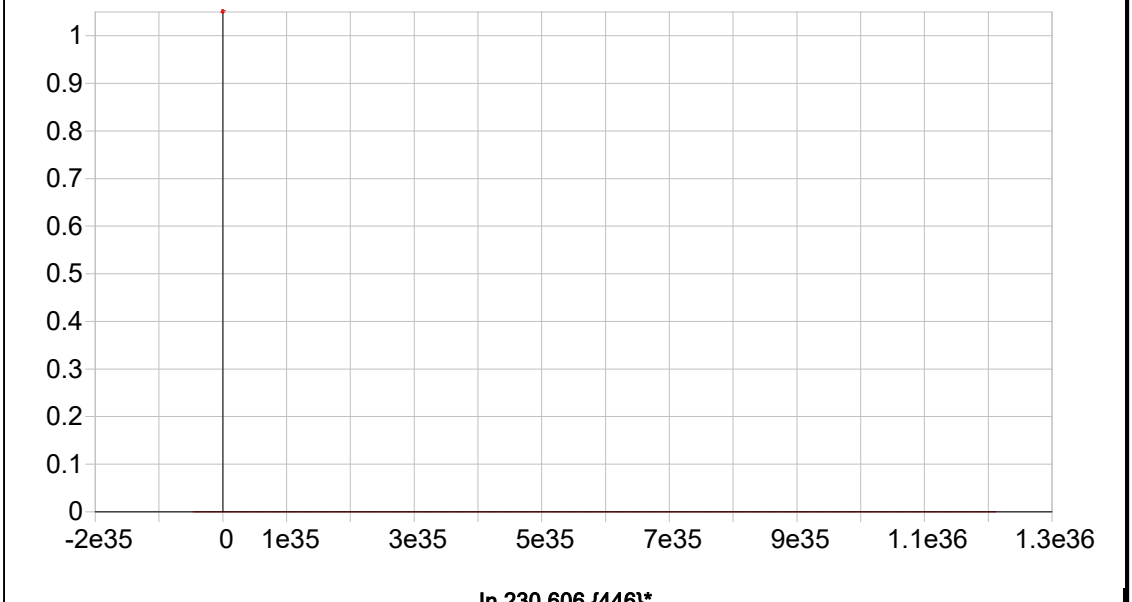


Y 224.306 {150}*

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

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.000000	Status:	Warning Zero Gain
Std Error of Est:	0.000000		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

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



In 230.606 {446}*

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

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

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

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: S0 Acquired: 4/2/2025 11:40:52 Type: Cal
Method: NON EPA-6010-200.7(v2877) 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	-.00007	-.00011	-.00024	.00020	.00028	.00069	.02715	-.00004
Stddev	.00006	.00010	.00024	.00008	.00026	.00017	.00173	.00009
%RSD	92.625	89.231	100.58	39.592	95.265	25.167	6.3816	194.69
#1	-.00013	-.00006	-.00024	.00025	.00020	.00070	.02807	-.00007
#2	-.00008	-.00005	-.00047	.00011	.00006	.00085	.02822	-.00011
#3	-.00000	-.00023	.00000	.00023	.00057	.00051	.02515	.00005

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	.00001	.00036	.00009	.00010	-.00072	.00010	.00209	-.00026
Stddev	.00009	.00027	.00004	.00012	.00003	.00001	.00010	.00014
%RSD	1658.8	73.701	40.076	128.01	3.7146	11.448	4.9363	55.528
#1	.00005	.00053	.00012	.00008	-.00074	.00011	.00198	-.00037
#2	-.00010	.00050	.00005	.00023	-.00069	.00010	.00217	-.00030
#3	.00007	.00005	.00010	-.00002	-.00073	.00009	.00214	-.00010

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00011	-.00086	.00246	-.00014	.01030	.00027	.00620	.00013
Stddev	.00011	.00003	.00018	.00013	.00014	.00012	.00018	.00002
%RSD	103.50	3.4415	7.3779	95.659	1.3127	45.863	2.8737	18.195
#1	-.00023	-.00082	.00225	-.00017	.01024	.00034	.00633	.00015
#2	-.00003	-.00087	.00258	.00001	.01021	.00034	.00628	.00010
#3	-.00006	-.00088	.00254	-.00025	.01046	.00013	.00600	.00013

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	.00031	.00203	.00018	-.00116	.00018	.00806	.00063
Stddev	.00005	.00006	.00001	.00004	.00004	.00043	.00040
%RSD	15.178	3.0088	6.6994	3.1325	22.884	5.3303	63.553
#1	.00027	.00209	.00019	-.00112	.00023	.00841	.00065
#2	.00036	.00202	.00017	-.00119	.00016	.00758	.00022
#3	.00029	.00197	.00017	-.00118	.00016	.00818	.00102

Sample Name: S0 Acquired: 4/2/2025 11:40:52 Type: Cal
Method: NON EPA-6010-200.7(v2877) 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	3309.5	72171.	15875.	3032.8	5259.3
Stddev	6.3	235.	90.	4.5	14.8
%RSD	.18930	.32584	.56761	.14882	.28134
#1	3311.6	72248.	15962.	3027.6	5268.9
#2	3314.4	71907.	15782.	3035.0	5266.9
#3	3302.4	72359.	15879.	3035.8	5242.3

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: S1 Acquired: 4/2/2025 11:45:13 Type: Cal
Method: NON EPA-6010-200.7(v2877) 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	.00081	.00193	.00195	.00136	.00681	.00878	.13451	.01730
Stddev	.00006	.00002	.00012	.00010	.00014	.00026	.00093	.00013
%RSD	6.8314	1.2839	6.3765	7.1928	2.0412	2.9505	.69255	.73960
#1	.00083	.00190	.00204	.00147	.00696	.00907	.13464	.01720
#2	.00085	.00195	.00199	.00129	.00668	.00870	.13353	.01744
#3	.00074	.00194	.00180	.00132	.00681	.00857	.13538	.01725

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	.01207	.10617	.00168	.02164	.01387	.00057	.01139	.02651
Stddev	.00022	.00030	.00002	.00015	.00011	.00001	.00014	.00015
%RSD	1.8500	.27886	1.1509	.70443	.81281	1.8299	1.2156	.58000
#1	.01181	.10585	.00168	.02181	.01382	.00056	.01123	.02658
#2	.01223	.10621	.00166	.02158	.01379	.00057	.01146	.02662
#3	.01217	.10644	.00170	.02153	.01400	.00058	.01149	.02633

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	.02326	.00117	.04658	.00454	.10403	.01420	.03464	.11963
Stddev	.00019	.00007	.00045	.00015	.00068	.00026	.00030	.00012
%RSD	.81381	6.2462	.97425	3.2349	.64920	1.8355	.87191	.09842
#1	.02317	.00117	.04619	.00439	.10453	.01413	.03470	.11952
#2	.02348	.00125	.04708	.00468	.10430	.01449	.03431	.11963
#3	.02313	.00110	.04648	.00456	.10326	.01398	.03490	.11975

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	.00415	.01660	.00239	-.00062	.00063	.02384	.16978
Stddev	.00009	.00026	.00003	.00008	.00006	.00026	.00030
%RSD	2.1166	1.5668	1.1646	12.934	10.210	1.1052	.17512
#1	.00423	.01636	.00236	-.00054	.00059	.02366	.16956
#2	.00405	.01656	.00240	-.00070	.00070	.02415	.16965
#3	.00417	.01688	.00241	-.00062	.00059	.02373	.17012

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: S1 Acquired: 4/2/2025 11:45:13 Type: Cal
Method: NON EPA-6010-200.7(v2877) 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	3234.2	71954.	15532.	3065.6	5040.8
Stddev	6.5	419.	37.	17.9	11.4
%RSD	.20089	.58214	.24130	.58497	.22551
#1	3241.7	71831.	15500.	3067.7	5051.6
#2	3230.6	71610.	15573.	3046.7	5041.8
#3	3230.3	72420.	15522.	3082.3	5028.9

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: S2 Acquired: 4/2/2025 11:49:34 Type: Cal
Method: NON EPA-6010-200.7(v2877) 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	.04308	.05138	.16390	.04859	.11538	.13844	2.0109	.13144
Stddev	.00006	.00038	.00044	.00031	.00049	.00022	.0013	.00040
%RSD	.13285	.74701	.26928	.63982	.42758	.16072	.06315	.30435
#1	.04301	.05126	.16364	.04838	.11580	.13830	2.0095	.13156
#2	.04311	.05181	.16364	.04845	.11484	.13870	2.0117	.13178
#3	.04311	.05107	.16441	.04895	.11551	.13833	2.0116	.13100

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	.91848	.23796	.03024	.32722	.15071	.00452	.24425	.05600
Stddev	.00136	.00083	.00009	.00066	.00039	.00004	.00053	.00027
%RSD	.14776	.34743	.29389	.20020	.25870	.94030	.21641	.48519
#1	.91823	.23702	.03019	.32722	.15077	.00456	.24382	.05628
#2	.91727	.23829	.03034	.32657	.15030	.00452	.24484	.05573
#3	.91995	.23857	.03019	.32788	.15107	.00447	.24410	.05599

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	.26820	.04405	.09908	.05272	1.0155	.03023	.27482	.54447
Stddev	.00039	.00005	.00024	.00027	.0020	.00007	.00098	.00226
%RSD	.14407	.10804	.24421	.51459	.19705	.21948	.35678	.41593
#1	.26841	.04401	.09935	.05245	1.0134	.03024	.27373	.54333
#2	.26775	.04405	.09892	.05300	1.0173	.03029	.27563	.54301
#3	.26843	.04410	.09895	.05272	1.0160	.03016	.27511	.54708

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	.08833	.32917	.00551	.02565	.01879	.74254	7.9341
Stddev	.00013	.00070	.00002	.00005	.00004	.00238	.0115
%RSD	.14415	.21389	.44145	.19375	.20620	.32072	.14485
#1	.08826	.32978	.00550	.02571	.01882	.74102	7.9258
#2	.08826	.32840	.00554	.02563	.01879	.74528	7.9472
#3	.08848	.32931	.00550	.02562	.01874	.74131	7.9294

Sample Name: S2 Acquired: 4/2/2025 11:49:34 Type: Cal
Method: NON EPA-6010-200.7(v2877) 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	3233.3	74642.	15477.	3148.3	5009.3
Stddev	10.8	239.	23.	6.7	17.6
%RSD	.33469	.31961	.14767	.21156	.35125
#1	3228.7	74375.	15473.	3149.2	4997.1
#2	3245.7	74717.	15455.	3141.2	5029.4
#3	3225.6	74834.	15501.	3154.4	5001.2

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: S3 Acquired: 4/2/2025 11:53:41 Type: Cal
Method: NON EPA-6010-200.7(v2877) 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	.11915	.14406	.45715	.13312	.31798	.38755	5.5342	.36949
Stddev	.00065	.00090	.00143	.00057	.00097	.00102	.0496	.00194
%RSD	.54665	.62277	.31358	.42926	.30528	.26258	.89552	.52522
#1	.11844	.14360	.45552	.13270	.31774	.38815	5.5882	.37128
#2	.11929	.14348	.45771	.13288	.31715	.38812	5.5235	.36976
#3	.11972	.14509	.45822	.13377	.31904	.38637	5.4909	.36743

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	2.5725	.66546	.08553	.91471	.41046	.01295	.67145	.15897
Stddev	.0079	.00165	.00031	.00312	.00112	.00006	.00277	.00014
%RSD	.30658	.24727	.35813	.34070	.27171	.47546	.41220	.08610
#1	2.5638	.66598	.08532	.91111	.40940	.01292	.66927	.15900
#2	2.5792	.66679	.08539	.91640	.41035	.01291	.67457	.15882
#3	2.5745	.66362	.08588	.91661	.41162	.01302	.67052	.15909

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	.74542	.12653	.28955	.14941	2.8845	.09035	.75752	1.4907
Stddev	.00223	.00048	.00162	.00034	.0181	.00059	.00254	.0050
%RSD	.29850	.37600	.55904	.22932	.62562	.65697	.33516	.33403
#1	.74298	.12608	.28809	.14978	2.8638	.08977	.75923	1.4867
#2	.74735	.12649	.28928	.14935	2.8922	.09031	.75872	1.4892
#3	.74592	.12703	.29129	.14910	2.8973	.09095	.75460	1.4963

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	.24667	.91362	.01605	.07575	.05326	2.0695	22.107
Stddev	.00045	.00238	.00022	.00016	.00027	.0069	.310
%RSD	.18055	.26100	1.3629	.21574	.49897	.33150	1.4004
#1	.24616	.91612	.01581	.07557	.05295	2.0760	22.416
#2	.24694	.91337	.01611	.07580	.05339	2.0702	22.108
#3	.24692	.91137	.01624	.07588	.05344	2.0623	21.797

Sample Name: S3 Acquired: 4/2/2025 11:53:41 Type: Cal
Method: NON EPA-6010-200.7(v2877) 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	3227.7	69918.	15324.	2996.1	4882.0
Stddev	8.9	332.	44.	16.4	6.6
%RSD	.27497	.47466	.29000	.54833	.13494
#1	3229.2	70251.	15290.	3015.0	4883.1
#2	3235.8	69915.	15307.	2988.3	4887.9
#3	3218.2	69587.	15374.	2985.1	4874.9

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: S4 Acquired: 4/2/2025 11:57:57 Type: Cal
Method: NON EPA-6010-200.7(v2877) 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	.23057	.27716	.88490	.25554	.61156	.75265	11.114	.72232
Stddev	.00009	.00250	.00066	.00089	.00074	.00052	.060	.00182
%RSD	.04038	.90341	.07466	.34881	.12112	.06915	.54217	.25171
#1	.23051	.27442	.88470	.25475	.61101	.75323	11.049	.72341
#2	.23053	.27773	.88436	.25538	.61126	.75221	11.125	.72022
#3	.23068	.27933	.88564	.25651	.61240	.75253	11.167	.72333

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	5.0328	1.3029	.16290	1.7845	.78692	.02520	1.2780	.31191
Stddev	.0031	.0027	.00053	.0015	.00019	.00007	.0017	.00047
%RSD	.06171	.21099	.32592	.08374	.02398	.25924	.13634	.15082
#1	5.0330	1.3058	.16345	1.7828	.78675	.02527	1.2773	.31138
#2	5.0296	1.3026	.16239	1.7849	.78689	.02517	1.2768	.31227
#3	5.0358	1.3003	.16285	1.7857	.78712	.02516	1.2800	.31208

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	1.4507	.24448	.55815	.29402	5.5059	.17726	1.4893	2.8489
Stddev	.0017	.00075	.00119	.00056	.0102	.00039	.0015	.0022
%RSD	.11873	.30654	.21407	.19111	.18570	.22128	.09897	.07726
#1	1.4523	.24463	.55950	.29465	5.5024	.17770	1.4884	2.8465
#2	1.4489	.24367	.55720	.29381	5.4978	.17710	1.4885	2.8496
#3	1.4509	.24514	.55776	.29359	5.5173	.17696	1.4910	2.8507

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	.48186	1.7947	.03093	.15302	.10648	4.1242	41.768
Stddev	.00130	.0047	.00013	.00080	.00029	.0068	.202
%RSD	.27079	.26067	.42231	.52603	.26812	.16476	.48417
#1	.48058	1.7988	.03086	.15260	.10628	4.1254	41.557
#2	.48181	1.7956	.03084	.15251	.10635	4.1303	41.961
#3	.48318	1.7896	.03108	.15395	.10680	4.1169	41.785

Sample Name: S4 Acquired: 4/2/2025 11:57:57 Type: Cal
Method: NON EPA-6010-200.7(v2877) 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	3154.0	69039.	14887.	2923.6	4665.3
Stddev	6.8	57.	30.	4.9	8.6
%RSD	.21488	.08228	.20071	.16740	.18406
#1	3147.4	69005.	14912.	2928.7	4656.9
#2	3153.6	69105.	14854.	2923.2	4664.9
#3	3160.9	69008.	14896.	2919.0	4674.1

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: S5 Acquired: 4/2/2025 12:02:09 Type: Cal
Method: NON EPA-6010-200.7(v2877) 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	.47027	.54117	1.7910	.51596	1.2455	1.5579	22.932	1.4755
Stddev	.00215	.00453	.0020	.00231	.0070	.0026	.178	.0048
%RSD	.45777	.83644	.11034	.44860	.56406	.16842	.77638	.32334
#1	.46847	.54070	1.7910	.51416	1.2402	1.5552	22.836	1.4782
#2	.46969	.54591	1.7891	.51515	1.2429	1.5583	23.137	1.4700
#3	.47266	.53690	1.7930	.51857	1.2535	1.5604	22.822	1.4784

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	10.231	2.6786	.31977	3.6442	1.5733	.04976	2.6221	.64957
Stddev	.013	.0040	.00040	.0048	.0078	.00034	.0073	.00147
%RSD	.13142	.14749	.12429	.13103	.49765	.68478	.27652	.22621
#1	10.235	2.6830	.31993	3.6456	1.5674	.04966	2.6247	.64906
#2	10.216	2.6754	.32007	3.6389	1.5703	.05014	2.6140	.64843
#3	10.243	2.6773	.31932	3.6482	1.5822	.04949	2.6278	.65123

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	2.9416	.48983	1.1264	.60778	10.822	.36151	3.0530	5.6711
Stddev	.0054	.00150	.0050	.00141	.017	.00173	.0099	.0233
%RSD	.18207	.30537	.43901	.23206	.15592	.47890	.32531	.41037
#1	2.9436	.49110	1.1237	.60743	10.838	.36050	3.0604	5.6600
#2	2.9356	.49021	1.1321	.60658	10.822	.36351	3.0417	5.6555
#3	2.9457	.48819	1.1234	.60934	10.805	.36053	3.0569	5.6979

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	.97340	3.7276	.06228	.32246	.22363	8.6173	84.552
Stddev	.00145	.0034	.00024	.00035	.00040	.0160	.996
%RSD	.14886	.09056	.38502	.10886	.18020	.18578	1.1785
#1	.97437	3.7248	.06200	.32283	.22322	8.5998	85.661
#2	.97173	3.7268	.06243	.32243	.22402	8.6312	84.265
#3	.97409	3.7313	.06240	.32213	.22365	8.6210	83.731

Sample Name: S5 Acquired: 4/2/2025 12:02:09 Type: Cal
Method: NON EPA-6010-200.7(v2877) 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	3040.5	68752.	14318.	2850.2	4395.3
Stddev	11.0	236.	40.	7.2	4.4
%RSD	.36043	.34349	.27945	.25333	.10080
#1	3049.1	68658.	14272.	2843.0	4398.7
#2	3044.4	68578.	14344.	2850.1	4397.0
#3	3028.2	69021.	14339.	2857.4	4390.3

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: ICV01 Acquired: 4/2/2025 15:20:04 Type: Unk
Method: NON EPA-6010-200.7(v2878) 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	1.041650	.9954821	1.017343	1.008243	.9834145	2.444998
Stddev	.003292	.0150121	.001281	.005997	.0002475	.007806
%RSD	.3160096	1.508026	.1259286	.5947555	.0251640	.3192657
#1	1.037976	.9787195	1.016244	1.001754	.9834232	2.453672
#2	1.042646	1.007688	1.017036	1.013581	.9831627	2.438539
#3	1.044329	1.000039	1.018750	1.009393	.9836574	2.442784

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5134406	.5259068	.5221860	10.06955	.5017097	.5231226
Stddev	.0027727	.0023448	.0013634	.01318	.0082953	.0010339
%RSD	.5400297	.4458481	.2610887	.1309028	1.653407	.1976436
#1	.5162776	.5263744	.5219370	10.06005	.5077455	.5224575
#2	.5133073	.5233635	.5209642	10.06399	.5051330	.5225965
#3	.5107369	.5279826	.5236566	10.08460	.4922506	.5243138

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5071478	9.998447	.5452533	5.940752	.5481717	.2591191
Stddev	.0011465	.191752	.0043749	.052844	.0010318	.0034388
%RSD	.2260610	1.917817	.8023560	.8895235	.1882270	1.327095
#1	.5064094	10.11053	.5444544	5.917006	.5486022	.2610149
#2	.5065654	10.10778	.5413330	5.903947	.5469944	.2611927
#3	.5084685	9.77704	.5499726	6.001304	.5489186	.2551497

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.14939	.4806894	.9914761	10.00338	2.490633	2.471331
Stddev	.19518	.0016550	.0124780	.19394	.021462	.002195
%RSD	1.923119	.3443072	1.258528	1.938701	.8617142	.0888014
#1	10.25088	.4823054	1.001973	10.11609	2.491833	2.468841
#2	10.27291	.4807648	.994776	10.11461	2.468596	2.472985
#3	9.92436	.4789979	.977680	9.77944	2.511470	2.472168

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: ICV01 Acquired: 4/2/2025 15:20:04 Type: Unk
Method: NON EPA-6010-200.7(v2878) 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	2.606659	2.549898	F 3.885322	2.528912	2.616334	2.612162
Stddev	.007437	.004763	.059673	.011917	.009365	.012008
%RSD	.2853120	.1868089	1.535846	.4712451	.3579379	.4596956
#1	2.601161	2.553839	3.931559	2.520928	2.609896	2.621003
#2	2.603696	2.551250	3.906445	2.523198	2.612029	2.616992
#3	2.615121	2.544605	3.817961	2.542610	2.627078	2.598491

Elem	Sr4077
Units	ppm
Avg	2.619596
Stddev	.019001
%RSD	.7253458
#1	2.597941
#2	2.627366
#3	2.633480

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3154.109	70819.83	15085.83	3017.534	4863.426
Stddev	5.800	1015.70	79.98	40.575	9.574
%RSD	.1838994	1.434207	.5301365	1.344633	.1968511
#1	3147.414	70065.84	15073.32	2991.275	4855.136
#2	3157.608	70418.83	15171.32	2997.062	4873.904
#3	3157.306	71974.82	15012.84	3064.267	4861.239

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: LLICV01 Acquired: 4/2/2025 15:41:23 Type: Unk
Method: NON EPA-6010-200.7(v2876) 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	.0197531	.0406824	.0107917	.0216755	.0512129	.0977545	.0897146
Stddev	.0015830	.0005561	.0009689	.0027042	.0013160	.0043718	.0005947
%RSD	8.013692	1.366886	8.977970	12.47565	2.569683	4.472234	.6629260
#1	.0189425	.0403035	.0108022	.0247383	.0508530	.0991067	.0894674
#2	.0215772	.0413208	.0117552	.0196179	.0501143	.1012905	.0903931
#3	.0187397	.0404229	.0098176	.0206703	.0526714	.0928664	.0892833

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0057024	.0056815	1.960226	.0098382	.0284030	.0225098	.0955297
Stddev	.0000585	.0000431	.012163	.0003129	.0002415	.0004028	.0015353
%RSD	1.025669	.7588631	.6205114	3.180636	.8503938	1.789522	1.607162
#1	.0056398	.0057255	1.960426	.0101501	.0284565	.0224499	.0939395
#2	.0057557	.0056795	1.972288	.0098405	.0286134	.0221402	.0970035
#3	.0057118	.0056393	1.947964	.0095242	.0281392	.0229392	.0956463

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0177812	2.063556	.0387615	.0104048	1.899054	.0394964	.0414405
Stddev	.0000824	.008949	.0001169	.0002176	.010584	.0007638	.0003649
%RSD	.4634546	.4336880	.3015208	2.091401	.5573071	1.933712	.8806202
#1	.0178595	2.057316	.0386275	.0101864	1.900739	.0403584	.0410261
#2	.0177891	2.073809	.0388146	.0104066	1.908694	.0389039	.0415815
#3	.0176952	2.059541	.0388423	.0106216	1.887729	.0392270	.0417139

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.828951	.0811739	.2074667	.0383969	.0390678	.3507538	.0169649
Stddev	.008771	.0004846	.0000551	.0009775	.0003067	.0041455	.0017500
%RSD	.4795595	.5969729	.0265627	2.545866	.7851297	1.181880	10.31525
#1	1.824819	.0816227	.2074287	.0372688	.0392983	.3515484	.0177950
#2	1.839025	.0806601	.2074416	.0389282	.0387197	.3544445	.0181454
#3	1.823009	.0812389	.2075299	.0389938	.0391856	.3462686	.0149544

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: LLICV01 Acquired: 4/2/2025 15:41:23 Type: Unk
Method: NON EPA-6010-200.7(v2876) 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	.0203203	.0185100	.0199935
Stddev	.0030050	.0003113	.0000274
%RSD	14.78832	1.681528	.1367805
#1	.0237875	.0181922	.0200161
#2	.0184663	.0188143	.0200013
#3	.0187072	.0185235	.0199631

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3279.711	73031.41	15589.16	3116.927	5196.427
Stddev	3.716	383.66	37.20	25.654	9.062
%RSD	.1133159	.5253295	.2386160	.8230500	.1743987
#1	3283.657	72692.58	15546.23	3100.897	5206.883
#2	3279.197	72953.68	15611.82	3103.368	5191.555
#3	3276.278	73447.98	15609.43	3146.515	5190.843

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: ICB01 Acquired: 4/2/2025 15:51:08 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	-.002154	.0002804	.0006452	.0014465	-.001245	-.001012	-.000859
Stddev	.001717	.0005190	.0011944	.0008664	.000944	.005057	.000849
%RSD	79.70934	185.0939	185.1144	59.89768	75.78836	499.9440	98.83975
#1	-.003407	.0004660	-.000611	.0004482	-.000171	.001321	-.001818
#2	-.002859	.0006812	.001767	.0018896	-.001625	.002458	-.000202
#3	-.000197	-.000306	.000780	.0020019	-.001939	-.006814	-.000557

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000047	-.000036	.0033887	-.000243	-.000092	.0003047	-.002046
Stddev	.000064	.000065	.0054049	.000260	.000125	.0002516	.001667
%RSD	136.3009	178.9921	159.4998	106.9080	136.0379	82.57911	81.46420
#1	-.000042	-.000006	.0066312	-.000523	-.000084	.0005487	-.000140
#2	-.000113	-.000110	-.002851	-.000007	.000029	.0000461	-.002766
#3	.000014	.000008	.006386	-.000201	-.000220	.0003193	-.003231

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000165	.0086554	-.000221	.0005734	-.037681	.0003374	-.000154
Stddev	.000310	.0062311	.000148	.0005407	.003475	.0012912	.000103
%RSD	187.4479	71.99037	66.77982	94.30727	9.222988	382.7161	67.35602
#1	-.000378	.0037478	-.000389	.0005823	-.041367	-.000183	-.000150
#2	-.000308	.0065526	-.000110	.0000282	-.034464	.001808	-.000052
#3	.000190	.0156659	-.000165	.0011095	-.037213	-.000612	-.000259

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.083484	-.017757	-.000374	-.000366	.0005901	.0007809	-.002246
Stddev	.030460	.000643	.000162	.000213	.0007500	.0044052	.001624
%RSD	36.48545	3.619479	43.42061	58.25245	127.0979	564.1482	72.32669
#1	-.114436	-.017766	-.000460	-.000457	.0005894	-.001179	-.001285
#2	-.053543	-.017109	-.000186	-.000122	-.000160	-.002304	-.001331
#3	-.082473	-.018395	-.000474	-.000518	.001340	.005826	-.004122

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: ICB01 Acquired: 4/2/2025 15:51:08 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	-.000624	-.000028	-.000081
Stddev	.002447	.000877	.000025
%RSD	392.3075	3120.655	30.49150
#1	.000437	.000777	-.000053
#2	.001114	-.000963	-.000095
#3	-.003422	.000102	-.000096

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3289.444	74407.21	15379.53	3135.056	5220.680
Stddev	9.934	450.63	52.38	12.382	20.500
%RSD	.3020100	.6056229	.3405751	.3949678	.3926665
#1	3296.596	74649.65	15360.20	3141.598	5236.973
#2	3278.101	74684.72	15339.57	3142.794	5197.663
#3	3293.636	73887.26	15438.83	3120.774	5227.404

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: CRI01 Acquired: 4/2/2025 15:55:25 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	.0190209	.0396138	.0119100	.0217319	.0493766	.0973052	.0912698
Stddev	.0013130	.0006697	.0007709	.0005765	.0013076	.0067683	.0000896
%RSD	6.902678	1.690694	6.472997	2.652821	2.648298	6.955725	.0981930
#1	.0182493	.0391015	.0115802	.0217529	.0478751	.0918749	.0912841
#2	.0205369	.0393681	.0127910	.0211451	.0502659	.1048880	.0911739
#3	.0182765	.0403717	.0113589	.0222976	.0499887	.0951528	.0913514

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0060171	.0057218	1.958101	.0097507	.0287660	.0220810	.0946259
Stddev	.0000510	.0000116	.014937	.0003712	.0001182	.0003097	.0020237
%RSD	.8475202	.2025777	.7628126	3.806591	.4110474	1.402509	2.138584
#1	.0060739	.0057162	1.975348	.0100088	.0288979	.0217810	.0953875
#2	.0060020	.0057141	1.949350	.0093253	.0286694	.0220626	.0961583
#3	.0059753	.0057351	1.949605	.0099179	.0287307	.0223995	.0923320

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0174684	2.071439	.0386762	.0099773	1.814608	.0389225	.0418018
Stddev	.0001966	.001768	.0001826	.0001913	.016173	.0019348	.0003111
%RSD	1.125233	.0853397	.4720934	1.917273	.8912913	4.971031	.7442047
#1	.0172715	2.073395	.0386141	.0097653	1.829264	.0366925	.0415022
#2	.0176646	2.070965	.0388817	.0100296	1.797256	.0401565	.0421232
#3	.0174691	2.069956	.0385327	.0101371	1.817304	.0399183	.0417801

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.757589	.0857503	.2037242	.0381425	.0383204	.3417371	.0144173
Stddev	.023836	.0003031	.0004529	.0003367	.0003027	.0030905	.0018661
%RSD	1.356154	.3534152	.2223032	.8827070	.7898194	.9043611	12.94349
#1	1.730568	.0856097	.2041079	.0383298	.0382228	.3397679	.0123264
#2	1.766569	.0860981	.2032246	.0377538	.0386598	.3452991	.0150119
#3	1.775630	.0855430	.2038401	.0383440	.0380786	.3401442	.0159137

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: CRI01 Acquired: 4/2/2025 15:55:25 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	.0181754	.0187145	.0195482
Stddev	.0023196	.0008435	.0000687
%RSD	12.76246	4.507135	.3512890
#1	.0160361	.0184540	.0196266
#2	.0178493	.0180320	.0195193
#3	.0206408	.0196575	.0194987

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3298.665	73062.59	15088.51	3115.234	5152.142
Stddev	11.970	212.92	70.50	9.651	18.058
%RSD	.3628736	.2914152	.4672504	.3097996	.3505022
#1	3287.440	72837.77	15040.36	3117.390	5145.277
#2	3311.262	73088.83	15055.74	3123.624	5172.626
#3	3297.292	73261.17	15169.43	3104.687	5138.522

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: ICSA01 Acquired: 4/2/2025 15:59:43 Type: Unk
Method: NON EPA-6010-200.7(v2879) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010832	.0116515	.0083754	-.001428	-.001772	240.3312	.0040475
Stddev	.0031090	.0056727	.0016052	.006682	.000214	.6711	.0005290
%RSD	287.0149	48.68639	19.16494	467.8452	12.09806	.2792388	13.06929
#1	.0030600	.0083017	.0091183	.002530	-.001789	240.1719	.0046277
#2	-.002500	.0182011	.0065334	.002328	-.001978	241.0677	.0035920
#3	.002690	.0084516	.0094745	-.009142	-.001550	239.7542	.0039229

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010993	-.000588	225.2556	.0546258	.0013695	-.008993	91.29159
Stddev	.0000473	.000141	.6039	.0003535	.0003988	.000400	.61023
%RSD	4.304529	23.90604	.2681160	.6471348	29.11569	4.446732	.6684440
#1	.0010585	-.000457	224.5814	.0547076	.0010019	-.009269	90.71127
#2	.0011512	-.000736	225.4385	.0542386	.0013133	-.009175	91.23562
#3	.0010883	-.000571	225.7470	.0549313	.0017934	-.008535	91.92788

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0040769	245.4372	.0025445	-.003969	.0170396	.0051782	.0047180
Stddev	.0001827	.6663	.0003559	.000132	.0103032	.0011352	.0002479
%RSD	4.481542	.2714628	13.98760	3.325798	60.46626	21.92173	5.253829
#1	.0042858	244.8012	.0027966	-.003878	.0075601	.0056869	.0044654
#2	.0039978	245.3803	.0021374	-.003910	.0155535	.0038777	.0049608
#3	.0039470	246.1300	.0026995	-.004121	.0280051	.0059701	.0047278

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.010076	.0968344	-.000557	-.003508	-.001658	.0102150	.0017586
Stddev	.005553	.0014611	.000650	.000735	.000315	.0030286	.0048301
%RSD	55.11637	1.508871	116.6761	20.94766	18.98065	29.64867	274.6549
#1	-.013637	.0953091	-.000540	-.002946	-.001943	.0133981	.0072263
#2	-.012913	.0982215	.000084	-.004340	-.001711	.0098777	-.000022
#3	-.003677	.0969726	-.001215	-.003238	-.001320	.0073691	-.001928

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: ICSA01 Acquired: 4/2/2025 15:59:43 Type: Unk
Method: NON EPA-6010-200.7(v2879) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.011001	.0020687	.0153522
Stddev	.002240	.0004005	.0005476
%RSD	20.35740	19.36201	3.566865
#1	-.012542	.0023027	.0159730
#2	-.008432	.0016062	.0151458
#3	-.012030	.0022971	.0149378

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2940.423	65810.67	14442.91	2804.113	4184.326
Stddev	20.364	230.28	48.15	17.927	25.605
%RSD	.6925581	.3499062	.3333831	.6393151	.6119290
#1	2932.368	66069.16	14453.79	2802.576	4180.326
#2	2963.582	65735.41	14390.25	2787.004	4211.696
#3	2925.317	65627.45	14484.69	2822.759	4160.957

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: ICSAB01 Acquired: 4/2/2025 16:04:07 Type: Unk
Method: NON EPA-6010-200.7(v2879) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1138914	.1063795	.0562959	.0484315	.6363603	253.0365	.4797663
Stddev	.0016452	.0036519	.0021083	.0060584	.0037988	1.5058	.0006787
%RSD	1.444523	3.432926	3.745020	12.50930	.5969641	.5950757	.1414643
#1	.1137593	.1037793	.0549067	.0475713	.6397225	251.4034	.4793457
#2	.1155987	.1105546	.0587218	.0428491	.6322393	253.3361	.4794040
#3	.1123163	.1048045	.0552592	.0548740	.6371191	254.3699	.4805493

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4893400	1.008804	235.0752	.5681136	.5099451	.4981534	100.4696
Stddev	.0018053	.000471	.7151	.0010055	.0005791	.0010298	.3352
%RSD	.3689218	.0466793	.3042174	.1769896	.1135613	.2067319	.3336715
#1	.4913377	1.008315	235.3914	.5670729	.5096125	.4973879	100.1293
#2	.4878255	1.008844	234.2564	.5681879	.5106137	.4977481	100.4801
#3	.4888569	1.009254	235.5777	.5690798	.5096089	.4993242	100.7996

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4900846	254.5539	1.022520	.1889072	.0255991	.4746569	1.075193
Stddev	.0007909	.9565	.001157	.0002011	.0039033	.0014592	.003556
%RSD	.1613869	.3757361	.1131548	.1064527	15.24787	.3074184	.3307413
#1	.4891720	255.1244	1.021872	.1889715	.0211078	.4731987	1.077729
#2	.4905104	253.4497	1.021832	.1890682	.0281719	.4746551	1.076722
#3	.4905714	255.0876	1.023856	.1886818	.0275177	.4761170	1.071128

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.054395	1.044179	1.021841	1.012505	.9515233	.9106650	.9772796
Stddev	.038370	.000759	.002549	.003285	.0005619	.0140606	.0042509
%RSD	70.53861	.0726613	.2494163	.3244425	.0590562	1.543995	.4349724
#1	-.098451	1.043307	1.023070	1.013678	.9515739	.8953802	.9731988
#2	-.028302	1.044690	1.018911	1.015042	.9509377	.9230489	.9769577
#3	-.036433	1.044540	1.023542	1.008794	.9520582	.9135659	.9816823

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: ICSAB01 Acquired: 4/2/2025 16:04:07 Type: Unk
Method: NON EPA-6010-200.7(v2879) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.028147	.9779504	.9857006
Stddev	.004474	.0059530	.0083930
%RSD	.4351909	.6087276	.8514779
#1	1.029710	.9712063	.9885657
#2	1.023101	.9824744	.9762502
#3	1.031631	.9801704	.9922859

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2834.113	63905.62	14971.43	2725.058	4061.107
Stddev	5.124	22.82	64.31	8.296	3.661
%RSD	.1807860	.0357078	.4295601	.3044375	.0901447
#1	2833.335	63911.70	14897.88	2717.020	4060.469
#2	2839.581	63880.38	15017.04	2724.565	4065.045
#3	2829.422	63924.78	14999.38	2733.590	4057.808

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: ICSADLX20 Acquired: 4/2/2025 16:12:49 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	-.003096	.0014975	.0002668	-.001132	-.001056	13.66327	.0003457
Stddev	.001056	.0018171	.0014883	.000618	.000986	.01585	.0004540
%RSD	34.10393	121.3370	557.7730	54.58460	93.40681	.1160271	131.3313
#1	-.002173	.0009216	.0005044	-.001742	-.001419	13.66320	-.000178
#2	-.002866	.0000382	-.001326	-.000506	.000060	13.67916	.000635
#3	-.004247	.0035328	.001622	-.001149	-.001809	13.64745	.000580

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001691	-.000221	13.44189	.0032135	.0001567	-.000469	5.476060
Stddev	.0000459	.000138	.00893	.0001755	.0003011	.000098	.017114
%RSD	27.15841	62.39109	.0664234	5.461052	192.2033	20.84771	.3125259
#1	.0001329	-.000379	13.45125	.0030360	.0001829	-.000571	5.483151
#2	.0002207	-.000124	13.44094	.0032174	-.000157	-.000460	5.488490
#3	.0001536	-.000159	13.43347	.0033869	.000444	-.000376	5.456541

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0082634	13.79126	.0002734	-.000063	-.042956	.0012532	.0065114
Stddev	.0001187	.01276	.0001629	.000392	.010231	.0008708	.0001638
%RSD	1.436101	.0925132	59.56620	625.1266	23.81744	69.48293	2.515091
#1	.0082078	13.78321	.0002208	-.000469	-.050385	.0002571	.0063340
#2	.0083997	13.80597	.0001434	.000314	-.047197	.0016329	.0065432
#3	.0081828	13.78460	.0004561	-.000033	-.031286	.0018697	.0066569

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.116005	-.010458	-.000159	.0011097	-.000170	.0065005	-.000416
Stddev	.000798	.000465	.000151	.0002454	.000088	.0027019	.002933
%RSD	.6882908	4.450481	94.48992	22.11628	51.44991	41.56373	704.6448
#1	-.115820	-.010580	-.000119	.0011642	-.000271	.0084527	-.003444
#2	-.116880	-.010850	-.000326	.0013232	-.000126	.0034169	.002412
#3	-.115316	-.009944	-.000033	.0008416	-.000113	.0076320	-.000217

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: ICSADLX20 Acquired: 4/2/2025 16:12:49 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	.0021254	-.000538	.0007707
Stddev	.0024545	.000786	.0000342
%RSD	115.4851	146.0363	4.433528
#1	.0021517	.000295	.0007541
#2	-.000342	-.001266	.0007481
#3	.004567	-.000643	.0008100

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3273.926	73842.90	15813.03	3125.098	5039.503
Stddev	10.360	230.01	39.51	8.039	10.648
%RSD	.3164533	.3114854	.2498560	.2572309	.2112979
#1	3276.734	73966.49	15858.64	3117.976	5037.062
#2	3282.593	73577.51	15789.33	3123.503	5051.159
#3	3262.451	73984.69	15791.12	3133.814	5030.286

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: ICSABDLX20 Acquired: 4/2/2025 16:18:04 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	.0024917	.0064575	.0037225	.0033397	.0306551	12.14544	.0240618
Stddev	.0019920	.0013714	.0004086	.0017957	.0018918	.01336	.0003376
%RSD	79.94581	21.23667	10.97726	53.76749	6.171170	.1099839	1.403094
#1	.0042243	.0053008	.0035565	.0039122	.0284793	12.13285	.0244269
#2	.0003152	.0060993	.0041880	.0013275	.0315755	12.15945	.0239976
#3	.0029356	.0079724	.0034229	.0047792	.0319106	12.14402	.0237609

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0249117	.0500133	12.14943	.0289664	.0251073	.0258406	5.128194
Stddev	.0001647	.0000735	.02225	.0005825	.0003153	.0002595	.050440
%RSD	.6613064	.1469416	.1831295	2.011012	1.255940	1.004342	.9835769
#1	.0247269	.0499288	12.17509	.0294092	.0247821	.0258069	5.177980
#2	.0249649	.0500482	12.13766	.0283065	.0251281	.0261154	5.129476
#3	.0250432	.0500628	12.13553	.0291835	.0254118	.0255996	5.077125

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0247630	12.42558	.0506555	.0091169	-.042383	.0252601	.0526251
Stddev	.0002352	.05939	.0003646	.0000226	.004535	.0006028	.0002446
%RSD	.9497283	.4779959	.7198050	.2480456	10.69899	2.386222	.4647099
#1	.0249976	12.49270	.0503612	.0091370	-.042759	.0258344	.0523969
#2	.0245273	12.40422	.0510634	.0090924	-.037673	.0246324	.0528832
#3	.0247641	12.37982	.0505418	.0091214	-.046718	.0253134	.0525950

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.116352	.0369848	.0505582	.0486751	.0486313	.0381365	.0445854
Stddev	.015008	.0004595	.0005864	.0006067	.0004597	.0025203	.0021159
%RSD	12.89873	1.242547	1.159840	1.246419	.9452512	6.608617	4.745809
#1	-.129994	.0369292	.0507142	.0481665	.0482817	.0380500	.0435173
#2	-.100276	.0365556	.0499096	.0493466	.0491520	.0356606	.0432163
#3	-.118787	.0374697	.0510509	.0485122	.0484600	.0406989	.0470224

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: ICSABDLX20 Acquired: 4/2/2025 16:18:04 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	.0410341	.0452673	.0481625
Stddev	.0004673	.0008687	.0000909
%RSD	1.138795	1.918953	.1886515
#1	.0408089	.0453718	.0480618
#2	.0407220	.0443511	.0481872
#3	.0415713	.0460790	.0482384

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3293.500	71790.34	15969.02	3083.555	5041.830
Stddev	9.815	357.42	25.23	27.728	9.814
%RSD	.2980066	.4978609	.1579676	.8992265	.1946463
#1	3290.315	71385.81	15998.10	3058.741	5041.171
#2	3304.512	72063.40	15953.02	3078.438	5051.956
#3	3285.673	71921.82	15955.93	3113.485	5032.362

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: CCV01 Acquired: 4/2/2025 16:39:12 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	5.080314	4.911792	5.107658	5.049694	5.060358	9.991241	9.865600
Stddev	.020960	.060574	.017567	.005685	.013803	.017221	.077608
%RSD	.4125719	1.233243	.3439251	.1125903	.2727579	.1723603	.7866569
#1	5.069748	4.977738	5.092187	5.046959	5.050288	9.982169	9.922887
#2	5.066739	4.899010	5.104032	5.045892	5.054695	9.980454	9.777276
#3	5.104454	4.858629	5.126754	5.056230	5.076091	10.01110	9.896636

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2549087	2.566031	24.81329	1.037727	2.560639	1.289829	5.015328
Stddev	.0002991	.008175	.05476	.003819	.008569	.004867	.016285
%RSD	.1173319	.3186006	.2206953	.3680214	.3346378	.3773015	.3247123
#1	.2548200	2.558207	24.87434	1.041314	2.553352	1.286376	5.030413
#2	.2546641	2.565369	24.79701	1.033712	2.558486	1.287715	5.017509
#3	.2552422	2.574518	24.76851	1.038154	2.570079	1.295395	4.998062

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.512077	25.04606	2.553259	1.281109	25.01136	2.504507	2.571332
Stddev	.002597	.09404	.010517	.003783	.01421	.008142	.003022
%RSD	.1033635	.3754489	.4119200	.2953025	.0567964	.3250816	.1175089
#1	2.511977	25.15306	2.545093	1.283642	25.02419	2.510110	2.574550
#2	2.509532	25.00857	2.549556	1.276761	24.99609	2.495168	2.570890
#3	2.514722	24.97656	2.565126	1.282926	25.01379	2.508245	2.568556

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.97750	5.099631	5.041882	5.076041	4.968992	4.985917	5.042626
Stddev	.04180	.014347	.014313	.011303	.007265	.021243	.006407
%RSD	.1673463	.2813340	.2838859	.2226779	.1462151	.4260594	.1270642
#1	24.99344	5.094735	5.030051	5.065342	4.977374	4.962802	5.049817
#2	24.93008	5.088372	5.037803	5.074918	4.965108	4.990367	5.040538
#3	25.00899	5.115785	5.057792	5.087864	4.964493	5.004582	5.037523

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: CCV01 Acquired: 4/2/2025 16:39:12 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	5.007029	4.946025	5.102169
Stddev	.023220	.010607	.017234
%RSD	.4637574	.2144460	.3377755
#1	5.000763	4.933971	5.094637
#2	4.987585	4.950174	5.089984
#3	5.032740	4.953930	5.121887

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3178.438	69696.21	14889.15	2979.783	4668.404
Stddev	9.394	275.85	45.29	11.428	12.831
%RSD	.2955493	.3957925	.3041638	.3835251	.2748522
#1	3182.482	69380.44	14838.19	2973.552	4671.997
#2	3185.132	69817.87	14904.46	2972.825	4679.055
#3	3167.699	69890.31	14924.80	2992.973	4654.159

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: CCB01 Acquired: 4/2/2025 16:43:22 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	-.000287	.0006045	-.000150	.0025517	-.000233	-.000670	.0007423
Stddev	.000640	.0011360	.000748	.0011125	.001166	.002028	.0005981
%RSD	223.1711	187.9119	497.4733	43.59867	500.7031	302.6810	80.57471
#1	-.000906	-.000695	.000657	.0022165	-.001181	-.000076	.0002761
#2	-.000327	.001409	-.000818	.0016453	.001069	.000994	.0014167
#3	.000372	.001099	-.000290	.0037933	-.000587	-.002928	.0005342

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000056	-.000031	-.002922	-.000436	-.000120	.0001244	-.002204
Stddev	.000079	.000048	.002678	.000112	.000204	.0001601	.002177
%RSD	141.9482	153.2290	91.63384	25.66219	169.3961	128.7118	98.76678
#1	-.000113	.000019	-.000123	-.000326	-.000048	.0000677	-.004667
#2	-.000088	-.000035	-.005459	-.000549	.000037	.0003052	-.000538
#3	.000034	-.000077	-.003185	-.000433	-.000351	.0000003	-.001407

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002365	.0126315	-.000056	-.000091	-.037811	.0004746	-.000151
Stddev	.000191	.0042505	.000294	.000144	.004017	.0001968	.000121
%RSD	8.092143	33.65020	522.9898	157.2262	10.62499	41.48252	80.30105
#1	-.002456	.0077719	-.000351	-.000118	-.042418	.0003423	-.000228
#2	-.002145	.0156569	.000237	.000064	-.035980	.0007008	-.000011
#3	-.002494	.0144658	-.000055	-.000220	-.035036	.0003806	-.000213

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.107038	-.006699	-.000281	-.000730	.0003616	.0007546	.0000574
Stddev	.017768	.000307	.000079	.000362	.0001549	.0045747	.0006459
%RSD	16.59945	4.590146	28.28533	49.63119	42.83669	606.2715	1125.591
#1	-.123764	-.006371	-.000262	-.000429	.0003549	.0060369	.0004924
#2	-.108963	-.006982	-.000367	-.000629	.0002102	-.001860	.0003645
#3	-.088386	-.006743	-.000212	-.001132	.0005197	-.001913	-.000685

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: CCB01 Acquired: 4/2/2025 16:43:22 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	-.002578	-.000692	.0000803
Stddev	.001598	.001720	.0000072
%RSD	62.00791	248.6791	8.976153
#1	-.001974	-.002624	.0000868
#2	-.004390	.000673	.0000817
#3	-.001369	-.000125	.0000726

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3341.904	74119.43	15748.95	3187.476	5283.071
Stddev	9.934	270.74	70.34	18.532	15.982
%RSD	.2972651	.3652692	.4466086	.5814037	.3025077
#1	3349.351	74158.61	15715.96	3183.136	5299.103
#2	3345.736	74368.43	15829.72	3207.793	5282.969
#3	3330.624	73831.23	15701.18	3171.499	5267.140

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1692-01 Acquired: 4/2/2025 16:47:42 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	.1054099	.0104935	.3845557	-.018823	-.002957	77.49847	.6555545
Stddev	.0042926	.0005717	.0036981	.002832	.001085	.18540	.0025662
%RSD	4.072296	5.447729	.9616643	15.04339	36.70191	.2392294	.3914556
#1	.1093530	.0102217	.3833820	-.018111	-.001740	77.32910	.6542175
#2	.1008373	.0111503	.3886983	-.021942	-.003308	77.46977	.6539329
#3	.1060393	.0101084	.3815868	-.016415	-.003823	77.69655	.6585131

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0080503	-.002085	147.6877	.2252879	.1047124	.2070420	276.5224
Stddev	.0001180	.000107	.2968	.0009945	.0000811	.0004601	1.1143
%RSD	1.466179	5.133950	.2009808	.4414445	.0774280	.2222368	.4029729
#1	.0080975	-.002140	148.0221	.2264363	.1046514	.2065768	277.7544
#2	.0079159	-.001962	147.5856	.2247069	.1048044	.2070523	276.2278
#3	.0081374	-.002154	147.4554	.2247206	.1046815	.2074968	275.5849

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.371268	78.62325	.1701524	-.010855	5.769882	.5200571	.5775665
Stddev	.010700	.30796	.0005195	.000300	.005052	.0019252	.0041792
%RSD	.3173764	.3916850	.3053082	2.763300	.0875559	.3701983	.7235899
#1	3.378435	78.92752	.1702350	-.010636	5.768665	.5214422	.5822418
#2	3.376399	78.63050	.1706257	-.011197	5.765549	.5178587	.5762641
#3	3.358969	78.31174	.1695966	-.010732	5.775430	.5208704	.5741936

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.83322	.4348239	.0056664	.0117061	2.908753	4.382962	4.701548
Stddev	.05452	.0026185	.0002770	.0013796	.007039	.004148	.009963
%RSD	.4248339	.6021925	4.887941	11.78555	.2420004	.0946424	.2119191
#1	12.82835	.4377193	.0054620	.0132988	2.905393	4.386843	4.704936
#2	12.78130	.4341305	.0059816	.0108795	2.904024	4.378591	4.709377
#3	12.89002	.4326219	.0055556	.0109401	2.916843	4.383452	4.690333

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1692-01 Acquired: 4/2/2025 16:47:42 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	5.134836	.2419927	.1193376
Stddev	.009043	.0018316	.0019734
%RSD	.1761117	.7568667	1.653641
#1	5.134063	.2407328	.1172254
#2	5.144241	.2440937	.1196533
#3	5.126205	.2411515	.1211342

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3353.108	73469.58	17325.07	3120.075	4403.404
Stddev	15.027	307.34	53.50	14.304	16.041
%RSD	.4481642	.4183212	.3088221	.4584380	.3642828
#1	3342.721	73120.42	17277.52	3104.076	4391.943
#2	3346.263	73699.14	17383.00	3124.522	4396.534
#3	3370.339	73589.19	17314.67	3131.627	4421.736

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1692-01DLX100 Acquired: 4/2/2025 16:51:47 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	-.001099	.0010670	.0044906	.0015216	-.000716	.8579570	.0076274
Stddev	.001419	.0005548	.0000587	.0012356	.001934	.0005382	.0000862
%RSD	129.1116	52.00167	1.307770	81.20619	270.1080	.0627361	1.130124
#1	.000451	.0015778	.0045020	.0028870	-.002560	.8574568	.0077266
#2	-.001413	.0004767	.0044270	.0004803	.001298	.8578877	.0075709
#3	-.002336	.0011465	.0045428	.0011975	-.000886	.8585266	.0075848

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000363	-.000154	1.716597	.0021195	.0007236	.0025363	3.037731
Stddev	.0000729	.000011	.004530	.0001740	.0001767	.0002122	.010578
%RSD	201.0392	6.845653	.2639234	8.208569	24.42425	8.366309	.3482338
#1	-.000047	-.000143	1.711366	.0019567	.0007283	.0027802	3.025682
#2	.000065	-.000163	1.719253	.0023028	.0008978	.0024346	3.042018
#3	.000090	-.000157	1.719173	.0020990	.0005445	.0023941	3.045493

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0395765	.9107180	.0014702	-.000330	.0084744	.0070689	.0063816
Stddev	.0002328	.0131347	.0001700	.000174	.0042501	.0007390	.0004216
%RSD	.5883630	1.442240	11.56070	52.78854	50.15177	10.45386	6.606573
#1	.0393352	.9219478	.0013190	-.000328	.0036051	.0078781	.0059339
#2	.0395944	.9139314	.0016542	-.000157	.0103794	.0064298	.0067710
#3	.0397999	.8962747	.0014375	-.000506	.0114386	.0068988	.0064398

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0232355	-.008982	-.000283	-.000780	.0340262	.0487544	.0463706
Stddev	.0142253	.000233	.000205	.000202	.0006472	.0034373	.0014787
%RSD	61.22227	2.598051	72.25591	25.85750	1.901967	7.050233	3.188858
#1	.0095818	-.009127	-.000269	-.000597	.0334370	.0512304	.0449775
#2	.0379707	-.008712	-.000495	-.000997	.0347188	.0448300	.0462123
#3	.0221539	-.009106	-.000086	-.000747	.0339228	.0502029	.0479221

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1692-01DLX100 Acquired: 4/2/2025 16:51:47 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	.0500521	.0019084	.0013367
Stddev	.0033836	.0005238	.0000134
%RSD	6.760101	27.44402	1.003060
#1	.0480716	.0024280	.0013212
#2	.0539590	.0019167	.0013456
#3	.0481257	.0013806	.0013431

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3366.883	73649.14	15715.70	3161.554	5219.957
Stddev	9.383	136.20	18.80	15.768	2.944
%RSD	.2786741	.1849316	.1195959	.4987483	.0564067
#1	3361.231	73750.73	15698.48	3174.022	5217.934
#2	3377.713	73494.38	15712.85	3143.829	5223.335
#3	3361.704	73702.32	15735.75	3166.811	5218.604

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1686-01 Acquired: 4/2/2025 16:56:04 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	.0621586	.0048189	.1345473	-.012251	-.001299	106.9557	.5295415
Stddev	.0017612	.0038192	.0003239	.003017	.001714	.1394	.0020946
%RSD	2.833340	79.25378	.2407381	24.62356	131.9058	.1302942	.3955510
#1	.0636020	.0012367	.1344246	-.011408	.000316	106.8018	.5271421
#2	.0601963	.0043825	.1343026	-.009746	-.003096	106.9919	.5310049
#3	.0626776	.0088376	.1349146	-.015600	-.001118	107.0734	.5304776

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0069305	-.001817	31.85150	.1872314	.1244977	.2935240	234.6480
Stddev	.0000808	.000551	.04052	.0003174	.0008520	.0009892	1.2212
%RSD	1.165772	30.30338	.1272172	.1695261	.6843225	.3370033	.5204406
#1	.0070211	-.001181	31.81818	.1874462	.1254717	.2946505	233.3854
#2	.0069048	-.002135	31.83972	.1868669	.1241304	.2927973	235.8231
#3	.0068657	-.002135	31.89661	.1873813	.1238909	.2931242	234.7354

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.179467	42.53014	.2372903	-.008424	11.63907	.2955717	.3778111
Stddev	.010497	.11345	.0011371	.000383	.08684	.0012469	.0003743
%RSD	.2026611	.2667527	.4792137	4.542529	.7461299	.4218648	.0990685
#1	5.178602	42.51720	.2385932	-.008833	11.55474	.2946863	.3777329
#2	5.169429	42.42370	.2364976	-.008365	11.72822	.2950311	.3774820
#3	5.190369	42.64950	.2367801	-.008074	11.63425	.2969977	.3782183

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.990181	.3641819	-.000267	.0052695	5.569014	6.342181	4.760767
Stddev	.030630	.0016469	.000287	.0008336	.019584	.122885	.024681
%RSD	.3833422	.4522070	107.4710	15.81988	.3516654	1.937589	.5184283
#1	7.971253	.3626873	-.000084	.0060542	5.563070	6.200295	4.785958
#2	8.025520	.3659475	-.000599	.0043943	5.553090	6.414534	4.759713
#3	7.973772	.3639110	-.000119	.0053599	5.590882	6.411715	4.736629

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1686-01 Acquired: 4/2/2025 16:56:04 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	.5892251	.1700418	-.077478
Stddev	.0051827	.0010903	.001248
%RSD	.8795869	.6411939	1.610400
#1	.5868048	.1689859	-.076174
#2	.5951752	.1711636	-.078661
#3	.5856951	.1699760	-.077600

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3668.280	80557.50	18778.02	3406.408	4603.986
Stddev	8.262	82.12	62.11	12.317	9.998
%RSD	.2252210	.1019340	.3307418	.3615836	.2171643
#1	3663.437	80641.51	18748.81	3419.664	4596.969
#2	3663.583	80477.43	18849.34	3404.241	4599.556
#3	3677.820	80553.57	18735.90	3395.318	4615.434

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1686-01DLX100 Acquired: 4/2/2025 17:00:10 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	.0002636	.0005077	.0019290	.0011615	.0007217	1.247193	.0063715
Stddev	.0012634	.0013352	.0010801	.0019631	.0007196	.006851	.0002625
%RSD	479.2917	262.9791	55.99107	169.0107	99.71504	.5493428	4.119080
#1	.0017191	-.000851	.0007499	.0029612	.0005454	1.245611	.0065971
#2	-.000549	.001818	.0028706	.0014554	.0015131	1.241271	.0060835
#3	-.000380	.000557	.0021665	-.000932	.0001066	1.254697	.0064340

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000988	-.000126	.3919678	.0020523	.0012731	.0039383	2.764329
Stddev	.0000563	.000078	.0054519	.0004737	.0001509	.0002448	.023425
%RSD	56.97878	61.47457	1.390919	23.08331	11.85104	6.215812	.8473971
#1	.0000703	-.000062	.3861569	.0015155	.0012520	.0036855	2.780712
#2	.0001636	-.000212	.3969705	.0022295	.0011338	.0039553	2.774777
#3	.0000624	-.000104	.3927760	.0024119	.0014333	.0041742	2.737498

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0632521	.5256228	.0022473	-.000310	.0877813	.0032708	.0051435
Stddev	.0004791	.0102646	.0001042	.000079	.0038062	.0012271	.0003283
%RSD	.7574889	1.952839	4.635812	25.59042	4.335954	37.51681	6.382457
#1	.0632748	.5214753	.0022467	-.000219	.0895696	.0034861	.0047826
#2	.0627620	.5180809	.0023517	-.000356	.0834103	.0019503	.0054244
#3	.0637194	.5373122	.0021434	-.000357	.0903639	.0043760	.0052235

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.016714	-.012139	-.000219	-.000423	.0649187	.0755668	.0452145
Stddev	.028877	.000110	.000081	.000416	.0002781	.0121093	.0014554
%RSD	172.7713	.9046744	37.16984	98.37633	.4284372	16.02468	3.218960
#1	-.040384	-.012207	-.000142	-.000817	.0646851	.0673260	.0445456
#2	.015460	-.012197	-.000210	-.000462	.0652264	.0699044	.0442138
#3	-.025217	-.012012	-.000304	.000012	.0648446	.0894700	.0468841

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1686-01DLX100 Acquired: 4/2/2025 17:00:10 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	.0078464	.0019132	-.000889
Stddev	.0028691	.0010193	.000063
%RSD	36.56521	53.27800	7.062908
#1	.0111370	.0024253	-.000957
#2	.0058684	.0007394	-.000833
#3	.0065340	.0025750	-.000878

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3363.320	71351.55	16322.81	3114.809	5193.445
Stddev	11.138	272.24	33.47	15.481	16.474
%RSD	.3311743	.3815445	.2050401	.4970017	.3172083
#1	3372.831	71037.80	16291.47	3100.474	5210.829
#2	3366.064	71491.59	16358.06	3131.225	5191.441
#3	3351.066	71525.26	16318.89	3112.727	5178.065

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1666-01 Acquired: 4/2/2025 17:04:28 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	-.003667	-.005657	.0219367	.0012796	.0027834	.2094748
Stddev	.002009	.001280	.0009717	.0010292	.0004937	.0088788
%RSD	54.78981	22.62214	4.429478	80.42998	17.73597	4.238604
#1	-.003471	-.004621	.0208688	.0024415	.0022638	.1997780
#2	-.001763	-.007087	.0221726	.0009149	.0028403	.2114401
#3	-.005767	-.005262	.0227688	.0004824	.0032462	.2172062

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1320373	-.000120	.0002491	255.4032	.0471627	.0038229
Stddev	.0005502	.000031	.0000197	.6151	.0011634	.0001680
%RSD	.4166936	25.50935	7.899867	.2408166	2.466720	4.394250
#1	.1314021	-.000089	.0002508	254.8009	.0485026	.0040166
#2	.1323474	-.000120	.0002286	255.3786	.0465757	.0037343
#3	.1323625	-.000151	.0002679	256.0302	.0464098	.0037177

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0436994	1.409503	.0889874	5.275063	.0310436	-.000830
Stddev	.0003705	.018303	.0006344	.009384	.0003036	.000170
%RSD	.8477983	1.298517	.7129554	.1778944	.9780332	20.53365
#1	.0441139	1.430096	.0882800	5.265362	.0312708	-.000734
#2	.0434007	1.395089	.0891763	5.275733	.0306988	-.001027
#3	.0435835	1.403326	.0895060	5.284094	.0311613	-.000730

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	223.4355	.0021894	2.312916	612.9551	-.000530	.1324591
Stddev	2.8436	.0010459	.035304	9.2804	.000807	.0007338
%RSD	1.272689	47.77003	1.526379	1.514039	152.1165	.5539696
#1	226.1265	.0012332	2.353619	623.6301	.000096	.1332620
#2	223.7194	.0033063	2.290611	608.4288	-.001441	.1318233
#3	220.4605	.0020286	2.294518	606.8064	-.000246	.1322919

Sample Name: Q1666-01 Acquired: 4/2/2025 17:04:28 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	-.006457	.0008220	F 17.40498	.0370806	F 477.8456	.0950499
Stddev	.000427	.0004307	.25447	.0017155	1.7581	.0015084
%RSD	6.607105	52.40210	1.462074	4.626288	.3679272	1.586974
#1	-.006483	.0012752	17.69653	.0354886	479.8220	.0950850
#2	-.006018	.0007729	17.29098	.0388973	477.2590	.0965405
#3	-.006870	.0004179	17.22744	.0368557	476.4557	.0935243

Elem	Sr4077
Units	ppm
Avg	4.466916
Stddev	.025961
%RSD	.5811760
#1	4.437386
#2	4.477217
#3	4.486145

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2835.258	61824.31	15262.64	2656.275	4021.060
Stddev	9.859	927.77	54.44	35.376	12.387
%RSD	.3477269	1.500651	.3566697	1.331783	.3080590
#1	2824.117	60753.31	15285.89	2615.464	4007.047
#2	2842.855	62338.20	15301.58	2678.200	4025.580
#3	2838.803	62381.43	15200.43	2675.162	4030.552

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1666-01DLX20 Acquired: 4/2/2025 17:09:07 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	-.000821	-.000380	.0018050	.0003911	.0004970	.0059669
Stddev	.001352	.000591	.0017336	.0012464	.0012588	.0059490
%RSD	164.6457	155.4634	96.04343	318.6965	253.2747	99.70097
#1	-.002064	.000134	.0030463	.0005008	-.000939	.0040405
#2	.000619	-.000249	-.000176	.0015790	.001017	.0012198
#3	-.001020	-.001026	.002544	-.000907	.001412	.0126404

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0054478	-.000074	-.000036	13.00694	.0018663	.0001304
Stddev	.0008605	.000038	.000038	.05884	.0001801	.0000555
%RSD	15.79612	50.77901	105.7818	.4523930	9.647761	42.54336
#1	.0061271	-.000083	-.000035	13.02207	.0017657	.0000765
#2	.0044801	-.000033	-.000074	12.94201	.0017589	.0001274
#3	.0057361	-.000107	.000002	13.05674	.0020741	.0001874

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0021219	.0664168	.0042758	.2833271	.0014147	-.000191
Stddev	.0002189	.0029866	.0003665	.0091461	.0001533	.000386
%RSD	10.31741	4.496804	8.571828	3.228092	10.83500	202.3053
#1	.0018877	.0649643	.0042312	.2853093	.0014056	-.000486
#2	.0023214	.0698519	.0039336	.2733524	.0012662	.000246
#3	.0021566	.0644343	.0046625	.2913194	.0015723	-.000331

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.570129	.0002720	.1110401	26.18401	-.016076	.0058847
Stddev	.048234	.0003945	.0008734	.10516	.000122	.0002589
%RSD	.5040045	145.0229	.7865356	.4016156	.7565962	4.398919
#1	9.526984	-.000183	.1101827	26.10045	-.016105	.0056700
#2	9.561199	.000480	.1110090	26.14949	-.016181	.0061721
#3	9.622204	.000519	.1119286	26.30209	-.015943	.0058120

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1666-01DLX20 Acquired: 4/2/2025 17:09:07 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	-.001604	.0009209	.7597345	.0024438	F 23.12035	.0061509
Stddev	.000583	.0005281	.0067851	.0020830	.04785	.0000474
%RSD	36.35807	57.35115	.8930892	85.23687	.2069784	.7710581
#1	-.001660	.0014018	.7522211	.0048327	23.11997	.0061234
#2	-.002157	.0010051	.7654145	.0010070	23.07268	.0062057
#3	-.000995	.0003557	.7615680	.0014917	23.16839	.0061237

Elem	Sr4077
Units	ppm
Avg	.2238431
Stddev	.0001657
%RSD	.0740287
#1	.2238416
#2	.2236781
#3	.2240095

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3284.392	70539.34	15504.29	3052.053	5003.621
Stddev	10.323	674.69	77.40	19.186	7.844
%RSD	.3142961	.9564668	.4992108	.6286274	.1567721
#1	3276.784	70899.58	15485.44	3062.429	4994.583
#2	3296.142	70957.45	15589.37	3063.817	5008.652
#3	3280.249	69761.00	15438.05	3029.914	5007.630

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1503-05 Acquired: 4/2/2025 17:13:23 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	-.002288	.0023607	-.000666	-.002470	-.002673	-.018834	.0036762
Stddev	.002302	.0020163	.001224	.000513	.001396	.005006	.0004087
%RSD	100.6158	85.41023	183.8209	20.76566	52.22132	26.57727	11.11684
#1	-.004674	.0000678	-.001866	-.002173	-.001299	-.015091	.0040764
#2	-.000080	.0038570	.000580	-.002174	-.002632	-.024520	.0036927
#3	-.002111	.0031573	-.000711	-.003062	-.004090	-.016892	.0032596

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000543	-.000109	50.17278	-.000806	-.000138	-.000120	-.005151
Stddev	.0000346	.000064	.28984	.000297	.000135	.000240	.001659
%RSD	63.63863	58.69473	.5776773	36.89009	97.83129	200.2596	32.20969
#1	.0000681	-.000102	49.91266	-.000668	-.000289	.000134	-.006820
#2	.0000799	-.000175	50.48521	-.000603	-.000027	-.000343	-.005133
#3	.0000150	-.000048	50.12046	-.001147	-.000098	-.000150	-.003501

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003922	17.01747	.0002543	-.000656	49.69849	.0015798	.0005427
Stddev	.000078	.11900	.0000006	.000061	.27128	.0005317	.0003782
%RSD	1.994452	.6992593	.2420633	9.367364	.5458471	33.65742	69.68264
#1	-.003834	16.89498	.0002540	-.000585	49.68067	.0017301	.0001598
#2	-.003947	17.13263	.0002550	-.000689	49.97824	.0009891	.0009160
#3	-.003985	17.02479	.0002539	-.000695	49.43657	.0020203	.0005524

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.45884	-.018250	-.000164	-.005339	-.001174	-.012357	-.000667
Stddev	.07609	.000320	.000389	.000882	.000057	.002633	.001229
%RSD	.3719256	1.753561	237.3351	16.51163	4.863269	21.31001	184.3211
#1	20.47720	-.018394	-.000045	-.004536	-.001112	-.009869	.000527
#2	20.52406	-.017884	.000152	-.005199	-.001224	-.015115	-.001927
#3	20.37524	-.018473	-.000598	-.006282	-.001185	-.012088	-.000599

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1503-05 Acquired: 4/2/2025 17:13:23 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	.0092804	-.010555	.0049695
Stddev	.0015639	.001160	.0000111
%RSD	16.85216	10.98908	.2227719
#1	.0110724	-.011739	.0049609
#2	.0081910	-.010505	.0049820
#3	.0085776	-.009421	.0049656

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3329.616	70971.16	15675.13	3103.427	4955.874
Stddev	7.088	254.96	86.93	16.086	13.660
%RSD	.2128839	.3592385	.5545814	.5183300	.2756244
#1	3333.349	71161.25	15765.83	3120.067	4963.525
#2	3334.058	70681.43	15592.53	3102.255	4963.994
#3	3321.442	71070.79	15667.05	3087.959	4940.104

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1503-01 Acquired: 4/2/2025 17:22:08 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	-.000196	-.000381	-.000015	.0014797	-.026973	.0889776	.0002614
Stddev	.002976	.000127	.000686	.0009790	.000967	.0028841	.0012083
%RSD	1521.802	33.43086	4432.726	66.16588	3.584687	3.241437	462.1648
#1	-.003403	-.000253	-.000773	.0015183	-.026281	.0910343	-.000671
#2	.002476	-.000382	.000162	.0024388	-.028078	.0902178	-.000172
#3	.000341	-.000508	.000564	.0004819	-.026559	.0856809	.001627

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000207	.0000153	.0082790	.0001166	-.000075	.0001432	-.003644
Stddev	.0000467	.0000480	.0046875	.0004232	.000115	.0003078	.003431
%RSD	226.2028	312.8720	56.61843	362.9836	151.9577	214.9577	94.13473
#1	.0000571	.0000576	.0055232	-.000247	-.000201	.0003490	-.006543
#2	-.000032	.0000252	.0056226	.000016	.000024	-.000211	-.004534
#3	.000037	-.000037	.0136913	.000581	-.000049	.000291	.000143

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001119	.0070738	-.000498	-.000057	.2311912	.0000574	.0001955
Stddev	.001779	.0032376	.000237	.000103	.0042793	.0003812	.0001404
%RSD	158.9500	45.76897	47.69456	178.9329	1.850968	664.3583	71.80869
#1	-.001883	.0099384	-.000374	.000027	.2279084	-.000009	.0002085
#2	-.002389	.0035612	-.000771	-.000172	.2360309	.000467	.0003288
#3	.000914	.0077220	-.000348	-.000028	.2296342	-.000286	.0000490

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.056811	.2263431	-.000316	1.566820	.2167417	1.974678	.0012882
Stddev	.002992	.0014974	.000164	.003292	.0006512	.009227	.0019283
%RSD	5.266806	.6615701	52.02809	.2101327	.3004614	.4672568	149.6932
#1	-.054935	.2280232	-.000491	1.564168	.2161955	1.971662	-.000923
#2	-.055236	.2251492	-.000165	1.565787	.2165673	1.985036	.002617
#3	-.060262	.2258570	-.000292	1.570505	.2174624	1.967337	.002171

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1503-01 Acquired: 4/2/2025 17:22:08 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	.0029403	.0017051	.0002337
Stddev	.0013510	.0011132	.0003285
%RSD	45.94920	65.28679	140.5324
#1	.0029945	.0014654	.0000479
#2	.0042635	.0007313	.0000403
#3	.0015630	.0029187	.0006130

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3393.438	71502.42	15846.38	3121.480	5354.251
Stddev	8.704	110.42	54.51	15.263	2.541
%RSD	.2565010	.1544326	.3439933	.4889538	.0474510
#1	3385.229	71518.91	15815.24	3104.226	5352.079
#2	3402.565	71603.68	15909.32	3133.215	5357.045
#3	3392.519	71384.68	15814.57	3127.000	5353.631

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1503-03 Acquired: 4/2/2025 17:31:06 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	.5450122	.1939339	.9779409	.8339753	.2785554	2.548436	.6199836
Stddev	.0044118	.0029049	.0031966	.0065192	.0015641	.007662	.0030320
%RSD	.8094819	1.497876	.3268729	.7817081	.5615166	.3006594	.4890417
#1	.5444954	.1967994	.9768607	.8406797	.2777126	2.555912	.6175094
#2	.5408816	.1940110	.9815376	.8276585	.2775935	2.548796	.6233658
#3	.5496597	.1909912	.9754242	.8335877	.2803602	2.540601	.6190754

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3173021	.6484397	.0115019	.2194895	.6144158	.6881825	3.438754
Stddev	.0010105	.0003958	.0048488	.0007616	.0008645	.0015652	.023966
%RSD	.3184741	.0610454	42.15675	.3469765	.1407072	.2274423	.6969349
#1	.3177974	.6480899	.0154105	.2200292	.6135670	.6876452	3.411544
#2	.3179694	.6483597	.0060758	.2198209	.6143850	.6869567	3.447995
#3	.3161395	.6488694	.0130194	.2186184	.6152952	.6899456	3.456725

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.620932	-.004956	.5032342	.7957998	.0384561	1.336655	1.085568
Stddev	.005659	.009047	.0005656	.0012055	.0050079	.003899	.002680
%RSD	.3491085	182.5595	.1124016	.1514786	13.02224	.2916905	.2468374
#1	1.625888	.002339	.5037205	.7968757	.0327505	1.335475	1.088464
#2	1.622142	-.015079	.5026135	.7960268	.0421232	1.341008	1.083177
#3	1.614766	-.002126	.5033688	.7944970	.0404947	1.333483	1.085064

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.091731	1.383351	.4768724	-.002430	.0001397	.4398631	-.001077
Stddev	.020677	.006943	.0010794	.000270	.0002612	.0041926	.002288
%RSD	22.54094	.5019171	.2263471	11.10032	187.0533	.9531549	212.4778
#1	-.113521	1.387857	.4780341	-.002540	-.000022	.4353091	-.000821
#2	-.072384	1.386841	.4759005	-.002627	.000441	.4435626	.001073
#3	-.089288	1.375355	.4766826	-.002122	-.000000	.4407177	-.003482

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1503-03 Acquired: 4/2/2025 17:31:06 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	.0027874	.0021500	.2736077
Stddev	.0020118	.0002952	.0010062
%RSD	72.17761	13.73143	.3677407
#1	.0050184	.0018380	.2745553
#2	.0011112	.0021869	.2737161
#3	.0022325	.0024250	.2725518

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3366.604	72262.47	16152.90	3129.555	5234.075
Stddev	4.779	87.83	47.27	5.234	6.656
%RSD	.1419386	.1215460	.2926680	.1672396	.1271574
#1	3362.170	72161.08	16126.37	3123.807	5230.280
#2	3371.665	72310.84	16124.85	3134.046	5230.184
#3	3365.978	72315.48	16207.48	3130.812	5241.759

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: CCV02 Acquired: 4/2/2025 17:35:12 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	4.974811	4.898237	5.054894	4.951753	4.985980	9.896064	9.838921
Stddev	.038665	.065870	.027666	.039711	.031141	.017969	.075189
%RSD	.7772172	1.344766	.5473047	.8019594	.6245636	.1815808	.7641999
#1	4.967105	4.892963	5.044138	4.950405	4.993080	9.916224	9.766618
#2	4.940579	4.835163	5.034221	4.912732	4.951903	9.881731	9.833446
#3	5.016749	4.966586	5.086322	4.992120	5.012958	9.890238	9.916697

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2472969	2.544210	24.63654	1.018152	2.551301	1.269386	4.863394
Stddev	.0014976	.015243	.03187	.003786	.014768	.008841	.040727
%RSD	.6055866	.5991249	.1293726	.3718345	.5788444	.6965073	.8374114
#1	.2472300	2.541721	24.65775	1.022367	2.546511	1.268450	4.884536
#2	.2488269	2.530364	24.59989	1.015042	2.539522	1.261049	4.816444
#3	.2458339	2.560543	24.65199	1.017045	2.567869	1.278657	4.889201

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.498610	24.79736	2.517233	1.242742	24.23302	2.500089	2.488653
Stddev	.003767	.04801	.012813	.003361	.21211	.005769	.001199
%RSD	.1507813	.1936213	.5090160	.2704584	.8753103	.2307641	.0481731
#1	2.498809	24.76435	2.515772	1.246606	24.36221	2.505603	2.487729
#2	2.502274	24.85244	2.505213	1.241126	23.98822	2.494094	2.488222
#3	2.494747	24.77529	2.530714	1.240495	24.34863	2.500570	2.490008

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.32403	4.996647	4.973170	4.994358	4.962273	4.827297	4.931056
Stddev	.20477	.029261	.027775	.022624	.012092	.036249	.031369
%RSD	.8418256	.5856141	.5585036	.4529926	.2436827	.7509157	.6361488
#1	24.47201	5.000305	4.977589	4.994498	4.974618	4.831782	4.916662
#2	24.09033	5.023907	4.943450	4.971664	4.950450	4.789014	4.909468
#3	24.40974	4.965729	4.998471	5.016911	4.961750	4.861095	4.967039

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: CCV02 Acquired: 4/2/2025 17:35:12 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	4.872946	4.894553	5.065780
Stddev	.032013	.018266	.005006
%RSD	.6569538	.3731868	.0988253
#1	4.880119	4.910013	5.062607
#2	4.837955	4.874398	5.071552
#3	4.900764	4.899247	5.063182

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3267.788	73721.04	15382.50	3093.127	4793.812
Stddev	12.611	309.09	53.87	5.083	18.148
%RSD	.3859306	.4192630	.3501819	.1643396	.3785780
#1	3264.875	73468.81	15376.45	3092.364	4791.339
#2	3281.601	74065.83	15331.92	3098.549	4813.070
#3	3256.888	73628.49	15439.14	3088.469	4777.027

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: CCB02 Acquired: 4/2/2025 17:39:22 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	.0012354	.0002379	.0001453	.0007810	.0009313	-.002890	-.001348
Stddev	.0003875	.0018943	.0009719	.0006238	.0010129	.000727	.000489
%RSD	31.36206	796.3551	669.0025	79.86728	108.7672	25.17078	36.30315
#1	.0009155	-.001781	.0000236	.0000613	-.000215	-.002082	-.001085
#2	.0011246	.000517	.0011723	.0011662	.001707	-.003492	-.001913
#3	.0016662	.001977	-.000760	.0011154	.001301	-.003095	-.001047

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000077	-.000005	.0011553	-.000114	-.000161	.0000786	-.003182
Stddev	.000028	.000045	.0052665	.000263	.000107	.0002839	.000627
%RSD	36.80382	921.6313	455.8631	230.1681	66.73906	361.3621	19.71275
#1	-.000108	.000041	.0010249	.000185	-.000255	.0003496	-.002647
#2	-.000051	-.000006	-.004045	-.000216	-.000183	-.000217	-.003872
#3	-.000073	-.000049	.006486	-.000312	-.000044	.000103	-.003026

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002387	.0085346	-.000102	-.000196	-.016081	.0002374	-.000139
Stddev	.000166	.0140081	.000364	.000102	.001253	.0006884	.000392
%RSD	6.941230	164.1336	358.2216	51.85207	7.794630	290.0453	282.5569
#1	-.002502	.0158413	-.000522	-.000190	-.015217	-.000206	-.000494
#2	-.002462	.0173786	.000114	-.000098	-.015508	.001030	-.000204
#3	-.002197	-.007616	.000103	-.000301	-.017519	-.000112	.000282

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.017529	-.008774	.0002173	-.000269	.0005507	-.000987	.0024262
Stddev	.022066	.000689	.0000501	.000216	.0004828	.003520	.0010214
%RSD	125.8824	7.848977	23.03429	80.35518	87.67172	356.7706	42.09778
#1	-.004120	-.008288	.0001818	-.000339	.0008986	-.004323	.0030359
#2	-.042996	-.008472	.0002746	-.000441	.0007542	.002692	.0012470
#3	-.005471	-.009562	.0001956	-.000026	-.000001	-.001329	.0029956

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: CCB02 Acquired: 4/2/2025 17:39:22 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	-.000857	.0001723	.0000964
Stddev	.000784	.0017153	.0000218
%RSD	91.46155	995.2697	22.60894
#1	-.000268	.0020280	.0000722
#2	-.000557	-.000156	.0001024
#3	-.001748	-.001355	.0001146

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3416.306	72938.83	15801.28	3138.406	5413.980
Stddev	16.335	81.23	46.97	10.708	25.932
%RSD	.4781540	.1113617	.2972547	.3411817	.4789886
#1	3401.628	73028.31	15810.75	3150.768	5391.954
#2	3433.905	72918.46	15842.79	3132.418	5442.561
#3	3413.386	72869.74	15750.29	3132.031	5407.425

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1503-05DLX2 Acquired: 4/2/2025 17:43:41 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	-.001072	.0013099	.0003076	.0002912	-.001183	-.005960	.0002227
Stddev	.001030	.0005484	.0012472	.0013272	.000671	.002639	.0004632
%RSD	96.11299	41.86773	405.4167	455.8054	56.74732	44.28414	208.0099
#1	-.002251	.0018686	.0017398	.0011375	-.001956	-.003275	.0001472
#2	-.000613	.0007724	-.000540	.0009744	-.000853	-.006054	-.000198
#3	-.000351	.0012887	-.000277	-.001238	-.000740	-.008551	.000719

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000968	-.000052	24.70948	-.000543	.0001070	-.000130	.0012746
Stddev	.0000400	.000109	.07512	.000170	.0002314	.000319	.0021861
%RSD	41.31091	209.0518	.3040119	31.37772	216.2117	245.7113	171.5062
#1	.0000704	-.000176	24.72510	-.000574	-.000145	-.000460	.0029654
#2	.0001428	.000032	24.62777	-.000696	.000156	.000178	-.001194
#3	.0000772	-.000012	24.77556	-.000360	.000310	-.000108	.002052

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003085	8.308611	.0000780	-.000024	24.54166	.0015760	.0001908
Stddev	.000204	.004899	.0003573	.000208	.28966	.0005717	.0001919
%RSD	6.596330	.0589686	458.3127	871.9416	1.180268	36.27564	100.6009
#1	-.003122	8.311272	.0004796	-.000072	24.26958	.0009625	-.000029
#2	-.002866	8.302957	-.000204	-.000203	24.50922	.0016717	.000278
#3	-.003268	8.311604	-.000041	.000204	24.84616	.0020939	.000324

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.834203	-.014041	-.000047	-.003663	.0003295	-.005656	.0003935
Stddev	.117023	.000047	.000148	.000628	.0004920	.004396	.0037299
%RSD	1.189955	.3358964	313.4817	17.15202	149.3235	77.71716	947.9091
#1	9.719389	-.014067	.000069	-.003246	-.000234	-.000605	.0005621
#2	9.829905	-.014069	.000004	-.004385	.000548	-.008616	.0040362
#3	9.953315	-.013987	-.000215	-.003357	.000674	-.007748	-.003418

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: Q1503-05DLX2 Acquired: 4/2/2025 17:43:41 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	.0079766	-.005513	.0025459
Stddev	.0033075	.001034	.0000200
%RSD	41.46545	18.75240	.7854107
#1	.0107959	-.006470	.0025600
#2	.0087981	-.004417	.0025230
#3	.0043357	-.005651	.0025547

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3285.577	71535.10	16037.29	3109.378	4987.041
Stddev	11.725	851.58	65.07	35.423	12.699
%RSD	.3568717	1.190434	.4057407	1.139244	.2546364
#1	3294.182	72153.42	16015.84	3137.255	4994.953
#2	3290.328	71888.10	16110.38	3121.362	4993.777
#3	3272.222	70563.79	15985.66	3069.517	4972.394

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: CCV03 Acquired: 4/2/2025 17:53:50 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	4.846796	4.818108	4.903896	4.839487	4.845815	9.550892	9.481418
Stddev	.003590	.086737	.016318	.014361	.003961	.018462	.104776
%RSD	.0740633	1.800222	.3327592	.2967444	.0817376	.1932978	1.105067
#1	4.850940	4.798860	4.919444	4.843871	4.843520	9.564780	9.361439
#2	4.844638	4.912852	4.905339	4.851145	4.850389	9.529942	9.554892
#3	4.844811	4.742612	4.886904	4.823445	4.843536	9.557953	9.527923

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2446694	2.470720	23.57807	1.010402	2.475791	1.238604	4.885564
Stddev	.0005087	.005708	.05713	.003529	.003734	.002068	.024964
%RSD	.2079284	.2310307	.2423195	.3492982	.1508367	.1669279	.5109652
#1	.2444074	2.475410	23.58038	1.014424	2.478607	1.240969	4.911760
#2	.2443451	2.472385	23.51982	1.007824	2.477210	1.237704	4.862049
#3	.2452558	2.464364	23.63402	1.008957	2.471555	1.237139	4.882882

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.401104	23.73500	2.436442	1.248524	24.35993	2.405989	2.508057
Stddev	.003497	.13197	.004061	.003950	.12850	.006925	.009444
%RSD	.1456209	.5560154	.1666886	.3163517	.5274973	.2878246	.3765421
#1	2.400040	23.66406	2.440424	1.253081	24.50830	2.398878	2.516545
#2	2.398262	23.65367	2.436598	1.246069	24.28452	2.412712	2.509741
#3	2.405008	23.88726	2.432305	1.246423	24.28698	2.406376	2.497884

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.53275	4.906782	4.790418	4.843010	4.783480	4.836901	4.825732
Stddev	.15069	.003856	.011830	.018194	.008136	.007677	.031159
%RSD	.6142228	.0785793	.2469561	.3756669	.1700924	.1587121	.6456842
#1	24.70479	4.904012	4.802863	4.849470	4.789299	4.845327	4.826062
#2	24.42418	4.905148	4.789073	4.857092	4.774183	4.835073	4.856724
#3	24.46929	4.911185	4.779317	4.822468	4.786958	4.830304	4.794408

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: CCV03 Acquired: 4/2/2025 17:53:50 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	4.760365	4.729996	4.916518
Stddev	.021161	.019465	.032176
%RSD	.4445319	.4115156	.6544414
#1	4.776517	4.745636	4.939350
#2	4.768167	4.708197	4.879719
#3	4.736410	4.736156	4.930485

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3247.772	69950.06	15199.43	2983.415	4759.830
Stddev	10.399	139.67	29.22	10.608	11.440
%RSD	.3201936	.1996751	.1922406	.3555634	.2403449
#1	3246.485	69791.47	15230.33	2977.610	4760.319
#2	3258.755	70003.95	15195.72	2976.977	4771.017
#3	3238.076	70054.76	15172.25	2995.659	4748.153

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: CCB03 Acquired: 4/2/2025 17:58:01 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	-.000672	.0001761	.0004426	.0007322	.0010385	.0000396	.0006675
Stddev	.001228	.0008129	.0012524	.0029115	.0009648	.0012284	.0005154
%RSD	182.8140	461.5872	282.9956	397.6582	92.90678	3098.608	77.21827
#1	-.001060	-.000285	-.000824	.0023141	.0021504	-.001192	.0012617
#2	.000704	.001115	.000472	-.002628	.0004240	.000047	.0003424
#3	-.001659	-.000301	.001680	.002510	.0005409	.001264	.0003983

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000062	-.000029	.0052572	-.000136	-.000224	.0000680	-.002944
Stddev	.000044	.000086	.0071864	.000295	.000124	.0002594	.000622
%RSD	71.16069	294.1501	136.6976	216.1431	55.19094	381.1782	21.11333
#1	-.000029	.000055	.0135455	.000201	-.000218	.0003577	-.003611
#2	-.000113	-.000026	.0007630	-.000267	-.000351	-.000143	-.002841
#3	-.000046	-.000118	.0014631	-.000343	-.000104	-.000011	-.002380

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002289	.0030533	-.000027	-.000102	-.025455	.0016920	-.000014
Stddev	.000204	.0083601	.000269	.000127	.004169	.0011521	.000179
%RSD	8.907412	273.8013	984.8214	124.8564	16.37677	68.09177	1293.412
#1	-.002373	-.002312	.000275	-.000232	-.023405	.0009356	.000189
#2	-.002438	.012686	-.000118	.000023	-.022708	.0030179	-.000082
#3	-.002057	-.001214	-.000239	-.000097	-.030252	.0011224	-.000149

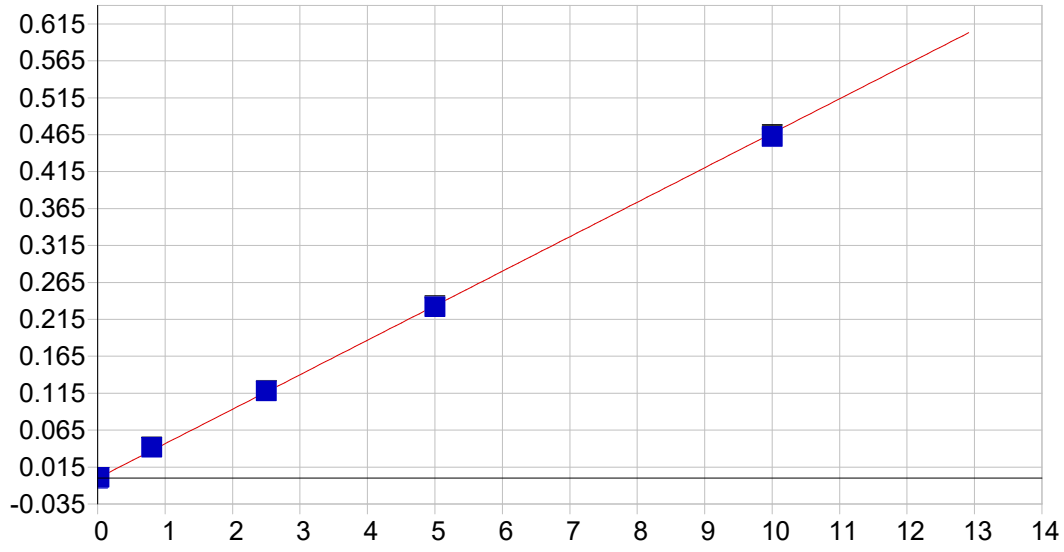
Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.040191	-.008646	.0000925	-.002650	.0005828	.0010010	.0011962
Stddev	.003328	.000180	.0002423	.000445	.0004193	.0007818	.0003971
%RSD	8.280188	2.084468	261.9879	16.80568	71.93278	78.10769	33.19288
#1	-.036882	-.008442	.0003310	-.003137	.0010406	.0001587	.0011431
#2	-.040152	-.008714	-.000153	-.002263	.0002175	.0011407	.0016172
#3	-.043538	-.008783	.000100	-.002551	.0004905	.0017035	.0008284

Reviewed By:jaswal
On:4/21/2025 10:08:04 AM
Inst Id :P4
LB :LB135273

Sample Name: CCB03 Acquired: 4/2/2025 17:58:01 Type: Unk
Method: NON EPA-6010-200.7(v2879) 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	.0022134	.0002389	.0000564
Stddev	.0026612	.0006537	.0000563
%RSD	120.2301	273.5930	99.84046
#1	-.000211	.0009446	.0001124
#2	.005061	.0001182	.0000569
#3	.001790	-.000346	-.000000

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3406.795	73346.14	15819.13	3189.042	5392.091
Stddev	17.416	130.94	67.06	6.060	14.460
%RSD	.5112158	.1785196	.4239321	.1900344	.2681704
#1	3413.492	73496.81	15759.80	3196.012	5395.963
#2	3419.869	73259.90	15805.69	3185.014	5404.221
#3	3387.025	73281.72	15891.89	3186.100	5376.089

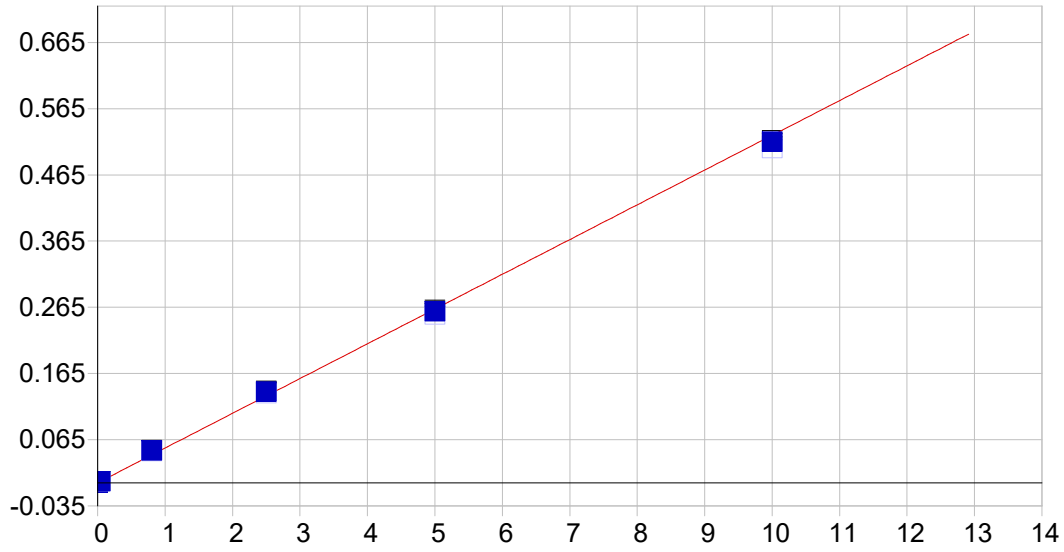


As 189.042 {479}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000135	Re-Slope:	1.000000
A1 (Gain):	0.046708	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999659	Status:	OK.
Std Error of Est:	0.000029		
Predicted MDL:	0.002556		
Predicted MQL:	0.008520		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00013	.000	1
S1	.02000	.02041	.000	2.07	.00081	.000	1
S3	2.5000	2.5323	.032	1.29	.11802	.001	1
S4	5.0000	4.9694	-.031	-.611	.23172	.001	1
S5	10.000	9.9042	-.096	-.958	.46196	.003	1
S2	.80000	.89359	.094	11.7	.04156	.000	1

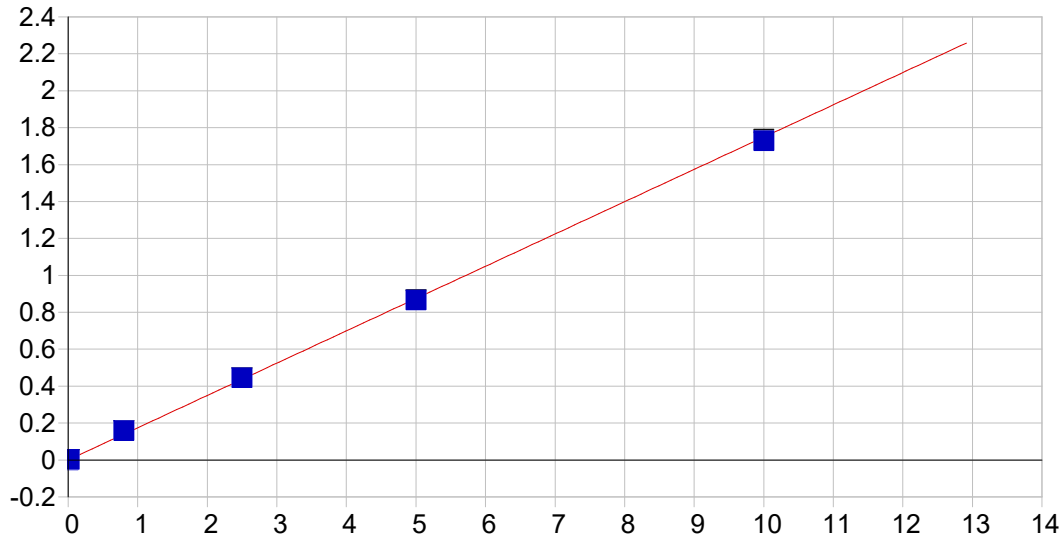


Tl 190.856 {477}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000081	Re-Slope:	1.000000
A1 (Gain):	0.052483	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999122	Status:	OK.
Std Error of Est:	0.000072		
Predicted MDL:	0.001892		
Predicted MQL:	0.006308		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00008	.000	1
S1	.04000	.04218	.002	5.44	.00200	.000	1
S3	2.5000	2.6258	.126	5.03	.13531	.001	1
S4	5.0000	4.9304	-.070	-1.39	.25385	.002	1
S5	10.000	9.8145	-.185	-1.85	.50535	.002	1
S2	.80000	.92713	.127	15.9	.04780	.000	1

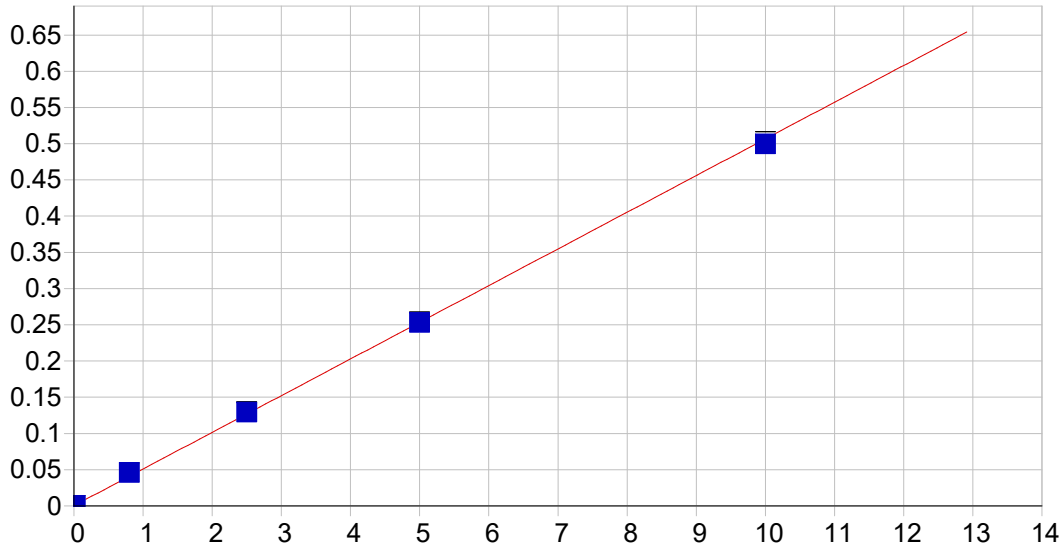


Pb 220.353 {453}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000151	Re-Slope:	1.000000
A1 (Gain):	0.174907	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999510	Status:	OK.
Std Error of Est:	0.000099		
Predicted MDL:	0.001399		
Predicted MQL:	0.004665		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00015	.000	1
S1	.01200	.01203	.000	.232	.00191	.000	1
S3	2.5000	2.5487	.049	1.95	.44515	.002	1
S4	5.0000	4.9537	-.046	-.925	.86533	.002	1
S5	10.000	9.8871	-.113	-1.13	1.7273	.008	1
S2	.80000	.91045	.110	13.8	.15894	.000	1

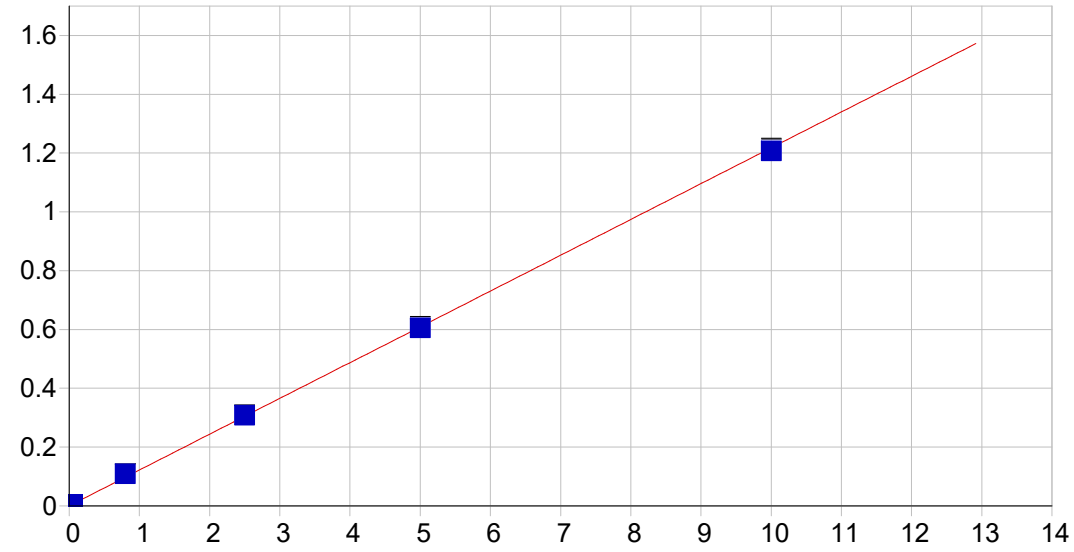


Se 196.090 {472}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000313	Re-Slope:	1.000000
A1 (Gain):	0.050630	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999579	Status:	OK.
Std Error of Est:	0.000034		
Predicted MDL:	0.002840		
Predicted MQL:	0.009466		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00031	.000	1
S1	.02000	.01969	-.000	-1.54	.00131	.000	1
S3	2.5000	2.5461	.046	1.84	.12918	.001	1
S4	5.0000	4.9893	-.011	-.214	.25283	.001	1
S5	10.000	9.8642	-.136	-1.36	.49956	.003	1
S2	.80000	.90073	.101	12.6	.04590	.000	1

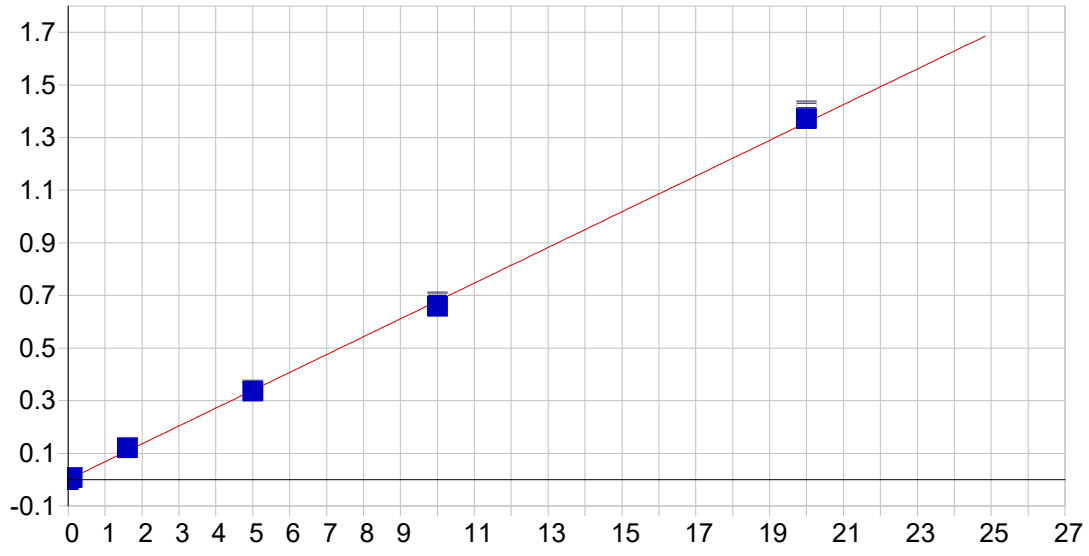


Sb 206.833 {463}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000299	Re-Slope:	1.000000
A1 (Gain):	0.121745	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999672	Status:	OK.
Std Error of Est:	0.000116		
Predicted MDL:	0.001775		
Predicted MQL:	0.005918		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00030	.000	1
S1	.05000	.04899	-.001	-2.02	.00628	.000	1
S3	2.5000	2.5271	.027	1.08	.30878	.001	1
S4	5.0000	4.9655	-.035	-.690	.60648	.004	1
S5	10.000	9.9153	-.085	-.847	1.2108	.006	1
S2	.80000	.89314	.093	11.6	.10930	.001	1

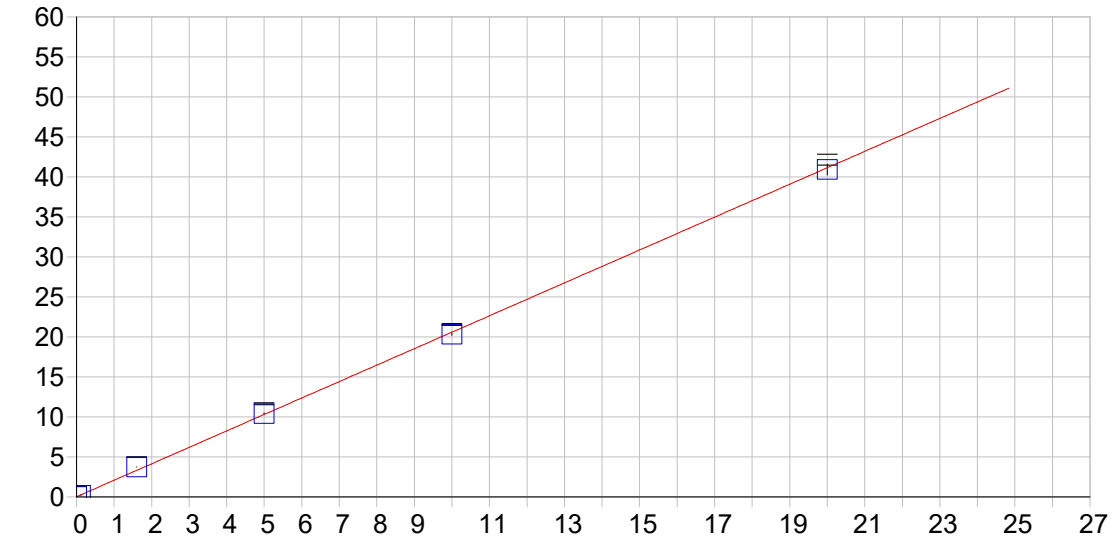


Al 396.152 { 85}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000299	Re-Slope:	1.000000
A1 (Gain):	0.067854	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999631	Status:	OK.
Std Error of Est:	0.000139		
Predicted MDL:	0.005865		
Predicted MQL:	0.019551		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00030	.000	1
S1	.10000	.09600	-.004	-4.00	.00734	.000	1
S3	5.0000	4.9416	-.058	-1.17	.34219	.001	1
S4	10.000	9.6960	-.304	-3.04	.67138	.003	1
S5	20.000	20.207	.207	1.04	1.3978	.004	1
S2	1.6000	1.7596	.160	9.97	.12180	.001	1

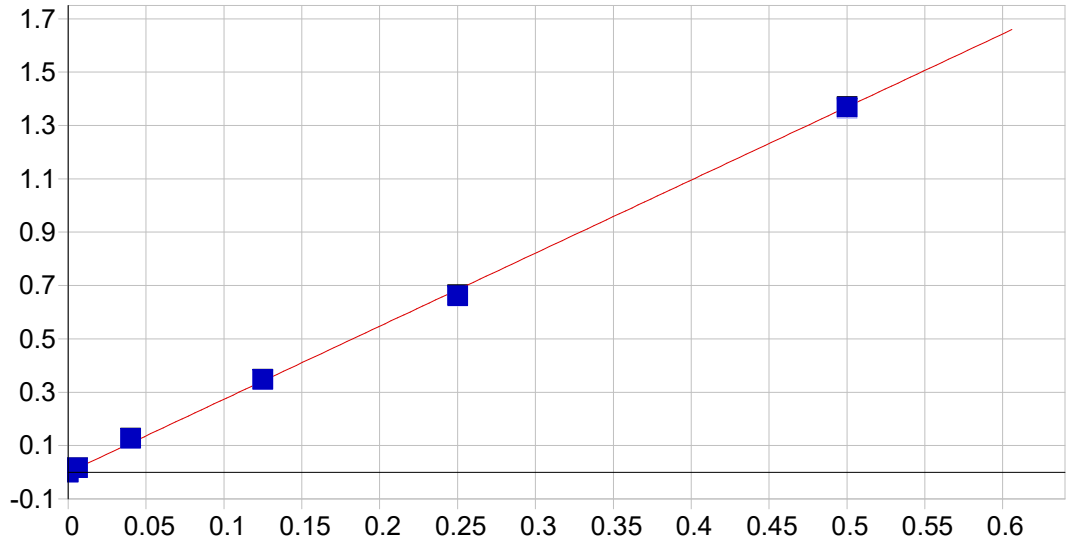


Ba 493.409 { 68}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.028248	Re-Slope:	1.000000
A1 (Gain):	2.055764	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999624	Status:	OK.
Std Error of Est:	0.004182		
Predicted MDL:	0.000767		
Predicted MQL:	0.002555		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.02822	.003	1
S1	.10000	.10103	.001	1.03	.23593	.001	1
S3	5.0000	5.0418	.042	.835	10.393	.110	1
S4	10.000	9.8679	-.132	-1.32	20.314	.114	1
S5	20.000	19.890	-.110	-.551	40.917	.695	1
S2	1.6000	1.7996	.200	12.5	3.7278	.013	1

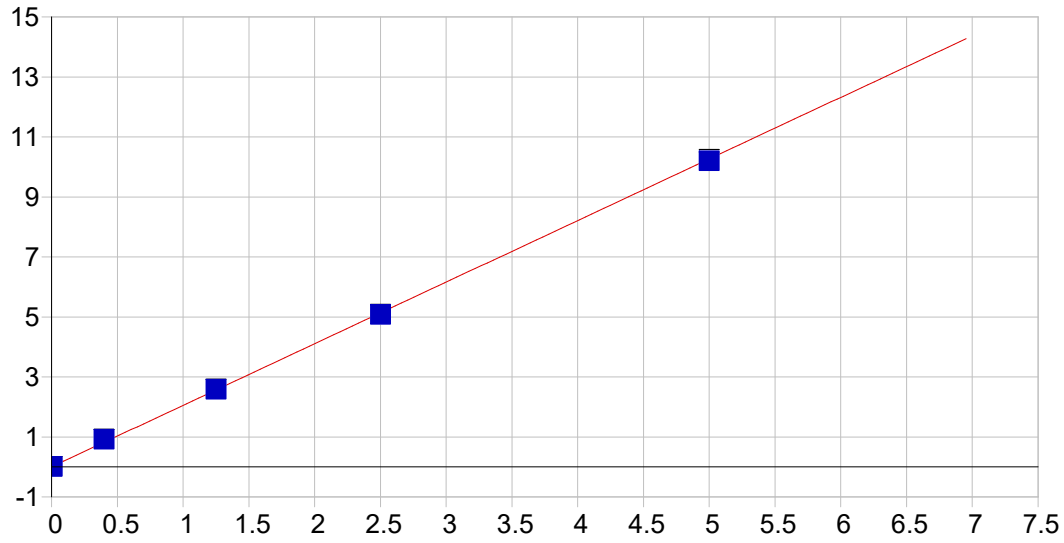


Be 234.861 {144}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000438	Re-Slope:	1.000000
A1 (Gain):	2.739481	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999238	Status:	OK.
Std Error of Est:	0.000306		
Predicted MDL:	0.000076		
Predicted MQL:	0.000252		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00044	.000	1
S1	.00600	.00596	-.000	-.608	.01578	.000	1
S3	.12500	.12699	.002	1.59	.34592	.001	1
S4	.25000	.24189	-.008	-3.25	.65914	.004	1
S5	.50000	.49954	-.000	-.093	1.3619	.003	1
S2	.04000	.04662	.007	16.6	.12679	.000	1

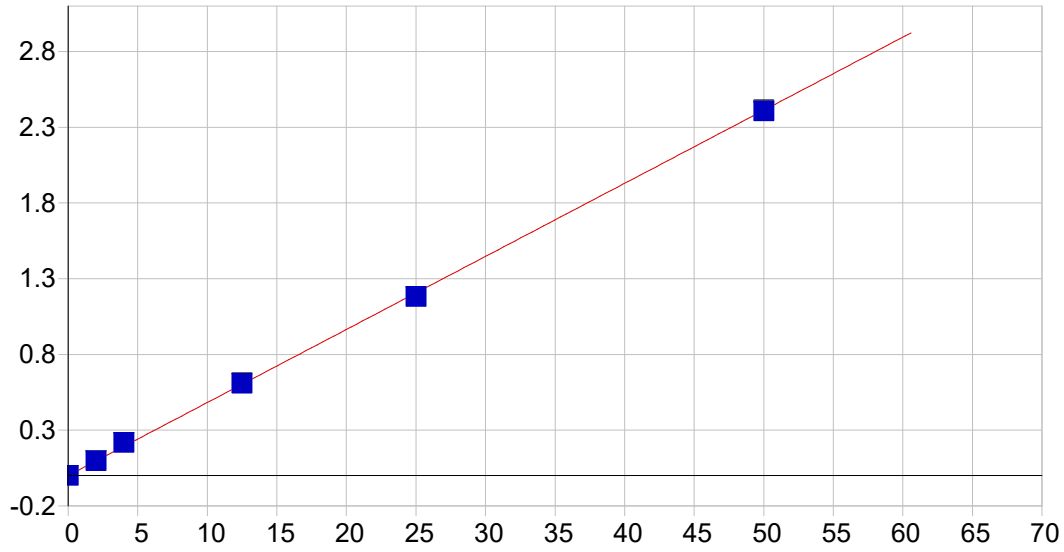


Cd 226.502 {449}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000083	Re-Slope:	1.000000
A1 (Gain):	2.053111	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999636	Status:	OK.
Std Error of Est:	0.000503		
Predicted MDL:	0.000082		
Predicted MQL:	0.000273		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00008	.000	1
S1	.00600	.00588	-.000	-2.04	.01205	.000	1
S3	1.2500	1.2606	.011	.846	2.5903	.007	1
S4	2.5000	2.4720	-.028	-1.12	5.0797	.009	1
S5	5.0000	4.9682	-.032	-.635	10.209	.043	1
S2	.40000	.44930	.049	12.3	.92309	.002	1

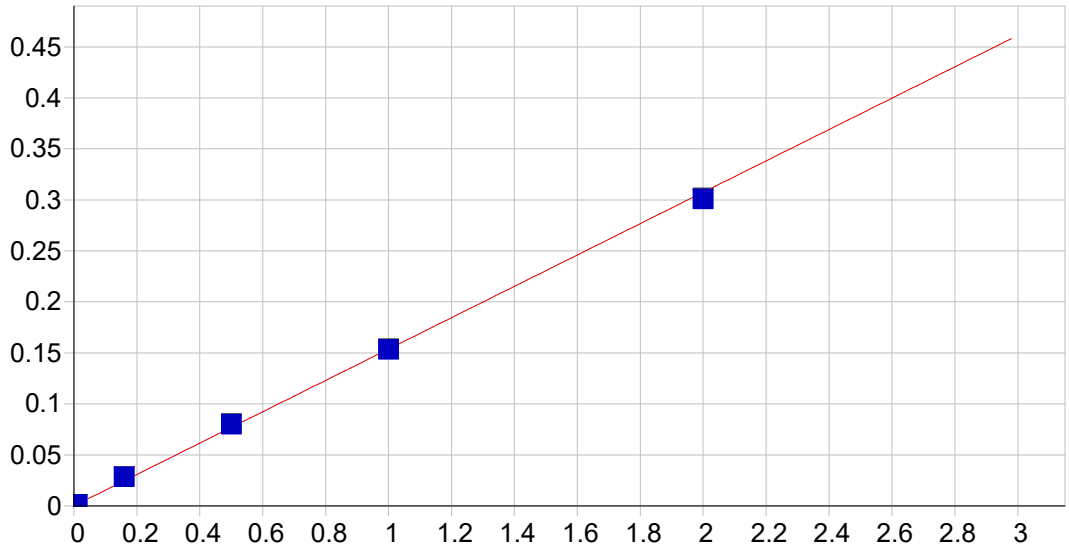


Ca 373.690 { 90}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000066	Re-Slope:	1.000000
A1 (Gain):	0.048244	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999577	Status:	OK.
Std Error of Est:	0.000742		
Predicted MDL:	0.007619		
Predicted MQL:	0.025398		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00024	-.000	.000	.00005	.000	1
S2	4.0000	4.5152	.515	12.9	.21790	.000	1
S3	12.500	12.622	.122	.972	.60897	.002	1
S4	25.000	24.471	-.529	-2.12	1.1806	.001	1
S5	50.000	49.882	-.118	-.236	2.4065	.008	1
S1	2.0000	2.0102	.010	.511	.09705	.000	1

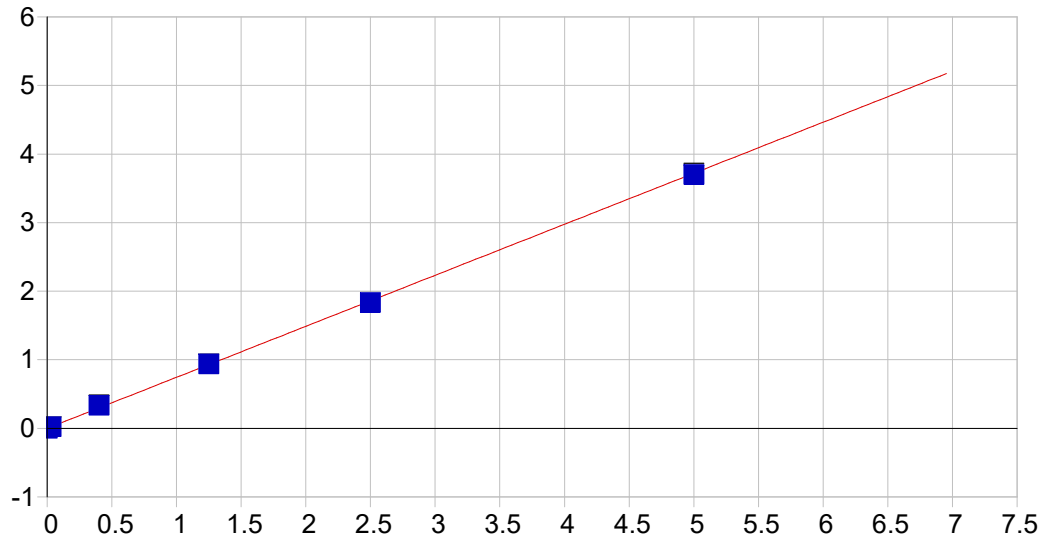


Cr 267.716 {126}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000081	Re-Slope:	1.000000
A1 (Gain):	0.153710	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999225	Status:	OK.
Std Error of Est:	0.000045		
Predicted MDL:	0.000378		
Predicted MQL:	0.001260		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00008	.000	1
S1	.01000	.00975	-.000	-2.54	.00158	.000	1
S3	.50000	.52072	.021	4.14	.08014	.000	1
S4	1.0000	.99763	-.002	-.237	.15347	.000	1
S5	2.0000	1.9569	-.043	-2.15	.30097	.001	1
S2	.16000	.18498	.025	15.6	.02852	.000	1

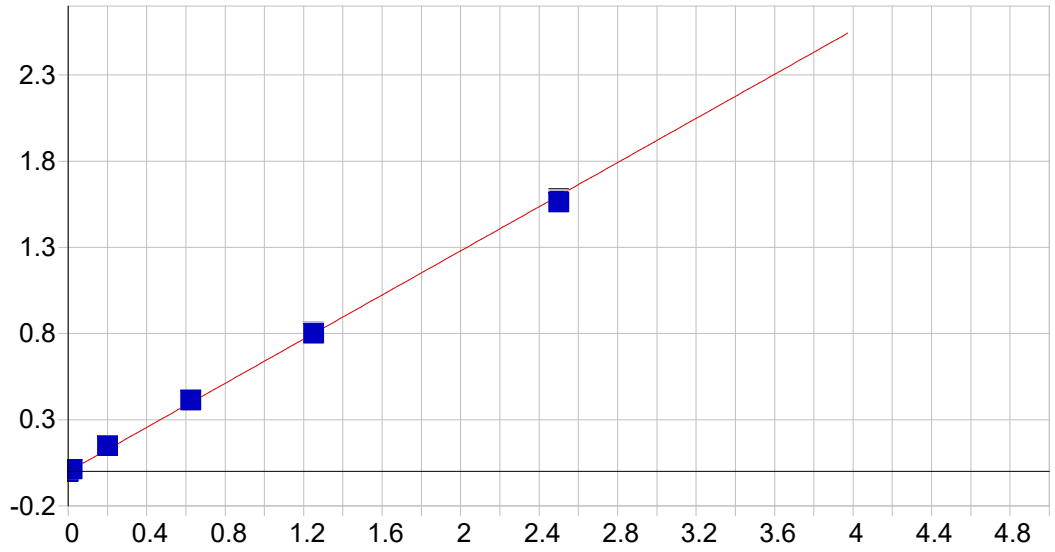


Co 228.616 {448}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000028	Re-Slope:	1.000000
A1 (Gain):	0.743997	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999590	Status:	OK.
Std Error of Est:	0.000434		
Predicted MDL:	0.000239		
Predicted MQL:	0.000795		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00003	.000	1
S1	.03000	.02968	-.000	-1.07	.02201	.000	1
S3	1.2500	1.2621	.012	.965	.94057	.002	1
S4	2.5000	2.4639	-.036	-1.44	1.8363	.003	1
S5	5.0000	4.9724	-.028	-.553	3.7058	.016	1
S2	.40000	.45202	.052	13.0	.33683	.001	1

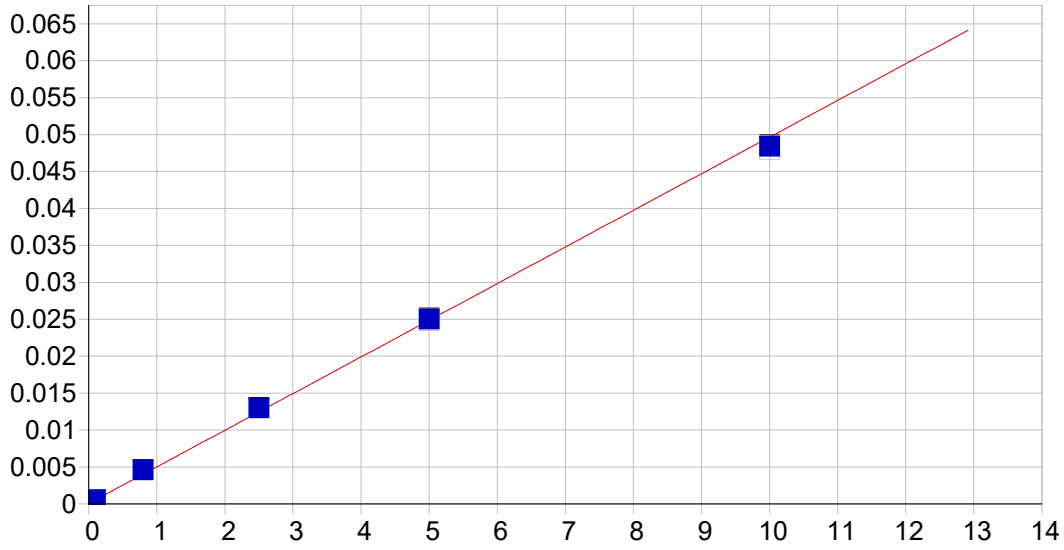


Cu 224.700 {450}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000583	Re-Slope:	1.000000
A1 (Gain):	0.640231	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999097	Status:	OK.
Std Error of Est:	0.000322		
Predicted MDL:	0.000397		
Predicted MQL:	0.001324		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00059	.000	1
S1	.02000	.02248	.002	12.4	.01393	.000	1
S3	.62500	.64680	.022	3.49	.41635	.001	1
S4	1.2500	1.2504	.000	.031	.80563	.003	1
S5	2.5000	2.4408	-.059	-2.37	1.5734	.008	1
S2	.20000	.23453	.035	17.3	.15048	.001	1

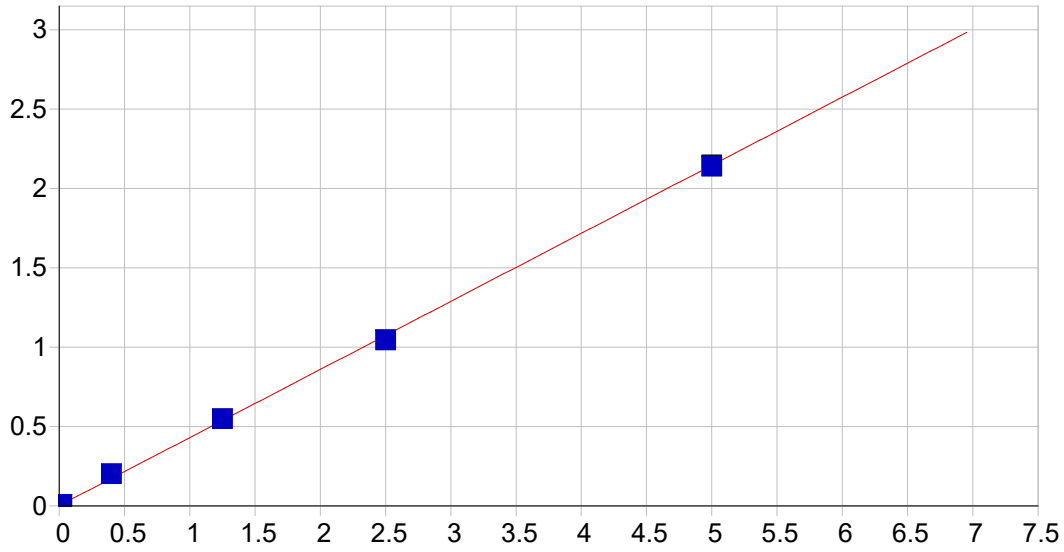


Fe 240.488 {140}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000045	Re-Slope:	1.000000
A1 (Gain):	0.004962	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999212	Status:	OK.
Std Error of Est:	0.000010		
Predicted MDL:	0.004127		
Predicted MQL:	0.013758		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	.00004	.000	1
S1	.10000	.10231	.002	2.31	.00055	.000	1
S3	2.5000	2.6107	.111	4.43	.01289	.000	1
S4	5.0000	5.0275	.027	.550	.02478	.000	1
S5	10.000	9.7434	-.257	-2.57	.04797	.000	1
S2	.80000	.91603	.116	14.5	.00456	.000	1

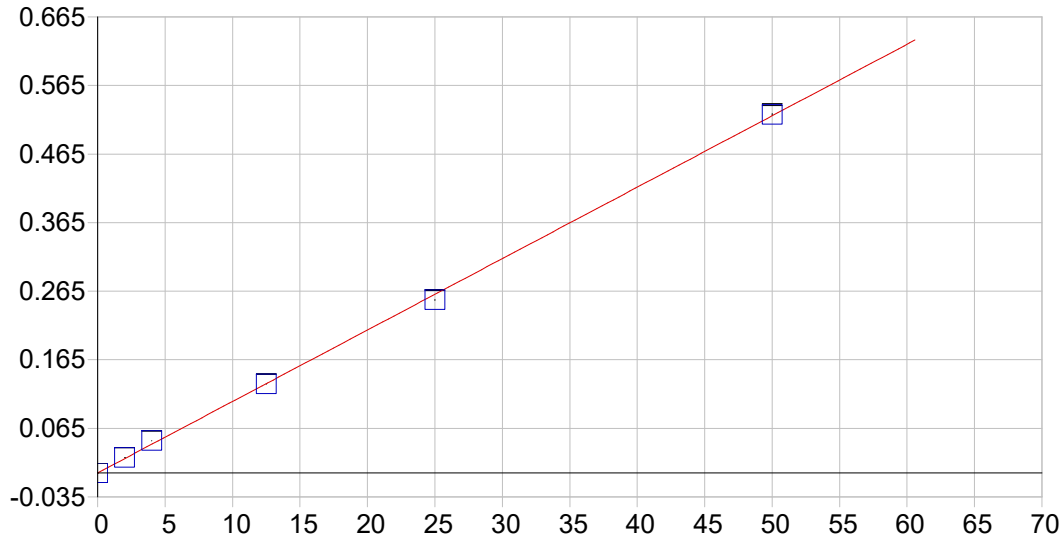


Mn 257.610 {131}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001710	Re-Slope:	1.000000
A1 (Gain):	0.429012	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999288	Status:	OK.
Std Error of Est:	0.000269		
Predicted MDL:	0.000324		
Predicted MQL:	0.001079		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00171	.000	1
S1	.02000	.01859	-.001	-7.06	.00969	.000	1
S3	1.2500	1.2755	.025	2.04	.54900	.003	1
S4	2.5000	2.4298	-.070	-2.81	1.0444	.003	1
S5	5.0000	4.9816	-.018	-.369	2.1393	.009	1
S2	.40000	.46456	.065	16.1	.20105	.001	1

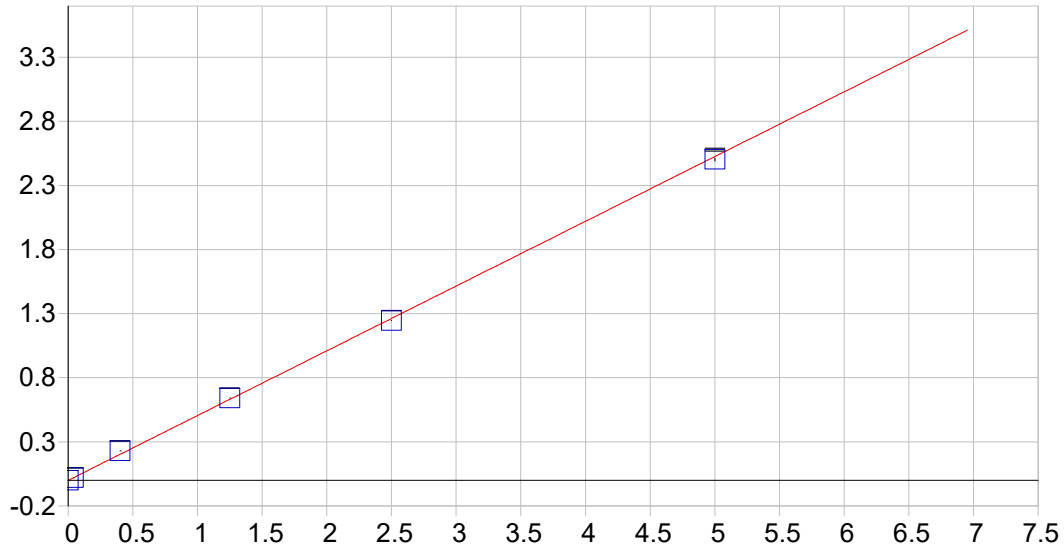


Mg 279.079 {121}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000011	Re-Slope:	1.000000
A1 (Gain):	0.010417	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999465	Status:	OK.
Std Error of Est:	0.000180		
Predicted MDL:	0.014683		
Predicted MQL:	0.048942		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00033	-.000	.000	-.00001	.000	1
S2	4.0000	4.5078	.508	12.7	.04695	.000	1
S3	12.500	12.463	-.037	-.300	.12981	.001	1
S4	25.000	24.216	-.784	-3.13	.25226	.001	1
S5	50.000	50.170	.170	.341	.52262	.001	1
S1	2.0000	2.1430	.143	7.15	.02231	.000	1

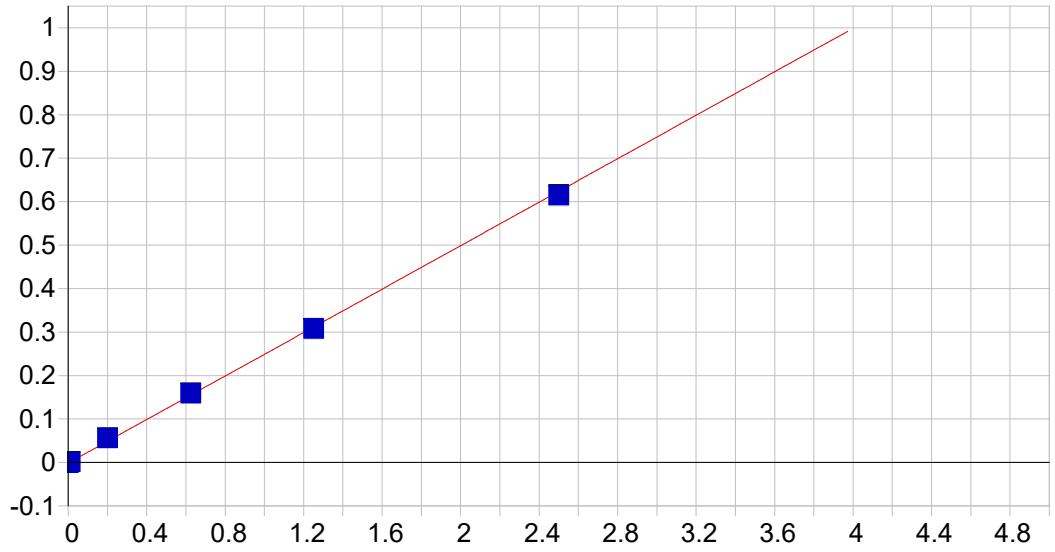


Ni 231.604 {446}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000207	Re-Slope:	1.000000
A1 (Gain):	0.505175	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999512	Status:	OK.
Std Error of Est:	0.000370		
Predicted MDL:	0.000330		
Predicted MQL:	0.001100		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00021	.000	1
S1	.04000	.04002	.000	.047	.02001	.000	1
S3	1.2500	1.2706	.021	1.65	.64165	.001	1
S4	2.5000	2.4680	-.032	-1.28	1.2465	.001	1
S5	5.0000	4.9555	-.044	-.890	2.5032	.012	1
S2	.40000	.45594	.056	14.0	.23012	.001	1

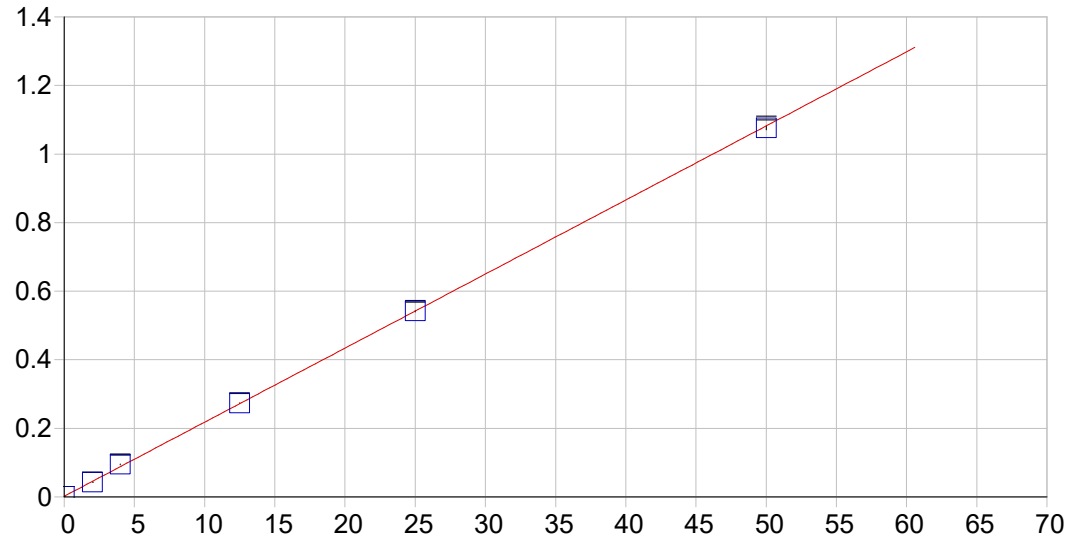


Ag 328.068 {103}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001282	Re-Slope:	1.000000
A1 (Gain):	0.250014	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999370	Status:	OK.
Std Error of Est:	0.000073		
Predicted MDL:	0.000333		
Predicted MQL:	0.001109		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00128	.000	1
S1	.01000	.01003	.000	.320	.00121	.000	1
S3	.62500	.64218	.017	2.75	.15865	.001	1
S4	1.2500	1.2369	-.013	-1.05	.30673	.000	1
S5	2.5000	2.4654	-.035	-1.39	.61261	.001	1
S2	.20000	.23050	.030	15.2	.05615	.001	1

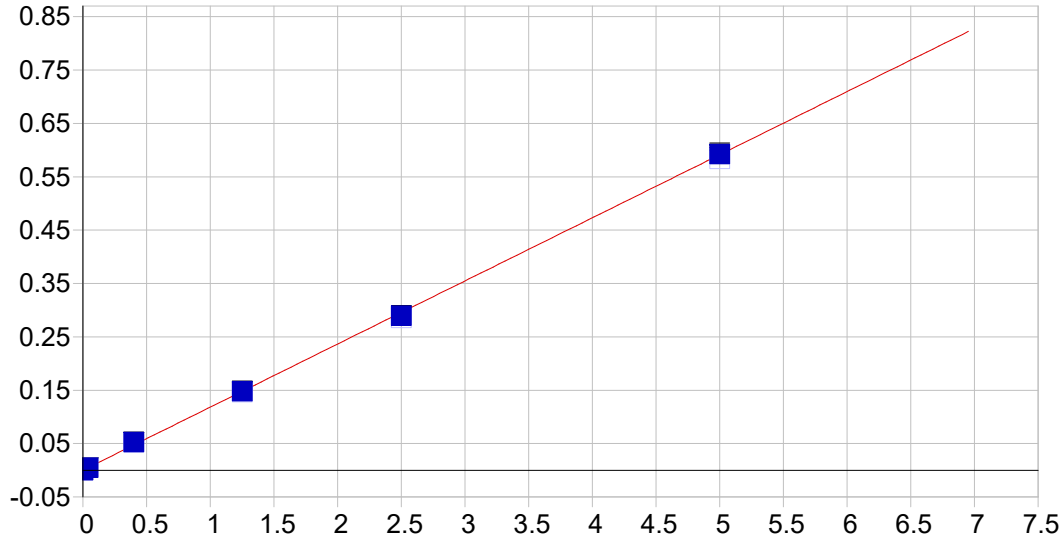


Na 589.592 { 57}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001980	Re-Slope:	1.000000
A1 (Gain):	0.021601	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999838	Status:	OK.
Std Error of Est:	0.000205		
Predicted MDL:	0.008036		
Predicted MQL:	0.026786		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00005	-.000	.000	.00198	.000	1
S2	4.0000	4.3048	.305	7.62	.09497	.001	1
S3	12.500	12.570	.070	.563	.27352	.001	1
S4	25.000	24.992	-.008	-.031	.54184	.003	1
S5	50.000	49.734	-.266	-.531	1.0763	.006	1
S1	2.0000	1.8982	-.102	-5.09	.04298	.000	1

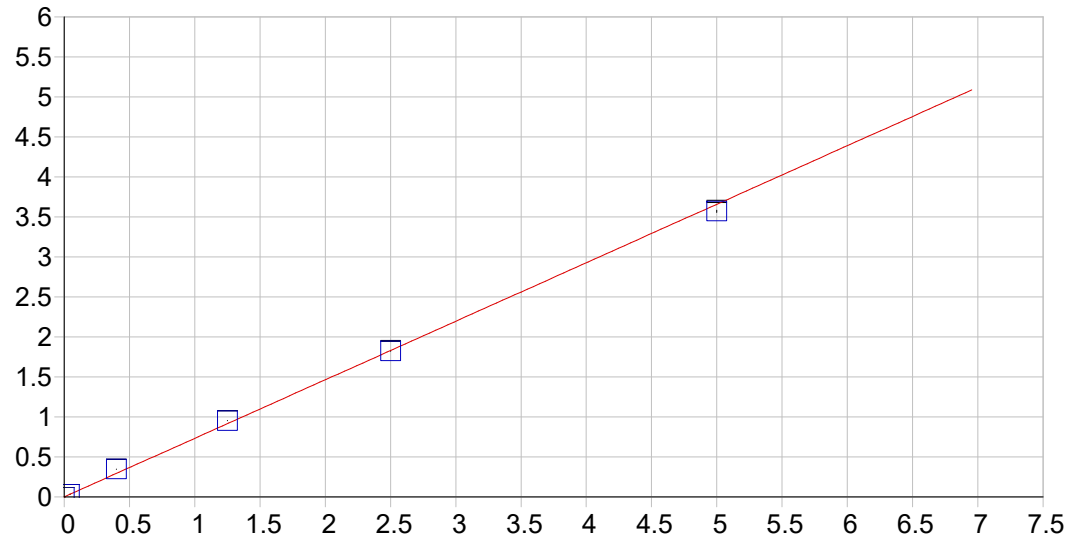


V 292.402 {115}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000020	Re-Slope:	1.000000
A1 (Gain):	0.118265	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999648	Status:	OK.
Std Error of Est:	0.000073		
Predicted MDL:	0.001434		
Predicted MQL:	0.004781		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00002	.000	1
S1	.04000	.03913	-.001	-2.18	.00447	.000	1
S3	1.2500	1.2523	.002	.181	.14596	.001	1
S4	2.5000	2.4466	-.053	-2.14	.28505	.001	1
S5	5.0000	5.0068	.007	.137	.58353	.002	1
S2	.40000	.44520	.045	11.3	.05198	.000	1

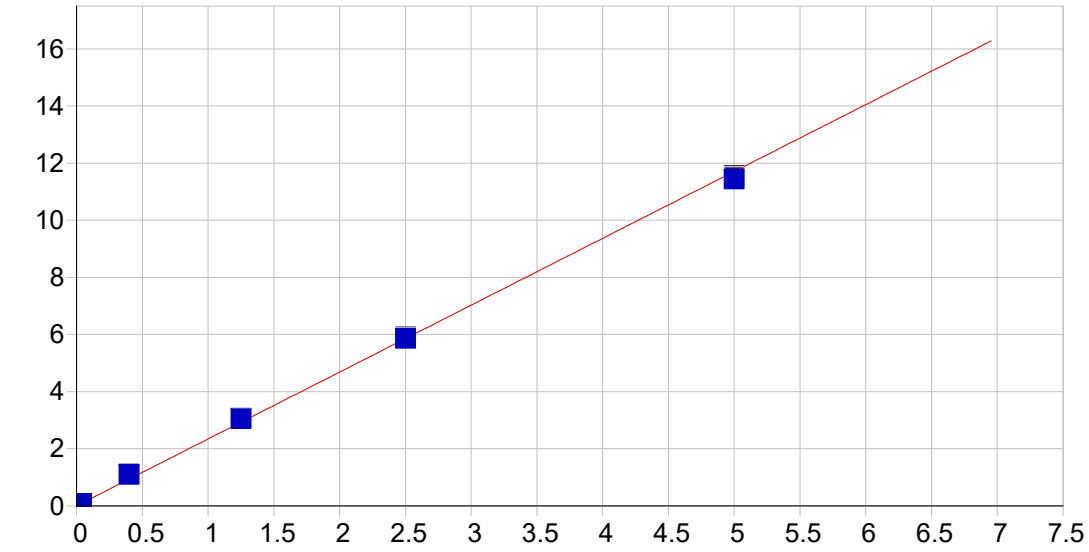


Zn 206.200 {464}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001045	Re-Slope:	1.000000
A1 (Gain):	0.731483	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999004	Status:	OK.
Std Error of Est:	0.000767		
Predicted MDL:	0.000210		
Predicted MQL:	0.000701		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00104	.000	1
S1	.04000	.04275	.003	6.88	.03232	.000	1
S3	1.2500	1.3015	.052	4.12	.95310	.002	1
S4	2.5000	2.4941	-.006	-.235	1.8255	.006	1
S5	5.0000	4.8792	-.121	-2.42	3.5701	.015	1
S2	.40000	.47234	.072	18.1	.34655	.001	1

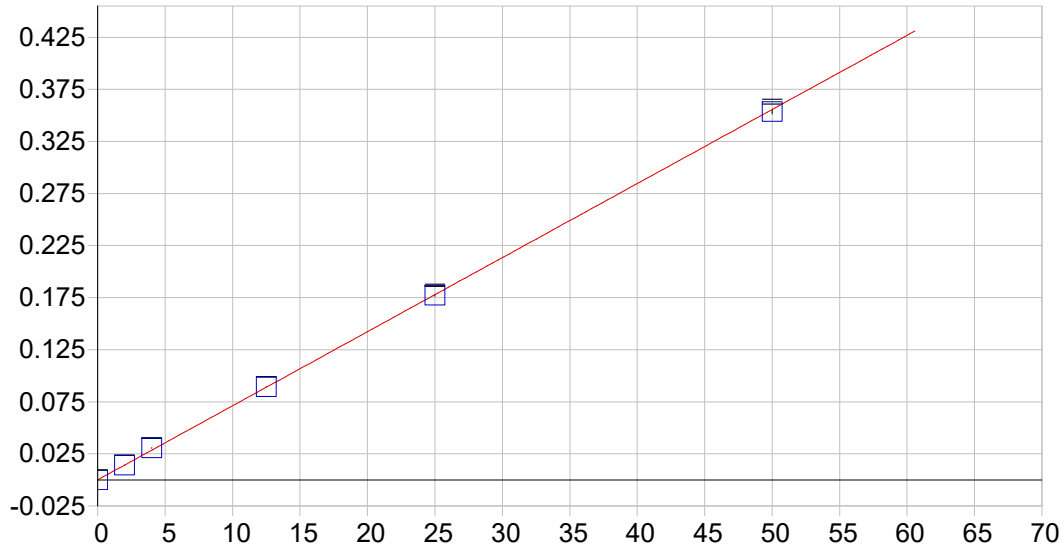


Zn 213.856 {158}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.004897	Re-Slope:	1.000000
A1 (Gain):	2.341056	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999193	Status:	OK.
Std Error of Est:	0.002224		
Predicted MDL:	0.000309		
Predicted MQL:	0.001029		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00488	.000	1
S1	.04000	.04156	.002	3.91	.10285	.002	1
S3	1.2500	1.2987	.049	3.90	3.0656	.009	1
S4	2.5000	2.4989	-.001	-.045	5.8956	.016	1
S5	5.0000	4.8860	-.114	-2.28	11.525	.036	1
S2	.40000	.46479	.065	16.2	1.0995	.015	1

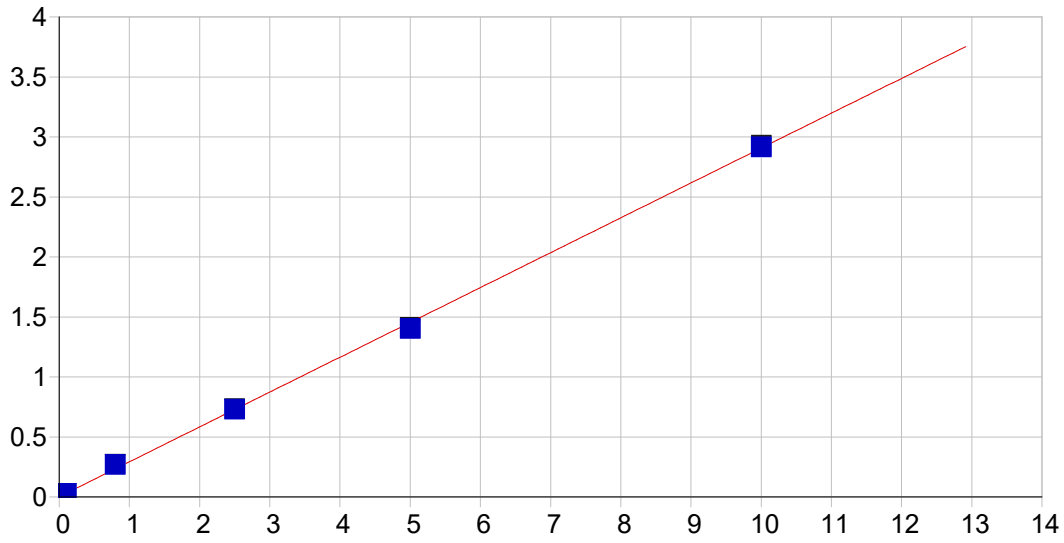


K 766.490 { 44}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000005	Re-Slope:	1.000000
A1 (Gain):	0.007114	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999860	Status:	OK.
Std Error of Est:	0.000063		
Predicted MDL:	0.025499		
Predicted MQL:	0.084998		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00012	-.000	.000	-.00001	.000	1
S2	4.0000	4.3082	.308	7.70	.03064	.000	1
S3	12.500	12.570	.070	.560	.08942	.000	1
S4	25.000	24.926	-.074	-.296	.17732	.001	1
S5	50.000	49.720	-.280	-.560	.35370	.002	1
S1	2.0000	1.9760	-.024	-1.20	.01405	.000	1

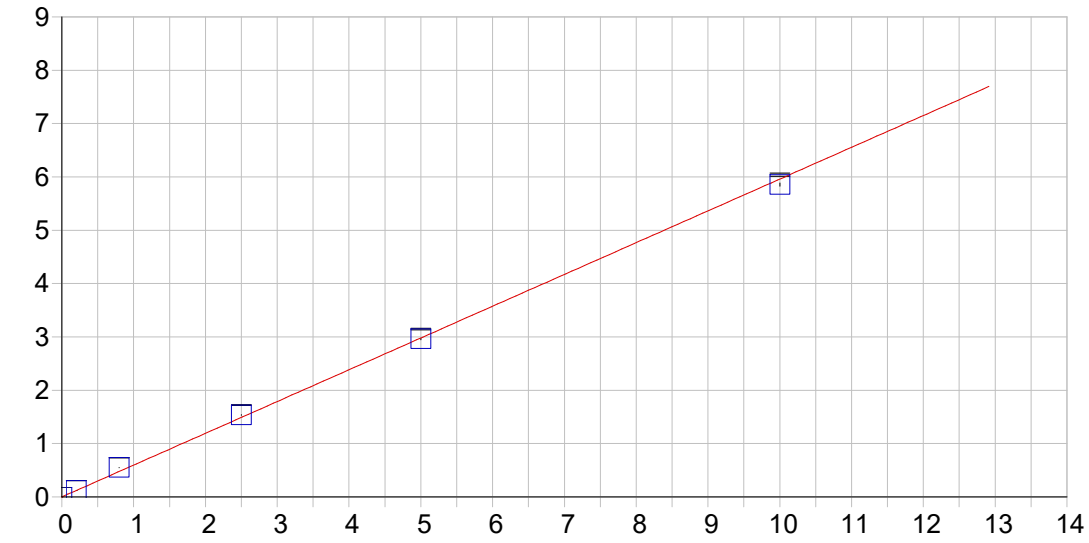


B 249.678 {135}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001935	Re-Slope:	1.000000
A1 (Gain):	0.290473	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999292	Status:	OK.
Std Error of Est:	0.000572		
Predicted MDL:	0.000680		
Predicted MQL:	0.002266		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00193	.000	1
S1	.10000	.10128	.001	1.28	.03120	.000	1
S3	2.5000	2.5119	.012	.476	.72931	.002	1
S4	5.0000	4.8243	-.176	-3.51	1.3987	.008	1
S5	10.000	10.037	.037	.375	2.9085	.013	1
S2	.80000	.92500	.125	15.6	.26990	.001	1

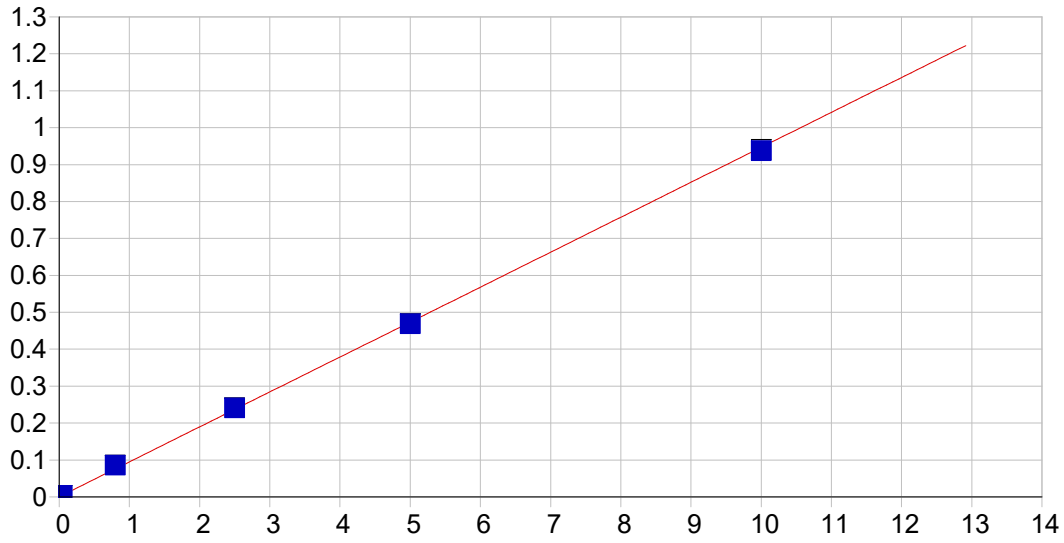


Mo 202.030 {467}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000293	Re-Slope:	1.000000
A1 (Gain):	0.595873	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999327	Status:	OK.
Std Error of Est:	0.001628		
Predicted MDL:	0.000270		
Predicted MQL:	0.000899		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00003	-.000	.000	.00027	.000	1
S1	.20000	.20190	.002	.952	.12060	.001	1
S3	2.5000	2.5762	.076	3.05	1.5354	.007	1
S4	5.0000	4.9708	-.029	-.583	2.9623	.015	1
S5	10.000	9.8266	-.173	-1.73	5.8557	.029	1
S2	.80000	.92452	.125	15.6	.55119	.002	1

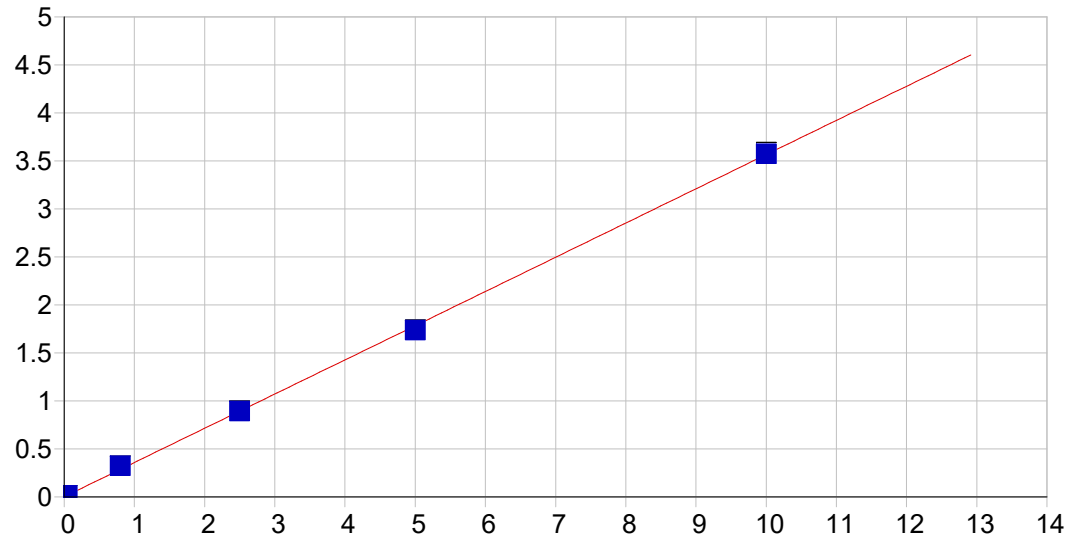


Sn 189.989 {478}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000273	Re-Slope:	1.000000
A1 (Gain):	0.094642	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999594	Status:	OK.
Std Error of Est:	0.000089		
Predicted MDL:	0.000814		
Predicted MQL:	0.002714		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00027	.000	1
S1	.04000	.03979	-.000	-.525	.00403	.000	1
S3	2.5000	2.5390	.039	1.56	.24033	.001	1
S4	5.0000	4.9504	-.050	-.992	.46830	.001	1
S5	10.000	9.9091	-.091	-.909	.93712	.003	1
S2	.80000	.90175	.102	12.7	.08554	.000	1

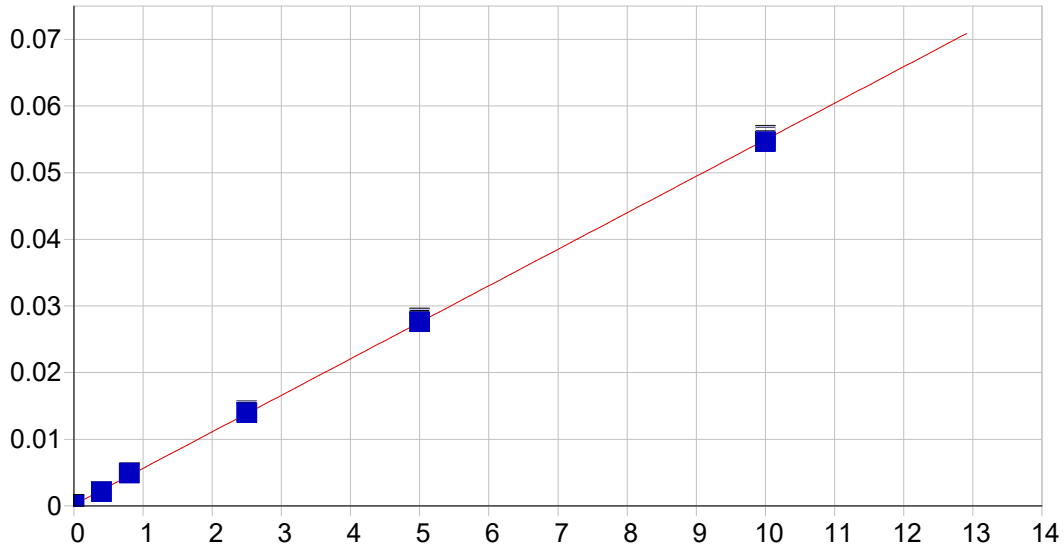


Ti 336.121 {100}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001739	Re-Slope:	1.000000
A1 (Gain):	0.356361	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999566	Status:	OK.
Std Error of Est:	0.000348		
Predicted MDL:	0.000653		
Predicted MQL:	0.002175		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00174	.000	1
S1	.04000	.04028	.000	.691	.01608	.000	1
S3	2.5000	2.5053	.005	.210	.89419	.004	1
S4	5.0000	4.8683	-.132	-2.63	1.7360	.004	1
S5	10.000	10.027	.027	.267	3.5736	.017	1
S2	.80000	.89943	.099	12.4	.32216	.001	1

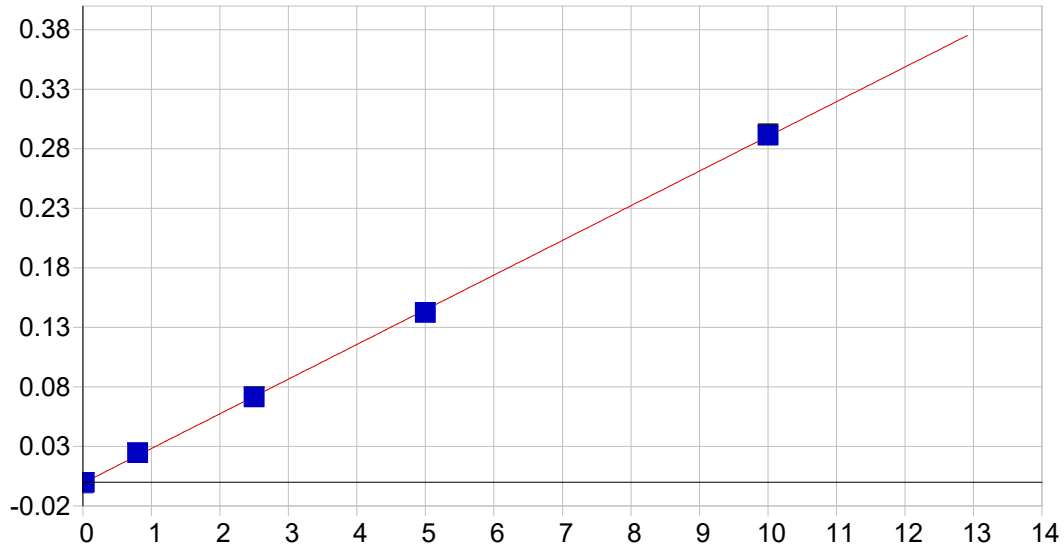


Si 288.158 {117}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000160	Re-Slope:	1.000000
A1 (Gain):	0.005478	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999707	Status:	OK.
Std Error of Est:	0.000014		
Predicted MDL:	0.006715		
Predicted MQL:	0.022382		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00016	.000	1
S1	.40000	.35277	-.047	-11.8	.00210	.000	1
S3	2.5000	2.5247	.025	.987	.01420	.000	1
S4	5.0000	5.0095	.009	.190	.02801	.000	1
S5	10.000	9.9482	-.052	-.518	.05548	.000	1
S2	.80000	.86427	.064	8.03	.00496	.000	1

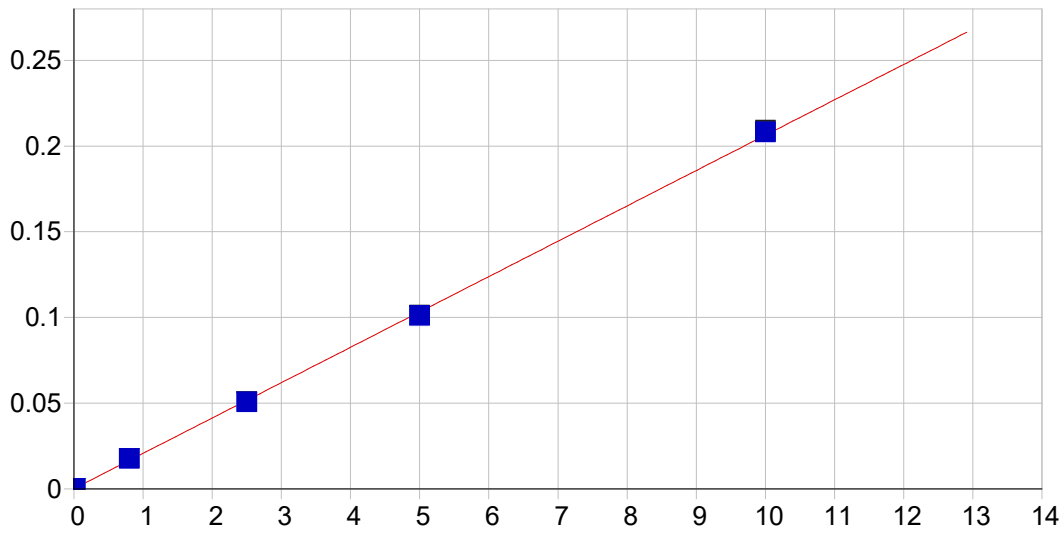


P 177.495 {490}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000865	Re-Slope:	1.000000
A1 (Gain):	0.029136	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999772	Status:	OK.
Std Error of Est:	0.000015		
Predicted MDL:	0.002848		
Predicted MQL:	0.009492		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00087	.000	1
S1	.02000	.01787	-.002	-10.7	-.00034	.000	1
S3	2.5000	2.4848	-.015	-.609	.07152	.000	1
S4	5.0000	4.9134	-.087	-1.73	.14227	.000	1
S5	10.000	10.032	.032	.323	.29139	.001	1
S2	.80000	.87172	.072	8.96	.02453	.000	1

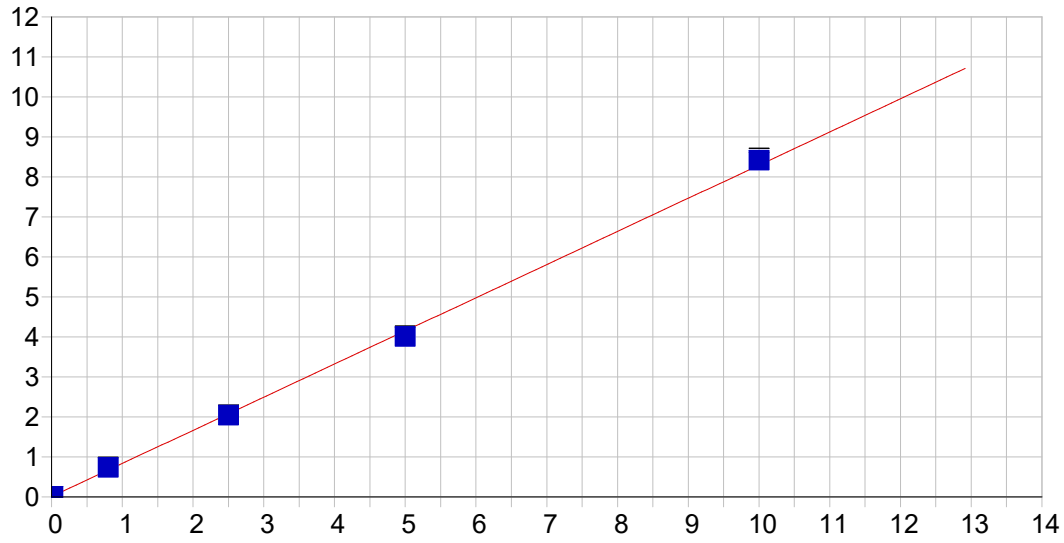


S 182.034 {485}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000120	Re-Slope:	1.000000
A1 (Gain):	0.020622	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999792	Status:	OK.
Std Error of Est:	0.000010		
Predicted MDL:	0.003532		
Predicted MQL:	0.011774		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00012	.000	1
S1	.02000	.02053	.001	2.66	.00053	.000	1
S3	2.5000	2.4538	-.046	-1.85	.05059	.000	1
S4	5.0000	4.8966	-.103	-2.07	.10083	.000	1
S5	10.000	10.095	.095	.948	.20776	.001	1
S2	.80000	.85430	.054	6.79	.01769	.000	1

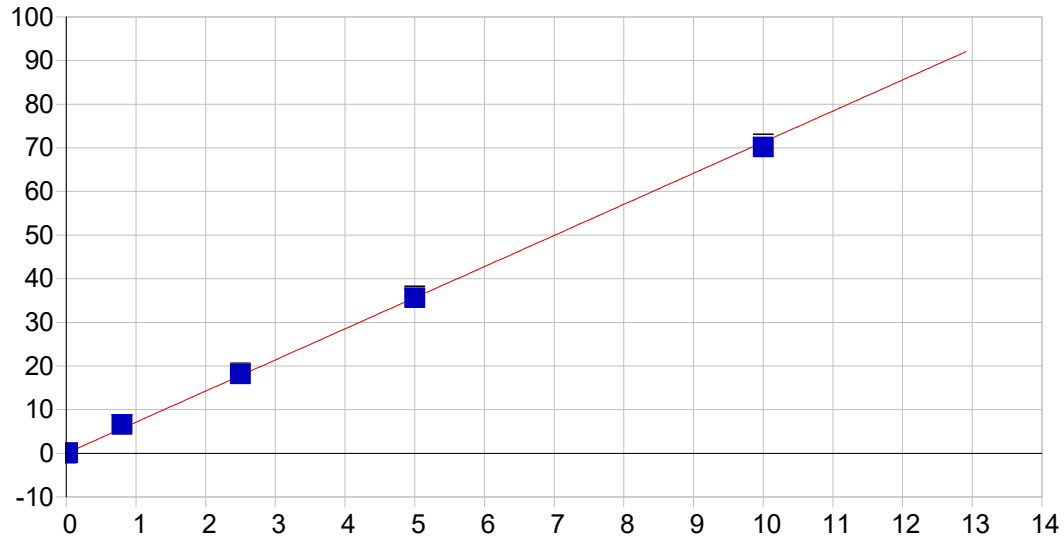


Li 670.784 { 50}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.007392	Re-Slope:	1.000000
A1 (Gain):	0.828677	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999537	Status:	OK.
Std Error of Est:	0.000591		
Predicted MDL:	0.001387		
Predicted MQL:	0.004622		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00739	.001	1
S5	10.000	10.144	.144	1.44	8.4174	.053	1
S4	5.0000	4.8237	-.176	-3.53	4.0067	.016	1
S3	2.5000	2.4567	-.043	-1.73	2.0443	.011	1
S1	.02000	.01762	-.002	-11.9	.02226	.001	1
S2	.80000	.87834	.078	9.79	.73559	.005	1

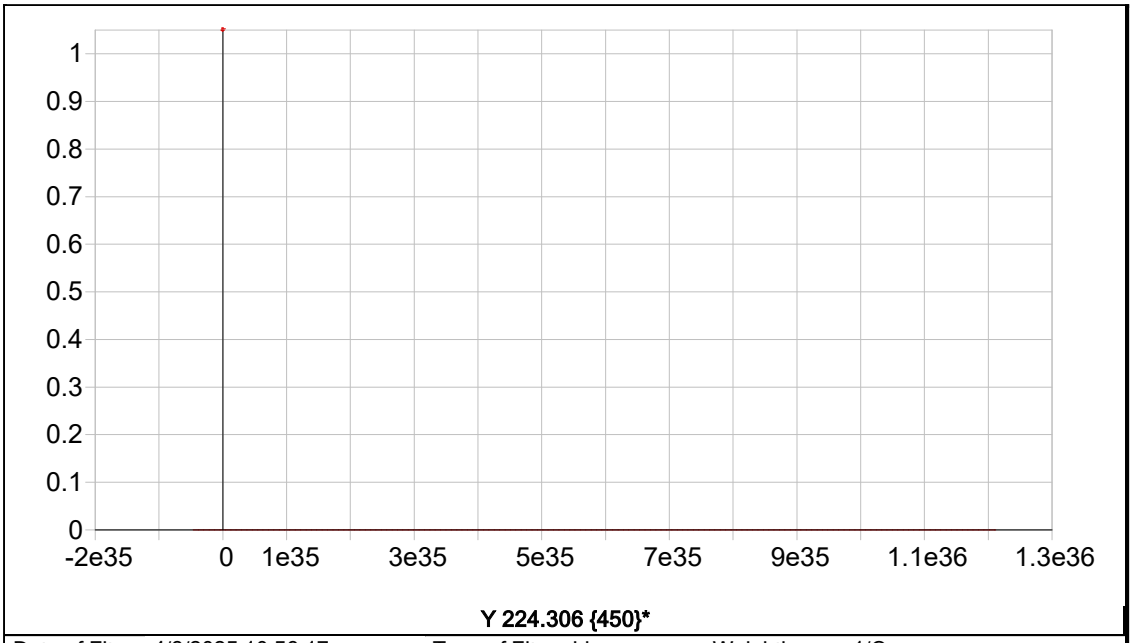


Sr 407.771 { 83}

Date of Fit:	4/3/2025 10:56:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000032	Re-Slope:	1.000000
A1 (Gain):	7.129825	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999423	Status:	OK.
Std Error of Est:	0.005685		
Predicted MDL:	0.000064		
Predicted MQL:	0.000213		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00005	.000	1
S1	.02000	.02020	.000	1.01	.14463	.001	1
S3	2.5000	2.5462	.046	1.85	18.170	.191	1
S4	5.0000	4.9981	-.002	-.039	35.667	.380	1
S5	10.000	9.8366	-.163	-1.63	70.196	.659	1
S2	.80000	.91895	.119	14.9	6.5570	.019	1

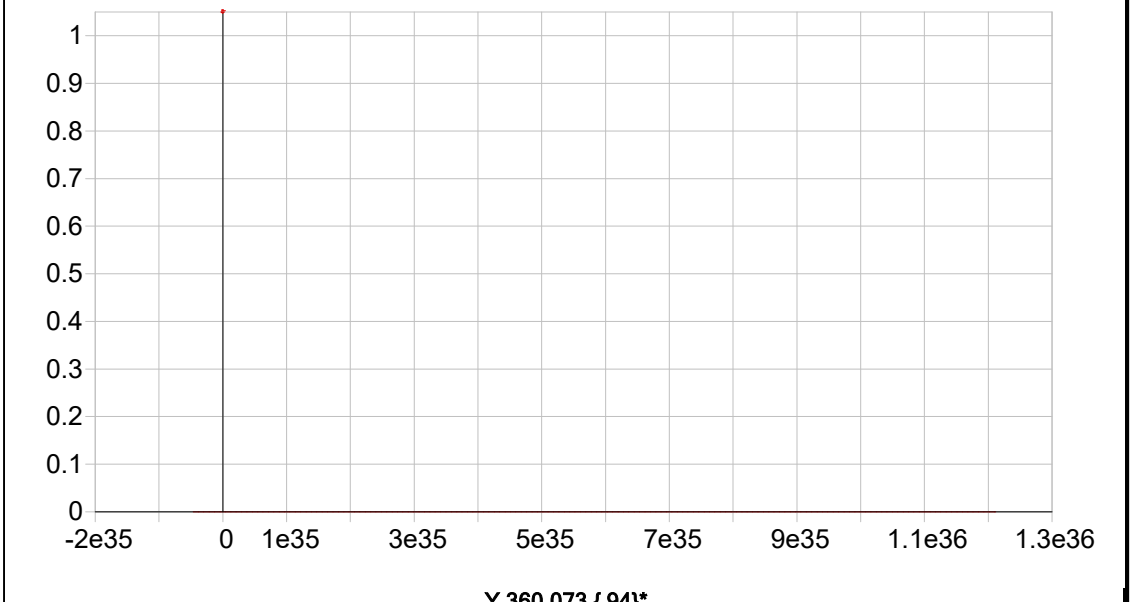


Y 224.306 {450}*

Date of Fit:	4/3/2025 10:56:17	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



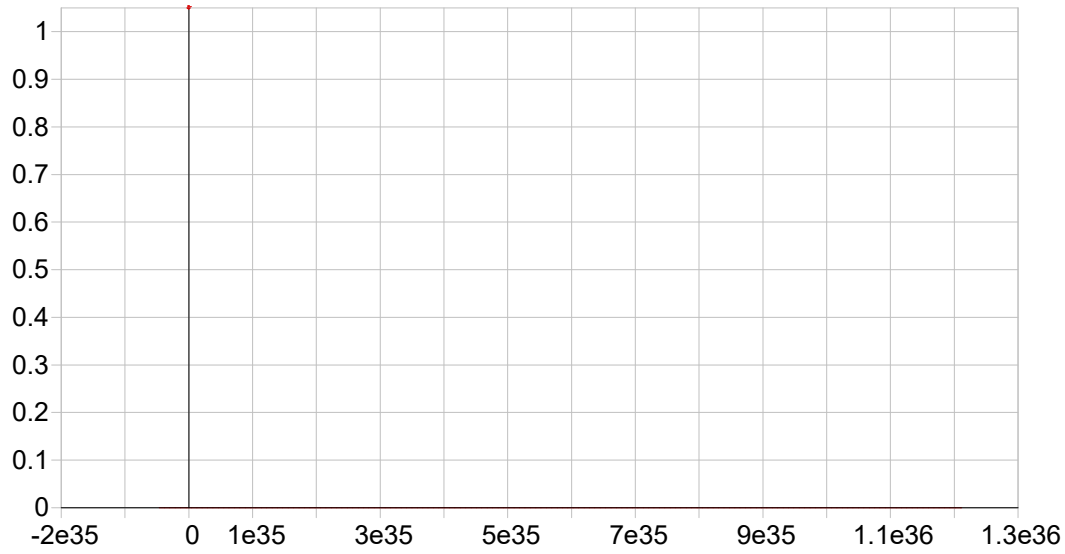
Y 360.073 { 94}*

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					

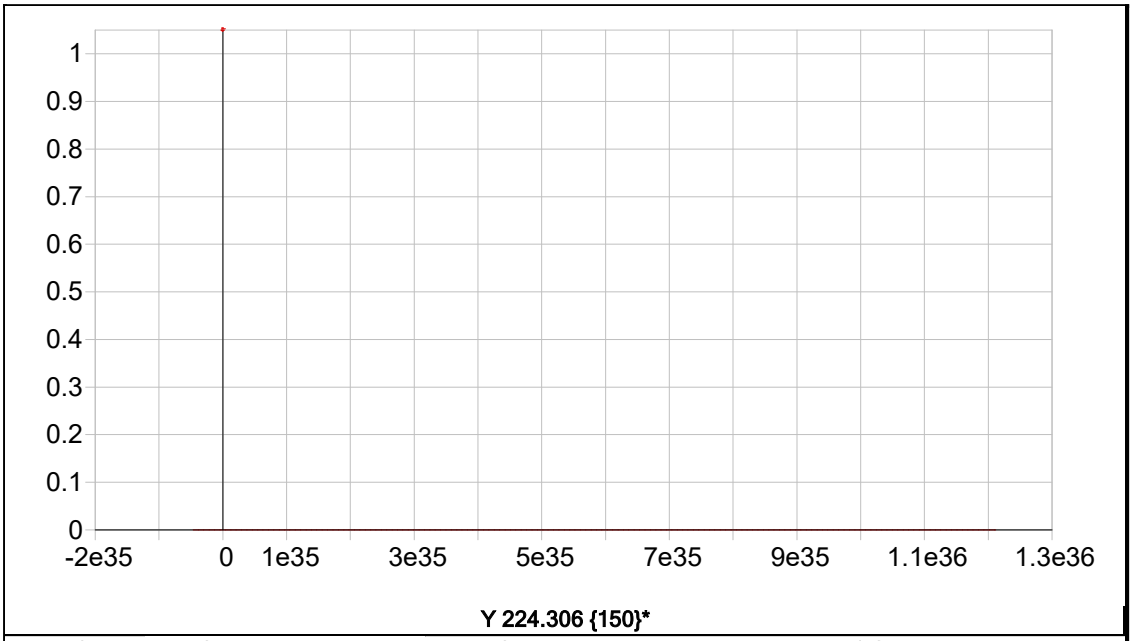
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



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

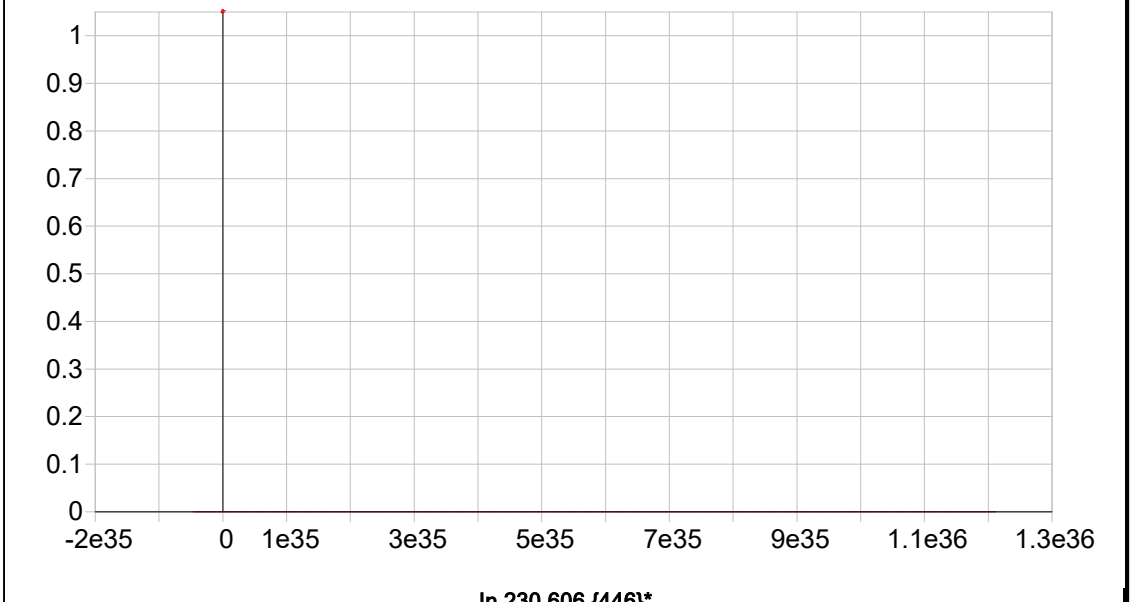


Y 224.306 {150}*

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:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: S0 Acquired: 4/3/2025 10:22:12 Type: Cal
Method: NON EPA-6010-200.7(v2880) 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	-.00013	-.00008	-.00015	.00031	.00030	.00030	.02822	-.00044
Stddev	.00008	.00008	.00005	.00007	.00003	.00041	.00262	.00014
%RSD	57.596	101.09	31.607	21.589	10.839	138.65	9.2974	30.844
#1	-.00018	-.00018	-.00012	.00038	.00033	-.00017	.02679	-.00059
#2	-.00018	-.00004	-.00013	.00025	.00027	.00060	.02663	-.00033
#3	-.00005	-.00003	-.00021	.00030	.00030	.00047	.03125	-.00040

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	-.00008	.00005	.00008	.00003	-.00059	.00004	.00171	-.00001
Stddev	.00014	.00018	.00001	.00009	.00012	.00001	.00009	.00002
%RSD	167.70	328.49	14.650	362.78	20.188	14.294	5.3214	127.81
#1	.00002	-.00008	.00007	.00005	-.00045	.00004	.00171	-.00004
#2	-.00003	.00026	.00008	-.00008	-.00068	.00004	.00180	-.00001
#3	-.00025	-.00001	.00009	.00010	-.00062	.00005	.00162	-.00000

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	-.00021	-.00128	.00198	.00002	.00488	-.00001	.00193	.00027
Stddev	.00013	.00004	.00015	.00008	.00012	.00009	.00021	.00008
%RSD	59.946	2.9337	7.4225	381.60	2.3647	1603.0	10.656	28.470
#1	-.00023	-.00125	.00200	.00003	.00483	-.00007	.00201	.00035
#2	-.00008	-.00132	.00182	-.00006	.00479	.00010	.00208	.00027
#3	-.00033	-.00127	.00211	.00009	.00501	-.00005	.00170	.00020

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	.00027	.00174	.00016	-.00087	.00012	.00739	-.00005
Stddev	.00009	.00009	.00003	.00004	.00001	.00075	.00025
%RSD	32.579	5.3931	18.769	5.0237	7.4864	10.196	450.78
#1	.00018	.00170	.00014	-.00084	.00011	.00761	-.00033
#2	.00028	.00167	.00019	-.00084	.00012	.00655	.00014
#3	.00036	.00184	.00015	-.00092	.00013	.00801	.00003

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: S0 Acquired: 4/3/2025 10:22:12 Type: Cal
Method: NON EPA-6010-200.7(v2880) 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	3484.8	80357.	16641.	2412.2	5519.2
Stddev	6.1	333.	193.	8.9	12.0
%RSD	.17471	.41463	1.1622	.36952	.21754
#1	3478.1	79980.	16799.	2402.7	5509.9
#2	3486.5	80481.	16426.	2413.3	5532.7
#3	3489.9	80611.	16700.	2420.4	5514.8

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: S1 Acquired: 4/3/2025 10:26:35 Type: Cal
Method: NON EPA-6010-200.7(v2880) 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	.00081	.00200	.00191	.00131	.00628	.00734	.23593	.01578
Stddev	.00002	.00004	.00012	.00015	.00015	.00033	.00095	.00016
%RSD	2.2796	2.2183	6.4457	11.740	2.4152	4.5050	.40425	1.0278
#1	.00082	.00196	.00184	.00135	.00640	.00714	.23703	.01561
#2	.00083	.00205	.00205	.00114	.00611	.00716	.23541	.01579
#3	.00079	.00198	.00184	.00144	.00632	.00772	.23535	.01593

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	.01205	.09705	.00158	.02201	.01393	.00055	.00969	.02231
Stddev	.00004	.00019	.00001	.00004	.00008	.00002	.00020	.00005
%RSD	.32294	.19464	.73363	.18614	.58987	3.0430	2.0847	.20825
#1	.01202	.09719	.00157	.02199	.01403	.00053	.00955	.02228
#2	.01203	.09683	.00159	.02206	.01388	.00055	.00992	.02237
#3	.01209	.09712	.00158	.02199	.01389	.00056	.00959	.02229

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	.02001	.00121	.04298	.00447	.10285	.01405	.03120	.12060
Stddev	.00003	.00008	.00022	.00005	.00153	.00015	.00023	.00079
%RSD	.17484	6.4665	.52022	1.0870	1.4890	1.0590	.74543	.65878
#1	.01997	.00129	.04273	.00442	.10129	.01396	.03137	.12034
#2	.02004	.00121	.04311	.00447	.10293	.01422	.03093	.11997
#3	.02002	.00113	.04311	.00452	.10435	.01398	.03129	.12150

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	.00403	.01608	.00210	-.00034	.00053	.02226	.14463
Stddev	.00001	.00022	.00004	.00001	.00001	.00072	.00092
%RSD	.21656	1.3393	1.9513	3.4652	2.3417	3.2309	.63405
#1	.00404	.01624	.00206	-.00035	.00053	.02272	.14363
#2	.00404	.01617	.00214	-.00033	.00051	.02263	.14483
#3	.00403	.01584	.00208	-.00035	.00053	.02143	.14543

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: S1 Acquired: 4/3/2025 10:26:35 Type: Cal
Method: NON EPA-6010-200.7(v2880) 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	3469.5	80773.	17036.	2399.9	5437.8
Stddev	20.2	125.	63.	.8	21.3
%RSD	.58331	.15441	.37188	.03379	.39235
#1	3473.5	80904.	16987.	2400.1	5445.1
#2	3487.4	80761.	17108.	2399.0	5454.6
#3	3447.5	80655.	17014.	2400.5	5413.8

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: S2 Acquired: 4/3/2025 10:30:52 Type: Cal
Method: NON EPA-6010-200.7(v2880) 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	.04156	.04780	.15894	.04590	.10930	.12180	3.7278	.12679
Stddev	.00032	.00030	.00039	.00018	.00066	.00056	.0131	.00035
%RSD	.76771	.62123	.24445	.40043	.60255	.46040	.35013	.27644
#1	.04128	.04752	.15921	.04570	.10873	.12147	3.7197	.12703
#2	.04150	.04778	.15849	.04606	.10915	.12245	3.7429	.12695
#3	.04191	.04811	.15911	.04595	.11002	.12148	3.7209	.12639

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	.92309	.21790	.02852	.33683	.15048	.00456	.20105	.04695
Stddev	.00211	.00014	.00036	.00132	.00079	.00006	.00065	.00008
%RSD	.22854	.06274	1.2592	.39096	.52390	1.2093	.32490	.17387
#1	.92309	.21798	.02875	.33730	.14975	.00457	.20030	.04686
#2	.92098	.21774	.02811	.33535	.15036	.00450	.20135	.04702
#3	.92520	.21797	.02871	.33785	.15131	.00461	.20149	.04696

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	.23012	.05615	.09497	.05198	1.0995	.03064	.26990	.55119
Stddev	.00050	.00065	.00127	.00009	.0149	.00042	.00075	.00231
%RSD	.21748	1.1621	1.3349	.16708	1.3549	1.3815	.27698	.41958
#1	.23021	.05651	.09503	.05188	1.1064	.03061	.27008	.54953
#2	.22958	.05539	.09367	.05205	1.0824	.03024	.27054	.55020
#3	.23057	.05654	.09620	.05201	1.1097	.03108	.26908	.55383

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	.08554	.32216	.00496	.02453	.01769	.73559	6.5570
Stddev	.00032	.00093	.00002	.00009	.00004	.00477	.0194
%RSD	.37337	.28809	.44144	.35978	.22373	.64834	.29536
#1	.08549	.32182	.00497	.02463	.01767	.73285	6.5430
#2	.08525	.32321	.00494	.02446	.01768	.74109	6.5791
#3	.08588	.32144	.00498	.02450	.01774	.73282	6.5488

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: S2 Acquired: 4/3/2025 10:30:52 Type: Cal
Method: NON EPA-6010-200.7(v2880) 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	3381.0	79033.	16488.	2301.6	5282.8
Stddev	11.0	1103.	22.	31.5	9.4
%RSD	.32648	1.3952	.13614	1.3691	.17856
#1	3392.6	78631.	16469.	2287.2	5289.5
#2	3379.8	80280.	16482.	2337.7	5286.8
#3	3370.7	78187.	16513.	2279.9	5272.0

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: S3 Acquired: 4/3/2025 10:34:56 Type: Cal
Method: NON EPA-6010-200.7(v2880) 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	.11802	.13531	.44515	.12918	.30878	.34219	10.393	.34592
Stddev	.00053	.00087	.00157	.00067	.00114	.00076	.110	.00094
%RSD	.44707	.64423	.35299	.51528	.36825	.22262	1.0600	.27038
#1	.11788	.13479	.44386	.12902	.30802	.34151	10.294	.34518
#2	.11757	.13484	.44470	.12860	.30824	.34301	10.512	.34697
#3	.11860	.13632	.44690	.12991	.31009	.34206	10.373	.34561

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	2.5903	.60897	.08014	.94057	.41635	.01289	.54900	.12981
Stddev	.0073	.00205	.00020	.00224	.00084	.00005	.00254	.00059
%RSD	.28179	.33629	.24601	.23782	.20217	.37813	.46197	.45306
#1	2.5834	.60762	.07993	.93847	.41589	.01285	.54865	.12949
#2	2.5895	.61133	.08019	.94032	.41584	.01289	.55169	.13049
#3	2.5979	.60797	.08031	.94292	.41733	.01295	.54666	.12946

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	.64165	.15865	.27352	.14596	3.0656	.08942	.72931	1.5354
Stddev	.00078	.00065	.00108	.00064	.0091	.00022	.00163	.0067
%RSD	.12099	.41123	.39494	.43765	.29529	.24784	.22401	.43559
#1	.64087	.15797	.27248	.14603	3.0706	.08916	.72806	1.5310
#2	.64167	.15871	.27343	.14657	3.0552	.08952	.73116	1.5320
#3	.64242	.15928	.27464	.14530	3.0712	.08956	.72872	1.5431

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	.24033	.89419	.01420	.07152	.05059	2.0443	18.170
Stddev	.00076	.00361	.00006	.00026	.00011	.0110	.191
%RSD	.31468	.40380	.44898	.36386	.21677	.53815	1.0501
#1	.23952	.89409	.01412	.07152	.05071	2.0458	18.156
#2	.24045	.89785	.01422	.07126	.05049	2.0544	18.367
#3	.24102	.89063	.01425	.07178	.05057	2.0326	17.986

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: S3 Acquired: 4/3/2025 10:34:56 Type: Cal
Method: NON EPA-6010-200.7(v2880) 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	3301.0	76436.	16664.	2192.7	5076.1
Stddev	11.3	244.	64.	7.4	12.2
%RSD	.34116	.31900	.38588	.33627	.24075
#1	3305.2	76715.	16678.	2189.7	5084.3
#2	3309.5	76330.	16594.	2201.2	5082.0
#3	3288.2	76263.	16721.	2187.4	5062.1

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: S4 Acquired: 4/3/2025 10:39:11 Type: Cal
Method: NON EPA-6010-200.7(v2880) 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	.23172	.25385	.86533	.25283	.60648	.67138	20.314	.65914
Stddev	.00128	.00216	.00244	.00096	.00386	.00301	.114	.00381
%RSD	.55353	.85067	.28163	.37953	.63666	.44840	.55992	.57757
#1	.23098	.25139	.86319	.25208	.60535	.66793	20.291	.65501
#2	.23098	.25541	.86482	.25251	.60330	.67272	20.214	.66250
#3	.23320	.25476	.86799	.25391	.61077	.67348	20.438	.65991

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	5.0797	1.1806	.15347	1.8363	.80563	.02478	1.0444	.25226
Stddev	.0089	.0010	.00037	.0029	.00331	.00016	.0025	.00086
%RSD	.17619	.08753	.23947	.15651	.41055	.65061	.24190	.34008
#1	5.0697	1.1795	.15367	1.8333	.80377	.02494	1.0432	.25212
#2	5.0827	1.1810	.15305	1.8365	.80367	.02462	1.0426	.25318
#3	5.0868	1.1815	.15370	1.8391	.80945	.02478	1.0472	.25148

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	1.2465	.30673	.54184	.28505	5.8956	.17732	1.3987	2.9623
Stddev	.0011	.00048	.00261	.00095	.0155	.00100	.0081	.0147
%RSD	.09107	.15759	.48215	.33489	.26343	.56275	.57991	.49578
#1	1.2452	.30687	.54276	.28396	5.8966	.17730	1.3897	2.9534
#2	1.2471	.30619	.53890	.28545	5.8796	.17633	1.4054	2.9543
#3	1.2473	.30712	.54387	.28575	5.9106	.17832	1.4011	2.9792

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	.46830	1.7360	.02801	.14227	.10083	4.0067	35.667
Stddev	.00122	.0042	.00016	.00017	.00028	.0163	.380
%RSD	.26091	.24107	.57342	.11770	.27837	.40625	1.0651
#1	.46697	1.7321	.02807	.14221	.10051	3.9941	36.091
#2	.46859	1.7354	.02783	.14214	.10094	4.0010	35.552
#3	.46936	1.7404	.02813	.14246	.10103	4.0251	35.357

Sample Name: S4 Acquired: 4/3/2025 10:39:11 Type: Cal
Method: NON EPA-6010-200.7(v2880) 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	3161.4	74679.	16460.	2108.7	4790.1
Stddev	17.4	244.	41.	11.0	16.9
%RSD	.55135	.32615	.24749	.52198	.35332
#1	3171.6	74431.	16489.	2102.8	4805.7
#2	3171.2	74918.	16413.	2121.4	4792.5
#3	3141.2	74690.	16477.	2101.9	4772.1

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: S5 Acquired: 4/3/2025 10:43:22 Type: Cal
Method: NON EPA-6010-200.7(v2880) 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	.46196	.50535	1.7273	.49956	1.2108	1.3978	40.917	1.3619
Stddev	.00258	.00219	.0080	.00321	.0064	.0035	.695	.0029
%RSD	.55842	.43292	.46131	.64312	.53188	.25231	1.6987	.21670
#1	.46492	.50553	1.7343	.50289	1.2160	1.4014	41.166	1.3596
#2	.46019	.50744	1.7186	.49647	1.2036	1.3944	40.131	1.3608
#3	.46078	.50308	1.7288	.49932	1.2127	1.3975	41.453	1.3652

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	10.209	2.4065	.30097	3.7058	1.5734	.04797	2.1393	.52262
Stddev	.043	.0077	.00072	.0158	.0083	.00023	.0087	.00148
%RSD	.42137	.31853	.24014	.42529	.52819	.47015	.40581	.28348
#1	10.249	2.4121	.30016	3.7188	1.5820	.04818	2.1461	.52310
#2	10.164	2.3978	.30155	3.6882	1.5654	.04773	2.1295	.52096
#3	10.215	2.4098	.30121	3.7103	1.5729	.04799	2.1423	.52381

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	2.5032	.61261	1.0763	.58353	11.525	.35370	2.9085	5.8557
Stddev	.0115	.00135	.0058	.00229	.036	.00221	.0130	.0290
%RSD	.46049	.22035	.53925	.39186	.31620	.62603	.44663	.49484
#1	2.5125	.61379	1.0829	.58527	11.551	.35625	2.9167	5.8857
#2	2.4903	.61114	1.0739	.58094	11.483	.35237	2.8935	5.8279
#3	2.5068	.61290	1.0721	.58438	11.540	.35246	2.9153	5.8535

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	.93712	3.5736	.05548	.29139	.20776	8.4174	70.196
Stddev	.00306	.0167	.00013	.00114	.00102	.0533	.659
%RSD	.32702	.46712	.22597	.39119	.48937	.63330	.93905
#1	.94015	3.5903	.05559	.29207	.20863	8.4691	70.148
#2	.93402	3.5569	.05550	.29008	.20664	8.3626	69.562
#3	.93719	3.5736	.05534	.29203	.20801	8.4204	70.878

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: S5 Acquired: 4/3/2025 10:43:22 Type: Cal
Method: NON EPA-6010-200.7(v2880) 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	3112.2	74003.	15457.	2062.9	4598.8
Stddev	14.5	71.	59.	11.2	18.6
%RSD	.46523	.09570	.38065	.54439	.40430
#1	3098.8	73941.	15471.	2055.6	4584.2
#2	3127.5	74080.	15508.	2075.8	4619.7
#3	3110.2	73989.	15392.	2057.3	4592.4

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: ICV01 Acquired: 4/3/2025 12:06:34 Type: Unk
Method: NON EPA-6010-200.7(v2881) 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	1.043948	1.098001	1.013116	1.047931	1.068526	2.604557
Stddev	.000577	.006043	.001403	.006175	.001715	.013889
%RSD	.0552800	.5503410	.1384441	.5892901	.1605125	.5332469
#1	1.043669	1.091896	1.013023	1.049244	1.068972	2.615708
#2	1.043564	1.098127	1.011762	1.053345	1.069975	2.588999
#3	1.044612	1.103979	1.014563	1.041205	1.066633	2.608963

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4946176	.4944679	.5110361	9.998329	.5293916	.5198204
Stddev	.0024051	.0018757	.0009343	.043028	.0008532	.0007445
%RSD	.4862447	.3793374	.1828294	.4303522	.1611566	.1432140
#1	.4962102	.4926405	.5108733	10.02502	.5298140	.5202349
#2	.4957916	.4943747	.5101939	10.02128	.5284096	.5189609
#3	.4918510	.4963885	.5120411	9.94869	.5299510	.5202652

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5156743	10.29508	.5007457	5.778889	.5490241	.2611828
Stddev	.0011288	.07292	.0021169	.025306	.0011471	.0019055
%RSD	.2189031	.7082887	.4227414	.4379124	.2089426	.7295718
#1	.5164335	10.35501	.5018026	5.791391	.5490442	.2632798
#2	.5143772	10.31633	.5021259	5.795511	.5478671	.2607114
#3	.5162123	10.21389	.4983085	5.749764	.5501611	.2595573

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.52316	.4972676	1.029737	10.17129	2.375974	2.638634
Stddev	.09510	.0024623	.002826	.11518	.004817	.001630
%RSD	.9037113	.4951613	.2743926	1.132362	.2027545	.0617746
#1	10.63098	.4993240	1.031176	10.29389	2.374121	2.637732
#2	10.48727	.4979397	1.026482	10.15462	2.372358	2.637654
#3	10.45122	.4945390	1.031553	10.06536	2.381443	2.640516

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: ICV01 Acquired: 4/3/2025 12:06:34 Type: Unk
Method: NON EPA-6010-200.7(v2881) 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	2.476959	2.429681	2.606325	F -.000165	F -.006675	F .0015750
Stddev	.005805	.008514	.015147	.002506	.003243	.0005152
%RSD	.2343636	.3504197	.5811628	1523.047	48.57417	32.70842
#1	2.473536	2.436920	2.622094	.001470	-.009832	.0009934
#2	2.473679	2.431823	2.591888	-.003050	-.003354	.0019740
#3	2.483661	2.420300	2.604994	.001087	-.006840	.0017574

Elem	Sr4077
Units	ppm
Avg	F -.007731
Stddev	.000090
%RSD	1.160595
#1	-.007780
#2	-.007786
#3	-.007627

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3150.234	73763.45	16769.10	2024.748	5036.616
Stddev	5.963	275.83	22.77	8.406	4.851
%RSD	.1892896	.3739378	.1357973	.4151523	.0963172
#1	3144.182	73446.43	16795.35	2016.499	5031.758
#2	3150.416	73895.44	16757.38	2024.443	5036.629
#3	3156.104	73948.49	16754.58	2033.303	5041.460

Sample Name: LLICV01 Acquired: 4/3/2025 12:11:26 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0206258	.0398237	.0111111	.0176337	.0506736	.1083144	.0889428
Stddev	.0011633	.0015286	.0006118	.0027369	.0013051	.0031677	.0000804
%RSD	5.639817	3.838436	5.506613	15.52064	2.575584	2.924533	.0903595
#1	.0208276	.0380718	.0104056	.0153056	.0521794	.1106574	.0889078
#2	.0216750	.0405136	.0114311	.0206485	.0498688	.1095755	.0888858
#3	.0193749	.0408858	.0114965	.0169469	.0499725	.1047104	.0890347

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0057763	.0057623	1.971922	.0097594	.0287188	.0227667	.1020014
Stddev	.0000481	.0000173	.017171	.0001856	.0000572	.0001958	.0035784
%RSD	.8330270	.3001972	.8707966	1.901420	.1993103	.8601613	3.508214
#1	.0058292	.0057612	1.957187	.0097386	.0287732	.0228420	.0995891
#2	.0057352	.0057455	1.967800	.0095851	.0287242	.0225444	.1003023
#3	.0057645	.0057801	1.990780	.0099545	.0286591	.0229137	.1061128

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0168441	2.009640	.0385655	.0104034	1.986810	.0392294	.0454473
Stddev	.0003470	.014596	.0002328	.0003374	.020206	.0020345	.0001891
%RSD	2.060086	.7263024	.6035977	3.243327	1.017024	5.186263	.4161542
#1	.0165563	1.995976	.0386104	.0100188	1.985836	.0387173	.0456258
#2	.0167466	2.007927	.0383135	.0105421	1.967108	.0374999	.0452491
#3	.0172294	2.025017	.0387725	.0106494	2.007486	.0414711	.0454671

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.901595	.0989791	.2061462	.0384499	.0393907	.3704675	.0180405
Stddev	.016187	.0001474	.0005998	.0003613	.0008745	.0073135	.0015425
%RSD	.8512240	.1489023	.2909739	.9397253	2.220160	1.974116	8.550021
#1	1.882944	.0988126	.2066283	.0382699	.0393504	.3765384	.0183776
#2	1.909857	.0990928	.2063358	.0382139	.0385370	.3725158	.0193865
#3	1.911984	.0990319	.2054745	.0388659	.0402847	.3623483	.0163573

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: LLICV01 Acquired: 4/3/2025 12:11:26 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0166215	.0174565	.0192183
Stddev	.0036918	.0010584	.0001693
%RSD	22.21119	6.063051	.8807304
#1	.0131383	.0164871	.0190245
#2	.0162348	.0172965	.0192932
#3	.0204915	.0185857	.0193372

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3235.666	75291.51	16782.81	2075.891	5262.014
Stddev	3.827	253.75	26.69	11.184	9.081
%RSD	.1182886	.3370279	.1590608	.5387722	.1725706
#1	3234.627	74999.31	16813.60	2068.074	5254.521
#2	3239.905	75418.70	16768.56	2070.896	5272.113
#3	3232.465	75456.51	16766.26	2088.702	5259.408

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: ICB01 Acquired: 4/3/2025 12:15:43 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0013080	.0006020	-.000275	-.001356	-.000693	-.001738	-.005019
Stddev	.0023310	.0013589	.000397	.001082	.000643	.002735	.000525
%RSD	178.2135	225.7218	144.6029	79.77962	92.70934	157.3548	10.45439
#1	-.000336	-.000847	.000068	-.001741	-.001122	.001008	-.004767
#2	.000284	.001848	-.000182	-.002193	-.001003	-.001761	-.005623
#3	.003976	.000805	-.000710	-.000134	.000046	-.004462	-.004669

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001320	.0000299	.0051263	-.000053	-.000193	-.000058	-.005261
Stddev	.0000594	.0000884	.0022277	.000155	.000068	.000278	.004812
%RSD	45.01882	295.6455	43.45575	294.8712	35.29261	475.1798	91.46054
#1	.0001968	-.000043	.0047042	-.000113	-.000255	.000209	-.004006
#2	.0000801	.000128	.0031399	-.000169	-.000120	-.000345	-.010576
#3	.0001190	.000005	.0075348	.000124	-.000204	-.000039	-.001201

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000628	-.007347	.0001608	.0005150	-.022918	-.000494	-.000417
Stddev	.000220	.005137	.0000591	.0001291	.007451	.001076	.000116
%RSD	35.11277	69.91880	36.73891	25.06450	32.51191	217.8960	27.73924
#1	-.000746	-.001819	.0001342	.0005106	-.026545	.000639	-.000442
#2	-.000764	-.011973	.0002284	.0006463	-.027862	-.001501	-.000518
#3	-.000374	-.008249	.0001196	.0003882	-.014348	-.000619	-.000291

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.047507	.0004997	-.000100	-.000002	.0011909	.0020893	-.001853
Stddev	.013776	.0005626	.000203	.001062	.0004284	.0032775	.000605
%RSD	28.99869	112.5970	202.7788	67619.43	35.97505	156.8706	32.63196
#1	-.049550	.0005178	-.000094	-.000115	.0008546	.0033173	-.002541
#2	-.032823	.0010530	-.000307	-.001002	.0016732	.0045755	-.001613
#3	-.060148	-.000072	.000100	.001113	.0010447	-.001625	-.001405

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: ICB01 Acquired: 4/3/2025 12:15:43 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.003448	-.001542	-.000015
Stddev	.000753	.001599	.000027
%RSD	21.83765	103.6865	181.7164
#1	-.003490	-.002739	.000007
#2	-.004179	-.002160	-.000044
#3	-.002675	.000274	-.000006

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3204.969	75067.28	15919.42	2068.158	5281.796
Stddev	9.494	845.52	112.34	23.934	6.610
%RSD	.2962143	1.126351	.7056777	1.157241	.1251501
#1	3213.876	74091.46	16037.77	2044.419	5288.689
#2	3206.051	75582.13	15906.25	2092.281	5275.511
#3	3194.981	75528.27	15814.25	2067.775	5281.187

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CRI01 Acquired: 4/3/2025 12:20:03 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0209522	.0411480	.0115639	.0204245	.0525591	.1080914	.0828320
Stddev	.0014038	.0002639	.0005484	.0005423	.0001767	.0045212	.0005365
%RSD	6.699964	.6413505	4.742083	2.655261	.3360890	4.182796	.6477195
#1	.0213742	.0414458	.0109370	.0209530	.0526071	.1079858	.0833646
#2	.0193858	.0409432	.0118007	.0204512	.0523634	.1036239	.0822916
#3	.0220966	.0410549	.0119542	.0198693	.0527068	.1126646	.0828397

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0059076	.0057575	1.937373	.0099986	.0289276	.0227789	.1096297
Stddev	.0000502	.0000969	.008398	.0001297	.0003294	.0000892	.0015592
%RSD	.8504842	1.682869	.4334690	1.297579	1.138678	.3915807	1.422219
#1	.0059654	.0058693	1.931792	.0100375	.0285717	.0226781	.1109175
#2	.0058753	.0057026	1.933296	.0101044	.0292218	.0228475	.1100753
#3	.0058820	.0057005	1.947031	.0098538	.0289893	.0228111	.1078962

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0164008	2.016167	.0387039	.0106797	1.946443	.0385363	.0427616
Stddev	.0002451	.010516	.0004363	.0002887	.017691	.0008875	.0006197
%RSD	1.494459	.5216069	1.127258	2.703381	.9088940	2.302977	1.449216
#1	.0163541	2.025498	.0383599	.0104542	1.941908	.0377054	.0434047
#2	.0166658	2.004771	.0391947	.0110051	1.965960	.0384324	.0427119
#3	.0161823	2.018231	.0385573	.0105797	1.931460	.0394712	.0421683

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.849713	.0969204	.2108738	.0386745	.0390050	.3660412	.0153192
Stddev	.018735	.0010929	.0008438	.0007730	.0003222	.0050858	.0032879
%RSD	1.012880	1.127628	.4001267	1.998804	.8260620	1.389411	21.46250
#1	1.829240	.0977996	.2099067	.0378786	.0386432	.3680183	.0136688
#2	1.853895	.0956968	.2114598	.0394224	.0392611	.3698416	.0191054
#3	1.866004	.0972650	.2112549	.0387226	.0391107	.3602638	.0131835

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CRI01 Acquired: 4/3/2025 12:20:03 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0175343	.0168689	.0186382
Stddev	.0036203	.0009636	.0000667
%RSD	20.64679	5.712141	.3579156
#1	.0145473	.0172518	.0187151
#2	.0164950	.0157727	.0186044
#3	.0215606	.0175821	.0185953

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3144.194	74332.21	16439.75	2015.975	5147.316
Stddev	2.789	239.09	82.06	4.624	10.557
%RSD	.0887148	.3216522	.4991860	.2293667	.2050999
#1	3147.282	74582.33	16423.86	2013.735	5151.059
#2	3141.858	74105.93	16528.59	2012.897	5135.398
#3	3143.441	74308.39	16366.79	2021.292	5155.493

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: ICSA01 Acquired: 4/3/2025 12:24:19 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0060229	.0083769	.0043618	-.013664	-.002315	246.8102
Stddev	.0014441	.0018797	.0019681	.000534	.001330	2.0591
%RSD	23.97604	22.43971	45.12065	3.904835	57.46291	.8343019
#1	.0076418	.0075300	.0063798	-.013279	-.003735	246.1652
#2	.0055594	.0070696	.0024477	-.014273	-.001097	249.1146
#3	.0048676	.0105311	.0042579	-.013439	-.002114	245.1508

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002751	.0012030	-.001357	225.0442	.0567925	.0017808
Stddev	.001394	.0000329	.000123	.7446	.0006406	.0004424
%RSD	50.65494	2.734078	9.099387	.3308653	1.127986	24.84242
#1	-.002571	.0012012	-.001498	225.1284	.0573008	.0021050
#2	-.001456	.0012367	-.001270	225.7431	.0560730	.0012768
#3	-.004226	.0011710	-.001301	224.2611	.0570038	.0019606

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0039540	93.84948	.0007170	241.1219	.0011047	.0002354
Stddev	.0011077	.76853	.0001281	1.0509	.0004010	.0003589
%RSD	28.01514	.8188916	17.87025	.4358534	36.29495	152.4781
#1	.0026884	94.55601	.0006825	240.2518	.0008155	.0006202
#2	.0044265	93.03120	.0008589	242.2895	.0015624	-.000090
#3	.0047472	93.96123	.0006097	240.8244	.0009362	.000176

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0344981	.0028449	.0054433	.0013952	F .1497654	-.000598
Stddev	.0046570	.0005852	.0002554	.0318942	.0019701	.000240
%RSD	13.49917	20.57064	4.691681	2285.992	1.315429	40.11500
#1	.0335194	.0023230	.0054533	-.025480	.1517927	-.000681
#2	.0304082	.0034776	.0051830	-.006974	.1478581	-.000786
#3	.0395666	.0027341	.0056935	.036640	.1496455	-.000328

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: ICSA01 Acquired: 4/3/2025 12:24:19 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.005430	-.000422	.0122013	-.000148	-.014708	.0017032
Stddev	.001040	.000469	.0043092	.003916	.004146	.0008455
%RSD	19.15130	111.1272	35.31804	2647.192	28.18660	49.64385
#1	-.004239	-.000594	.0072958	.003904	-.012451	.0007518
#2	-.006153	-.000781	.0153763	-.003912	-.019493	.0023686
#3	-.005899	.000109	.0139318	-.000435	-.012181	.0019892

Elem	Sr4077
Units	ppm
Avg	.0086903
Stddev	.0004829
%RSD	5.556297
#1	.0082985
#2	.0092298
#3	.0085427

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2794.563	66176.02	15559.92	1808.301	4130.993
Stddev	9.182	413.56	58.04	14.806	11.799
%RSD	.3285573	.6249389	.3729863	.8187944	.2856121
#1	2794.123	65905.41	15603.25	1794.200	4129.360
#2	2803.956	66652.07	15493.98	1823.724	4143.523
#3	2785.609	65970.58	15582.52	1806.979	4120.096

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: ICSAB01 Acquired: 4/3/2025 12:28:44 Type: Unk
Method: NON EPA-6010-200.7(v2880) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1100045	.1117876	.0551956	.0350335	.6379744	254.2891	.4754754
Stddev	.0025431	.0020601	.0006492	.0054888	.0028100	2.9639	.0048873
%RSD	2.311819	1.842903	1.176148	15.66733	.4404519	1.165569	1.027874
#1	.1096726	.1094254	.0551763	.0287774	.6382003	250.8680	.4698362
#2	.1126973	.1127255	.0545562	.0390407	.6406646	256.0818	.4784839
#3	.1076437	.1132119	.0558542	.0372824	.6350583	255.9176	.4781060

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4747909	1.002668	232.0476	.5725087	.5107409	.5117143	98.96097
Stddev	.0009967	.003297	1.3013	.0050466	.0024877	.0016889	.43674
%RSD	.2099323	.3287914	.5607947	.8814933	.4870669	.3300388	.4413303
#1	.4736452	1.004297	230.7620	.5738396	.5123487	.5097741	98.73918
#2	.4754580	.998874	233.3641	.5669300	.5078755	.5128547	98.67963
#3	.4752697	1.004834	232.0167	.5767565	.5119984	.5125142	99.46411

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4607696	248.4162	1.006782	.1913346	.0358357	.4714872	1.069475
Stddev	.0028035	.8711	.003300	.0009426	.0035000	.0048973	.004265
%RSD	.6084460	.3506605	.3277987	.4926229	9.766868	1.038684	.3988187
#1	.4578796	247.5106	1.007493	.1917419	.0336629	.4664724	1.069582
#2	.4634778	249.2481	1.003185	.1902569	.0339709	.4762578	1.065157
#3	.4609515	248.4900	1.009669	.1920050	.0398732	.4717314	1.073686

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.037163	1.050574	1.035623	1.008040	.9386555	.9199439	.9922243
Stddev	.016034	.007253	.001955	.002625	.0084763	.0041359	.0104196
%RSD	43.14458	.6903398	.1888109	.2603797	.9030242	.4495828	1.050120
#1	-.049746	1.044363	1.037683	1.009677	.9288679	.9153093	.9981076
#2	-.019110	1.048814	1.033792	1.005013	.9435389	.9212635	.9801937
#3	-.042633	1.058544	1.035394	1.009431	.9435595	.9232591	.9983714

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: ICSAB01 Acquired: 4/3/2025 12:28:44 Type: Unk
Method: NON EPA-6010-200.7(v2880) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.013706	.9502850	.9291315
Stddev	.004970	.0144220	.0043395
%RSD	.4902935	1.517652	.4670486
#1	1.019022	.9337228	.9241212
#2	1.012922	.9600711	.9315747
#3	1.009176	.9570611	.9316985

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2820.484	67529.95	16218.65	1830.787	4156.910
Stddev	5.957	276.58	36.74	5.344	5.187
%RSD	.2112179	.4095718	.2265058	.2919110	.1247861
#1	2826.634	67394.25	16249.58	1825.454	4160.378
#2	2814.740	67848.17	16178.05	1836.142	4159.406
#3	2820.077	67347.42	16228.33	1830.766	4150.947

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: ICSADLX20 Acquired: 4/3/2025 12:33:02 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.000108	.0003329	.0004346	-.004080	-.000604	11.79745	-.003777
Stddev	.000558	.0017272	.0005344	.000791	.000549	.02219	.000293
%RSD	516.5268	518.7531	122.9585	19.38860	90.96819	.1880903	7.764406
#1	-.000751	.0016762	-.000047	-.004307	-.001216	11.80676	-.003862
#2	.000181	-.001615	.001010	-.004733	-.000153	11.81348	-.004018
#3	.000246	.000938	.000341	-.003200	-.000442	11.77212	-.003450

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002562	-.000202	11.31132	.0026107	.0002217	.0005216	4.534560
Stddev	.0001054	.000056	.03997	.0000925	.0001072	.0003290	.017854
%RSD	41.13097	27.86160	.3533787	3.543835	48.35569	63.06823	.3937285
#1	.0003345	-.000248	11.35658	.0026966	.0003435	.0003564	4.524275
#2	.0001364	-.000139	11.29656	.0026227	.0001795	.0009004	4.524230
#3	.0002977	-.000220	11.28084	.0025127	.0001420	.0003080	4.555176

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001880	11.75037	-.000071	.0002488	-.020492	-.000232	-.000293
Stddev	.000253	.05322	.000462	.0002384	.003459	.000281	.000123
%RSD	13.48255	.4529465	651.6475	95.80961	16.87964	121.0296	41.88247
#1	-.002145	11.78773	-.000571	-.000018	-.024286	-.000115	-.000164
#2	-.001640	11.68943	.000340	.000324	-.019678	-.000552	-.000409
#3	-.001855	11.77394	.000019	.000440	-.017513	-.000029	-.000308

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.051390	.0060195	.0001436	-.002325	.0014887	.0043704	-.002114
Stddev	.019716	.0001240	.0000577	.000607	.0002549	.0040631	.001726
%RSD	38.36615	2.060613	40.18854	26.11971	17.12300	92.96912	81.65602
#1	-.057747	.0059521	.0002038	-.001626	.0013069	.0006988	-.001033
#2	-.067144	.0061626	.0001383	-.002619	.0017800	.0036767	-.001204
#3	-.029279	.0059437	.0000887	-.002729	.0013791	.0087358	-.004105

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: ICSADLX20 Acquired: 4/3/2025 12:33:02 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0001183	-.002038	.0006237
Stddev	.0007943	.001418	.0000446
%RSD	671.1789	69.58582	7.152458
#1	.0006825	-.000400	.0006323
#2	.0004626	-.002858	.0006634
#3	-.000790	-.002855	.0005755

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3186.960	73305.90	15866.65	2034.098	5080.015
Stddev	6.215	167.52	48.27	2.642	8.777
%RSD	.1950153	.2285231	.3042015	.1299057	.1727803
#1	3185.977	73342.82	15824.00	2031.827	5077.083
#2	3193.608	73123.00	15856.91	2036.998	5089.883
#3	3181.295	73451.89	15919.05	2033.468	5073.079

Sample Name: ICSABDLX20 Acquired: 4/3/2025 12:37:18 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0060059	.0053533	.0028021	-.003350	.0297238	12.40296	.0203049
Stddev	.0011954	.0007530	.0003766	.000921	.0021620	.02578	.0005238
%RSD	19.90387	14.06668	13.43948	27.49765	7.273758	.2078758	2.579572
#1	.0063567	.0061099	.0023673	-.003210	.0272500	12.40850	.0198327
#2	.0046743	.0053461	.0030132	-.004333	.0312515	12.42551	.0208683
#3	.0069867	.0046039	.0030259	-.002507	.0306700	12.37485	.0202138

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0249929	.0498579	12.04078	.0297824	.0252185	.0268845	5.096207
Stddev	.0000690	.0001991	.02617	.0004381	.0001812	.0002549	.035445
%RSD	.2762427	.3992564	.2173311	1.470978	.7185115	.9482654	.6955253
#1	.0250592	.0496580	12.04859	.0294599	.0253471	.0266551	5.055445
#2	.0249980	.0500561	12.06215	.0296061	.0252971	.0268394	5.113395
#3	.0249215	.0498596	12.01159	.0302812	.0250113	.0271589	5.119782

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0237176	12.29769	.0504926	.0095748	-.023298	.0244792	.0537408
Stddev	.0001555	.01417	.0004879	.0003098	.012486	.0009569	.0001268
%RSD	.6556698	.1152514	.9662181	3.235552	53.59222	3.909097	.2359541
#1	.0238962	12.31388	.0505390	.0092679	-.017200	.0245980	.0537215
#2	.0236118	12.29162	.0509556	.0095691	-.037660	.0234684	.0538762
#3	.0236449	12.28756	.0499831	.0098874	-.015032	.0253711	.0536248

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.077865	.0523669	.0526317	.0484047	.0488072	.0506016	.0411663
Stddev	.027376	.0002134	.0001577	.0009051	.0008168	.0010038	.0011633
%RSD	35.15779	.4075914	.2996713	1.869944	1.673586	1.983622	2.825924
#1	-.091937	.0525389	.0526776	.0473652	.0488458	.0515596	.0412964
#2	-.046316	.0521280	.0527615	.0490185	.0479718	.0495576	.0399435
#3	-.095343	.0524337	.0524562	.0488305	.0496041	.0506878	.0422592

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: ICSABDLX20 Acquired: 4/3/2025 12:37:18 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0443959	.0418351	.0469339
Stddev	.0041459	.0012663	.0002494
%RSD	9.338539	3.026798	.5313722
#1	.0459757	.0430675	.0467774
#2	.0475196	.0419003	.0472215
#3	.0396923	.0405375	.0468028

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3210.476	73838.81	16936.44	2049.884	5121.591
Stddev	4.851	198.83	48.52	5.176	10.432
%RSD	.1510958	.2692774	.2864557	.2524806	.2036820
#1	3207.470	74059.56	16887.60	2047.014	5123.300
#2	3207.885	73783.08	16937.10	2046.780	5110.410
#3	3216.072	73673.79	16984.62	2055.859	5131.063

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCV01 Acquired: 4/3/2025 12:41:32 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	5.052362	5.146393	4.929632	5.112991	5.130527	9.893718	9.399046
Stddev	.030802	.025235	.026491	.026342	.024370	.012783	.131071
%RSD	.6096606	.4903398	.5373851	.5151896	.4750088	.1292070	1.394519
#1	5.024816	5.142735	4.903861	5.090823	5.102440	9.907326	9.535511
#2	5.046649	5.123187	4.928246	5.106038	5.143062	9.881961	9.387494
#3	5.085621	5.173257	4.956789	5.142111	5.146078	9.891868	9.274133

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2403281	2.438255	23.87712	1.017182	2.438655	1.268887	4.867574
Stddev	.0012350	.012674	.07662	.000741	.013071	.005370	.003995
%RSD	.5138799	.5197892	.3209048	.0728849	.5359753	.4232206	.0820813
#1	.2414030	2.424473	23.92504	1.017965	2.424342	1.262927	4.863809
#2	.2406022	2.440884	23.91757	1.017089	2.441664	1.270386	4.867147
#3	.2389791	2.449408	23.78875	1.016491	2.449959	1.273349	4.871765

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.321706	23.61265	2.434102	1.257618	25.65750	2.410239	2.533025
Stddev	.008917	.09412	.012882	.003793	.10183	.006541	.006812
%RSD	.3840511	.3986175	.5292408	.3016355	.3968882	.2713981	.2689259
#1	2.323870	23.69248	2.419954	1.259535	25.54880	2.413389	2.528348
#2	2.329342	23.63660	2.437198	1.260070	25.67300	2.414609	2.540840
#3	2.311907	23.50886	2.445154	1.253248	25.75069	2.402719	2.529886

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.78580	4.761223	5.084761	4.931405	4.756782	5.050763	4.946510
Stddev	.12457	.030359	.017764	.024171	.009413	.017896	.019595
%RSD	.5025761	.6376352	.3493627	.4901515	.1978941	.3543132	.3961426
#1	24.64240	4.782121	5.065081	4.907986	4.754364	5.055933	4.924963
#2	24.84779	4.775149	5.089594	4.929964	4.767169	5.030852	4.951304
#3	24.86722	4.726399	5.099609	4.956265	4.748814	5.065505	4.963264

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCV01 Acquired: 4/3/2025 12:41:32 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	4.884928	4.788963	4.780440
Stddev	.026048	.010348	.056560
%RSD	.5332391	.2160840	1.183152
#1	4.865787	4.785954	4.822582
#2	4.874405	4.800483	4.802579
#3	4.914592	4.780453	4.716159

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3062.513	71858.78	16119.62	1957.206	4729.785
Stddev	11.911	116.14	85.54	7.622	20.247
%RSD	.3889303	.1616250	.5306610	.3894117	.4280769
#1	3076.081	71832.79	16074.80	1963.216	4753.164
#2	3053.780	71757.84	16065.81	1948.634	4718.012
#3	3057.676	71985.71	16218.26	1959.769	4718.179

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCB01 Acquired: 4/3/2025 12:47:21 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0011756	.0002739	-.001147	.0001082	-.000285	-.001776	-.006545
Stddev	.0007836	.0007893	.000478	.0005678	.001465	.001468	.000533
%RSD	66.65198	288.1578	41.71227	524.7004	514.8068	82.63111	8.150651
#1	.0014696	.0006868	-.001684	-.000547	.001294	-.000097	-.006579
#2	.0017698	-.000636	-.000765	.000437	-.001599	-.002816	-.005995
#3	.0002876	.000771	-.000992	.000435	-.000548	-.002414	-.007060

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001042	.0000360	.0111766	-.000067	-.000077	-.000007	-.005426
Stddev	.0000380	.0000134	.0041909	.000380	.000267	.000364	.001925
%RSD	36.45591	37.19236	37.49666	564.2245	346.6038	5541.583	35.47332
#1	.0000920	.0000423	.0128567	-.000122	-.000219	-.000407	-.007641
#2	.0000738	.0000206	.0064064	.000337	-.000243	.000082	-.004473
#3	.0001468	.0000451	.0142667	-.000418	.000231	.000306	-.004163

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002521	-.004694	-.000114	.0003652	-.029735	-.000861	-.000297
Stddev	.000101	.013392	.000083	.0000855	.003878	.000972	.000278
%RSD	4.020305	285.2992	73.09103	23.41295	13.04172	112.9174	93.77556
#1	-.002549	-.003259	-.000080	.0004629	-.034080	-.000086	-.000064
#2	-.002409	.007923	-.000053	.0003282	-.026625	-.000545	-.000221
#3	-.002606	-.018745	-.000209	.0003043	-.028500	-.001951	-.000605

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.092603	.0011465	-.000106	-.001483	.0014475	.0041220	-.002687
Stddev	.007298	.0005203	.000083	.000983	.0003249	.0020728	.000728
%RSD	7.881290	45.38611	78.22824	66.23197	22.44547	50.28676	27.10839
#1	-.086608	.0005484	-.000048	-.001099	.0014335	.0042942	-.002050
#2	-.100730	.0014953	-.000200	-.002600	.0011298	.0019685	-.003481
#3	-.090470	.0013957	-.000068	-.000752	.0017791	.0061034	-.002530

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCB01 Acquired: 4/3/2025 12:47:21 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.000965	-.002436	.0000471
Stddev	.002354	.000623	.0000006
%RSD	244.0013	25.59164	1.184854
#1	-.002002	-.002941	.0000468
#2	.001730	-.001739	.0000467
#3	-.002621	-.002627	.0000477

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3182.624	75421.55	16631.70	2046.948	5257.087
Stddev	1.008	98.06	97.46	5.903	5.460
%RSD	.0316628	.1300140	.5859846	.2883981	.1038622
#1	3182.916	75313.88	16631.26	2051.994	5258.046
#2	3183.452	75445.06	16534.46	2048.392	5262.004
#3	3181.502	75505.72	16729.38	2040.456	5251.211

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1503-07 Acquired: 4/3/2025 12:51:41 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0027080	.0016281	-.001810	-.003586	-.001689	.0026447
Stddev	.0017435	.0004365	.000409	.003440	.001688	.0003393
%RSD	64.38280	26.81345	22.60025	95.94863	99.92895	12.82941
#1	.0022751	.0013497	-.001836	-.002130	-.002963	.0024237
#2	.0046271	.0014033	-.002206	-.007514	-.002328	.0024751
#3	.0012217	.0021312	-.001389	-.001112	.000225	.0030354

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004464	.0002129	.0004703	-.008339	-.000330	-.000979
Stddev	.000522	.0000654	.0000139	.002383	.000292	.000215
%RSD	11.68645	30.71315	2.953778	28.58165	88.46956	21.92319
#1	-.003937	.0001972	.0004637	-.005911	.000006	-.001214
#2	-.004980	.0001568	.0004863	-.008431	-.000479	-.000931
#3	-.004474	.0002847	.0004610	-.010675	-.000518	-.000793

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001301	-.003410	-.004163	-.006332	-.000253	.0005708
Stddev	.000185	.002943	.000130	.006090	.000168	.0002659
%RSD	14.22874	86.29743	3.130845	96.16536	66.55564	46.58194
#1	-.001130	-.005881	-.004161	-.007747	-.000391	.0007461
#2	-.001277	-.000154	-.004034	-.011590	-.000302	.0002649
#3	-.001497	-.004195	-.004295	.000340	-.000065	.0007014

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	165.5581	-.000113	-.000981	-.152993	.0009790	.0264555
Stddev	.7375	.000469	.000375	.008633	.0006424	.0008769
%RSD	.4454852	417.1734	38.23524	5.642955	65.62116	3.314566
#1	166.1093	.000203	-.000606	-.162615	.0002987	.0273799
#2	165.8446	-.000652	-.001357	-.150438	.0010631	.0263511
#3	164.7203	.000112	-.000981	-.145925	.0015752	.0256354

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1503-07 Acquired: 4/3/2025 12:51:41 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.002077	.0048656	F 84.85260	.0000243	.0106334	-.004224
Stddev	.000292	.0002866	.27720	.0004834	.0031295	.000505
%RSD	14.06137	5.890456	.3266802	1993.225	29.43031	11.95131
#1	-.001941	.0051914	84.56462	.0004760	.0076413	-.004800
#2	-.002412	.0046525	85.11758	-.000486	.0103749	-.003862
#3	-.001878	.0047527	84.87560	.000082	.0138842	-.004009

Elem	Sr4077
Units	ppm
Avg	.0000857
Stddev	.0000342
%RSD	39.87012
#1	.0000464
#2	.0001027
#3	.0001081

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3182.622	73184.42	17021.50	2039.859	4900.429
Stddev	9.352	283.44	154.95	14.460	14.240
%RSD	.2938533	.3872941	.9102989	.7088692	.2905875
#1	3193.117	73499.55	16939.07	2056.552	4915.956
#2	3179.576	72950.32	17200.23	2031.208	4887.979
#3	3175.172	73103.39	16925.19	2031.816	4897.353

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1680-01 Acquired: 4/3/2025 13:00:27 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0714187	.0132079	.3132243	-.033211	-.004335	135.7553
Stddev	.0033577	.0010240	.0020673	.001149	.002094	.1962
%RSD	4.701455	7.753221	.6600073	3.458679	48.29456	.1445522
#1	.0748537	.0143375	.3112995	-.034349	-.002666	135.6497
#2	.0712584	.0123402	.3129640	-.032052	-.003654	135.6344
#3	.0681440	.0129460	.3154095	-.033233	-.006684	135.9817

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.557589	.0106009	-.002762	18.58048	.2195087	.1340854
Stddev	.002903	.0000933	.000181	.00372	.0011029	.0004020
%RSD	.1863911	.8796377	6.560485	.0200055	.5024353	.2998405
#1	1.554874	.0106620	-.002728	18.58398	.2206318	.1341019
#2	1.560649	.0106471	-.002957	18.58088	.2184272	.1336753
#3	1.557244	.0104936	-.002600	18.57658	.2194670	.1344789

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1935765	271.0732	3.183736	47.90337	.2445611	.0017135
Stddev	.0005353	.5056	.004284	.13851	.0006367	.0002766
%RSD	.2765493	.1865172	.1345616	.2891381	.2603538	16.14217
#1	.1937087	271.6561	3.188549	48.01546	.2451236	.0018408
#2	.1929875	270.7534	3.182317	47.74853	.2438699	.0013962
#3	.1940333	270.8100	3.180341	47.94612	.2446898	.0019036

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.589792	.2986335	.6560278	14.56690	.4964951	.0019136
Stddev	.020996	.0027068	.0005289	.03191	.0011252	.0002442
%RSD	.3756188	.9063920	.0806272	.2190818	.2266325	12.75916
#1	5.566917	.3017357	.6555908	14.53025	.4977693	.0016411
#2	5.594273	.2967521	.6558767	14.58858	.4956380	.0019871
#3	5.608186	.2974128	.6566158	14.58186	.4960780	.0021125

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1680-01 Acquired: 4/3/2025 13:00:27 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0136916	2.738981	5.156759	7.008271	F 20.90323	.3238207
Stddev	.0017576	.003366	.004064	.035074	.04854	.0009080
%RSD	12.83668	.1229005	.0788032	.5004685	.2322023	.2803868
#1	.0145780	2.740415	5.158144	7.038163	20.95403	.3235411
#2	.0148295	2.735136	5.159949	6.969660	20.85733	.3248356
#3	.0116674	2.741393	5.152184	7.016991	20.89831	.3230855

Elem	Sr4077
Units	ppm
Avg	-.081314
Stddev	.000556
%RSD	.6841096
#1	-.081879
#2	-.080767
#3	-.081295

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3476.110	82465.08	19697.85	2243.953	4576.555
Stddev	6.566	283.89	75.22	3.439	2.208
%RSD	.1889033	.3442489	.3818888	.1532487	.0482533
#1	3474.220	82206.21	19616.51	2240.608	4574.173
#2	3470.696	82768.67	19764.90	2247.479	4578.534
#3	3483.414	82420.35	19712.15	2243.773	4576.960

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1680-01DUP Acquired: 4/3/2025 13:05:10 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0733525	.0116604	.3085101	-.037501	-.003583	134.5976
Stddev	.0027438	.0021207	.0032497	.006004	.001451	.1931
%RSD	3.740512	18.18763	1.053352	16.01119	40.49805	.1434314
#1	.0711327	.0112717	.3111328	-.042969	-.004604	134.6376
#2	.0725047	.0139486	.3048746	-.031075	-.004224	134.7675
#3	.0764201	.0097608	.3095229	-.038461	-.001922	134.3876

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.585176	.0101239	-.002945	18.48343	.2170814	.1327253
Stddev	.000699	.0001304	.000352	.05458	.0007618	.0010219
%RSD	.0441131	1.288092	11.93817	.2953018	.3509203	.7699430
#1	1.585971	.0102701	-.002544	18.50531	.2175144	.1336325
#2	1.584656	.0100817	-.003203	18.42131	.2175280	.1316182
#3	1.584901	.0100197	-.003087	18.52369	.2162018	.1329250

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1890157	272.6132	3.146959	46.92551	.2414021	.0024755
Stddev	.0015127	.5991	.013712	.16659	.0014104	.0003779
%RSD	.8002835	.2197712	.4357284	.3550069	.5842319	15.26399
#1	.1901700	272.1033	3.148171	47.00062	.2415456	.0021181
#2	.1873033	272.4633	3.132681	46.73458	.2399255	.0024375
#3	.1895738	273.2730	3.160025	47.04131	.2427353	.0028709

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.708340	.2981634	.6503075	14.94936	.5024856	.0019319
Stddev	.019764	.0008816	.0023551	.03113	.0011295	.0003047
%RSD	.3462273	.2956615	.3621547	.2082281	.2247889	15.77101
#1	5.687562	.2976473	.6486621	14.96171	.5014143	.0015993
#2	5.726902	.2976616	.6492550	14.97242	.5023768	.0021976
#3	5.710555	.2991813	.6530053	14.91395	.5036655	.0019988

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1680-01DUP Acquired: 4/3/2025 13:05:10 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0140160	2.767488	6.137157	6.766613	F 20.47623	.3239689
Stddev	.0010557	.009162	.021274	.048320	.13767	.0003215
%RSD	7.532186	.3310757	.3466359	.7140970	.6723446	.0992283
#1	.0127997	2.769657	6.113443	6.796125	20.57661	.3240626
#2	.0145543	2.757435	6.143462	6.710849	20.31929	.3236110
#3	.0146941	2.775371	6.154565	6.792864	20.53279	.3242331

Elem	Sr4077
Units	ppm
Avg	-.081145
Stddev	.000829
%RSD	1.021163
#1	-.080456
#2	-.080915
#3	-.082065

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3491.486	83909.43	20549.90	2249.636	4613.130
Stddev	23.493	270.33	64.84	11.738	37.121
%RSD	.6728656	.3221660	.3155188	.5217944	.8046745
#1	3476.068	84209.41	20559.08	2251.284	4583.807
#2	3518.524	83834.19	20609.65	2260.464	4654.867
#3	3479.864	83684.70	20480.96	2237.161	4600.717

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1680-01LX5 Acquired: 4/3/2025 13:09:13 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0172928	.0019488	.0646304	-.009375	-.000339	30.85456	.3481918
Stddev	.0008896	.0020042	.0003880	.002201	.000737	.07199	.0008252
%RSD	5.144395	102.8462	.6002806	23.47758	217.1265	.2333092	.2369839
#1	.0167925	.0026912	.0649343	-.007295	-.000692	30.78950	.3482874
#2	.0167661	-.000321	.0641934	-.009150	.000508	30.84229	.3489649
#3	.0183200	.003476	.0647635	-.011680	-.000834	30.93189	.3473229

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0026004	-.002774	4.374142	.0507366	.0270093	.0466542	63.02967
Stddev	.0000925	.000044	.002772	.0001113	.0001478	.0002217	.24637
%RSD	3.555600	1.576215	.0633644	.2194219	.5472948	.4751631	.3908718
#1	.0026594	-.002751	4.370948	.0506081	.0271775	.0468221	63.23908
#2	.0026479	-.002824	4.375552	.0507988	.0269504	.0467375	63.09172
#3	.0024938	-.002745	4.375924	.0508030	.0269001	.0464029	62.75821

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7473831	10.96974	.0501421	.0009054	1.240718	.0691074	.1508644
Stddev	.0036285	.00806	.0002148	.0002206	.009093	.0003112	.0010897
%RSD	.4854908	.0735017	.4283065	24.36050	.7328994	.4503232	.7223261
#1	.7470974	10.96146	.0499351	.0011211	1.240703	.0692828	.1516205
#2	.7511460	10.97019	.0501272	.0009149	1.249819	.0692914	.1496153
#3	.7439059	10.97757	.0503639	.0006802	1.231633	.0687481	.1513575

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.162633	.1126267	.0000441	.0001660	.6461712	1.388043	1.383191
Stddev	.047871	.0007730	.0000739	.0007477	.0024928	.017160	.009856
%RSD	1.513651	.6863715	167.6219	450.3326	.3857749	1.236247	.7125860
#1	3.200671	.1134642	.0000150	-.000200	.6434388	1.388824	1.373258
#2	3.178347	.1124753	-.000011	-.000328	.6467538	1.404798	1.383345
#3	3.108879	.1119406	.000128	.001026	.6483211	1.370506	1.392969

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1680-01LX5 Acquired: 4/3/2025 13:09:13 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	4.136835	.0735856	-.018957
Stddev	.010362	.0008625	.000285
%RSD	.2504823	1.172100	1.503557
#1	4.125842	.0726813	-.019165
#2	4.138238	.0743991	-.019074
#3	4.146424	.0736764	-.018632

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3239.864	76198.54	17987.17	2084.617	4982.128
Stddev	19.232	189.26	30.73	4.272	22.129
%RSD	.5936147	.2483767	.1708619	.2049193	.4441617
#1	3217.850	76083.92	18021.66	2079.783	4957.082
#2	3253.409	76094.72	17962.70	2086.184	4999.034
#3	3248.332	76416.99	17977.15	2087.884	4990.269

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1680-01MS Acquired: 4/3/2025 13:17:38 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.6536064	1.707616	1.110368	1.366527	.2871326	153.2637
Stddev	.0020526	.018171	.007517	.002736	.0014540	.1246
%RSD	.3140473	1.064091	.6769477	.2002372	.5063959	.0813023
#1	.6544014	1.720384	1.117702	1.364948	.2887802	153.2204
#2	.6551425	1.715650	1.110721	1.369686	.2860291	153.1665
#3	.6512751	1.686813	1.102681	1.364946	.2865886	153.4041

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.669302	.1456733	.1643745	24.88157	.5148633	.2927818
Stddev	.004228	.0008629	.0009715	.09528	.0015394	.0011866
%RSD	.2532569	.5923394	.5910267	.3829497	.2989993	.4052745
#1	1.673733	.1447460	.1654763	24.77166	.5164808	.2937854
#2	1.665313	.1458213	.1640060	24.94098	.5146930	.2930879
#3	1.668860	.1464527	.1636412	24.93206	.5134161	.2914722

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3890959	265.4693	4.152722	46.91820	.6603833	.0604586
Stddev	.0016086	.7183	.002736	.27722	.0040717	.0004010
%RSD	.4134256	.2705719	.0658902	.5908518	.6165735	.6633113
#1	.3904342	266.2610	4.150186	46.59947	.6649619	.0602860
#2	.3895423	265.2874	4.152358	47.05189	.6590196	.0609170
#3	.3873112	264.8594	4.155622	47.10323	.6571685	.0601727

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.670347	.5045327	.8359887	23.30436	.6391432	.3317459
Stddev	.055371	.0018545	.0019301	.15339	.0026981	.0010578
%RSD	.6386294	.3675642	.2308704	.6581928	.4221460	.3188609
#1	8.731248	.5063300	.8378292	23.46566	.6420020	.3327035
#2	8.656758	.5026259	.8361566	23.28705	.6387864	.3319238
#3	8.623035	.5046421	.8339801	23.16036	.6366413	.3306105

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1680-01MS Acquired: 4/3/2025 13:17:38 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.6400464	2.710081	6.447063	F 12.90575	F 17.26187	.4700127
Stddev	.0058289	.005954	.017801	.05808	.10877	.0016352
%RSD	.9106917	.2197105	.2761124	.4500041	.6301416	.3479041
#1	.6467402	2.707099	6.467428	12.95885	17.34919	.4713515
#2	.6360912	2.706208	6.434467	12.91466	17.29640	.4704965
#3	.6373078	2.716938	6.439293	12.84373	17.14003	.4681902

Elem	Sr4077
Units	ppm
Avg	.0892864
Stddev	.0003198
%RSD	.3582208
#1	.0890858
#2	.0891182
#3	.0896553

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3464.777	81920.08	19995.94	2229.876	4540.175
Stddev	9.103	69.25	80.62	7.676	21.842
%RSD	.2627422	.0845310	.4031586	.3442221	.4810755
#1	3455.906	81905.55	20086.21	2231.646	4516.997
#2	3464.329	81859.25	19970.48	2221.469	4543.152
#3	3474.097	81995.44	19931.13	2236.511	4560.375

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1680-01MSD Acquired: 4/3/2025 13:28:41 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.6546011	1.682031	1.101764	1.371667	.2850058	155.4819
Stddev	.0028601	.030158	.002553	.007738	.0037936	.4887
%RSD	.4369182	1.792941	.2316937	.5641152	1.331064	.3143445
#1	.6577715	1.713610	1.102880	1.377762	.2883477	155.5438
#2	.6522150	1.678951	1.098844	1.362962	.2857874	154.9652
#3	.6538167	1.653531	1.103570	1.374278	.2808823	155.9368

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.663636	.1476752	.1646270	25.00817	.5119992	.2910339
Stddev	.002050	.0013936	.0006402	.16512	.0011733	.0008558
%RSD	.1232198	.9436955	.3888626	.6602541	.2291600	.2940663
#1	1.664183	.1481594	.1653274	25.06797	.5117329	.2919998
#2	1.661368	.1461041	.1640721	24.82149	.5109819	.2903702
#3	1.665357	.1487621	.1644816	25.13506	.5132827	.2907316

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3881330	260.7056	4.164264	46.71455	.6554250	.0600903
Stddev	.0013681	1.4776	.018232	.22300	.0010880	.0002417
%RSD	.3524899	.5667535	.4378087	.4773693	.1660039	.4022135
#1	.3896925	259.0659	4.167965	46.82012	.6554689	.0598130
#2	.3871343	261.9339	4.144466	46.45837	.6543157	.0602560
#3	.3875724	261.1169	4.180362	46.86516	.6564904	.0602019

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.581196	.5072252	.8419250	22.98413	.6186769	.3324437
Stddev	.082340	.0015077	.0035687	.18980	.0035903	.0007839
%RSD	.9595363	.2972372	.4238742	.8258016	.5803237	.2357862
#1	8.498660	.5068767	.8402681	22.76970	.6147706	.3332585
#2	8.663338	.5059223	.8394858	23.13057	.6218326	.3323776
#3	8.581590	.5088766	.8460209	23.05214	.6194274	.3316949

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1680-01MSD Acquired: 4/3/2025 13:28:41 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.6339978	2.720355	6.447493	F 12.59409	F 17.03516	.4721714
Stddev	.0040609	.008079	.070947	.07757	.06335	.0011858
%RSD	.6405258	.2969659	1.100381	.6159337	.3718828	.2511435
#1	.6379427	2.721737	6.373215	12.68150	17.10767	.4710510
#2	.6298301	2.711674	6.514558	12.56729	16.99057	.4720501
#3	.6342205	2.727653	6.454707	12.53347	17.00723	.4734133

Elem	Sr4077
Units	ppm
Avg	.0934519
Stddev	.0018009
%RSD	1.927076
#1	.0950561
#2	.0915039
#3	.0937957

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3438.114	81955.93	19612.74	2197.080	4532.669
Stddev	3.847	417.03	171.29	12.499	4.290
%RSD	.1118921	.5088407	.8733365	.5688951	.0946524
#1	3433.852	82400.73	19544.09	2211.226	4529.860
#2	3441.329	81893.30	19807.70	2192.485	4537.608
#3	3439.161	81573.77	19486.42	2187.528	4530.540

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1680-01A Acquired: 4/3/2025 13:32:40 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.6534874	1.689369	1.106340	1.371274	.2760038	156.6436
Stddev	.0017931	.009484	.008675	.006325	.0003533	.5661
%RSD	.2743886	.5614164	.7841568	.4612712	.1279976	.3613953
#1	.6516301	1.678980	1.096439	1.366891	.2763888	157.1753
#2	.6552085	1.691562	1.109971	1.368405	.2756944	156.7071
#3	.6536237	1.697565	1.112610	1.378525	.2759282	156.0484

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.652769	.1516359	.1656004	25.38285	.5140105	.2921340
Stddev	.004665	.0007914	.0014633	.17845	.0016440	.0024995
%RSD	.2822299	.5218755	.8836300	.7030532	.3198315	.8556105
#1	1.657992	.1523319	.1639592	25.46903	.5122326	.2893349
#2	1.651297	.1518007	.1660728	25.50186	.5154756	.2929240
#3	1.649018	.1507752	.1667690	25.17766	.5143232	.2941431

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3920172	256.3534	4.181357	47.26541	.6596397	.0589836
Stddev	.0018215	.3755	.022335	.15013	.0043688	.0003299
%RSD	.4646379	.1464583	.5341459	.3176317	.6622961	.5593450
#1	.3904094	255.9890	4.193889	47.34446	.6548940	.0588002
#2	.3916467	256.7390	4.194611	47.35951	.6605309	.0593645
#3	.3939954	256.3323	4.155570	47.09228	.6634941	.0587862

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.389630	.5069973	.8423076	22.55969	.6131808	.3291769
Stddev	.051363	.0021719	.0007663	.11533	.0012894	.0018287
%RSD	.6122194	.4283781	.0909726	.5112081	.2102718	.5555225
#1	8.396904	.5081046	.8424838	22.50995	.6119888	.3270859
#2	8.335017	.5083923	.8414685	22.47759	.6145493	.3299680
#3	8.436967	.5044949	.8429703	22.69154	.6130044	.3304768

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1680-01A Acquired: 4/3/2025 13:32:40 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.6352993	2.790792	7.951289	F 12.79386	F 17.18317	.4716936
Stddev	.0049481	.017302	.012722	.09539	.10148	.0014961
%RSD	.7788571	.6199527	.1599957	.7456056	.5905912	.3171731
#1	.6296757	2.806259	7.945169	12.69784	17.06732	.4733787
#2	.6372364	2.794010	7.942784	12.79515	17.22580	.4705215
#3	.6389857	2.772107	7.965915	12.88861	17.25638	.4711805

Elem	Sr4077
Units	ppm
Avg	.0963124
Stddev	.0015002
%RSD	1.557680
#1	.0980217
#2	.0957019
#3	.0952137

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3446.000	81631.44	19036.95	2194.715	4523.341
Stddev	8.561	155.22	98.72	4.195	20.142
%RSD	.2484288	.1901443	.5185571	.1911408	.4452809
#1	3455.723	81808.93	18987.18	2196.190	4546.181
#2	3442.682	81564.27	18973.01	2189.981	4515.721
#3	3439.594	81521.12	19150.64	2197.973	4508.122

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1681-01 Acquired: 4/3/2025 13:40:57 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0472637	.0107258	.1686680	-.037290	-.005335	106.3245	1.248532
Stddev	.0006667	.0021797	.0008712	.002156	.001420	.0893	.004147
%RSD	1.410676	20.32231	.5165076	5.782417	26.60750	.0839777	.3321865
#1	.0480267	.0091681	.1689121	-.034813	-.006401	106.4164	1.250444
#2	.0469715	.0097925	.1677008	-.038306	-.005881	106.2381	1.243774
#3	.0467930	.0132168	.1693911	-.038750	-.003724	106.3190	1.251379

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0115954	.0009957	25.84186	.2260825	.0921107	.2876200	224.8972
Stddev	.0000935	.0002617	.04399	.0012367	.0006985	.0007260	1.4038
%RSD	.8063694	26.28592	.1702153	.5470303	.7583619	.2524216	.6242108
#1	.0116867	.0007358	25.87706	.2268630	.0923665	.2881857	225.7022
#2	.0114999	.0012592	25.79255	.2246566	.0913203	.2868014	223.2762
#3	.0115995	.0009921	25.85596	.2267281	.0926453	.2878729	225.7132

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.291268	30.17455	.2032969	-.001819	7.180498	.2792101	.5097311
Stddev	.010703	.07684	.0008962	.000299	.045982	.0009043	.0024511
%RSD	.3251993	.2546431	.4408331	16.45674	.6403719	.3238686	.4808669
#1	3.295534	30.08583	.2029824	-.001503	7.212955	.2781933	.5097393
#2	3.279090	30.21865	.2026004	-.001856	7.127879	.2799243	.5072759
#3	3.299181	30.21919	.2043080	-.002098	7.200660	.2795125	.5121781

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.180188	.3743106	.0033339	.0014623	2.213095	6.136311	6.464187
Stddev	.055939	.0042510	.0003132	.0020086	.007158	.021659	.021464
%RSD	.6093404	1.135689	9.394111	137.3549	.3234583	.3529566	.3320481
#1	9.237800	.3764108	.0029723	.0014190	2.220787	6.144596	6.488862
#2	9.126088	.3694182	.0035186	.0034923	2.206629	6.111733	6.449833
#3	9.176677	.3771027	.0035107	-.000524	2.211867	6.152603	6.453866

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1681-01 Acquired: 4/3/2025 13:40:57 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.7532908	.2394258	-.064693
Stddev	.0043048	.0009061	.000888
%RSD	.5714638	.3784474	1.373208
#1	.7575481	.2389004	-.065387
#2	.7533844	.2389051	-.063692
#3	.7489400	.2404721	-.065001

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3608.152	85249.77	18397.69	2360.175	4681.309
Stddev	2.792	158.88	39.63	8.772	5.572
%RSD	.0773678	.1863646	.2154328	.3716798	.1190165
#1	3610.072	85139.41	18423.64	2360.753	4680.331
#2	3609.434	85431.87	18352.07	2368.644	4687.304
#3	3604.949	85178.04	18417.37	2351.128	4676.291

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1503-07DLX10 Acquired: 4/3/2025 13:45:04 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0028650	.0011394	-.000283	-.000487	.0000939	.0136847	-.005589
Stddev	.0003061	.0010883	.001512	.000381	.0010022	.0031335	.001086
%RSD	10.68577	95.51325	535.2536	78.28389	1067.550	22.89778	19.42694
#1	.0028478	.0015378	.001395	-.000604	-.000431	.0111296	-.005651
#2	.0025678	.0019723	-.001541	-.000061	.001250	.0127436	-.004474
#3	.0031794	-.000092	-.000702	-.000796	-.000537	.0171808	-.006643

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001259	-.000008	.0045577	-.000193	-.000206	.0000266	.0261728
Stddev	.0000561	.000042	.0039531	.000164	.000161	.0004125	.0035987
%RSD	44.58310	553.1085	86.73364	84.78308	77.94084	1551.576	13.74962
#1	.0000854	-.000038	.0016380	-.000004	-.000027	-.000440	.0295913
#2	.0001900	-.000025	.0029790	-.000285	-.000337	.000179	.0265094
#3	.0001023	.000040	.0090562	-.000291	-.000255	.000342	.0224177

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001850	-.006408	-.000055	.0002938	16.09095	-.000467	-.000408
Stddev	.000379	.011694	.000113	.0001785	.04355	.000631	.000308
%RSD	20.50738	182.5101	206.6633	60.75183	.2706196	135.1372	75.55914
#1	-.001509	-.015415	.000045	.0003059	16.08646	-.000097	-.000738
#2	-.002258	-.010616	-.000032	.0001095	16.04982	-.001195	-.000361
#3	-.001783	.006809	-.000178	.0004659	16.13657	-.000109	-.000126

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.057796	-.002835	-.000241	-.001823	.0013201	9.298560	-.000963
Stddev	.018530	.000159	.000372	.000247	.0004105	.019454	.002267
%RSD	32.06079	5.609533	154.5333	13.52812	31.09491	.2092194	235.5066
#1	-.065674	-.002704	-.000187	-.001846	.0008642	9.312721	-.000598
#2	-.036629	-.002789	-.000636	-.001565	.0014356	9.276378	.001100
#3	-.071085	-.003012	.000102	-.002057	.0016605	9.306583	-.003391

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1503-07DLX10 Acquired: 4/3/2025 13:45:04 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.000805	-.002608	.0000298
Stddev	.002631	.001024	.0000292
%RSD	326.8342	39.26737	98.11230
#1	-.001245	-.002554	.0000015
#2	-.003188	-.003657	.0000279
#3	.002018	-.001612	.0000599

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3226.536	75240.21	17547.43	2092.194	5225.906
Stddev	14.566	143.68	47.56	5.866	22.069
%RSD	.4514450	.1909683	.2710129	.2803899	.4223028
#1	3224.566	75380.89	17598.23	2094.101	5221.739
#2	3241.986	75246.04	17503.97	2096.869	5249.762
#3	3213.055	75093.70	17540.09	2085.611	5206.218

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1688-01 Acquired: 4/3/2025 13:49:23 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0411453	-.004046	.3194873	-.027056	-.003616	117.5886	.6426014
Stddev	.0010174	.000829	.0009325	.002698	.001700	.0327	.0011029
%RSD	2.472605	20.49403	.2918878	9.973049	46.99679	.0277968	.1716258
#1	.0405828	-.003696	.3204830	-.029687	-.003354	117.6264	.6415700
#2	.0423197	-.004992	.3186344	-.024295	-.005432	117.5690	.6424702
#3	.0405334	-.003449	.3193447	-.027184	-.002063	117.5706	.6437640

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0070025	-.001653	40.63922	.2055266	.1158837	.3307252	226.6963
Stddev	.0002141	.000271	.05830	.0003989	.0004562	.0003093	.4944
%RSD	3.057488	16.39584	.1434552	.1941085	.3936911	.0935126	.2181103
#1	.0068263	-.001824	40.57987	.2052583	.1159155	.3305321	226.7470
#2	.0072407	-.001340	40.69641	.2053364	.1154124	.3305616	226.1784
#3	.0069403	-.001794	40.64138	.2059850	.1163231	.3310819	227.1634

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.837576	45.33457	.2025701	.0018564	8.204007	.3806409	.4912927
Stddev	.003140	.02241	.0003482	.0003285	.035699	.0007508	.0028012
%RSD	.1106661	.0494283	.1718948	17.69796	.4351384	.1972409	.5701582
#1	2.834348	45.32564	.2026925	.0014778	8.214651	.3814186	.4881553
#2	2.837758	45.36007	.2021773	.0020664	8.164197	.3805837	.4935427
#3	2.840621	45.31801	.2028407	.0020250	8.233174	.3799203	.4921800

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.60802	.4507834	.0029932	.0013918	4.432774	4.685610	6.289923
Stddev	.03423	.0008617	.0004227	.0010342	.006920	.038731	.024080
%RSD	.2949049	.1911564	14.12115	74.30747	.1561144	.8266041	.3828335
#1	11.61436	.4512526	.0025554	.0002966	4.424957	4.675344	6.266358
#2	11.57105	.4497889	.0030255	.0023517	4.435245	4.653046	6.288924
#3	11.63863	.4513086	.0033989	.0015272	4.438119	4.728441	6.314486

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1688-01 Acquired: 4/3/2025 13:49:23 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	3.743573	.1965058	-.065303
Stddev	.012066	.0001325	.000401
%RSD	.3223199	.0674319	.6137148
#1	3.745418	.1965978	-.065488
#2	3.730691	.1963539	-.064843
#3	3.754611	.1965656	-.065577

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3420.953	82388.21	20313.30	2223.621	4505.805
Stddev	27.895	250.25	73.58	5.867	29.091
%RSD	.8154080	.3037505	.3622121	.2638423	.6456252
#1	3444.186	82107.30	20262.35	2217.380	4529.323
#2	3390.016	82587.37	20279.90	2224.460	4473.275
#3	3428.656	82469.96	20397.66	2229.023	4514.818

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCV02 Acquired: 4/3/2025 13:53:29 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	5.026586	5.011857	4.864521	5.060790	5.081995	9.620208	9.402689
Stddev	.034155	.060879	.009961	.019059	.019741	.158681	.132653
%RSD	.6794794	1.214709	.2047768	.3766003	.3884435	1.649453	1.410798
#1	5.023880	4.954013	4.856038	5.061926	5.085011	9.727131	9.478826
#2	4.993865	5.006184	4.862034	5.041189	5.060919	9.437885	9.249516
#3	5.062013	5.075375	4.875490	5.079256	5.100054	9.695606	9.479726

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2280278	2.413933	23.21983	.9948982	2.418769	1.261028	4.863199
Stddev	.0017528	.006389	.36667	.0020596	.006167	.003544	.026179
%RSD	.7686774	.2646851	1.579122	.2070152	.2549828	.2810142	.5383015
#1	.2286008	2.408340	23.42072	.9927613	2.412743	1.262167	4.889932
#2	.2260602	2.412561	22.79662	.9968706	2.418495	1.257055	4.837613
#3	.2294224	2.420896	23.44215	.9950627	2.425069	1.263862	4.862051

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.256655	22.85514	2.418725	1.230241	25.62590	2.354660	2.490359
Stddev	.040296	.27046	.007391	.001689	.24466	.037423	.006369
%RSD	1.785671	1.183371	.3055858	.1372908	.9547514	1.589320	.2557564
#1	2.285557	22.88767	2.413974	1.228899	25.87777	2.378384	2.483485
#2	2.210624	22.56988	2.414961	1.229687	25.38915	2.311519	2.491531
#3	2.273785	23.10786	2.427241	1.232137	25.61077	2.374077	2.496061

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.76801	4.546981	5.030336	4.868435	4.645497	5.076413	4.716265
Stddev	.22017	.038655	.017377	.018359	.083632	.028272	.027197
%RSD	.8889485	.8501231	.3454532	.3771044	1.800278	.5569246	.5766693
#1	24.97242	4.557251	5.022787	4.855286	4.705207	5.094701	4.693112
#2	24.53489	4.504228	5.018010	4.860607	4.549913	5.043850	4.709468
#3	24.79673	4.579464	5.050212	4.889410	4.681371	5.090687	4.746217

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCV02 Acquired: 4/3/2025 13:53:29 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	4.831397	4.666906	4.737870
Stddev	.024681	.095540	.055373
%RSD	.5108357	2.047173	1.168737
#1	4.814733	4.744391	4.774509
#2	4.819708	4.560157	4.674170
#3	4.859751	4.696169	4.764932

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3050.717	72491.96	16665.27	1950.642	4713.197
Stddev	11.357	234.49	214.43	12.921	15.693
%RSD	.3722820	.3234757	1.286696	.6624127	.3329509
#1	3047.859	72335.60	16567.13	1947.040	4715.694
#2	3063.231	72761.59	16911.21	1964.983	4727.491
#3	3041.063	72378.71	16517.48	1939.905	4696.405

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCB02 Acquired: 4/3/2025 13:57:40 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0004309	-.000545	.0008414	-.001939	-.000713	-.002661	-.006254
Stddev	.0010600	.001315	.0003947	.000549	.000435	.003509	.000767
%RSD	245.9840	241.0722	46.91210	28.31434	61.07519	131.8989	12.26930
#1	.0015389	-.002004	.0004724	-.002447	-.000698	.001385	-.005496
#2	-.000573	.000548	.0007943	-.001357	-.000285	-.004891	-.007030
#3	.000327	-.000181	.0012576	-.002012	-.001155	-.004476	-.006236

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000782	-.000012	.0033358	.0000167	-.000124	.0001232	-.001117
Stddev	.0000049	.000038	.0039604	.0004035	.000213	.0002780	.002651
%RSD	6.213901	319.6173	118.7237	2416.565	171.7083	225.6590	237.2909
#1	.0000836	-.000003	.0034734	-.000125	.000119	.0001451	.001933
#2	.0000768	-.000054	.0072257	-.000297	-.000279	-.000165	-.002413
#3	.0000742	.000021	-.000692	.000472	-.000212	.000390	-.002872

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002169	-.008849	-.000167	.0003341	-.002161	-.000281	-.000210
Stddev	.000129	.006881	.000105	.0001381	.003119	.000908	.000199
%RSD	5.967072	77.75362	62.67178	41.32797	144.3352	323.3777	94.93149
#1	-.002026	-.004279	-.000282	.0002936	.001394	.000710	-.000245
#2	-.002203	-.005506	-.000078	.0002208	-.003437	-.000480	.000005
#3	-.002279	-.016763	-.000142	.0004879	-.004438	-.001072	-.000389

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.023981	.0025070	.0003499	-.002192	.0011078	.0064603	.0000277
Stddev	.016122	.0004786	.0001180	.000106	.0003195	.0020633	.0002319
%RSD	67.22935	19.08857	33.72076	4.815799	28.84262	31.93811	837.1044
#1	-.032088	.0027793	.0004839	-.002084	.0008855	.0067427	-.000214
#2	-.034441	.0019545	.0003044	-.002295	.0014740	.0042704	.000249
#3	-.005414	.0027874	.0002615	-.002197	.0009639	.0083679	.000048

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCB02 Acquired: 4/3/2025 13:57:40 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.000971	-.002422	.0002405
Stddev	.003210	.000640	.0000085
%RSD	330.4602	26.43873	3.529501
#1	-.002592	-.003057	.0002457
#2	-.003049	-.002433	.0002450
#3	.002726	-.001776	.0002307

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3247.236	75140.84	17318.81	2066.573	5375.125
Stddev	16.217	80.34	70.77	6.125	23.967
%RSD	.4993957	.1069207	.4086376	.2963977	.4458927
#1	3239.967	75204.99	17268.92	2068.337	5356.878
#2	3235.926	75166.79	17287.70	2059.759	5366.230
#3	3265.816	75050.72	17399.81	2071.623	5402.269

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: PB167411BL Acquired: 4/3/2025 14:02:00 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.000050	.0000110	-.000270	-.001663	.0008745	-.003525	-.005582
Stddev	.000776	.0021572	.000216	.001761	.0006285	.002357	.000410
%RSD	1543.057	19522.89	80.19249	105.8895	71.87174	66.86029	7.343448
#1	.000416	.0024781	-.000291	-.003520	.0001516	-.002250	-.005602
#2	.000379	-.001520	-.000474	-.001452	.0012915	-.006244	-.005982
#3	-.000946	-.000925	-.000044	-.000017	.0011806	-.002080	-.005163

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000906	.0000433	.0046954	.0000191	-.000088	.0000982	-.001457
Stddev	.0000471	.0000411	.0026640	.0001997	.000056	.0001190	.001476
%RSD	51.93501	94.87135	56.73755	1045.143	64.18560	121.1548	101.2909
#1	.0001450	.0000861	.0062374	-.000054	-.000045	.0001101	-.002836
#2	.0000644	.0000394	.0016192	-.000134	-.000152	-.000026	.000100
#3	.0000626	.0000043	.0062295	.000245	-.000066	.000211	-.001636

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002201	-.014200	-.000230	.0001989	-.008799	.0000978	-.000331
Stddev	.000363	.005485	.000191	.0002860	.003425	.0013559	.000170
%RSD	16.47010	38.62827	83.00813	143.8088	38.92893	1386.764	51.20455
#1	-.002608	-.008026	-.000394	-.000066	-.012657	-.001468	-.000502
#2	-.002085	-.016063	-.000275	.000502	-.007623	.000855	-.000330
#3	-.001911	-.018511	-.000021	.000161	-.006116	.000906	-.000163

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.029306	-.000521	.0000347	-.001862	.0010203	-.003028	-.000169
Stddev	.006796	.000443	.0000105	.000285	.0003293	.005689	.001890
%RSD	23.18883	85.03104	30.10517	15.29823	32.27728	187.8641	1115.441
#1	-.037095	-.000109	.0000275	-.002102	.0010683	-.002887	-.001523
#2	-.024585	-.000990	.0000467	-.001936	.0006696	-.008787	.001990
#3	-.026238	-.000464	.0000300	-.001547	.0013230	.002589	-.000974

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: PB167411BL Acquired: 4/3/2025 14:02:00 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.001685	-.002799	.0000540
Stddev	.002976	.000402	.0000151
%RSD	176.6183	14.37757	27.89803
#1	-.001075	-.002541	.0000486
#2	-.004918	-.002595	.0000423
#3	.000939	-.003263	.0000710

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3240.007	76388.27	17085.81	2115.919	5322.499
Stddev	.388	57.26	143.47	7.419	3.887
%RSD	.0119902	.0749533	.8396996	.3506506	.0730389
#1	3239.896	76454.18	17068.76	2112.524	5322.819
#2	3240.439	76359.74	16951.63	2110.805	5318.461
#3	3239.686	76350.88	17237.05	2124.429	5326.217

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: PB167411BS Acquired: 4/3/2025 14:06:20 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.7662961	2.014947	.9240744	1.946621	.7998838	1.833676
Stddev	.0036595	.019215	.0040909	.012311	.0066907	.007741
%RSD	.4775611	.9536398	.4427017	.6324235	.8364605	.4221415
#1	.7654456	2.010325	.9203335	1.944009	.7964889	1.825626
#2	.7631368	1.998464	.9234471	1.935825	.7955711	1.841065
#3	.7703060	2.036051	.9284428	1.960028	.8075914	1.834339

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1726690	.1822511	.1846346	.9074171	.3955154	.1877266
Stddev	.0009043	.0013422	.0010494	.0011726	.0013871	.0008504
%RSD	.5236949	.7364707	.5683432	.1292280	.3506965	.4529993
#1	.1729582	.1837388	.1841608	.9069508	.3970895	.1876510
#2	.1716555	.1811309	.1839056	.9087512	.3944720	.1869165
#3	.1733932	.1818837	.1858373	.9065494	.3949849	.1886123

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3060026	2.842975	.1795011	1.795036	.4725589	.0732096
Stddev	.0010934	.018325	.0009084	.006351	.0032254	.0006462
%RSD	.3573347	.6445720	.5060477	.3538217	.6825361	.8827167
#1	.3047484	2.834220	.1802845	1.802326	.4719363	.0739443
#2	.3065042	2.830669	.1785054	1.790696	.4696902	.0727290
#3	.3067553	2.864035	.1797135	1.792086	.4760502	.0729555

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.890326	.2773166	.1980561	9.178566	.2725695	.4001580
Stddev	.020304	.0013676	.0023277	.044299	.0031528	.0019457
%RSD	.7024880	.4931491	1.175258	.4826368	1.156683	.4862311
#1	2.870411	.2782948	.2003235	9.127551	.2760373	.3991587
#2	2.910998	.2757539	.1956725	9.207321	.2717951	.3989151
#3	2.889569	.2779011	.1981724	9.200826	.2698761	.4024003

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: PB167411BS Acquired: 4/3/2025 14:06:20 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.6559194	.1814225	.7692706	5.391343	F -.010905	.1868618
Stddev	.0036699	.0008517	.0100660	.045082	.001163	.0005720
%RSD	.5595064	.4694318	1.308517	.8361871	10.66088	.3061023
#1	.6545929	.1821022	.7722301	5.359881	-.011917	.1873877
#2	.6530973	.1804672	.7580566	5.371158	-.011162	.1869448
#3	.6600682	.1816982	.7775251	5.442990	-.009635	.1862528

Elem	Sr4077
Units	ppm
Avg	.1807999
Stddev	.0004387
%RSD	.2426218
#1	.1809389
#2	.1811521
#3	.1803085

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3177.958	75602.14	16903.47	2062.831	5134.132
Stddev	15.644	389.45	141.80	15.333	21.241
%RSD	.4922661	.5151308	.8388609	.7433151	.4137241
#1	3194.547	75246.69	16763.29	2050.863	5156.774
#2	3163.472	76018.43	17046.83	2080.115	5114.645
#3	3175.857	75541.29	16900.30	2057.516	5130.977

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1690-01 Acquired: 4/3/2025 14:10:23 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0032180	-.004843	.0604208	-.002774	.0040401	4.352180
Stddev	.0032598	.001793	.0013888	.001843	.0021639	.012197
%RSD	101.2981	37.01657	2.298589	66.43005	53.56076	.2802590
#1	-.000532	-.006804	.0591973	-.002793	.0020454	4.358263
#2	.005379	-.003289	.0619304	-.004607	.0063407	4.360140
#3	.004807	-.004436	.0601346	-.000922	.0037342	4.338138

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2581552	.0001946	.0002139	81.60582	.0121839	.0028118
Stddev	.0005577	.0001147	.0000281	.16969	.0003843	.0002681
%RSD	.2160344	58.92363	13.14993	.2079356	3.153827	9.533305
#1	.2576601	.0002375	.0001851	81.44180	.0117634	.0031205
#2	.2580462	.0002817	.0002153	81.59500	.0125168	.0026775
#3	.2587594	.0000647	.0002413	81.78065	.0122715	.0026375

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0502048	9.205765	.4777000	9.332732	.0129867	.0006781
Stddev	.0001396	.060669	.0015653	.013168	.0001717	.0000225
%RSD	.2780336	.6590375	.3276832	.1410935	1.321969	3.319109
#1	.0503553	9.137756	.4764545	9.319234	.0131698	.0006556
#2	.0500796	9.254324	.4771882	9.333419	.0128294	.0006782
#3	.0501796	9.225215	.4794571	9.345542	.0129608	.0007006

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	66.67770	.0140719	.1710246	5.217971	.1421999	.0044470
Stddev	.48757	.0013301	.0016397	.057850	.0012195	.0001205
%RSD	.7312401	9.452000	.9587807	1.108663	.8576057	2.710476
#1	66.17627	.0154726	.1691758	5.151955	.1407976	.0044665
#2	67.15012	.0139168	.1723031	5.259809	.1430120	.0043180
#3	66.70672	.0128261	.1715947	5.242149	.1427902	.0045567

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1690-01 Acquired: 4/3/2025 14:10:23 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0018919	.1903323	F 14.09458	.6608882	6.018766	-.002352
Stddev	.0004872	.0003097	.09820	.0003034	.016826	.000934
%RSD	25.75047	.1627217	.6967121	.0459121	.2795507	39.73311
#1	.0024329	.1899926	13.98227	.6605664	5.999880	-.001924
#2	.0014880	.1904051	14.16427	.6611691	6.032156	-.001707
#3	.0017546	.1905991	14.13720	.6609291	6.024263	-.003423

Elem	Sr4077
Units	ppm
Avg	.3953450
Stddev	.0003472
%RSD	.0878177
#1	.3951124
#2	.3957441
#3	.3951786

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2976.051	71307.68	17404.05	1886.435	4742.406
Stddev	12.317	632.07	36.74	11.082	12.269
%RSD	.4138572	.8863992	.2111262	.5874314	.2587142
#1	2979.671	72011.90	17445.96	1891.462	4743.029
#2	2962.330	70789.53	17377.37	1873.731	4729.836
#3	2986.151	71121.62	17388.81	1894.112	4754.351

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1707-01 Acquired: 4/3/2025 14:15:08 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0008410	-.000180	.0262646	-.004072	.0010474	2.392351
Stddev	.0013115	.000807	.0002390	.001936	.0021581	.015134
%RSD	155.9585	448.9085	.9098878	47.55719	206.0498	.6326170
#1	.0023489	.000317	.0263743	-.003264	.0032952	2.382189
#2	-.000034	-.001111	.0264291	-.002670	-.001008	2.409745
#3	.000208	.000255	.0259905	-.006281	.000855	2.385120

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0632400	.0004028	-.000305	F 99.20573	.0086469	.0032124
Stddev	.0008215	.0000300	.000038	.04470	.0001506	.0002921
%RSD	1.299102	7.437778	12.42426	.0450594	1.741618	9.091409
#1	.0631993	.0004098	-.000261	99.23888	.0086504	.0028923
#2	.0640812	.0004287	-.000324	99.22341	.0084946	.0034643
#3	.0624396	.0003700	-.000329	99.15489	.0087957	.0032806

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0534846	F 13.79537	.3699833	14.78816	.0112859	.0005467
Stddev	.0003174	.09899	.0014027	.06272	.0000376	.0001662
%RSD	.5933602	.7175437	.3791346	.4241506	.3332643	30.40135
#1	.0535038	13.71472	.3693409	14.72652	.0112514	.0005004
#2	.0531581	13.76554	.3715922	14.78605	.0113260	.0007311
#3	.0537920	13.90584	.3690169	14.85191	.0112802	.0004085

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 174.9272	.0069298	.3761746	13.48120	.0825258	.0031088
Stddev	1.3192	.0001100	.0061103	.10619	.0002231	.0001947
%RSD	.7541423	1.587501	1.624336	.7876787	.2703221	6.262194
#1	174.3445	.0068699	.3722366	13.36412	.0823960	.0032459
#2	173.9996	.0070568	.3730735	13.50817	.0823979	.0031946
#3	176.4374	.0068628	.3832137	13.57129	.0827834	.0028860

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1707-01 Acquired: 4/3/2025 14:15:08 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.004467	.1394258	F 16.28223	1.424170	7.699593	.0018410
Stddev	.000645	.0005519	.14702	.011117	.026574	.0002789
%RSD	14.44466	.3958639	.9029729	.7805743	.3451399	15.14837
#1	-.005022	.1391035	16.12297	1.413764	7.701135	.0015287
#2	-.003759	.1391109	16.31093	1.422865	7.672281	.0019291
#3	-.004620	.1400631	16.41279	1.435882	7.725362	.0020653

Elem	Sr4077
Units	ppm
Avg	.3035555
Stddev	.0010528
%RSD	.3468193
#1	.3033960
#2	.3046789
#3	.3025915

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2895.829	70315.52	17314.93	1857.092	4463.251
Stddev	8.833	721.83	28.11	29.076	15.815
%RSD	.3050335	1.026552	.1623348	1.565675	.3543389
#1	2904.549	70858.54	17324.20	1879.634	4478.383
#2	2896.052	70591.63	17337.24	1867.369	4464.538
#3	2886.887	69496.40	17283.36	1824.273	4446.832

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1707-02 Acquired: 4/3/2025 14:19:29 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0025748	-.000589	.0309719	-.002871	.0037500	2.667776
Stddev	.0014239	.000382	.0006629	.001123	.0008112	.005700
%RSD	55.29990	64.93988	2.140363	39.12432	21.63243	.2136491
#1	.0025842	-.000278	.0306532	-.004140	.0044907	2.665258
#2	.0039939	-.001016	.0317340	-.002005	.0038761	2.674301
#3	.0011463	-.000472	.0305286	-.002468	.0028831	2.663768

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0664808	.0002987	-.000445	102.7574	.0087848	.0034927
Stddev	.0007036	.0000378	.000037	.0093	.0002530	.0001588
%RSD	1.058393	12.66158	8.387324	.0090353	2.879334	4.547671
#1	.0661261	.0003115	-.000448	102.7467	.0090765	.0034139
#2	.0660251	.0002561	-.000481	102.7639	.0086257	.0033886
#3	.0672912	.0003285	-.000407	102.7614	.0086523	.0036755

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0615035	14.46481	.3643007	16.08134	.0110498	.0004770
Stddev	.0001849	.07043	.0007775	.03886	.0002515	.0002933
%RSD	.3005895	.4869297	.2134139	.2416664	2.275633	61.48429
#1	.0612914	14.40233	.3643283	16.04255	.0112581	.0001994
#2	.0615885	14.45095	.3650639	16.12028	.0111209	.0004479
#3	.0616305	14.54114	.3635097	16.08120	.0107705	.0007838

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	180.9879	.0073465	.3852765	14.18436	.0857289	.0033608
Stddev	1.1132	.0007891	.0022975	.09353	.0005306	.0001251
%RSD	.6150762	10.74151	.5963338	.6594019	.6189641	3.723617
#1	179.7147	.0064388	.3847848	14.08475	.0853806	.0034191
#2	181.4713	.0078700	.3832647	14.19800	.0863396	.0032172
#3	181.7776	.0077306	.3877801	14.27032	.0854665	.0034462

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1707-02 Acquired: 4/3/2025 14:19:29 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.001882	.1590529	F 18.16552	1.498617	9.134591	.0042870
Stddev	.000782	.0064845	.12746	.008919	.049911	.0011847
%RSD	41.57362	4.076955	.7016432	.5951332	.5464001	27.63400
#1	-.001940	.1602808	18.08842	1.490276	9.102987	.0030685
#2	-.002634	.1648357	18.09549	1.497556	9.108656	.0043578
#3	-.001072	.1520422	18.31264	1.508019	9.192131	.0054347

Elem	Sr4077
Units	ppm
Avg	.3169124
Stddev	.0001689
%RSD	.0532812
#1	.3168737
#2	.3170973
#3	.3167663

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2875.978	69511.49	17186.59	1857.159	4423.343
Stddev	2.725	177.66	73.16	11.655	7.428
%RSD	.0947472	.2555823	.4256579	.6275571	.1679342
#1	2872.881	69714.50	17149.45	1869.375	4429.752
#2	2878.008	69384.40	17139.46	1855.940	4425.076
#3	2877.046	69435.59	17270.87	1846.161	4415.202

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1690-01DUP Acquired: 4/3/2025 14:23:49 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0035818	-.004943	.0592382	-.002952	.0034724	4.603194
Stddev	.0022287	.001146	.0009607	.002179	.0017498	.007076
%RSD	62.22215	23.19140	1.621833	73.80409	50.39153	.1537300
#1	.0033062	-.005135	.0602280	-.000639	.0027648	4.603764
#2	.0059355	-.005981	.0591773	-.003250	.0021872	4.609968
#3	.0015038	-.003713	.0583094	-.004966	.0054651	4.595850

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2615078	.0002751	.0002756	81.28087	.0121997	.0028684
Stddev	.0007143	.0000333	.0000634	.40665	.0004324	.0003760
%RSD	.2731280	12.09410	22.99969	.5002973	3.544049	13.10726
#1	.2611886	.0003107	.0003414	80.91386	.0124988	.0032972
#2	.2623260	.0002698	.0002150	81.71803	.0117039	.0025953
#3	.2610089	.0002448	.0002705	81.21072	.0123963	.0027127

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0496556	9.065767	.4823826	9.363222	.0127369	.0003609
Stddev	.0002517	.072665	.0011444	.064740	.0000453	.0002286
%RSD	.5068982	.8015281	.2372334	.6914338	.3557753	63.33242
#1	.0498040	8.982871	.4812156	9.322105	.0127618	.0004024
#2	.0493649	9.095974	.4835030	9.437849	.0126846	.0001145
#3	.0497977	9.118456	.4824292	9.329712	.0127644	.0005659

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	64.45136	.0153046	.1708531	5.160783	.1427168	.0041673
Stddev	.28723	.0001697	.0021832	.035545	.0010862	.0003086
%RSD	.4456616	1.108719	1.277826	.6887566	.7611132	7.406128
#1	64.23801	.0154969	.1684393	5.128138	.1414934	.0042583
#2	64.33812	.0151758	.1714305	5.155560	.1430886	.0038234
#3	64.77795	.0152412	.1726897	5.198651	.1435682	.0044202

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1690-01DUP Acquired: 4/3/2025 14:23:49 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0023004	.2121758	F 14.36773	.6642462	5.985055	-.002269
Stddev	.0008136	.0032827	.04009	.0041617	.009080	.000453
%RSD	35.36613	1.547151	.2790083	.6265295	.1517116	19.97450
#1	.0014812	.2095050	14.33413	.6645861	5.991337	-.002531
#2	.0031082	.2111818	14.35695	.6599250	5.989184	-.002531
#3	.0023119	.2158406	14.41210	.6682275	5.974644	-.001746

Elem	Sr4077
Units	ppm
Avg	.3963217
Stddev	.0010278
%RSD	.2593349
#1	.3951841
#2	.3965976
#3	.3971833

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3013.057	72729.77	17128.66	1918.084	4781.810
Stddev	8.045	163.83	90.28	14.804	12.107
%RSD	.2669922	.2252534	.5270637	.7718336	.2531968
#1	3004.253	72852.60	17114.74	1925.228	4767.860
#2	3014.895	72543.76	17046.15	1901.062	4789.578
#3	3020.025	72792.94	17225.09	1927.961	4787.994

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1690-01LX5 Acquired: 4/3/2025 14:28:02 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0000820	-.001836	.0123281	-.000560	-.000138	.9592642	.0490643
Stddev	.0011187	.001830	.0007476	.001922	.001201	.0074538	.0012771
%RSD	1364.429	99.65485	6.064029	343.3144	869.7974	.7770300	2.602953
#1	.0011686	-.000595	.0125648	.001545	.001101	.9588778	.0498566
#2	.0001438	-.000976	.0114908	-.002220	-.001296	.9669036	.0475910
#3	-.001066	-.003937	.0129286	-.001004	-.000220	.9520111	.0497454

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001119	.0000587	16.91174	.0024568	.0003815	.0105572	1.911095
Stddev	.0000566	.0000010	.02849	.0003801	.0000391	.0003112	.010018
%RSD	50.57864	1.632319	.1684579	15.46951	10.24408	2.948041	.5242092
#1	.0000694	.0000586	16.94401	.0021531	.0003559	.0101978	1.919625
#2	.0000902	.0000578	16.89008	.0023343	.0004265	.0107306	1.900063
#3	.0001762	.0000597	16.90113	.0028830	.0003621	.0107430	1.913597

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0992659	1.964133	.0025765	.0003906	12.94429	.0023887	.0347529
Stddev	.0004538	.015744	.0000318	.0000803	.00947	.0017246	.0002181
%RSD	.4571621	.8015942	1.235515	20.54628	.0731395	72.19654	.6275186
#1	.0997509	1.961711	.0025476	.0003602	12.93682	.0028333	.0348616
#2	.0988516	1.980947	.0026106	.0004816	12.95494	.0004854	.0348954
#3	.0991953	1.949739	.0025712	.0003300	12.94111	.0038475	.0345019

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9905208	.0291876	.0006508	-.001563	.0447167	3.012234	.1373573
Stddev	.0194834	.0005512	.0002119	.001134	.0008784	.012522	.0035670
%RSD	1.966990	1.888619	32.56154	72.55548	1.964352	.4157066	2.596837
#1	1.008072	.0289922	.0006508	-.002765	.0457306	2.998155	.1335445
#2	.993935	.0287607	.0008627	-.001413	.0441845	3.022126	.1406127
#3	.969556	.0298100	.0004389	-.000512	.0442352	3.016421	.1379148

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1690-01LX5 Acquired: 4/3/2025 14:28:02 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	1.267154	-.000561	.0799871
Stddev	.001545	.000497	.0002112
%RSD	.1219025	88.59373	.2640973
#1	1.265695	-.000945	.0801530
#2	1.266994	.000000	.0800589
#3	1.268772	-.000739	.0797493

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3136.688	73938.44	17381.22	2010.103	5037.409
Stddev	6.772	25.17	32.58	1.835	10.136
%RSD	.2158951	.0340407	.1874651	.0912677	.2012048
#1	3144.349	73909.37	17364.14	2008.052	5045.587
#2	3131.498	73953.17	17360.73	2011.587	5040.572
#3	3134.219	73952.76	17418.79	2010.669	5026.070

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1692-01 Acquired: 4/3/2025 14:35:36 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.1102919	.0060026	.3812167	-.044155	-.004457	77.75448	.6776497
Stddev	.0015149	.0026127	.0013248	.002556	.002894	.25761	.0013617
%RSD	1.373579	43.52595	.3475260	5.789133	64.93108	.3313093	.2009511
#1	.1117396	.0079009	.3825018	-.046557	-.006129	77.52827	.6768172
#2	.1104184	.0030228	.3798554	-.044440	-.006126	77.70031	.6769107
#3	.1087177	.0070841	.3812930	-.041468	-.001115	78.03487	.6792212

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0079051	-.004092	145.5917	.2209553	.1044355	.2563260	277.9275
Stddev	.0001389	.000345	.5858	.0011395	.0002800	.0017510	1.0866
%RSD	1.757730	8.436801	.4023284	.5157192	.2681246	.6831161	.3909537
#1	.0080643	-.004379	145.1099	.2210681	.1041174	.2547020	278.3014
#2	.0078425	-.004188	145.4214	.2220342	.1046448	.2560949	278.7777
#3	.0078084	-.003709	146.2437	.2197636	.1045443	.2581811	276.7033

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.216238	77.34695	.1674606	.0012257	5.976269	.5189096	.5762558
Stddev	.009922	.26811	.0002846	.0002974	.033071	.0005845	.0027429
%RSD	.3084990	.3466355	.1699680	24.26029	.5533640	.1126414	.4759860
#1	3.208195	77.12682	.1674251	.0009888	5.958447	.5182416	.5794198
#2	3.213194	77.26849	.1671953	.0015594	6.014427	.5191596	.5747989
#3	3.227326	77.64554	.1677613	.0011289	5.955931	.5193275	.5745489

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.24021	.5321797	.0060728	.0074364	2.964168	6.378130	4.915546
Stddev	.05119	.0026284	.0001853	.0014014	.007910	.015787	.020120
%RSD	.3866607	.4938850	3.051090	18.84571	.2668633	.2475145	.4093046
#1	13.23107	.5328105	.0062707	.0083855	2.957524	6.359972	4.895254
#2	13.29535	.5344352	.0060442	.0058267	2.962061	6.385818	4.915895
#3	13.19419	.5292933	.0059035	.0080969	2.972918	6.388600	4.935489

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1692-01 Acquired: 4/3/2025 14:35:36 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	5.369440	.2454172	.1062635
Stddev	.035384	.0009067	.0017484
%RSD	.6589818	.3694541	1.645302
#1	5.332313	.2454311	.1050079
#2	5.373230	.2463168	.1055222
#3	5.402775	.2445036	.1082604

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3210.775	77667.10	18825.15	2098.241	4389.330
Stddev	11.280	311.03	48.09	14.777	14.036
%RSD	.3513260	.4004654	.2554394	.7042611	.3197750
#1	3222.021	77487.46	18832.10	2081.311	4404.576
#2	3210.842	77487.58	18869.38	2104.860	4386.469
#3	3199.461	78026.24	18773.96	2108.551	4376.945

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCV03 Acquired: 4/3/2025 14:39:37 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	5.033493	5.201544	4.909182	5.077409	5.089616	9.766694	9.576879
Stddev	.018598	.025890	.009090	.020814	.025741	.044872	.046159
%RSD	.3694894	.4977405	.1851650	.4099296	.5057541	.4594378	.4819807
#1	5.017820	5.176365	4.902589	5.053917	5.065481	9.747302	9.525070
#2	5.028614	5.200175	4.919551	5.084763	5.086660	9.818001	9.613623
#3	5.054044	5.228091	4.905405	5.093549	5.116707	9.734780	9.591943

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2418184	2.441741	23.66938	1.006586	2.446034	1.272338	4.875425
Stddev	.0010372	.003688	.08721	.005932	.003974	.002915	.028382
%RSD	.4289262	.1510310	.3684560	.5893658	.1624578	.2290870	.5821428
#1	.2406212	2.438359	23.58032	.999752	2.442248	1.269549	4.866523
#2	.2423874	2.445673	23.75462	1.010411	2.450172	1.272100	4.907190
#3	.2424466	2.441192	23.67321	1.009595	2.445681	1.275364	4.852561

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.322938	23.89780	2.451844	1.249367	25.31449	2.409616	2.523161
Stddev	.008976	.11852	.003271	.005391	.21177	.006984	.016667
%RSD	.3863997	.4959344	.1334265	.4315370	.8365482	.2898468	.6605694
#1	2.317427	23.81865	2.449040	1.243781	25.25020	2.405998	2.506153
#2	2.333296	23.84071	2.455438	1.254540	25.55095	2.417667	2.539465
#3	2.318093	24.03406	2.451054	1.249782	25.14231	2.405184	2.523863

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.64349	4.795158	5.067990	4.934230	4.752821	5.065192	4.988206
Stddev	.22090	.021730	.018447	.008364	.027602	.034208	.005434
%RSD	.8964027	.4531569	.3639814	.1695026	.5807399	.6753448	.1089389
#1	24.64080	4.770069	5.050579	4.924628	4.744750	5.032554	4.991389
#2	24.86572	4.807998	5.066068	4.939925	4.783558	5.100778	4.991297
#3	24.42394	4.807407	5.087322	4.938137	4.730155	5.062245	4.981931

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCV03 Acquired: 4/3/2025 14:39:37 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	4.954749	4.800481	4.800381
Stddev	.004881	.046632	.014353
%RSD	.0985170	.9713928	.2989959
#1	4.950370	4.802317	4.809185
#2	4.960012	4.846168	4.783819
#3	4.953866	4.752959	4.808139

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3074.816	72261.47	16055.75	1983.966	4725.432
Stddev	10.631	206.23	26.36	7.731	8.413
%RSD	.3457419	.2853985	.1641881	.3896547	.1780374
#1	3084.415	72445.12	16085.96	1990.269	4734.587
#2	3076.643	72038.36	16037.37	1975.340	4723.669
#3	3063.390	72300.94	16043.94	1986.288	4718.040

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCB03 Acquired: 4/3/2025 14:43:48 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0012460	-.001010	.0010608	-.000773	-.000162	.0001522	-.005847
Stddev	.0005899	.002013	.0008889	.001260	.000800	.0048777	.000308
%RSD	47.34260	199.2096	83.79716	163.0537	494.1229	3204.208	5.267146
#1	.0017049	-.000540	.0010783	.000349	.000026	.0056105	-.005814
#2	.0014524	.000726	.0019408	-.000531	-.001039	-.001374	-.005557
#3	.0005806	-.003217	.0001632	-.002136	.000527	-.003780	-.006170

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001202	.0002570	.0124466	-.000026	.0002068	.0000141	.0016993
Stddev	.0000351	.0000565	.0020181	.000050	.0000828	.0002829	.0020176
%RSD	29.21399	21.97767	16.21443	191.4712	40.00888	2010.862	118.7276
#1	.0000866	.0003073	.0123623	-.000079	.0001218	.0002714	.0015091
#2	.0001174	.0002678	.0104719	-.000021	.0002871	.0000596	-.000216
#3	.0001567	.0001959	.0145055	.000021	.0002116	-.000289	.003805

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001614	-.004526	.0001034	.0003109	.0004473	.0011916	-.000074
Stddev	.000226	.004009	.0002823	.0002884	.0036774	.0001644	.000270
%RSD	14.03544	88.57215	272.9591	92.75435	822.1072	13.79534	363.9218
#1	-.001866	-.004697	.0000963	-.000004	.0038356	.0013782	.000221
#2	-.001427	-.000435	-.000175	.000375	-.003463	.0010684	-.000310
#3	-.001549	-.008447	.000389	.000562	.000970	.0011281	-.000134

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.023340	.0031903	.0007905	-.001829	.0028180	.0053736	-.000462
Stddev	.016961	.0004369	.0002685	.000193	.0000417	.0026398	.001240
%RSD	72.67121	13.69580	33.96993	10.54048	1.480498	49.12649	268.6615
#1	-.028201	.0031033	.0008604	-.002051	.0028662	.0080445	-.000941
#2	-.037340	.0028034	.0010172	-.001707	.0027937	.0027660	-.001391
#3	-.004479	.0036642	.0004940	-.001729	.0027942	.0053102	.000947

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCB03 Acquired: 4/3/2025 14:43:48 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0036889	-.000339	.0007154
Stddev	.0016854	.000382	.0001105
%RSD	45.68706	112.6383	15.44746
#1	.0019266	-.000060	.0008278
#2	.0052850	-.000774	.0007115
#3	.0038552	-.000183	.0006069

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3164.162	74262.06	16402.63	2014.861	5217.302
Stddev	13.952	320.34	39.34	13.286	26.969
%RSD	.4409372	.4313665	.2398231	.6594009	.5169170
#1	3168.998	73952.77	16375.86	1999.928	5226.144
#2	3175.053	74240.99	16447.80	2019.280	5238.740
#3	3148.436	74592.41	16384.24	2025.374	5187.021

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1690-01MS Acquired: 4/3/2025 14:49:47 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.7452875	1.770565	.8906585	1.803669	.7828944	5.841411
Stddev	.0040925	.006468	.0016476	.007198	.0013318	.006160
%RSD	.5491206	.3653320	.1849888	.3991019	.1701133	.1054536
#1	.7486000	1.777712	.8888495	1.805154	.7830090	5.843200
#2	.7465500	1.765113	.8910527	1.810009	.7841651	5.834555
#3	.7407125	1.768869	.8920732	1.795843	.7815089	5.846479

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4082534	.1691891	.1721841	77.59834	.3764604	.1803007
Stddev	.0006398	.0006288	.0003057	.06193	.0014134	.0005188
%RSD	.1567129	.3716539	.1775657	.0798096	.3754477	.2877646
#1	.4083585	.1684759	.1722390	77.54396	.3771279	.1799499
#2	.4075676	.1696637	.1718546	77.66575	.3748368	.1800554
#3	.4088342	.1694276	.1724586	77.58531	.3774164	.1808967

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3276472	10.40338	.6003347	10.41867	.4545330	.0673383
Stddev	.0005599	.07109	.0014553	.02293	.0008307	.0001321
%RSD	.1708828	.6833392	.2424107	.2200559	.1827559	.1961207
#1	.3271078	10.42601	.5986551	10.40062	.4539648	.0673635
#2	.3282255	10.32373	.6011282	10.44447	.4541478	.0671954
#3	.3276084	10.46040	.6012207	10.41092	.4554863	.0674559

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	61.58334	.2713357	.3436131	13.95328	.3771438	.4045288
Stddev	.40525	.0008149	.0016031	.08818	.0017318	.0008374
%RSD	.6580470	.3003345	.4665431	.6319637	.4591789	.2070032
#1	61.63585	.2706040	.3431885	13.95763	.3751442	.4047341
#2	61.15440	.2722140	.3422650	13.86301	.3781572	.4052444
#3	61.95978	.2711892	.3453857	14.03921	.3781300	.4036078

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1690-01MS Acquired: 4/3/2025 14:49:47 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.6222057	.3300447	F 13.17917	5.928501	5.822845	.1797210
Stddev	.0015302	.0014325	.07196	.026177	.011381	.0019382
%RSD	.2459261	.4340337	.5460284	.4415494	.1954540	1.078474
#1	.6217267	.3293565	13.17107	5.908514	5.823402	.1802342
#2	.6209723	.3290862	13.11161	5.918856	5.833937	.1775778
#3	.6239180	.3316915	13.25485	5.958132	5.811196	.1813510

Elem	Sr4077
Units	ppm
Avg	.5450250
Stddev	.0011773
%RSD	.2160139
#1	.5460678
#2	.5437483
#3	.5452590

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2924.402	71404.83	16457.13	1909.582	4598.863
Stddev	12.497	190.33	48.50	6.719	10.147
%RSD	.4273226	.2665510	.2946891	.3518418	.2206503
#1	2926.553	71359.66	16453.07	1902.164	4603.729
#2	2910.970	71613.67	16410.79	1915.259	4587.199
#3	2935.684	71241.14	16507.53	1911.323	4605.661

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1690-01MSD Acquired: 4/3/2025 14:53:47 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.7244232	1.752554	.8771640	1.750539	.7647972	5.785449
Stddev	.0011569	.005713	.0035741	.003460	.0005763	.004657
%RSD	.1597000	.3259986	.4074566	.1976607	.0753505	.0805028
#1	.7241498	1.746465	.8761145	1.750117	.7650210	5.790825
#2	.7234275	1.757798	.8742323	1.754191	.7641425	5.782644
#3	.7256924	1.753400	.8811454	1.747310	.7652279	5.782878

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4220881	.1633245	.1696733	77.60258	.3757197	.1790583
Stddev	.0007839	.0001794	.0005573	.04103	.0008563	.0005470
%RSD	.1857129	.1098146	.3284760	.0528744	.2278959	.3054878
#1	.4224211	.1635284	.1696676	77.56058	.3751720	.1791765
#2	.4211927	.1632538	.1691188	77.60459	.3767064	.1784619
#3	.4226505	.1631913	.1702334	77.64257	.3752806	.1795365

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3216597	10.88312	.6078425	10.35227	.4501901	.0677157
Stddev	.0006262	.03947	.0008538	.05110	.0018505	.0001983
%RSD	.1946891	.3626695	.1404585	.4936311	.4110371	.2928533
#1	.3214304	10.85207	.6072846	10.29469	.4498840	.0675452
#2	.3211803	10.86976	.6074176	10.36990	.4485117	.0679333
#3	.3223682	10.92753	.6088254	10.39222	.4521745	.0676686

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	63.17517	.2719714	.3442440	14.60836	.3676618	.4023517
Stddev	.04080	.0028092	.0012119	.02275	.0007875	.0020228
%RSD	.0645879	1.032896	.3520547	.1557232	.2141874	.5027358
#1	63.16353	.2734134	.3454903	14.62044	.3685539	.4007803
#2	63.22053	.2737668	.3441719	14.58212	.3670633	.4016408
#3	63.14145	.2687341	.3430697	14.62252	.3673681	.4046339

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1690-01MSD Acquired: 4/3/2025 14:53:47 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.6132213	.3343724	F 13.62431	5.800624	5.662411	.1818969
Stddev	.0013508	.0009399	.02913	.025037	.015495	.0010128
%RSD	.2202790	.2810941	.2138188	.4316270	.2736478	.5567850
#1	.6146709	.3333567	13.59207	5.775748	5.669046	.1824733
#2	.6129952	.3345493	13.64875	5.800306	5.644703	.1824899
#3	.6119979	.3352114	13.63212	5.825819	5.673483	.1807275

Elem	Sr4077
Units	ppm
Avg	.5529693
Stddev	.0011101
%RSD	.2007510
#1	.5542422
#2	.5524631
#3	.5522025

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3004.400	71650.72	17106.37	1931.860	4725.108
Stddev	5.892	168.90	25.73	7.851	11.857
%RSD	.1961050	.2357285	.1504300	.4064153	.2509368
#1	3009.446	71796.29	17104.27	1924.733	4729.376
#2	3005.829	71465.53	17081.75	1930.572	4734.239
#3	2997.925	71690.33	17133.09	1940.276	4711.707

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1690-01A Acquired: 4/3/2025 14:57:47 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.7353603	1.747667	.8903215	1.779492	.7739242	5.989738
Stddev	.0032013	.019391	.0028388	.000499	.0003052	.010544
%RSD	.4353367	1.109508	.3188480	.0280599	.0394344	.1760381
#1	.7386392	1.765424	.8919781	1.779450	.7738156	5.987273
#2	.7322427	1.750599	.8870436	1.780010	.7742688	5.980645
#3	.7351990	1.726977	.8919427	1.779014	.7736880	6.001296

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4295498	.1602500	.1720320	77.35848	.3721300	.1807148
Stddev	.0010866	.0009299	.0004995	.20860	.0006459	.0006375
%RSD	.2529728	.5802782	.2903553	.2696561	.1735621	.3527631
#1	.4307562	.1613193	.1722849	77.53524	.3723271	.1813676
#2	.4286478	.1598003	.1714567	77.41181	.3714085	.1800938
#3	.4292453	.1596305	.1723545	77.12839	.3726544	.1806830

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3261616	11.11981	.6084042	10.39379	.4562532	.0669565
Stddev	.0005111	.01934	.0009987	.03602	.0007826	.0005651
%RSD	.1566960	.1739127	.1641473	.3465264	.1715308	.8440449
#1	.3257357	11.10718	.6095048	10.42080	.4559473	.0675357
#2	.3260208	11.11018	.6075558	10.40766	.4556697	.0664066
#3	.3267283	11.14208	.6081518	10.35290	.4571426	.0669272

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	63.62944	.2734613	.3428292	14.87418	.3622185	.4030875
Stddev	.35825	.0014853	.0025379	.08322	.0006490	.0011925
%RSD	.5630268	.5431364	.7402723	.5595025	.1791736	.2958539
#1	63.41867	.2718230	.3450175	14.81764	.3627511	.4025649
#2	63.42656	.2747199	.3434230	14.83516	.3624087	.4044522
#3	64.04308	.2738408	.3400471	14.96974	.3614956	.4022455

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1690-01A Acquired: 4/3/2025 14:57:47 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.6267587	.3551728	F 14.52941	5.963276	5.855877	.1828254
Stddev	.0015883	.0033745	.07514	.022496	.010588	.0005965
%RSD	.2534166	.9500944	.5171547	.3772462	.1808164	.3262483
#1	.6279722	.3528095	14.49841	5.988811	5.867366	.1821715
#2	.6249610	.3536716	14.47473	5.946379	5.846511	.1829651
#3	.6273429	.3590374	14.61509	5.954638	5.853753	.1833396

Elem	Sr4077
Units	ppm
Avg	.5582381
Stddev	.0006899
%RSD	.1235801
#1	.5588806
#2	.5575090
#3	.5583247

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2968.017	72449.47	17456.33	1972.347	4638.043
Stddev	3.940	177.26	77.85	6.342	1.981
%RSD	.1327389	.2446606	.4459575	.3215256	.0427026
#1	2971.052	72349.71	17372.51	1965.030	4640.188
#2	2963.565	72654.13	17470.12	1975.759	4637.657
#3	2969.434	72344.58	17526.37	1976.252	4636.283

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1657-04 Acquired: 4/3/2025 15:01:46 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.003915	-.007875	.0008942	.0040331	.0014486	.0311689	.4482422
Stddev	.002977	.001617	.0016215	.0028460	.0008149	.0047283	.0024314
%RSD	76.03721	20.52903	181.3480	70.56526	56.25277	15.17005	.5424409
#1	-.002814	-.008814	-.000123	.0065346	.0019504	.0260494	.4501773
#2	-.007286	-.006008	.000041	.0046281	.0018871	.0353720	.4455130
#3	-.001646	-.008802	.002764	.0009367	.0005084	.0320852	.4490364

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000389	.0005862	79.22853	.0007826	.0005398	.0041880	.0325579
Stddev	.0000777	.0000464	.19613	.0001379	.0000782	.0007447	.0007870
%RSD	199.7101	7.914682	.2475533	17.62591	14.48168	17.78189	2.417396
#1	.0000413	.0006204	79.35959	.0006289	.0005951	.0044548	.0321978
#2	-.000040	.0006047	79.00304	.0008956	.0004504	.0047625	.0334606
#3	.000115	.0005334	79.32294	.0008232	.0005740	.0033466	.0320154

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5315402	10.91992	.0069264	-.000202	401.0743	-.000437	.1915653
Stddev	.0036480	.02573	.0001953	.000428	2.6212	.002372	.0002583
%RSD	.6863012	.2355839	2.820235	212.1669	.6535387	542.6689	.1348163
#1	.5345408	10.89924	.0068862	-.000681	403.8634	.000829	.1914626
#2	.5274796	10.91179	.0067542	-.000066	400.6978	-.003174	.1913742
#3	.5326001	10.94873	.0071386	.000142	398.6618	.001034	.1918591

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.015123	.0592424	.0005767	-.003759	.0002793	3.966487	.0112511
Stddev	.006867	.0007170	.0001121	.000167	.0004961	.024658	.0071354
%RSD	.6764679	1.210248	19.43865	4.446120	177.6125	.6216546	63.41979
#1	1.022864	.0584961	.0006684	-.003949	.0007767	3.974152	.0192832
#2	1.012741	.0599259	.0004517	-.003693	-.000216	3.938907	.0088249
#3	1.009764	.0593052	.0006100	-.003635	.000277	3.986402	.0056451

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1657-04 Acquired: 4/3/2025 15:01:46 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	2.241994	-.016018	.2536865
Stddev	.003555	.000732	.0010677
%RSD	.1585687	4.567554	.4208530
#1	2.242132	-.016571	.2547352
#2	2.238372	-.015188	.2526008
#3	2.245478	-.016294	.2537234

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2887.180	68481.42	16110.99	1878.548	4335.515
Stddev	8.388	186.39	23.96	7.875	8.448
%RSD	.2905222	.2721747	.1487284	.4191842	.1948539
#1	2887.050	68456.99	16083.45	1882.973	4337.397
#2	2895.632	68308.46	16122.49	1869.456	4342.864
#3	2878.858	68678.82	16127.04	1883.214	4326.285

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: PB167422BL Acquired: 4/3/2025 15:06:09 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0007482	.0015862	-.001145	-.001641	.0011320	-.003407	-.005805
Stddev	.0005285	.0001815	.000691	.002524	.0015695	.006155	.001069
%RSD	70.64328	11.44475	60.39863	153.8203	138.6570	180.6515	18.41430
#1	.0007489	.0013825	-.000349	-.000550	.0016192	-.003030	-.005090
#2	.0002193	.0016454	-.001487	-.004528	-.000623	-.009741	-.007034
#3	.0012764	.0017308	-.001597	.000154	.002400	.002551	-.005291

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000777	.0000097	.0225457	-.000079	-.000096	-.000223	-.001496
Stddev	.0000568	.0000063	.0056597	.000048	.000078	.000251	.006171
%RSD	73.08778	65.38472	25.10327	61.30234	80.93715	112.6527	412.6392
#1	.0000408	.0000148	.0218710	-.000034	-.000075	-.000450	-.007374
#2	.0001431	.0000026	.0172536	-.000130	-.000031	.000047	.004932
#3	.0000491	.0000116	.0285126	-.000072	-.000183	-.000266	-.002044

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001904	.0007108	-.000046	.0001362	.1428561	-.000118	.0008004
Stddev	.000155	.0017188	.000082	.0001058	.0155808	.001018	.0003167
%RSD	8.151727	241.8031	178.5699	77.69048	10.90665	859.4721	39.57533
#1	-.002065	.0009869	-.000014	.0000140	.1603155	.000414	.0009163
#2	-.001891	.0022748	-.000140	.0001997	.1378864	.000523	.0010428
#3	-.001755	-.001129	.000015	.0001949	.1303663	-.001292	.0004420

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0270965	-.002049	-.000280	-.001518	.0012613	.0003116	.0012462
Stddev	.0129018	.000495	.000222	.000233	.0003803	.0019109	.0025158
%RSD	47.61429	24.13876	79.22244	15.36310	30.15264	613.3467	201.8770
#1	.0134559	-.001606	-.000041	-.001650	.0012093	.0011627	.0010403
#2	.0391040	-.002583	-.000320	-.001655	.0016649	-.001877	-.001160
#3	.0287296	-.001957	-.000480	-.001248	.0009097	.001649	.003859

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: PB167422BL Acquired: 4/3/2025 15:06:09 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0021173	.0029264	.0000396
Stddev	.0040956	.0007903	.0000119
%RSD	193.4356	27.00738	30.19184
#1	.0043742	.0037136	.0000425
#2	-.002610	.0029327	.0000264
#3	.004588	.0021330	.0000498

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3260.274	76047.99	16737.02	2114.751	5326.702
Stddev	13.499	960.20	72.27	33.876	21.346
%RSD	.4140327	1.262630	.4317825	1.601889	.4007333
#1	3267.568	75369.75	16698.38	2095.513	5333.354
#2	3268.557	75627.52	16820.39	2094.874	5343.930
#3	3244.698	77146.71	16692.28	2153.866	5302.823

Sample Name: PB167422BS Acquired: 4/3/2025 15:10:28 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.7746386	2.034645	.9346642	1.966564	.8061861	1.861433	.1741524
Stddev	.0082807	.028293	.0075524	.015769	.0071320	.030671	.0035806
%RSD	1.068975	1.390554	.8080332	.8018682	.8846587	1.647683	2.056006
#1	.7833309	2.040621	.9410014	1.975405	.8115853	1.848482	.1715333
#2	.7668424	2.003841	.9263073	1.948358	.7981012	1.839362	.1726913
#3	.7737423	2.059472	.9366839	1.975930	.8088719	1.896455	.1782324

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1856629	.1876388	.9056476	.4022230	.1910436	.3102429	2.881385
Stddev	.0022603	.0016404	.0072708	.0008192	.0016024	.0023200	.009471
%RSD	1.217416	.8742376	.8028339	.2036586	.8387732	.7477914	.3286987
#1	.1846571	.1888143	.9099521	.4013107	.1924716	.3115470	2.891135
#2	.1840800	.1857648	.8972528	.4024626	.1893106	.3075643	2.872220
#3	.1882515	.1883373	.9097378	.4028955	.1913484	.3116174	2.880799

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1807871	1.845068	.4814810	.0748779	2.998248	.2801881	.2025311
Stddev	.0023640	.027202	.0049536	.0003212	.012319	.0030147	.0004257
%RSD	1.307638	1.474285	1.028823	.4289933	.4108676	1.075947	.2101914
#1	.1800129	1.822150	.4853364	.0747723	2.995097	.2770795	.2030220
#2	.1789072	1.837927	.4758940	.0752387	2.987811	.2803858	.2023078
#3	.1834412	1.875128	.4832125	.0746228	3.011836	.2830991	.2022634

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.334650	.2748622	.4052499	.6638609	.1836498	.7798384	5.496157
Stddev	.042330	.0033213	.0035044	.0056953	.0020712	.0060312	.049209
%RSD	.4534707	1.208355	.8647401	.8579033	1.127811	.7733914	.8953341
#1	9.320288	.2726351	.4077215	.6671227	.1824012	.7742414	5.528246
#2	9.301370	.2732719	.4012394	.6572847	.1825076	.7790480	5.439502
#3	9.382293	.2786797	.4067888	.6671754	.1860407	.7862259	5.520723

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: PB167422BS Acquired: 4/3/2025 15:10:28 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.008048	.1905827	.1819750
Stddev	.001935	.0025921	.0026163
%RSD	24.03940	1.360073	1.437727
#1	-.009667	.1883767	.1808226
#2	-.005906	.1899338	.1801327
#3	-.008572	.1934376	.1849697

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3174.285	74427.64	16742.28	2024.539	5126.909
Stddev	22.117	78.19	200.38	5.376	38.091
%RSD	.6967474	.1050524	1.196836	.2655417	.7429571
#1	3163.136	74516.09	16876.92	2027.899	5103.999
#2	3199.757	74367.75	16837.93	2018.339	5170.879
#3	3159.962	74399.07	16512.00	2027.379	5105.848

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1673-01 Acquired: 4/3/2025 15:14:31 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0079943	.0134433	.0126259	.2510303	.0026888	.0972777
Stddev	.0025275	.0019130	.0017228	.0040981	.0030236	.0097918
%RSD	31.61705	14.23033	13.64494	1.632511	112.4532	10.06578
#1	.0050881	.0149696	.0145170	.2557623	.0040066	.0919968
#2	.0096803	.0140631	.0122151	.2486426	-.000770	.0912601
#3	.0092143	.0112972	.0111457	.2486859	.004830	.1085763

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0348837	.0003996	.0015298	684.6650	.0016374	-.000059
Stddev	.0009794	.0000551	.0000242	5.7913	.0003029	.000335
%RSD	2.807741	13.78673	1.580210	.8458519	18.49782	566.1520
#1	.0339452	.0004271	.0015026	680.5474	.0017138	.000137
#2	.0348065	.0003362	.0015489	682.1605	.0018949	-.000446
#3	.0358995	.0004356	.0015378	691.2869	.0013037	.000132

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0117016	.0119394	.0522837	173.4952	.0196130	-.000532
Stddev	.0004339	.0026201	.0004738	1.5929	.0006502	.000027
%RSD	3.707646	21.94502	.9062367	.9181430	3.314997	5.055036
#1	.0112104	.0126815	.0518272	172.2281	.0197439	-.000503
#2	.0118616	.0090283	.0522507	172.9739	.0189074	-.000557
#3	.0120327	.0141085	.0527731	175.2834	.0201878	-.000536

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	144.8040	.0427988	.0357952	321.2538	.4587480	2.985018
Stddev	1.5635	.0013348	.0003832	3.9678	.0049766	.008549
%RSD	1.079747	3.118836	1.070439	1.235099	1.084825	.2863916
#1	143.8697	.0412782	.0356073	325.5970	.4538491	2.978552
#2	146.6091	.0433405	.0355422	320.3455	.4585961	2.994710
#3	143.9334	.0437775	.0362360	317.8189	.4637989	2.981791

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1673-01 Acquired: 4/3/2025 15:14:31 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0207220	-.014689	.6184188	.0044932	F 772.7709	1.034608
Stddev	.0007792	.000252	.0010788	.0022319	4.2033	.007125
%RSD	3.760344	1.716306	.1744377	49.67121	.5439275	.6886211
#1	.0216206	-.014839	.6189012	.0061886	768.0458	1.042167
#2	.0203126	-.014831	.6171830	.0019646	776.0941	1.033640
#3	.0202329	-.014398	.6191722	.0053265	774.1728	1.028016

Elem	Sr4077
Units	ppm
Avg	1.049276
Stddev	.015213
%RSD	1.449820
#1	1.031718
#2	1.058533
#3	1.057575

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2894.148	72063.13	17800.98	1882.209	3756.440
Stddev	9.602	140.03	173.32	13.043	16.839
%RSD	.3317886	.1943142	.9736490	.6929477	.4482785
#1	2896.926	71901.53	17981.88	1870.507	3771.476
#2	2883.463	72148.58	17784.67	1879.851	3738.245
#3	2902.056	72139.29	17636.39	1896.270	3759.599

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1673-02 Acquired: 4/3/2025 15:19:10 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0091607	.0308186	.0075671	.6309467	.0088398	.1447861
Stddev	.0011899	.0012559	.0015132	.0032843	.0042585	.0030701
%RSD	12.98950	4.075212	19.99732	.5205386	48.17437	2.120413
#1	.0093282	.0305765	.0079870	.6295534	.0056625	.1483299
#2	.0102580	.0297014	.0058883	.6285887	.0071782	.1429333
#3	.0078959	.0321779	.0088262	.6346980	.0136785	.1430952

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0882616	.0001976	-.000431	1189.457	.0034064	.0192586
Stddev	.0005124	.0000643	.000163	2.601	.0001509	.0004647
%RSD	.5805758	32.55852	37.93078	.2186672	4.430368	2.413012
#1	.0887793	.0001660	-.000617	1187.512	.0034268	.0190329
#2	.0877546	.0001551	-.000366	1192.411	.0035462	.0197931
#3	.0882509	.0002716	-.000310	1188.446	.0032464	.0189499

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0020806	1.847194	4.668579	309.0074	.0351073	-.001039
Stddev	.0003340	.001920	.011058	1.2650	.0002901	.000312
%RSD	16.05378	.1039169	.2368564	.4093689	.8263168	30.06437
#1	.0020954	1.848446	4.657812	307.9811	.0347749	-.001400
#2	.0017394	1.844984	4.679907	310.4207	.0353099	-.000867
#3	.0024069	1.848151	4.668019	308.6206	.0352370	-.000851

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	577.3958	.0672695	.1537758	709.2519	.8097898	4.967211
Stddev	1.7172	.0001039	.0006610	4.3706	.0009438	.022321
%RSD	.2973975	.1544962	.4298659	.6162321	.1165530	.4493707
#1	578.6125	.0673422	.1541435	713.8266	.8087410	4.952840
#2	575.4316	.0671505	.1541713	708.8105	.8100576	4.955866
#3	578.1434	.0673160	.1530127	705.1188	.8105708	4.992926

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1673-02 Acquired: 4/3/2025 15:19:10 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0204874	-.026399	1.229288	F 23.68561	F 1124.966	1.919784
Stddev	.0010759	.000434	.005392	.14747	5.095	.007908
%RSD	5.251407	1.642805	.4385993	.6225943	.4528783	.4119082
#1	.0192455	-.026747	1.234852	23.63291	1125.245	1.919981
#2	.0211366	-.025913	1.224087	23.57174	1119.738	1.911779
#3	.0210800	-.026538	1.228925	23.85218	1129.916	1.927591

Elem	Sr4077
Units	ppm
Avg	1.982177
Stddev	.021531
%RSD	1.086216
#1	1.958742
#2	2.001083
#3	1.986706

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2358.790	59621.77	15045.44	1546.710	3406.264
Stddev	10.923	161.36	24.46	2.420	11.148
%RSD	.4630920	.2706415	.1625636	.1564663	.3272927
#1	2362.932	59438.37	15047.75	1546.755	3408.884
#2	2367.036	59685.00	15019.91	1544.267	3415.869
#3	2346.401	59741.95	15068.66	1549.107	3394.039

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1684-01 Acquired: 4/3/2025 15:23:57 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0420619	-.004880	.1656881	-.037740	-.009638	151.0103	.6045182
Stddev	.0003177	.004549	.0014990	.004052	.002226	.3258	.0027801
%RSD	.7554121	93.21070	.9046822	10.73532	23.09691	.2157722	.4598922
#1	.0420998	-.006924	.1639602	-.040692	-.011990	151.1449	.6038772
#2	.0417268	.000332	.1666402	-.033121	-.007563	151.2474	.6075629
#3	.0423589	-.008049	.1664638	-.039408	-.009362	150.6388	.6021146

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0086022	-.005304	13.77252	.3908793	.1568263	.3158057	287.5087
Stddev	.0000699	.000284	.03789	.0013006	.0006608	.0014863	.9540
%RSD	.8126406	5.351909	.2751278	.3327292	.4213544	.4706346	.3318206
#1	.0086694	-.004988	13.81622	.3902112	.1575836	.3174518	286.6992
#2	.0086073	-.005387	13.74874	.3923781	.1563672	.3145621	288.5605
#3	.0085299	-.005537	13.75260	.3900485	.1565280	.3154032	287.2663

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.628681	33.41915	.2603313	-.000087	9.883071	.5436233	.3937037
Stddev	.011726	.19212	.0007819	.000105	.052248	.0006545	.0008849
%RSD	.2083285	.5748816	.3003591	120.3207	.5286589	.1203998	.2247736
#1	5.634594	33.53982	.2606487	-.000208	9.869381	.5442131	.3944969
#2	5.636274	33.19760	.2609046	-.000042	9.940801	.5437378	.3927492
#3	5.615176	33.52001	.2594405	-.000012	9.839031	.5429192	.3938650

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.475876	.5100626	.0017856	-.003563	6.692482	4.598078	4.042064
Stddev	.031814	.0026702	.0003500	.000772	.009607	.013490	.010339
%RSD	.5809770	.5235130	19.59970	21.67246	.1435452	.2933924	.2557854
#1	5.495468	.5073372	.0019030	-.002976	6.697093	4.604683	4.052642
#2	5.492992	.5126740	.0020618	-.003275	6.698914	4.582558	4.041568
#3	5.439169	.5101766	.0013920	-.004438	6.681439	4.606994	4.031981

Sample Name: Q1684-01 Acquired: 4/3/2025 15:23:57 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	1.106675	.2081052	-.173758
Stddev	.028119	.0002565	.000652
%RSD	2.540889	.1232664	.3750902
#1	1.133334	.2080457	-.173076
#2	1.109397	.2083863	-.174374
#3	1.077293	.2078838	-.173825

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3468.175	79937.69	18662.08	2232.424	4615.680
Stddev	2.801	203.05	77.18	4.556	5.899
%RSD	.0807752	.2540106	.4135609	.2040903	.1278033
#1	3465.329	79869.69	18574.48	2227.188	4611.524
#2	3468.266	79777.38	18691.73	2235.490	4613.085
#3	3470.930	80166.02	18720.05	2234.593	4622.432

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1685-01 Acquired: 4/3/2025 15:28:02 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0854239	.0078494	.1343783	-.054481	-.008918	184.6350	.4790404
Stddev	.0020612	.0029646	.0034328	.005279	.001423	1.5378	.0010567
%RSD	2.412913	37.76821	2.554564	9.689063	15.95253	.8328709	.2205889
#1	.0861322	.0062077	.1310230	-.055229	-.008063	183.9458	.4798999
#2	.0870376	.0060688	.1378837	-.059346	-.010560	183.5624	.4778606
#3	.0831019	.0112717	.1342281	-.048868	-.008130	186.3968	.4793606

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0138104	-.001501	21.82833	.2552987	.1562748	.4074480	399.8088
Stddev	.0001269	.000336	.10863	.0021111	.0003918	.0012740	.5947
%RSD	.9187375	22.36644	.4976459	.8269199	.2506771	.3126772	.1487445
#1	.0139404	-.001455	21.91425	.2576658	.1558865	.4072600	399.8061
#2	.0136869	-.001858	21.70623	.2546194	.1562681	.4062784	400.4049
#3	.0138041	-.001191	21.86451	.2536108	.1566699	.4088055	399.2155

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.194939	24.88036	.2236967	-.001330	5.265655	.6835094	.6052667
Stddev	.009507	.20206	.0016324	.000681	.019308	.0035257	.0068943
%RSD	.4331465	.8121321	.7297473	51.15993	.3666729	.5158268	1.139048
#1	2.203912	24.92968	.2236147	-.001766	5.276263	.6837848	.6078979
#2	2.184975	24.65820	.2221068	-.001679	5.277332	.6798541	.6104580
#3	2.195931	25.05319	.2253685	-.000546	5.243368	.6868894	.5974443

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.707188	.7296660	.0021631	.0026194	3.098178	3.815216	4.051276
Stddev	.023289	.0021013	.0003030	.0007931	.015740	.030092	.026930
%RSD	.8602594	.2879836	14.00721	30.27719	.5080430	.7887287	.6647350
#1	2.710641	.7291726	.0024521	.0017055	3.105781	3.842482	4.039152
#2	2.728558	.7319701	.0018478	.0030256	3.080080	3.820236	4.032539
#3	2.682365	.7278553	.0021895	.0031272	3.108673	3.782930	4.082137

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1685-01 Acquired: 4/3/2025 15:28:02 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.9988944	.1919734	-.245237
Stddev	.0060225	.0004765	.000852
%RSD	.6029211	.2482061	.3472780
#1	1.000774	.1925151	-.244945
#2	.992156	.1917861	-.246196
#3	1.003753	.1916190	-.244569

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3608.972	86490.70	20888.81	2392.037	4454.592
Stddev	7.584	474.76	123.19	23.999	17.676
%RSD	.2101319	.5489174	.5897484	1.003301	.3968119
#1	3603.402	86315.16	20823.06	2386.050	4456.342
#2	3617.609	86128.71	21030.93	2371.599	4471.328
#3	3605.906	87028.24	20812.46	2418.463	4436.106

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCV04 Acquired: 4/3/2025 15:32:23 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	4.886269	5.109738	4.847181	4.896256	4.904260	9.362722	9.575773
Stddev	.016953	.024186	.031698	.030010	.027967	.003321	.066611
%RSD	.3469506	.4733231	.6539413	.6129095	.5702642	.0354754	.6956232
#1	4.866787	5.085118	4.810586	4.863356	4.872046	9.366455	9.530299
#2	4.894359	5.133464	4.866104	4.903285	4.918405	9.360094	9.544787
#3	4.897662	5.110633	4.864851	4.922128	4.922328	9.361617	9.652233

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2313453	2.431863	23.10675	.9897294	2.443872	1.249254	4.972161
Stddev	.0011058	.014572	.12074	.0014378	.015492	.006228	.030453
%RSD	.4779892	.5992288	.5225412	.1452722	.6339307	.4985015	.6124732
#1	.2304168	2.415093	23.02764	.9913862	2.426029	1.242345	5.006572
#2	.2325686	2.441442	23.24573	.9889931	2.453898	1.250982	4.961225
#3	.2310504	2.439055	23.04689	.9888088	2.451690	1.254435	4.948686

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.295932	23.74759	2.466476	1.227463	25.20218	2.387542	2.457011
Stddev	.009061	.13759	.016242	.002297	.15383	.010684	.007582
%RSD	.3946535	.5793978	.6585115	.1871294	.6103850	.4474885	.3085687
#1	2.290109	23.67937	2.447818	1.230094	25.36701	2.380540	2.465700
#2	2.306372	23.90596	2.477454	1.226441	25.06243	2.399839	2.451741
#3	2.291316	23.65744	2.474156	1.225855	25.17709	2.382246	2.453591

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.97331	4.597701	4.961209	4.892316	4.709097	5.045678	4.906341
Stddev	.14552	.027120	.022203	.031197	.006117	.009123	.027309
%RSD	.5826997	.5898601	.4475397	.6376818	.1299073	.1808064	.5566013
#1	25.10196	4.570882	4.935646	4.856529	4.703564	5.055665	4.874840
#2	24.81538	4.625113	4.972293	4.913780	4.715667	5.037782	4.920871
#3	25.00260	4.597108	4.975689	4.906638	4.708060	5.043587	4.923314

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCV04 Acquired: 4/3/2025 15:32:23 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	4.947839	4.713903	4.737006
Stddev	.026783	.001958	.030377
%RSD	.5412992	.0415461	.6412755
#1	4.916918	4.715713	4.712621
#2	4.963777	4.711824	4.727361
#3	4.962823	4.714173	4.771034

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3119.796	73293.65	16637.06	2054.725	4726.065
Stddev	8.957	183.94	69.91	7.511	18.187
%RSD	.2871160	.2509652	.4202321	.3655436	.3848315
#1	3126.020	73084.19	16690.23	2046.330	4743.268
#2	3123.838	73428.86	16557.87	2060.808	4727.896
#3	3109.530	73367.91	16663.08	2057.038	4707.032

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCB04 Acquired: 4/3/2025 15:36:34 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0008333	.0008842	-.000501	-.002662	.0002209	.0107936
Stddev	.0014813	.0015424	.001522	.002557	.0014458	.0027990
%RSD	177.7588	174.4300	303.6749	96.06621	654.4360	25.93242
#1	.0024693	.0000788	-.002257	-.001293	.0006342	.0124621
#2	-.000417	-.000089	.000314	-.005612	-.001386	.0123565
#3	.000448	.002663	.000439	-.001081	.001415	.0075621

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002460	.0001319	.0001532	.0206304	-.000134	.0001818
Stddev	.000386	.0000574	.0000465	.0045876	.000202	.0001638
%RSD	15.68411	43.49651	30.34531	22.23720	151.0435	90.14260
#1	-.002902	.0001831	.0001063	.0186992	.000014	.0002486
#2	-.002286	.0000699	.0001992	.0258680	-.000051	-.000005
#3	-.002192	.0001429	.0001540	.0173241	-.000364	.000302

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000594	.0242521	-.001331	-.006344	.0002637	-.000139
Stddev	.0007646	.0046186	.000134	.005576	.0000395	.000392
%RSD	1287.384	19.04405	10.09371	87.88984	14.98066	282.7805
#1	.0004930	.0295534	-.001270	-.010210	.0002733	-.000110
#2	-.000823	.0221053	-.001485	-.008871	.0002975	.000238
#3	.000509	.0210977	-.001238	.000048	.0002203	-.000545

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0571808	-.000443	-.000275	.1003560	.0025591	.0005272
Stddev	.0060193	.000449	.000253	.0361317	.0004477	.0003491
%RSD	10.52684	101.3570	91.99003	36.00353	17.49497	66.21082
#1	.0508549	-.000816	-.000307	.0619176	.0026718	.0007597
#2	.0628377	-.000568	-.000511	.1336240	.0020658	.0006962
#3	.0578499	.000055	-.000008	.1055265	.0029397	.0001258

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCB04 Acquired: 4/3/2025 15:36:34 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.001253	.0018356	.0013893	-.002287	F .0295119	.0008878
Stddev	.000896	.0008900	.0029401	.000321	.0010884	.0006801
%RSD	71.47786	48.48226	211.6237	14.01672	3.687866	76.60299
#1	-.001846	.0012199	.0027807	-.001976	.0303536	.0001427
#2	-.001691	.0028560	.0033754	-.002616	.0298993	.0010455
#3	-.000223	.0014310	-.001988	-.002268	.0282829	.0014752

Elem	Sr4077
Units	ppm
Avg	.0006298
Stddev	.0000675
%RSD	10.71584
#1	.0006717
#2	.0006658
#3	.0005520

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3196.010	75406.93	17064.26	2090.575	5168.604
Stddev	19.282	20.25	37.08	6.856	32.592
%RSD	.6033219	.0268495	.2172770	.3279556	.6305771
#1	3202.858	75400.10	17021.45	2095.529	5166.615
#2	3210.934	75429.71	17085.43	2082.751	5202.144
#3	3174.238	75390.99	17085.89	2093.447	5137.052

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1685-01DUP Acquired: 4/3/2025 15:40:53 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0843916	.0064230	.1336689	-.060573	-.007419	191.9756	.4825871
Stddev	.0057613	.0010255	.0005787	.001431	.001031	1.7166	.0029751
%RSD	6.826896	15.96551	.4329212	2.361802	13.88983	.8941659	.6164805
#1	.0907603	.0066232	.1332727	-.062120	-.007542	192.7272	.4859589
#2	.0828724	.0053122	.1334009	-.060302	-.006333	193.1881	.4814708
#3	.0795421	.0073336	.1343329	-.059297	-.008383	190.0114	.4803317

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0141446	.0010053	21.94444	.2600861	.1559200	.4015473	394.3737
Stddev	.0001931	.0003133	.12352	.0006599	.0006326	.0019969	2.0983
%RSD	1.364948	31.16696	.5628554	.2537394	.4056937	.4973032	.5320487
#1	.0142649	.0013342	22.08082	.2596616	.1553331	.4014469	392.0720
#2	.0142469	.0007102	21.84010	.2597504	.1558369	.3996025	394.8692
#3	.0139219	.0009716	21.91241	.2608464	.1565900	.4035925	396.1799

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.174762	25.04342	.2210197	-.002399	5.297703	.6854430	.6186993
Stddev	.013868	.13325	.0006765	.000433	.038669	.0037850	.0008147
%RSD	.6376581	.5320926	.3060737	18.02835	.7299281	.5521967	.1316781
#1	2.190594	25.19728	.2214881	-.002853	5.253366	.6895345	.6189672
#2	2.168922	24.96836	.2202442	-.002352	5.324452	.6820665	.6177843
#3	2.164769	24.96463	.2213269	-.001992	5.315290	.6847280	.6193462

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.692402	.7089008	.0018976	.0034252	3.181428	6.167868	3.934574
Stddev	.012632	.0074892	.0003681	.0005216	.009827	.037186	.008491
%RSD	.4691865	1.056445	19.39668	15.22718	.3088913	.6028962	.2157939
#1	2.684938	.7002940	.0019685	.0030036	3.191937	6.149128	3.932913
#2	2.706987	.7124763	.0022250	.0032636	3.179881	6.143781	3.927038
#3	2.685281	.7139321	.0014992	.0040085	3.172467	6.210696	3.943773

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1685-01DUP Acquired: 4/3/2025 15:40:53 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.9328913	.1903999	-.241446
Stddev	.0007369	.0009997	.002354
%RSD	.0789876	.5250485	.9750856
#1	.9326311	.1894165	-.238827
#2	.9323199	.1903681	-.242123
#3	.9337230	.1914151	-.243388

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3621.774	84501.36	20331.98	2297.727	4499.724
Stddev	14.322	110.36	124.57	8.987	19.361
%RSD	.3954492	.1306072	.6126980	.3911240	.4302781
#1	3624.089	84562.19	20189.15	2295.378	4501.355
#2	3634.797	84373.97	20388.68	2290.147	4518.218
#3	3606.435	84567.93	20418.13	2307.655	4479.598

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1685-01LX5 Acquired: 4/3/2025 15:45:14 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0213903	.0044828	.0293402	-.013793	-.003885	46.76088	.1184499
Stddev	.0008293	.0028444	.0006116	.001221	.002448	.08945	.0012094
%RSD	3.877234	63.45178	2.084406	8.855772	63.00193	.1912966	1.021018
#1	.0205484	.0011983	.0295326	-.013574	-.006173	46.82432	.1186875
#2	.0214158	.0061307	.0286555	-.012696	-.001304	46.79974	.1195228
#3	.0222065	.0061192	.0298324	-.015109	-.004179	46.65857	.1171393

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0035976	-.004593	5.644515	.0662304	.0335396	.1059107	103.7967
Stddev	.0000986	.000334	.063537	.0002576	.0003554	.0013215	.6289
%RSD	2.742093	7.261671	1.125638	.3889252	1.059749	1.247788	.6058813
#1	.0036196	-.004556	5.626452	.0660359	.0332374	.1056724	103.1414
#2	.0036833	-.004944	5.715127	.0661327	.0334502	.1047245	104.3954
#3	.0034897	-.004280	5.591965	.0665225	.0339312	.1073352	103.8531

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5648321	6.356967	.0486882	-.000054	1.284775	.1735936	.1545008
Stddev	.0056404	.074175	.0003816	.000091	.012364	.0021937	.0006752
%RSD	.9986007	1.166827	.7837709	167.1055	.9623847	1.263714	.4370269
#1	.5648628	6.325034	.0482940	-.000123	1.276599	.1751718	.1551581
#2	.5704571	6.441760	.0487147	.000048	1.278727	.1745205	.1538090
#3	.5591764	6.304106	.0490558	-.000088	1.298999	.1710886	.1545353

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6444722	.1893082	.0000371	-.001341	.8211044	1.575900	.8243297
Stddev	.0361263	.0018349	.0001918	.000612	.0021935	.011190	.0104885
%RSD	5.605559	.9692869	517.4179	45.59272	.2671401	.7100960	1.272373
#1	.6034553	.1872257	.0002237	-.001423	.8202835	1.571748	.8294285
#2	.6583986	.1906877	-.000159	-.000693	.8235899	1.567379	.8122666
#3	.6715625	.1900113	.000047	-.001908	.8194397	1.588573	.8312941

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1685-01LX5 Acquired: 4/3/2025 15:45:14 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.2040764	.0487179	-.064259
Stddev	.0060882	.0004577	.000618
%RSD	2.983316	.9394958	.9620519
#1	.1988813	.0488331	-.063627
#2	.2025722	.0482136	-.064862
#3	.2107758	.0491070	-.064290

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3319.081	76571.61	18117.18	2127.878	4934.283
Stddev	31.414	226.81	169.12	16.915	40.968
%RSD	.9464626	.2962053	.9335007	.7949373	.8302756
#1	3316.362	76358.48	17983.74	2111.836	4942.602
#2	3351.766	76809.98	18060.42	2145.549	4970.453
#3	3289.115	76546.36	18307.38	2126.249	4889.794

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1685-01A Acquired: 4/3/2025 15:58:03 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.7002036	1.800158	1.006155	1.435310	.6286157	186.3148	.6371911
Stddev	.0048392	.009335	.001316	.004745	.0021360	1.2109	.0003449
%RSD	.6911059	.5185655	.1307792	.3305663	.3398004	.6499276	.0541225
#1	.6978388	1.806135	1.007669	1.433988	.6265769	185.3592	.6372615
#2	.6970016	1.789401	1.005285	1.431367	.6284330	187.6765	.6374953
#3	.7057704	1.804939	1.005511	1.440576	.6308372	185.9085	.6368164

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1606172	.1842446	22.29035	.5699805	.3426333	.6281477	387.8002
Stddev	.0006111	.0007426	.04533	.0047175	.0000345	.0022912	3.9309
%RSD	.3804902	.4030259	.2033695	.8276611	.0100686	.3647530	1.013638
#1	.1606484	.1849656	22.30874	.5646993	.3426639	.6290153	384.0545
#2	.1612121	.1834822	22.23871	.5714653	.3425959	.6255494	391.8933
#3	.1599911	.1842861	22.32359	.5737770	.3426400	.6298784	387.4529

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.318482	26.19265	.6913934	.0589737	7.617341	.8984655	.7594793
Stddev	.001142	.01583	.0003244	.0006195	.075595	.0023495	.0084989
%RSD	.0492749	.0604192	.0469226	1.050443	.9924072	.2614996	1.119046
#1	2.319488	26.20668	.6911685	.0585486	7.530845	.9008836	.7501299
#2	2.317240	26.19577	.6912464	.0596845	7.670761	.8961912	.7667372
#3	2.318717	26.17550	.6917653	.0586880	7.650416	.8983218	.7615709

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.89082	.9002623	.3272563	.6533031	3.326195	6.911923	9.234890
Stddev	.10200	.0090204	.0008446	.0016638	.002170	.089141	.013310
%RSD	.9365625	1.001972	.2580728	.2546686	.0652458	1.289669	.1441267
#1	10.77396	.8914083	.3273351	.6538135	3.323695	6.810152	9.228763
#2	10.93655	.9094404	.3263751	.6514439	3.327285	6.949462	9.225748
#3	10.96195	.8999381	.3280587	.6546519	3.327603	6.976155	9.250160

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1685-01A Acquired: 4/3/2025 15:58:03 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.8948757	.3447206	-.085180
Stddev	.0057412	.0007600	.003528
%RSD	.6415623	.2204767	4.141520
#1	.9015015	.3444947	-.081717
#2	.8917509	.3455680	-.088769
#3	.8913749	.3440991	-.085055

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3635.481	85424.36	20061.54	2369.853	4506.771
Stddev	8.067	662.06	27.61	21.712	6.776
%RSD	.2218852	.7750243	.1376176	.9161566	.1503589
#1	3640.973	86183.61	20038.55	2394.386	4510.173
#2	3639.250	84967.38	20053.90	2353.115	4511.173
#3	3626.220	85122.10	20092.16	2362.057	4498.968

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1693-01 Acquired: 4/3/2025 16:02:18 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.1076350	.0145126	.4083919	-.064588	-.009506	193.0175	1.789574
Stddev	.0025424	.0024295	.0017832	.002225	.001124	1.8721	.002173
%RSD	2.362082	16.74047	.4366353	3.444203	11.82060	.9699124	.1214334
#1	.1090086	.0119154	.4065587	-.063380	-.009596	192.7024	1.791315
#2	.1091952	.0167294	.4084965	-.063228	-.010581	195.0272	1.787139
#3	.1047013	.0148930	.4101205	-.067155	-.008339	191.3230	1.790269

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0140080	.0092137	102.1143	.3587084	.2664094	.4682050	398.9386
Stddev	.0001164	.0010335	.3483	.0011856	.0018013	.0029881	3.2348
%RSD	.8310702	11.21664	.3410641	.3305257	.6761412	.6381965	.8108564
#1	.0141067	.0087470	102.4110	.3600759	.2647628	.4670152	400.1029
#2	.0138796	.0084959	101.7309	.3580809	.2661322	.4659951	401.4301
#3	.0140377	.0103982	102.2010	.3579685	.2683332	.4716047	395.2828

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.957312	109.5904	.5390643	-.001846	9.803258	.4814467	1.161033
Stddev	.027869	.3929	.0041770	.000953	.012518	.0013774	.002782
%RSD	.3111261	.3585258	.7748530	51.63949	.1276896	.2861005	.2395855
#1	8.987165	109.9885	.5354645	-.001521	9.800117	.4826293	1.160826
#2	8.931980	109.2029	.5380842	-.001098	9.792610	.4799344	1.163913
#3	8.952790	109.5798	.5436441	-.002919	9.817047	.4817766	1.158361

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	36.47014	.7657156	.0031208	.0233018	3.877360	5.985243	9.078846
Stddev	.01890	.0086492	.0002249	.0027869	.009829	.013049	.085290
%RSD	.0518200	1.129553	7.205802	11.95988	.2535091	.2180188	.9394358
#1	36.45750	.7674879	.0028657	.0250018	3.887171	5.998253	9.004545
#2	36.49187	.7733414	.0032066	.0200855	3.867512	5.985320	9.060015
#3	36.46106	.7563176	.0032902	.0248179	3.877397	5.972156	9.171978

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1693-01 Acquired: 4/3/2025 16:02:18 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	9.437195	.5537475	-.053506
Stddev	.064295	.0004844	.003150
%RSD	.6812888	.0874729	5.886755
#1	9.381974	.5538671	-.054035
#2	9.421832	.5541608	-.056358
#3	9.507779	.5532145	-.050125

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3608.260	85851.87	21347.26	2340.152	4207.817
Stddev	4.467	44.99	33.38	6.516	18.805
%RSD	.1238077	.0524050	.1563689	.2784445	.4468945
#1	3610.135	85845.26	21317.79	2347.674	4221.965
#2	3611.483	85810.55	21383.51	2336.246	4215.008
#3	3603.160	85899.80	21340.48	2336.536	4186.478

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1685-01MS Acquired: 4/3/2025 16:06:37 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.7175974	1.816020	1.027175	1.473667	.6398502	183.4474	.6488528
Stddev	.0029878	.020943	.002498	.007905	.0031149	.6828	.0042396
%RSD	.4163659	1.153250	.2431514	.5363965	.4868108	.3721887	.6533945
#1	.7160539	1.795436	1.028908	1.468910	.6394911	183.4266	.6520348
#2	.7156971	1.815320	1.024312	1.469299	.6369304	182.7752	.6504836
#3	.7210413	1.837305	1.028304	1.482792	.6431290	184.1403	.6440400

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1537203	.1842303	22.12154	.5706331	.3471881	.6390946	402.2965
Stddev	.0007338	.0006722	.09763	.0021953	.0009418	.0013885	1.2710
%RSD	.4773771	.3648736	.4413362	.3847088	.2712710	.2172577	.3159306
#1	.1545297	.1846923	22.23276	.5731135	.3470003	.6400621	401.3865
#2	.1530985	.1834591	22.04999	.5689401	.3463544	.6375037	401.7544
#3	.1535327	.1845395	22.08188	.5698456	.3482097	.6397181	403.7487

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.315546	26.01768	.7020755	.0611614	7.794949	.9028652	.7579309
Stddev	.010317	.07604	.0013739	.0004296	.012577	.0044262	.0021788
%RSD	.4455648	.2922784	.1956896	.7023454	.1613511	.4902407	.2874633
#1	2.326327	26.10496	.7012333	.0606731	7.792704	.9058865	.7593399
#2	2.314545	25.98231	.7013323	.0613302	7.808498	.9049246	.7554214
#3	2.305765	25.96575	.7036609	.0614810	7.783646	.8977845	.7590315

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.19619	.9351877	.3295347	.6651847	3.337768	7.072663	9.520434
Stddev	.03945	.0034406	.0008832	.0024501	.015211	.006491	.025979
%RSD	.3523925	.3678997	.2680174	.3683291	.4557238	.0917720	.2728714
#1	11.22413	.9332681	.3296024	.6649421	3.352479	7.065169	9.527051
#2	11.21337	.9331351	.3286196	.6628649	3.338723	7.076339	9.491787
#3	11.15105	.9391597	.3303821	.6677470	3.322102	7.076483	9.542465

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1685-01MS Acquired: 4/3/2025 16:06:37 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.9227275	.3494861	-.095156
Stddev	.0031313	.0007393	.002368
%RSD	.3393526	.2115533	2.488766
#1	.9191819	.3495967	-.093609
#2	.9238871	.3486976	-.093977
#3	.9251137	.3501639	-.097882

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3553.939	85753.89	20839.41	2372.320	4401.401
Stddev	5.891	73.10	75.90	4.695	5.126
%RSD	.1657504	.0852489	.3641945	.1978905	.1164685
#1	3547.400	85679.33	20751.92	2367.333	4396.921
#2	3558.829	85825.44	20887.57	2376.655	4406.992
#3	3555.588	85756.90	20878.74	2372.970	4400.290

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1685-01MSD Acquired: 4/3/2025 16:10:53 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.7024478	1.814689	1.015709	1.445181	.6291194	189.0086	.6490777
Stddev	.0043645	.007758	.012276	.014005	.0034852	.4256	.0016940
%RSD	.6213279	.4275305	1.208611	.9690556	.5539760	.2251544	.2609804
#1	.7022380	1.820331	1.009856	1.439615	.6299157	188.8568	.6499566
#2	.7069134	1.817895	1.029816	1.461113	.6321374	189.4893	.6501516
#3	.6981920	1.805841	1.007454	1.434815	.6253049	188.6798	.6471249

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1639989	.1868001	22.36742	.5725475	.3453208	.6328881	385.6500
Stddev	.0011548	.0028946	.05513	.0005749	.0050559	.0065283	2.9455
%RSD	.7041463	1.549556	.2464807	.1004121	1.464125	1.031510	.7637645
#1	.1653040	.1854298	22.39035	.5730528	.3425795	.6315339	382.3527
#2	.1635833	.1901254	22.40739	.5719220	.3511553	.6399873	388.0208
#3	.1631095	.1848452	22.30453	.5726677	.3422275	.6271431	386.5765

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.334473	26.57691	.6969349	.0582144	7.559541	.9086857	.7650987
Stddev	.003356	.05369	.0093590	.0007836	.023807	.0027810	.0008973
%RSD	.1437577	.2020298	1.342874	1.346008	.3149319	.3060458	.1172733
#1	2.335473	26.59163	.6917473	.0574531	7.533085	.9118096	.7661035
#2	2.337215	26.62170	.7077388	.0590185	7.566300	.9064795	.7648150
#3	2.330731	26.51739	.6913185	.0581717	7.579239	.9077681	.7643776

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.80717	.8950290	.3286759	.6562114	3.414893	8.733479	9.327415
Stddev	.04088	.0078595	.0026102	.0106288	.008432	.033581	.100714
%RSD	.3782935	.8781340	.7941467	1.619717	.2469272	.3845070	1.079761
#1	10.76087	.8861839	.3274689	.6488045	3.422274	8.696707	9.270359
#2	10.83831	.9012110	.3316712	.6683898	3.416702	8.741211	9.443703
#3	10.82233	.8976922	.3268877	.6514400	3.405703	8.762520	9.268184

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1685-01MSD Acquired: 4/3/2025 16:10:53 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.9011005	.3464100	-.080896
Stddev	.0111465	.0015122	.002468
%RSD	1.236984	.4365463	3.051358
#1	.9050612	.3449160	-.078052
#2	.9097258	.3479398	-.082486
#3	.8885146	.3463741	-.082150

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3621.167	85220.47	19664.06	2358.175	4484.306
Stddev	17.353	119.20	85.39	8.362	41.428
%RSD	.4792148	.1398771	.4342550	.3545834	.9238401
#1	3626.697	85330.01	19571.66	2367.691	4507.802
#2	3601.722	85093.52	19680.44	2352.002	4436.472
#3	3635.081	85237.87	19740.07	2354.832	4508.644

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1693-05 Acquired: 4/3/2025 16:15:09 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.2061379	.0176105	.6810765	-.050313	-.010374	134.4867
Stddev	.0036598	.0004137	.0046604	.002821	.003720	.2038
%RSD	1.775427	2.349076	.6842752	5.607423	35.85866	.1515168
#1	.2067664	.0171637	.6790751	-.050287	-.006671	134.2894
#2	.2094427	.0179803	.6864034	-.053147	-.014111	134.4745
#3	.2022045	.0176876	.6777511	-.047505	-.010339	134.6963

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.514808	.0111851	.0034928	92.61690	.6896461	.1765084
Stddev	.003098	.0000820	.0004166	.04290	.0028255	.0009432
%RSD	.2045198	.7332960	11.92721	.0463251	.4097084	.5343607
#1	1.512245	.0112747	.0030119	92.60918	.6926839	.1763111
#2	1.518251	.0111137	.0037219	92.57838	.6891581	.1775347
#3	1.513929	.0111669	.0037445	92.66314	.6870964	.1756795

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5374603	323.7259	6.452126	77.45989	.3672895	-.000765
Stddev	.0023812	1.1577	.004322	.14854	.0026677	.000068
%RSD	.4430407	.3576240	.0669800	.1917613	.7263182	8.886863
#1	.5352576	324.3977	6.451225	77.28840	.3660953	-.000690
#2	.5399868	324.3909	6.448326	77.54829	.3703456	-.000784
#3	.5371366	322.3891	6.456827	77.54297	.3654275	-.000822

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.23591	.3222131	.9447049	21.50947	.6154281	.0046670
Stddev	.05588	.0003944	.0009992	.09196	.0027653	.0003273
%RSD	.4566978	.1223930	.1057715	.4275428	.4493365	7.012224
#1	12.25787	.3221687	.9447604	21.56023	.6166524	.0044455
#2	12.27747	.3226278	.9436790	21.56486	.6173700	.0050429
#3	12.17238	.3218429	.9456752	21.40331	.6122620	.0045127

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1693-05 Acquired: 4/3/2025 16:15:09 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.1682483	2.285302	4.276585	9.782792	F 80.25610	.3973141
Stddev	.0006526	.002990	.057859	.042129	.38076	.0017739
%RSD	.3878734	.1308241	1.352924	.4306408	.4744342	.4464609
#1	.1675234	2.281994	4.335391	9.741711	79.88795	.3961665
#2	.1687889	2.286102	4.274643	9.825895	80.64833	.3964187
#3	.1684328	2.287811	4.219722	9.780771	80.23202	.3993572

Elem	Sr4077
Units	ppm
Avg	.0248273
Stddev	.0012662
%RSD	5.099939
#1	.0237174
#2	.0245581
#3	.0262064

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3408.817	83386.43	19639.50	2263.834	4280.797
Stddev	14.074	373.26	30.17	10.147	17.823
%RSD	.4128633	.4476217	.1536344	.4482342	.4163442
#1	3422.905	83291.55	19666.58	2266.374	4297.260
#2	3394.758	83069.76	19606.97	2252.657	4261.871
#3	3408.789	83797.96	19644.95	2272.469	4283.261

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1693-09 Acquired: 4/3/2025 16:19:12 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.1517003	.0311941	.3400515	-.083426	-.014054	210.7342
Stddev	.0017849	.0058170	.0033977	.003055	.001400	1.1681
%RSD	1.176616	18.64789	.9991847	3.662002	9.964489	.5543118
#1	.1510092	.0248199	.3399414	-.083718	-.014756	211.6220
#2	.1537274	.0325469	.3367101	-.086325	-.012441	211.1697
#3	.1503642	.0362156	.3435029	-.080236	-.014964	209.4109

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.609174	.0162332	.0141973	55.81050	.3616377	.3416442
Stddev	.008902	.0000243	.0007794	.08090	.0004104	.0016897
%RSD	.5531733	.1498642	5.489684	.1449581	.1134858	.4945665
#1	1.619373	.0162431	.0136087	55.88310	.3617137	.3405391
#2	1.605185	.0162055	.0150812	55.82511	.3611946	.3408044
#3	1.602965	.0162510	.0139020	55.72329	.3620048	.3435893

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5303774	514.0062	9.594132	113.9018	.6705659	-.005667
Stddev	.0016142	5.4670	.030317	.1489	.0034985	.000730
%RSD	.3043493	1.063597	.3159935	.1307174	.5217193	12.87578
#1	.5286842	513.4229	9.627843	114.0697	.6680201	-.005975
#2	.5305493	508.8542	9.585449	113.8502	.6691225	-.006193
#3	.5318988	519.7414	9.569104	113.7856	.6745552	-.004834

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.097911	.4406987	1.207013	25.03779	.9531472	.0014445
Stddev	.085295	.0022610	.002236	.18811	.0150615	.0001807
%RSD	.9375248	.5130544	.1852506	.7513046	1.580190	12.51053
#1	9.190482	.4433083	1.207391	25.25115	.9528889	.0013217
#2	9.022502	.4394638	1.204613	24.89583	.9382165	.0013598
#3	9.080750	.4393240	1.209037	24.96639	.9683363	.0016520

Sample Name: Q1693-09 Acquired: 4/3/2025 16:19:12 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0043748	3.033580	3.250494	F 10.80983	5.104951	.6470089
Stddev	.0015025	.013808	.027583	.07443	.026746	.0038604
%RSD	34.34448	.4551777	.8485938	.6885856	.5239305	.5966547
#1	.0029278	3.048349	3.265332	10.74589	5.077899	.6501642
#2	.0059272	3.031398	3.218668	10.79205	5.105572	.6427044
#3	.0042693	3.020992	3.267482	10.89154	5.131381	.6481583

Elem	Sr4077
Units	ppm
Avg	-.163684
Stddev	.005382
%RSD	3.288277
#1	-.161387
#2	-.159832
#3	-.169834

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3719.903	89155.15	22148.75	2433.598	4196.797
Stddev	12.246	338.88	15.99	11.037	18.003
%RSD	.3292127	.3801000	.0721874	.4535235	.4289788
#1	3728.292	88915.58	22162.25	2431.065	4210.569
#2	3725.568	89542.88	22131.09	2445.681	4203.398
#3	3705.850	89006.99	22152.90	2424.048	4176.425

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1694-01 Acquired: 4/3/2025 16:23:31 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0421020	.0068471	.2370599	-.027639	-.006881	98.92982	1.729527
Stddev	.0004888	.0028808	.0006949	.002091	.001651	.04231	.005748
%RSD	1.161037	42.07316	.2931539	7.563722	23.99593	.0427722	.3323599
#1	.0419893	.0088997	.2373161	-.026623	-.005319	98.97435	1.723410
#2	.0416794	.0035538	.2375904	-.030043	-.008609	98.89014	1.730355
#3	.0426374	.0080876	.2362732	-.026251	-.006715	98.92496	1.734817

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0094006	-.003623	28.53486	.1897038	.0884302	.2276268	199.5791
Stddev	.0000515	.000194	.05844	.0006057	.0001650	.0007649	.4783
%RSD	.5478296	5.343315	.2047991	.3192719	.1866363	.3360519	.2396429
#1	.0094459	-.003693	28.49307	.1896623	.0883483	.2269065	199.2050
#2	.0093446	-.003772	28.60164	.1903291	.0883221	.2275442	200.1180
#3	.0094113	-.003405	28.50987	.1891199	.0886202	.2284297	199.4143

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.578944	22.56422	.1784473	.0000746	12.43740	.2550646	.4120087
Stddev	.013311	.07516	.0003196	.0004398	.01389	.0013933	.0006936
%RSD	.2906929	.3330791	.1791258	589.7342	.1116441	.5462490	.1683488
#1	4.563655	22.60160	.1788163	-.000154	12.45273	.2562393	.4113009
#2	4.587950	22.61336	.1782705	.000582	12.43378	.2554292	.4120381
#3	4.585227	22.47771	.1782552	-.000204	12.42568	.2535252	.4126872

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.168897	.3653318	.0012047	.0020901	1.595375	5.190181	5.275148
Stddev	.012473	.0011467	.0004543	.0009727	.001903	.053709	.010206
%RSD	.1739837	.3138751	37.70625	46.54070	.1192963	1.034827	.1934754
#1	7.172646	.3649273	.0014681	.0019925	1.594062	5.130030	5.281945
#2	7.154980	.3666259	.0014659	.0011698	1.597558	5.207172	5.280087
#3	7.179065	.3644422	.0006802	.0031079	1.594506	5.233339	5.263412

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1694-01 Acquired: 4/3/2025 16:23:31 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.9893568	.1783814	-.020899
Stddev	.0036677	.0006084	.000491
%RSD	.3707189	.3410420	2.351436
#1	.9901392	.1777534	-.020896
#2	.9853610	.1784227	-.021393
#3	.9925701	.1789680	-.020410

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3506.887	83408.42	19816.76	2292.277	4621.381
Stddev	7.271	102.72	16.18	8.164	11.503
%RSD	.2073240	.1231481	.0816601	.3561323	.2489045
#1	3512.478	83429.29	19827.04	2283.383	4633.445
#2	3509.514	83296.87	19798.10	2299.430	4620.159
#3	3498.668	83499.10	19825.12	2294.017	4610.537

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1695-01 Acquired: 4/3/2025 16:27:37 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.1186657	-.005163	9.869893	-.062742	.0166007	90.67927
Stddev	.0028185	.004222	.023277	.002688	.0010890	.04907
%RSD	2.375182	81.76473	.2358432	4.283473	6.560170	.0541122
#1	.1218380	-.008798	9.871805	-.059641	.0154569	90.73101
#2	.1177089	-.006159	9.845718	-.064191	.0167199	90.63340
#3	.1164500	-.000533	9.892155	-.064394	.0176252	90.67340

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.480828	.0130754	.0387439	610.8515	.4396328	.1977733
Stddev	.011251	.0001039	.0002807	2.6912	.0014719	.0009457
%RSD	.3232284	.7949085	.7245466	.4405696	.3347899	.4781569
#1	3.486458	.0131954	.0388813	610.6228	.4387672	.1974442
#2	3.488152	.0130135	.0384209	613.6497	.4387990	.1970361
#3	3.467873	.0130172	.0389294	608.2819	.4413322	.1988395

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.210796	313.7687	5.080250	233.5079	.6314948	.0050233
Stddev	.005387	.2560	.010808	.9136	.0001596	.0001908
%RSD	.2436714	.0815889	.2127474	.3912565	.0252788	3.797725
#1	2.208264	313.9391	5.085554	233.0599	.6316481	.0049397
#2	2.207143	313.8927	5.087381	234.5591	.6315069	.0052416
#3	2.216983	313.4743	5.067814	232.9048	.6313295	.0048887

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.675285	.5435485	8.713998	12.04847	.7102025	.0404272
Stddev	.023221	.0014190	.038102	.04345	.0015234	.0007477
%RSD	.3025379	.2610607	.4372549	.3605976	.2145072	1.849479
#1	7.687825	.5437646	8.718081	12.06135	.7118320	.0399288
#2	7.648491	.5448471	8.674018	12.00004	.7088139	.0400658
#3	7.689540	.5420339	8.749894	12.08402	.7099615	.0412869

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1695-01 Acquired: 4/3/2025 16:27:37 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.5389643	4.911534	F 15.17909	F 12.17717	F 10.10600	.1712113
Stddev	.0010110	.011206	.08772	.01006	.03917	.0009741
%RSD	.1875845	.2281501	.5778757	.0826111	.3876222	.5689420
#1	.5384441	4.917721	15.12157	12.18317	10.13937	.1713749
#2	.5383193	4.918282	15.13565	12.16555	10.06287	.1701658
#3	.5401295	4.898599	15.28005	12.18278	10.11575	.1720932

Elem	Sr4077
Units	ppm
Avg	1.438690
Stddev	.014028
%RSD	.9750314
#1	1.443307
#2	1.449828
#3	1.422936

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3168.758	76886.97	19815.75	2052.437	3821.997
Stddev	13.683	41.88	49.11	7.494	15.938
%RSD	.4318186	.0544689	.2478105	.3651391	.4170191
#1	3181.174	76931.33	19824.83	2052.179	3834.081
#2	3171.014	76848.11	19762.74	2060.057	3827.976
#3	3154.088	76881.48	19859.68	2045.075	3803.934

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCV05 Acquired: 4/3/2025 16:36:20 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	4.901438	5.061378	4.860822	4.899564	4.939605	9.303608	9.613087
Stddev	.015900	.008783	.009234	.011839	.012928	.033871	.104262
%RSD	.3243899	.1735387	.1899625	.2416299	.2617311	.3640591	1.084582
#1	4.894281	5.069149	4.869401	4.888316	4.930168	9.267593	9.724887
#2	4.890375	5.063137	4.851049	4.898459	4.934307	9.308409	9.595866
#3	4.919659	5.051848	4.862017	4.911916	4.954342	9.334822	9.518508

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2271678	2.439669	22.96122	.9935523	2.453617	1.252728	4.899615
Stddev	.0012660	.005668	.15880	.0023745	.004917	.004227	.005397
%RSD	.5573137	.2323294	.6915950	.2389914	.2004052	.3373897	.1101570
#1	.2257220	2.444102	22.77831	.9928432	2.456274	1.253931	4.905843
#2	.2277035	2.433282	23.06385	.9916131	2.447943	1.248030	4.896323
#3	.2280779	2.441622	23.04150	.9962006	2.456635	1.256222	4.896677

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.264156	23.71455	2.477412	1.220641	25.07412	2.381679	2.442867
Stddev	.010270	.13223	.007267	.001809	.05803	.007477	.005695
%RSD	.4535708	.5576065	.2933386	.1482087	.2314279	.3139583	.2331131
#1	2.252454	23.56192	2.482483	1.221325	25.07818	2.373092	2.448448
#2	2.271670	23.79475	2.469087	1.222009	25.13001	2.385188	2.443088
#3	2.268344	23.78697	2.480667	1.218590	25.01417	2.386757	2.437065

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.68707	4.522564	5.000780	4.912094	4.685577	5.174684	4.829861
Stddev	.05657	.025287	.012319	.014083	.020779	.020260	.004843
%RSD	.2291281	.5591386	.2463321	.2867020	.4434665	.3915232	.1002804
#1	24.67436	4.494291	4.994396	4.924658	4.661748	5.166878	4.830086
#2	24.74891	4.543018	4.992964	4.896871	4.699921	5.197686	4.824909
#3	24.63794	4.530384	5.014980	4.914753	4.695063	5.159489	4.834588

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCV05 Acquired: 4/3/2025 16:36:20 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	4.879513	4.643719	4.748874
Stddev	.018491	.016022	.058653
%RSD	.3789560	.3450145	1.235093
#1	4.886475	4.626672	4.681155
#2	4.858551	4.658466	4.783618
#3	4.893512	4.646020	4.781849

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3111.513	73949.84	16853.75	2020.331	4730.791
Stddev	11.099	92.28	99.54	6.390	15.786
%RSD	.3567219	.1247870	.5906334	.3163063	.3336853
#1	3114.519	74056.19	16963.61	2012.996	4727.914
#2	3120.800	73902.50	16828.10	2023.301	4747.817
#3	3099.220	73890.85	16769.54	2024.697	4716.641

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCB05 Acquired: 4/3/2025 16:40:30 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0014944	.0015531	.0011199	-.001546	.0016701	.0071061	-.002351
Stddev	.0018070	.0012714	.0005509	.001760	.0020499	.0072938	.001713
%RSD	120.9184	81.86228	49.19225	113.8425	122.7426	102.6424	72.85355
#1	.0030492	.0030019	.0015136	-.001572	-.000661	.0016369	-.001494
#2	-.000488	.0010345	.0013558	.000227	.002482	.0042940	-.004323
#3	.001922	.0006230	.0004903	-.003292	.003189	.0153874	-.001236

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001579	.0003811	.0334665	.0003032	.0003307	.0003156	.0284628
Stddev	.0000127	.0000901	.0083049	.0000084	.0000535	.0000646	.0081154
%RSD	8.032729	23.65083	24.81567	2.756531	16.17568	20.45219	28.51237
#1	.0001478	.0004095	.0307060	.0002936	.0003194	.0003009	.0211096
#2	.0001539	.0004537	.0268933	.0003071	.0003889	.0002597	.0271088
#3	.0001721	.0002802	.0428001	.0003089	.0002837	.0003863	.0371701

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001115	-.000405	.0004464	.0006121	.0181199	.0007524	.0005431
Stddev	.000361	.007954	.0003003	.0002605	.0005539	.0004573	.0001574
%RSD	32.39098	1964.063	67.27346	42.56174	3.056887	60.77991	28.97867
#1	-.001530	-.007966	.0004105	.0005635	.0175915	.0012455	.0007222
#2	-.000947	-.001139	.0007632	.0008934	.0186962	.0003422	.0004269
#3	-.000868	.007890	.0001657	.0003792	.0180721	.0006695	.0004802

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.019243	.0036524	.0007287	-.000933	.0028589	.0127597	.0006489
Stddev	.023054	.0005126	.0001754	.000403	.0007436	.0029992	.0011994
%RSD	119.8063	14.03491	24.07744	43.12834	26.01001	23.50535	184.8396
#1	-.026497	.0041134	.0008528	-.001331	.0026026	.0132496	-.000703
#2	-.037798	.0037436	.0008053	-.000942	.0022774	.0095457	.001587
#3	.006566	.0031004	.0005280	-.000526	.0036968	.0154838	.001063

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCB05 Acquired: 4/3/2025 16:40:30 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0062517	-.000548	.0013075
Stddev	.0022453	.000847	.0003284
%RSD	35.91457	154.5914	25.11807
#1	.0055575	-.001126	.0011380
#2	.0087621	-.000943	.0010985
#3	.0044355	.000425	.0016861

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3190.491	75697.94	17785.89	2042.327	5203.576
Stddev	12.855	1032.03	209.06	25.117	9.983
%RSD	.4029176	1.363353	1.175414	1.229814	.1918494
#1	3193.132	74566.72	17687.60	2013.738	5199.993
#2	3176.520	75938.97	17644.09	2052.395	5195.878
#3	3201.820	76588.12	18025.98	2060.848	5214.856

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: LR1 Acquired: 4/3/2025 16:46:21 Type: Unk
Method: NON EPA-6010-200.7(v2882) 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	.0685884	.0854176	.0074985	-.092726	-.000860	1999.128	.0089875
Stddev	.0062529	.0009244	.0015693	.005441	.011873	6.575	.0005486
%RSD	9.116546	1.082273	20.92759	5.867933	1381.319	.3288868	6.104552
#1	.0721944	.0864250	.0090742	-.098423	.012601	1999.147	.0085496
#2	.0722026	.0846081	.0059357	-.087582	-.009846	1992.543	.0088099
#3	.0613682	.0852197	.0074857	-.092174	-.005334	2005.693	.0096029

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0069313	-.025523	1903.962	.0237782	.0272435	-.040257	1094.850
Stddev	.0002080	.000929	4.189	.0009097	.0006438	.001034	5.399
%RSD	3.001186	3.640195	.2199971	3.825727	2.362984	2.567598	.4930958
#1	.0069941	-.025586	1902.078	.0227283	.0267720	-.039204	1089.371
#2	.0066992	-.026419	1908.762	.0243335	.0279769	-.041271	1100.165
#3	.0071008	-.024564	1901.046	.0242727	.0269815	-.040297	1095.013

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0107011	1652.941	.0099573	.0190191	2106.928	.0149171	.1427495
Stddev	.0004421	7.369	.0004565	.0001102	8.900	.0031945	.0027943
%RSD	4.131248	.4458376	4.584946	.5795921	.4224126	21.41508	1.957454
#1	.0104474	1659.621	.0103419	.0188925	2106.588	.0116435	.1430652
#2	.0112116	1645.036	.0094528	.0190936	2098.203	.0180262	.1398108
#3	.0104443	1654.166	.0100773	.0190714	2115.994	.0150817	.1453725

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1293.084	2.075883	-.008654	-.002767	-.033126	.1655382	.0670572
Stddev	11.114	.013000	.001905	.003294	.001079	.0070966	.0063997
%RSD	.8595175	.6262327	22.01670	119.0342	3.256639	4.286986	9.543604
#1	1286.373	2.063325	-.010720	.001024	-.032507	.1732878	.0731312
#2	1305.913	2.089284	-.008277	-.004399	-.032499	.1593571	.0676651
#3	1286.966	2.075038	-.006965	-.004926	-.034372	.1639695	.0603752

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: LR1 Acquired: 4/3/2025 16:46:21 Type: Unk
Method: NON EPA-6010-200.7(v2882) 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	-.235886	.1411499	-.951980
Stddev	.008555	.0018023	.004728
%RSD	3.626888	1.276851	.4966748
#1	-.245688	.1391257	-.947210
#2	-.232048	.1417435	-.956666
#3	-.229922	.1425806	-.952062

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2092.033	50972.04	14147.45	1350.748	2723.954
Stddev	9.337	131.88	25.49	3.585	11.245
%RSD	.4463140	.2587223	.1801738	.2653742	.4128327
#1	2102.253	51114.01	14119.01	1347.385	2736.051
#2	2089.898	50853.36	14168.23	1350.339	2721.993
#3	2083.949	50948.74	14155.12	1354.519	2713.818

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: LR2 Acquired: 4/3/2025 16:51:18 Type: Unk
Method: NON EPA-6010-200.7(v2882) 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	.0090669	-.016622	252.4226	.0012333	-.004777	.5929337	^F *****
Stddev	.0014353	.002206	2.0236	.0020618	.001927	.0127585	-----
%RSD	15.83039	13.27281	.8016754	167.1841	40.34259	2.151752	-----
#1	.0100674	-.016040	253.3445	.0035643	-.006622	.5954552	^ -----
#2	.0097110	-.014765	250.1021	-.000352	-.004933	.6042432	^ -----
#3	.0074224	-.019061	253.8210	.000487	-.002777	.5791028	^ -----

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001260	-.002881	.7602776	.0081822	.0044452	248.3136	.2792496
Stddev	.000063	.000094	.0129887	.0001928	.0002954	2.5812	.0112233
%RSD	5.011883	3.253974	1.708418	2.356492	6.645300	1.039473	4.019074
#1	-.001257	-.002840	.7718807	.0083789	.0045858	248.8119	.2870430
#2	-.001198	-.002814	.7627060	.0079936	.0041057	245.5196	.2843201
#3	-.001324	-.002988	.7462460	.0081742	.0046439	250.6092	.2663858

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	45.19739	.2944981	47.53251	.0004436	.6182666	-.010506	32.19782
Stddev	.33617	.0098549	.39230	.0002802	.0192757	.001395	.11896
%RSD	.7437795	3.346342	.8253377	63.16735	3.117707	13.27654	.3694510
#1	44.82166	.3058720	47.75355	.0004224	.6335574	-.009267	32.33293
#2	45.30082	.2891200	47.07956	.0001745	.6246283	-.010233	32.15171
#3	45.46968	.2885024	47.76442	.0007337	.5966141	-.012017	32.10883

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4787597	-.003053	-.005537	-.006323	-.034595	-.006266	.1647110
Stddev	.0235632	.000748	.000130	.000507	.000515	.002707	.0065128
%RSD	4.921720	24.49987	2.344663	8.018040	1.489439	43.20134	3.954061
#1	.5051191	-.003845	-.005428	-.006198	-.035083	-.008951	.1700341
#2	.4714206	-.002359	-.005680	-.005890	-.034645	-.003538	.1574490
#3	.4597395	-.002954	-.005501	-.006881	-.034057	-.006310	.1666500

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: LR2 Acquired: 4/3/2025 16:51:18 Type: Unk
Method: NON EPA-6010-200.7(v2882) 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	-.007405	-.001113	.0012773
Stddev	.004529	.000980	.0000793
%RSD	61.15631	88.08233	6.207642
#1	-.002476	-.002205	.0013618
#2	-.008359	-.000825	.0012045
#3	-.011381	-.000309	.0012658

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2838.448	75392.06	16997.45	1993.391	4844.885
Stddev	26.427	156.18	59.23	1.380	36.283
%RSD	.9310501	.2071534	.3484451	.0692051	.7488851
#1	2821.643	75565.57	16949.09	1994.781	4824.448
#2	2868.910	75262.74	16979.76	1992.023	4886.776
#3	2824.792	75347.87	17063.51	1993.369	4823.430

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1695-05 Acquired: 4/3/2025 16:55:24 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0678769	-.021523	1.256620	-.038423	.0118807	93.13383
Stddev	.0023454	.001932	.009770	.001431	.0036031	.07413
%RSD	3.455415	8.974548	.7774503	3.723417	30.32756	.0795934
#1	.0687323	-.019595	1.265874	-.037908	.0123730	93.07491
#2	.0652238	-.023458	1.257578	-.037321	.0152124	93.10951
#3	.0696745	-.021515	1.246406	-.040040	.0080568	93.21706

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6846341	.0057548	.0033859	109.5881	.2624085	.1565115
Stddev	.0014677	.0000942	.0007097	.3501	.0037731	.0006938
%RSD	.2143779	1.636703	20.96127	.3195051	1.437853	.4432635
#1	.6842421	.0058514	.0040652	109.2823	.2602537	.1569369
#2	.6862580	.0056632	.0034432	109.9700	.2602067	.1568866
#3	.6834021	.0057498	.0026493	109.5120	.2667652	.1557109

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7291901	235.2560	2.929844	68.54732	.2821171	-.000680
Stddev	.0068367	2.9342	.012495	.21671	.0022274	.000396
%RSD	.9375784	1.247232	.4264796	.3161415	.7895259	58.25573
#1	.7361389	232.5615	2.918360	68.32568	.2841762	-.001095
#2	.7289602	234.8244	2.943150	68.75874	.2824223	-.000305
#3	.7224712	238.3821	2.928021	68.55755	.2797529	-.000641

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.992546	.3981615	.5159169	29.00617	.5222908	.0208522
Stddev	.057616	.0006253	.0045332	.31455	.0066449	.0002687
%RSD	1.443085	.1570383	.8786635	1.084424	1.272260	1.288390
#1	3.971979	.3985999	.5121713	28.82403	.5163035	.0206754
#2	3.948035	.3984391	.5146231	28.82511	.5211288	.0207198
#3	4.057622	.3974455	.5209563	29.36939	.5294400	.0211613

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1695-05 Acquired: 4/3/2025 16:55:24 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.1134800	7.452273	4.286601	8.905120	F 12.22389	.2018588
Stddev	.0019136	.019289	.040174	.050248	.08127	.0016186
%RSD	1.686255	.2588366	.9372079	.5642617	.6648479	.8018693
#1	.1152654	7.437837	4.259963	8.944163	12.31541	.2001878
#2	.1137146	7.474180	4.267028	8.922768	12.19612	.2019693
#3	.1114599	7.444802	4.332810	8.848429	12.16015	.2034194

Elem	Sr4077
Units	ppm
Avg	.1492883
Stddev	.0025044
%RSD	1.677558
#1	.1508430
#2	.1506227
#3	.1463993

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3644.260	87902.60	21016.43	2403.539	4302.156
Stddev	17.225	773.63	82.58	24.660	22.635
%RSD	.4726729	.8801035	.3929246	1.025984	.5261278
#1	3624.679	88459.43	21014.25	2425.065	4280.571
#2	3651.025	88229.14	20934.96	2408.918	4300.185
#3	3657.076	87019.24	21100.08	2376.633	4325.712

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: PB167421BS Acquired: 4/3/2025 17:03:48 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.7511335	2.009610	.9229142	1.894940	.7782675	1.778953
Stddev	.0009951	.007455	.0010407	.005267	.0034099	.008697
%RSD	.1324815	.3709780	.1127582	.2779302	.4381388	.4888868
#1	.7522494	2.001163	.9220004	1.893873	.7785841	1.770047
#2	.7508126	2.012397	.9226953	1.890289	.7747103	1.787425
#3	.7503384	2.015270	.9240469	1.900658	.7815080	1.779388

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1804587	.1797610	.1856152	.9102291	.3911605	.1901877
Stddev	.0013793	.0007609	.0002858	.0045407	.0010905	.0002540
%RSD	.7643472	.4232600	.1539985	.4988540	.2787801	.1335439
#1	.1790629	.1788827	.1858420	.9055451	.3901990	.1902644
#2	.1818209	.1802175	.1852941	.9105306	.3909370	.1899042
#3	.1804922	.1801829	.1857096	.9146115	.3923454	.1903944

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3062585	2.836642	.1788332	1.822384	.4827973	.0724685
Stddev	.0008670	.016508	.0011451	.015022	.0008736	.0001649
%RSD	.2830976	.5819583	.6403035	.8242911	.1809459	.2275368
#1	.3061906	2.830831	.1776079	1.806668	.4832506	.0725086
#2	.3054274	2.855269	.1790155	1.836599	.4817902	.0722873
#3	.3071575	2.823825	.1798762	1.823886	.4833510	.0726097

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.970037	.2777175	.1939200	9.340918	.2694937	.3977156
Stddev	.018243	.0027542	.0010723	.061352	.0012806	.0002110
%RSD	.6142336	.9917166	.5529751	.6568040	.4752071	.0530459
#1	2.949533	.2755412	.1933097	9.276018	.2682924	.3979152
#2	2.976105	.2808140	.1932922	9.397965	.2708411	.3974948
#3	2.984472	.2767975	.1951582	9.348771	.2693476	.3977368

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: PB167421BS Acquired: 4/3/2025 17:03:48 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.6572699	.1810541	.7554695	5.220309	F -.005009	.1862550
Stddev	.0023762	.0020314	.0060511	.016532	.002659	.0012168
%RSD	.3615245	1.121966	.8009706	.3166832	53.08050	.6533029
#1	.6587125	.1788765	.7515961	5.207292	-.007136	.1862581
#2	.6545273	.1813880	.7523700	5.214725	-.002028	.1850366
#3	.6585697	.1828979	.7624424	5.238910	-.005862	.1874703

Elem	Sr4077
Units	ppm
Avg	.1817716
Stddev	.0006067
%RSD	.3337723
#1	.1811024
#2	.1822858
#3	.1819267

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3239.906	77099.98	17148.55	2130.265	5179.654
Stddev	11.009	177.70	108.04	4.925	10.596
%RSD	.3397955	.2304754	.6300275	.2312134	.2045701
#1	3234.849	77301.70	17271.79	2127.073	5175.906
#2	3252.535	77031.66	17103.71	2135.937	5191.615
#3	3232.334	76966.59	17070.15	2127.784	5171.441

Sample Name: PB167421BL Acquired: 4/3/2025 17:09:26 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.000601	.0005919	.0020043	-.002237	-.000187	.0044790	-.005192
Stddev	.003454	.0018574	.0018079	.001213	.002411	.0006049	.000688
%RSD	574.2845	313.7957	90.20347	54.19805	1288.744	13.50537	13.25579
#1	-.000742	-.001325	.0040902	-.001209	-.002969	.0048656	-.005537
#2	.002921	.002384	.0008879	-.001929	.001116	.0037819	-.005639
#3	-.003983	.000716	.0010348	-.003575	.001292	.0047894	-.004399

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001433	-.000005	.0137123	.0000273	-.000020	.0014947	.0030157
Stddev	.0000631	.000018	.0052772	.0004614	.000154	.0003986	.0005371
%RSD	44.00636	343.6628	38.48536	1687.782	751.0072	26.66905	17.80840
#1	.0001735	-.000024	.0158526	-.000336	.000153	.0018869	.0035068
#2	.0001856	.000011	.0175832	.000546	-.000077	.0010900	.0030982
#3	.0000708	-.000003	.0077012	-.000128	-.000138	.0015072	.0024422

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001507	-.012733	.0000830	.0000650	.0830803	-.000175	-.000250
Stddev	.000025	.010866	.0000331	.0000975	.0073414	.001411	.000182
%RSD	1.633217	85.33998	39.86786	149.8656	8.836462	806.0695	72.68321
#1	-.001489	-.009381	.0001197	-.000046	.0760062	-.001700	-.000314
#2	-.001535	-.024880	.0000742	.000137	.0825722	.001083	-.000391
#3	-.001496	-.003938	.0000553	.000104	.0906625	.000093	-.000045

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0569380	-.003694	-.000288	-.001246	.0012741	-.000358	.0030491
Stddev	.0065433	.000560	.000090	.000419	.0004751	.002579	.0011568
%RSD	11.49192	15.15511	31.20755	33.61676	37.29357	719.9608	37.93753
#1	.0625047	-.003282	-.000186	-.000913	.0007332	.002396	.0034502
#2	.0497305	-.003469	-.000354	-.001717	.0014644	-.000755	.0039519
#3	.0585789	-.004331	-.000324	-.001110	.0016245	-.002716	.0017452

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: PB167421BL Acquired: 4/3/2025 17:09:26 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0034406	-.003176	.0000386
Stddev	.0008440	.000889	.0000414
%RSD	24.53158	27.99685	107.2625
#1	.0029403	-.002518	.0000712
#2	.0029664	-.004187	-.000008
#3	.0044151	-.002822	.000053

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3232.776	77559.31	17338.32	2118.084	5269.086
Stddev	32.429	166.55	72.58	8.350	46.539
%RSD	1.003135	.2147402	.4186028	.3942256	.8832453
#1	3268.749	77369.98	17318.18	2120.267	5322.398
#2	3223.798	77624.72	17277.95	2108.859	5248.285
#3	3205.783	77683.22	17418.85	2125.126	5236.576

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1689-01 Acquired: 4/3/2025 17:13:45 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.015791	-.015594	-.035478	.0262408	.0164091	.3550346
Stddev	.005734	.012794	.005221	.0106230	.0012289	.0162739
%RSD	36.30967	82.04288	14.71740	40.48282	7.489168	4.583756
#1	-.017938	-.021877	-.030207	.0354011	.0157908	.3712615
#2	-.020141	-.024032	-.040648	.0145956	.0156121	.3551284
#3	-.009294	-.000874	-.035577	.0287257	.0178244	.3387140

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0153389	.0005671	-.002833	F 283.8787	.1941788	.8054327
Stddev	.0005153	.0001063	.000101	.9889	.0010168	.0031916
%RSD	3.359192	18.74500	3.580829	.3483598	.5236665	.3962559
#1	.0158167	.0006451	-.002723	282.9677	.1932357	.8066810
#2	.0154069	.0006101	-.002924	284.9305	.1952560	.8018057
#3	.0147930	.0004460	-.002852	283.7380	.1940446	.8078115

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.012526	.1293275	.0004693	15.09833	2.489037	.0127252
Stddev	.002699	.0072724	.0002119	.07478	.030280	.0004649
%RSD	21.54490	5.623279	45.16185	.4952615	1.216547	3.652958
#1	-.012545	.1332136	.0006640	15.01652	2.503384	.0125833
#2	-.015216	.1209376	.0005004	15.16315	2.454250	.0123478
#3	-.009818	.1338313	.0002435	15.11534	2.509477	.0132445

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	-.001787	.3530528	F 492.1591	.1692727	3.824413
Stddev	-----	.001099	.0032719	44.4248	.0018801	.016278
%RSD	-----	61.49893	.9267363	9.026515	1.110716	.4256232
#1	^ -----	-.002776	.3519146	443.0324	.1698068	3.816544
#2	^ -----	-.000604	.3567418	503.9362	.1671833	3.843129
#3	^ -----	-.001980	.3505021	529.5087	.1708280	3.813564

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1689-01 Acquired: 4/3/2025 17:13:45 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.024424	.0166897	2.057825	.0016050	F 4768.070	.0164488
Stddev	.004571	.0003857	.050477	.0153965	69.798	.0020348
%RSD	18.71406	2.310927	2.452917	959.2847	1.463854	12.37070
#1	-.028714	.0162531	1.999542	-.001611	4769.147	.0141915
#2	-.019617	.0168319	2.087484	.018356	4697.740	.0170128
#3	-.024941	.0169841	2.086449	-.011929	4837.323	.0181421

Elem	Sr4077
Units	ppm
Avg	.5726837
Stddev	.0034831
%RSD	.6081993
#1	.5693683
#2	.5723695
#3	.5763132

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	876.9580	22630.13	8217.535	587.7013	924.4798
Stddev	27.8016	213.28	65.547	6.3668	34.1694
%RSD	3.170236	.9424391	.7976502	1.083344	3.696066
#1	884.2545	22854.69	8158.253	593.3581	930.5313
#2	846.2357	22430.29	8287.927	580.8063	887.6889
#3	900.3837	22605.40	8206.423	588.9393	955.2191

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1689-01DUP Acquired: 4/3/2025 17:18:03 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.009339	-.013237	-.038355	.0219091	.0113411	.2599649
Stddev	.003709	.008101	.007568	.0074317	.0046544	.0124231
%RSD	39.71366	61.20099	19.73153	33.92061	41.04014	4.778758
#1	-.010269	-.006888	-.046742	.0230366	.0060601	.2581037
#2	-.005253	-.010463	-.036289	.0139781	.0148458	.2485774
#3	-.012494	-.022362	-.032034	.0287126	.0131174	.2732136

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0155157	.0005411	-.002682	290.9919	.1953157	.8091294
Stddev	.0012325	.0001213	.000488	2.6065	.0026606	.0023273
%RSD	7.943831	22.42705	18.20433	.8957157	1.362223	.2876335
#1	.0167851	.0004610	-.002350	293.2543	.1926263	.8064493
#2	.0143236	.0004815	-.002453	291.5796	.1953741	.8106396
#3	.0154384	.0006807	-.003242	288.1418	.1979467	.8102994

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.008331	.0979786	-.000161	15.79160	2.527671	.0119390
Stddev	.001245	.0028578	.000534	.23429	.016905	.0005447
%RSD	14.94915	2.916796	332.4548	1.483661	.6687992	4.562448
#1	-.009645	.0948100	.000453	15.97426	2.508212	.0118252
#2	-.007168	.0987647	-.000517	15.87310	2.538745	.0114601
#3	-.008179	.1003611	-.000418	15.52744	2.536055	.0125316

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	-.003156	.3401921	571.8304	.1712082	3.778222
Stddev	-----	.002352	.0003300	3.4026	.0050949	.005538
%RSD	-----	74.52093	.0970141	.5950424	2.975851	.1465865
#1	^ -----	-.000998	.3399332	569.6391	.1722992	3.782070
#2	^ -----	-.002806	.3400794	575.7503	.1656562	3.771875
#3	^ -----	-.005662	.3405637	570.1017	.1756693	3.780723

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1689-01DUP Acquired: 4/3/2025 17:18:03 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.023857	.0187258	1.796163	-.003535	F 4955.061	.0185858
Stddev	.004714	.0010294	.025979	.019588	70.706	.0040786
%RSD	19.75882	5.497090	1.446371	554.1094	1.426936	21.94479
#1	-.019238	.0198201	1.781407	-.016095	4883.735	.0155402
#2	-.023672	.0185805	1.780922	-.013547	5025.130	.0169975
#3	-.028660	.0177768	1.826160	.019036	4956.319	.0232196

Elem	Sr4077
Units	ppm
Avg	.5577953
Stddev	.0076982
%RSD	1.380107
#1	.5609765
#2	.5490164
#3	.5633931

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	925.3046	22793.46	7969.338	600.3785	983.3822
Stddev	13.6775	317.36	90.928	12.8317	15.3206
%RSD	1.478157	1.392317	1.140976	2.137273	1.557955
#1	909.9264	22710.11	7875.579	598.4639	967.7038
#2	936.1090	22526.10	8057.143	588.6117	998.3181
#3	929.8785	23144.18	7975.292	614.0600	984.1246

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1689-01LX5 Acquired: 4/3/2025 17:22:20 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0001646	.0018923	-.008896	.0004658	.0024923	.0321104
Stddev	.0054808	.0039071	.003587	.0065952	.0036934	.0027993
%RSD	3329.646	206.4695	40.32605	1415.923	148.1904	8.717705
#1	.0059464	.0020394	-.010122	.0071548	-.001764	.0340118
#2	-.000498	.0057238	-.011709	.0002739	.004385	.0288960
#3	-.004955	-.002086	-.004856	-.006031	.004855	.0334235

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004636	.0002326	-.000721	74.85457	.0540850	.1919994
Stddev	.001413	.0000757	.000175	.53666	.0005485	.0021454
%RSD	30.48438	32.55409	24.21965	.7169407	1.014044	1.117418
#1	-.003547	.0002969	-.000521	74.80258	.0542423	.1938328
#2	-.006234	.0002516	-.000799	74.34579	.0534751	.1925255
#3	-.004128	.0001491	-.000843	75.41533	.0545375	.1896398

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0040171	.0223757	-.001615	4.413915	.6296888	.0011059
Stddev	.0009688	.0079176	.000216	.030850	.0106457	.0005189
%RSD	24.11641	35.38478	13.37627	.6989350	1.690636	46.92326
#1	.0050757	.0200100	-.001538	4.395597	.6394816	.0011462
#2	.0031748	.0312064	-.001448	4.396614	.6312271	.0005680
#3	.0038006	.0159106	-.001859	4.449533	.6183575	.0016035

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	-.002039	.0488749	80.19985	.0322122	.9276608
Stddev	-----	.000101	.0006891	2.63335	.0007504	.0035688
%RSD	-----	4.977520	1.410014	3.283491	2.329494	.3847082
#1	^ -----	-.002030	.0480814	77.66814	.0313616	.9238296
#2	^ -----	-.001941	.0493234	80.00713	.0327802	.9282619
#3	^ -----	-.002144	.0492200	82.92427	.0324950	.9308908

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1689-01LX5 Acquired: 4/3/2025 17:22:20 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.006057	.0061628	.2536671	.0014559	F 2426.692	-.005067
Stddev	.001025	.0007516	.0052868	.0048585	63.799	.002091
%RSD	16.91398	12.19559	2.084157	333.7079	2.629053	41.27385
#1	-.006328	.0067063	.2586162	-.003296	2490.116	-.006994
#2	-.004925	.0053051	.2480973	.006415	2427.436	-.005362
#3	-.006920	.0064770	.2542878	.001249	2362.524	-.002843

Elem	Sr4077
Units	ppm
Avg	.1164523
Stddev	.0006311
%RSD	.5419034
#1	.1157281
#2	.1167444
#3	.1168845

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1691.634	39541.26	11537.00	1127.690	2110.936
Stddev	38.463	272.34	32.39	14.274	30.912
%RSD	2.273690	.6887503	.2807065	1.265730	1.464358
#1	1728.381	39791.73	11572.00	1144.101	2140.941
#2	1694.864	39580.70	11508.10	1120.808	2112.675
#3	1651.659	39251.35	11530.88	1118.162	2079.191

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1689-01MS Acquired: 4/3/2025 17:26:39 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	1.176898	1.486816	.7267959	3.524481	1.349680	3.169197
Stddev	.022323	.016113	.0013766	.027153	.012500	.145784
%RSD	1.896733	1.083701	.1894072	.7704135	.9261773	4.600043
#1	1.151122	1.498573	.7252794	3.495282	1.337495	3.285812
#2	1.189639	1.468449	.7279668	3.548973	1.362473	3.005752
#3	1.189932	1.493424	.7271414	3.529186	1.349071	3.216028

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1934060	.2206827	.1567298	281.5418	.4316446	.9398397
Stddev	.0003504	.0045679	.0016250	6.8902	.0099224	.0058681
%RSD	.1811960	2.069903	1.036786	2.447324	2.298748	.6243684
#1	.1937790	.2156646	.1579034	274.7041	.4427233	.9412432
#2	.1930836	.2217847	.1548751	288.4834	.4235751	.9333972
#3	.1933555	.2245988	.1574108	281.4380	.4286354	.9448788

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1380582	3.003522	.1292011	16.36717	2.810122	.1852015
Stddev	.0016293	.060027	.0031603	.43860	.021196	.0032937
%RSD	1.180168	1.998564	2.446046	2.679732	.7542808	1.778427
#1	.1398778	2.980730	.1259470	15.95155	2.824382	.1814158
#2	.1367344	3.071607	.1322584	16.82560	2.785765	.1874102
#3	.1375624	2.958229	.1293980	16.32438	2.820217	.1867785

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	.2129789	.6872977	558.4862	.3962211	3.912136
Stddev	-----	.0013899	.0113649	7.5907	.0074865	.007874
%RSD	-----	.6526194	1.653567	1.359160	1.889467	.2012823
#1	^ -----	.2114041	.6744594	562.6209	.3880446	3.906046
#2	^ -----	.2134981	.6913624	549.7258	.3978794	3.909335
#3	^ -----	.2140345	.6960714	563.1120	.4027395	3.921029

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1689-01MS Acquired: 4/3/2025 17:26:39 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.5684385	.1742554	3.531171	F 12.71703	F 4761.543	.4755914
Stddev	.0080201	.0022036	.128408	.12198	64.471	.0198265
%RSD	1.410908	1.264592	3.636403	.9591691	1.353997	4.168812
#1	.5729915	.1717157	3.658309	12.57782	4825.862	.4889926
#2	.5591780	.1756599	3.401530	12.80520	4696.920	.4528161
#3	.5731458	.1753907	3.533674	12.76806	4761.846	.4849655

Elem	Sr4077
Units	ppm
Avg	.7119115
Stddev	.0048828
%RSD	.6858714
#1	.7089823
#2	.7092040
#3	.7175482

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	952.6786	24007.94	8199.887	630.2906	994.5858
Stddev	7.1449	207.54	117.004	9.1842	8.6311
%RSD	.7499807	.8644829	1.426894	1.457143	.8678085
#1	955.6053	24005.25	8330.816	639.4508	1000.728
#2	944.5351	23801.75	8105.558	621.0825	984.718
#3	957.8956	24216.82	8163.288	630.3384	998.312

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1689-01MSD Acquired: 4/3/2025 17:30:52 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	1.194205	1.485003	.7199755	3.611336	1.397035	3.171883
Stddev	.011543	.019072	.0191176	.073127	.024604	.192914
%RSD	.9665664	1.284320	2.655317	2.024937	1.761185	6.082018
#1	1.194289	1.465150	.6979014	3.609579	1.408057	3.237468
#2	1.205706	1.503184	.7312023	3.685326	1.414201	3.323454
#3	1.182620	1.486674	.7308227	3.539103	1.368846	2.954727

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1924412	.2264242	.1560553	280.4507	.4425321	.9386848
Stddev	.0045393	.0017463	.0018386	5.2726	.0148565	.0114037
%RSD	2.358786	.7712477	1.178160	1.880039	3.357148	1.214863
#1	.1954344	.2260135	.1539724	284.4582	.4596686	.9256828
#2	.1946709	.2249198	.1567413	274.4777	.4346496	.9469902
#3	.1872182	.2283392	.1574523	282.4162	.4332781	.9433814

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1342797	3.067805	.1289677	16.29165	2.802761	.1931740
Stddev	.0050468	.082468	.0021545	.36845	.033913	.0029965
%RSD	3.758419	2.688186	1.670555	2.261619	1.210000	1.551215
#1	.1314559	3.153132	.1309981	16.46719	2.763732	.1910959
#2	.1312768	3.061754	.1267076	15.86825	2.825046	.1966090
#3	.1401063	2.988529	.1291976	16.53951	2.819506	.1918171

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	.2139541	.7134466	555.2875	.4030048	3.951103
Stddev	-----	.0031222	.0031540	18.6075	.0038544	.034123
%RSD	-----	1.459281	.4420868	3.350973	.9564176	.8636407
#1	^ -----	.2175150	.7128485	561.6794	.4034112	3.922623
#2	^ -----	.2116859	.7168569	569.8565	.3989633	3.988924
#3	^ -----	.2126613	.7106344	534.3264	.4066399	3.941761

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1689-01MSD Acquired: 4/3/2025 17:30:52 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.5698531	.1731669	3.632108	F 12.95670	F 4720.733	.4939752
Stddev	.0044929	.0023384	.197251	.19355	65.459	.0286922
%RSD	.7884273	1.350383	5.430746	1.493821	1.386618	5.808427
#1	.5647471	.1756789	3.726919	12.95313	4645.149	.5042130
#2	.5716107	.1710532	3.764053	13.15202	4758.306	.5161444
#3	.5732015	.1727686	3.405354	12.76497	4758.745	.4615684

Elem	Sr4077
Units	ppm
Avg	.7162142
Stddev	.0144768
%RSD	2.021289
#1	.7283655
#2	.7200801
#3	.7001969

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	929.4210	23449.07	8128.330	610.3717	970.4107
Stddev	21.1718	202.00	101.453	2.2533	26.2100
%RSD	2.277956	.8614223	1.248139	.3691612	2.700917
#1	928.1088	23217.54	8118.759	612.9060	970.1073
#2	908.9359	23540.43	8234.229	608.5943	944.3537
#3	951.2185	23589.24	8032.001	609.6149	996.7711

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCV06 Acquired: 4/3/2025 17:48:06 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	5.009572	5.222170	4.936416	5.021222	5.049636	9.567602	9.638699
Stddev	.044759	.008586	.043366	.035091	.040986	.008504	.074730
%RSD	.8934738	.1644225	.8784905	.6988462	.8116607	.0888783	.7753106
#1	5.032861	5.231438	4.973118	5.031652	5.077691	9.576116	9.664140
#2	5.037885	5.220586	4.947566	5.049915	5.068617	9.567582	9.697386
#3	4.957970	5.214485	4.888564	4.982099	5.002601	9.559109	9.554570

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2390954	2.476961	23.59500	1.013055	2.494292	1.282045	4.881944
Stddev	.0012775	.021984	.04031	.002550	.021219	.012511	.026962
%RSD	.5343059	.8875279	.1708489	.2517463	.8506957	.9758769	.5522824
#1	.2404212	2.494969	23.64089	1.012497	2.512528	1.290981	4.852396
#2	.2378725	2.483451	23.56531	1.015837	2.499345	1.287409	4.888223
#3	.2389924	2.452463	23.57879	1.010829	2.471003	1.267746	4.905212

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.308069	24.14295	2.515312	1.248304	27.01087	2.432474	2.527904
Stddev	.004660	.06601	.022317	.001072	.19241	.003548	.006835
%RSD	.2018998	.2734083	.8872432	.0858813	.7123520	.1458451	.2703774
#1	2.311236	24.21911	2.534019	1.247148	26.79616	2.436271	2.535740
#2	2.302718	24.10231	2.521307	1.249265	27.16769	2.431907	2.524800
#3	2.310252	24.10743	2.490610	1.248499	27.06876	2.429244	2.523172

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.30795	4.749989	5.091794	4.982773	4.750622	5.193646	4.799193
Stddev	.22215	.032816	.040725	.042748	.006540	.035926	.036063
%RSD	.8777761	.6908729	.7998187	.8579237	.1376761	.6917368	.7514286
#1	25.05380	4.786597	5.119944	5.015882	4.750269	5.154711	4.820086
#2	25.46510	4.723211	5.110340	4.997924	4.757331	5.200712	4.819941
#3	25.40496	4.740160	5.045096	4.934513	4.744264	5.225514	4.757551

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCV06 Acquired: 4/3/2025 17:48:06 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	5.016721	4.617818	4.816128
Stddev	.033815	.006881	.024174
%RSD	.6740377	.1490003	.5019429
#1	5.047779	4.611620	4.793378
#2	5.021686	4.625222	4.841511
#3	4.980699	4.616613	4.813494

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3062.781	72561.72	16171.39	1980.062	4669.261
Stddev	24.988	131.89	94.85	3.853	40.121
%RSD	.8158670	.1817595	.5865044	.1946038	.8592566
#1	3042.625	72714.01	16067.99	1976.581	4632.208
#2	3054.978	72485.16	16254.34	1984.202	4663.703
#3	3090.739	72486.00	16191.84	1979.402	4711.870

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCB06 Acquired: 4/3/2025 18:00:40 Type: Unk
Method: NON EPA-6010-200.7(v2883) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012102	.0001681	-.001179	-.001527	.0005169	-.000706
Stddev	.0025923	.0020693	.000846	.000721	.0004909	.001166
%RSD	214.2059	1231.213	71.71828	47.17734	94.97636	165.2050
#1	.0041505	.0000874	-.001558	-.002359	.0001144	-.001690
#2	.0002254	.0022765	-.001769	-.001118	.0010638	.000582
#3	-.000745	-.001860	-.000210	-.001105	.0003724	-.001010

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005708	.0001222	.0000103	.0033171	.0000723	.0000809
Stddev	.000241	.0000606	.0000183	.0052120	.0000806	.0001090
%RSD	4.215838	49.61603	176.5346	157.1255	111.5328	134.7240
#1	-.005534	.0001238	-.000001	-.002130	.0001504	.0001870
#2	-.005982	.0001820	.000031	.008257	-.000011	-.000031
#3	-.005607	.0000608	.000001	.003825	.000077	.000087

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001173	-.005623	-.001821	-.010343	-.000031	-.000224
Stddev	.0003759	.002386	.000253	.008074	.000262	.000191
%RSD	320.5396	42.43147	13.87674	78.06819	831.6702	85.20888
#1	-.000062	-.003483	-.002073	-.019253	-.000301	-.000004
#2	-.000136	-.005191	-.001822	-.003509	.000222	-.000343
#3	.000549	-.008196	-.001568	-.008266	-.000015	-.000324

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6239735	.0009195	-.000536	.5527732	-.002203	.0002158
Stddev	.0187237	.0006834	.000286	.0237448	.000404	.0001234
%RSD	3.000712	74.32405	53.38111	4.295581	18.35080	57.17298
#1	.6046577	.0011918	-.000739	.5292651	-.001883	.0001868
#2	.6252201	.0001419	-.000209	.5523066	-.002657	.0003512
#3	.6420427	.0014248	-.000661	.5767479	-.002070	.0001095

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCB06 Acquired: 4/3/2025 18:00:40 Type: Unk
Method: NON EPA-6010-200.7(v2883) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001685	.0016373	.0047291	.0012092	F .0356530	-.002718
Stddev	.000386	.0003296	.0025394	.0007038	.0046991	.000265
%RSD	22.91138	20.13057	53.69710	58.20329	13.18003	9.760885
#1	-.001241	.0020154	.0018687	.0020023	.0321587	-.002978
#2	-.001874	.0014108	.0067179	.0009665	.0409951	-.002448
#3	-.001941	.0014856	.0056006	.0006590	.0338051	-.002727

Elem	Sr4077
Units	ppm
Avg	.0001219
Stddev	.0000510
%RSD	41.87396
#1	.0001800
#2	.0001015
#3	.0000842

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3178.579	73810.08	15655.70	2052.382	5164.739
Stddev	7.078	164.62	20.21	11.329	5.373
%RSD	.2226885	.2230262	.1291195	.5519849	.1040325
#1	3185.499	73911.69	15653.87	2051.713	5169.743
#2	3178.886	73898.40	15676.76	2064.031	5159.060
#3	3171.353	73620.15	15636.45	2041.403	5165.413

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1689-01A Acquired: 4/3/2025 18:04:36 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	1.109023	1.482261	.7339262	3.320142	1.252978	3.016075
Stddev	.025131	.020033	.0181148	.072594	.035658	.115816
%RSD	2.266019	1.351494	2.468209	2.186476	2.845836	3.839969
#1	1.080054	1.503550	.7547376	3.236346	1.213238	2.952152
#2	1.122055	1.479451	.7253400	3.363951	1.263520	3.149766
#3	1.124962	1.463782	.7217010	3.360128	1.282176	2.946308

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1950502	.2215911	.1587331	294.7703	.4695632	.9407483
Stddev	.0007031	.0023726	.0028533	4.2880	.0057643	.0110903
%RSD	.3604588	1.070730	1.797546	1.454677	1.227583	1.178882
#1	.1951056	.2242810	.1620120	297.0863	.4649130	.9535502
#2	.1957239	.2206964	.1573732	289.8223	.4677640	.9340679
#3	.1943210	.2197958	.1568142	297.4022	.4760124	.9346267

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1519651	3.153275	.1333489	17.16092	2.837849	.1777899
Stddev	.0068712	.104046	.0010320	.32051	.046596	.0021210
%RSD	4.521584	3.299608	.7738931	1.867666	1.641947	1.192961
#1	.1594942	3.118682	.1338591	17.31857	2.891557	.1763883
#2	.1460329	3.070932	.1321612	16.79212	2.808208	.1767513
#3	.1503684	3.270211	.1340264	17.37207	2.813781	.1802299

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	.2154289	.6678906	468.2218	.4008492	3.881514
Stddev	-----	.0011821	.0125719	14.9431	.0046953	.013073
%RSD	-----	.5487002	1.882332	3.191456	1.171334	.3368060
#1	^ -----	.2140887	.6602255	451.8922	.4061085	3.892263
#2	^ -----	.2158753	.6610466	471.5594	.3970792	3.866961
#3	^ -----	.2163228	.6823997	481.2140	.3993600	3.885318

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1689-01A Acquired: 4/3/2025 18:04:36 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.5720939	.1768819	3.407597	F 12.07904	F 4985.747	.4501074
Stddev	.0047343	.0013810	.105631	.22582	143.914	.0177311
%RSD	.8275466	.7807446	3.099857	1.869542	2.886512	3.939300
#1	.5769788	.1764797	3.293948	11.82094	5151.558	.4438380
#2	.5717767	.1757466	3.502773	12.24023	4893.280	.4701215
#3	.5675261	.1784193	3.426069	12.17595	4912.404	.4363628

Elem	Sr4077
Units	ppm
Avg	.7113966
Stddev	.0062499
%RSD	.8785432
#1	.7061605
#2	.7183157
#3	.7097137

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	977.2288	23152.97	7919.606	628.2057	1045.829
Stddev	11.6757	548.32	99.834	17.4712	14.729
%RSD	1.194776	2.368236	1.260593	2.781129	1.408366
#1	987.0469	23414.49	7871.099	638.0199	1060.935
#2	980.3213	23521.56	8034.425	638.5631	1045.044
#3	964.3181	22522.85	7853.294	608.0341	1031.508

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1703-02 Acquired: 4/3/2025 18:08:49 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.000110	.0019461	.0563242	-.000074	.0336910	1.988049
Stddev	.000696	.0016133	.0025428	.000205	.0011776	.001929
%RSD	631.1324	82.89761	4.514547	278.9199	3.495177	.0970083
#1	.000170	.0022295	.0586938	-.000298	.0350502	1.989538
#2	-.000902	.0033989	.0566410	.000105	.0330455	1.988738
#3	.000401	.0002099	.0536379	-.000028	.0329773	1.985870

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1153579	.0004339	.0028835	18.20505	.0365793	.0035577
Stddev	.0008491	.0000394	.0001057	.00196	.0004838	.0002744
%RSD	.7360948	9.089034	3.666199	.0107821	1.322596	7.711901
#1	.1148037	.0004179	.0027876	18.20279	.0371251	.0032985
#2	.1149346	.0004788	.0028662	18.20594	.0364096	.0035295
#3	.1163355	.0004049	.0029969	18.20641	.0362032	.0038451

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2885421	12.06395	.1419991	4.460695	.0365785	.0018291
Stddev	.0012709	.04883	.0004891	.012010	.0006824	.0001682
%RSD	.4404382	.4047734	.3444220	.2692501	1.865699	9.195532
#1	.2875788	12.01502	.1418589	4.470654	.0365599	.0016356
#2	.2880651	12.11268	.1425429	4.447357	.0359056	.0019113
#3	.2899825	12.06415	.1415954	4.464074	.0372701	.0019404

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	695.2001	.0048667	1.158634	19.19375	.1650294	.0280224
Stddev	4.3673	.0009542	.003683	.07880	.0005755	.0003699
%RSD	.6282140	19.60598	.3179134	.4105451	.3487153	1.320003
#1	691.2593	.0050081	1.154710	19.11192	.1656743	.0284434
#2	699.8956	.0057422	1.162017	19.26912	.1648456	.0278739
#3	694.4453	.0038497	1.159176	19.20021	.1645683	.0277498

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1703-02 Acquired: 4/3/2025 18:08:49 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0200409	.0835764	F 23.96687	8.303331	F 214.0887	.0294886
Stddev	.0005380	.0010814	.10209	.026679	.7013	.0014854
%RSD	2.684581	1.293954	.4259779	.3213107	.3275890	5.037046
#1	.0194697	.0847349	23.85628	8.287818	213.9051	.0277823
#2	.0205379	.0825936	24.05753	8.288038	213.4975	.0304918
#3	.0201153	.0834006	23.98680	8.334138	214.8636	.0301919

Elem	Sr4077
Units	ppm
Avg	.1517489
Stddev	.0004712
%RSD	.3105213
#1	.1512481
#2	.1518151
#3	.1521835

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2865.970	65779.04	15930.84	1897.017	4090.963
Stddev	14.204	391.38	66.05	20.448	16.167
%RSD	.4955938	.5949902	.4146319	1.077888	.3951999
#1	2874.667	66165.21	15945.87	1919.162	4094.329
#2	2873.664	65789.23	15988.09	1893.039	4105.182
#3	2849.580	65382.66	15858.57	1878.852	4073.377

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1704-01 Acquired: 4/3/2025 18:13:08 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	.0005343	.0008474	-.000293	-.003543	.0005201	.0588013
Stddev	.0017318	.0013288	.000316	.000523	.0014375	.0033002
%RSD	324.1251	156.8106	108.0031	14.75838	276.3819	5.612423
#1	.0006443	-.000685	-.000546	-.003366	.0006027	.0553228
#2	-.001250	.001543	.000062	-.004131	.0019146	.0591929
#3	.002209	.001684	-.000395	-.003131	-.000957	.0618882

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1599521	.0003124	.0000388	118.1977	.0008648	-.000289
Stddev	.0007908	.0000070	.0000685	.4928	.0002843	.000107
%RSD	.4944133	2.247011	176.5319	.4168871	32.87953	36.94377
#1	.1606860	.0003195	.0000700	118.7666	.0005856	-.000239
#2	.1591146	.0003055	-.000040	117.9214	.0008548	-.000217
#3	.1600558	.0003121	.000086	117.9050	.0011540	-.000412

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005932	.0423216	.0035236	29.51828	.0087479	-.000283
Stddev	.0002118	.0008682	.0000715	.09574	.0000869	.000325
%RSD	35.70081	2.051360	2.028803	.3243546	.9930962	114.6820
#1	.0007466	.0415548	.0036018	29.60085	.0087045	-.000593
#2	.0003516	.0421458	.0035076	29.54067	.0088479	-.000311
#3	.0006816	.0432642	.0034615	29.41333	.0086913	.000055

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	290.2296	.0024376	.0282071	20.20120	.2543337	.0076107
Stddev	2.1841	.0009658	.0002534	.00643	.0011967	.0001326
%RSD	.7525486	39.61946	.8985146	.0318465	.4705107	1.742614
#1	290.6609	.0027855	.0281022	20.19378	.2533844	.0074877
#2	287.8620	.0013461	.0284961	20.20450	.2539388	.0075931
#3	292.1659	.0031812	.0280229	20.20530	.2556779	.0077512

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: Q1704-01 Acquired: 4/3/2025 18:13:08 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	-.005597	-.000740	F 11.10479	.0502464	F 37.06520	-.014470
Stddev	.001096	.000601	.01695	.0012197	.04689	.000494
%RSD	19.57862	81.21317	.1526752	2.427413	.1264959	3.413821
#1	-.005705	-.000977	11.12427	.0490410	37.10244	-.014342
#2	-.004451	-.000057	11.09337	.0502183	37.08063	-.015015
#3	-.006635	-.001187	11.09673	.0514799	37.01255	-.014052

Elem	Sr4077
Units	ppm
Avg	1.217139
Stddev	.009218
%RSD	.7573578
#1	1.215630
#2	1.208768
#3	1.227018

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2902.162	67573.97	16051.23	1892.296	4285.709
Stddev	6.624	100.41	14.94	4.514	10.927
%RSD	.2282376	.1485893	.0930594	.2385597	.2549578
#1	2907.467	67683.40	16067.71	1888.596	4293.423
#2	2894.738	67486.08	16047.40	1890.967	4273.205
#3	2904.283	67552.42	16038.58	1897.326	4290.498

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: PB167442BL Acquired: 4/3/2025 18:21:52 Type: Unk
Method: NON EPA-6010-200.7(v2884) 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	.0009612	-.000526	-.000675	-.002693	-.000609	-.000402
Stddev	.0010636	.001174	.000910	.002611	.001367	.003845
%RSD	110.6458	223.0198	134.7778	96.96629	224.5182	955.6813
#1	.0021625	-.000792	-.001479	-.000214	-.000293	-.003493
#2	.0001393	-.001544	-.000860	-.005418	-.002107	-.001617
#3	.0005820	.000757	.000313	-.002446	.000573	.003903

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002715	.0001378	-.000006	.0069354	-.000144	.0000347
Stddev	.000963	.0000376	.000042	.0029092	.000082	.0001670
%RSD	35.47459	27.27412	690.3084	41.94747	57.06140	481.7249
#1	-.003418	.0001379	.000032	.0102083	-.000157	.0002171
#2	-.001617	.0001753	.000000	.0059546	-.000220	-.000111
#3	-.003108	.0001001	-.000051	.0046433	-.000056	-.000003

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002736	-.006749	-.002074	-.014266	-.000028	-.000012
Stddev	.0004144	.002437	.000230	.015681	.000152	.000199
%RSD	151.4748	36.10516	11.10803	109.9198	532.8597	1688.512
#1	.0000762	-.004997	-.002174	.003171	.000142	.000217
#2	.0007498	-.009531	-.002237	-.027212	-.000149	-.000133
#3	-.000005	-.005718	-.001810	-.018757	-.000078	-.000120

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9891230	-.000243	-.000354	.6919893	-.003316	.0000512
Stddev	.0124328	.001990	.000289	.0220903	.000556	.0000572
%RSD	1.256953	820.0781	81.65197	3.192292	16.75152	111.6388
#1	.9747885	.000014	-.000688	.6778449	-.002739	-.000000
#2	.9956079	-.002348	-.000194	.6806786	-.003362	.000113
#3	.9969727	.001607	-.000181	.7174445	-.003847	.000041

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: PB167442BL Acquired: 4/3/2025 18:21:52 Type: Unk
Method: NON EPA-6010-200.7(v2884) 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	-.001249	.0010217	.0035975	.0019576	F .0562771	-.003500
Stddev	.000169	.0002934	.0069638	.0010549	.0061483	.000808
%RSD	13.56524	28.71728	193.5729	53.88759	10.92498	23.08972
#1	-.001088	.0010270	-.000760	.0030645	.0614476	-.002776
#2	-.001232	.0007256	-.000077	.0009639	.0494787	-.003351
#3	-.001426	.0013123	.011629	.0018444	.0579050	-.004372

Elem	Sr4077
Units	ppm
Avg	.0000801
Stddev	.0000070
%RSD	8.743932
#1	.0000757
#2	.0000882
#3	.0000765

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3152.326	71982.29	16096.22	2033.354	5062.225
Stddev	7.193	238.81	37.80	5.235	10.430
%RSD	.2281678	.3317687	.2348557	.2574631	.2060355
#1	3144.204	72152.09	16108.28	2038.166	5050.235
#2	3157.892	71709.22	16053.86	2027.779	5067.238
#3	3154.881	72085.56	16126.52	2034.117	5069.202

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: PB167442BS Acquired: 4/3/2025 18:25:49 Type: Unk
Method: NON EPA-6010-200.7(v2885) 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	.7897234	2.083532	.9561715	1.993430	.8048715	1.841914
Stddev	.0035612	.004227	.0021006	.008330	.0010009	.006449
%RSD	.4509439	.2028524	.2196861	.4178700	.1243512	.3501266
#1	.7893748	2.078666	.9543633	2.000370	.8051868	1.841131
#2	.7934461	2.085646	.9584757	1.995729	.8037510	1.848719
#3	.7863493	2.086285	.9556756	1.984192	.8056768	1.835892

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1790075	.1890788	.1943033	.9328689	.4116671	.1972758
Stddev	.0009492	.0011534	.0001399	.0017734	.0008207	.0006251
%RSD	.5302415	.6100163	.0719890	.1901049	.1993487	.3168852
#1	.1787021	.1890435	.1943851	.9331593	.4109502	.1974760
#2	.1800718	.1902494	.1943831	.9309682	.4125623	.1977762
#3	.1782486	.1879434	.1941418	.9344792	.4114889	.1965750

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3162079	2.965648	.1823481	1.828444	.4984551	.0758131
Stddev	.0019390	.025612	.0007106	.008574	.0017965	.0000775
%RSD	.6131917	.8636371	.3897025	.4689375	.3604047	.1021782
#1	.3175592	2.937204	.1823112	1.818544	.4997353	.0758178
#2	.3170782	2.972858	.1830764	1.833472	.4992285	.0758882
#3	.3139862	2.986883	.1816566	1.833317	.4964015	.0757335

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 6.954590	.2836122	.2057153	11.23511	.2770105	.4044064
Stddev	.024336	.0020470	.0009946	.08476	.0028042	.0010343
%RSD	.3499257	.7217439	.4834876	.7544621	1.012325	.2557477
#1	6.974517	.2816963	.2045897	11.16512	.2771755	.4055658
#2	6.927468	.2857689	.2060808	11.21086	.2797286	.4040749
#3	6.961785	.2833715	.2064755	11.32936	.2741274	.4035786

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: PB167442BS Acquired: 4/3/2025 18:25:49 Type: Unk
Method: NON EPA-6010-200.7(v2885) 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	.6839204	.1836860	.7973192	5.643922	F .0368824	.1826218
Stddev	.0023930	.0005564	.0113867	.014223	.0012213	.0012155
%RSD	.3498944	.3029071	1.428118	.2519970	3.311272	.6655760
#1	.6834277	.1835275	.7844000	5.654741	.0382562	.1834930
#2	.6865215	.1843044	.8058948	5.649214	.0359198	.1812332
#3	.6818122	.1832260	.8016627	5.627813	.0364710	.1831391

Elem	Sr4077
Units	ppm
Avg	.1829194
Stddev	.0006031
%RSD	.3297230
#1	.1834436
#2	.1830544
#3	.1822602

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3076.133	71341.26	16321.42	2006.454	4863.897
Stddev	7.378	144.35	97.99	6.929	12.873
%RSD	.2398477	.2023355	.6003639	.3453586	.2646671
#1	3070.831	71492.11	16333.84	2009.385	4860.240
#2	3073.009	71204.44	16217.81	2011.436	4853.248
#3	3084.559	71327.24	16412.60	1998.541	4878.203

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCV07 Acquired: 4/3/2025 18:29:24 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	5.020559	5.305520	4.981135	5.010017	5.053382	9.838640	9.622148
Stddev	.009900	.009606	.006152	.012670	.010459	.029410	.128599
%RSD	.1971925	.1810478	.1235063	.2528958	.2069633	.2989246	1.336494
#1	5.009438	5.295514	4.987120	5.001023	5.054045	9.804683	9.642115
#2	5.028411	5.306379	4.981456	5.024507	5.063494	9.856020	9.484733
#3	5.023828	5.314668	4.974828	5.004522	5.042608	9.855216	9.739596

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2528131	2.494611	24.21230	1.045481	2.504598	1.282541	4.964459
Stddev	.0004465	.002603	.03054	.002890	.001816	.001168	.013852
%RSD	.1766323	.1043470	.1261513	.2764031	.0724990	.0910968	.2790223
#1	.2532201	2.497510	24.17723	1.042381	2.505957	1.283097	4.948992
#2	.2528838	2.492474	24.23304	1.045962	2.502536	1.283328	4.968666
#3	.2523354	2.493850	24.22665	1.048100	2.505301	1.281199	4.975720

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.359729	24.67520	2.515309	1.289976	26.62897	2.469220	2.586418
Stddev	.001644	.05629	.001001	.001260	.13732	.007881	.001365
%RSD	.0696851	.2281205	.0397779	.0977051	.5156728	.3191517	.0527637
#1	2.358127	24.62665	2.515345	1.289179	26.48012	2.461576	2.585319
#2	2.359648	24.66206	2.516291	1.289320	26.65605	2.468765	2.585989
#3	2.361413	24.73690	2.514291	1.291429	26.75073	2.477318	2.587946

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.31647	4.957703	5.121537	5.026340	4.799703	5.185612	4.863375
Stddev	.09330	.011390	.001070	.003574	.002851	.024217	.007596
%RSD	.3685521	.2297458	.0208873	.0711124	.0593992	.4670097	.1561933
#1	25.22186	4.970650	5.122032	5.030030	4.796519	5.159306	4.869298
#2	25.31913	4.953237	5.120309	5.022894	4.802020	5.190552	4.854811
#3	25.40841	4.949223	5.122270	5.026096	4.800571	5.206978	4.866017

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCV07 Acquired: 4/3/2025 18:29:24 Type: Unk
Method: NON EPA-6010-200.7(v2880) 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	4.990506	4.640847	4.824296
Stddev	.013583	.002069	.019316
%RSD	.2721779	.0445895	.4003801
#1	4.985348	4.643101	4.843778
#2	5.005913	4.639034	4.823959
#3	4.980258	4.640405	4.805151

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3050.007	68934.72	15341.92	1928.805	4645.425
Stddev	2.843	130.57	26.27	4.380	3.814
%RSD	.0932270	.1894060	.1712446	.2271024	.0821078
#1	3052.615	69059.88	15311.75	1933.462	4648.196
#2	3046.976	68944.93	15359.80	1928.185	4641.075
#3	3050.429	68799.35	15354.21	1924.768	4647.004

Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCB07 Acquired: 4/3/2025 18:33:11 Type: Unk
Method: NON EPA-6010-200.7(v2886) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB07 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005314	.0002398	.0008700	.0002275	-.000258	-.000787
Stddev	.0020445	.0013837	.0003844	.0002427	.001166	.000771
%RSD	384.7221	577.1275	44.18725	106.6909	452.4690	98.03385
#1	.0017107	.0014210	.0010438	.0003843	.000700	-.001352
#2	-.001829	.0005810	.0004293	-.000052	.000084	-.001100
#3	.001713	-.001283	.0011368	.000350	-.001557	.000092

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001815	.0001439	.0002316	.0059197	-.000135	.0004098
Stddev	.000485	.0000247	.0000549	.0051781	.000334	.0000481
%RSD	26.72630	17.17621	23.71086	87.47261	247.3761	11.73003
#1	-.001309	.0001722	.0002403	.0092862	-.000234	.0003561
#2	-.002275	.0001334	.0001729	-.000043	.000237	.0004487
#3	-.001860	.0001262	.0002817	.008516	-.000409	.0004247

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000015	-.005735	-.001540	-.014098	.0000246	.0001833
Stddev	.000118	.002999	.000075	.006743	.0001403	.0001851
%RSD	803.6635	52.29940	4.852505	47.82564	570.9227	101.0027
#1	.000113	-.002314	-.001456	-.006912	.0000081	.0001532
#2	-.000038	-.006976	-.001563	-.015098	-.000107	.0000151
#3	-.000119	-.007914	-.001600	-.020285	.000172	.0003816

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4408841	-.000919	.0000530	.5908405	.0016062	.0006633
Stddev	.0212188	.000545	.0001970	.0274623	.0003429	.0000493
%RSD	4.812780	59.31653	371.6521	4.648004	21.34589	7.432425
#1	.4204967	-.000290	.0002003	.5632383	.0015944	.0006065
#2	.4393092	-.001229	.0001296	.5911226	.0019549	.0006953
#3	.4628465	-.001238	-.000171	.6181607	.0012695	.0006881

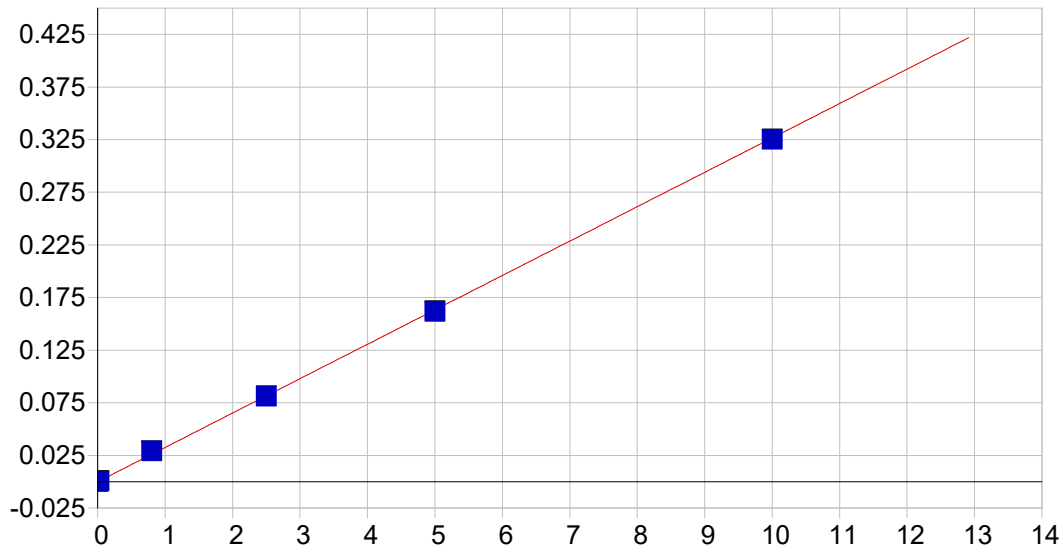
Reviewed By:mohan
On:4/4/2025 5:07:26 PM
Inst Id :P4
LB :LB135289

Sample Name: CCB07 Acquired: 4/3/2025 18:33:11 Type: Unk
Method: NON EPA-6010-200.7(v2886) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB07 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000933	.0021727	.0128759	.0019134	F .0357493	-.003891
Stddev	.000134	.0005806	.0024741	.0017496	.0027181	.000408
%RSD	14.37959	26.72134	19.21479	91.43966	7.603110	10.49568
#1	-.000778	.0015355	.0100369	-.000097	.0378807	-.003959
#2	-.001019	.0023110	.0145716	.002748	.0366788	-.003453
#3	-.001002	.0026716	.0140192	.003089	.0326885	-.004262

Elem	Sr4077
Units	ppm
Avg	.0008130
Stddev	.0000727
%RSD	8.944216
#1	.0008797
#2	.0008238
#3	.0007355

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3150.037	72167.75	15797.77	2008.100	5116.823
Stddev	7.099	287.72	45.80	7.043	7.345
%RSD	.2253616	.3986884	.2899159	.3507433	.1435403
#1	3147.451	72332.32	15787.61	2009.353	5115.660
#2	3144.594	72335.40	15757.90	2014.432	5110.129
#3	3158.067	71835.51	15847.79	2000.514	5124.680

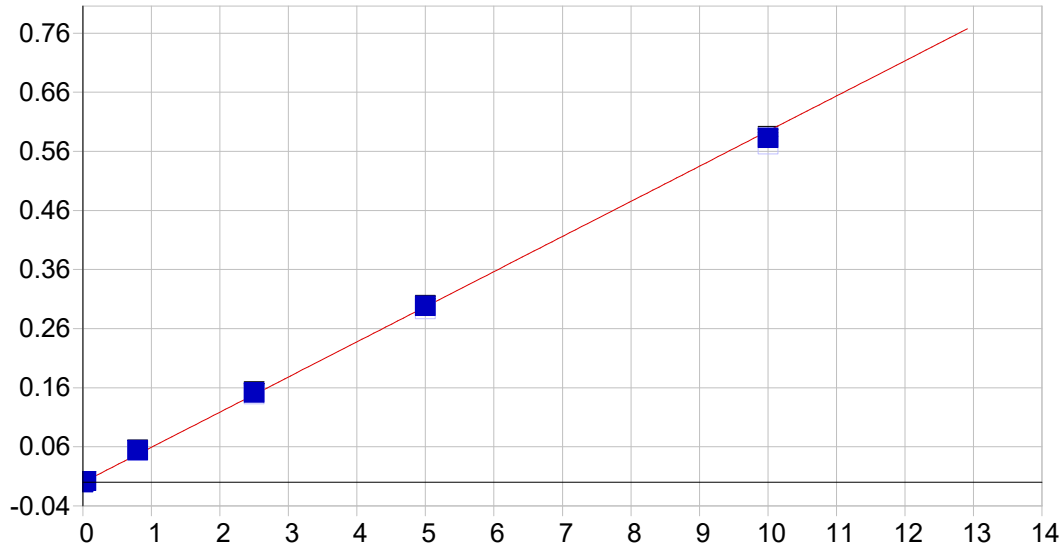


As 189.042 {479}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000166	Re-Slope:	1.000000
A1 (Gain):	0.032683	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999631	Status:	OK.
Std Error of Est:	0.000021		
Predicted MDL:	0.004613		
Predicted MQL:	0.015377		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00017	.000	1
S1	.02000	.02222	.002	11.1	.00056	.000	1
S3	2.5000	2.4909	-.009	-.362	.08116	.000	1
S4	5.0000	4.9510	-.049	-.980	.16147	.001	1
S5	10.000	9.9557	-.044	-.443	.32487	.001	1
S2	.80000	.90017	.100	12.5	.02923	.000	1

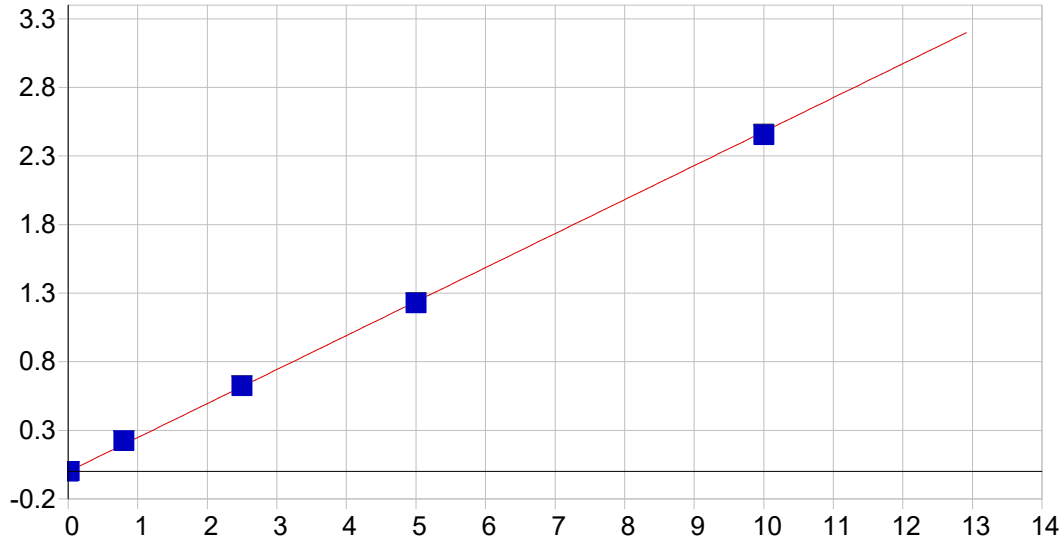


Tl 190.856 {477}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000199	Re-Slope:	1.000000
A1 (Gain):	0.059445	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999400	Status:	OK.
Std Error of Est:	0.000067		
Predicted MDL:	0.002389		
Predicted MQL:	0.007963		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00020	.000	1
S1	.04000	.04199	.002	4.97	.00214	.000	1
S3	2.5000	2.5586	.059	2.34	.14916	.001	1
S4	5.0000	5.0229	.023	.457	.29291	.001	1
S5	10.000	9.8042	-.196	-1.96	.57167	.003	1
S2	.80000	.91244	.112	14.1	.05317	.001	1

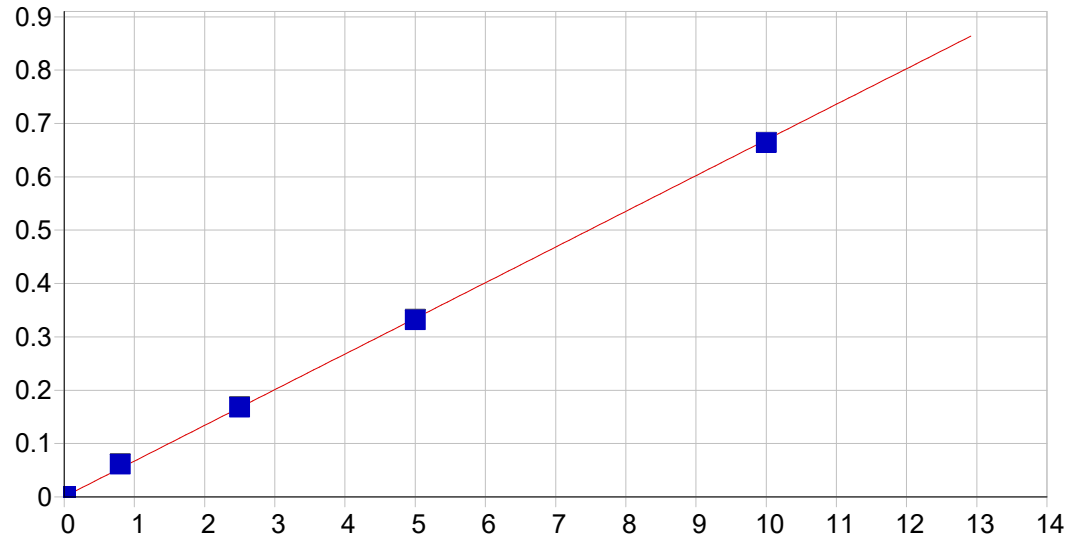


Pb 220.353 {453}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000274	Re-Slope:	1.000000
A1 (Gain):	0.247776	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999577	Status:	OK.
Std Error of Est:	0.000131		
Predicted MDL:	0.001238		
Predicted MQL:	0.004127		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00027	.000	1
S1	.01200	.01135	-.001	-5.39	.00248	.000	1
S3	2.5000	2.5217	.022	.867	.62386	.002	1
S4	5.0000	4.9609	-.039	-.782	1.2276	.003	1
S5	10.000	9.9116	-.088	-.884	2.4529	.004	1
S2	.80000	.90645	.106	13.3	.22410	.001	1

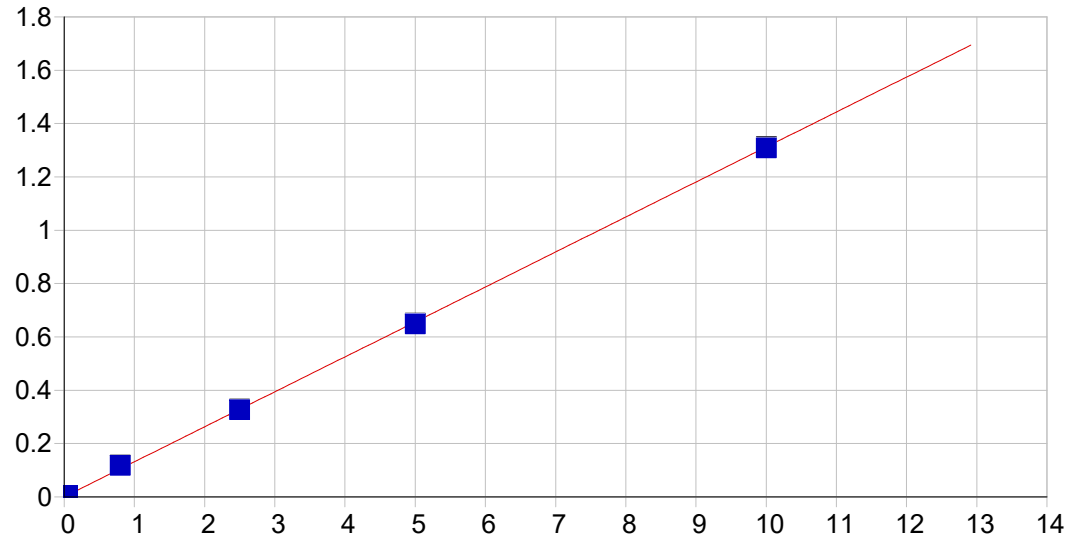


Se 196.090 {472}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000326	Re-Slope:	1.000000
A1 (Gain):	0.066870	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999545	Status:	OK.
Std Error of Est:	0.000047		
Predicted MDL:	0.003217		
Predicted MQL:	0.010722		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00033	.000	1
S1	.02000	.02082	.001	4.08	.00172	.000	1
S3	2.5000	2.5033	.003	.134	.16768	.001	1
S4	5.0000	4.9550	-.045	-.900	.33158	.001	1
S5	10.000	9.9287	-.071	-.713	.66409	.001	1
S2	.80000	.91211	.112	14.0	.06130	.000	1

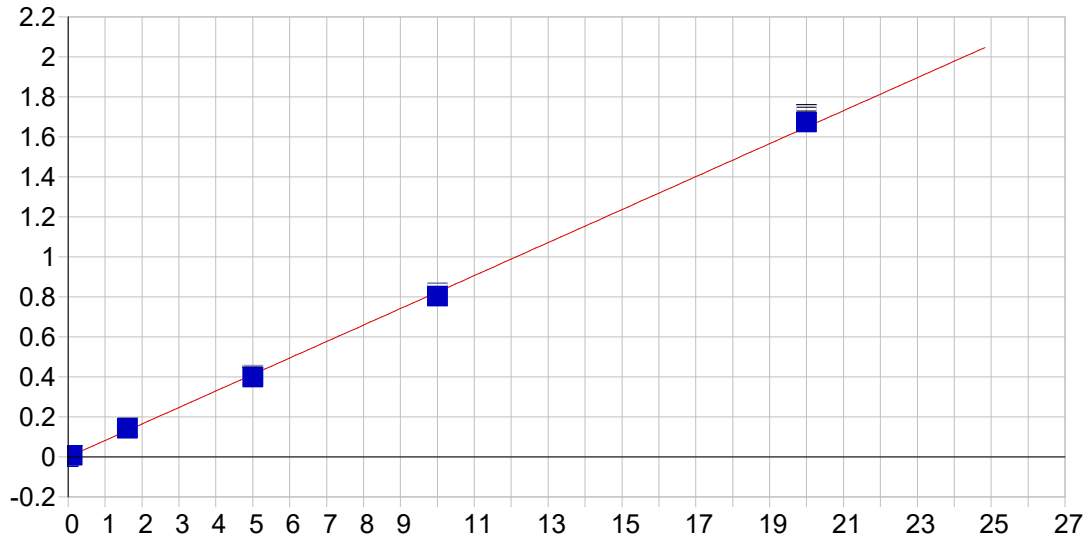


Sb 206.833 {463}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000487	Re-Slope:	1.000000
A1 (Gain):	0.131147	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999662	Status:	OK.
Std Error of Est:	0.000127		
Predicted MDL:	0.001915		
Predicted MQL:	0.006385		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00049	.000	1
S1	.05000	.05062	.001	1.24	.00714	.000	1
S3	2.5000	2.4883	-.012	-.469	.32771	.001	1
S4	5.0000	4.9413	-.059	-1.17	.65030	.001	1
S5	10.000	9.9733	-.027	-.267	1.3120	.002	1
S2	.80000	.89649	.096	12.1	.11834	.000	1

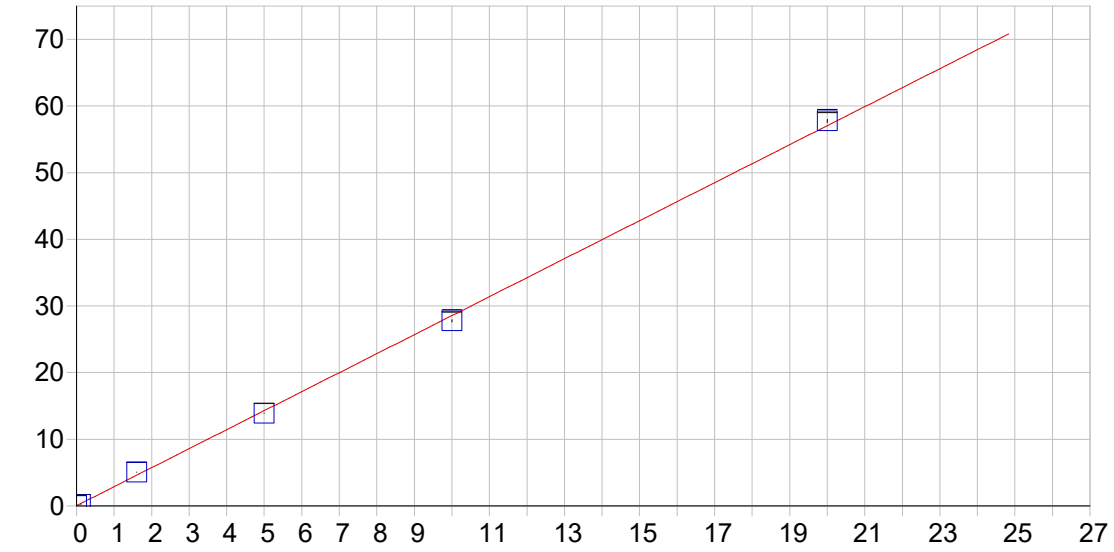


Al 396.152 { 85}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000232	Re-Slope:	1.000000
A1 (Gain):	0.082446	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999647	Status:	OK.
Std Error of Est:	0.000166		
Predicted MDL:	0.007164		
Predicted MQL:	0.023880		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00023	.000	1
S1	.10000	.10101	.001	1.01	.00874	.000	1
S3	5.0000	4.8392	-.161	-3.22	.40674	.001	1
S4	10.000	9.7354	-.265	-2.65	.81841	.001	1
S5	20.000	20.296	.296	1.48	1.7050	.006	1
S2	1.6000	1.7288	.129	8.05	.14486	.001	1

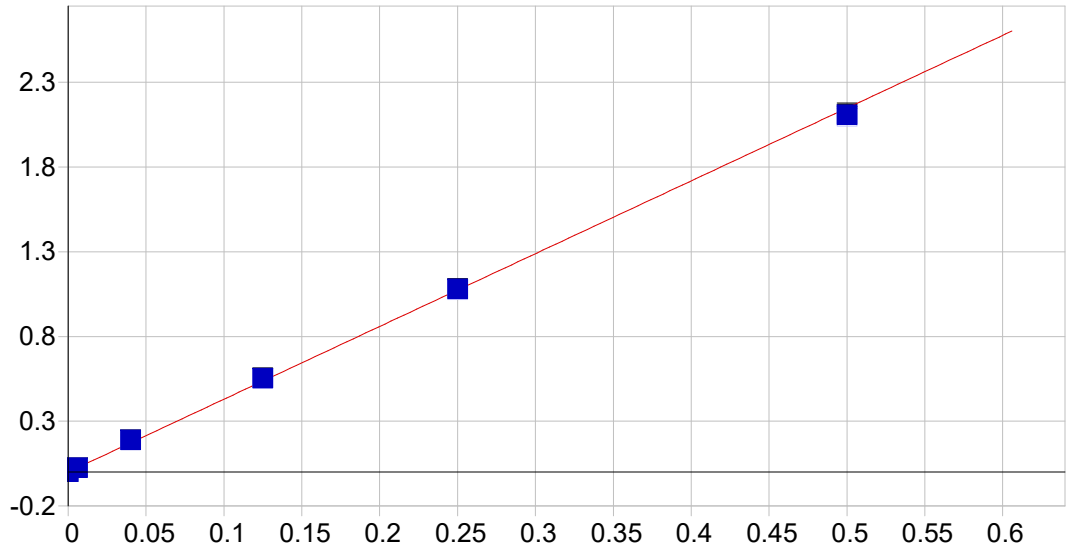


Ba 493.409 { 68}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.039106	Re-Slope:	1.000000
A1 (Gain):	2.850702	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999575	Status:	OK.
Std Error of Est:	0.006162		
Predicted MDL:	0.000762		
Predicted MQL:	0.002540		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.03911	.001	1
S1	.10000	.09391	-.006	-6.09	.30681	.003	1
S3	5.0000	4.8614	-.139	-2.77	13.898	.014	1
S4	10.000	9.7282	-.272	-2.72	27.771	.159	1
S5	20.000	20.255	.255	1.27	57.779	.234	1
S2	1.6000	1.7617	.162	10.1	5.0612	.017	1

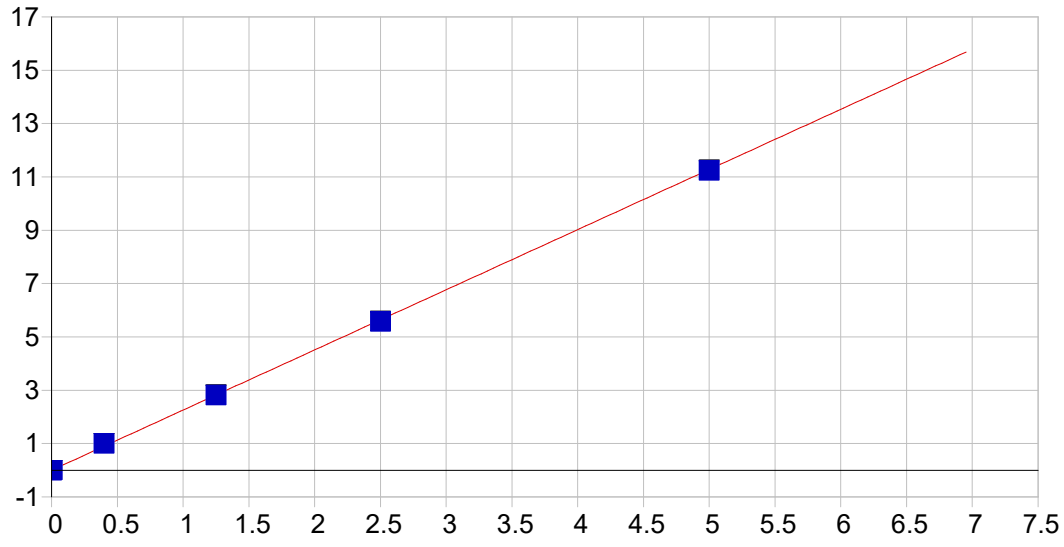


Be 234.861 {144}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000090	Re-Slope:	1.000000
A1 (Gain):	4.295163	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999620	Status:	OK.
Std Error of Est:	0.000339		
Predicted MDL:	0.000059		
Predicted MQL:	0.000196		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00009	.000	1
S1	.00600	.00587	-.000	-2.21	.02510	.000	1
S3	.12500	.12894	.004	3.15	.55149	.002	1
S4	.25000	.25135	.001	.540	1.0749	.002	1
S5	.50000	.49088	-.009	-1.82	2.0989	.010	1
S2	.04000	.04397	.004	9.92	.18817	.001	1

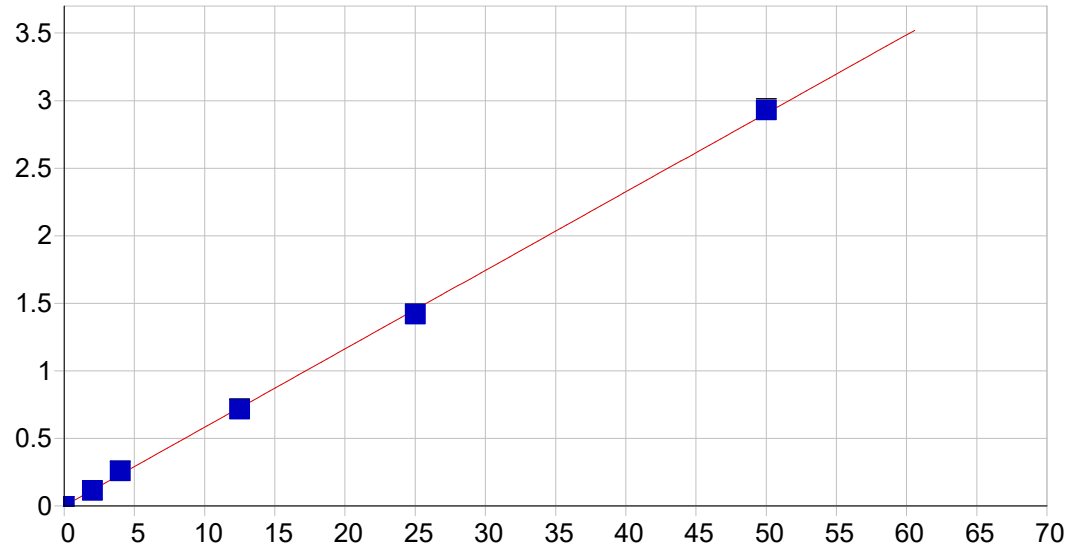


Cd 226.502 {449}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000026	Re-Slope:	1.000000
A1 (Gain):	2.255839	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999698	Status:	OK.
Std Error of Est:	0.000503		
Predicted MDL:	0.000103		
Predicted MQL:	0.000343		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00003	.000	1
S1	.00600	.00590	-.000	-1.72	.01334	.000	1
S3	1.2500	1.2488	-.001	-.099	2.8193	.007	1
S4	2.5000	2.4743	-.026	-1.03	5.5863	.002	1
S5	5.0000	4.9814	-.019	-.372	11.246	.013	1
S2	.40000	.44562	.046	11.4	1.0060	.002	1

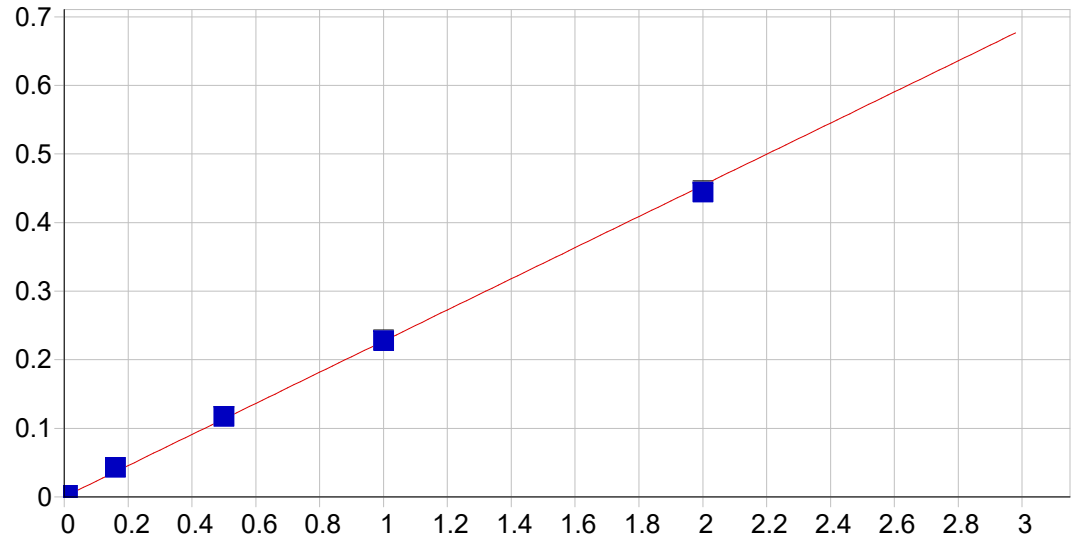


Ca 373.690 { 90}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000672	Re-Slope:	1.000000
A1 (Gain):	0.058098	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999637	Status:	OK.
Std Error of Est:	0.000828		
Predicted MDL:	0.009541		
Predicted MQL:	0.031804		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00010	-.000	.000	.00067	.000	1
S2	4.0000	4.4243	.424	10.6	.25772	.001	1
S3	12.500	12.309	-.191	-1.53	.71580	.001	1
S4	25.000	24.390	-.610	-2.44	1.4177	.004	1
S5	50.000	50.429	.429	.859	2.9305	.008	1
S1	2.0000	1.9470	-.053	-2.65	.11379	.000	1

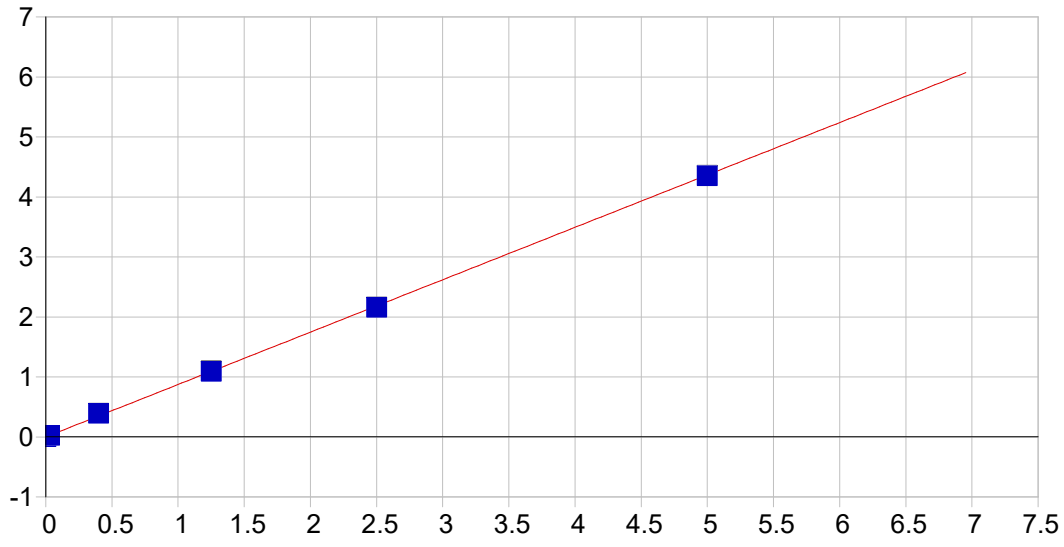


Cr 267.716 {126}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000148	Re-Slope:	1.000000
A1 (Gain):	0.227074	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999164	Status:	OK.
Std Error of Est:	0.000069		
Predicted MDL:	0.000401		
Predicted MQL:	0.001336		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00015	.000	1
S1	.01000	.00972	-.000	-2.78	.00236	.000	1
S3	.50000	.51415	.014	2.83	.11693	.000	1
S4	1.0000	1.0022	.002	.221	.22779	.001	1
S5	2.0000	1.9563	-.044	-2.19	.44450	.002	1
S2	.16000	.18765	.028	17.3	.04277	.000	1

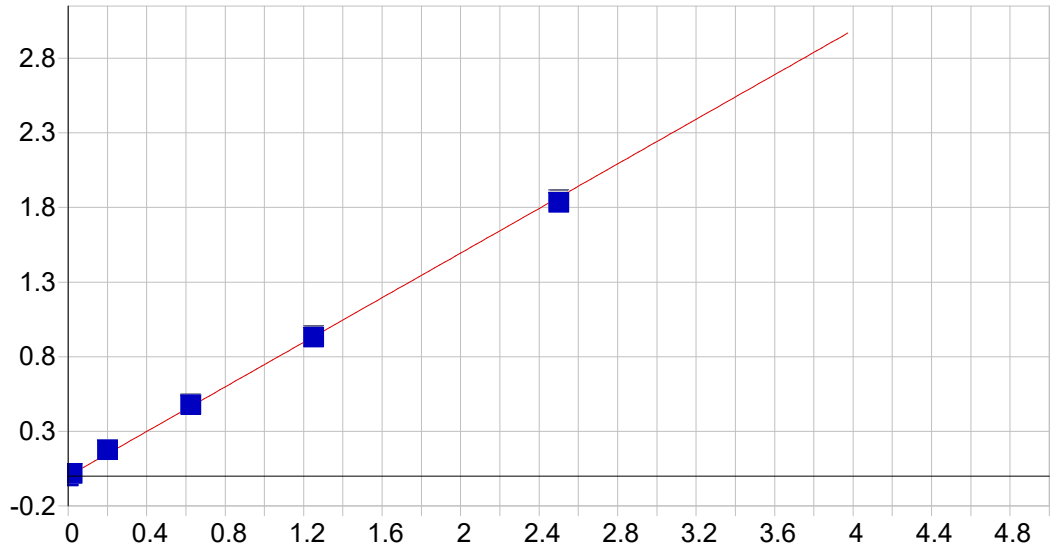


Co 228.616 {448}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000031	Re-Slope:	1.000000
A1 (Gain):	0.873206	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999661	Status:	OK.
Std Error of Est:	0.000462		
Predicted MDL:	0.000235		
Predicted MQL:	0.000784		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00003	.000	1
S1	.03000	.02962	-.000	-1.27	.02572	.000	1
S3	1.2500	1.2496	-.000	-.036	1.0929	.003	1
S4	2.5000	2.4710	-.029	-1.16	2.1613	.002	1
S5	5.0000	4.9816	-.018	-.368	4.3573	.004	1
S2	.40000	.44828	.048	12.1	.39200	.001	1

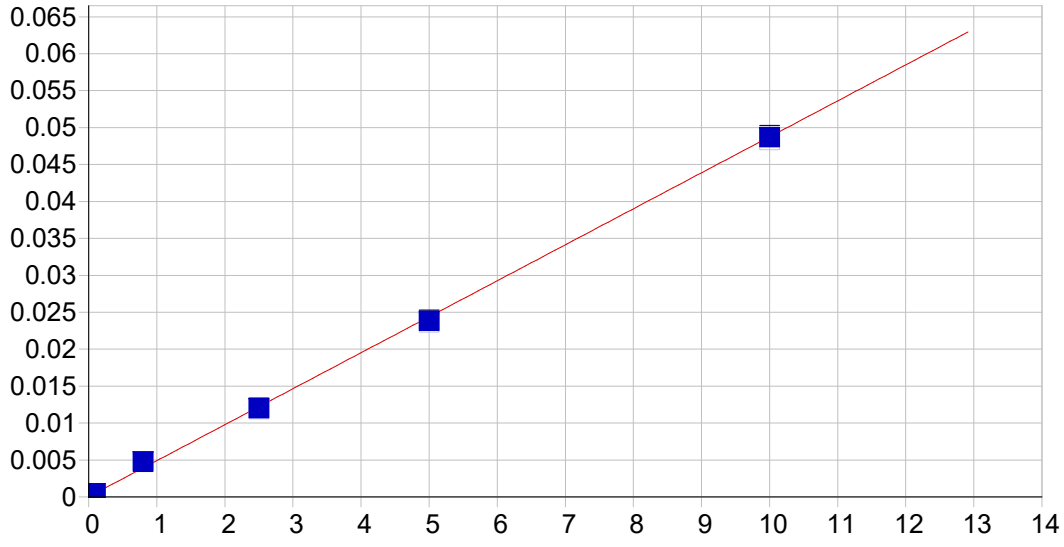


Cu 224.700 {450}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000193	Re-Slope:	1.000000
A1 (Gain):	0.747320	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999194	Status:	OK.
Std Error of Est:	0.000356		
Predicted MDL:	0.000470		
Predicted MQL:	0.001566		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00020	.000	1
S1	.02000	.02222	.002	11.1	.01660	.000	1
S3	.62500	.63947	.014	2.31	.48214	.001	1
S4	1.2500	1.2456	-.004	-.351	.93958	.001	1
S5	2.5000	2.4529	-.047	-1.89	1.8507	.003	1
S2	.20000	.23484	.035	17.4	.17673	.000	1

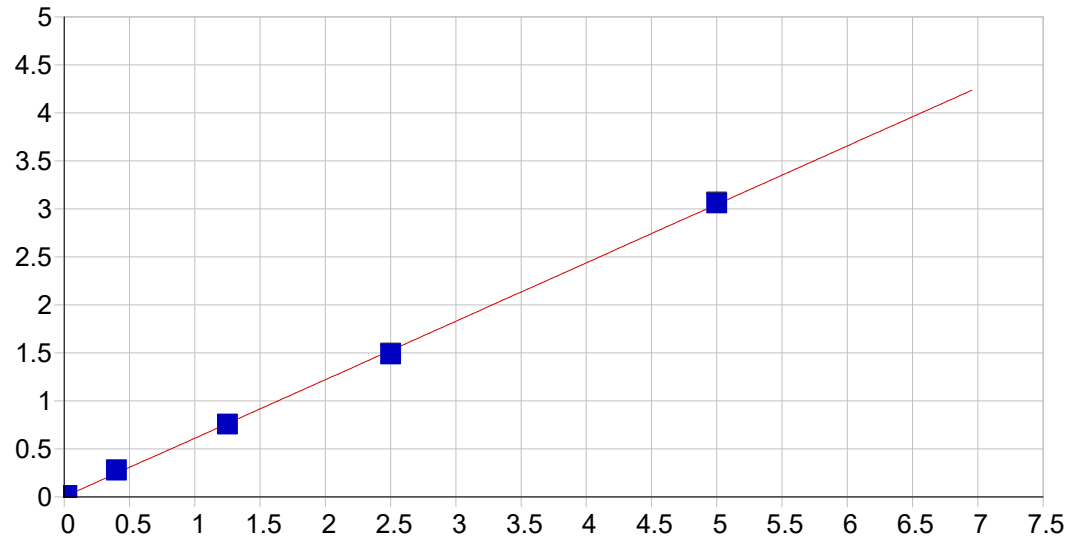


Fe 240.488 {140}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000030	Re-Slope:	1.000000
A1 (Gain):	0.004872	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998903	Status:	OK.
Std Error of Est:	0.000012		
Predicted MDL:	0.005812		
Predicted MQL:	0.019373		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00003	.000	1
S1	.10000	.09678	-.003	-3.22	.00050	.000	1
S3	2.5000	2.4550	-.045	-1.80	.01189	.000	1
S4	5.0000	4.8861	-.114	-2.28	.02363	.000	1
S5	10.000	9.9919	-.008	-.081	.04829	.000	1
S2	.80000	.97023	.170	21.3	.00472	.000	1

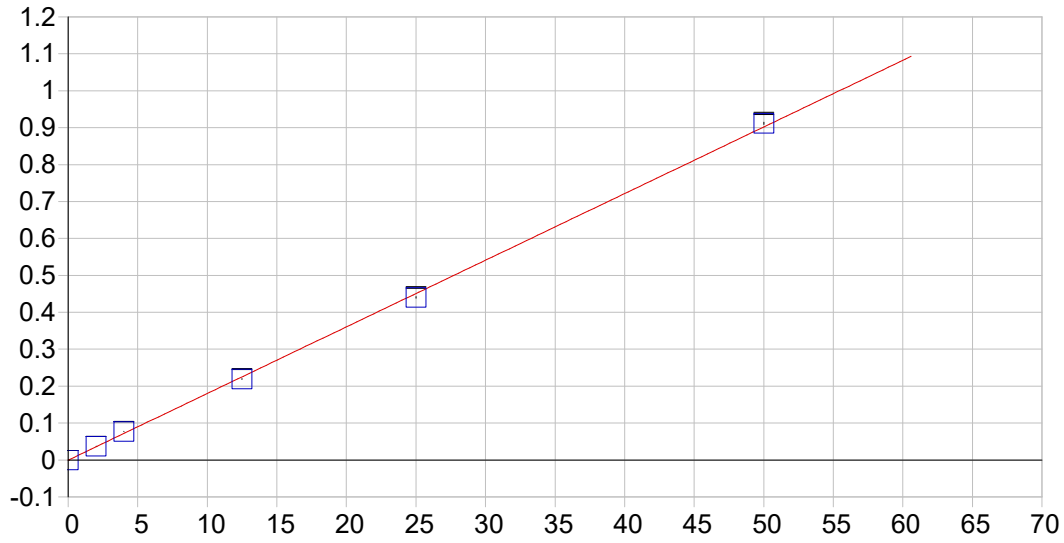


Mn 257.610 {131}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002732	Re-Slope:	1.000000
A1 (Gain):	0.608887	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999545	Status:	OK.
Std Error of Est:	0.000305		
Predicted MDL:	0.000356		
Predicted MQL:	0.001187		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00273	.000	1
S1	.02000	.02053	.001	2.65	.01524	.000	1
S3	1.2500	1.2379	-.012	-.965	.75665	.002	1
S4	2.5000	2.4381	-.062	-2.48	1.4876	.009	1
S5	5.0000	5.0221	.022	.442	3.0612	.009	1
S2	.40000	.45133	.051	12.8	.27759	.001	1

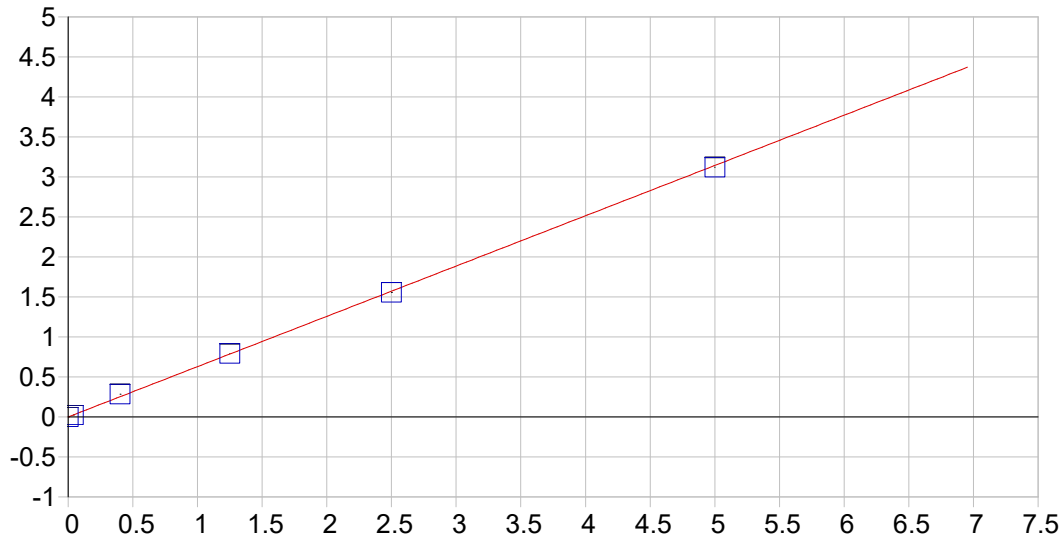


Mg 279.079 {121}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000358	Re-Slope:	1.000000
A1 (Gain):	0.018046	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999716	Status:	OK.
Std Error of Est:	0.000227		
Predicted MDL:	0.013696		
Predicted MQL:	0.045655		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00015	-.000	.000	-.00036	.000	1
S2	4.0000	4.2981	.298	7.45	.07720	.000	1
S3	12.500	12.173	-.327	-2.61	.21931	.001	1
S4	25.000	24.416	-.584	-2.34	.44024	.002	1
S5	50.000	50.538	.538	1.08	.91162	.003	1
S1	2.0000	2.0753	.075	3.77	.03709	.000	1

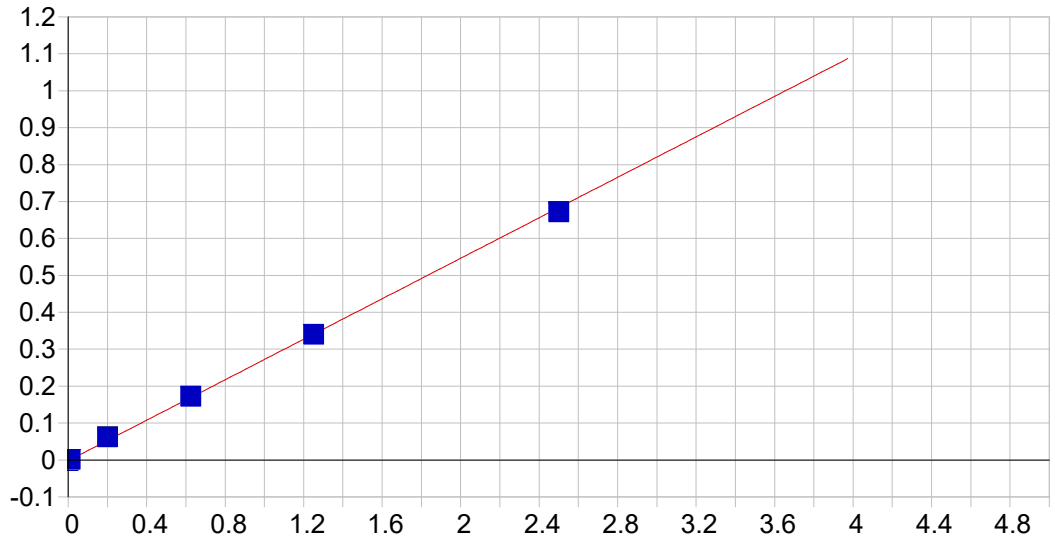


Ni 231.604 {446}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000496	Re-Slope:	1.000000
A1 (Gain):	0.628641	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999585	Status:	OK.
Std Error of Est:	0.000425		
Predicted MDL:	0.000365		
Predicted MQL:	0.001216		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00050	.000	1
S1	.04000	.03995	-.000	-.132	.02462	.000	1
S3	1.2500	1.2595	.009	.759	.79127	.002	1
S4	2.5000	2.4743	-.026	-1.03	1.5550	.001	1
S5	5.0000	4.9632	-.037	-.735	3.1196	.005	1
S2	.40000	.45300	.053	13.3	.28428	.001	1

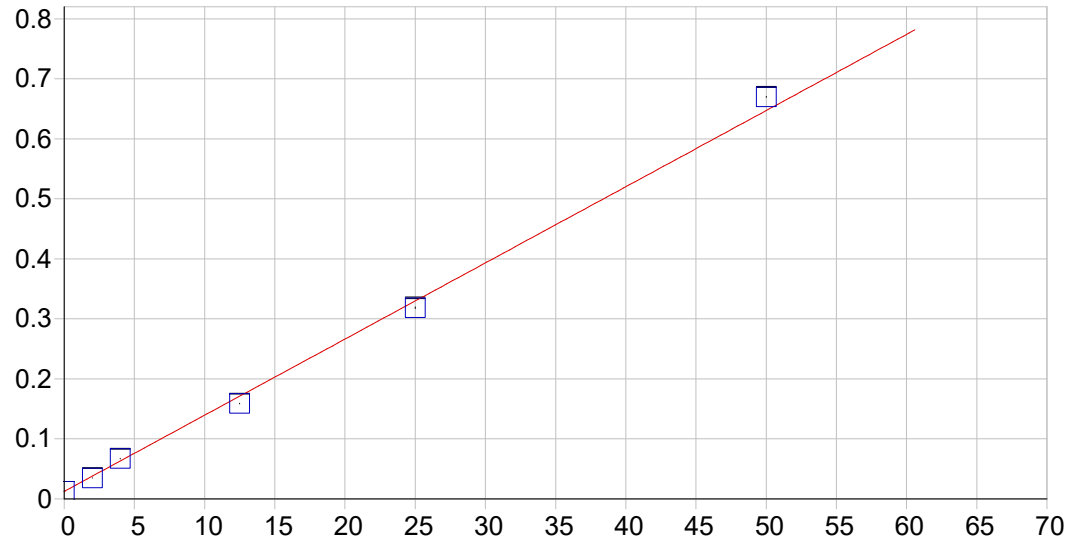


Ag 328.068 {103}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001918	Re-Slope:	1.000000
A1 (Gain):	0.274091	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999285	Status:	OK.
Std Error of Est:	0.000086		
Predicted MDL:	0.000434		
Predicted MQL:	0.001448		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00192	.000	1
S1	.01000	.01057	.001	5.72	.00096	.000	1
S3	.62500	.63553	.011	1.68	.17160	.000	1
S4	1.2500	1.2470	-.003	-.238	.33852	.001	1
S5	2.5000	2.4584	-.042	-1.66	.66919	.001	1
S2	.20000	.23346	.033	16.7	.06185	.000	1

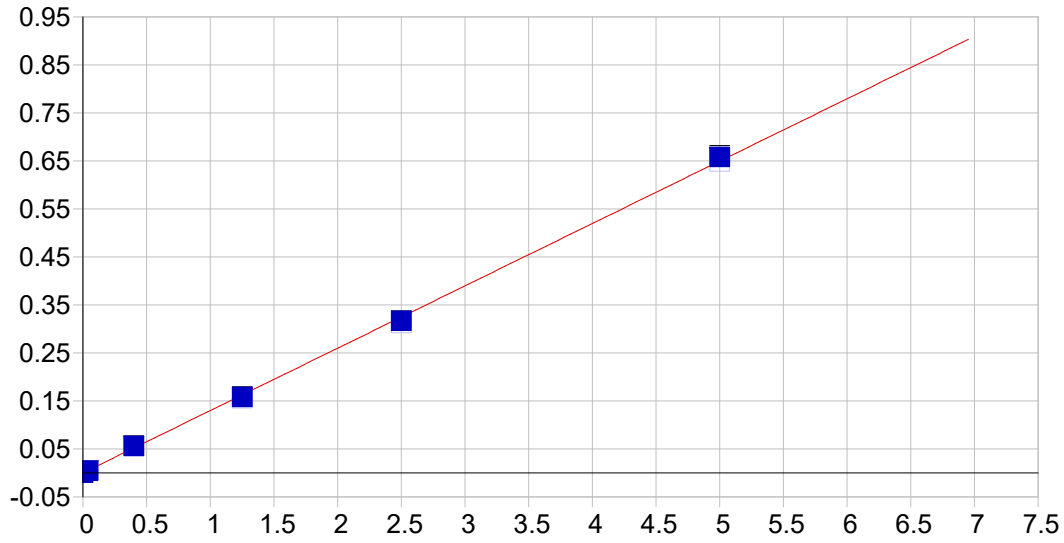


Na 589.592 { 57}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.012580	Re-Slope:	1.000000
A1 (Gain):	0.012688	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998811	Status:	OK.
Std Error of Est:	0.000328		
Predicted MDL:	0.016066		
Predicted MQL:	0.053554		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00025	.000	.000	.01258	.000	1
S2	4.0000	4.2992	.299	7.48	.06713	.000	1
S3	12.500	11.534	-.966	-7.73	.15892	.001	1
S4	25.000	24.108	-.892	-3.57	.31847	.001	1
S5	50.000	51.800	1.80	3.60	.66983	.001	1
S1	2.0000	1.7593	-.241	-12.0	.03490	.000	1

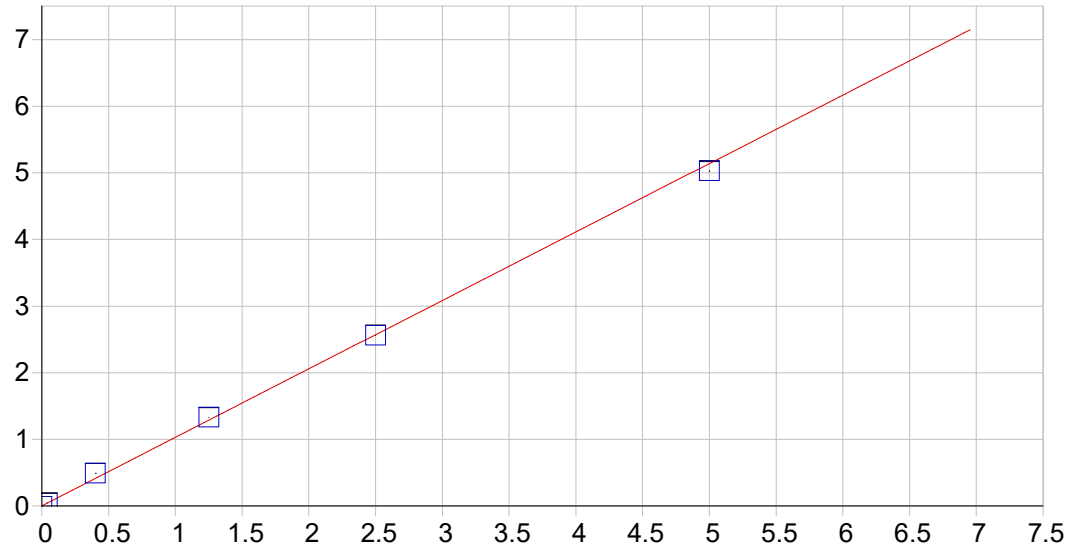


V 292.402 {115}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000040	Re-Slope:	1.000000
A1 (Gain):	0.129911	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999658	Status:	OK.
Std Error of Est:	0.000079		
Predicted MDL:	0.001926		
Predicted MQL:	0.006421		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00004	.000	1
S1	.04000	.03863	-.001	-3.44	.00478	.000	1
S3	1.2500	1.2159	-.034	-2.72	.15556	.000	1
S4	2.5000	2.4367	-.063	-2.53	.31178	.000	1
S5	5.0000	5.0661	.066	1.32	.64863	.003	1
S2	.40000	.43259	.033	8.15	.05540	.000	1

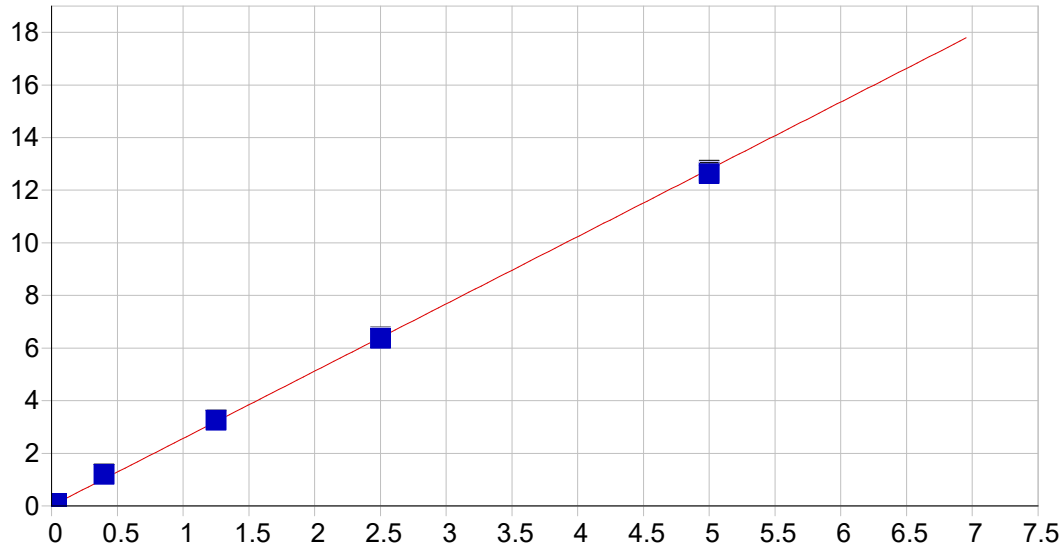


Zn 206.200 {464}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002373	Re-Slope:	1.000000
A1 (Gain):	1.027630	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999048	Status:	OK.
Std Error of Est:	0.001053		
Predicted MDL:	0.000223		
Predicted MQL:	0.000744		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00236	.000	1
S1	.04000	.04187	.002	4.68	.04540	.000	1
S3	1.2500	1.2912	.041	3.30	1.3292	.004	1
S4	2.5000	2.4921	-.008	-.315	2.5633	.003	1
S5	5.0000	4.8909	-.109	-2.18	5.0284	.009	1
S2	.40000	.47396	.074	18.5	.48943	.001	1

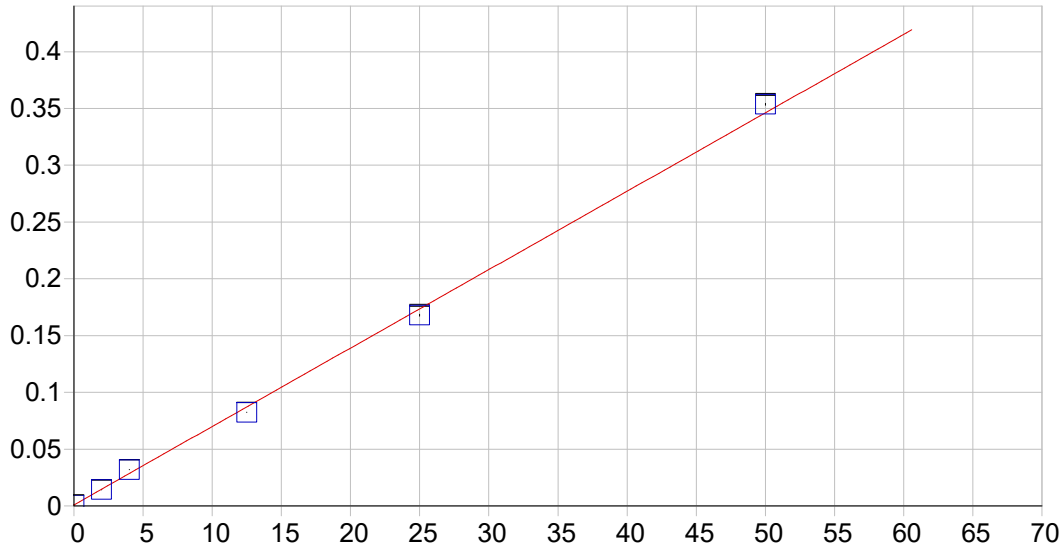


Zn 213.856 {158}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.007203	Re-Slope:	1.000000
A1 (Gain):	2.557506	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999360	Status:	OK.
Std Error of Est:	0.002164		
Predicted MDL:	0.000375		
Predicted MQL:	0.001249		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00718	.000	1
S1	.04000	.04118	.001	2.94	.11323	.001	1
S3	1.2500	1.2669	.017	1.35	3.2695	.006	1
S4	2.5000	2.4847	-.015	-.612	6.4063	.021	1
S5	5.0000	4.9319	-.068	-1.36	12.710	.052	1
S2	.40000	.46530	.065	16.3	1.2043	.005	1

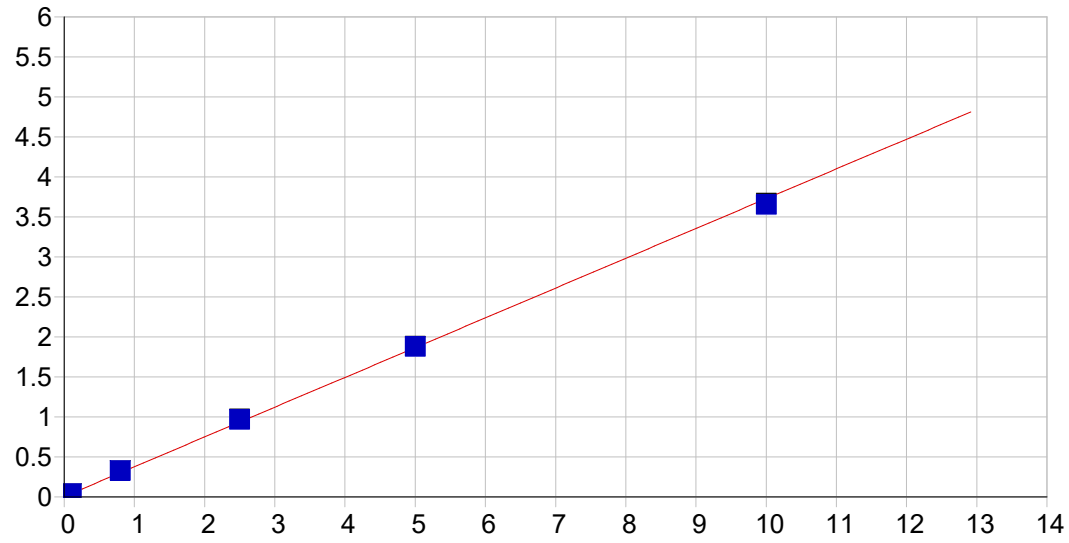


K 766.490 { 44}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000933	Re-Slope:	1.000000
A1 (Gain):	0.006904	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999187	Status:	OK.
Std Error of Est:	0.000147		
Predicted MDL:	0.036398		
Predicted MQL:	0.121326		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00004	-.000	.000	.00093	.000	1
S2	4.0000	4.4917	.492	12.3	.03194	.000	1
S3	12.500	11.803	-.697	-5.57	.08242	.000	1
S4	25.000	24.188	-.812	-3.25	.16793	.001	1
S5	50.000	51.090	1.09	2.18	.35366	.001	1
S1	2.0000	1.9275	-.072	-3.62	.01424	.000	1

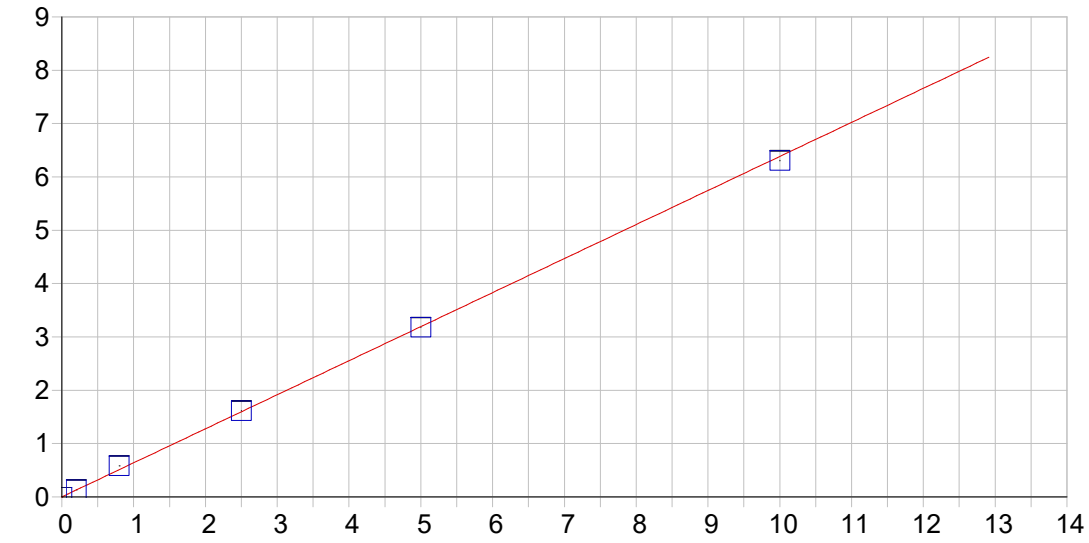


B 249.678 {135}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.004672	Re-Slope:	1.000000
A1 (Gain):	0.372260	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999650	Status:	OK.
Std Error of Est:	0.000516		
Predicted MDL:	0.000849		
Predicted MQL:	0.002829		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00467	.000	1
S1	.10000	.09893	-.001	-1.07	.04134	.000	1
S3	2.5000	2.5852	.085	3.41	.96523	.006	1
S4	5.0000	5.0352	.035	.704	1.8754	.005	1
S5	10.000	9.8109	-.189	-1.89	3.6496	.014	1
S2	.80000	.86980	.070	8.73	.32788	.000	1

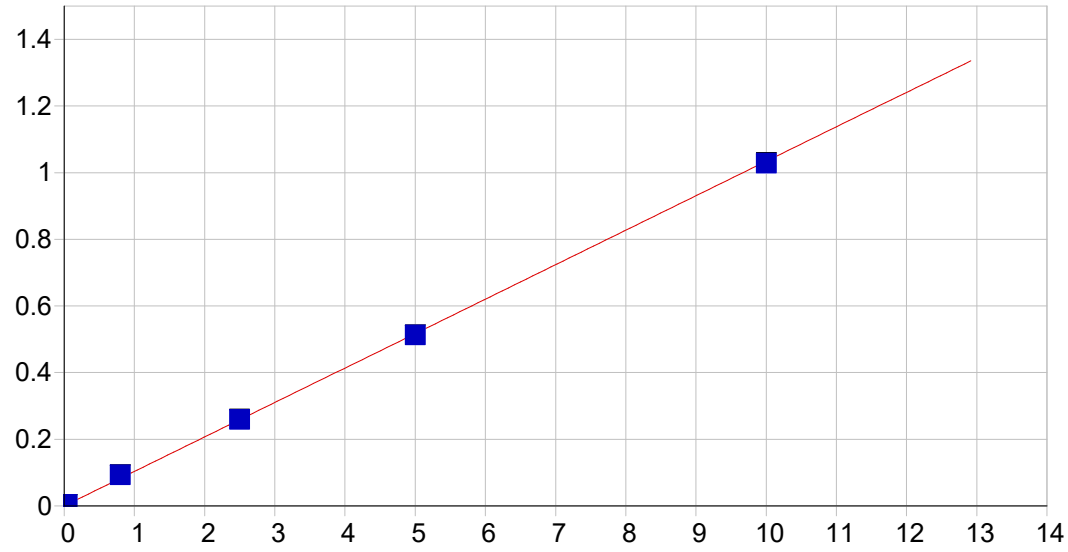


Mo 202.030 {467}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000518	Re-Slope:	1.000000
A1 (Gain):	0.638349	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999510	Status:	OK.
Std Error of Est:	0.001488		
Predicted MDL:	0.000347		
Predicted MQL:	0.001157		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00003	-.000	.000	.00050	.000	1
S1	.20000	.20431	.004	2.15	.13094	.000	1
S3	2.5000	2.5294	.029	1.18	1.6152	.004	1
S4	5.0000	4.9772	-.023	-.457	3.1777	.001	1
S5	10.000	9.8758	-.124	-1.24	6.3047	.004	1
S2	.80000	.91329	.113	14.2	.58352	.001	1

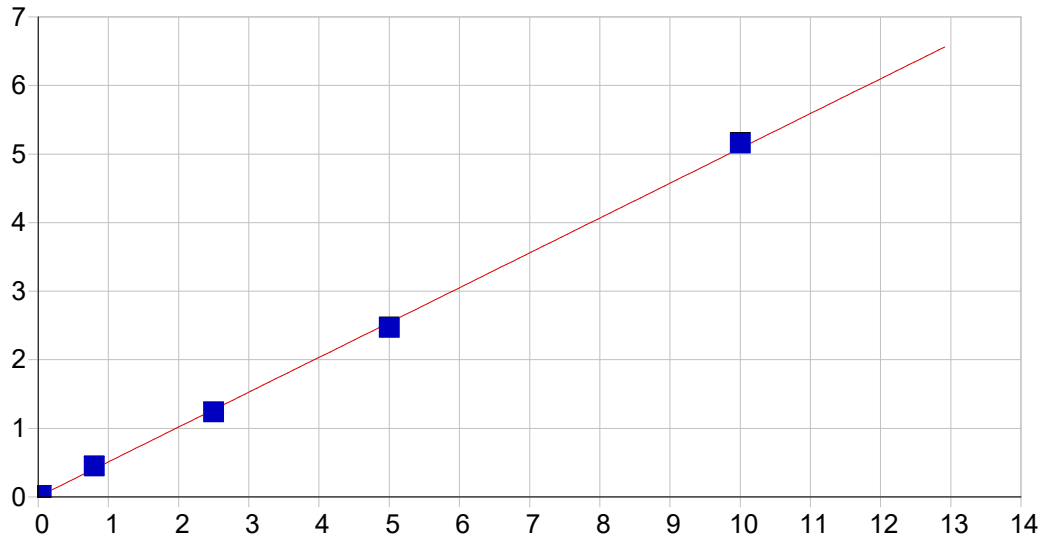


Sn 189.989 {478}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000162	Re-Slope:	1.000000
A1 (Gain):	0.103409	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999675	Status:	OK.
Std Error of Est:	0.000087		
Predicted MDL:	0.001035		
Predicted MQL:	0.003450		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00016	.000	1
S1	.04000	.03973	-.000	-.680	.00427	.000	1
S3	2.5000	2.5038	.004	.151	.25881	.001	1
S4	5.0000	4.9615	-.038	-.769	.51270	.000	1
S5	10.000	9.9401	-.060	-.599	1.0270	.002	1
S2	.80000	.89489	.095	11.9	.09262	.000	1

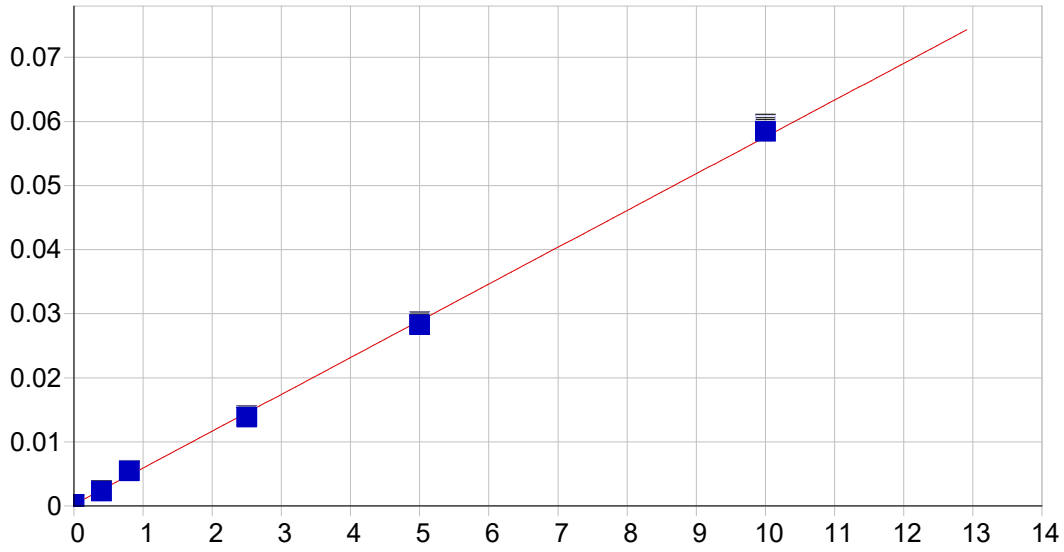


Ti 336.121 {100}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002969	Re-Slope:	1.000000
A1 (Gain):	0.507920	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999574	Status:	OK.
Std Error of Est:	0.000492		
Predicted MDL:	0.000718		
Predicted MQL:	0.002392		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00297	.000	1
S1	.04000	.03879	-.001	-3.02	.02266	.000	1
S3	2.5000	2.4290	-.071	-2.84	1.2362	.002	1
S4	5.0000	4.8530	-.147	-2.94	2.4670	.008	1
S5	10.000	10.143	.143	1.43	5.1532	.012	1
S2	.80000	.87584	.076	9.48	.44768	.002	1

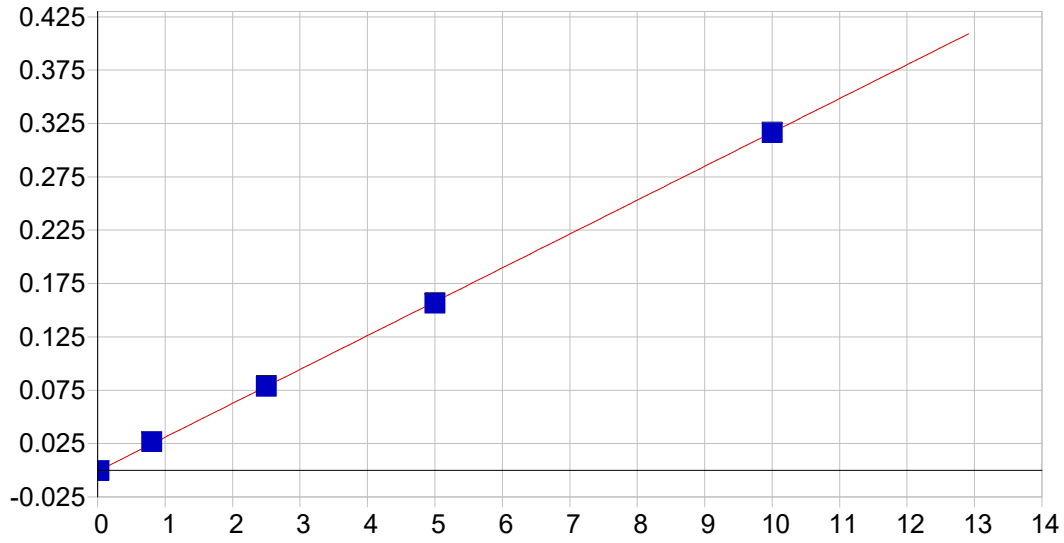


Si 288.158 {117}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000191	Re-Slope:	1.000000
A1 (Gain):	0.005739	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999238	Status:	OK.
Std Error of Est:	0.000024		
Predicted MDL:	0.009039		
Predicted MQL:	0.030129		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00019	.000	1
S1	.40000	.36676	-.033	-8.31	.00230	.000	1
S3	2.5000	2.3775	-.123	-4.90	.01405	.000	1
S4	5.0000	4.8915	-.109	-2.17	.02869	.000	1
S5	10.000	10.151	.151	1.51	.05931	.000	1
S2	.80000	.91300	.113	14.1	.00550	.000	1

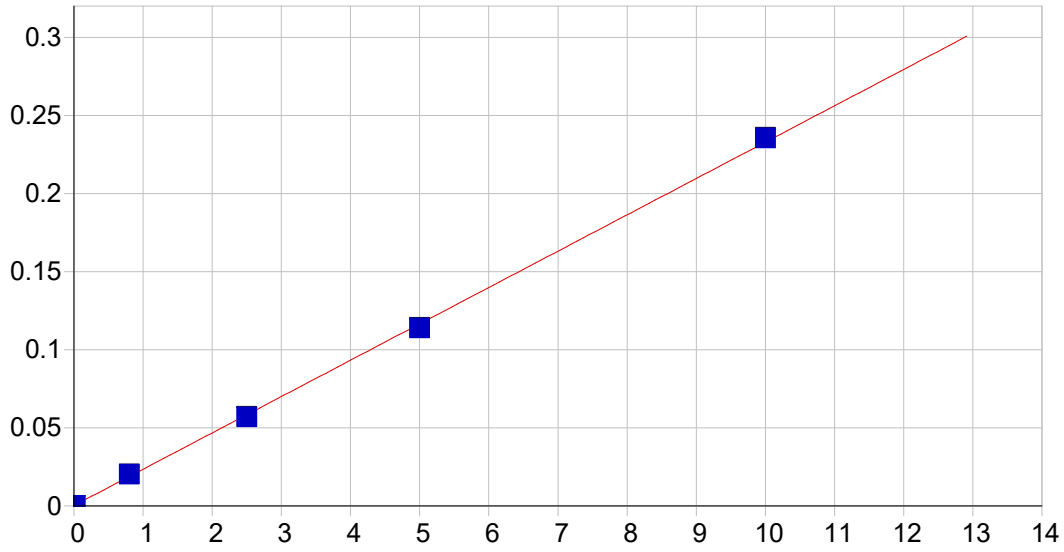


P 177.495 {490}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000831	Re-Slope:	1.000000
A1 (Gain):	0.031747	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999848	Status:	OK.
Std Error of Est:	0.000013		
Predicted MDL:	0.003170		
Predicted MQL:	0.010567		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00083	.000	1
S1	.02000	.01790	-.002	-10.5	-.00026	.000	1
S3	2.5000	2.4974	-.003	-.103	.07844	.001	1
S4	5.0000	4.9504	-.050	-.992	.15630	.000	1
S5	10.000	9.9920	-.008	-.080	.31633	.000	1
S2	.80000	.86225	.062	7.78	.02654	.000	1

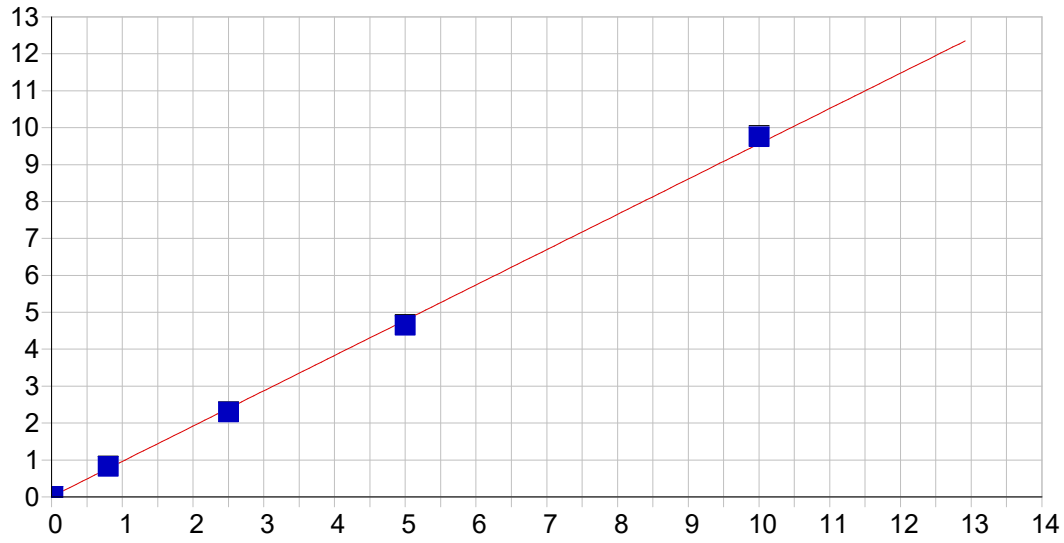


S 182.034 {485}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000230	Re-Slope:	1.000000
A1 (Gain):	0.023265	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999721	Status:	OK.
Std Error of Est:	0.000013		
Predicted MDL:	0.004329		
Predicted MQL:	0.014430		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00023	.000	1
S1	.02000	.01690	-.003	-15.5	.00060	.000	1
S3	2.5000	2.4401	-.060	-2.39	.05685	.000	1
S4	5.0000	4.8887	-.111	-2.23	.11366	.000	1
S5	10.000	10.115	.115	1.15	.23493	.000	1
S2	.80000	.85966	.060	7.46	.02018	.000	1

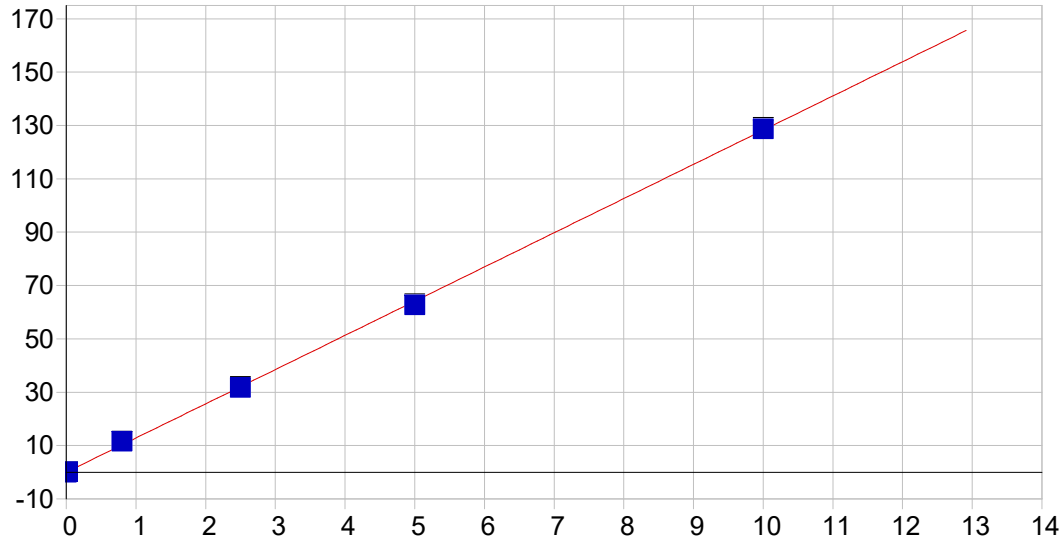


Li 670.784 { 50}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.006531	Re-Slope:	1.000000
A1 (Gain):	0.955741	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999548	Status:	OK.
Std Error of Est:	0.000674		
Predicted MDL:	0.001145		
Predicted MQL:	0.003815		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00653	.001	1
S5	10.000	10.195	.195	1.95	9.7590	.025	1
S4	5.0000	4.8535	-.146	-2.93	4.6495	.017	1
S3	2.5000	2.3972	-.103	-4.11	2.2998	.002	1
S1	.02000	.01769	-.002	-11.5	.02378	.001	1
S2	.80000	.85657	.057	7.07	.82588	.004	1

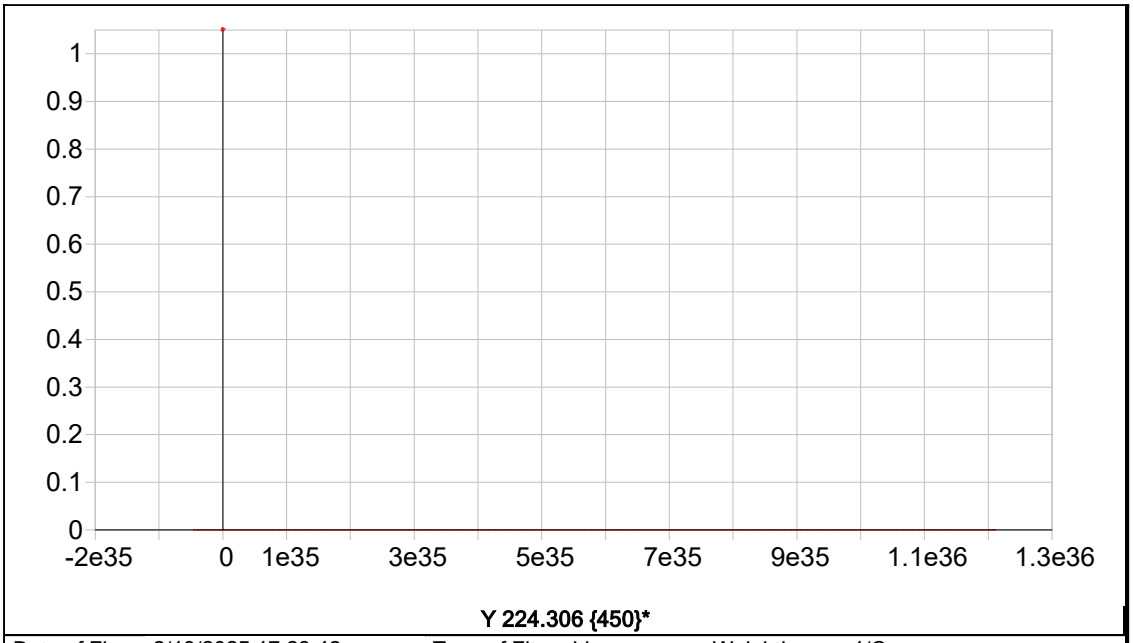


Sr 407.771 { 83}

Date of Fit:	4/7/2025 11:17:00	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000317	Re-Slope:	1.000000
A1 (Gain):	12.825150	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999577	Status:	OK.
Std Error of Est:	0.008757		
Predicted MDL:	0.000049		
Predicted MQL:	0.000164		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00030	.000	1
S1	.02000	.01913	-.001	-4.36	.24692	.000	1
S3	2.5000	2.4765	-.023	-.938	31.794	.281	1
S4	5.0000	4.8910	-.109	-2.18	62.792	.312	1
S5	10.000	10.032	.032	.321	128.79	.477	1
S2	.80000	.90126	.101	12.7	11.569	.041	1

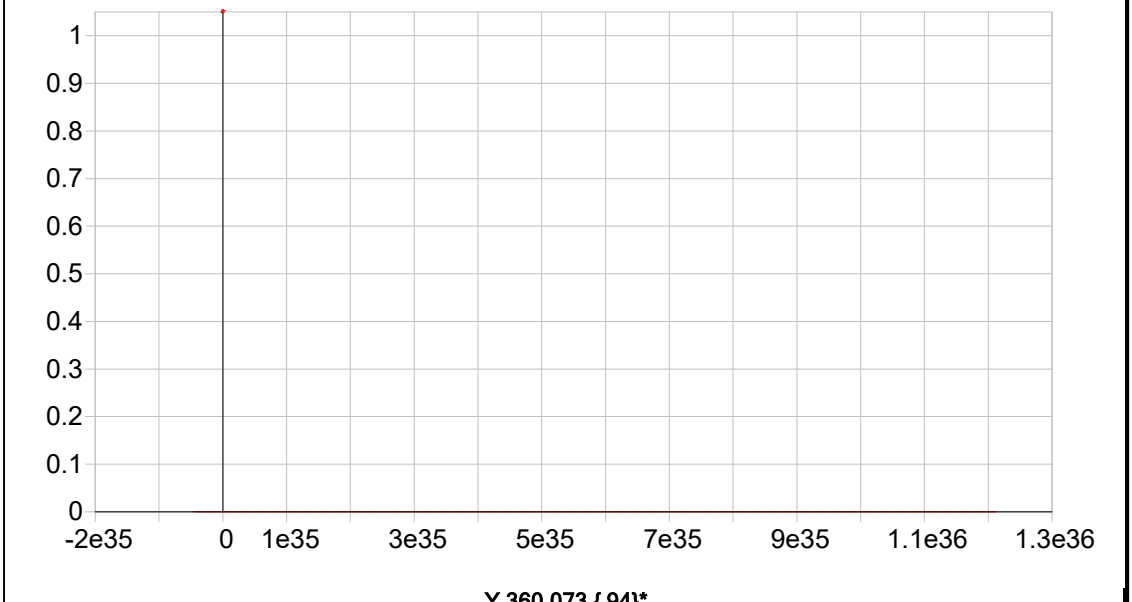


Y 224.306 {450}*

Date of Fit:	2/19/2025 17:23:42	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.000000	Status:	Warning Zero Gain
Std Error of Est:	0.000000		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

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



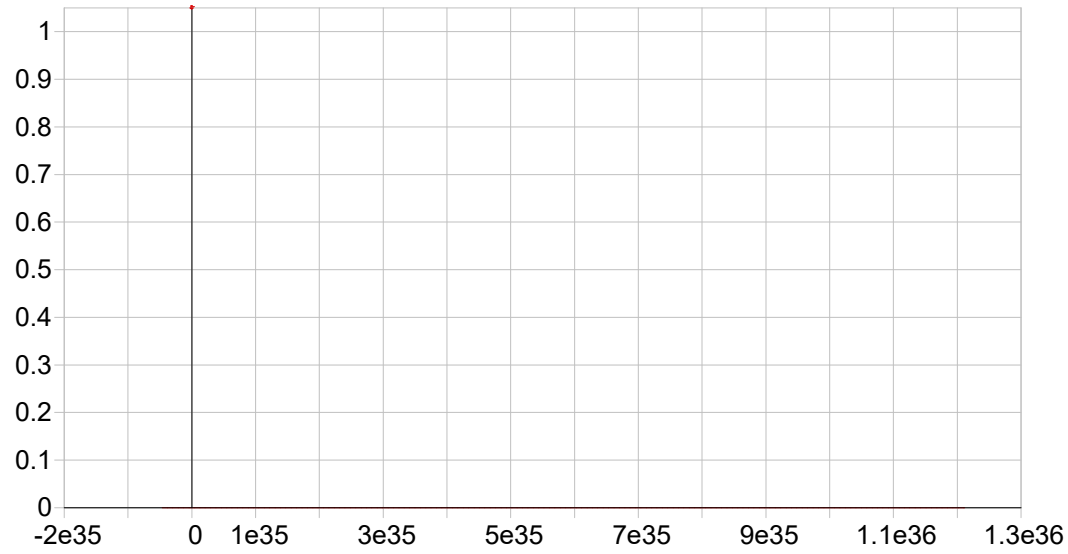
Y 360.073 { 94}*

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

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

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

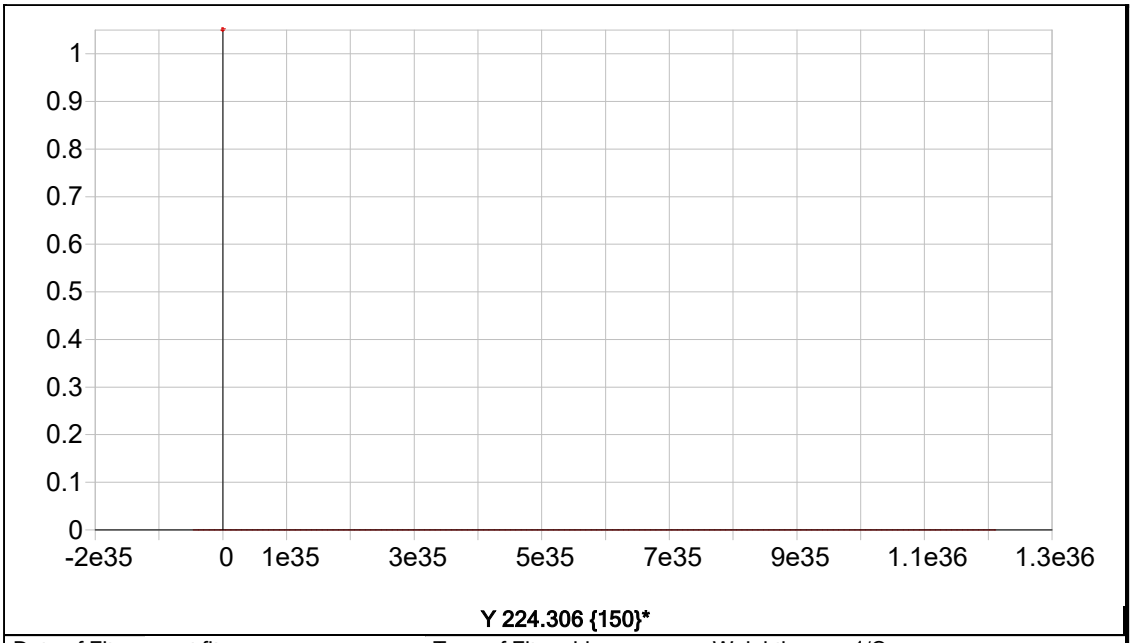
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



Y 371.030 { 91}*

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

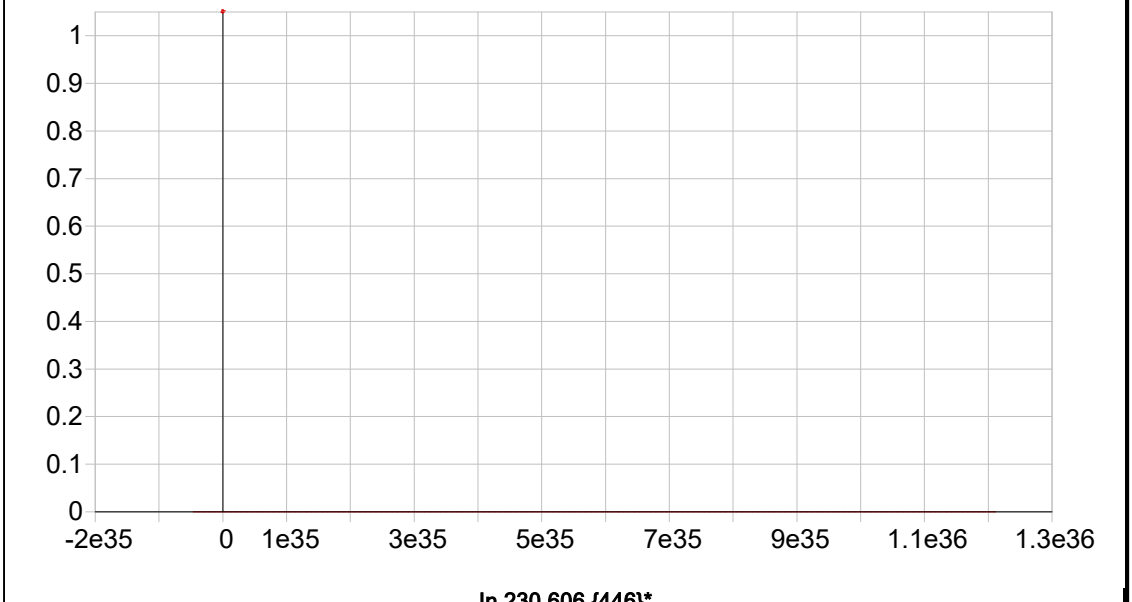
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



Y 224.306 {150}*

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

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



In 230.606 {446}*

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

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

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: S0 Acquired: 4/7/2025 10:51:09 Type: Cal
Method: NON EPA-6010-200.7(v2710) 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	-.00017	-.00020	-.00027	.00033	.00049	-.00023	.03911	.00009
Stddev	.00005	.00000	.00021	.00001	.00014	.00024	.00121	.00010
%RSD	29.727	1.9922	76.921	3.7671	29.351	101.53	3.1002	116.32
#1	-.00011	-.00020	-.00050	.00033	.00062	-.00019	.04048	-.00003
#2	-.00021	-.00020	-.00009	.00033	.00051	-.00002	.03818	.00015
#3	-.00018	-.00019	-.00023	.00031	.00033	-.00049	.03866	.00014

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	-.00003	.00067	.00015	-.00003	-.00020	.00003	.00273	-.00036
Stddev	.00019	.00022	.00008	.00023	.00024	.00001	.00012	.00015
%RSD	705.67	32.917	54.286	681.03	119.59	40.339	4.4638	42.904
#1	.00013	.00079	.00006	-.00006	.00007	.00002	.00260	-.00032
#2	.00003	.00080	.00020	.00021	-.00031	.00003	.00274	-.00023
#3	-.00024	.00041	.00019	-.00025	-.00035	.00004	.00285	-.00053

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	-.00050	-.00192	.01258	-.00004	.00718	.00093	.00467	.00050
Stddev	.00017	.00004	.00023	.00011	.00027	.00013	.00028	.00022
%RSD	33.451	2.0327	1.8486	277.00	3.7346	13.736	5.9889	44.496
#1	-.00068	-.00193	.01267	.00009	.00736	.00106	.00440	.00073
#2	-.00034	-.00188	.01232	-.00008	.00687	.00093	.00496	.00030
#3	-.00048	-.00195	.01276	-.00013	.00732	.00081	.00465	.00046

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	.00297	.00019	-.00083	.00023	.00653	.00030
Stddev	.00004	.00019	.00002	.00007	.00006	.00084	.00047
%RSD	22.241	6.3105	9.3364	8.4536	25.000	12.839	153.88
#1	.00019	.00291	.00018	-.00089	.00020	.00556	-.00019
#2	.00018	.00282	.00021	-.00076	.00030	.00705	.00036
#3	.00012	.00318	.00018	-.00084	.00019	.00698	.00074

Sample Name: S0 Acquired: 4/7/2025 10:51:09 Type: Cal
Method: NON EPA-6010-200.7(v2710) 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	2281.9	51393.	9965.3	1469.0	3626.3
Stddev	4.2	168.	33.8	7.1	2.1
%RSD	.18208	.32691	.33888	.48326	.05741
#1	2277.1	51341.	9993.7	1463.3	3626.1
#2	2284.4	51581.	9927.9	1476.9	3628.4
#3	2284.2	51257.	9974.2	1466.8	3624.3

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: S1 Acquired: 4/7/2025 10:55:36 Type: Cal
Method: NON EPA-6010-200.7(v2710) 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	.00056	.00214	.00248	.00172	.00714	.00874	.30681	.02510
Stddev	.00018	.00007	.00013	.00014	.00002	.00032	.00299	.00030
%RSD	31.871	3.2692	5.2811	7.9858	.27176	3.6584	.97439	1.2102
#1	.00037	.00211	.00255	.00162	.00716	.00862	.30456	.02476
#2	.00058	.00222	.00256	.00188	.00712	.00910	.30566	.02517
#3	.00072	.00210	.00233	.00166	.00713	.00849	.31020	.02536

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	.01334	.11379	.00236	.02572	.01660	.00050	.01524	.03709
Stddev	.00017	.00049	.00005	.00011	.00008	.00002	.00022	.00007
%RSD	1.3085	.43146	2.1447	.44614	.46238	4.9503	1.4267	.19084
#1	.01314	.11325	.00234	.02561	.01659	.00051	.01529	.03701
#2	.01343	.11392	.00232	.02572	.01653	.00047	.01543	.03713
#3	.01345	.11420	.00241	.02584	.01668	.00051	.01500	.03713

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	.02462	.00096	.03490	.00478	.11323	.01424	.04134	.13094
Stddev	.00018	.00010	.00026	.00019	.00099	.00006	.00046	.00039
%RSD	.74202	10.854	.75213	3.8849	.86995	.41356	1.1230	.29628
#1	.02441	.00087	.03460	.00499	.11430	.01427	.04086	.13133
#2	.02475	.00094	.03506	.00474	.11302	.01428	.04138	.13092
#3	.02469	.00107	.03504	.00462	.11237	.01417	.04179	.13056

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	.00427	.02266	.00230	-.00026	.00060	.02378	.24692
Stddev	.00004	.00024	.00003	.00003	.00008	.00137	.00046
%RSD	.87546	1.0643	1.4276	10.512	13.805	5.7544	.18457
#1	.00423	.02258	.00227	-.00023	.00051	.02290	.24640
#2	.00427	.02246	.00234	-.00026	.00067	.02536	.24725
#3	.00430	.02293	.00229	-.00029	.00063	.02309	.24710

Sample Name: S1 Acquired: 4/7/2025 10:55:36 Type: Cal
Method: NON EPA-6010-200.7(v2710) 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	2276.5	52255.	10120.	1483.6	3561.3
Stddev	3.5	109.	53.	2.5	7.4
%RSD	.15253	.20893	.52130	.16611	.20863
#1	2274.9	52176.	10140.	1482.4	3556.7
#2	2274.2	52380.	10160.	1486.4	3557.5
#3	2280.5	52210.	10060.	1481.9	3569.9

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: S2 Acquired: 4/7/2025 11:00:02 Type: Cal
Method: NON EPA-6010-200.7(v2710) 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	.02923	.05317	.22410	.06130	.11834	.14486	5.0612	.18817
Stddev	.00012	.00074	.00072	.00017	.00007	.00126	.0171	.00056
%RSD	.39357	1.3954	.32154	.27341	.06178	.86737	.33704	.29558
#1	.02930	.05231	.22334	.06128	.11826	.14346	5.0490	.18843
#2	.02928	.05360	.22419	.06148	.11838	.14588	5.0539	.18753
#3	.02909	.05359	.22478	.06115	.11839	.14524	5.0807	.18855

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	1.0060	.25772	.04277	.39200	.17673	.00472	.27759	.07720
Stddev	.0017	.00075	.00018	.00079	.00032	.00002	.00118	.00036
%RSD	.16843	.29261	.42769	.20241	.18002	.46000	.42675	.45993
#1	1.0041	.25710	.04274	.39125	.17703	.00474	.27685	.07733
#2	1.0063	.25748	.04260	.39193	.17677	.00470	.27697	.07748
#3	1.0075	.25856	.04297	.39283	.17639	.00473	.27896	.07680

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	.28428	.06185	.06713	.05540	1.2043	.03194	.32788	.58352
Stddev	.00057	.00006	.00037	.00014	.0053	.00009	.00046	.00084
%RSD	.19933	.08930	.54423	.24499	.43576	.27785	.13965	.14423
#1	.28363	.06187	.06697	.05543	1.2026	.03204	.32841	.58256
#2	.28469	.06190	.06687	.05552	1.2002	.03186	.32759	.58387
#3	.28452	.06179	.06755	.05525	1.2102	.03193	.32765	.58413

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	.09262	.44768	.00550	.02654	.02018	.82588	11.569
Stddev	.00015	.00206	.00004	.00006	.00005	.00354	.041
%RSD	.16282	.46007	.77725	.22101	.22714	.42862	.35010
#1	.09245	.44635	.00549	.02660	.02021	.82250	11.547
#2	.09267	.44664	.00546	.02654	.02013	.82558	11.545
#3	.09273	.45005	.00555	.02648	.02021	.82956	11.616

Sample Name: S2 Acquired: 4/7/2025 11:00:02 Type: Cal
Method: NON EPA-6010-200.7(v2710) 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	2267.4	51419.	10311.	1480.3	3490.3
Stddev	2.7	38.	7.	5.7	.3
%RSD	.11968	.07441	.07227	.38218	.00723
#1	2264.6	51448.	10306.	1485.4	3490.5
#2	2267.7	51434.	10319.	1481.1	3490.4
#3	2270.0	51376.	10306.	1474.2	3490.0

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: S3 Acquired: 4/7/2025 11:04:15 Type: Cal
Method: NON EPA-6010-200.7(v2710) 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	.08116	.14916	.62386	.16768	.32771	.40674	13.898	.55149
Stddev	.00015	.00130	.00184	.00093	.00140	.00098	.014	.00190
%RSD	.17948	.86891	.29511	.55506	.42870	.24107	.10200	.34510
#1	.08114	.14901	.62244	.16784	.32740	.40584	13.886	.54930
#2	.08103	.14795	.62319	.16668	.32648	.40659	13.913	.55276
#3	.08131	.15053	.62594	.16852	.32924	.40778	13.893	.55241

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	2.8193	.71580	.11693	1.0929	.48214	.01189	.75665	.21931
Stddev	.0066	.00080	.00028	.0034	.00067	.00004	.00166	.00120
%RSD	.23535	.11152	.24025	.31265	.13989	.35306	.21980	.54735
#1	2.8173	.71508	.11663	1.0909	.48189	.01190	.75481	.21813
#2	2.8139	.71566	.11697	1.0911	.48164	.01192	.75803	.21929
#3	2.8267	.71666	.11719	1.0969	.48291	.01184	.75711	.22053

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	.79127	.17160	.15892	.15556	3.2695	.08242	.96523	1.6152
Stddev	.00230	.00031	.00058	.00044	.0060	.00017	.00569	.0044
%RSD	.29069	.18033	.36543	.28579	.18396	.20603	.58997	.27110
#1	.78943	.17128	.15959	.15531	3.2700	.08257	.95936	1.6141
#2	.79055	.17160	.15866	.15529	3.2632	.08246	.96560	1.6115
#3	.79385	.17190	.15852	.15607	3.2752	.08224	.97073	1.6200

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	.25881	1.2362	.01405	.07844	.05685	2.2998	31.794
Stddev	.00110	.0020	.00004	.00055	.00029	.0022	.281
%RSD	.42359	.16069	.27203	.70594	.50531	.09725	.88516
#1	.25836	1.2342	.01406	.07828	.05713	2.2976	31.878
#2	.25800	1.2364	.01408	.07798	.05655	2.3021	32.025
#3	.26006	1.2381	.01401	.07906	.05686	2.2997	31.481

Sample Name: S3 Acquired: 4/7/2025 11:04:15 Type: Cal
Method: NON EPA-6010-200.7(v2710) 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	2246.4	51341.	9625.3	1456.3	3387.8
Stddev	4.1	34.	44.2	4.1	7.7
%RSD	.18188	.06632	.45921	.28177	.22612
#1	2246.6	51380.	9676.1	1453.1	3388.8
#2	2250.3	51315.	9596.1	1454.9	3394.9
#3	2242.1	51328.	9603.6	1460.9	3379.7

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: S4 Acquired: 4/7/2025 11:08:30 Type: Cal
Method: NON EPA-6010-200.7(v2710) 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	.16147	.29291	1.2276	.33158	.65030	.81841	27.771	1.0749
Stddev	.00057	.00093	.0026	.00130	.00112	.00144	.159	.0022
%RSD	.35325	.31711	.21448	.39253	.17225	.17609	.57141	.20802
#1	.16083	.29311	1.2245	.33022	.64914	.81699	27.755	1.0743
#2	.16192	.29190	1.2287	.33171	.65040	.81988	27.938	1.0773
#3	.16167	.29372	1.2294	.33281	.65137	.81836	27.621	1.0730

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	5.5863	1.4177	.22779	2.1613	.93958	.02363	1.4876	.44024
Stddev	.0018	.0043	.00072	.0020	.00101	.00012	.0093	.00198
%RSD	.03296	.30417	.31673	.09328	.10732	.50241	.62533	.44960
#1	5.5844	1.4195	.22717	2.1590	.94013	.02365	1.4919	.43882
#2	5.5881	1.4208	.22762	2.1628	.93841	.02373	1.4939	.44250
#3	5.5864	1.4128	.22858	2.1622	.94018	.02350	1.4769	.43939

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	1.5550	.33852	.31847	.31178	6.4063	.16793	1.8754	3.1777
Stddev	.0009	.00073	.00126	.00033	.0213	.00094	.0050	.0013
%RSD	.05661	.21538	.39622	.10493	.33318	.56258	.26526	.04214
#1	1.5540	.33900	.31992	.31173	6.4130	.16861	1.8777	3.1763
#2	1.5556	.33768	.31759	.31213	6.3824	.16685	1.8789	3.1778
#3	1.5553	.33888	.31790	.31148	6.4235	.16832	1.8697	3.1789

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	.51270	2.4670	.02869	.15630	.11366	4.6495	62.792
Stddev	.00041	.0080	.00009	.00039	.00030	.0168	.312
%RSD	.08083	.32350	.29944	.25199	.26075	.36128	.49734
#1	.51233	2.4744	.02862	.15663	.11336	4.6683	63.139
#2	.51262	2.4680	.02867	.15641	.11368	4.6444	62.705
#3	.51315	2.4585	.02879	.15587	.11395	4.6359	62.533

Sample Name: S4 Acquired: 4/7/2025 11:08:30 Type: Cal
Method: NON EPA-6010-200.7(v2710) 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	2190.4	49979.	9494.8	1395.7	3257.5
Stddev	1.6	77.	48.4	1.8	1.2
%RSD	.07130	.15371	.51026	.12620	.03613
#1	2191.9	50064.	9502.9	1397.0	3258.5
#2	2188.8	49959.	9442.8	1396.5	3256.2
#3	2190.5	49914.	9538.7	1393.7	3257.7

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: S5 Acquired: 4/7/2025 11:12:48 Type: Cal
Method: NON EPA-6010-200.7(v2710) 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	.32487	.57167	2.4529	.66409	1.3120	1.7050	57.779	2.0989
Stddev	.00051	.00282	.0039	.00052	.0019	.0063	.234	.0104
%RSD	.15689	.49257	.15981	.07888	.14098	.37237	.40447	.49450
#1	.32479	.56884	2.4510	.66448	1.3141	1.7033	57.764	2.0941
#2	.32440	.57447	2.4502	.66349	1.3112	1.6997	57.554	2.0917
#3	.32541	.57170	2.4574	.66429	1.3108	1.7121	58.020	2.1108

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	11.246	2.9305	.44450	4.3573	1.8507	.04829	3.0612	.91162
Stddev	.013	.0080	.00178	.0043	.0028	.00024	.0093	.00295
%RSD	.11662	.27262	.40087	.09795	.15139	.50207	.30444	.32400
#1	11.240	2.9301	.44257	4.3557	1.8536	.04843	3.0644	.91302
#2	11.238	2.9228	.44485	4.3541	1.8481	.04844	3.0508	.90823
#3	11.261	2.9387	.44609	4.3622	1.8503	.04801	3.0686	.91361

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	3.1196	.66919	.66983	.64863	12.710	.35366	3.6496	6.3047
Stddev	.0047	.00058	.00088	.00330	.052	.00085	.0138	.0043
%RSD	.15079	.08681	.13154	.50907	.40998	.23985	.37754	.06823
#1	3.1163	.66869	.66992	.64932	12.676	.35300	3.6481	6.3066
#2	3.1175	.66983	.67066	.64504	12.770	.35462	3.6366	6.2998
#3	3.1250	.66905	.66890	.65153	12.684	.35336	3.6640	6.3077

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	1.0270	5.1532	.05931	.31633	.23493	9.7590	128.79
Stddev	.0022	.0120	.00026	.00044	.00047	.0248	.48
%RSD	.21345	.23301	.44206	.13946	.19978	.25410	.37022
#1	1.0248	5.1559	.05907	.31619	.23544	9.7628	128.36
#2	1.0270	5.1401	.05927	.31598	.23450	9.7325	128.72
#3	1.0292	5.1636	.05959	.31682	.23486	9.7816	129.30

Sample Name: S5 Acquired: 4/7/2025 11:12:48 Type: Cal
Method: NON EPA-6010-200.7(v2710) 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	2111.8	49282.	9356.4	1336.8	3076.9
Stddev	4.2	118.	47.4	2.3	4.6
%RSD	.19655	.23849	.50659	.17042	.14847
#1	2108.7	49396.	9363.5	1335.8	3075.2
#2	2116.5	49287.	9399.9	1335.1	3082.1
#3	2110.1	49162.	9305.9	1339.4	3073.5

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: ICV01 Acquired: 4/7/2025 12:35:07 Type: Unk
Method: NON EPA-6010-200.7(v2892) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9986112	1.037343	.9768230	1.033418	1.017689	2.403346	.5046295
Stddev	.0077403	.006091	.0026315	.007978	.003593	.003811	.0020289
%RSD	.7751055	.5872019	.2693936	.7720122	.3530738	.1585904	.4020523
#1	.9994345	1.031808	.9764609	1.036001	1.016770	2.400352	.5068685
#2	.9904922	1.036351	.9743912	1.024469	1.014646	2.402049	.5029128
#3	1.005907	1.043869	.9796167	1.039785	1.021653	2.407636	.5041074

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5346381	.4953565	10.27096	.5233482	.5061060	.5208063	9.719878
Stddev	.0008213	.0004120	.01152	.0005095	.0005473	.0018918	.031151
%RSD	.1536086	.0831789	.1121142	.0973462	.1081344	.3632424	.3204889
#1	.5339467	.4951379	10.26215	.5231897	.5055684	.5211308	9.753416
#2	.5355459	.4950999	10.26673	.5229368	.5060870	.5187732	9.691848
#3	.5344218	.4958318	10.28399	.5239180	.5066625	.5225148	9.714371

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5153526	6.157813	.5079711	.2417900	10.39884	.5068942	1.008654
Stddev	.0004697	.013103	.0007709	.0005592	.06325	.0015972	.003227
%RSD	.0911327	.2127941	.1517514	.2312918	.6082817	.3150911	.3199204
#1	.5158033	6.163024	.5076667	.2412116	10.46692	.5081056	1.006141
#2	.5153882	6.142906	.5073989	.2423278	10.38770	.5050842	1.007529
#3	.5148661	6.167510	.5088476	.2418307	10.34189	.5074927	1.012293

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.433068	2.532030	2.458224	2.495242	2.513985	2.513034	2.604048
Stddev	.053937	.003277	.007717	.005798	.004461	.003521	.002537
%RSD	.5717880	.1294266	.3139445	.2323553	.1774399	.1401031	.0974210
#1	9.484268	2.528700	2.457702	2.488787	2.518582	2.515566	2.606106
#2	9.438180	2.535252	2.450781	2.496934	2.513699	2.509013	2.604825
#3	9.376758	2.532139	2.466189	2.500006	2.509674	2.514521	2.601214

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: ICV01 Acquired: 4/7/2025 12:35:07 Type: Unk
Method: NON EPA-6010-200.7(v2892) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	2.613875	2.534519	2.539924
Stddev	.014520	.010720	.019219
%RSD	.5554827	.4229608	.7566747
#1	2.597142	2.545413	2.551547
#2	2.621335	2.534163	2.550486
#3	2.623148	2.523981	2.517741

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2208.274	51154.09	9815.522	1411.303	3410.939
Stddev	5.850	111.40	23.005	5.335	4.214
%RSD	.2649341	.2177690	.2343745	.3780177	.1235311
#1	2208.101	51120.68	9807.222	1407.352	3413.156
#2	2214.209	51063.22	9797.818	1417.371	3413.581
#3	2202.512	51278.37	9841.525	1409.184	3406.080

Sample Name: LLICV01 Acquired: 4/7/2025 13:00:27 Type: Unk
Method: NON EPA-6010-200.7(v2893) 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	.0236485	.0406518	.0111099	.0196115	.0526575	.1053135	.0895716
Stddev	.0021741	.0017698	.0004721	.0020853	.0016255	.0013961	.0014948
%RSD	9.193303	4.353544	4.249270	10.63314	3.086975	1.325612	1.668843
#1	.0215822	.0394663	.0115493	.0214625	.0545290	.1059948	.0908177
#2	.0234470	.0426861	.0106108	.0200199	.0518461	.1062380	.0879142
#3	.0259163	.0398029	.0111697	.0173522	.0515973	.1037076	.0899828

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0056758	.0057396	1.905230	.0097113	.0291740	.0220717	.0937060
Stddev	.0000538	.0000634	.010682	.0002131	.0002135	.0003325	.0047801
%RSD	.9473402	1.104317	.5606653	2.194030	.7318705	1.506484	5.101159
#1	.0056953	.0057962	1.911659	.0094716	.0290057	.0223156	.0895186
#2	.0056150	.0056711	1.892899	.0097833	.0294142	.0222066	.0926855
#3	.0057170	.0057515	1.911131	.0098791	.0291020	.0216930	.0989140

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0207064	2.009670	.0392536	.0104341	1.990139	.0387933	.0414724
Stddev	.0004119	.033485	.0002164	.0000473	.046735	.0015309	.0001151
%RSD	1.989128	1.666171	.5513623	.4530889	2.348350	3.946270	.2774459
#1	.0206655	2.030997	.0391833	.0104267	1.957848	.0383221	.0415809
#2	.0203165	1.971076	.0394964	.0104847	2.043730	.0405044	.0413517
#3	.0211372	2.026936	.0390811	.0103910	1.968840	.0375534	.0414845

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.747745	.0894271	.2082171	.0389982	.0376392	.3601572	.0248611
Stddev	.025153	.0009129	.0009837	.0007112	.0013184	.0077777	.0038579
%RSD	1.439188	1.020817	.4724376	1.823739	3.502675	2.159542	15.51796
#1	1.719606	.0902338	.2090345	.0398189	.0362659	.3540425	.0293063
#2	1.768045	.0884361	.2071254	.0385623	.0388947	.3689112	.0228918
#3	1.755585	.0896112	.2084915	.0386133	.0377569	.3575181	.0223853

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: LLICV01 Acquired: 4/7/2025 13:00:27 Type: Unk
Method: NON EPA-6010-200.7(v2893) 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	.0196101	.0180233	.0188053
Stddev	.0041539	.0004722	.0000703
%RSD	21.18258	2.619946	.3737779
#1	.0161278	.0182010	.0187571
#2	.0242079	.0183808	.0187729
#3	.0184947	.0174880	.0188860

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2221.844	51219.95	10121.61	1428.346	3535.506
Stddev	3.869	361.93	61.59	10.873	5.792
%RSD	.1741190	.7066206	.6085160	.7612083	.1638147
#1	2217.472	51266.48	10096.02	1433.032	3528.893
#2	2223.235	50837.01	10191.87	1415.915	3537.952
#3	2224.825	51556.37	10076.94	1436.089	3539.674

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: ICB01 Acquired: 4/7/2025 13:05:48 Type: Unk
Method: NON EPA-6010-200.7(v2893) 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	.0007689	-.001212	.0007294	.0004524	.0016698	.0032121	-.001662
Stddev	.0019603	.002243	.0005967	.0011069	.0011585	.0047226	.000436
%RSD	254.9568	185.0701	81.80905	244.6608	69.38128	147.0233	26.21384
#1	-.000155	-.001597	.0000424	-.000785	.0020804	.0040421	-.002049
#2	.003020	.001198	.0011185	.000793	.0003619	.0074648	-.001747
#3	-.000558	-.003238	.0010273	.001349	.0025671	-.001870	-.001190

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000048	-.000079	-.007675	-.000336	.0000971	-.000151	.0324361
Stddev	.000021	.000031	.004798	.000131	.0001701	.000445	.0062722
%RSD	44.25360	38.62428	62.51613	39.02660	175.1481	294.2645	19.33706
#1	-.000031	-.000098	-.009031	-.000210	.0001955	-.000237	.0365584
#2	-.000072	-.000096	-.011649	-.000472	.0001951	-.000548	.0252179
#3	-.000041	-.000044	-.002345	-.000326	-.000099	.000331	.0355320

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019061	.0051226	-.000047	.0002903	-.417308	.0008119	-.000242
Stddev	.0001603	.0059156	.000146	.0001604	.019190	.0020695	.000450
%RSD	8.411669	115.4802	312.7693	55.24098	4.598414	254.9012	186.2489
#1	.0020907	.0071234	.000119	.0002967	-.395522	-.001237	-.000383
#2	.0018252	-.001534	-.000160	.0004474	-.431704	.002902	-.000604
#3	.0018023	.009778	-.000099	.0001268	-.424699	.000771	.000262

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.153184	-.009133	-.000227	-.001085	.0004164	.0008703	-.001108
Stddev	.018029	.000425	.000262	.000866	.0002886	.0022709	.001906
%RSD	11.76979	4.656842	115.6134	79.84565	69.31404	260.9259	172.1201
#1	-.135473	-.009602	-.000427	-.000138	.0007067	-.001374	-.000109
#2	-.152565	-.008772	-.000324	-.001838	.0004131	.003167	.000092
#3	-.171516	-.009025	.000070	-.001278	.0001294	.000818	-.003306

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: ICB01 Acquired: 4/7/2025 13:05:48 Type: Unk
Method: NON EPA-6010-200.7(v2893) 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	-.000701	-.001123	-.000131		
Stddev	.002740	.000561	.000038		
%RSD	390.8905	49.94030	28.76031		
#1	-.003862	-.000591	-.000165		
#2	.000768	-.001070	-.000138		
#3	.000992	-.001709	-.000091		
Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2217.513	49980.71	10028.70	1389.871	3563.429
Stddev	3.916	92.76	26.02	5.872	3.988
%RSD	.1765891	.1855865	.2594423	.4225091	.1119053
#1	2213.231	49893.62	10006.94	1396.226	3561.851
#2	2218.396	50078.25	10057.52	1384.645	3560.472
#3	2220.913	49970.25	10021.65	1388.744	3567.964

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CRI01 Acquired: 4/7/2025 13:10:09 Type: Unk
Method: NON EPA-6010-200.7(v2893) 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	.0227668	.0406786	.0117094	.0210042	.0537970	.1033478	.0905940
Stddev	.0028310	.0030322	.0006270	.0013495	.0003408	.0033312	.0005057
%RSD	12.43476	7.454130	5.354621	6.424744	.6335117	3.223241	.5581623
#1	.0195258	.0388312	.0121901	.0205329	.0538606	.1007437	.0900148
#2	.0247567	.0390266	.0110002	.0199537	.0541015	.1071015	.0908195
#3	.0240180	.0441782	.0119380	.0225262	.0534289	.1021983	.0909476

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0056693	.0057750	1.923162	.0098453	.0297864	.0223722	.0997617
Stddev	.0000453	.0000389	.025644	.0001314	.0001832	.0003877	.0026631
%RSD	.7984121	.6727364	1.333414	1.334944	.6149478	1.733111	2.669496
#1	.0056388	.0057328	1.897634	.0098011	.0296134	.0222215	.1001178
#2	.0057213	.0058092	1.922930	.0097418	.0299783	.0228127	.0969384
#3	.0056477	.0057832	1.948920	.0099932	.0297675	.0220825	.1022288

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0211726	2.031789	.0397098	.0109436	1.459358	.0381768	.0414187
Stddev	.0001590	.013519	.0003541	.0001189	.011321	.0002287	.0000830
%RSD	.7507778	.6653961	.8916592	1.086002	.7757847	.5990768	.2003007
#1	.0210257	2.016535	.0393037	.0110355	1.446347	.0383960	.0414495
#2	.0213414	2.036537	.0399536	.0109858	1.466962	.0379396	.0413247
#3	.0211507	2.042293	.0398721	.0108093	1.464764	.0381947	.0414818

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.873969	.0890002	.2097660	.0395503	.0384777	.3743464	.0171066
Stddev	.010786	.0010345	.0011262	.0002770	.0000462	.0029449	.0015468
%RSD	.5755717	1.162311	.5368691	.7004746	.1201470	.7866855	9.042382
#1	1.862868	.0879222	.2103376	.0397623	.0384320	.3710081	.0184969
#2	1.874630	.0899848	.2104918	.0396519	.0384767	.3765764	.0154403
#3	1.884409	.0890935	.2084687	.0392368	.0385244	.3754547	.0173825

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CRI01 Acquired: 4/7/2025 13:10:09 Type: Unk
Method: NON EPA-6010-200.7(v2893) 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	.0169535	.0172073	.0189834
Stddev	.0039595	.0004825	.0000491
%RSD	23.35491	2.804243	.2588181
#1	.0160640	.0177014	.0189335
#2	.0135144	.0167373	.0190318
#3	.0212820	.0171831	.0189849

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2211.557	50486.11	10273.60	1405.241	3503.008
Stddev	5.860	149.84	44.26	3.186	5.694
%RSD	.2649791	.2967973	.4307703	.2267068	.1625357
#1	2205.269	50657.95	10322.54	1408.504	3498.060
#2	2212.535	50382.70	10261.85	1402.139	3509.232
#3	2216.867	50417.68	10236.41	1405.081	3501.734

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: ICSA01 Acquired: 4/7/2025 13:14:28 Type: Unk
Method: NON EPA-6010-200.7(v2893) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0031502	.0060279	.0069416	-.016618	.0029700	244.1646	.0031830
Stddev	.0015188	.0007623	.0016112	.001596	.0009448	.8512	.0002191
%RSD	48.21167	12.64663	23.21146	9.605766	31.81159	.3486302	6.883269
#1	.0015598	.0051822	.0087092	-.015401	.0038112	243.7176	.0032664
#2	.0033055	.0066621	.0065603	-.016027	.0031512	243.6300	.0033482
#3	.0045854	.0062395	.0055551	-.018425	.0019478	245.1462	.0029345

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015482	.0016451	230.7384	.0586430	.0017839	.0212698	101.3146
Stddev	.0000520	.0001821	.6982	.0003983	.0003214	.0006782	.2793
%RSD	3.361542	11.07171	.3025873	.6791792	18.01908	3.188353	.2757113
#1	.0014888	.0018526	230.7610	.0584239	.0018692	.0219086	101.1150
#2	.0015698	.0015118	230.0292	.0584024	.0014284	.0213427	101.1949
#3	.0015860	.0015709	231.4250	.0591027	.0020541	.0205581	101.6338

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0029280	248.2958	.0023505	-.004957	-.262336	.0051475	.0045272
Stddev	.0003620	1.0605	.0002355	.000223	.020207	.0015482	.0001524
%RSD	12.36482	.4271263	10.01999	4.506492	7.702747	30.07602	3.367081
#1	.0027257	248.1902	.0024872	-.004740	-.285221	.0062025	.0044373
#2	.0027124	247.2921	.0020786	-.005186	-.254836	.0033702	.0047032
#3	.0033460	249.4052	.0024857	-.004944	-.246952	.0058698	.0044411

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.132901	-.021512	-.001747	-.004905	-.001355	.0167203	.0009611
Stddev	.010665	.000482	.000386	.001882	.000282	.0131191	.0023095
%RSD	8.025001	2.242533	22.08065	38.36809	20.83411	78.46208	240.2933
#1	-.123693	-.021399	-.002028	-.005168	-.001680	.0114754	-.001666
#2	-.130423	-.021097	-.001906	-.002905	-.001170	.0316504	.002671
#3	-.144588	-.022041	-.001307	-.006641	-.001215	.0070350	.001879

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: ICSA01 Acquired: 4/7/2025 13:14:28 Type: Unk
Method: NON EPA-6010-200.7(v2893) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.007657	-.017007	-.005805
Stddev	.001691	.000171	.000122
%RSD	22.08908	1.007626	2.099890
#1	-.007880	-.016896	-.005665
#2	-.005865	-.016920	-.005873
#3	-.009226	-.017204	-.005879

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2001.922	44752.45	9590.641	1273.705	2848.370
Stddev	6.200	179.99	42.779	10.695	4.048
%RSD	.3097054	.4022005	.4460523	.8396429	.1421118
#1	1998.843	44887.31	9582.494	1284.770	2847.180
#2	1997.864	44821.97	9636.908	1272.921	2845.050
#3	2009.059	44548.06	9552.521	1263.424	2852.879

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: ICSAB01 Acquired: 4/7/2025 13:18:53 Type: Unk
Method: NON EPA-6010-200.7(v2893) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1091196	.1016301	.0547064	.0414446	.6187269	238.0796	.4783205
Stddev	.0110848	.0026321	.0015735	.0023040	.0028974	3.4304	.0027440
%RSD	10.15842	2.589860	2.876262	5.559324	.4682807	1.440874	.5736777
#1	.1208198	.1037212	.0553516	.0418935	.6167448	234.1185	.4802228
#2	.1077642	.0986745	.0558547	.0389491	.6173839	240.0478	.4751749
#3	.0987747	.1024946	.0529128	.0434911	.6220521	240.0724	.4795638

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4564441	.9866395	228.8359	.5550659	.5015059	.4997651	105.6225
Stddev	.0031604	.0012471	1.2260	.0014062	.0011729	.0004341	.7756
%RSD	.6923990	.1263997	.5357765	.2533371	.2338690	.0868540	.7343341
#1	.4536700	.9853742	228.7097	.5558942	.5013596	.4994049	106.3787
#2	.4557778	.9866768	227.6779	.5534423	.5004131	.4996434	104.8288
#3	.4598846	.9878676	230.1202	.5558613	.5027451	.5002471	105.6599

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4593979	242.6305	.9909976	.1851094	-.301827	.4563495	1.034380
Stddev	.0030669	1.3939	.0019467	.0007813	.006658	.0011434	.002465
%RSD	.6676006	.5744773	.1964383	.4220769	2.205926	.2505444	.2383078
#1	.4579797	241.9238	.9896929	.1855728	-.309464	.4560690	1.037159
#2	.4572966	241.7316	.9900647	.1855480	-.297246	.4576071	1.033526
#3	.4629173	244.2362	.9932352	.1842073	-.298769	.4553725	1.032456

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.135549	1.004387	1.133540	1.136656	1.052815	1.065716	1.085206
Stddev	.010072	.002475	.000155	.003083	.005439	.004877	.003612
%RSD	7.430403	.2464648	.0136914	.2712652	.5165904	.4576460	.3327942
#1	-.131454	1.002621	1.133615	1.136907	1.051059	1.070127	1.084573
#2	-.128170	1.003322	1.133644	1.133455	1.048471	1.066541	1.081953
#3	-.147024	1.007216	1.133362	1.139606	1.058915	1.060478	1.089093

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: ICSAB01 Acquired: 4/7/2025 13:18:53 Type: Unk
Method: NON EPA-6010-200.7(v2893) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.097519	.9987718	.9743853
Stddev	.007601	.0062834	.0054806
%RSD	.6925306	.6291164	.5624635
#1	1.106289	1.002116	.9771612
#2	1.092848	.991523	.9680722
#3	1.093419	1.002676	.9779226

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1974.663	45284.83	10233.38	1285.770	2815.869
Stddev	.898	120.93	57.65	8.873	5.918
%RSD	.0454686	.2670446	.5633427	.6900768	.2101571
#1	1974.374	45158.89	10281.54	1276.315	2817.321
#2	1975.670	45400.04	10249.10	1293.915	2820.925
#3	1973.945	45295.56	10169.50	1287.080	2809.360

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: ICSADLX20 Acquired: 4/7/2025 13:23:05 Type: Unk
Method: NON EPA-6010-200.7(v2893) 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	.0008176	.0011732	-.000123	-.001561	-.000370	12.00778	-.000961
Stddev	.0030108	.0010516	.000643	.002592	.000324	.01179	.000099
%RSD	368.2634	89.63764	521.9523	166.0342	87.61599	.0982245	10.25502
#1	.0042934	.0012572	.000200	-.003952	-.000018	11.99919	-.001075
#2	-.000984	.0021804	-.000864	-.001924	-.000436	12.00292	-.000909
#3	-.000857	.0000821	.000294	.001193	-.000657	12.02123	-.000899

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001245	-.000027	11.91334	.0023849	.0002386	.0013719	5.214164
Stddev	.0000431	.000057	.02032	.0003092	.0000706	.0001861	.002868
%RSD	34.58968	210.2702	.1705294	12.96528	29.57922	13.56544	.0550072
#1	.0001150	-.000071	11.89087	.0024525	.0002530	.0011733	5.213681
#2	.0001715	-.000048	11.91875	.0026548	.0001619	.0014000	5.217243
#3	.0000869	.000038	11.93040	.0020475	.0003008	.0015423	5.211568

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018709	12.18207	.0000681	-.000061	-.442050	.0008595	-.000591
Stddev	.0001999	.05732	.0001392	.000123	.016508	.0016713	.000747
%RSD	10.68674	.4705444	204.4814	203.9130	3.734386	194.4534	126.4433
#1	.0019385	12.12348	.0000414	.000020	-.449977	-.000597	-.001066
#2	.0020283	12.18470	.0002187	.000001	-.453099	.002684	-.000976
#3	.0016460	12.23804	-.000056	-.000203	-.423074	.000491	.000270

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.201186	-.009484	-.000427	-.000979	.0004626	-.003947	-.001835
Stddev	.022484	.000550	.000119	.000473	.0001028	.004877	.001729
%RSD	11.17587	5.797010	27.78198	48.29045	22.22288	123.5584	94.22819
#1	-.210475	-.008849	-.000400	-.000437	.0005688	.001647	-.003689
#2	-.175546	-.009780	-.000558	-.001306	.0004553	-.007303	-.001550
#3	-.217537	-.009821	-.000325	-.001195	.0003636	-.006185	-.000266

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: ICSADLX20 Acquired: 4/7/2025 13:23:05 Type: Unk
Method: NON EPA-6010-200.7(v2893) 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	-.000940	-.002651	-.000352
Stddev	.001067	.000841	.000022
%RSD	113.4756	31.71436	6.138421
#1	-.002096	-.001805	-.000341
#2	-.000732	-.002661	-.000338
#3	.000007	-.003486	-.000377

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2221.702	49632.72	10346.11	1398.241	3460.326
Stddev	.897	220.39	45.28	8.266	7.844
%RSD	.0403647	.4440401	.4376405	.5911886	.2266832
#1	2221.321	49885.49	10398.06	1407.672	3451.398
#2	2222.726	49531.88	10325.30	1394.799	3463.471
#3	2221.059	49480.80	10314.98	1392.252	3466.110

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: ICSABDLX20 Acquired: 4/7/2025 13:37:51 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0073445	.0064537	.0027129	.0017299	.0297126	12.12814	.0216283
Stddev	.0010979	.0015509	.0002713	.0011485	.0012393	.02229	.0005459
%RSD	14.94837	24.03058	10.00193	66.38663	4.171080	.1837481	2.523802
#1	.0082383	.0082423	.0030247	.0009859	.0309181	12.10259	.0214416
#2	.0061190	.0056353	.0025841	.0011513	.0284420	12.14360	.0222430
#3	.0076761	.0054834	.0025299	.0030526	.0297776	12.13821	.0212003

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0258254	.0497798	11.99339	.0287481	.0250859	.0275935	4.929000
Stddev	.0001146	.0001009	.01397	.0002714	.0001690	.0005001	.017878
%RSD	.4438401	.2027386	.1165035	.9440979	.6738053	1.812470	.3627061
#1	.0257779	.0496698	11.99542	.0284358	.0249250	.0271694	4.931483
#2	.0259562	.0498017	11.97852	.0288815	.0252621	.0274661	4.910011
#3	.0257422	.0498680	12.00625	.0289269	.0250705	.0281450	4.945506

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0255737	12.31533	.0506299	.0090656	-.464558	.0237931	.0509399
Stddev	.0003314	.01707	.0002414	.0005461	.010105	.0013550	.0000828
%RSD	1.295884	.1386250	.4768676	6.024146	2.175082	5.695007	.1625448
#1	.0256994	12.30646	.0504740	.0096459	-.454389	.0253573	.0508730
#2	.0251978	12.33502	.0505078	.0089891	-.474596	.0230440	.0510325
#3	.0258238	12.30453	.0509080	.0085617	-.464689	.0229781	.0509141

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.223099	.0345363	.0586990	.0557403	.0541560	.0386908	.0437124
Stddev	.039846	.0002230	.0003584	.0002557	.0006372	.0105849	.0028558
%RSD	17.86013	.6456954	.6106300	.4587598	1.176560	27.35770	6.533188
#1	-.226867	.0345195	.0585378	.0558966	.0540861	.0280784	.0424876
#2	-.181503	.0343221	.0591097	.0554452	.0548252	.0387459	.0469763
#3	-.260927	.0347672	.0584495	.0558791	.0535566	.0492481	.0416733

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: ICSABDLX20 Acquired: 4/7/2025 13:37:51 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0546785	.0476358	.0490519
Stddev	.0052626	.0010928	.0000657
%RSD	9.624575	2.294142	.1340233
#1	.0486042	.0473119	.0489796
#2	.0578633	.0488539	.0491081
#3	.0575679	.0467414	.0490681

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2198.902	50421.42	9778.199	1426.744	3396.022
Stddev	3.965	137.56	34.350	5.906	5.768
%RSD	.1803303	.2728240	.3512869	.4139606	.1698465
#1	2197.134	50513.51	9793.130	1430.186	3397.618
#2	2203.443	50487.45	9802.557	1430.122	3400.824
#3	2196.127	50263.29	9738.911	1419.924	3389.624

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCV01 Acquired: 4/7/2025 13:42:11 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	4.998148	5.100096	4.973754	5.028018	5.044854	9.832461	9.855406
Stddev	.011346	.019785	.014855	.017795	.022855	.013927	.100722
%RSD	.2270122	.3879266	.2986597	.3539169	.4530433	.1416450	1.021994
#1	4.993298	5.080414	4.963372	5.009468	5.025303	9.828158	9.742712
#2	4.990033	5.099892	4.967119	5.029638	5.039279	9.821193	9.886855
#3	5.011114	5.119982	4.990769	5.044947	5.069982	9.848032	9.936650

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2486603	2.481280	24.50141	1.010984	2.483321	1.263541	4.980519
Stddev	.0001715	.005828	.06940	.002740	.006150	.003781	.015303
%RSD	.0689632	.2348586	.2832325	.2710551	.2476650	.2992218	.3072627
#1	.2487245	2.479330	24.44700	1.013109	2.481606	1.259281	4.997750
#2	.2487904	2.476678	24.47768	1.007891	2.478209	1.264843	4.968513
#3	.2484659	2.487833	24.57956	1.011951	2.490146	1.266498	4.975293

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.449860	24.39642	2.486557	1.261365	24.84474	2.458652	2.523467
Stddev	.003460	.10309	.004809	.001452	.11145	.002503	.003858
%RSD	.1412145	.4225802	.1933976	.1150932	.4485671	.1017921	.1528682
#1	2.447471	24.28987	2.483438	1.261954	24.93103	2.456071	2.520060
#2	2.448282	24.40372	2.484138	1.259711	24.71891	2.461068	2.522685
#3	2.453827	24.49567	2.492095	1.262430	24.88427	2.458817	2.527655

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.91861	4.997568	5.094282	4.994379	4.907404	4.936135	5.094198
Stddev	.14797	.012479	.014474	.010141	.003864	.030845	.013065
%RSD	.5938282	.2496927	.2841140	.2030435	.0787325	.6248852	.2564745
#1	25.01574	5.003065	5.079450	4.994533	4.902956	4.916101	5.089766
#2	24.74830	5.006355	5.095026	4.984162	4.909328	4.920650	5.083926
#3	24.99178	4.983285	5.108369	5.004441	4.909928	4.971655	5.108903

Sample Name: CCV01 Acquired: 4/7/2025 13:42:11 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	4.922041	4.975103	5.010307
Stddev	.006447	.004475	.031108
%RSD	.1309899	.0899518	.6208797
#1	4.928640	4.971998	4.974478
#2	4.915757	4.980233	5.030443
#3	4.921727	4.973078	5.026000

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2175.586	49647.82	9585.218	1383.793	3252.482
Stddev	5.400	287.12	38.479	13.811	6.396
%RSD	.2481897	.5783096	.4014404	.9980244	.1966627
#1	2181.449	49691.13	9617.933	1395.045	3256.988
#2	2174.493	49910.82	9594.896	1387.954	3255.298
#3	2170.817	49341.50	9542.824	1368.381	3245.161

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCB01 Acquired: 4/7/2025 13:50:48 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0011940	.0007424	-.000111	.0001431	-.000190	.0042208	-.002376
Stddev	.0026135	.0017532	.000859	.0021100	.000904	.0038171	.000685
%RSD	218.8823	236.1523	774.7106	1474.861	475.7452	90.43687	28.82263
#1	.0029591	.0021419	.000133	-.002231	.000854	.0084608	-.002554
#2	.0024313	-.001224	-.001066	.001804	-.000725	.0010582	-.002955
#3	-.001808	.001309	.000600	.000856	-.000700	.0031433	-.001620

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000038	-.000023	-.005364	-.000131	.0002071	-.000277	-.003958
Stddev	.000022	.000077	.002861	.000526	.0002448	.000234	.001237
%RSD	57.21672	331.9890	53.33590	401.4720	118.1729	84.64438	31.24878
#1	-.000042	.000060	-.007128	.000452	.0000114	-.000129	-.002961
#2	-.000014	-.000090	-.006901	-.000277	.0001285	-.000547	-.003570
#3	-.000057	-.000039	-.002063	-.000568	.0004816	-.000154	-.005342

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016834	.0045474	.0002757	.0003851	-.470385	.0015026	-.000941
Stddev	.0004399	.0089071	.0000968	.0000255	.007168	.0017517	.000265
%RSD	26.13028	195.8753	35.10498	6.622476	1.523804	116.5741	28.12731
#1	.0013800	-.005670	.0001842	.0004129	-.477972	.0024804	-.000948
#2	.0014823	.010676	.0003771	.0003794	-.469456	-.000520	-.001203
#3	.0021879	.008636	.0002658	.0003629	-.463727	.002547	-.000674

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.226667	-.006045	-.000475	-.000432	.0005637	-.001707	-.002158
Stddev	.026009	.000499	.000279	.000506	.0006645	.005302	.001353
%RSD	11.47458	8.253537	58.62554	117.1158	117.8865	310.5685	62.69403
#1	-.225339	-.006619	-.000778	-.000815	.0005044	-.007598	-.001968
#2	-.201347	-.005793	-.000419	.000142	-.000069	.002684	-.003597
#3	-.253314	-.005722	-.000229	-.000623	.001256	-.000208	-.000911

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCB01 Acquired: 4/7/2025 13:50:48 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	-.000257	-.001562	.0000181
Stddev	.001867	.001211	.0000505
%RSD	727.1171	77.51623	278.5237
#1	.001357	-.001319	-.000035
#2	.000175	-.000491	.000025
#3	-.002301	-.002875	.000065

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2208.742	50056.28	10419.07	1389.249	3558.448
Stddev	1.863	137.69	23.12	4.631	4.164
%RSD	.0843310	.2750638	.2218957	.3333130	.1170207
#1	2210.812	50084.21	10436.97	1387.343	3557.101
#2	2208.211	49906.77	10392.96	1394.529	3563.119
#3	2207.202	50177.86	10427.27	1385.876	3555.124

Sample Name: PB167491BL Acquired: 4/7/2025 14:03:34 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0007271	.0010875	-.000389	.0007022	.0007067	.0075126	-.000757
Stddev	.0030552	.0014859	.001077	.0008880	.0012924	.0065901	.001208
%RSD	420.1696	136.6366	276.8890	126.4705	182.8743	87.72024	159.5572
#1	.0009979	-.000625	-.001598	.0010555	.0019425	.0011683	-.001312
#2	.0036380	.001849	-.000037	.0013591	.0008136	.0070458	-.001587
#3	-.002454	.002038	.000468	-.000308	-.000636	.0143236	.000629

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000032	-.000012	-.002220	-.000217	.0000403	-.000126	-.000608
Stddev	.000015	.000045	.005772	.000070	.0000489	.000273	.002443
%RSD	45.31559	372.4614	259.9458	32.22741	121.1248	217.7076	401.9574
#1	-.000035	-.000060	.000235	-.000138	.0000879	.000041	-.002535
#2	-.000016	-.000006	-.008814	-.000272	.0000429	.000023	-.001427
#3	-.000045	.000029	.001918	-.000241	-.000010	-.000441	.002139

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014210	.0008154	.0002150	.0000347	-.530423	-.000280	-.001052
Stddev	.0002104	.0190223	.0002282	.0002540	.007388	.001055	.000136
%RSD	14.80391	2332.940	106.1173	731.2660	1.392816	376.8890	12.93041
#1	.0014370	.0086315	.0001477	-.000243	-.538129	.000915	-.001202
#2	.0012031	-.020870	.0004693	.000256	-.523401	-.001083	-.000938
#3	.0016230	.014685	.0000281	.000091	-.529740	-.000673	-.001015

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.249850	-.007749	-.000521	-.000085	-.000017	.0007692	-.002198
Stddev	.037642	.000174	.000167	.000581	.000771	.0057297	.001475
%RSD	15.06601	2.244267	32.11216	681.3766	4524.021	744.8655	67.12769
#1	-.270116	-.007806	-.000714	-.000441	.000830	-.005635	-.000494
#2	-.273017	-.007887	-.000431	-.000401	-.000201	.002535	-.003054
#3	-.206416	-.007554	-.000418	.000586	-.000679	.005408	-.003045

Sample Name: PB167491BL Acquired: 4/7/2025 14:03:34 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	-.004666	-.000954	-.000031
Stddev	.001885	.000145	.000006
%RSD	40.38808	15.18302	18.14660
#1	-.006722	-.000885	-.000024
#2	-.004256	-.000857	-.000033
#3	-.003021	-.001121	-.000035

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2259.465	50887.18	9875.348	1449.089	3638.096
Stddev	6.031	25.48	38.543	5.962	7.264
%RSD	.2669003	.0500670	.3902917	.4114082	.1996616
#1	2255.832	50863.01	9918.908	1455.708	3632.723
#2	2266.426	50884.75	9845.666	1444.141	3646.360
#3	2256.136	50913.79	9861.471	1447.417	3635.206

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: PB167491BS Acquired: 4/7/2025 14:19:12 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.7489575	1.873270	.9155707	1.915088	.7774439	1.808159	.1733701
Stddev	.0022491	.023376	.0026483	.005409	.0026207	.005659	.0008939
%RSD	.3002969	1.247879	.2892545	.2824546	.3370885	.3129616	.5156281
#1	.7485257	1.851478	.9165386	1.921059	.7803319	1.808699	.1742927
#2	.7469555	1.870372	.9125745	1.913687	.7767824	1.813529	.1725078
#3	.7513911	1.897960	.9175988	1.910517	.7752173	1.802250	.1733097

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1867126	.1823704	.9134295	.3796029	.1862536	.2970724	2.747773
Stddev	.0007563	.0002249	.0065078	.0007119	.0004686	.0000883	.024553
%RSD	.4050510	.1232999	.7124609	.1875396	.2516148	.0297353	.8935607
#1	.1874061	.1823752	.9188920	.3802964	.1865485	.2970598	2.765750
#2	.1859062	.1821431	.9062291	.3796386	.1857133	.2969911	2.757771
#3	.1868254	.1825928	.9151673	.3788739	.1864991	.2971664	2.719798

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1844763	1.761613	.4682172	.0716027	3.002346	.2704945	.1913039
Stddev	.0007210	.010106	.0001796	.0002561	.030564	.0006110	.0000424
%RSD	.3908245	.5737004	.0383582	.3576897	1.017989	.2258759	.0221590
#1	.1852254	1.772809	.4680789	.0718526	3.017538	.2705068	.1912624
#2	.1844164	1.753162	.4681524	.0716147	3.022336	.2698774	.1913471
#3	.1837872	1.758870	.4684202	.0713408	2.967163	.2710992	.1913023

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.807521	.3150523	.3838366	.6517663	.1787971	.9015257	5.565816
Stddev	.069424	.0011206	.0007632	.0013698	.0000645	.0090029	.011305
%RSD	.7882380	.3556990	.1988292	.2101620	.0360551	.9986336	.2031105
#1	8.815861	.3144106	.3832570	.6528225	.1787471	.8915060	5.578390
#2	8.872398	.3144001	.3835514	.6502186	.1787742	.9089348	5.562567
#3	8.734303	.3163463	.3847012	.6522577	.1788698	.9041364	5.556492

Sample Name: PB167491BS Acquired: 4/7/2025 14:19:12 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	8.922683	.1877553	.1792763
Stddev	.008901	.0003723	.0008118
%RSD	.0997612	.1982895	.4528157
#1	8.912405	.1876370	.1799664
#2	8.927881	.1881724	.1794807
#3	8.927764	.1874566	.1783819

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2191.096	51364.65	9869.282	1430.054	3431.459
Stddev	3.872	203.88	53.256	9.190	5.426
%RSD	.1766937	.3969171	.5396139	.6426629	.1581205
#1	2186.747	51176.31	9808.621	1421.820	3425.470
#2	2194.166	51336.51	9908.353	1428.373	3436.046
#3	2192.376	51581.14	9890.871	1439.969	3432.861

Sample Name: PB167471BL Acquired: 4/7/2025 14:23:15 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0019689	-.000255	.0006288	.0007189	.0014407	.0034169	-.000719
Stddev	.0009696	.000711	.0013602	.0042808	.0016323	.0058964	.000415
%RSD	49.24768	278.3455	216.3212	595.4381	113.2973	172.5647	57.80976
#1	.0030583	-.000015	.0010828	.0020597	.0033026	-.000399	-.000428
#2	.0012002	.000304	.0017039	.0041689	.0007638	.010208	-.001195
#3	.0016483	-.001056	-.000900	-.004072	.0002558	.000442	-.000533

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000063	.0000188	-.004708	-.000159	.0000364	-.000540	-.000780
Stddev	.000044	.0000488	.006361	.000181	.0001835	.000280	.001393
%RSD	69.63974	259.6114	135.1152	113.7592	503.6173	51.83539	178.7297
#1	-.000040	-.000004	.001511	-.000326	.0002483	-.000805	-.000203
#2	-.000036	-.000014	-.004432	-.000183	-.000070	-.000568	-.002369
#3	-.000114	.000075	-.011202	.000033	-.000069	-.000247	.000233

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014111	-.005183	.0000121	.0002236	-.519735	.0009330	-.001389
Stddev	.0000401	.007372	.0002741	.0002141	.010992	.0017409	.000233
%RSD	2.843857	142.2459	2266.549	95.73604	2.114961	186.5961	16.80723
#1	.0014336	.000105	-.000269	.0000707	-.532427	.0029379	-.001414
#2	.0014349	-.002049	.000279	.0004683	-.513461	.0000561	-.001609
#3	.0013647	-.013604	.000026	.0001319	-.513316	-.000195	-.001144

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.216763	-.009539	-.000439	-.000699	-.000112	-.003748	-.000811
Stddev	.016765	.000855	.000382	.000163	.000344	.007564	.001463
%RSD	7.734278	8.963909	87.00902	23.27431	307.1142	201.8216	180.3747
#1	-.212285	-.010315	-.000172	-.000792	.000226	-.004008	.000819
#2	-.235313	-.008622	-.000269	-.000794	-.000100	.003943	-.002011
#3	-.202693	-.009678	-.000876	-.000511	-.000462	-.011178	-.001241

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: PB167471BL Acquired: 4/7/2025 14:23:15 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	-.001253	-.001724	-.000041
Stddev	.000503	.000511	.000043
%RSD	40.12137	29.65777	106.2729
#1	-.001826	-.001134	-.000041
#2	-.001044	-.002005	-.000084
#3	-.000888	-.002032	.000003

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2237.015	51122.27	10674.47	1453.789	3575.359
Stddev	5.377	165.45	33.53	9.203	9.204
%RSD	.2403501	.3236352	.3141269	.6330448	.2574151
#1	2234.765	51051.72	10710.25	1443.197	3574.585
#2	2243.151	51003.79	10643.76	1458.337	3584.925
#3	2233.129	51311.30	10669.40	1459.832	3566.567

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: PB167471BS Acquired: 4/7/2025 14:34:30 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.7780046	1.986955	.9375255	1.976608	.8065618	1.838744	.1796000
Stddev	.0126487	.007147	.0048729	.012580	.0056362	.000689	.0005168
%RSD	1.625791	.3596795	.5197620	.6364651	.6987914	.0374800	.2877563
#1	.7659843	1.989078	.9336143	1.968197	.8009544	1.839094	.1792381
#2	.7768297	1.992801	.9359779	1.970555	.8065046	1.837950	.1801919
#3	.7911997	1.978988	.9429842	1.991070	.8122263	1.839188	.1793700

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1855101	.1877708	.9397424	.3946132	.1909412	.3057028	2.909538
Stddev	.0007347	.0008824	.0094380	.0027160	.0007456	.0014346	.030750
%RSD	.3960390	.4699238	1.004322	.6882770	.3904917	.4692799	1.056873
#1	.1853513	.1868915	.9503179	.3930995	.1901886	.3041870	2.942777
#2	.1863112	.1877646	.9367337	.3929912	.1909555	.3058820	2.882104
#3	.1848678	.1886562	.9321755	.3977487	.1916796	.3070394	2.903733

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1852668	1.794278	.4808576	.0738241	3.012239	.2765051	.1970976
Stddev	.0014764	.008295	.0014569	.0003465	.016095	.0020448	.0008046
%RSD	.7968863	.4623019	.3029834	.4693648	.5343066	.7395144	.4082113
#1	.1836204	1.801354	.4795665	.0736192	2.998156	.2741683	.1962353
#2	.1857070	1.796329	.4805692	.0736290	3.008779	.2779660	.1978282
#3	.1864731	1.785149	.4824372	.0742242	3.029782	.2773812	.1972292

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.381234	.2602579	.3987369	.6727477	.1823650	.7738226	5.704938
Stddev	.095305	.0007480	.0018827	.0020076	.0007889	.0120073	.015937
%RSD	1.015912	.2874136	.4721572	.2984116	.4326006	1.551684	.2793528
#1	9.415984	.2599744	.3975384	.6713077	.1831912	.7613332	5.689271
#2	9.273430	.2611062	.3977653	.6718944	.1822841	.7852813	5.704410
#3	9.454289	.2596930	.4009068	.6750409	.1816196	.7748533	5.721132

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: PB167471BS Acquired: 4/7/2025 14:34:30 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	9.248180	.1884301	.1817343
Stddev	.034702	.0007284	.0007195
%RSD	.3752294	.3865520	.3958886
#1	9.218429	.1880221	.1811843
#2	9.239810	.1892711	.1814702
#3	9.286302	.1879972	.1825485

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2174.361	50244.08	10123.31	1402.513	3413.485
Stddev	10.071	117.83	34.34	5.524	13.054
%RSD	.4631864	.2345114	.3391743	.3938658	.3824227
#1	2179.249	50258.04	10133.83	1408.690	3421.206
#2	2181.055	50354.30	10084.95	1400.805	3420.837
#3	2162.778	50119.89	10151.16	1398.045	3398.414

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1504-05 Acquired: 4/7/2025 14:38:31 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0058624	.0014817	-.000210	-.002934	-.001868	-.013973	.0020673
Stddev	.0075515	.0016229	.000912	.002720	.001266	.007563	.0009377
%RSD	128.8114	109.5292	434.2378	92.71390	67.79796	54.12648	45.35823
#1	.0075318	.0003414	-.000071	-.005100	-.002358	-.020310	.0028620
#2	-.002384	.0033397	.000624	-.003821	-.000430	-.005601	.0010331
#3	.012440	.0007640	-.001183	.000119	-.002815	-.016008	.0023069

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000763	-.000067	49.68474	-.001136	-.000142	-.000670	-.001898
Stddev	.0000182	.000025	.17672	.000306	.000132	.000174	.002007
%RSD	23.82428	37.80913	.3556842	26.92327	93.48597	25.93997	105.7626
#1	.0000964	-.000045	49.49787	-.001117	-.000105	-.000544	-.002558
#2	.0000610	-.000062	49.84916	-.001451	-.000288	-.000868	-.003492
#3	.0000714	-.000095	49.70719	-.000840	-.000031	-.000598	.000356

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004480	16.50885	.0002871	.0000729	54.15804	.0009710	-.000580
Stddev	.000058	.05094	.0004769	.0001515	.25578	.0025352	.000217
%RSD	1.299342	.3085370	166.1370	207.7142	.4722872	261.0827	37.47081
#1	-.004465	16.49262	-.000256	.0000427	53.86901	-.001182	-.000375
#2	-.004544	16.46801	.000477	.0002372	54.35518	.003765	-.000807
#3	-.004431	16.56593	.000640	-.000061	54.24993	.000330	-.000556

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.52008	-.010361	-.000427	-.004881	-.001305	-.010069	-.000834
Stddev	.07712	.000385	.000252	.000536	.000220	.004814	.002758
%RSD	.3583672	3.713468	59.11325	10.98315	16.83870	47.80744	330.8085
#1	21.43424	-.010777	-.000591	-.005098	-.001483	-.007379	.001907
#2	21.54249	-.010286	-.000553	-.005275	-.001372	-.015627	-.000800
#3	21.58352	-.010019	-.000136	-.004271	-.001059	-.007202	-.003608

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1504-05 Acquired: 4/7/2025 14:38:31 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0092079	-.011646	.0048261
Stddev	.0041154	.000281	.0000741
%RSD	44.69396	2.415759	1.535547
#1	.0076319	-.011803	.0047415
#2	.0061134	-.011815	.0048572
#3	.0138783	-.011322	.0048797

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2203.333	50301.18	10687.71	1420.956	3346.308
Stddev	5.714	58.29	20.75	8.501	9.245
%RSD	.2593558	.1158866	.1941777	.5982523	.2762671
#1	2207.922	50318.77	10710.82	1426.959	3355.723
#2	2205.143	50348.65	10681.68	1424.680	3345.957
#3	2196.932	50236.11	10670.65	1411.229	3337.244

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1504-01 Acquired: 4/7/2025 14:42:50 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.5606723	.1944500	.9706099	.8660850	.2864974	2.513291	.6314889
Stddev	.0030528	.0026332	.0010242	.0020766	.0017238	.004528	.0001904
%RSD	.5444819	1.354192	.1055221	.2397701	.6016799	.1801670	.0301577
#1	.5571856	.1914337	.9712352	.8679032	.2876892	2.513552	.6315899
#2	.5628646	.1962899	.9694279	.8665299	.2845208	2.508638	.6312692
#3	.5619666	.1956266	.9711666	.8638220	.2872822	2.517683	.6316075

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3191552	.6405471	.0186563	.2178202	.6066732	.6841273	3.514252
Stddev	.0020677	.0001764	.0032473	.0005793	.0003424	.0003576	.019329
%RSD	.6478549	.0275329	17.40568	.2659702	.0564347	.0522769	.5500050
#1	.3212581	.6405077	.0178838	.2174262	.6068659	.6844579	3.491940
#2	.3171247	.6403937	.0158650	.2175489	.6062779	.6841762	3.524941
#3	.3190826	.6407398	.0222202	.2184854	.6068758	.6837477	3.525876

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.594055	-.002931	.5005796	.8083918	-.442911	1.345423	1.083370
Stddev	.002253	.021655	.0010839	.0004561	.003671	.001992	.006497
%RSD	.1413310	738.7058	.2165238	.0564209	.8289191	.1480536	.5996907
#1	1.595379	-.017517	.4999118	.8088270	-.447127	1.347692	1.081036
#2	1.595332	-.013228	.4999968	.8079174	-.441188	1.344619	1.090712
#3	1.591453	.021951	.5018302	.8084309	-.440419	1.343959	1.078364

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.217969	1.397446	.4928887	-.000162	-.000305	.4594292	-.000859
Stddev	.012946	.008176	.0005000	.000600	.000267	.0151327	.002754
%RSD	5.939543	.5850474	.1014489	371.1607	87.73346	3.293809	320.6596
#1	-.203594	1.403909	.4923197	-.000753	-.000117	.4548263	.000690
#2	-.228711	1.388255	.4930886	-.000179	-.000186	.4763290	-.004039
#3	-.221602	1.400174	.4932579	.000447	-.000611	.4471325	.000772

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1504-01 Acquired: 4/7/2025 14:42:50 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	-.006296	-.002443	.2659299
Stddev	.003074	.000655	.0002316
%RSD	48.83004	26.80480	.0870789
#1	-.002937	-.002194	.2660240
#2	-.008971	-.003186	.2656660
#3	-.006980	-.001949	.2660996

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2225.381	50472.97	10293.27	1434.219	3527.829
Stddev	2.352	125.24	49.08	3.952	5.768
%RSD	.1057007	.2481342	.4768511	.2755502	.1635100
#1	2223.083	50527.45	10237.41	1436.958	3521.621
#2	2225.277	50329.72	10329.48	1429.688	3528.844
#3	2227.784	50561.75	10312.93	1436.010	3533.023

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1504-03 Acquired: 4/7/2025 14:46:57 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0036832	.0008002	-.000684	.0009470	-.015871	.0881926	-.000205
Stddev	.0043744	.0019560	.000695	.0010302	.001824	.0043352	.000787
%RSD	118.7647	244.4535	101.6555	108.7805	11.49472	4.915647	383.4931
#1	.0071033	.0018104	.000063	-.000241	-.015059	.0838984	-.001092
#2	.0051924	.0020445	-.001312	.001485	-.014594	.0925678	.000412
#3	-.001246	-.001454	-.000803	.001597	-.017961	.0881115	.000064

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000025	-.000053	-.006832	-.000174	.0001756	-.000092	.0017697
Stddev	.000039	.000010	.008574	.000577	.0001803	.000301	.0039205
%RSD	155.5094	19.35149	125.5100	332.4668	102.6727	327.5247	221.5348
#1	-.000067	-.000043	.001048	-.000766	.0000104	-.000315	-.001891
#2	.000009	-.000064	-.015963	-.000141	.0003680	.000250	.001294
#3	-.000017	-.000053	-.005580	.000387	.0001485	-.000211	.005907

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013078	-.002122	.0000658	-.000202	-.324453	-.000173	-.001054
Stddev	.0001427	.015853	.0002419	.000224	.016779	.000551	.000077
%RSD	10.91096	747.2083	367.5177	111.0576	5.171370	319.5081	7.272903
#1	.0012274	-.016615	.0003337	-.000403	-.322459	.000280	-.000968
#2	.0012235	.014809	-.000137	.000040	-.342140	-.000012	-.001079
#3	.0014726	-.004559	.000000	-.000242	-.308761	-.000787	-.001115

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.236430	.2465054	-.000561	1.609495	.2187780	2.002855	-.000984
Stddev	.023833	.0020708	.000229	.007353	.0020552	.017334	.001389
%RSD	10.08057	.8400594	40.80847	.4568206	.9394117	.8654617	141.1317
#1	-.253632	.2454084	-.000728	1.602863	.2203631	2.007528	.000589
#2	-.246432	.2488939	-.000656	1.608222	.2164559	1.983663	-.001501
#3	-.209225	.2452139	-.000300	1.617401	.2195151	2.017373	-.002040

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1504-03 Acquired: 4/7/2025 14:46:57 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	-.001485	-.001488	.0000200
Stddev	.001165	.000834	.0000417
%RSD	78.47031	56.07915	208.8062
#1	-.000149	-.002000	.0000494
#2	-.002013	-.001938	.0000383
#3	-.002292	-.000525	-.000028

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2255.184	51030.48	10127.27	1460.204	3598.215
Stddev	8.215	191.69	55.96	2.318	11.060
%RSD	.3642870	.3756312	.5525693	.1587560	.3073724
#1	2261.545	50998.33	10179.43	1457.948	3605.570
#2	2258.098	51236.21	10068.16	1462.580	3603.579
#3	2245.909	50856.90	10134.22	1460.085	3585.496

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1698-01 Acquired: 4/7/2025 14:51:16 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.1146662	.0087386	.3692608	-.004298	.0043488	16.94393
Stddev	.0097350	.0046829	.0041664	.001193	.0009477	.09340
%RSD	8.489884	53.58842	1.128316	27.75263	21.79142	.5512291
#1	.1055335	.0036215	.3644822	-.003357	.0033310	16.84675
#2	.1249085	.0097836	.3721328	-.005639	.0045098	16.95200
#3	.1135567	.0128108	.3711675	-.003897	.0052057	17.03303

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2040427	.0030960	.0025141	162.9381	.1591206	.0165653
Stddev	.0012834	.0000133	.0003432	.8432	.0018276	.0003746
%RSD	.6289928	.4278803	13.65030	.5174972	1.148589	2.261157
#1	.2026809	.0030868	.0021187	162.0915	.1607298	.0163865
#2	.2042173	.0030900	.0026888	162.9452	.1594986	.0169958
#3	.2052298	.0031112	.0027349	163.7778	.1571336	.0163137

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5758161	50.45562	.7965831	29.10057	.0514475	-.001862
Stddev	.0109741	.43982	.0040351	.24991	.0007871	.000144
%RSD	1.905832	.8716881	.5065564	.8587874	1.529917	7.741145
#1	.5633479	50.87516	.7928976	28.89754	.0505388	-.001776
#2	.5840096	50.49369	.7959571	29.02450	.0518836	-.001782
#3	.5800908	49.99800	.8008947	29.37968	.0519199	-.002029

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.058715	.0673600	.9838322	2.741142	-.092234	.0290459
Stddev	.022251	.0006521	.0042186	.019536	.003698	.0005657
%RSD	37.89562	.9680971	.4287925	.7126986	4.009838	1.947479
#1	-.066859	.0675659	.9875827	2.754344	-.089527	.0284368
#2	-.033540	.0666298	.9846489	2.750382	-.090726	.0295547
#3	-.075747	.0678843	.9792649	2.718700	-.096448	.0291463

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1698-01 Acquired: 4/7/2025 14:51:16 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0206566	1.116651	F 13.12177	1.515529	5.130776	.0072185
Stddev	.0003187	.007110	.06471	.021531	.082642	.0012085
%RSD	1.542868	.6367032	.4931861	1.420718	1.610717	16.74126
#1	.0204474	1.110719	13.15547	1.491038	5.036385	.0086134
#2	.0210234	1.114702	13.16268	1.531481	5.190117	.0065556
#3	.0204989	1.124532	13.04716	1.524069	5.165825	.0064866

Elem	Sr4077
Units	ppm
Avg	.4799182
Stddev	.0030070
%RSD	.6265625
#1	.4765685
#2	.4808017
#3	.4823846

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2132.945	48404.17	9791.435	1353.050	3140.864
Stddev	32.354	315.54	77.738	5.734	47.044
%RSD	1.516867	.6518814	.7939394	.4237714	1.497806
#1	2169.920	48069.20	9835.150	1347.059	3193.841
#2	2109.829	48447.52	9837.475	1353.604	3103.975
#3	2119.086	48695.80	9701.681	1358.487	3124.774

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1698-07 Acquired: 4/7/2025 14:55:26 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0464565	-.005704	.8973311	-.022564	.0076639	19.76898
Stddev	.0035169	.002082	.0078208	.002575	.0031077	.03441
%RSD	7.570244	36.49262	.8715633	11.41178	40.54981	.1740813
#1	.0492280	-.007681	.9038765	-.022467	.0063803	19.80842
#2	.0425002	-.003531	.8994466	-.020038	.0054036	19.74504
#3	.0476413	-.005901	.8886701	-.025185	.0112078	19.75349

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3656344	.0024413	.0028192	136.7715	.1881538	.0259184
Stddev	.0003444	.0000315	.0003209	.4455	.0035951	.0004960
%RSD	.0941968	1.291307	11.38222	.3257562	1.910721	1.913527
#1	.3659594	.0024433	.0028556	137.2825	.1901112	.0264835
#2	.3656703	.0024088	.0031203	136.5678	.1840048	.0257162
#3	.3652734	.0024718	.0024816	136.4642	.1903455	.0255555

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6202072	75.84833	1.004172	16.98691	.0760735	-.002566
Stddev	.0070668	.91600	.003067	.11068	.0009249	.000345
%RSD	1.139420	1.207672	.3054278	.6515581	1.215808	13.43568
#1	.6258133	76.54318	1.006998	17.10819	.0769761	-.002220
#2	.6225392	74.81030	1.000910	16.96116	.0761165	-.002568
#3	.6122692	76.19151	1.004609	16.89137	.0751278	-.002910

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000009	.0886475	1.088876	3.319390	-.149865	.0193511
Stddev	.024694	.0017297	.021181	.048800	.001280	.0004526
%RSD	270556.5	1.951204	1.945250	1.470158	.8539351	2.338803
#1	.028448	.0904917	1.101815	3.308438	-.151200	.0197431
#2	-.015787	.0883897	1.064432	3.276996	-.148649	.0194546
#3	-.012689	.0870612	1.100380	3.372735	-.149746	.0188558

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1698-07 Acquired: 4/7/2025 14:55:26 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0489929	1.346353	F 12.52909	1.913546	6.080756	.0094798
Stddev	.0003930	.004401	.15114	.023056	.076587	.0009950
%RSD	.8022147	.3268523	1.206289	1.204896	1.259506	10.49613
#1	.0485435	1.351431	12.61781	1.935531	6.137512	.0102614
#2	.0491633	1.343967	12.35458	1.915557	6.111112	.0083597
#3	.0492720	1.343660	12.61488	1.889551	5.993644	.0098184

Elem	Sr4077
Units	ppm
Avg	.4647192
Stddev	.0006370
%RSD	.1370696
#1	.4641730
#2	.4654189
#3	.4645657

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2169.849	49946.64	10131.62	1382.512	3221.536
Stddev	20.336	759.85	43.97	26.309	30.700
%RSD	.9372183	1.521321	.4339606	1.902992	.9529616
#1	2149.870	49408.08	10093.18	1366.680	3191.113
#2	2169.152	50815.78	10179.56	1412.882	3220.991
#3	2190.525	49616.05	10122.13	1367.973	3252.506

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1698-07DUP Acquired: 4/7/2025 14:59:35 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0459603	-.004983	.9007992	-.021778	.0050425	19.75524
Stddev	.0039995	.004358	.0132893	.004043	.0003112	.06081
%RSD	8.702047	87.45500	1.475277	18.56280	6.171542	.3078409
#1	.0416627	-.000246	.8854581	-.026272	.0048264	19.77891
#2	.0495733	-.008821	.9087757	-.018438	.0053991	19.80066
#3	.0466448	-.005881	.9081637	-.020623	.0049018	19.68615

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3737064	.0024447	.0022468	134.1236	.1898211	.0259014
Stddev	.0020265	.0000583	.0002240	.2945	.0012950	.0004876
%RSD	.5422582	2.383929	9.968254	.2195788	.6822402	1.882580
#1	.3750467	.0024338	.0019884	133.9890	.1892043	.0253635
#2	.3746974	.0023927	.0023859	134.4614	.1913092	.0263145
#3	.3713752	.0025077	.0023661	133.9204	.1889497	.0260262

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6163248	79.32520	1.008202	15.12584	.0756587	-.002178
Stddev	.0093229	.71563	.003080	.02236	.0008456	.000456
%RSD	1.512652	.9021436	.3054771	.1478357	1.117700	20.94790
#1	.6055795	79.62549	1.011436	15.10147	.0747725	-.001730
#2	.6211333	79.84176	1.007868	15.13063	.0764569	-.002642
#3	.6222617	78.50835	1.005304	15.14542	.0757466	-.002162

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0696044	.0909503	1.114625	3.534163	-.140462	.0193209
Stddev	.0141149	.0008845	.004141	.085483	.001888	.0006112
%RSD	20.27873	.9724615	.3714893	2.418766	1.344354	3.163206
#1	.0839740	.0914575	1.112506	3.590864	-.138642	.0187066
#2	.0690805	.0914644	1.119397	3.575785	-.140330	.0199289
#3	.0557588	.0899290	1.111973	3.435840	-.142412	.0193272

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1698-07DUP Acquired: 4/7/2025 14:59:35 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0503545	1.352635	F 13.32996	1.903587	5.978631	.0094546
Stddev	.0005941	.004159	.12010	.028727	.089912	.0004733
%RSD	1.179801	.3074484	.9009726	1.509119	1.503886	5.005888
#1	.0500183	1.355662	13.34109	1.870854	5.874940	.0094862
#2	.0510405	1.354350	13.44411	1.924610	6.034990	.0099113
#3	.0500048	1.347893	13.20468	1.915297	6.025961	.0089663

Elem	Sr4077
Units	ppm
Avg	.4681167
Stddev	.0040096
%RSD	.8565363
#1	.4713581
#2	.4693589
#3	.4636330

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2175.917	49067.41	10385.09	1368.860	3224.305
Stddev	27.091	226.68	54.47	3.565	44.165
%RSD	1.245036	.4619835	.5244896	.2604134	1.369747
#1	2207.121	49148.46	10443.03	1372.279	3275.283
#2	2162.223	48811.34	10377.32	1365.166	3200.025
#3	2158.407	49242.42	10334.92	1369.135	3197.606

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCV02 Acquired: 4/7/2025 15:07:59 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	4.844254	4.905586	4.829110	4.871404	4.896935	9.495168	9.878387
Stddev	.056922	.079081	.049236	.050950	.055785	.046026	.086053
%RSD	1.175042	1.612052	1.019558	1.045898	1.139176	.4847358	.8711288
#1	4.790925	4.853412	4.781563	4.816142	4.838986	9.463898	9.832832
#2	4.837645	4.866772	4.825892	4.881556	4.901550	9.473587	9.824687
#3	4.904192	4.996574	4.879876	4.916513	4.950269	9.548020	9.977642

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2355960	2.417357	23.93367	.9755257	2.409056	1.227234	4.991383
Stddev	.0008243	.021895	.17134	.0018461	.022941	.013009	.027457
%RSD	.3498703	.9057240	.7158751	.1892457	.9522688	1.060038	.5500943
#1	.2348038	2.397302	23.84494	.9771494	2.388863	1.214064	5.013274
#2	.2355353	2.414052	23.82489	.9735176	2.404305	1.227561	4.960576
#3	.2364490	2.440716	24.13117	.9759100	2.434001	1.240076	5.000299

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.388480	23.54837	2.416437	1.225188	25.24744	2.412467	2.446074
Stddev	.021674	.14204	.024750	.002236	.14095	.015875	.002829
%RSD	.9074338	.6031703	1.024226	.1825132	.5582870	.6580424	.1156490
#1	2.378192	23.46574	2.395640	1.226703	25.33482	2.401119	2.444347
#2	2.373865	23.46699	2.409861	1.222619	25.08483	2.405674	2.449339
#3	2.413381	23.71238	2.443811	1.226240	25.32266	2.430608	2.444537

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.96911	4.795555	4.923288	4.849156	4.801764	5.044973	5.014122
Stddev	.04943	.032567	.054185	.049848	.032008	.005636	.051921
%RSD	.1979641	.6791130	1.100589	1.027979	.6665806	.1117214	1.035497
#1	24.99923	4.764863	4.869300	4.806072	4.790563	5.040033	4.961708
#2	24.91207	4.792082	4.922897	4.837643	4.776862	5.043772	5.015121
#3	24.99604	4.829719	4.977668	4.903754	4.837866	5.051113	5.065536

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCV02 Acquired: 4/7/2025 15:07:59 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	4.814609	4.832358	4.895307
Stddev	.074947	.028026	.030510
%RSD	1.556654	.5799609	.6232458
#1	4.749814	4.819406	4.891313
#2	4.797325	4.813150	4.866991
#3	4.896687	4.864517	4.927617

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2167.900	49719.12	9860.144	1394.050	3233.989
Stddev	19.797	82.31	43.011	2.158	29.500
%RSD	.9132032	.1655446	.4362142	.1547672	.9121896
#1	2189.164	49645.86	9898.375	1396.241	3262.124
#2	2164.537	49808.18	9868.483	1393.980	3236.551
#3	2150.000	49703.30	9813.574	1391.928	3203.291

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCB02 Acquired: 4/7/2025 15:12:11 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	-.000031	-.000334	-.000504	.0000338	.0019055	-.000793	-.001354
Stddev	.002285	.000895	.000363	.0027437	.0016556	.008371	.000382
%RSD	7369.382	267.8099	72.11117	8118.066	86.88435	1055.210	28.21984
#1	.002597	.000322	-.000092	.0022077	.0028523	.007831	-.001744
#2	-.001555	.000029	-.000641	-.003049	.0028704	-.008885	-.001339
#3	-.001135	-.001354	-.000778	.000943	-.000006	-.001326	-.000980

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000037	-.000003	-.008032	-.000537	.0001144	.0001317	.0015033
Stddev	.0000842	.000050	.006584	.000085	.0002293	.0000759	.0044076
%RSD	2284.920	1473.878	81.97895	15.92457	200.4802	57.59492	293.1874
#1	.0000923	-.000060	-.002688	-.000454	-.000056	.0001406	.0011186
#2	-.000006	.000014	-.006020	-.000625	.000024	.0002028	-.002699
#3	-.000075	.000036	-.015388	-.000531	.000375	.0000518	.006091

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018290	.0029086	.0000838	.0003032	-.557822	-.001389	-.001141
Stddev	.0002023	.0070875	.0001117	.0002217	.016174	.000690	.000099
%RSD	11.06278	243.6772	133.3182	73.12653	2.899520	49.71260	8.632056
#1	.0016483	.0055155	.0000253	.0000584	-.549975	-.002185	-.001030
#2	.0020476	.0083234	.0000135	.0004905	-.547068	-.001002	-.001218
#3	.0017911	-.005113	.0002126	.0003607	-.576423	-.000979	-.001176

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.252133	-.001502	-.000281	-.000226	.0004770	.0071007	-.001062
Stddev	.016882	.000295	.000204	.001101	.0006444	.0046529	.000266
%RSD	6.695740	19.65604	72.60456	487.6141	135.1041	65.52728	25.08469
#1	-.235888	-.001558	-.000306	.000982	.0010736	.0118209	-.001068
#2	-.250922	-.001182	-.000472	-.001172	-.000206	.0069629	-.000792
#3	-.269588	-.001764	-.000066	-.000488	.000564	.0025182	-.001325

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCB02 Acquired: 4/7/2025 15:12:11 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	-.003284	-.001648	.0000282
Stddev	.001881	.000649	.0000510
%RSD	57.27293	39.37820	180.6192
#1	-.001248	-.001786	.0000045
#2	-.003648	-.002217	.0000868
#3	-.004956	-.000941	-.000007

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2217.836	50319.03	10419.04	1421.535	3542.735
Stddev	31.441	84.36	30.79	4.119	46.026
%RSD	1.417665	.1676478	.2955571	.2897443	1.299156
#1	2219.885	50373.38	10384.54	1417.298	3549.744
#2	2248.202	50361.86	10443.74	1421.783	3584.854
#3	2185.420	50221.85	10428.84	1425.525	3493.607

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1698-07LX5 Acquired: 4/7/2025 15:16:32 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0107466	.0002728	.1858523	-.002555	.0025788	3.997244	.0741922
Stddev	.0028628	.0008501	.0028260	.002041	.0012273	.121492	.0028466
%RSD	26.63884	311.6256	1.520571	79.88967	47.59315	3.039401	3.836780
#1	.0131342	.0008172	.1826226	-.004888	.0039062	4.066892	.0764005
#2	.0115326	.0007080	.1878711	-.001680	.0023450	4.067882	.0751966
#3	.0075729	-.000707	.1870631	-.001097	.0014852	3.856958	.0709796

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005017	.0002111	27.34009	.0394905	.0053647	.1318839	16.29088
Stddev	.0000936	.0000636	.86318	.0002347	.0002525	.0021512	.04041
%RSD	18.66430	30.14085	3.157199	.5944571	4.706907	1.631111	.2480747
#1	.0005782	.0002237	27.88452	.0397382	.0056557	.1296193	16.28836
#2	.0005296	.0001421	27.79090	.0394618	.0052352	.1339001	16.25179
#3	.0003973	.0002674	26.34484	.0392714	.0052032	.1321323	16.33250

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2099808	3.122813	.0150583	-.000893	-.465916	.0202453	.2320526
Stddev	.0067995	.092120	.0004295	.000205	.005926	.0008726	.0014453
%RSD	3.238136	2.949920	2.851897	23.00699	1.271986	4.309983	.6228439
#1	.2145450	3.186666	.0146136	-.000670	-.471466	.0201330	.2307274
#2	.2132312	3.164563	.0154707	-.000935	-.466608	.0211685	.2318368
#3	.2021662	3.017210	.0150905	-.001074	-.459674	.0194343	.2335937

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4529389	-.034752	.0037674	.0092564	.2747765	2.544073	.3844258
Stddev	.0044167	.000620	.0002248	.0007153	.0089759	.023274	.0054022
%RSD	.9751306	1.783813	5.967450	7.727143	3.266637	.9148148	1.405276
#1	.4563295	-.035344	.0039485	.0087060	.2801895	2.521268	.3782315
#2	.4545430	-.034804	.0038378	.0089984	.2797246	2.543164	.3881608
#3	.4479443	-.034107	.0035158	.0100649	.2644155	2.567788	.3868852

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1698-07LX5 Acquired: 4/7/2025 15:16:32 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	1.185862	.0009899	.0923764
Stddev	.019680	.0005891	.0034754
%RSD	1.659547	59.50916	3.762191
#1	1.163416	.0010127	.0946487
#2	1.200158	.0015672	.0941049
#3	1.194012	.0003897	.0883757

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2229.433	50059.29	10376.87	1404.968	3460.197
Stddev	27.289	214.91	316.42	8.204	43.771
%RSD	1.224030	.4293199	3.049277	.5839176	1.264982
#1	2257.024	50168.98	10156.03	1406.397	3507.326
#2	2202.456	50197.23	10235.22	1412.363	3420.820
#3	2228.820	49811.67	10739.37	1396.143	3452.444

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1698-07MS Acquired: 4/7/2025 15:20:48 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.7172342	1.589742	1.767823	1.588886	.4914373	24.72637
Stddev	.0068316	.017631	.023356	.018724	.0093096	.03660
%RSD	.9524878	1.109030	1.321147	1.178433	1.894357	.1480165
#1	.7094088	1.569910	1.741216	1.567663	.4808816	24.73710
#2	.7220091	1.595672	1.784939	1.603074	.4984763	24.75641
#3	.7202846	1.603643	1.777313	1.595920	.4949539	24.68561

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5392366	.1568374	.1682768	128.5613	.5640268	.2116869
Stddev	.0006861	.0003705	.0031340	.3158	.0024678	.0043146
%RSD	.1272327	.2362336	1.862407	.2456538	.4375263	2.038215
#1	.5397432	.1564506	.1647106	128.7619	.5611776	.2069007
#2	.5395107	.1571891	.1705926	128.7246	.5654879	.2152782
#3	.5384558	.1568725	.1695272	128.1972	.5654149	.2128818

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9331523	133.7444	1.378293	15.25030	.5151070	.0645109
Stddev	.0155251	.3048	.003224	.02144	.0078494	.0002041
%RSD	1.663727	.2279329	.2338995	.1405923	1.523848	.3164500
#1	.9154800	133.5484	1.381048	15.26305	.5061090	.0646568
#2	.9445953	133.5892	1.379084	15.26230	.5205498	.0642776
#3	.9393816	134.0956	1.374747	15.22554	.5186622	.0645982

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.048765	.3483586	1.346955	14.12234	.0081083	.3580855
Stddev	.037959	.0022185	.010298	.08261	.0012170	.0053374
%RSD	1.245049	.6368346	.7645500	.5849618	15.00892	1.490540
#1	3.032567	.3498268	1.335067	14.09475	.0071394	.3519891
#2	3.021592	.3494425	1.353132	14.05705	.0077112	.3619167
#3	3.092135	.3458066	1.352667	14.21521	.0094742	.3603507

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1698-07MS Acquired: 4/7/2025 15:20:48 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.6265269	1.849546	F 17.82353	7.278311	5.533776	.1890458
Stddev	.0096163	.006918	.08671	.112683	.086781	.0018738
%RSD	1.534855	.3740324	.4864884	1.548206	1.568215	.9911613
#1	.6155315	1.856543	17.77414	7.150142	5.438735	.1901591
#2	.6333659	1.849385	17.77280	7.361813	5.608800	.1900959
#3	.6306833	1.842710	17.92365	7.322978	5.553792	.1868825

Elem	Sr4077
Units	ppm
Avg	.5866120
Stddev	.0018304
%RSD	.3120216
#1	.5881300
#2	.5871266
#3	.5845794

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2152.474	48621.71	10812.77	1351.802	3177.158
Stddev	26.796	218.56	26.39	10.462	48.833
%RSD	1.244893	.4495201	.2440767	.7739420	1.536990
#1	2182.998	48850.66	10821.20	1363.824	3232.801
#2	2132.828	48599.20	10783.19	1344.765	3141.434
#3	2141.594	48415.28	10833.91	1346.816	3157.238

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1698-07MSD Acquired: 4/7/2025 15:24:49 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.7052031	1.597727	1.753624	1.567557	.4822268	24.84438
Stddev	.0048642	.022044	.025351	.020753	.0062606	.00937
%RSD	.6897568	1.379702	1.445626	1.323930	1.298277	.0377163
#1	.7043870	1.596142	1.743036	1.560859	.4808437	24.83511
#2	.7104237	1.620520	1.782553	1.590832	.4890634	24.85385
#3	.7007985	1.576518	1.735284	1.550979	.4767734	24.84418

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5306030	.1654009	.1688690	128.5284	.5539559	.2096448
Stddev	.0015333	.0004691	.0021367	.0484	.0045505	.0024192
%RSD	.2889660	.2836058	1.265299	.0376870	.8214470	1.153936
#1	.5310240	.1649440	.1676033	128.4840	.5551257	.2087601
#2	.5318819	.1658813	.1713360	128.5211	.5578073	.2123818
#3	.5289033	.1653773	.1676678	128.5801	.5489348	.2077925

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9340379	125.4061	1.385370	15.42272	.5119182	.0618127
Stddev	.0125539	.7163	.001711	.02142	.0061317	.0005053
%RSD	1.344044	.5712030	.1234866	.1388672	1.197783	.8174905
#1	.9289386	125.2924	1.384963	15.43860	.5095714	.0613394
#2	.9483390	126.1725	1.383899	15.39836	.5188767	.0623449
#3	.9248360	124.7535	1.387247	15.43119	.5073066	.0617537

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.741762	.3489826	1.324066	13.16489	-.004545	.3541793
Stddev	.028831	.0011054	.005203	.08483	.001976	.0034455
%RSD	1.051534	.3167534	.3929674	.6443507	43.48602	.9728243
#1	2.732425	.3477071	1.323689	13.20257	-.002781	.3525936
#2	2.774103	.3496617	1.329447	13.22434	-.004172	.3581322
#3	2.718756	.3495791	1.319061	13.06775	-.006681	.3518120

Sample Name: Q1698-07MSD Acquired: 4/7/2025 15:24:49 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.6209251	1.839425	F 16.82532	7.384725	5.558681	.1906940
Stddev	.0082566	.000947	.10640	.091508	.065072	.0010180
%RSD	1.329733	.0515025	.6323747	1.239155	1.170640	.5338131
#1	.6161350	1.838517	16.79358	7.348565	5.527591	.1897858
#2	.6304590	1.840407	16.94397	7.488788	5.633466	.1917943
#3	.6161813	1.839350	16.73840	7.316822	5.514985	.1905019

Elem	Sr4077
Units	ppm
Avg	.5891221
Stddev	.0009314
%RSD	.1581036
#1	.5898601
#2	.5894306
#3	.5880756

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2170.024	49469.54	10208.87	1375.288	3189.072
Stddev	25.329	215.53	20.95	4.158	36.939
%RSD	1.167223	.4356801	.2052034	.3023449	1.158299
#1	2175.037	49379.54	10201.62	1372.182	3202.930
#2	2142.563	49313.60	10232.48	1373.670	3147.208
#3	2192.472	49715.48	10192.52	1380.012	3217.078

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1698-07A Acquired: 4/7/2025 15:28:50 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.8140851	1.851126	1.792162	1.825812	.8000515	21.51231
Stddev	.0076288	.014811	.005490	.003174	.0058755	.02614
%RSD	.9371023	.8001308	.3063403	.1738407	.7343929	.1215068
#1	.8204236	1.844527	1.798466	1.826576	.8067243	21.50361
#2	.8162137	1.840760	1.788427	1.828535	.7977770	21.54169
#3	.8056181	1.868090	1.789594	1.822326	.7956533	21.49163

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5589778	.1802514	.1926277	258.7677	.5774383	.2214649
Stddev	.0014472	.0007520	.0005823	.4864	.0121256	.0012356
%RSD	.2589034	.4171648	.3022852	.1879840	2.099902	.5579407
#1	.5575831	.1804658	.1932875	258.2097	.5854835	.2228708
#2	.5604723	.1794156	.1921859	258.9914	.5634916	.2205514
#3	.5588779	.1808729	.1924096	259.1022	.5833397	.2209724

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8828549	95.44658	1.411814	81.95745	.5600739	.0723329
Stddev	.0034348	1.45293	.000736	.20221	.0018718	.0014652
%RSD	.3890572	1.522243	.0521671	.2467208	.3341983	2.025662
#1	.8867287	96.61601	1.411088	81.73583	.5622046	.0735718
#2	.8816550	93.82007	1.412560	82.00464	.5586948	.0707156
#3	.8801810	95.90366	1.411796	82.13189	.5593222	.0727112

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.349386	.3763975	1.286568	14.68419	.1068616	.4127368
Stddev	.052428	.0020030	.028682	.20133	.0023763	.0011542
%RSD	1.565293	.5321612	2.229366	1.371033	2.223729	.2796364
#1	3.376415	.3750063	1.309433	14.82690	.1085240	.4140498
#2	3.288959	.3754929	1.254385	14.45391	.1041399	.4122783
#3	3.382783	.3786933	1.295886	14.77177	.1079210	.4118824

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1698-07A Acquired: 4/7/2025 15:28:50 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.7321369	1.733225	F 17.50511	8.246415	F 10.25626	.1891916
Stddev	.0025019	.001388	.27778	.032128	.02333	.0002097
%RSD	.3417240	.0801029	1.586869	.3896000	.2274696	.1108289
#1	.7341359	1.731625	17.67610	8.281625	10.28320	.1889939
#2	.7293312	1.733950	17.18459	8.218691	10.24280	.1894115
#3	.7329438	1.734102	17.65463	8.238928	10.24278	.1891693

Elem	Sr4077
Units	ppm
Avg	.6913959
Stddev	.0033207
%RSD	.4802920
#1	.6885742
#2	.6950552
#3	.6905582

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2110.274	48840.02	10509.23	1372.736	3021.122
Stddev	9.543	902.48	31.23	31.008	10.576
%RSD	.4522159	1.847823	.2972117	2.258882	.3500539
#1	2099.260	48176.78	10504.04	1350.405	3008.937
#2	2115.475	49867.74	10542.74	1408.140	3027.908
#3	2116.087	48475.54	10480.92	1359.663	3026.521

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1705-01 Acquired: 4/7/2025 15:32:51 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0149922	-.023050	.0978778	-.051137	-.000665	77.62849
Stddev	.0050682	.006001	.0006921	.002574	.001536	.50657
%RSD	33.80596	26.03292	.7070971	5.034261	230.9170	.6525599
#1	.0092221	-.018402	.0976479	-.051187	.001101	77.12840
#2	.0187241	-.029824	.0973298	-.053686	-.001695	77.61576
#3	.0170303	-.020923	.0986555	-.048538	-.001402	78.14131

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5177576	.0050614	.0110876	1017.521	.3808358	.0363434
Stddev	.0037719	.0000611	.0002295	6.838	.0008278	.0003103
%RSD	.7285050	1.206207	2.070072	.6719848	.2173747	.8537374
#1	.5142467	.0051283	.0110882	1017.452	.3803150	.0366828
#2	.5172808	.0050470	.0108577	1010.718	.3804021	.0362729
#3	.5217452	.0050088	.0113168	1024.393	.3817904	.0360743

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1341810	127.2949	2.571671	45.94587	.1923183	-.006128
Stddev	.0009326	.2599	.014108	.27883	.0016385	.000132
%RSD	.6950360	.2041743	.5485811	.6068605	.8519646	2.152784
#1	.1348632	126.9979	2.561123	45.79733	.1922175	-.005978
#2	.1331183	127.4062	2.566194	45.77277	.1907326	-.006225
#3	.1345615	127.4806	2.587696	46.26752	.1940049	-.006182

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.910301	.1130095	.5349737	27.37680	-.084925	.0180269
Stddev	.038138	.0019611	.0041983	.14311	.001836	.0005285
%RSD	.4821337	1.735329	.7847745	.5227248	2.162217	2.931506
#1	7.866545	.1116488	.5314117	27.22164	-.084195	.0186133
#2	7.936492	.1121222	.5339069	27.50360	-.083567	.0178800
#3	7.927866	.1152574	.5396026	27.40515	-.087014	.0175875

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1705-01 Acquired: 4/7/2025 15:32:51 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	-.002673	3.316967	F 14.99781	F 11.47556	F 60.34963	-.096013
Stddev	.001287	.020299	.09239	.09673	.38537	.001564
%RSD	48.16418	.6119611	.6159985	.8429334	.6385705	1.628552
#1	-.001930	3.301754	14.89123	11.50746	60.35804	-.097226
#2	-.004160	3.309131	15.05511	11.36691	59.96012	-.094248
#3	-.001930	3.340015	15.04709	11.55232	60.73073	-.096565

Elem	Sr4077
Units	ppm
Avg	5.452181
Stddev	.049611
%RSD	.9099290
#1	5.423992
#2	5.423086
#3	5.509464

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2564.411	58827.39	13198.35	1649.190	2560.303
Stddev	4.195	86.02	81.05	9.336	12.525
%RSD	.1635841	.1462171	.6141017	.5660780	.4892065
#1	2563.215	58892.02	13224.29	1650.953	2557.174
#2	2569.075	58860.39	13263.25	1657.517	2574.096
#3	2560.944	58729.76	13107.50	1639.098	2549.639

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1705-02 Acquired: 4/7/2025 15:37:14 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0170143	-.018199	.1005153	-.056977	-.001732	75.42247
Stddev	.0030635	.006037	.0029501	.002240	.002548	.23665
%RSD	18.00531	33.17106	2.934949	3.932072	147.0964	.3137658
#1	.0159288	-.021426	.0971641	-.056881	.000388	75.43882
#2	.0204728	-.021936	.1016613	-.054786	-.004559	75.17806
#3	.0146415	-.011234	.1027203	-.059263	-.001025	75.65051

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4924742	.0048375	.0165808	884.8289	.1985577	.1016330
Stddev	.0011006	.0000654	.0006927	2.8932	.0009518	.0016153
%RSD	.2234901	1.351440	4.177810	.3269784	.4793789	1.589338
#1	.4917500	.0049125	.0170463	886.6263	.1977024	.1023496
#2	.4919318	.0048069	.0157847	881.4914	.1983875	.0997834
#3	.4937407	.0047930	.0169114	886.3690	.1995831	.1027661

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2370843	156.9384	2.087636	47.11728	.0966499	-.008171
Stddev	.0050491	.8329	.006679	.12775	.0015112	.000340
%RSD	2.129681	.5307428	.3199131	.2711215	1.563624	4.155710
#1	.2398280	156.1192	2.081317	47.01202	.0971795	-.008379
#2	.2312573	157.7844	2.086965	47.08041	.0949451	-.007779
#3	.2401675	156.9116	2.094624	47.25940	.0978251	-.008354

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.712006	.1061903	.4943115	29.44115	-.186800	.0118544
Stddev	.061249	.0011275	.0046404	.09136	.001759	.0002511
%RSD	.9125309	1.061767	.9387685	.3103182	.9415104	2.118254
#1	6.644533	.1049818	.4889935	29.33640	-.188821	.0116922
#2	6.764100	.1063753	.4975384	29.48273	-.185971	.0117274
#3	6.727386	.1072139	.4964027	29.50433	-.185610	.0121437

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1705-02 Acquired: 4/7/2025 15:37:14 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	-.003811	3.010121	F 15.03159	F 24.03396	F 69.06266	-.070387
Stddev	.000827	.008079	.07683	.37112	1.06135	.000722
%RSD	21.69445	.2683830	.5111175	1.544164	1.536796	1.026039
#1	-.003023	3.006906	14.96337	24.25862	69.70392	-.071017
#2	-.003736	3.004145	15.11481	23.60559	67.83756	-.069599
#3	-.004672	3.019312	15.01657	24.23766	69.64649	-.070543

Elem	Sr4077
Units	ppm
Avg	4.764418
Stddev	.025975
%RSD	.5451950
#1	4.739643
#2	4.791447
#3	4.762166

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2754.943	62865.49	13852.10	1740.670	2603.296
Stddev	30.791	355.61	56.76	18.776	38.751
%RSD	1.117674	.5656657	.4097556	1.078640	1.488536
#1	2746.849	63268.38	13895.95	1761.785	2587.163
#2	2788.974	62595.35	13872.35	1725.854	2647.507
#3	2729.008	62732.75	13787.99	1734.371	2575.217

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCV03 Acquired: 4/7/2025 15:41:38 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	5.035334	5.056458	4.969322	5.099381	5.080766	9.606211	9.807274
Stddev	.042614	.059260	.061712	.036889	.048272	.335569	.326752
%RSD	.8463082	1.171958	1.241865	.7234084	.9500902	3.493249	3.331727
#1	5.059603	5.118462	5.009785	5.120285	5.109759	9.796738	9.880904
#2	5.060270	5.050522	4.999889	5.121071	5.107497	9.218747	9.449990
#3	4.986128	5.000389	4.898292	5.056787	5.025042	9.803148	10.09093

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2341327	2.474534	23.72753	1.019445	2.472056	1.265441	5.171467
Stddev	.0069100	.029674	.81001	.005521	.026414	.013322	.002023
%RSD	2.951299	1.199159	3.413804	.5416127	1.068484	1.052796	.0391145
#1	.2363998	2.493245	24.13317	1.013943	2.489270	1.274648	5.169263
#2	.2263740	2.490037	22.79484	1.024985	2.485253	1.271509	5.173239
#3	.2396243	2.440320	24.25458	1.019406	2.441645	1.250164	5.171900

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.348920	23.55300	2.478888	1.269931	25.94553	2.396421	2.533350
Stddev	.077423	.80560	.029082	.003818	.19357	.082438	.021362
%RSD	3.296105	3.420369	1.173206	.3006338	.7460486	3.440042	.8432124
#1	2.389707	23.90695	2.497710	1.266532	26.14551	2.443210	2.519385
#2	2.259631	22.63102	2.493561	1.274061	25.93199	2.301234	2.557941
#3	2.397422	24.12103	2.445392	1.269199	25.75909	2.444819	2.522724

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.12915	4.677702	5.084499	4.981674	4.777575	5.394334	5.064442
Stddev	.07943	.142755	.051947	.054979	.161922	.007198	.040091
%RSD	.3040007	3.051809	1.021668	1.103634	3.389202	.1334370	.7916229
#1	26.20640	4.730974	5.122122	5.024728	4.867705	5.401375	5.102684
#2	26.13334	4.515972	5.106145	5.000551	4.590644	5.394638	5.067915
#3	26.04771	4.786161	5.025230	4.919743	4.874376	5.386989	5.022727

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCV03 Acquired: 4/7/2025 15:41:38 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	4.958545	4.823747	4.845308
Stddev	.034678	.165042	.098617
%RSD	.6993585	3.421441	2.035303
#1	4.978326	4.932706	4.903773
#2	4.978805	4.633862	4.731449
#3	4.918503	4.904673	4.900702

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2147.835	48492.81	10138.81	1344.222	3221.064
Stddev	22.764	249.32	292.47	12.236	35.478
%RSD	1.059879	.5141380	2.884684	.9102367	1.101429
#1	2130.922	48670.85	10023.42	1351.693	3195.223
#2	2138.865	48207.87	10471.38	1330.102	3206.455
#3	2173.718	48599.72	9921.64	1350.872	3261.514

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCB03 Acquired: 4/7/2025 15:45:48 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0001669	.0001976	-.001426	.0000296	.0009522	.0015132	-.000861
Stddev	.0008584	.0010264	.001255	.0003827	.0013760	.0043637	.000146
%RSD	514.1340	519.5146	87.97726	1294.687	144.5080	288.3746	16.98630
#1	-.000818	.0013310	-.002552	-.000127	.0018029	.0043236	-.000810
#2	.000757	-.000069	-.001652	-.000250	-.000635	.0037300	-.001026
#3	.000562	-.000669	-.000074	.000466	.001689	-.003514	-.000747

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000054	.0000352	-.002837	-.000097	.0000773	-.000039	-.003720
Stddev	.000068	.0000564	.004445	.000214	.0002399	.000234	.002693
%RSD	125.9775	160.0720	156.6759	221.6738	310.3288	601.7758	72.38118
#1	.000012	.0000998	-.002434	-.000213	.0003446	-.000298	-.004998
#2	-.000124	-.000004	.001392	.000151	.0000063	.000027	-.000626
#3	-.000049	.000010	-.007470	-.000228	-.000119	.000155	-.005535

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017113	.0055553	-.000065	-.000006	-.471058	.0020539	-.001124
Stddev	.0000721	.0154149	.000535	.000091	.004739	.0007468	.000302
%RSD	4.214995	277.4822	819.6503	1590.892	1.006117	36.35897	26.89534
#1	.0017922	.0088892	.000499	-.000108	-.475635	.0024617	-.001337
#2	.0016535	.0190304	-.000564	.000067	-.471366	.0025081	-.000778
#3	.0016883	-.011254	-.000131	.000024	-.466171	.0011920	-.001257

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.176266	-.001741	-.000349	.0002900	.0006120	.0051646	-.001185
Stddev	.024079	.000429	.000130	.0005204	.0009107	.0046698	.001949
%RSD	13.66053	24.65331	37.27736	179.4228	148.8004	90.41898	164.4338
#1	-.187011	-.002095	-.000200	-.000104	.0004604	.0066966	-.002579
#2	-.193101	-.001863	-.000408	.000094	-.000213	-.000079	-.002019
#3	-.148685	-.001264	-.000440	.000880	.001589	.008876	.001042

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCB03 Acquired: 4/7/2025 15:45:48 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	-.000828	-.002366	.0000288
Stddev	.005646	.001046	.0000296
%RSD	682.2954	44.19367	102.7970
#1	-.006260	-.001609	.0000496
#2	.005011	-.001930	-.000005
#3	-.001234	-.003559	.000042

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2237.528	51020.23	10464.55	1435.632	3578.942
Stddev	35.454	134.38	14.93	5.175	58.919
%RSD	1.584537	.2633906	.1426354	.3604983	1.646273
#1	2228.211	50896.85	10470.59	1432.148	3565.204
#2	2276.711	51000.42	10447.55	1441.579	3643.517
#3	2207.663	51163.42	10475.51	1433.169	3528.106

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1706-01 Acquired: 4/7/2025 15:50:09 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0195162	-.009965	.2260915	-.049545	.0056312	108.4638
Stddev	.0037927	.002060	.0018019	.001737	.0001670	.2088
%RSD	19.43345	20.66865	.7969730	3.506336	2.965570	.1925190
#1	.0201472	-.009203	.2264249	-.049350	.0054915	108.6893
#2	.0154477	-.012297	.2277034	-.047914	.0055860	108.2772
#3	.0229539	-.008395	.2241461	-.051372	.0058162	108.4250

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6204920	.0077212	.0034200	21.55159	.1806645	.1073683
Stddev	.0009664	.0000484	.0002056	.07692	.0008084	.0005199
%RSD	.1557465	.6275534	6.012997	.3569276	.4474780	.4841989
#1	.6204596	.0076825	.0034685	21.63236	.1809754	.1073693
#2	.6195423	.0077756	.0035970	21.47920	.1812713	.1078876
#3	.6214743	.0077056	.0031944	21.54321	.1797468	.1068479

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4390985	211.8604	5.369136	38.61317	.1927103	-.007431
Stddev	.0016055	.5426	.007766	.05336	.0008241	.000527
%RSD	.3656281	.2561287	.1446396	.1381788	.4276588	7.098430
#1	.4404413	211.3260	5.376733	38.67129	.1918967	-.007689
#2	.4395339	212.4109	5.361212	38.60181	.1935446	-.006824
#3	.4373202	211.8445	5.369464	38.56641	.1926896	-.007780

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.023460	.3145348	.6427412	10.52440	-.303779	.0015863
Stddev	.029385	.0016460	.0006852	.03771	.004208	.0001352
%RSD	.9718835	.5233164	.1065987	.3582656	1.385319	8.524650
#1	2.992426	.3155841	.6434570	10.48342	-.306844	.0016791
#2	3.050856	.3153827	.6426753	10.55762	-.298981	.0014311
#3	3.027099	.3126377	.6420914	10.53217	-.305512	.0016486

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1706-01 Acquired: 4/7/2025 15:50:09 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0391494	3.385106	F 10.00564	3.418419	1.958297	.1534169
Stddev	.0005474	.005993	.03884	.005506	.007332	.0010014
%RSD	1.398271	.1770364	.3882196	.1610745	.3744285	.6527228
#1	.0385743	3.389715	9.96121	3.418851	1.956248	.1537470
#2	.0396641	3.378332	10.03321	3.423697	1.966436	.1542115
#3	.0392099	3.387273	10.02249	3.412710	1.952207	.1522921

Elem	Sr4077
Units	ppm
Avg	-.125328
Stddev	.000723
%RSD	.5765357
#1	-.124578
#2	-.126019
#3	-.125388

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2459.528	55552.40	11788.75	1591.676	3205.249
Stddev	4.178	108.52	22.96	4.188	3.385
%RSD	.1698683	.1953402	.1947431	.2631053	.1055936
#1	2455.842	55612.42	11764.80	1590.908	3203.884
#2	2458.676	55427.13	11810.56	1587.925	3202.761
#3	2464.066	55617.64	11790.90	1596.194	3209.103

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCV04 Acquired: 4/7/2025 17:00:25 Type: Unk
Method: NON EPA-6010-200.7(v2894) 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	4.921351	4.942860	4.897908	4.985454	4.988789	9.624261	9.751113
Stddev	.029460	.028281	.011031	.016860	.023360	.040154	.115835
%RSD	.5986141	.5721680	.2252120	.3381921	.4682492	.4172175	1.187919
#1	4.912964	4.975516	4.894328	4.978695	4.969436	9.620128	9.646319
#2	4.896993	4.926360	4.889112	4.973021	4.982195	9.666322	9.875493
#3	4.954094	4.926705	4.910284	5.004645	5.014738	9.586333	9.731528

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2452562	2.447329	24.10581	.9913003	2.444320	1.249558	4.957105
Stddev	.0007090	.003719	.03906	.0031398	.004468	.004697	.028207
%RSD	.2890943	.1519437	.1620296	.3167331	.1827820	.3758625	.5690315
#1	.2458009	2.446625	24.09726	.9944764	2.442000	1.245465	4.985112
#2	.2455131	2.444013	24.14844	.9912265	2.441490	1.248522	4.957502
#3	.2444545	2.451349	24.07174	.9881981	2.449471	1.254686	4.928701

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.415850	23.80850	2.450112	1.246802	25.33434	2.424342	2.490507
Stddev	.012246	.05537	.005065	.003319	.11315	.006177	.013811
%RSD	.5069081	.2325821	.2067432	.2662175	.4466394	.2547764	.5545603
#1	2.418210	23.75086	2.448603	1.248351	25.44634	2.428131	2.493092
#2	2.426745	23.86129	2.445972	1.249064	25.33662	2.427681	2.502842
#3	2.402596	23.81335	2.455760	1.242991	25.22006	2.417215	2.475585

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.00148	4.972931	5.011204	4.903459	4.845762	5.052855	5.224919
Stddev	.10425	.020787	.013746	.007297	.016195	.006179	.017124
%RSD	.4169912	.4179971	.2743140	.1488131	.3342181	.1222967	.3277316
#1	25.11199	4.981598	5.002566	4.896879	4.850264	5.045771	5.221745
#2	24.98758	4.987982	5.003990	4.902191	4.859231	5.057142	5.209605
#3	24.90487	4.949213	5.027056	4.911307	4.827792	5.055651	5.243408

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCV04 Acquired: 4/7/2025 17:00:25 Type: Unk
Method: NON EPA-6010-200.7(v2894) 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	4.896944	4.950446	4.894896
Stddev	.010766	.013089	.031289
%RSD	.2198496	.2644019	.6392268
#1	4.884557	4.960624	4.913725
#2	4.904050	4.955033	4.912186
#3	4.902224	4.935681	4.858777

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2142.723	49188.28	9580.030	1375.937	3208.173
Stddev	7.055	120.35	40.940	9.554	5.927
%RSD	.3292576	.2446661	.4273519	.6943464	.1847366
#1	2146.622	49140.60	9581.970	1375.528	3209.859
#2	2146.969	49099.07	9538.154	1366.594	3213.075
#3	2134.579	49325.15	9619.966	1385.688	3201.587

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCB04 Acquired: 4/7/2025 17:04:43 Type: Unk
Method: NON EPA-6010-200.7(v2894) 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	-.000631	-.000128	-.000649	.0016947	.0012984	.0026048	-.001399
Stddev	.003237	.001736	.000795	.0020270	.0009154	.0032162	.000128
%RSD	512.8393	1361.181	122.4318	119.6044	70.50213	123.4714	9.119180
#1	.001770	-.002070	-.000383	.0012825	.0018164	.0002237	-.001300
#2	-.004313	.001273	-.001543	.0038961	.0002415	.0013273	-.001354
#3	.000649	.000414	-.000022	-.000094	.0018375	.0062634	-.001543

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000022	-.000040	-.006269	.0000268	.0001130	-.000172	-.000981
Stddev	.000019	.000070	.005948	.0003981	.0002759	.000470	.005714
%RSD	86.65272	173.0982	94.88262	1482.921	244.2548	274.1801	582.3917
#1	-.000037	.000002	-.001629	-.000327	.0001653	-.000423	-.005080
#2	-.000030	-.000121	-.004203	.000458	-.000185	-.000463	.005546
#3	-.000000	-.000002	-.012974	-.000051	.000359	.000371	-.003410

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016717	.0081258	.0001256	.0002736	-.390580	.0002959	-.001210
Stddev	.0001506	.0164956	.0001633	.0001228	.013244	.0016323	.000183
%RSD	9.009164	203.0035	130.0368	44.90467	3.390965	551.7133	15.08569
#1	.0018088	.0120800	-.000029	.0004143	-.404267	-.000840	-.001343
#2	.0016958	.0222849	.000109	.0001879	-.377828	-.000439	-.001002
#3	.0015105	-.009988	.000297	.0002185	-.389645	.002166	-.001286

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.139902	-.002846	-.000305	.0002985	.0006175	.0026270	-.001683
Stddev	.022784	.000832	.000210	.0005539	.0002725	.0043107	.001170
%RSD	16.28593	29.24343	68.93268	185.5428	44.13858	164.0935	69.50667
#1	-.161192	-.001903	-.000081	.0005164	.0005704	.0027876	-.003033
#2	-.115872	-.003157	-.000497	-.000331	.0009105	-.001762	-.000998
#3	-.142642	-.003479	-.000336	.000710	.0003715	.006855	-.001017

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCB04 Acquired: 4/7/2025 17:04:43 Type: Unk
Method: NON EPA-6010-200.7(v2894) 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	-.000729	-.000564	.0000194
Stddev	.001088	.000390	.0000296
%RSD	149.3056	69.12910	152.7901
#1	.000473	-.000114	.0000393
#2	-.001013	-.000808	-.000015
#3	-.001646	-.000770	.000033

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2205.175	50741.41	10034.35	1417.561	3541.767
Stddev	11.257	159.13	14.43	6.097	19.804
%RSD	.5104656	.3136162	.1437754	.4300836	.5591510
#1	2215.072	50923.50	10030.77	1423.335	3557.163
#2	2192.929	50629.02	10022.05	1411.186	3519.426
#3	2207.523	50671.72	10050.23	1418.161	3548.713

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1706-03 Acquired: 4/7/2025 17:09:10 Type: Unk
Method: NON EPA-6010-200.7(v2894) 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	.0254893	-.004850	.4404931	-.082784	.0115546	144.5242	.8161625
Stddev	.0073247	.003888	.0045741	.001201	.0005309	.3154	.0030088
%RSD	28.73643	80.16775	1.038415	1.450312	4.594530	.2182251	.3686548
#1	.0296108	-.000365	.4456616	-.083142	.0121429	144.3378	.8185701
#2	.0170323	-.007262	.4369668	-.083765	.0111111	144.8884	.8171279
#3	.0298248	-.006923	.4388508	-.081445	.0114099	144.3465	.8127895

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0111443	.0118962	23.80402	.2546715	.1688572	.6865052	298.9669
Stddev	.0000724	.0003352	.07527	.0002947	.0013324	.0059868	.5192
%RSD	.6496475	2.817844	.3162209	.1157300	.7890485	.8720653	.1736753
#1	.0112231	.0122711	23.84964	.2545014	.1703244	.6931910	299.5501
#2	.0111291	.0117919	23.84529	.2550118	.1677228	.6816403	298.5549
#3	.0110808	.0116255	23.71714	.2545013	.1685246	.6846842	298.7955

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.404399	54.48376	.2985532	-.014384	4.305909	.4011159	1.026966
Stddev	.037959	.18998	.0028790	.000088	.010917	.0010023	.001931
%RSD	.5126607	.3486893	.9643126	.6141293	.2535292	.2498841	.1880343
#1	7.435774	54.53658	.3017661	-.014389	4.313959	.4002560	1.025729
#2	7.415219	54.64175	.2962075	-.014470	4.293483	.4008748	1.029192
#3	7.362204	54.27296	.2976860	-.014294	4.310286	.4022167	1.025979

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.73670	-.546892	.0043453	.0768714	4.417150	9.216297	5.217593
Stddev	.05435	.002977	.0001239	.0006928	.013179	.020352	.047917
%RSD	.3956723	.5442839	2.850150	.9012964	.2983537	.2208309	.9183760
#1	13.69125	-.548848	.0044405	.0772551	4.417268	9.206313	5.272720
#2	13.72195	-.548363	.0042053	.0772876	4.430270	9.202865	5.194129
#3	13.79691	-.543467	.0043902	.0760717	4.403914	9.239714	5.185929

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1706-03 Acquired: 4/7/2025 17:09:10 Type: Unk
Method: NON EPA-6010-200.7(v2894) 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	1.871849	.2440975	-.186339
Stddev	.022784	.0004338	.000554
%RSD	1.217186	.1777295	.2973416
#1	1.896585	.2436657	-.186692
#2	1.851722	.2440934	-.185701
#3	1.867242	.2445334	-.186626

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2467.543	56211.14	11607.92	1574.183	3085.088
Stddev	16.560	10.48	51.73	3.486	24.407
%RSD	.6711113	.0186433	.4456407	.2214763	.7911260
#1	2448.987	56207.74	11581.91	1575.559	3057.909
#2	2480.820	56222.89	11574.35	1570.218	3105.134
#3	2472.823	56202.77	11667.49	1576.770	3092.221

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1604-05 Acquired: 4/7/2025 17:13:20 Type: Unk
Method: NON EPA-6010-200.7(v2894) 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	-.001075	-.009501	-.000034	.0061952	.0086538	-.059470
Stddev	.002114	.002139	.000369	.0015029	.0016937	.006252
%RSD	196.6925	22.51050	1094.111	24.25855	19.57239	10.51315
#1	-.000522	-.010761	.000305	.0055201	.0095369	-.053124
#2	-.003410	-.007031	-.000426	.0051482	.0067010	-.065624
#3	.000708	-.010710	.000020	.0079172	.0097234	-.059661

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2300767	-.000187	.0000694	149.8858	.0021228	-.000227
Stddev	.0016920	.000037	.0000148	.5317	.0004701	.000261
%RSD	.7353982	19.93468	21.37167	.3547494	22.14609	115.0251
#1	.2313063	-.000224	.0000728	149.9296	.0026600	-.000218
#2	.2281470	-.000150	.0000822	149.3335	.0019220	-.000491
#3	.2307767	-.000186	.0000531	150.3942	.0017865	.000029

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0431151	.0333919	.0053134	24.55782	.0159614	-.000246
Stddev	.0004744	.0024372	.0001507	.11030	.0005280	.000408
%RSD	1.100277	7.298756	2.835850	.4491516	3.307752	165.5365
#1	.0429003	.0348815	.0054047	24.47660	.0153630	.000018
#2	.0436588	.0305793	.0053959	24.51347	.0161599	-.000716
#3	.0427860	.0347149	.0051394	24.68340	.0163614	-.000041

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	414.7215	.0045664	.0093541	38.37209	.6228261	.0203574
Stddev	4.3352	.0004391	.0002737	.16415	.0017567	.0001747
%RSD	1.045319	9.614890	2.926377	.4277956	.2820596	.8584125
#1	418.1737	.0042185	.0093142	38.46782	.6212269	.0202502
#2	416.1348	.0044210	.0091026	38.18255	.6225449	.0202630
#3	409.8561	.0050597	.0096457	38.46592	.6247065	.0205591

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1604-05 Acquired: 4/7/2025 17:13:20 Type: Unk
Method: NON EPA-6010-200.7(v2894) 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	-.003992	-.001833	8.475798	.0361337	F 56.24070	-.005711
Stddev	.000673	.001089	.049811	.0025282	.09705	.000384
%RSD	16.85654	59.40036	.5876839	6.996859	.1725609	6.721094
#1	-.003392	-.002865	8.493771	.0390491	56.13217	-.005350
#2	-.004719	-.001940	8.419495	.0348069	56.31913	-.006115
#3	-.003865	-.000695	8.514128	.0345450	56.27082	-.005669

Elem	Sr4077
Units	ppm
Avg	1.161649
Stddev	.006662
%RSD	.5734545
#1	1.166680
#2	1.154095
#3	1.164172

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1936.499	44614.55	9523.206	1237.289	2853.644
Stddev	3.692	27.43	17.461	9.555	6.950
%RSD	.1906457	.0614894	.1833556	.7722524	.2435477
#1	1932.479	44603.87	9526.886	1240.581	2846.698
#2	1937.281	44645.72	9538.535	1244.762	2853.638
#3	1939.738	44594.07	9504.198	1226.523	2860.598

Sample Name: PB167441BL Acquired: 4/7/2025 17:17:46 Type: Unk
Method: NON EPA-6010-200.7(v2894) 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	-.000524	.0002539	-.000305	-.000254	-.000475	.0078188	-.001492
Stddev	.003253	.0020987	.000394	.002233	.000442	.0027550	.000622
%RSD	620.7360	826.5276	129.1307	877.8407	92.90884	35.23555	41.67426
#1	-.001678	.0015960	.000002	.002083	.000035	.0047406	-.001304
#2	.003148	.0013304	-.000168	-.002366	-.000729	.0100532	-.000986
#3	-.003043	-.002165	-.000749	-.000481	-.000732	.0086626	-.002186

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000068	-.000063	-.001610	-.000314	.0001258	-.000431	.0056696
Stddev	.000058	.000011	.002567	.000183	.0001881	.000447	.0073753
%RSD	85.86881	17.97046	159.4230	58.29381	149.5354	103.5387	130.0849
#1	-.000077	-.000066	-.003008	-.000103	-.000059	-.000082	-.000357
#2	-.000006	-.000072	.001352	-.000415	.000120	-.000934	.003472
#3	-.000121	-.000050	-.003175	-.000425	.000317	-.000277	.013894

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017081	.0063500	.0000602	-.000056	-.370779	.0005269	-.000950
Stddev	.0003107	.0038559	.0001154	.000093	.025230	.0011505	.000160
%RSD	18.18860	60.72295	191.5906	167.0462	6.804536	218.3514	16.85872
#1	.0013835	.0019633	-.000073	-.000140	-.357687	-.000414	-.000768
#2	.0017381	.0078834	.000129	-.000071	-.399864	.001810	-.001014
#3	.0020027	.0092034	.000124	.000044	-.354786	.000185	-.001069

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.148489	-.006580	-.000370	.0002206	.0006114	-.001161	-.002275
Stddev	.010922	.000159	.000393	.0002960	.0003414	.002779	.000435
%RSD	7.355563	2.414268	106.2677	134.2078	55.83922	239.4273	19.12008
#1	-.160235	-.006465	-.000709	-.000032	.0008627	.001907	-.002330
#2	-.138639	-.006514	-.000462	.000147	.0007487	-.001879	-.001815
#3	-.146593	-.006762	.000061	.000546	.0002227	-.003511	-.002680

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: PB167441BL Acquired: 4/7/2025 17:17:46 Type: Unk
Method: NON EPA-6010-200.7(v2894) 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	.0018301	.0001344	-.000000
Stddev	.0013308	.0011033	.000027
%RSD	72.71968	820.8954	36835.03
#1	.0016345	-.001030	.000007
#2	.0006079	.001164	.000022
#3	.0032479	.000269	-.000030

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2256.041	50292.16	9827.329	1422.498	3641.053
Stddev	5.093	229.48	39.158	8.181	7.385
%RSD	.2257520	.4562912	.3984653	.5750807	.2028206
#1	2251.019	50029.90	9870.841	1416.893	3632.725
#2	2261.202	50390.54	9794.922	1418.715	3646.804
#3	2255.903	50456.05	9816.225	1431.885	3643.631

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1712-01 Acquired: 4/7/2025 17:31:02 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0464766	-.001663	1.706809	-.037736	-.000223	88.57203	1.092019
Stddev	.0019836	.001654	.003643	.002735	.001613	.11249	.003112
%RSD	4.268003	99.48507	.2134360	7.247052	722.8380	.1269987	.2849405
#1	.0454312	.000130	1.709173	-.037148	-.002021	88.68050	1.094825
#2	.0487643	-.001987	1.708639	-.040717	.001096	88.57966	1.092560
#3	.0452344	-.003131	1.702613	-.035343	.000255	88.45592	1.088673

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0067345	.0068701	111.7346	.1306528	.1917629	.5427270	148.5463
Stddev	.0000449	.0001931	.1439	.0005499	.0001467	.0005396	.3463
%RSD	.6665314	2.810666	.1288287	.4208874	.0765261	.0994191	.2331207
#1	.0067838	.0069839	111.8541	.1300417	.1919063	.5433491	148.2154
#2	.0067238	.0066472	111.7751	.1311077	.1917694	.5423866	148.9062
#3	.0066960	.0069793	111.5748	.1308090	.1916130	.5424453	148.5172

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.803745	32.21737	.3113854	-.004096	11.92430	.2104816	1.185511
Stddev	.013524	.03262	.0003533	.000275	.07326	.0016473	.004805
%RSD	.2330230	.1012571	.1134562	6.719069	.6143471	.7826494	.4053053
#1	5.816757	32.24028	.3113085	-.003778	11.87848	.2104745	1.180550
#2	5.804717	32.18002	.3117708	-.004251	12.00878	.2121324	1.185840
#3	5.789761	32.23181	.3110769	-.004258	11.88563	.2088378	1.190143

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.31661	-.237504	.0027817	.0501600	1.579453	3.724512	5.489288
Stddev	.04420	.002878	.0001242	.0004959	.003559	.028211	.013989
%RSD	.3319289	1.211924	4.465704	.9886766	.2253598	.7574427	.2548492
#1	13.28805	-.240701	.0026399	.0502030	1.582175	3.692143	5.493632
#2	13.36752	-.236693	.0028713	.0496440	1.580759	3.743870	5.473642
#3	13.29426	-.235119	.0028338	.0506330	1.575425	3.737522	5.500591

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1712-01 Acquired: 4/7/2025 17:31:02 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	1.942909	.1250236	.4650836
Stddev	.009418	.0004353	.0010459
%RSD	.4847398	.3481734	.2248768
#1	1.932559	.1247628	.4657186
#2	1.950975	.1247820	.4656556
#3	1.945195	.1255262	.4638765

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2300.988	52453.58	11607.96	1469.043	3043.772
Stddev	4.304	137.67	50.77	3.077	8.989
%RSD	.1870670	.2624557	.4373545	.2094887	.2953370
#1	2298.865	52473.00	11552.58	1472.582	3042.968
#2	2298.157	52307.23	11619.01	1466.990	3035.212
#3	2305.941	52580.50	11652.30	1467.559	3053.136

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1715-05 Acquired: 4/7/2025 17:35:07 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0719755	-.005416	4.275520	-.064962	.0110261	82.24126	1.072629
Stddev	.0033249	.000788	.007720	.002847	.0018023	.09583	.003875
%RSD	4.619481	14.54431	.1805611	4.381987	16.34560	.1165195	.3612977
#1	.0732120	-.005103	4.281375	-.065533	.0104350	82.28469	1.072290
#2	.0745050	-.004834	4.266771	-.067480	.0095937	82.30768	1.076662
#3	.0682095	-.006312	4.278414	-.061874	.0130498	82.13141	1.068934

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0075658	.0121082	227.1389	.1460214	.1467409	1.248488	245.7034
Stddev	.0000729	.0004134	.3408	.0002075	.0003290	.001847	.9597
%RSD	.9631607	3.413846	.1500526	.1421232	.2242128	.1479614	.3906038
#1	.0076431	.0125823	227.3383	.1462035	.1468068	1.249942	244.8711
#2	.0074984	.0119194	227.3330	.1457955	.1470320	1.246409	246.7532
#3	.0075558	.0118231	226.7453	.1460652	.1463840	1.249113	245.4860

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.875662	47.26906	.2584755	-.006685	18.38307	.3030632	1.924994
Stddev	.016707	.12550	.0000397	.000704	.14166	.0015147	.005845
%RSD	.3426581	.2655032	.0153392	10.53000	.7706021	.4997926	.3036175
#1	4.883134	47.30678	.2585123	-.007140	18.29267	.3024589	1.926860
#2	4.887328	47.12902	.2584805	-.005874	18.54634	.3047867	1.918445
#3	4.856523	47.37137	.2584335	-.007041	18.31022	.3019438	1.929679

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.30972	.0087347	.0083980	.2037376	3.188308	7.582385	7.799494
Stddev	.06388	.0018823	.0002639	.0014936	.006283	.049197	.024381
%RSD	.5648163	21.54920	3.142516	.7331024	.1970631	.6488299	.3126002
#1	11.26904	.0071003	.0085667	.2036062	3.189156	7.525597	7.827617
#2	11.38335	.0083112	.0080939	.2023140	3.194123	7.609489	7.786551
#3	11.27678	.0107927	.0085334	.2052925	3.181644	7.612069	7.784313

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1715-05 Acquired: 4/7/2025 17:35:07 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	6.780470	.0841875	1.055724
Stddev	.015456	.0008216	.020927
%RSD	.2279484	.9759456	1.982236
#1	6.794901	.0846008	1.078183
#2	6.782349	.0847203	1.036772
#3	6.764161	.0832413	1.052216

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2321.444	52909.08	11736.02	1467.233	2955.652
Stddev	2.855	37.29	45.44	5.003	5.740
%RSD	.1229623	.0704748	.3871706	.3409760	.1941981
#1	2318.853	52931.63	11684.56	1471.416	2949.751
#2	2320.977	52866.04	11752.87	1468.593	2955.987
#3	2324.504	52929.56	11770.62	1461.691	2961.216

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1721-02 Acquired: 4/7/2025 17:39:19 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0780661	-.002849	.1778084	-.051574	.0005824	70.96931
Stddev	.0019539	.001707	.0013304	.004887	.0017366	.20289
%RSD	2.502944	59.92029	.7482251	9.475842	298.1677	.2858862
#1	.0802631	-.002229	.1767400	-.048765	.0020763	71.15634
#2	.0774124	-.004779	.1792985	-.057217	-.001323	70.99798
#3	.0765229	-.001538	.1773866	-.048741	.000994	70.75360

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3542294	.0070119	.0015136	228.8996	.1978620	.0642441
Stddev	.0016277	.0001772	.0002810	.6308	.0011120	.0003346
%RSD	.4595072	2.527740	18.56463	.2755708	.5619913	.5208755
#1	.3558827	.0069073	.0011901	229.4469	.1990003	.0641803
#2	.3541770	.0072165	.0016974	229.0422	.1967784	.0646060
#3	.3526285	.0069118	.0016532	228.2097	.1978074	.0639459

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1601333	195.5309	1.477612	41.85731	.0855635	-.008800
Stddev	.0017927	1.1240	.002018	.17606	.0002492	.000234
%RSD	1.119503	.5748246	.1365420	.4206185	.2911843	2.656007
#1	.1583321	196.4762	1.479837	41.99579	.0856556	-.008671
#2	.1619173	194.2881	1.477098	41.91696	.0852814	-.008659
#3	.1601504	195.8283	1.475901	41.65917	.0857534	-.009070

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.437311	.2671910	.3280261	6.450555	-.332611	.0034217
Stddev	.025315	.0006037	.0004542	.017049	.007081	.0001551
%RSD	1.761261	.2259562	.1384518	.2643082	2.128937	4.532066
#1	1.416287	.2678871	.3277089	6.469114	-.329807	.0034446
#2	1.430236	.2668768	.3285463	6.435587	-.340665	.0032564
#3	1.465411	.2668092	.3278229	6.446964	-.327362	.0035640

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1721-02 Acquired: 4/7/2025 17:39:19 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0023104	1.316972	F 10.45651	3.979812	4.841580	.0285025
Stddev	.0008589	.002613	.03179	.014561	.030239	.0009197
%RSD	37.17570	.1984219	.3040354	.3658704	.6245650	3.226727
#1	.0013656	1.319543	10.47473	3.964768	4.808970	.0280178
#2	.0025216	1.317054	10.41980	3.993836	4.868693	.0279266
#3	.0030440	1.314319	10.47499	3.980831	4.847079	.0295632

Elem	Sr4077
Units	ppm
Avg	.6389279
Stddev	.0023472
%RSD	.3673681
#1	.6405224
#2	.6400288
#3	.6362326

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2181.917	50368.67	10805.47	1399.749	2988.517
Stddev	2.406	213.51	46.02	3.408	4.294
%RSD	.1102767	.4238894	.4259370	.2434606	.1436907
#1	2179.173	50133.60	10777.19	1395.970	2992.295
#2	2182.914	50550.57	10780.64	1402.588	2983.847
#3	2183.664	50421.82	10858.57	1400.689	2989.410

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCV05 Acquired: 4/7/2025 17:43:26 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	4.883036	4.914278	4.840165	4.896047	4.917661	9.598727	9.577853
Stddev	.014114	.037522	.005311	.026963	.012606	.027930	.085067
%RSD	.2890377	.7635293	.1097344	.5507028	.2563506	.2909726	.8881620
#1	4.866772	4.936266	4.836715	4.900110	4.907174	9.566517	9.562591
#2	4.890265	4.870953	4.837500	4.867283	4.914160	9.613437	9.501451
#3	4.892070	4.935615	4.846282	4.920747	4.931647	9.616227	9.669518

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2511367	2.434837	23.74461	.9891950	2.420088	1.235964	4.756234
Stddev	.0012065	.004445	.03505	.0023812	.005681	.004849	.028864
%RSD	.4804001	.1825598	.1476176	.2407192	.2347400	.3923222	.6068636
#1	.2506342	2.433607	23.72528	.9910161	2.416380	1.232736	4.761906
#2	.2502627	2.431137	23.78507	.9900685	2.417254	1.233616	4.781840
#3	.2525132	2.439768	23.72348	.9865004	2.426628	1.241540	4.724955

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.368521	23.78922	2.429079	1.237771	23.45420	2.397312	2.472824
Stddev	.005786	.06564	.006457	.003647	.23627	.003018	.005917
%RSD	.2443049	.2759427	.2658180	.2946068	1.007363	.1259016	.2392853
#1	2.368445	23.71560	2.425587	1.236284	23.45656	2.395629	2.475308
#2	2.374345	23.84164	2.425120	1.241926	23.68927	2.395510	2.477094
#3	2.362773	23.81042	2.436530	1.235103	23.21675	2.400797	2.466070

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.72455	5.122070	4.949795	4.868065	4.745916	4.895545	5.063981
Stddev	.20866	.033407	.017013	.012654	.010720	.026049	.011356
%RSD	.8795068	.6522245	.3437211	.2599355	.2258872	.5320953	.2242578
#1	23.77889	5.106016	4.938428	4.866391	4.736400	4.887014	5.059084
#2	23.90067	5.099719	4.941602	4.856332	4.757531	4.924790	5.055895
#3	23.49410	5.160474	4.969354	4.881473	4.743818	4.874832	5.076965

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCV05 Acquired: 4/7/2025 17:43:26 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	4.845190	4.877410	4.789976
Stddev	.012994	.010188	.084490
%RSD	.2681792	.2088753	1.763890
#1	4.839429	4.866664	4.693917
#2	4.836073	4.886928	4.852772
#3	4.860068	4.878639	4.823240

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2171.343	49420.18	9334.452	1389.342	3241.780
Stddev	4.641	215.62	40.697	8.092	4.087
%RSD	.2137458	.4363079	.4359852	.5824646	.1260720
#1	2176.380	49471.21	9362.860	1381.999	3246.121
#2	2170.410	49183.61	9352.668	1388.008	3241.212
#3	2167.240	49605.71	9287.830	1398.018	3238.007

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCB05 Acquired: 4/7/2025 17:47:37 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0037140	-.000977	.0005398	.0007566	.0012874	.0103670	-.000487
Stddev	.0022262	.000791	.0000695	.0005729	.0002334	.0037879	.000561
%RSD	59.93993	80.92849	12.88342	75.72162	18.12733	36.53823	115.0479
#1	.0027730	-.001588	.0005897	.0004339	.0011334	.0101306	-.000847
#2	.0062561	-.000084	.0004604	.0014180	.0011730	.0142675	.000159
#3	.0021128	-.001259	.0005692	.0004178	.0015559	.0067028	-.000773

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000041	-.000020	-.003395	-.000469	.0000802	.0000197	-.001751
Stddev	.0000689	.000092	.006208	.000397	.0001210	.0003420	.001475
%RSD	1676.972	457.5880	182.8638	84.51667	150.7155	1733.446	84.19921
#1	.0000271	.000084	-.008057	-.000891	.0002124	.0004134	-.001280
#2	-.000073	-.000088	.003652	-.000413	.0000533	-.000204	-.000570
#3	.000059	-.000057	-.005779	-.000103	-.000025	-.000150	-.003404

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016011	.0109775	-.000071	-.000147	-.556416	-.000198	-.000729
Stddev	.0002281	.0074386	.000165	.000207	.005759	.000411	.000541
%RSD	14.24712	67.76243	233.4312	141.4536	1.035046	207.9194	74.20331
#1	.0017713	.0193967	-.000217	-.000235	-.555868	-.000616	-.000976
#2	.0013419	.0082412	.000108	-.000296	-.550951	-.000183	-.001104
#3	.0016901	.0052946	-.000102	.000090	-.562430	.000206	-.000109

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.213053	-.002968	.0001191	-.000201	.0003434	.0053960	-.001110
Stddev	.030351	.000654	.0001765	.001226	.0004797	.0083008	.002843
%RSD	14.24582	22.03662	148.2162	608.8989	139.7088	153.8333	256.0118
#1	-.196204	-.003541	.0002009	.001116	.0006127	-.003535	.000531
#2	-.194864	-.002256	-.000083	-.000411	.0006280	.006847	.000531
#3	-.248091	-.003106	.000240	-.001309	-.000210	.012876	-.004393

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCB05 Acquired: 4/7/2025 17:47:37 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	-.000526	-.000819	.0000403
Stddev	.004455	.000712	.0000268
%RSD	846.4436	86.92708	66.45519
#1	-.005489	-.000840	.0000695
#2	.003129	-.001520	.0000349
#3	.000782	-.000097	.0000167

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2253.156	51637.66	10042.19	1449.206	3621.586
Stddev	4.953	273.73	43.48	8.920	5.529
%RSD	.2198117	.5301025	.4329355	.6155219	.1526694
#1	2258.817	51747.40	10044.30	1455.270	3627.163
#2	2251.032	51839.50	9997.70	1453.386	3621.488
#3	2249.620	51326.09	10084.58	1438.964	3616.106

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1721-02DUP Acquired: 4/7/2025 17:52:05 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0787190	-.002182	.1762825	-.051544	.0010309	71.44268
Stddev	.0044235	.002134	.0011271	.001292	.0009474	.13111
%RSD	5.619313	97.81557	.6393932	2.506225	91.90025	.1835237
#1	.0809960	-.004061	.1753134	-.050665	.0000409	71.38840
#2	.0815401	-.002622	.1775194	-.050940	.0011228	71.59222
#3	.0736209	.000138	.1760146	-.053027	.0019290	71.34743

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3416230	.0075520	.0030386	226.4860	.1986346	.0637794
Stddev	.0004326	.0000401	.0001127	.4859	.0005313	.0002839
%RSD	.1266150	.5305363	3.707308	.2145286	.2674929	.4451164
#1	.3411448	.0075395	.0029361	226.1180	.1982236	.0636476
#2	.3417372	.0075197	.0030205	227.0368	.1984457	.0641053
#3	.3419869	.0075969	.0031592	226.3033	.1992346	.0635854

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1678982	184.9545	1.462918	42.09524	.0846534	-.010451
Stddev	.0014516	.1983	.003163	.10360	.0002883	.000216
%RSD	.8645752	.1072188	.2162083	.2461020	.3405863	2.066780
#1	.1675443	185.1082	1.465189	42.03392	.0843249	-.010255
#2	.1666562	185.0248	1.464260	42.21485	.0847703	-.010683
#3	.1694940	184.7307	1.459305	42.03695	.0848648	-.010416

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.228911	.2635920	.3286218	6.062485	-.380437	.0035116
Stddev	.017100	.0013040	.0018796	.040362	.003147	.0003854
%RSD	1.391468	.4947143	.5719724	.6657628	.8271242	10.97573
#1	1.209170	.2621632	.3272268	6.016412	-.376805	.0030671
#2	1.239161	.2638948	.3278795	6.091608	-.382334	.0037137
#3	1.238401	.2647179	.3307593	6.079435	-.382173	.0037539

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1721-02DUP Acquired: 4/7/2025 17:52:05 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0030873	1.303992	F 10.18100	3.951148	4.779390	.0295604
Stddev	.0006096	.000832	.02284	.009904	.008559	.0001030
%RSD	19.74474	.0637965	.2243256	.2506505	.1790811	.3485755
#1	.0028603	1.304535	10.16212	3.945027	4.786799	.0294419
#2	.0037777	1.303034	10.17450	3.962574	4.781351	.0296288
#3	.0026237	1.304406	10.20638	3.945843	4.770021	.0296105

Elem	Sr4077
Units	ppm
Avg	.6308935
Stddev	.0009833
%RSD	.1558547
#1	.6304912
#2	.6320142
#3	.6301752

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2193.187	49916.55	10184.63	1400.247	3010.296
Stddev	.275	73.29	25.45	4.248	1.950
%RSD	.0125328	.1468306	.2498775	.3033747	.0647908
#1	2193.365	49980.33	10203.98	1404.716	3008.394
#2	2192.871	49836.49	10155.80	1399.765	3010.204
#3	2193.326	49932.83	10194.11	1396.261	3012.291

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1721-02LX5 Acquired: 4/7/2025 17:56:14 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0142771	-.000322	.0364087	-.007641	-.000437	15.14717	.0757681
Stddev	.0061008	.000550	.0013481	.002103	.000475	.03410	.0006348
%RSD	42.73163	170.8991	3.702799	27.52164	108.8149	.2251536	.8377564
#1	.0211836	-.000817	.0377852	-.009683	-.000832	15.14146	.0753063
#2	.0120259	.000270	.0350908	-.007756	-.000569	15.11628	.0764919
#3	.0096218	-.000419	.0363503	-.005482	.000091	15.18377	.0755059

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015980	-.000369	49.54338	.0432161	.0127750	.0375848	41.34977
Stddev	.0000473	.000049	.16007	.0001607	.0001727	.0003310	.15000
%RSD	2.961556	13.32439	.3230850	.3719240	1.351851	.8806246	.3627600
#1	.0016525	-.000314	49.36345	.0434005	.0125762	.0373788	41.18729
#2	.0015670	-.000410	49.66995	.0431418	.0128882	.0374090	41.37905
#3	.0015746	-.000383	49.59673	.0431060	.0128605	.0379665	41.48297

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3276436	9.113001	.0175437	-.002112	-.186080	.0584295	.0697199
Stddev	.0017209	.025567	.0000865	.000510	.007859	.0015480	.0002647
%RSD	.5252239	.2805529	.4928498	24.16031	4.223705	2.649271	.3796672
#1	.3262055	9.083490	.0174448	-.002338	-.193663	.0600731	.0694493
#2	.3295502	9.127065	.0175819	-.002469	-.186607	.0569993	.0699783
#3	.3271751	9.128449	.0176046	-.001527	-.177971	.0582162	.0697320

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.113294	-.082301	.0006031	-.001818	.2873028	2.195198	.7864607
Stddev	.008574	.000901	.0001615	.000205	.0007459	.015524	.0027110
%RSD	.7701151	1.094684	26.77054	11.25392	.2596072	.7071858	.3447143
#1	1.111533	-.081430	.0007858	-.002045	.2865426	2.196225	.7836066
#2	1.122611	-.083229	.0004795	-.001647	.2880335	2.179186	.7867742
#3	1.105737	-.082243	.0005441	-.001763	.2873322	2.210183	.7890014

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1721-02LX5 Acquired: 4/7/2025 17:56:14 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.9419595	.0045003	.1352991
Stddev	.0040720	.0008451	.0004240
%RSD	.4322945	18.77967	.3133562
#1	.9377513	.0054762	.1350642
#2	.9458801	.0040108	.1357885
#3	.9422473	.0040139	.1350445

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2221.681	50989.59	10492.21	1415.647	3349.546
Stddev	8.261	133.76	16.44	3.538	6.113
%RSD	.3718304	.2623303	.1566912	.2499082	.1825009
#1	2212.371	50962.39	10511.17	1413.749	3342.503
#2	2228.135	51134.87	10482.01	1413.464	3352.668
#3	2224.537	50871.53	10483.43	1419.729	3353.467

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1721-02MS Acquired: 4/7/2025 18:00:30 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.7092643	1.614613	.9849100	1.414992	.2107441	73.20705
Stddev	.0030256	.009636	.0048207	.006284	.0035027	.04607
%RSD	.4265778	.5967831	.4894584	.4440939	1.662042	.0629339
#1	.7057708	1.609415	.9818756	1.411633	.2067804	73.16543
#2	.7109795	1.608692	.9823858	1.411101	.2120292	73.19917
#3	.7110425	1.625732	.9904687	1.422241	.2134227	73.25656

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4748074	.1520723	.1655116	120.5647	.5194858	.2357425
Stddev	.0009504	.0004914	.0005901	.2931	.0007291	.0005292
%RSD	.2001689	.3231134	.3565565	.2430764	.1403570	.2244830
#1	.4747451	.1526296	.1659041	120.8424	.5190622	.2362517
#2	.4757874	.1518859	.1648329	120.5934	.5203277	.2351953
#3	.4738896	.1517014	.1657978	120.2583	.5190675	.2357805

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4004737	194.4031	2.993487	28.94996	.4895605	.0548843
Stddev	.0013204	.7215	.008912	.05124	.0007394	.0000354
%RSD	.3296980	.3711268	.2977021	.1770085	.1510389	.0644768
#1	.4000184	194.2194	3.001975	28.99755	.4902782	.0548436
#2	.3994412	195.1987	2.994282	28.95661	.4888011	.0549019
#3	.4019614	193.7912	2.984205	28.89571	.4896022	.0549074

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.672419	.5039014	.5205309	15.17389	-.154336	.3093417
Stddev	.037669	.0025726	.0026804	.08825	.003558	.0009143
%RSD	1.025720	.5105328	.5149348	.5816203	2.305616	.2955528
#1	3.677500	.5055101	.5208715	15.07857	-.158160	.3088350
#2	3.707289	.5009343	.5230246	15.25277	-.151122	.3087930
#3	3.632467	.5052597	.5176964	15.19032	-.153725	.3103971

Sample Name: Q1721-02MS Acquired: 4/7/2025 18:00:30 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.5742860	1.270040	F 12.23882	8.489884	3.607052	.2070633
Stddev	.0016960	.004639	.05317	.044403	.011161	.0006422
%RSD	.2953240	.3652508	.4344651	.5230060	.3094316	.3101659
#1	.5723429	1.273535	12.17836	8.525655	3.606407	.2066770
#2	.5754688	1.271808	12.25978	8.440188	3.596228	.2078047
#3	.5750465	1.264777	12.27831	8.503809	3.618522	.2067082

Elem	Sr4077
Units	ppm
Avg	.4457055
Stddev	.0012499
%RSD	.2804358
#1	.4464949
#2	.4463571
#3	.4442644

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2237.985	51138.04	10977.42	1419.986	3117.283
Stddev	5.217	85.24	53.12	5.567	9.096
%RSD	.2330914	.1666783	.4838980	.3920309	.2917807
#1	2240.153	51121.51	10916.11	1422.591	3111.099
#2	2241.767	51062.28	11009.67	1413.595	3127.727
#3	2232.034	51230.33	11006.48	1423.773	3113.024

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1721-02MSD Acquired: 4/7/2025 18:04:32 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.6967315	1.602712	.9741728	1.396038	.2129042	73.85239
Stddev	.0017045	.015619	.0021097	.005059	.0019050	.14185
%RSD	.2446390	.9745145	.2165614	.3623993	.8947872	.1920718
#1	.6986104	1.610312	.9718740	1.390199	.2127346	73.78557
#2	.6962996	1.613076	.9746239	1.399117	.2148883	74.01531
#3	.6952846	1.584748	.9760204	1.398797	.2110896	73.75629

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4715425	.1555610	.1651949	120.2430	.5201814	.2337361
Stddev	.0026514	.0009031	.0004792	.3597	.0021177	.0004597
%RSD	.5622746	.5805516	.2900655	.2991092	.4071059	.1966817
#1	.4693154	.1545556	.1646772	119.9113	.5222299	.2333003
#2	.4744754	.1563033	.1656228	120.6253	.5180007	.2342165
#3	.4708368	.1558243	.1652846	120.1924	.5203136	.2336915

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4032211	189.9495	2.987780	29.10882	.4862127	.0537474
Stddev	.0018739	1.2248	.010878	.03670	.0004899	.0005584
%RSD	.4647192	.6447781	.3640941	.1260673	.1007559	1.038889
#1	.4011027	191.3347	2.976530	29.06807	.4857154	.0541222
#2	.4038991	189.0100	2.998244	29.11912	.4866949	.0531057
#3	.4046617	189.5038	2.988567	29.13926	.4862279	.0540144

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.511950	.5045419	.5204851	14.80525	-.163502	.3092917
Stddev	.019403	.0018059	.0037710	.12413	.003746	.0004871
%RSD	.5524829	.3579285	.7245146	.8384405	2.291190	.1574850
#1	3.533500	.5048369	.5247040	14.94854	-.159346	.3094542
#2	3.506480	.5061822	.5174423	14.73691	-.166618	.3087441
#3	3.495868	.5026067	.5193092	14.73031	-.164542	.3096768

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1721-02MSD Acquired: 4/7/2025 18:04:32 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.5704771	1.289414	F 12.80061	8.350665	3.555783	.2094087
Stddev	.0013637	.004721	.07773	.010515	.008253	.0013590
%RSD	.2390389	.3661628	.6072483	.1259165	.2321137	.6489504
#1	.5720435	1.285497	12.88482	8.349039	3.548620	.2083259
#2	.5695553	1.294656	12.73159	8.361899	3.564809	.2109337
#3	.5698324	1.288088	12.78543	8.341058	3.553921	.2089666

Elem	Sr4077
Units	ppm
Avg	.4474668
Stddev	.0035465
%RSD	.7925843
#1	.4442500
#2	.4512700
#3	.4468803

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2256.571	51368.19	10736.70	1427.447	3147.506
Stddev	3.313	226.14	54.70	6.531	3.162
%RSD	.1468283	.4402396	.5094247	.4575201	.1004758
#1	2255.122	51121.06	10795.94	1420.162	3146.480
#2	2260.362	51564.80	10688.12	1429.405	3151.054
#3	2254.228	51418.72	10726.04	1432.776	3144.983

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: Q1721-02A Acquired: 4/7/2025 18:08:35 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.6154023	1.354970	.8592612	1.257453	.3611425	73.07440
Stddev	.1190916	.294026	.1509111	.281976	.1505025	.48893
%RSD	19.35183	21.69979	17.56289	22.42436	41.67400	.6690805
#1	.4953210	1.062086	.7078575	.976164	.2175434	73.32948
#2	.6174069	1.352701	.8602513	1.256086	.3481747	73.38303
#3	.7334789	1.650124	1.009675	1.540110	.5177093	72.51068

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4078607	.0780279	.1433463	229.1751	.3502375	.2086938
Stddev	.0018203	.0084355	.0317481	1.4524	.0197219	.0326575
%RSD	.4463036	10.81088	22.14784	.6337662	5.631014	15.64851
#1	.4060142	.0699370	.1118028	230.0343	.3316563	.1760037
#2	.4079143	.0773765	.1429411	229.9929	.3481260	.2087593
#3	.4096536	.0867702	.1752951	227.4982	.3709302	.2413185

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3615633	196.9609	1.535835	42.72434	.4462438	.0215357
Stddev	.0457867	.4363	.008455	.21445	.0811169	.0033555
%RSD	12.66353	.2215376	.5505049	.5019307	18.17771	15.58090
#1	.3157436	197.3855	1.538140	42.75859	.3655043	.0185691
#2	.3616295	196.5137	1.542898	42.91959	.4454943	.0208607
#3	.4073169	196.9835	1.526467	42.49482	.5277328	.0251774

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.314358	.3459883	.4049994	10.17647	-.234644	.1823816
Stddev	.054172	.0046454	.0086367	.17525	.016022	.0752528
%RSD	2.340708	1.342634	2.132513	1.722140	6.828193	41.26116
#1	2.263032	.3436493	.3965536	10.00112	-.246834	.1109017
#2	2.309055	.3429774	.4046297	10.17667	-.240601	.1753321
#3	2.370987	.3513383	.4138150	10.35162	-.216497	.2609111

Sample Name: Q1721-02A Acquired: 4/7/2025 18:08:35 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.3245211	1.410179	F 13.37047	8.491041	4.770623	.0896679
Stddev	.1367627	.009339	.06105	1.012042	.012105	.0042442
%RSD	42.14292	.6622760	.4565828	11.91893	.2537456	4.733225
#1	.1945550	1.414667	13.42540	7.484333	4.767754	.0860661
#2	.3118149	1.416428	13.30475	8.480456	4.760209	.0885909
#3	.4671935	1.399443	13.38127	9.508333	4.783905	.0943469

Elem	Sr4077
Units	ppm
Avg	.6888690
Stddev	.0032976
%RSD	.4787005
#1	.6897878
#2	.6916097
#3	.6852094

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2192.083	49997.37	10614.25	1403.990	2994.927
Stddev	4.818	42.89	69.85	2.338	10.723
%RSD	.2197818	.0857912	.6580955	.1665100	.3580490
#1	2196.372	50027.77	10585.95	1402.830	3002.254
#2	2193.007	50016.04	10562.99	1402.459	2999.908
#3	2186.870	49948.31	10693.81	1406.681	2982.619

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: PB167441BS Acquired: 4/7/2025 18:12:38 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.7412568	1.937761	.9156884	1.882206	.7749645	1.847868
Stddev	.0033395	.017758	.0012061	.009139	.0051534	.019781
%RSD	.4505214	.9163957	.1317118	.4855625	.6649904	1.070457
#1	.7383779	1.952155	.9146033	1.887820	.7718078	1.840546
#2	.7404745	1.917917	.9154750	1.871660	.7721742	1.870266
#3	.7449180	1.943209	.9169869	1.887138	.7809114	1.832792

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1836824	.1909737	.1852740	.9509595	.3926981	.1874630
Stddev	.0011760	.0017162	.0000884	.0097155	.0018439	.0006091
%RSD	.6402118	.8986737	.0477318	1.021653	.4695502	.3249219
#1	.1825137	.1908005	.1852315	.9522718	.3938823	.1867609
#2	.1848655	.1927700	.1852148	.9599522	.3905736	.1877780
#3	.1836679	.1893507	.1853757	.9406546	.3936384	.1878501

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2977365	2.897867	.1892620	1.815435	.4716342	.0738812
Stddev	.0003535	.025241	.0009751	.023145	.0009006	.0005758
%RSD	.1187211	.8710217	.5151919	1.274905	.1909527	.7793758
#1	.2973398	2.898532	.1884005	1.800000	.4711251	.0741471
#2	.2978520	2.872300	.1903205	1.842048	.4711034	.0732205
#3	.2980178	2.922769	.1890649	1.804258	.4726740	.0742760

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.974636	.2798462	.1967962	9.184600	.2756020	.3922704
Stddev	.029878	.0047125	.0015443	.067435	.0034510	.0011049
%RSD	1.004431	1.683969	.7847180	.7342187	1.252177	.2816658
#1	2.957791	.2749075	.1972053	9.144442	.2747778	.3923701
#2	2.956983	.2842941	.1950886	9.146904	.2793905	.3911190
#3	3.009133	.2803371	.1980948	9.262455	.2726377	.3933221

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: PB167441BS Acquired: 4/7/2025 18:12:38 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.6552436	.1837212	.7679900	5.652382	F -.009479	.1926196
Stddev	.0031261	.0018510	.0019727	.004950	.000845	.0024220
%RSD	.4770967	1.007521	.2568631	.0875685	8.918838	1.257379
#1	.6530499	.1821790	.7665197	5.652435	-.009274	.1899221
#2	.6538579	.1857739	.7672184	5.647407	-.010408	.1946074
#3	.6588231	.1832106	.7702318	5.657306	-.008755	.1933294

Elem	Sr4077
Units	ppm
Avg	.1830868
Stddev	.0017701
%RSD	.9667976
#1	.1815218
#2	.1850078
#3	.1827308

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2264.294	51148.02	9988.111	1460.043	3549.601
Stddev	5.625	168.93	101.466	6.050	3.335
%RSD	.2484132	.3302831	1.015871	.4143733	.0939428
#1	2265.685	51226.18	10023.32	1459.515	3550.615
#2	2269.093	51263.73	9873.73	1466.339	3552.312
#3	2258.104	50954.16	10067.28	1454.274	3545.878

Sample Name: PB167466BL Acquired: 4/7/2025 18:16:41 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0022574	-.000301	-.000520	.0013884	.0003055	.0034100	-.000784
Stddev	.0019083	.000875	.000797	.0005290	.0008874	.0106344	.000295
%RSD	84.53703	290.5591	153.3279	38.09779	290.4365	311.8556	37.63456
#1	.0028027	-.001258	-.000950	.0018260	.0004924	-.008513	-.000994
#2	.0038337	-.000104	.000400	.0008006	.0010846	.011916	-.000910
#3	.0001358	.000459	-.001009	.0015386	-.000660	.006828	-.000446

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000015	-.000048	.0010113	-.000189	-.000061	-.000236	.0007530
Stddev	.000055	.000073	.0079066	.000292	.000243	.000148	.0046409
%RSD	374.0996	152.4852	781.8198	155.1206	401.0435	62.56892	616.3044
#1	.000009	-.000101	-.000151	-.000175	-.000164	-.000323	.0028360
#2	-.000078	-.000078	.009435	-.000487	-.000235	-.000320	.0039876
#3	.000025	.000035	-.006250	.000097	.000217	-.000066	-.004564

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013993	.0050269	-.000073	.0002453	-.605377	.0002582	-.001097
Stddev	.0003039	.0114511	.000197	.0001388	.006692	.0005465	.000229
%RSD	21.72112	227.7979	270.5498	56.57349	1.105374	211.6084	20.87304
#1	.0010669	-.007946	-.000262	.0002761	-.612207	-.000249	-.000981
#2	.0014680	.013728	-.000086	.0003661	-.598833	.000837	-.001361
#3	.0016630	.009299	.000130	.0000937	-.605092	.000187	-.000950

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.245156	-.008320	-.000495	.0005947	.0001194	-.006409	-.001838
Stddev	.007746	.000412	.000354	.0003879	.0005979	.005756	.001544
%RSD	3.159762	4.948637	71.48884	65.21654	500.9643	89.81489	84.01941
#1	-.243797	-.007847	-.000683	.0002233	.0003937	-.003800	-.000521
#2	-.253491	-.008600	-.000087	.0005637	-.000567	-.002419	-.001454
#3	-.238178	-.008513	-.000714	.0009972	.000531	-.013008	-.003537

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: PB167466BL Acquired: 4/7/2025 18:16:41 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	-.000784	-.000074	-.000019
Stddev	.003980	.000820	.000021
%RSD	507.3850	1102.135	114.4650
#1	.003765	.000847	.000006
#2	-.002492	-.000722	-.000030
#3	-.003626	-.000348	-.000032

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2266.915	51167.08	10028.64	1453.044	3640.068
Stddev	10.491	154.98	61.84	6.885	11.721
%RSD	.4627760	.3028993	.6166287	.4738479	.3220132
#1	2275.944	51276.20	10029.36	1460.573	3650.893
#2	2255.406	50989.68	9966.44	1447.068	3627.619
#3	2269.394	51235.37	10090.11	1451.491	3641.691

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: PB167466BS Acquired: 4/7/2025 18:27:26 Type: Unk
Method: NON EPA-6010-200.7(v2895) 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	.7547065	1.913274	.9154939	1.936581	.7827066	1.843006
Stddev	.0027225	.012614	.0026436	.010890	.0057488	.003451
%RSD	.3607381	.6592881	.2887586	.5623107	.7344740	.1872571
#1	.7558986	1.898732	.9139492	1.927729	.7805597	1.845604
#2	.7515913	1.919840	.9139862	1.933273	.7783403	1.844324
#3	.7566297	1.921251	.9185464	1.948741	.7892199	1.839090

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1763564	.1793767	.1847631	.9577335	.3869952	.1866570
Stddev	.0006789	.0007494	.0008404	.0056098	.0018264	.0007480
%RSD	.3849699	.4177753	.4548449	.5857416	.4719546	.4007569
#1	.1768748	.1801426	.1842965	.9616634	.3848995	.1860046
#2	.1766064	.1786450	.1842595	.9602280	.3882482	.1864928
#3	.1755879	.1793423	.1857332	.9513090	.3878378	.1874735

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2974981	2.925352	.1812356	1.803875	.4713355	.0729548
Stddev	.0009311	.012133	.0005591	.012141	.0019710	.0004519
%RSD	.3129890	.4147574	.3085063	.6730756	.4181705	.6194480
#1	.2965795	2.914169	.1815949	1.811083	.4700390	.0734489
#2	.2974736	2.923635	.1815205	1.789857	.4703638	.0725625
#3	.2984413	2.938252	.1805914	1.810684	.4736036	.0728528

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.962178	.2711653	.1930802	9.328786	.2546689	.3887920
Stddev	.018391	.0026903	.0006267	.013973	.0027747	.0010351
%RSD	.6208535	.9921155	.3245797	.1497814	1.089529	.2662444
#1	2.942015	.2739633	.1937394	9.342591	.2572823	.3880703
#2	2.978033	.2709348	.1930090	9.314651	.2517571	.3883277
#3	2.966484	.2685976	.1924921	9.329117	.2549672	.3899780

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: PB167466BS Acquired: 4/7/2025 18:27:26 Type: Unk
Method: NON EPA-6010-200.7(v2895) 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	.6533497	.1782471	.7554751	5.616185	F -.016204	.1840301
Stddev	.0030971	.0006680	.0082748	.031372	.000679	.0005833
%RSD	.4740401	.3747708	1.095314	.5586019	4.192794	.3169754
#1	.6507069	.1789744	.7650107	5.589199	-.015596	.1843278
#2	.6525844	.1776610	.7501811	5.608748	-.016937	.1844046
#3	.6567577	.1781059	.7512335	5.650607	-.016080	.1833580

Elem	Sr4077
Units	ppm
Avg	.1771845
Stddev	.0004979
%RSD	.2810108
#1	.1777192
#2	.1771002
#3	.1767341

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2213.148	51031.04	10379.99	1431.323	3464.398
Stddev	5.897	79.81	36.75	5.543	6.541
%RSD	.2664683	.1563929	.3540883	.3872410	.1887968
#1	2207.639	51011.51	10339.79	1428.371	3459.614
#2	2219.369	50962.80	10388.33	1427.881	3471.852
#3	2212.436	51118.80	10411.87	1437.717	3461.730

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: LR1 Acquired: 4/7/2025 18:41:58 Type: Unk
Method: NON EPA-6010-200.7(v2896) 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	.0410497	.0762372	.0483380	-.227040	.0087569	1930.508	.0165800
Stddev	.0056835	.0013399	.0056796	.016193	.0091698	22.474	.0007939
%RSD	13.84531	1.757571	11.74970	7.132392	104.7157	1.164131	4.788099
#1	.0437335	.0751104	.0546190	-.231439	.0159249	1947.486	.0173007
#2	.0448943	.0758823	.0435638	-.209101	-.001576	1939.014	.0167102
#3	.0345213	.0777188	.0468311	-.240579	.011922	1905.022	.0157291

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0094596	.0302777	1873.654	.0252347	.0275612	.0510505	974.0240
Stddev	.0001776	.0013713	10.460	.0007203	.0002959	.0085202	4.0706
%RSD	1.877608	4.529017	.5582498	2.854407	1.073477	16.68972	.4179129
#1	.0093170	.0294976	1884.032	.0258862	.0273514	.0470188	976.2761
#2	.0096585	.0294744	1873.814	.0253566	.0278996	.0452945	976.4708
#3	.0094032	.0318610	1863.115	.0244612	.0274325	.0608383	969.3250

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.032236	1635.542	.0161046	-.045589	1818.678	.0177787	.4198488
Stddev	.000559	7.495	.0012048	.000144	9.581	.0026133	.0016293
%RSD	1.733662	.4582564	7.480977	.3158409	.5268143	14.69928	.3880567
#1	-.031648	1641.084	.0160435	-.045680	1811.714	.0149094	.4204534
#2	-.032298	1638.528	.0149315	-.045423	1814.715	.0184039	.4180037
#3	-.032761	1627.014	.0173387	-.045663	1829.604	.0200227	.4210893

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1379.147	^ *****	-.013696	-.001895	-.035346	.1151766	.0726044
Stddev	8.532	-----	.002598	.002776	.000515	.0081405	.0106346
%RSD	.6186512	-----	18.97096	146.5163	1.456255	7.067852	14.64737
#1	1375.825	^ -----	-.016644	.001179	-.035875	.1179796	.0603535
#2	1388.840	^ -----	-.011738	-.004220	-.035317	.1060049	.0794594
#3	1372.775	^ -----	-.012707	-.002643	-.034847	.1215452	.0780003

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: LR1 Acquired: 4/7/2025 18:41:58 Type: Unk
Method: NON EPA-6010-200.7(v2896) 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	-.200486	-.296147	-.962701
Stddev	.028390	.000738	.004086
%RSD	14.16083	.2492571	.4244139
#1	-.230551	-.296780	-.964951
#2	-.196770	-.295336	-.965168
#3	-.174136	-.296324	-.957985

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1542.489	35475.18	8753.969	988.4035	1955.645
Stddev	6.318	96.23	52.893	3.3216	4.128
%RSD	.4096154	.2712691	.6042199	.3360558	.2110860
#1	1543.627	35384.51	8696.008	984.6077	1957.542
#2	1548.160	35464.89	8766.275	989.8252	1958.484
#3	1535.679	35576.15	8799.625	990.7777	1950.910

Sample Name: LR2 Acquired: 4/7/2025 18:46:57 Type: Unk
Method: NON EPA-6010-200.7(v2896) 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	-.006000	-.026240	262.9397	.0058882	.0037343	.3178710	95.87287
Stddev	.001534	.004694	.3530	.0048095	.0035867	.0068642	1.83680
%RSD	25.56311	17.89041	.1342432	81.68080	96.04708	2.159427	1.915869
#1	-.004323	-.028358	262.9576	.0040837	.0074478	.3257884	97.91071
#2	-.007332	-.020860	262.5781	.0113389	.0034657	.3135909	94.34480
#3	-.006344	-.029502	263.2833	.0022419	.0002895	.3142337	95.36310

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003298	-.004259	.4268428	.0093523	.0027253	269.7784	.3493580
Stddev	.000043	.000064	.0130669	.0002608	.0004280	1.6851	.0061470
%RSD	1.300935	1.499196	3.061292	2.788530	15.70308	.6246302	1.759504
#1	-.003306	-.004186	.4334387	.0090513	.0030209	271.2072	.3489724
#2	-.003252	-.004282	.4352971	.0095114	.0029204	267.9201	.3556887
#3	-.003337	-.004307	.4117927	.0094942	.0022346	270.2079	.3434130

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.04173	.0015263	51.54665	.0030069	-.358053	-.011353	31.85936
Stddev	.46652	.0205973	.05898	.0001296	.019880	.000590	.12730
%RSD	.9512677	1349.457	.1144246	4.308986	5.552220	5.197516	.3995713
#1	49.56987	.0177415	51.58362	.0029515	-.343191	-.011092	31.73275
#2	48.68579	.0084870	51.47863	.0029142	-.350334	-.012028	31.98734
#3	48.86952	-.021649	51.57770	.0031549	-.380635	-.010938	31.85800

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0735842	-.007965	-.008521	-.006447	-.032688	-.008568	.4448910
Stddev	.0088107	.000988	.000361	.000667	.000618	.005805	.0066645
%RSD	11.97367	12.39827	4.236736	10.34090	1.889932	67.75066	1.498012
#1	.0649004	-.007264	-.008851	-.005876	-.032007	-.001954	.4520520
#2	.0825166	-.007536	-.008576	-.007180	-.033214	-.010933	.4437509
#3	.0733356	-.009094	-.008136	-.006284	-.032842	-.012817	.4388701

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: LR2 Acquired: 4/7/2025 18:46:57 Type: Unk
Method: NON EPA-6010-200.7(v2896) 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	-.003428	-.001007	.0013773
Stddev	.002230	.000756	.0000340
%RSD	65.05132	75.13123	2.469688
#1	-.005223	-.000318	.0013492
#2	-.004130	-.000886	.0014151
#3	-.000932	-.001816	.0013675

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1802.592	50803.64	10058.11	1373.670	3380.568
Stddev	3.739	145.19	83.72	3.910	5.328
%RSD	.2074168	.2857855	.8323990	.2846746	.1576211
#1	1804.573	50855.38	9962.40	1371.791	3383.788
#2	1804.923	50915.88	10094.19	1378.165	3383.499
#3	1798.279	50639.67	10117.75	1371.053	3374.418

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCV06 Acquired: 4/7/2025 18:51:48 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	4.932824	4.936253	4.891713	4.967998	4.995592	9.574465	9.840386
Stddev	.022770	.056419	.033302	.023825	.027025	.024327	.065876
%RSD	.4616112	1.142953	.6807865	.4795776	.5409777	.2540806	.6694419
#1	4.921853	4.907886	4.870284	4.963877	4.995181	9.602506	9.813640
#2	4.917616	4.899646	4.874776	4.946502	4.968775	9.559002	9.915428
#3	4.959003	5.001226	4.930080	4.993615	5.022820	9.561888	9.792090

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2347814	2.449135	23.87253	.9971477	2.437855	1.256818	5.117340
Stddev	.0013706	.014823	.06260	.0011301	.012836	.007170	.011750
%RSD	.5837756	.6052165	.2622166	.1133293	.5265200	.5705199	.2296157
#1	.2337030	2.438336	23.80739	.9984434	2.428714	1.253626	5.127350
#2	.2363238	2.443034	23.93223	.9963658	2.432322	1.251798	5.104403
#3	.2343174	2.466034	23.87797	.9966339	2.452530	1.265030	5.120267

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.369925	23.59007	2.448838	1.243043	25.82792	2.412330	2.465424
Stddev	.008410	.09369	.014356	.000779	.18091	.002652	.009255
%RSD	.3548843	.3971659	.5862351	.0626943	.7004426	.1099541	.3753885
#1	2.365035	23.51558	2.440188	1.242398	26.02202	2.413010	2.469127
#2	2.379636	23.69526	2.440916	1.242821	25.66400	2.409403	2.454890
#3	2.365103	23.55937	2.465409	1.243909	25.79772	2.414576	2.472253

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.69552	4.747691	4.994969	4.909268	4.802322	5.288855	5.065389
Stddev	.22736	.029887	.022488	.029170	.008124	.038190	.045732
%RSD	.8848082	.6295034	.4502161	.5941924	.1691703	.7220810	.9028240
#1	25.88034	4.723095	4.994880	4.889837	4.803054	5.315802	5.049112
#2	25.44164	4.780953	4.972525	4.895155	4.810055	5.245152	5.030023
#3	25.76458	4.739025	5.017501	4.942811	4.793856	5.305612	5.117033

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCV06 Acquired: 4/7/2025 18:51:48 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	4.882523	4.820591	4.855069
Stddev	.010740	.005164	.045650
%RSD	.2199733	.1071187	.9402446
#1	4.873829	4.826497	4.826308
#2	4.879211	4.818348	4.907705
#3	4.894529	4.816928	4.831195

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2165.854	49186.74	10023.97	1370.858	3239.144
Stddev	6.497	131.38	55.69	4.586	14.771
%RSD	.2999927	.2671055	.5555732	.3345436	.4560044
#1	2165.416	49035.04	10043.58	1365.629	3249.193
#2	2172.559	49263.42	9961.13	1374.197	3246.055
#3	2159.586	49261.76	10067.21	1372.748	3222.185

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCB06 Acquired: 4/7/2025 18:55:59 Type: Unk
Method: NON EPA-6010-200.7(v2710) 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	.0023125	.0005912	.0006219	.0010106	.0005922	.0025568	-.001603
Stddev	.0016047	.0012440	.0005463	.0009096	.0013097	.0050256	.000508
%RSD	69.39334	210.4084	87.84201	90.01397	221.1562	196.5526	31.66877
#1	.0021140	.0015646	.0011740	.0016562	.0017992	-.003244	-.001071
#2	.0008162	-.000810	.0000815	.0014052	.0007780	.005589	-.001656
#3	.0040072	.001019	.0006104	-.000030	-.000800	.005325	-.002082

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000078	.0000198	-.002919	-.000177	.0002026	.0004111	-.002644
Stddev	.000047	.0000692	.004578	.000307	.0001158	.0001839	.005952
%RSD	60.02960	349.8560	156.8540	173.7628	57.15804	44.73780	225.1095
#1	-.000058	-.000060	-.007912	-.000121	.0001327	.0002291	-.004443
#2	-.000045	.000052	-.001926	.000099	.0001388	.0005969	-.007489
#3	-.000132	.000067	.001082	-.000508	.0003363	.0004073	.004000

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016494	.0026256	.0001418	.0000448	-.334739	.0015551	-.001284
Stddev	.0002520	.0038852	.0000988	.0005242	.024513	.0022107	.000246
%RSD	15.27836	147.9731	69.67728	1169.393	7.322910	142.1616	19.15979
#1	.0013622	.0022228	.0001279	.0002977	-.362403	.0014362	-.001355
#2	.0017526	-.001042	.0002467	.0003946	-.326094	.0038229	-.001487
#3	.0018334	.006697	.0000506	-.000558	-.315721	-.000594	-.001011

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.122189	-.005717	-.000478	-.000278	.0003801	.0087389	-.001963
Stddev	.037252	.000918	.000163	.000440	.0003818	.0030676	.002137
%RSD	30.48734	16.05139	34.00307	158.5596	100.4421	35.10313	108.8702
#1	-.114291	-.006557	-.000414	-.000426	.0006511	.0122782	-.001949
#2	-.089519	-.004738	-.000358	.000218	.0005457	.0068445	-.004107
#3	-.162756	-.005858	-.000663	-.000625	-.000057	.0070941	.000167

Reviewed By:jaswal
On:4/9/2025 11:41:50 AM
Inst Id :P4
LB :LB135333

Sample Name: CCB06 Acquired: 4/7/2025 18:55:59 Type: Unk
Method: NON EPA-6010-200.7(v2710) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

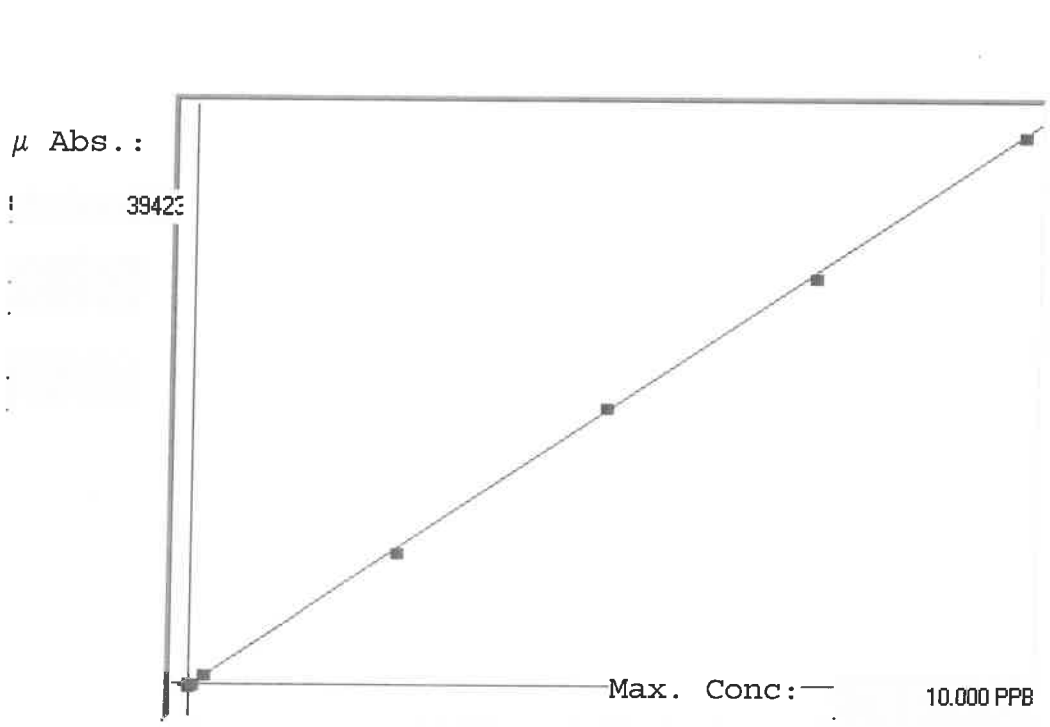
Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0009128	.0000526	.0000356
Stddev	.0019242	.0008076	.0000296
%RSD	210.8165	1536.417	82.99562
#1	.0020247	-.000871	.0000647
#2	.0020227	.000625	.0000367
#3	-.001309	.000403	.0000056

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2271.943	50886.16	9741.098	1438.603	3670.727
Stddev	9.529	173.67	6.619	1.892	13.134
%RSD	.4194021	.3412970	.0679470	.1315182	.3578063
#1	2272.087	50878.70	9744.795	1437.987	3670.916
#2	2281.399	50716.34	9745.042	1440.726	3683.766
#3	2262.343	51063.45	9733.456	1437.095	3657.500

Reviewed By:jaswal
On:4/9/2025 10:42:20 PM
Inst Id :CV1
LB :LB135283

LB135283

245.1 INSTRUMENT ID: CV1



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	%D
0.0	0.000	-0.007	-0.007	-174	0.000	-174					1
0.05	0.050	0.055	0.005	71	0.0 %	71	0				10
0.2	0.200	0.211	0.011	687	0.0 %	687					5
2.5	2.500	2.446	-0.054	9525	0.0 %	9525					-2
5.0	5.000	5.095	0.095	19996	0.0 %	19996					2
7.5	7.500	7.440	-0.060	29269	0.0 %	29269					-1
10.0	10.000	10.009	0.009	39423	0.0 %	39423					0

Reviewed By:jaswal
On:4/9/2025 10:42:20 PM
Inst Id :CV1
LB :LB135283

LB135283 INSTRUMENT ID : CV1

Method: 245.1 Operator: Admin Date of Analysis: 03 Apr 2025 11:41:56

Sample ID	Extended ID	µ Abs.	Conc.	Stnd Conc	Method	Units	Date	Type	Type
0.0 - 1	S0	-174	-	0.0000	245.1	PPB	03 Apr 2025 11:55:47	S	Std
0.05 - 1	S0.05	71	-	0.0500	245.1	PPB	03 Apr 2025 11:58:04	S	St
0.2 - 1	S0.2	687	-	0.2000	245.1	PPB	03 Apr 2025 12:00:21	S	St
2.5 - 1	S2.5	9525	-	2.5000	245.1	PPB	03 Apr 2025 12:02:38	S	St
5.0 - 1	S5.0	19996	-	5.0000	245.1	PPB	03 Apr 2025 12:04:54	S	St
7.5 - 1	S7.5	29269	-	7.5000	245.1	PPB	03 Apr 2025 12:07:12	S	St
10.0 - 1	S10	39423	-	10.0000	245.1	PPB	03 Apr 2025 12:09:29	S	St
ICV74 - 1	ICV74	15046	3.8429		245.1	PPB	03 Apr 2025 12:12:33	U	SMPL
ICB74 - 1	ICB74	-233	-0.0217		245.1	PPB	03 Apr 2025 12:14:48	U	SMPL
CCV25 - 1	CCV25	19768	5.0373		245.1	PPB	03 Apr 2025 12:17:06	U	SMPL
CCB25 - 1	CCB25	-496	-0.0882		245.1	PPB	03 Apr 2025 12:19:22	U	SMPL
CRA - 1	CRA	7	0.0390		245.1	PPB	03 Apr 2025 12:24:17	U	SMPL
HighStd - 1	HighStd	38476	9.7692		245.1	PPB	03 Apr 2025 12:26:32	U	SMPL
ChkStd - 1	ChkStd	25540	6.4972		245.1	PPB	03 Apr 2025 12:28:47	U	SMPL
PB167449BL - 1	PBW	11	0.0400		245.1	PPB	03 Apr 2025 12:36:25	U	SMPL
PB167449BS - 1	LCSW	16000	4.0842		245.1	PPB	03 Apr 2025 12:38:41	U	SMPL
Q1503-08 - 1	PT-HG-WP	67617	17.1401		245.1	PPB	03 Apr 2025 12:40:57	U	SMPL
CCV26 - 1	CCV26	18647	4.7537		245.1	PPB	03 Apr 2025 12:56:25	U	SMPL
CCB26 - 1	CCB26	-341	-0.0490		245.1	PPB	03 Apr 2025 12:58:40	U	SMPL
Q1503-08DLX5 - 1	PT-HG-WP	13381	3.4218		245.1	PPB	03 Apr 2025 13:00:58	U	SMPL
CCV27 - 1	CCV27	17709	4.5165		245.1	PPB	03 Apr 2025 13:10:06	U	SMPL
CCB27 - 1	CCB27	-449	-0.0763		245.1	PPB	03 Apr 2025 13:12:24	U	SMPL

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB167491

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: 03/21/2025 **Time :** 08:30 **Temp :** 96 °C

End Digest Date: 03/21/2025 **Time :** 11:35 **Temp :** 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: SLD.

Supervisor Signature:

Temp : 1. 96°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
LFS-1	0.25	M6003
LFS-2	0.25	M6012
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	MP84720
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
03/27/25 12:35	SLD met.dig	SD Metals Lab
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB167491

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
PB167491BL	PBW491	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	1
PB167491BS	LCS491	<2	50	50	Colorless	Colorless	Clear	Clear	M6003,M6012	2
Q1503-01	PT-TM1-WP	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	3
Q1503-03	PT-SNTI-WP	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	4
Q1503-05	PT-MIN2-WP	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	5
Q1503-07	PT-SIO2-WP	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	6

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB167491 **WorkList ID :** 188782 **Department :** Digestion **Date :** 03-20-2025 08:01:09

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1503-01	PT-TM1-WP	Water	Metals Group3	1:1 HNO3 to pH < 2	ALLI03	QA Of	03/03/2025	200.7
Q1503-03	PT-SNTI-WP	Water	Metals Group4	1:1 HNO3 to pH < 2	ALLI03	QA Of	03/03/2025	200.7
Q1503-05	PT-MIN2-WP	Water	Metals Group5	1:1 HNO3 to pH < 2	ALLI03	QA Of	03/03/2025	200.7
Q1503-07	PT-SIO2-WP	Water	Silica	1:1 HNO3 to pH < 2	ALLI03	QA Of	03/03/2025	200.7

Date/Time 03/20/25 08:30
Raw Sample Received by: SLG. met. dig
Raw Sample Relinquished by: [illegible]

Date/Time 03/20/25 09:30
Raw Sample Received by: [illegible]
Raw Sample Relinquished by: SLG. met. dig

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB167449

SOP ID : M245.1-Mercury-19

SDG No : NA

Matrix : WATER

Pippete ID: HG A

Balance ID : M SC-3

Filter paper ID : NA

pH Strip ID : M6069

Hood ID : #1

Block ID: 1. HG HOT BLOCK#3 2. N/A

Start Digest Date: 04/03/2025 **Time :** 08:10 **Temp :** 94 °C

End Digest Date: 04/03/2025 **Time :** 10:10 **Temp :** 95 °C

Digestion tube ID: M5595

Block thermometer ID: HG-DIG#3

Dig Technician Signature: MB

Supervisor Signature: [illegible]

Temp : 1. 94°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
ICV	30mL	MP85129
CCV	30mL	MP85131
CRA	30mL	MP85133
Blank Spike	0.48mL	MP85121
Matrix Spike	0.48mL	MP85121

Chemical Used	ML/SAMPLE USED	Lot Number
HNO3/H2SO4(1:2)	2.5mL	MP84563
KMnO4 (5%)	4.5mL	MP84564
K2S2O8 (5%)	2.5mL	MP84565
Hydroxylamine HCL (12%)	2.0mL	MP84566
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	MP85122
0.05 ppb	S0.05	30mL	MP85123
0.2 ppb	S0.2	30mL	MP85124
2.5 ppb	S2.5	30mL	MP85125
5.0 ppb	S5.0	30mL	MP85126
7.5 ppb	S7.5	30mL	MP85127
10.0 ppb	S10.0	30mL	MP85138
ICV	ICV	30mL	MP85129
ICB	ICB	30mL	MP85130
CCV	CCV	30mL	MP85131
CCB	CCB	30mL	MP85132
CRI	CRI	30mL	MP85133
CHK STD	CHK STD	30mL	MP85134

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
4/3/2025 10:40	MB - Digestion Lab	MB - Metals Lab
	Preparation Group	**Analysis Group**

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB167449

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Comment	Prep Pos
PB167449BL	PBW449	30	30	<2	N/A	3-19
PB167449BS	LCS449	30	30	<2	MP85121	20
Q1503-08	PT-HG-WP	30	30	<2	N/A	21

WORKLIST(Hardcopy Internal Chain)

WorkList Name : 040325_245.1 **WorkList ID :** 188710 **Department :** Digestion **Date :** 04-03-2025 06:09:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1503-08	PT-HG-WP	Water	Mercury	1:1 HNO3 to pH < 2	ALLI03	QA Office	03/03/2025	245.1

Date/Time 4/3/25 @ 9:50

Raw Sample Received by: ওয়াসিম

Raw Sample Relinquished by: (Cometal Signature)

Date/Time 4/3/25 @ 8:30

Raw Sample Received by: (Cometal Signature)

Raw Sample Relinquished by: ওয়াসিম

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 # LB135273

Review By	kareem	Review On	4/3/2025 5:59:21 PM
Supervise By	jaswal	Supervise On	4/21/2025 10:08:04 AM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85017,MP85018,MP85019,MP85020,MP85022
ICV Standard	MP85023
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85022
LCS Standard	
Chk Standard	MP85030,MP85031

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	04/02/25 11:40		Kareem	OK
2	S1	S1	CAL2	04/02/25 11:45		Kareem	OK
3	S2	S2	CAL3	04/02/25 11:49		Kareem	OK
4	S3	S3	CAL4	04/02/25 11:53		Kareem	OK
5	S4	S4	CAL5	04/02/25 11:57		Kareem	OK
6	S5	S5	CAL6	04/02/25 12:02		Kareem	OK
7	ICV01	ICV01	ICV	04/02/25 15:20		Kareem	OK
8	LLICV01	LLICV01	LLICV	04/02/25 15:41		Kareem	OK
9	ICB01	ICB01	ICB	04/02/25 15:51		Kareem	OK
10	CRI01	CRI01	CRDL	04/02/25 15:55		Kareem	OK
11	ICSA01	ICSA01	ICSA	04/02/25 15:59		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	04/02/25 16:04		Kareem	OK
13	ICSADL	ICSADL	ICSA	04/02/25 16:12		Kareem	OK
14	ICSABDL	ICSABDL	ICSAB	04/02/25 16:18		Kareem	OK
15	CCV01	CCV01	CCV	04/02/25 16:39		Kareem	OK
16	CCB01	CCB01	CCB	04/02/25 16:43		Kareem	OK
17	Q1692-01	NB-08-04012025	SAM	04/02/25 16:47	Ca,Fe,Mg high	Kareem	Dilution
18	Q1692-01DL	NB-08-04012025DL	SAM	04/02/25 16:51	100X for Ca,Fe,Mg	Kareem	Confirms

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135273

Review By	kareem	Review On	4/3/2025 5:59:21 PM
Supervise By	jaswal	Supervise On	4/21/2025 10:08:04 AM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85017,MP85018,MP85019,MP85020,MP85022
ICV Standard	MP85023
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85022
LCS Standard	
Chk Standard	MP85030,MP85031

19	Q1686-01	EO-03-040125	SAM	04/02/25 16:56	Fe,Mn high	Kareem	Dilution
20	Q1686-01DL	EO-03-040125DL	SAM	04/02/25 17:00	100X for Fe,Mn	Kareem	Confirms
21	Q1666-01	TW-WTS-05	SAM	04/02/25 17:04		Kareem	OK
22	Q1666-01DL	TW-WTS-05DL	SAM	04/02/25 17:09	Not use	Kareem	Not Ok
23	Q1503-05	PT-MIN2-WP	SAM	04/02/25 17:13		Kareem	OK
24	Q1503-03	PT-SNTI-WP	SAM	04/02/25 17:22		Kareem	OK
25	Q1503-01	PT-TM1-WP	SAM	04/02/25 17:31		Kareem	OK
26	CCV02	CCV02	CCV	04/02/25 17:35		Kareem	OK
27	CCB02	CCB02	CCB	04/02/25 17:39		Kareem	OK
28	Q1503-05DL	PT-MIN2-WPDL	SAM	04/02/25 17:43	Not required	Kareem	Not Ok
29	CCV03	CCV03	CCV	04/02/25 17:53		Kareem	OK
30	CCB03	CCB03	CCB	04/02/25 17:58		Kareem	OK

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Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB135283

Review By	mohan	Review On	4/9/2025 11:09:23 AM
Supervise By	jaswal	Supervise On	4/9/2025 10:42:20 PM

STD. NAME	STD REF.#
ICAL Standard	MP85122,MP85123,MP85124,MP85125,MP85126,MP85127,MP85138
ICV Standard	MP85129
CCV Standard	MP85131
ICSA Standard	
CRI Standard	MP85133
LCS Standard	
Chk Standard	MP85130,MP85132,MP85134,MP85136

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	04/03/25 11:55		mohan	OK
2	S0.05	S0.05	CAL2	04/03/25 11:58		mohan	OK
3	S0.2	S0.2	CAL3	04/03/25 12:00		mohan	OK
4	S2.5	S2.5	CAL4	04/03/25 12:02		mohan	OK
5	S5	S5	CAL5	04/03/25 12:04		mohan	OK
6	S7.5	S7.5	CAL6	04/03/25 12:07		mohan	OK
7	S10	S10	CAL7	04/03/25 12:09		mohan	OK
8	ICV74	ICV74	ICV	04/03/25 12:12		mohan	OK
9	ICB74	ICB74	ICB	04/03/25 12:14		mohan	OK
10	CCV25	CCV25	CCV	04/03/25 12:17		mohan	OK
11	CCB25	CCB25	CCB	04/03/25 12:19		mohan	OK
12	CRA	CRA	CRDL	04/03/25 12:24		mohan	OK
13	HighStd	HighStd	HIGH STD	04/03/25 12:26		mohan	OK
14	ChkStd	ChkStd	SAM	04/03/25 12:28		mohan	OK
15	PB167449BL	PB167449BL	MB	04/03/25 12:36		mohan	OK
16	PB167449BS	PB167449BS	LCS	04/03/25 12:38		mohan	OK
17	Q1503-08	PT-HG-WP	SAM	04/03/25 12:40	Hg High	mohan	Dilution
18	CCV26	CCV26	CCV	04/03/25 12:56		mohan	OK

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Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB135283

Review By	mohan	Review On	4/9/2025 11:09:23 AM
Supervise By	jaswal	Supervise On	4/9/2025 10:42:20 PM

STD. NAME	STD REF.#
ICAL Standard	MP85122,MP85123,MP85124,MP85125,MP85126,MP85127,MP85138
ICV Standard	MP85129
CCV Standard	MP85131
ICSA Standard	
CRI Standard	MP85133
LCS Standard	
Chk Standard	MP85130,MP85132,MP85134,MP85136

19	CCB26	CCB26	CCB	04/03/25 12:58		mohan	OK
20	Q1503-08DL	PT-HG-WPDL	SAM	04/03/25 13:00	5X for Hg	mohan	Confirms
21	CCV27	CCV27	CCV	04/03/25 13:10		mohan	OK
22	CCB27	CCB27	CCB	04/03/25 13:12		mohan	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135289

Review By	kareem	Review On	4/4/2025 10:20:46 AM
Supervise By	mohan	Supervise On	4/4/2025 5:07:26 PM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85017,MP85018,MP85019,MP85020,MP85022
ICV Standard	MP85023
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85022
LCS Standard	
Chk Standard	MP85030,MP85031

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	04/03/25 10:22		Kareem	OK
2	S1	S1	CAL2	04/03/25 10:26		Kareem	OK
3	S2	S2	CAL3	04/03/25 10:30		Kareem	OK
4	S3	S3	CAL4	04/03/25 10:34		Kareem	OK
5	S4	S4	CAL5	04/03/25 10:39		Kareem	OK
6	S5	S5	CAL6	04/03/25 10:43		Kareem	OK
7	ICV01	ICV01	ICV	04/03/25 12:06	ICV fail for Sb,Na,Tl (200.7) (95-105)	Kareem	OK
8	LLICV01	LLICV01	LLICV	04/03/25 12:11		Kareem	OK
9	ICB01	ICB01	ICB	04/03/25 12:15		Kareem	OK
10	CRI01	CRI01	CRDL	04/03/25 12:20		Kareem	OK
11	ICSA01	ICSA01	ICSA	04/03/25 12:24		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	04/03/25 12:28		Kareem	OK
13	ICSADL	ICSADL	ICSA	04/03/25 12:33		Kareem	OK
14	ICSABDL	ICSABDL	ICSAB	04/03/25 12:37		Kareem	OK
15	CCV01	CCV01	CCV	04/03/25 12:41		Kareem	OK
16	CCB01	CCB01	CCB	04/03/25 12:47		Kareem	OK
17	Q1503-07	PT-SIO2-WP	SAM	04/03/25 12:51	Si high	Kareem	Dilution
18	Q1680-01	TP-4	SAM	04/03/25 13:00		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135289

Review By	kareem	Review On	4/4/2025 10:20:46 AM
Supervise By	mohan	Supervise On	4/4/2025 5:07:26 PM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85017,MP85018,MP85019,MP85020,MP85022
ICV Standard	MP85023
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85022
LCS Standard	
Chk Standard	MP85030,MP85031

19	Q1680-01DUP	TP-4DUP	DUP	04/03/25 13:05		Kareem	OK
20	Q1680-01L	TP-4L	SD	04/03/25 13:09		Kareem	OK
21	Q1680-01MS	TP-4MS	MS	04/03/25 13:17	0.1 ML OF M6013 AND M6004	Kareem	OK
22	Q1680-01MSD	TP-4MSD	MSD	04/03/25 13:28	0.1 ML OF M6013 AND M6004	Kareem	OK
23	Q1680-01A	TP-4A	PS	04/03/25 13:32	0.1 ML OF M6013 AND M6004	Kareem	OK
24	Q1681-01	TP-12	SAM	04/03/25 13:40		Kareem	OK
25	Q1503-07DL	PT-SIO2-WPDL	SAM	04/03/25 13:45	10x for Si	Kareem	Confirms
26	Q1688-01	OR-02-040125	SAM	04/03/25 13:49		Kareem	OK
27	CCV02	CCV02	CCV	04/03/25 13:53		Kareem	OK
28	CCB02	CCB02	CCB	04/03/25 13:57		Kareem	OK
29	PB167411BL	PB167411BL	MB	04/03/25 14:02		Kareem	OK
30	PB167411BS	PB167411BS	LCS	04/03/25 14:06	0.1 ML OF M6013 AND M6004	Kareem	OK
31	Q1690-01	MW112010	SAM	04/03/25 14:10		Kareem	OK
32	Q1707-01	001-WILLETS-PT-BL	SAM	04/03/25 14:15		Kareem	OK
33	Q1707-02	002-35TH-AVE(MAR)	SAM	04/03/25 14:19		Kareem	OK
34	Q1690-01DUP	MW112010DUP	DUP	04/03/25 14:23		Kareem	OK
35	Q1690-01L	MW112010L	SD	04/03/25 14:28		Kareem	OK
36	Q1692-01	NB-08-04012025	SAM	04/03/25 14:35		Kareem	OK
37	CCV03	CCV03	CCV	04/03/25 14:39		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135289

Review By	kareem	Review On	4/4/2025 10:20:46 AM
Supervise By	mohan	Supervise On	4/4/2025 5:07:26 PM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85017,MP85018,MP85019,MP85020,MP85022
ICV Standard	MP85023
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85022
LCS Standard	
Chk Standard	MP85030,MP85031

38	CCB03	CCB03	CCB	04/03/25 14:43		Kareem	OK
39	Q1690-01MS	MW112010MS	MS	04/03/25 14:49	0.1 ML OF M6013 AND M6004	Kareem	OK
40	Q1690-01MSD	MW112010MSD	MSD	04/03/25 14:53	0.1 ML OF M6013 AND M6004	Kareem	OK
41	Q1690-01A	MW112010A	PS	04/03/25 14:57	0.1 ML OF M6013 AND M6004	Kareem	OK
42	Q1657-04	72-11998	SAM	04/03/25 15:01		Kareem	OK
43	PB167422BL	PB167422BL	MB	04/03/25 15:06		Kareem	OK
44	PB167422BS	PB167422BS	LCS	04/03/25 15:10	0.1 ML OF M6013 AND M6004	Kareem	OK
45	Q1673-01	GW-CONTROL	SAM	04/03/25 15:14		Kareem	OK
46	Q1673-02	SDC9	SAM	04/03/25 15:19		Kareem	OK
47	Q1684-01	SU-04-040125	SAM	04/03/25 15:23		Kareem	OK
48	Q1685-01	HR-02-040125	SAM	04/03/25 15:28		Kareem	OK
49	CCV04	CCV04	CCV	04/03/25 15:32		Kareem	OK
50	CCB04	CCB04	CCB	04/03/25 15:36		Kareem	OK
51	Q1685-01DUP	HR-02-040125DUP	DUP	04/03/25 15:40		Kareem	OK
52	Q1685-01L	HR-02-040125L	SD	04/03/25 15:45		Kareem	OK
53	Q1685-01A	HR-02-040125A	PS	04/03/25 15:58	0.1 ML OF M6013 AND M6004	Kareem	OK
54	Q1693-01	WCS-TP-3	SAM	04/03/25 16:02		Kareem	OK
55	Q1685-01MS	HR-02-040125MS	MS	04/03/25 16:06		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135289

Review By	kareem	Review On	4/4/2025 10:20:46 AM
Supervise By	mohan	Supervise On	4/4/2025 5:07:26 PM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85017,MP85018,MP85019,MP85020,MP85022
ICV Standard	MP85023
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85022
LCS Standard	
Chk Standard	MP85030,MP85031

56	Q1685-01MSD	HR-02-040125MSD	MSD	04/03/25 16:10		Kareem	OK
57	Q1693-05	WCS-TP-2	SAM	04/03/25 16:15		Kareem	OK
58	Q1693-09	WCS-TP-1	SAM	04/03/25 16:19		Kareem	OK
59	Q1694-01	TP-18	SAM	04/03/25 16:23		Kareem	OK
60	Q1695-01	TT-2	SAM	04/03/25 16:27		Kareem	OK
61	CCV05	CCV05	CCV	04/03/25 16:36		Kareem	OK
62	CCB05	CCB05	CCB	04/03/25 16:40		Kareem	OK
63	LR1	LR1	HIGH STD	04/03/25 16:46		Kareem	OK
64	LR2	LR2	HIGH STD	04/03/25 16:51		Kareem	OK
65	Q1695-05	TT-3	SAM	04/03/25 16:55		Kareem	OK
66	PB167421BS	PB167421BS	LCS	04/03/25 17:03	0.1 ML OF M6013 AND M6004	Kareem	OK
67	PB167421BL	PB167421BL	MB	04/03/25 17:09		Kareem	OK
68	Q1689-01	Q2 WASTEWATER	SAM	04/03/25 17:13	MS/MS fail for more than 50% parameter	Kareem	Not Ok
69	Q1689-01DUP	Q2 WASTEWATERDU	DUP	04/03/25 17:18	MS/MS fail for more than 50% parameter	Kareem	Not Ok
70	Q1689-01L	Q2 WASTEWATERL	SD	04/03/25 17:22	MS/MS fail for more than 50% parameter	Kareem	Not Ok
71	Q1689-01MS	Q2 WASTEWATERMS	MS	04/03/25 17:26	MS/MS fail for more than 50% parameter	Kareem	Not Ok
72	Q1689-01MSD	Q2 WASTEWATERMS	MSD	04/03/25 17:30	MS/MS fail for more than 50% parameter	Kareem	Not Ok
73	CCV06	CCV06	CCV	04/03/25 17:48		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135289

Review By	kareem	Review On	4/4/2025 10:20:46 AM
Supervise By	mohan	Supervise On	4/4/2025 5:07:26 PM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85017,MP85018,MP85019,MP85020,MP85022
ICV Standard	MP85023
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85022
LCS Standard	
Chk Standard	MP85030,MP85031

74	CCB06	CCB06	CCB	04/03/25 18:00		Kareem	OK
75	Q1689-01A	Q2 WASTEWATERA	PS	04/03/25 18:04	MS/MS fail for more than 50% parameter	Kareem	Not Ok
76	Q1703-02	COMP	SAM	04/03/25 18:08		Kareem	OK
77	Q1704-01	402	SAM	04/03/25 18:13		Kareem	OK
78	PB167442BL	PB167442BL	MB	04/03/25 18:21		Kareem	OK
79	PB167442BS	PB167442BS	LCS	04/03/25 18:25	0.1 ML OF M6013 AND M6004	Kareem	OK
80	CCV07	CCV07	CCV	04/03/25 18:29		Kareem	OK
81	CCB07	CCB07	CCB	04/03/25 18:33		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135333

Review By	kareem	Review On	4/8/2025 4:31:10 PM
Supervise By	jaswal	Supervise On	4/9/2025 11:41:50 AM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85017,MP85018,MP85019,MP85020,MP85022
ICV Standard	MP85023
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85022
LCS Standard	
Chk Standard	MP85030,MP85031

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	04/07/25 10:51		Kareem	OK
2	S1	S1	CAL2	04/07/25 10:55		Kareem	OK
3	S2	S2	CAL3	04/07/25 11:00		Kareem	OK
4	S3	S3	CAL4	04/07/25 11:04		Kareem	OK
5	S4	S4	CAL5	04/07/25 11:08		Kareem	OK
6	S5	S5	CAL6	04/07/25 11:12		Kareem	OK
7	ICV01	ICV01	ICV	04/07/25 12:35		Kareem	OK
8	LLICV01	LLICV01	LLICV	04/07/25 13:00		Kareem	OK
9	ICB01	ICB01	ICB	04/07/25 13:05		Kareem	OK
10	CRI01	CRI01	CRDL	04/07/25 13:10		Kareem	OK
11	ICSA01	ICSA01	ICSA	04/07/25 13:14		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	04/07/25 13:18		Kareem	OK
13	ICSADL	ICSADL	ICSA	04/07/25 13:23		Kareem	OK
14	ICSABDL	ICSABDL	ICSAB	04/07/25 13:37		Kareem	OK
15	CCV01	CCV01	CCV	04/07/25 13:42		Kareem	OK
16	CCB01	CCB01	CCB	04/07/25 13:50		Kareem	OK
17	PB167491BL	PB167491BL	MB	04/07/25 14:03		Kareem	OK
18	PB167491BS	PB167491BS	LCS	04/07/25 14:19	0.1 ML OF M6013 AND M6004 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135333

Review By	kareem	Review On	4/8/2025 4:31:10 PM
Supervise By	jaswal	Supervise On	4/9/2025 11:41:50 AM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85017,MP85018,MP85019,MP85020,MP85022
ICV Standard	MP85023
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85022
LCS Standard	
Chk Standard	MP85030,MP85031

19	PB167471BL	PB167471BL	MB	04/07/25 14:23		Kareem	OK
20	PB167471BS	PB167471BS	LCS	04/07/25 14:34	0.1 ML OF M6013 AND M6004 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
21	Q1504-05	PT-MIN2-WP	SAM	04/07/25 14:38		Kareem	OK
22	Q1504-01	PT-TM1-WP	SAM	04/07/25 14:42		Kareem	OK
23	Q1504-03	PT-SNTI-WP	SAM	04/07/25 14:46		Kareem	OK
24	Q1698-01	B-9	SAM	04/07/25 14:51		Kareem	OK
25	Q1698-07	B-10	SAM	04/07/25 14:55		Kareem	OK
26	Q1698-07DUP	B-10DUP	DUP	04/07/25 14:59		Kareem	OK
27	CCV02	CCV02	CCV	04/07/25 15:07		Kareem	OK
28	CCB02	CCB02	CCB	04/07/25 15:12		Kareem	OK
29	Q1698-07L	B-10L	SD	04/07/25 15:16		Kareem	OK
30	Q1698-07MS	B-10MS	MS	04/07/25 15:20	0.1 ML OF M6013 AND M6004 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
31	Q1698-07MSD	B-10MSD	MSD	04/07/25 15:24	0.1 ML OF M6013 AND M6004 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
32	Q1698-07A	B-10A	PS	04/07/25 15:28	0.1 ML OF M6013 AND M6004 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
33	Q1705-01	ETGI-327	SAM	04/07/25 15:32		Kareem	OK
34	Q1705-02	ETGI-275	SAM	04/07/25 15:37		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135333

Review By	kareem	Review On	4/8/2025 4:31:10 PM
Supervise By	jaswal	Supervise On	4/9/2025 11:41:50 AM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85017,MP85018,MP85019,MP85020,MP85022
ICV Standard	MP85023
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85022
LCS Standard	
Chk Standard	MP85030,MP85031

35	CCV03	CCV03	CCV	04/07/25 15:41		Kareem	OK
36	CCB03	CCB03	CCB	04/07/25 15:45		Kareem	OK
37	Q1706-01	PL-01-040225	SAM	04/07/25 15:50		Kareem	OK
38	CCV04	CCV04	CCV	04/07/25 17:00		Kareem	OK
39	CCB04	CCB04	CCB	04/07/25 17:04		Kareem	OK
40	Q1706-03	PL-02-040225	SAM	04/07/25 17:09		Kareem	OK
41	Q1604-05	FRAC-TANK-N45878	SAM	04/07/25 17:13		Kareem	OK
42	PB167441BL	PB167441BL	MB	04/07/25 17:17		Kareem	OK
43	Q1712-01	Z-05A	SAM	04/07/25 17:31		Kareem	OK
44	Q1712-05	TT-7	SAM	04/07/25 17:35		Kareem	OK
45	Q1721-02	AU-05-040325	SAM	04/07/25 17:39		Kareem	OK
46	CCV05	CCV05	CCV	04/07/25 17:43		Kareem	OK
47	CCB05	CCB05	CCB	04/07/25 17:47		Kareem	OK
48	Q1721-02DUP	AU-05-040325DUP	DUP	04/07/25 17:52		Kareem	OK
49	Q1721-02L	AU-05-040325L	SD	04/07/25 17:56		Kareem	OK
50	Q1721-02MS	AU-05-040325MS	MS	04/07/25 18:00	0.1 ML OF M6013 AND M6004 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
51	Q1721-02MSD	AU-05-040325MSD	MSD	04/07/25 18:04	0.1 ML OF M6013 AND M6004 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
52	Q1721-02A	AU-05-040325A	PS	04/07/25 18:08		Kareem	OK

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Daily Analysis Runlog For Sequence/QCBatch ID # LB135333

Review By	kareem	Review On	4/8/2025 4:31:10 PM
Supervise By	jaswal	Supervise On	4/9/2025 11:41:50 AM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85017,MP85018,MP85019,MP85020,MP85022
ICV Standard	MP85023
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85022
LCS Standard	
Chk Standard	MP85030,MP85031

53	PB167441BS	PB167441BS	LCS	04/07/25 18:12	0.1 ML OF M6013 AND M6004 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
54	PB167466BL	PB167466BL	MB	04/07/25 18:16		Kareem	OK
55	PB167466BS	PB167466BS	LCS	04/07/25 18:27	0.1 ML OF M6013 AND M6004 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
56	LR1	LR1	HIGH STD	04/07/25 18:41		Kareem	OK
57	LR2	LR2	HIGH STD	04/07/25 18:46		Kareem	OK
58	CCV06	CCV06	CCV	04/07/25 18:51		Kareem	OK
59	CCB06	CCB06	CCB	04/07/25 18:55		Kareem	OK

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Prep Standard - Chemical Standard Summary

Order ID : Q1503

Test : Hardness, Calcium,Hardness, Total,Mercury,Metals Group3,Metals Group4,Metals Group5,Silica

Prepbatch ID : PB167449,PB167491,

Sequence ID/Qc Batch ID: LB135273,LB135273,LB135273,LB135283,LB135289,LB135333,

Standard ID :
MP84041,MP84563,MP84564,MP84565,MP84566,MP84720,MP85016,MP85017,MP85018,MP85019,MP85020,MP850
21,MP85022,MP85023,MP85024,MP85025,MP85026,MP85030,MP85031,MP85121,MP85122,MP85123,MP85124,MP
85125,MP85126,MP85127,MP85129,MP85130,MP85131,MP85132,MP85133,MP85134,MP85136,MP85138,

Chemical ID :
M4371,M4465,M4883,M4891,M4916,M5020,M5062,M5288,M5387,M5395,M5429,M5466,M5472,M5496,M5497,M5516
,M5521,M5532,M5658,M5747,M5748,M5768,M5789,M5798,M5799,M5800,M5801,M5811,M5814,M5816,M5817,M5820
,M5875,M5882,M5884,M5959,M5970,M5978,M5985,M6003,M6012,M6021,M6023,M6028,M6030,M6041,M6058,M607
6,M6126,M6128,M6137,M6150,M6151,M6152,M6155,M6156,M6158,M6160,W3112,

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
169	1:1HNO3	MP84041	01/14/2025	07/14/2025	Eman Mughal	None	None	Sarabjit Jaswal 01/16/2025

FROM 1250.00000ml of M6126 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3965	2:1 H2SO4 : HNO3	MP84563	02/18/2025	06/03/2025	Mohan Bera	None	None	Janvi Patel 02/19/2025

FROM 1600.00000ml of M6041 + 800.00000ml of M6126 = Final Quantity: 3200.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
65	POTASSIUM PERMANGANATE SOLUTION 5 %	MP84564	02/18/2025	08/18/2025	Mohan Bera	None	None	Janvi Patel 02/19/2025

FROM 100.00000gram of M4916 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
66	POTASSIUM PERSULFATE SOLUTION 5 %	MP84565	02/18/2025	08/06/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Janvi Patel 02/19/2025

FROM 100.00000ml of M4465 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
67	SODIUM CHLORIDE - HYDROXYL- CHLORIDE SOLUTION	MP84566	02/18/2025	06/25/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Janvi Patel 02/19/2025

FROM 2000.00000ml of W3112 + 240.00000gram of M4371 + 240.00000gram of M5884 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
170	1:1HCL	MP84720	03/03/2025	04/04/2025	Sagar Kanani	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 03/03/2025

FROM 1000.00000ml of M6151 + 1000.00000ml 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
902	ICP AES CAL BLK (SO/ICB/CCB)	MP85016	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 125.00000ml of M6151 + 2350.00000ml of W3112 + 25.00000ml of M5789 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
907	ICP AES STD S (S5)	MP85017	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 5.00000ml of M5395 + 5.00000ml of M5466 + 5.00000ml of M5472 + 5.00000ml of M5816 + 5.00000ml of M5820 + 5.00000ml of M5875 + 5.00000ml of M5970 + 5.00000ml of M6076 + 5.00000ml of M6160 + 455.00000ml of MP85016 = 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
910	ICP AES STD S4	MP85018	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 50.00000ml of MP85016 + 50.00000ml of MP85017 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
909	ICP AES STD S3	MP85019	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 25.00000ml of MP85017 + 75.00000ml of MP85016 = 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
3913	ICP AES STD S2	MP85020	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 16.00000ml of MP85017 + 184.00000ml of MP85016 = Final Quantity: 200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2950	ICP AES S1/CRI STOCK STD	MP85021	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 0.03000ml of M5798 + 0.03000ml of M6028 + 0.04000ml of M6137 + 0.05000ml of M5496 + 0.05000ml of M5658 + 0.05000ml of M5811 + 0.05000ml of M6030 + 0.06000ml of M5747 + 0.10000ml of M4883 + 0.10000ml of M5472 + 0.10000ml of M5521 + 0.10000ml of M5801 + 0.10000ml of M5820 + 0.10000ml of M5970 + 0.10000ml of M6128 + 0.15000ml of M5800 + 0.20000ml of M4891 + 0.20000ml of M5748 + 0.20000ml of M5799 + 0.20000ml of M6021 + 0.20000ml of M6023 + 0.25000ml of M5466 + 0.25000ml of M6160 + 0.50000ml of M5387 + 0.50000ml of M5814 + 1.00000ml of M5288 + 1.00000ml of M5497 + 1.00000ml of M5516 + 1.00000ml of M5768 + 1.00000ml of M5978 + 1.00000ml of M6156 + 2.00000ml of M5816 + 77.68000ml of MP85016 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2951	ICP AES S1/CRI WORK STD	MP85022	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 2.00000ml of MP85021 + 98.00000ml of MP85016 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
912	ICP AES ICV SOLN	MP85023	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 0.02500ml of M5020 + 0.02500ml of M5429 + 0.02500ml of M5817 + 0.10000ml of M5466 + 0.25000ml of M5472 + 0.25000ml of M6058 + 10.00000ml of M6150 + 89.77500ml of MP85016 = 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	MP85024	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 25.00000ml of M6152 + 225.00000ml of MP85016 = 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	MP85025	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 0.01000ml of M5020 + 0.01000ml of M5817 + 0.10000ml of M5472 + 0.10000ml of M5970 + 0.10000ml of M6076 + 10.00000ml of M6152 + 10.00000ml of M6155 + 79.50000ml of MP85016 = 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	MP85026	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 50.00000ml of MP85016 + 50.00000ml of MP85017 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
919	ICP AES INTERNAL STD	MP85030	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 1.00000ml of M5959 + 10.00000ml of M5985 + 1969.00000ml of W3112 + 20.00000ml of M5789 = 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
513	RINSE SOLN	MP85031	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 200.00000ml of M5789 + 9800.00000ml of W3112 = Final Quantity: 10000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP85121	04/03/2025	04/04/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/07/2025

FROM 1.00000ml of M6158 + 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	MP85122	04/03/2025	04/04/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/07/2025

FROM 2.50000ml of M6158 + 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	MP85123	04/03/2025	04/04/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/07/2025

FROM 2.50000ml of M6158 + 247.45000ml of W3112 + 0.05000ml of MP85121 = 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	MP85124	04/03/2025	04/04/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/07/2025

FROM 2.50000ml of M6158 + 247.30000ml of W3112 + 0.20000ml of MP85121 = 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	MP85125	04/03/2025	04/04/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/07/2025

FROM 2.50000ml of M6158 + 245.00000ml of W3112 + 2.50000ml of MP85121 = 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	MP85126	04/03/2025	04/04/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/07/2025

FROM 2.50000ml of M6158 + 242.50000ml of W3112 + 5.00000ml of MP85121 = 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	MP85127	04/03/2025	04/04/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/07/2025

FROM 2.50000ml of M6158 + 240.00000ml of W3112 + 7.50000ml of MP85121 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1346	Hg ICV SOLUTION	MP85129	04/03/2025	04/04/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/07/2025

FROM 2.50000ml of M5532 + 2.50000ml of M6158 + 245.00000ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1351	ICB (Hg 0.00 PPB SOLUTION)	MP85130	04/03/2025	04/04/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/07/2025

FROM 2.50000ml of M6158 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1358	CCV (Hg 5.0 PPB SOLUTION)	MP85131	04/03/2025	04/04/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/07/2025

FROM 485.00000ml of W3112 + 5.00000ml of M6158 + 10.00000ml of MP85121 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1352	CCB (Hg 0.00 PPB SOLUTION)	MP85132	04/03/2025	04/04/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/07/2025

FROM 495.00000ml of W3112 + 5.00000ml of M6158 = Final Quantity: 500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1349	CRA/CRI (Hg 0.2 PPB SOLUTION)	MP85133	04/03/2025	04/04/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/07/2025

FROM 2.50000ml of M6158 + 247.30000ml of W3112 + 0.20000ml of MP85121 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1350	CHK STD (Hg 7.0 PPB SOLUTION)	MP85134	04/03/2025	04/04/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/07/2025

FROM 2.50000ml of M6158 + 240.50000ml of W3112 + 7.00000ml of MP85121 = 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
68	STANNOUS CHLORIDE SOLUTION	MP85136	04/03/2025	04/04/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 04/07/2025

FROM 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6151 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1345	Hg 10.0 PPB STD	MP85138	04/03/2025	04/04/2025	Mohan Bera	None	None	Sarabjit Jaswal 04/07/2025

FROM 2.50000ml of M6158 + 237.50000ml of W3112 + 10.00000ml of MP85121 = Final Quantity: 250.000 ml

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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.	57034 / Se, 1000 PPM, 125 ml	070221	09/07/2025	08/06/2021 / jaswal	08/05/2021 / jaswal	M4883

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	031921	05/19/2025	08/25/2021 / bin	08/05/2021 / jaswal	M4891

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 #
Absolute Standards, Inc.	57115 / P, 10000 PPM, 125 ml	032921	05/17/2025	12/13/2021 / bin	12/09/2021 / bin	M5020

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	MSHG-10PPM / MERCURY HCl 125mL 10ug/mL	S2-HG709270	09/22/2026	05/28/2022 / mohan	01/27/2022 / mohan	M5062

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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.	57056 / Ba, 1000 PPM, 125 ml	072122	07/21/2025	11/01/2022 / jaswal	09/18/2022 / jaswal	M5387

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	01/30/2024 / bin	09/19/2022 / bin	M5395

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	061322	06/13/2025	03/06/2023 / bin	03/01/2023 / bin	M5466

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57038 / Sr, 1000 PPM, 125 ml	082922	08/29/2025	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.	58113 / Al, 10000 PPM, 500 ml	011623	01/16/2026	08/15/2023 / jaswal	03/17/2023 / bin	M5496

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.	58111 / Na, 10000 PPM, 500 ml	022123	11/06/2025	11/06/2024 / kareem	03/17/2023 / bin	M5516

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	102622	10/26/2025	11/21/2022 / bin	11/20/2022 / bin	M5521

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	04/30/2025	01/02/2025 / jaswal	03/30/2023 / mohan	M5532

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58024 / Chromium, Cr, 500 ml, 1000 PPM	060523	06/05/2026	08/28/2023 / jaswal	08/25/2023 / jaswal	M5658

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ Lead (Pb) 1000PPM	100923	10/09/2026	05/20/2024 / Jaswal	12/20/2023 / jaswal	M5747

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ Nickel (Ni) 1000PPM	091223	09/12/2026	01/02/2024 / bin	12/20/2023 / jaswal	M5748

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	091823	09/18/2026	01/08/2024 / bin	01/03/2024 / bin	M5768

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)	23G1262003	07/30/2025	02/08/2024 / Al-Terek	06/26/2023 / Al-Terek	M5789

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

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57050 / Sn, 1000 PPM, 125 ml	071123	07/11/2026	02/09/2024 / bin	02/09/2024 / bin	M5799

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57027 / CO, 1000 PPM, 125 ml	091923	09/19/2026	05/31/2024 / bin	02/09/2024 / bin	M5800

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57033 / As, 1000 PPM, 125 ml	111323	11/13/2026	02/09/2024 / bin	02/09/2024 / bin	M5801

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58126 / Fe, 10000 PPM, 500 ml	051523	05/15/2026	02/06/2025 / kareem	01/03/2024 / jaswal	M5811

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57005 / B, 1000 PPM, 125 ml	071123	07/11/2026	03/26/2024 / Sohil	01/03/2024 / jaswal	M5814

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.	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

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

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57003 / Li, 1000 PPM, 125 ml	061224	06/21/2027	07/01/2024 / Jaswal	07/01/2024 / Jaswal	M5970

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGTI1-1 / TITANIUM 125mL 1000ug/mL	T2-TI719972	06/17/2027	08/07/2024 / jaswal	02/22/2024 / Jaswal	M5978

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	08/26/2025	02/26/2025 / Eman	05/14/2024 / Jaswal	M6003

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	09/17/2025	03/17/2025 / Eman	05/14/2024 / Jaswal	M6012

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

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57081 / Tl, 1000 PPM, 125 ml	0624724	06/27/2027	08/05/2024 / kareem	08/05/2024 / Jaswal	M6023

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57048 / Cd, 1000 PPM, 125 ml	070124	07/01/2027	08/05/2024 / kareem	08/05/2024 / Jaswal	M6028

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57047 / Ag, 1000 PPM, 125 ml	122823	12/28/2026	08/05/2024 / kareem	08/05/2024 / Jaswal	M6030

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	08/16/2024 / mohan	08/16/2024 / mohan	M6041

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CHEM-QC-4 / CHEM-QC-4, Second Source, 1000 ug/ml, B, Mo, Si, Sn, Ti	V2-MEB746173	01/29/2026	01/29/2025 / JANVI	08/22/2024 / Jaswal	M6058

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	Z9651Q / CHEM-CLP-4/.25L	V2-MEB746762	01/01/2026	01/01/2025 / kareem	09/19/2024 / kareem	M6076

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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.	58025 / Mn, 1000 PPM, 500 ml	101124	10/11/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6128

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGSI1-1 / SILICON 125mL 1000ug/mL	V2-SI744713	07/10/2029	01/14/2025 / Jaswal	10/03/2024 / Jaswal	M6137

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-1 / ICV (ICP/ICPMS) STOCK SOLN	ICV1-1014	07/07/2025	02/07/2025 / JANVI	04/20/2021 / JANVI	M6150

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	08/18/2025	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART A / ICSA (ICP) STOCK SOLN	ICSA-1211	08/24/2025	02/24/2025 / kareem	04/20/2021 / kareem	M6152

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART B / ICSAB (ICP) STOCK SOLN	ICSB-0710	06/20/2025	02/10/2025 / kareem	02/09/2024 / kareem	M6155

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57042 / Mo, 1000 PPM, 125 ml	032123	03/21/2026	11/06/2024 / JANVI	06/12/2024 / JANVI	M6156

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	03/25/2029	03/10/2025 / Eman	02/02/2025 / Sagar	M6158

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57051 / Sb, 1000 PPM, 125 ml	071724	03/24/2026	03/24/2025 / kareem	10/18/2024 / kareem	M6160

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
www.absolutestandards.com

Certified Reference Material CRM

M6028

R: 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57048
Lot Number: 070124
Description: Cadmium (Cd)

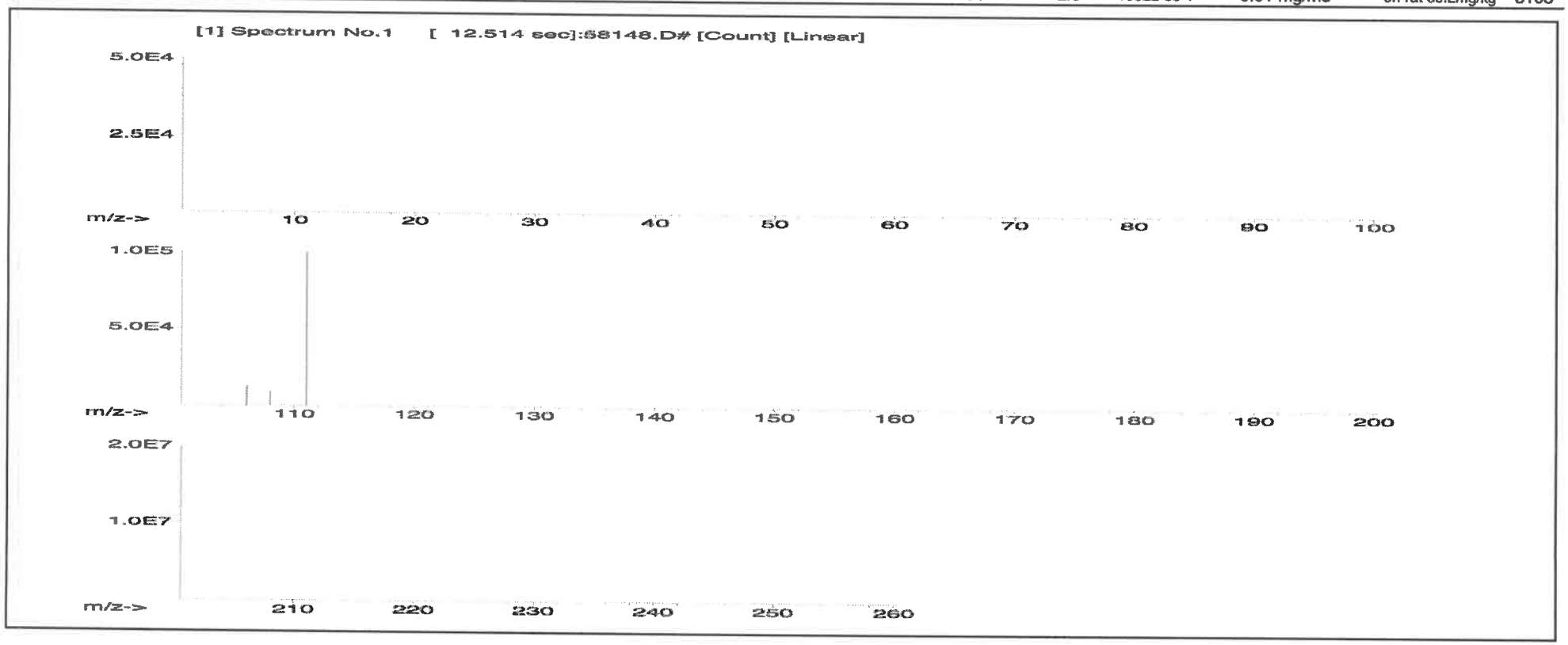
Expiration Date: 070127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
	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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	T	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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:	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 (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 27, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 27, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

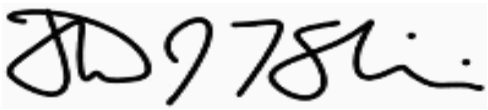
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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300 Technology Drive
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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:	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

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 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

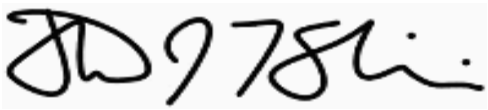
- Sealed TCT Bag Open Date: _____

- 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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R : 01/03/24. M5810, M5811

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**58126**		**Lot #**	
Lot Number:	**051523**	**Solvent:**	21110221	Nitric Acid
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	

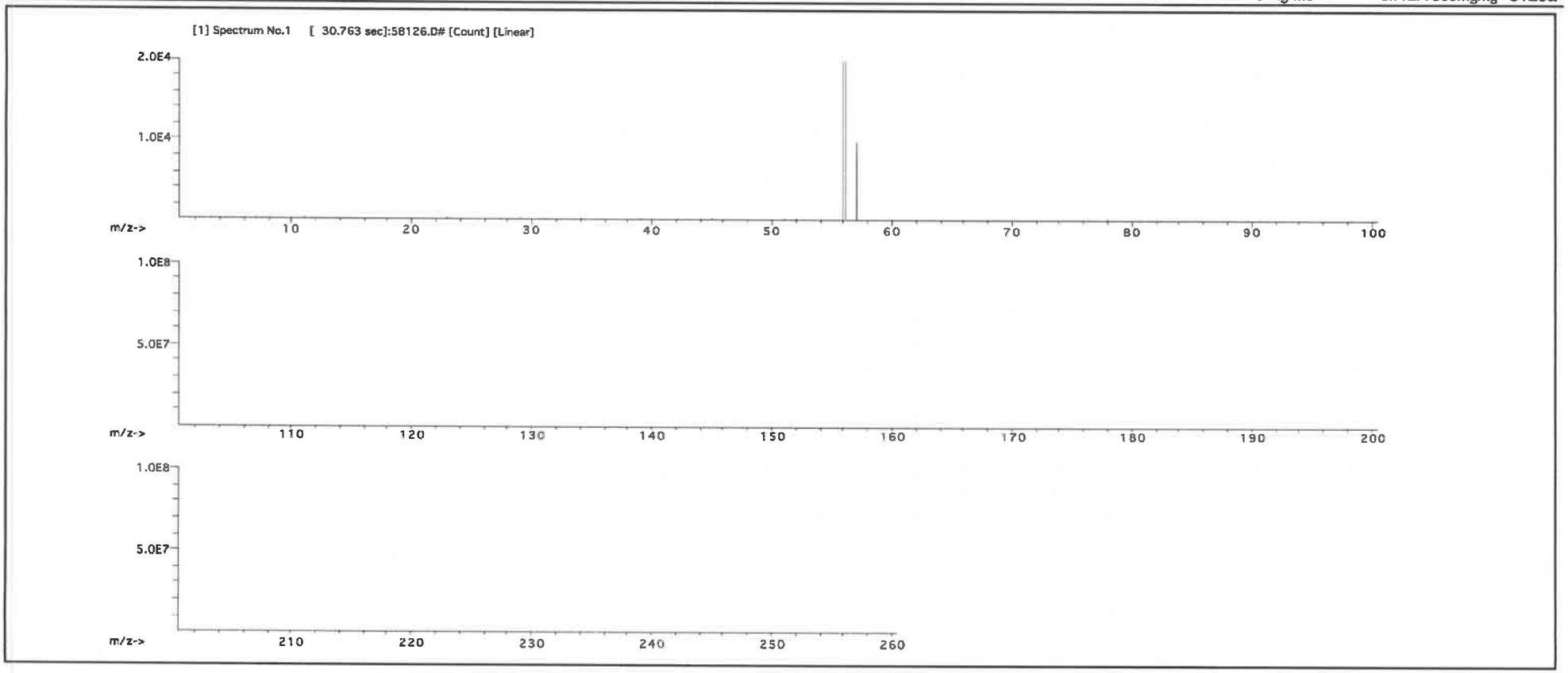
Giovanni Esposito

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.10	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.10	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.05	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.10	Ge	<0.10	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.10
B	<0.02	Cu	<0.10	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES

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Certificate of Analysis

RD:05/14/2024

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F: 540-585-3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-1
Lot Number:	T2-MEB723367
Matrix:	5% (v/v) HNO3

Value / Analyte(s):	1 000 µg/mL ea: Potassium,	
	600 µg/mL ea: Phosphorus,	
	300 µg/mL ea: Sodium,	Iron,
	200 µg/mL ea: Magnesium, Cerium, Thallium,	Aluminum, Selenium,
	100 µg/mL ea: Lead,	Calcium,
	80 µg/mL ea: Arsenic,	
	70 µg/mL ea: Mercury,	
	50 µg/mL ea: Nickel,	
	40 µg/mL ea: Chromium,	
	30 µg/mL ea: Copper, Vanadium,	Boron,
	20 µg/mL ea: Zinc, Barium, Cadmium, Manganese,	Strontium, Beryllium, Cobalt, Lithium,
	7.5 µg/mL ea: Silver	

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	200.0 ± 0.7 µg/mL	Arsenic, As	80.0 ± 0.7 µg/mL
Barium, Ba	20.00 ± 0.09 µg/mL	Beryllium, Be	20.00 ± 0.13 µg/mL
Boron, B	30.00 ± 0.18 µg/mL	Cadmium, Cd	20.00 ± 0.09 µg/mL
Calcium, Ca	100.0 ± 0.4 µg/mL	Cerium, Ce	200.0 ± 0.8 µg/mL
Chromium, Cr	40.00 ± 0.30 µg/mL	Cobalt, Co	20.00 ± 0.10 µg/mL
Copper, Cu	30.00 ± 0.13 µg/mL	Iron, Fe	300.0 ± 1.3 µg/mL
Lead, Pb	100.0 ± 0.4 µg/mL	Lithium, Li	20.00 ± 0.08 µg/mL
Magnesium, Mg	200.0 ± 0.8 µg/mL	Manganese, Mn	20.00 ± 0.08 µg/mL
Mercury, Hg	70.0 ± 0.3 µg/mL	Nickel, Ni	50.00 ± 0.22 µg/mL
Phosphorus, P	600.0 ± 2.7 µg/mL	Potassium, K	1 000 ± 4 µg/mL
Selenium, Se	200.0 ± 1.3 µg/mL	Silver, Ag	7.50 ± 0.03 µg/mL
Sodium, Na	300.0 ± 1.4 µg/mL	Strontium, Sr	20.01 ± 0.08 µg/mL
Thallium, Tl	200.0 ± 1.4 µg/mL	Vanadium, V	30.00 ± 0.13 µg/mL
Zinc, Zn	20.00 ± 0.09 µg/mL		

Density: 1.034 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
B	ICP Assay	3107	190605
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Ce	ICP Assay	3110	090504
Ce	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	Traceable to 3152A	S2-NA700842
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Tl	ICP Assay	3158	151215
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 30, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 30, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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RD:05/14/2024

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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
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Absolute Standards, Inc.
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Certified Reference Material CRM

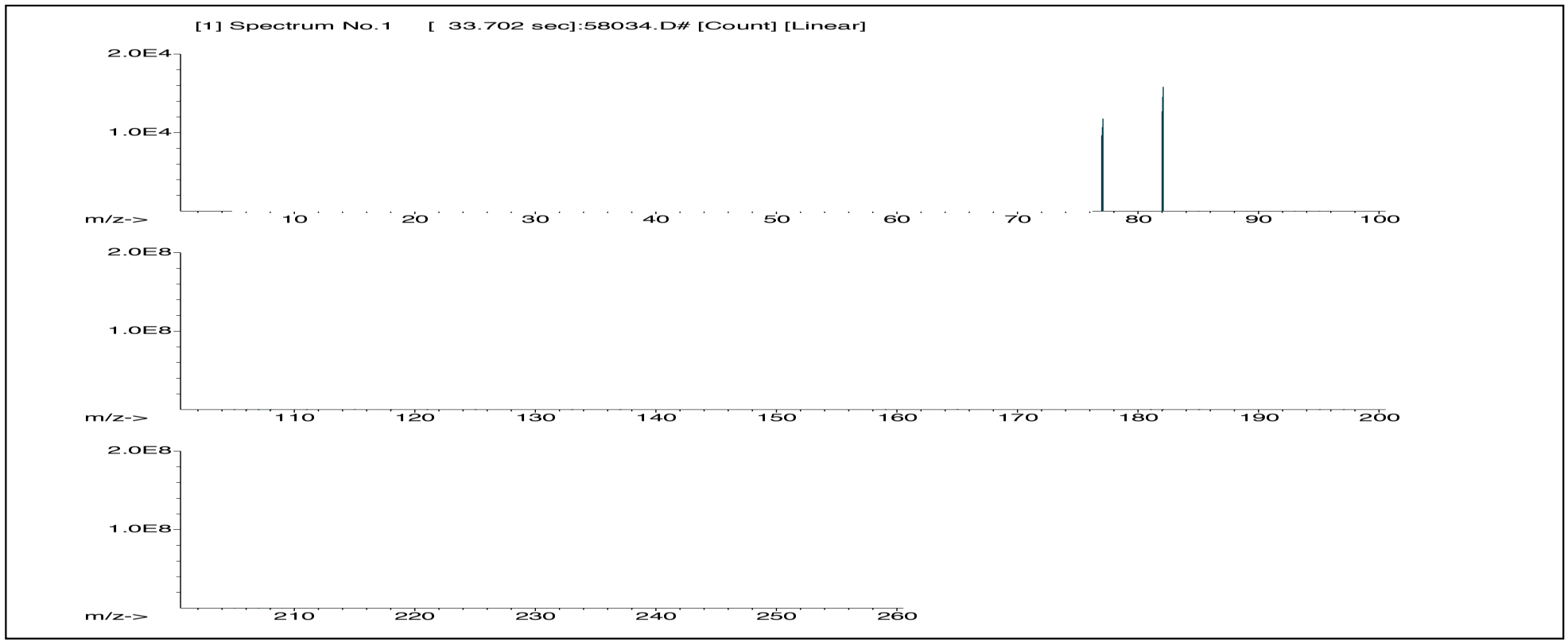
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57034**	20370011	Nitric Acid	
Lot Number:	**070221**			
Description:	**Selenium (Se)**			
		2.0%	40.0	Nitric Acid
Expiration Date:	070224		(mL)	
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:	Giovanni Esposito 070221
Reviewed By:	Pedro L. Rentas 070221

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(IV) oxide (Se)	58134	021621	0.1000	200.0	0.084	1000	10000.2	**1000.0**	**2.2**	7446-08-4	0.2 mg/m3	orl-rat 68 mg/kg	3149



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Certified Reference Material CRM



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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	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 WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58030**	20370011	Nitric Acid	
Lot Number:	**031921**			
Description:	**Zinc (Zn)**			
		2.0%	40.0	Nitric Acid
Expiration Date:	031924		(mL)	
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	

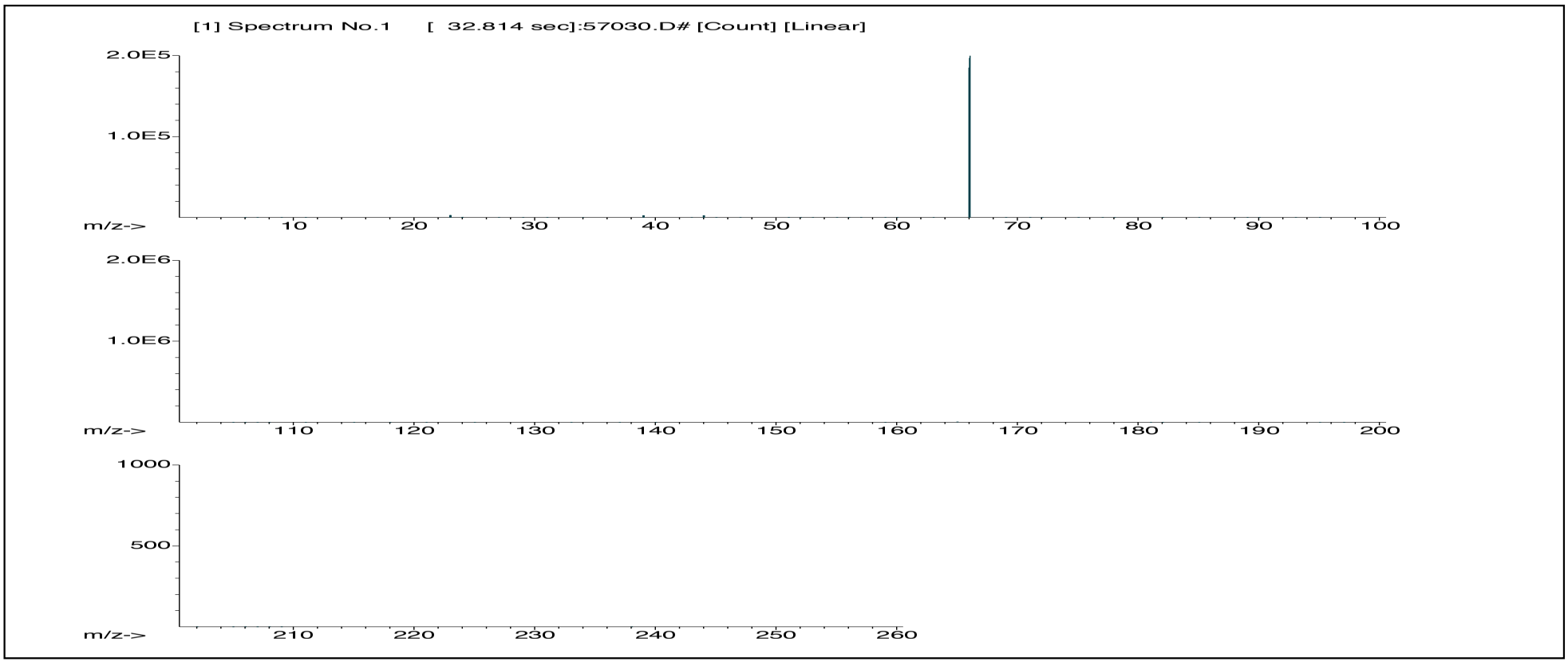
Giovanni Esposito

Formulated By:	Giovanni Esposito	031921

Pedro Rentas

Reviewed By:	Pedro L. Rentas	031921

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. Zinc nitrate hexahydrate (Zn)	58130	082020	0.1000	200.0	0.084	1000	10000.3	**1000.0**	**2.2**	10196-18-6	1 mg/m3	orl-rat 1190mg/kg	3168



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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	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:

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.

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Certified Reference Material CRM

BA NM5020 R: 12/09/21

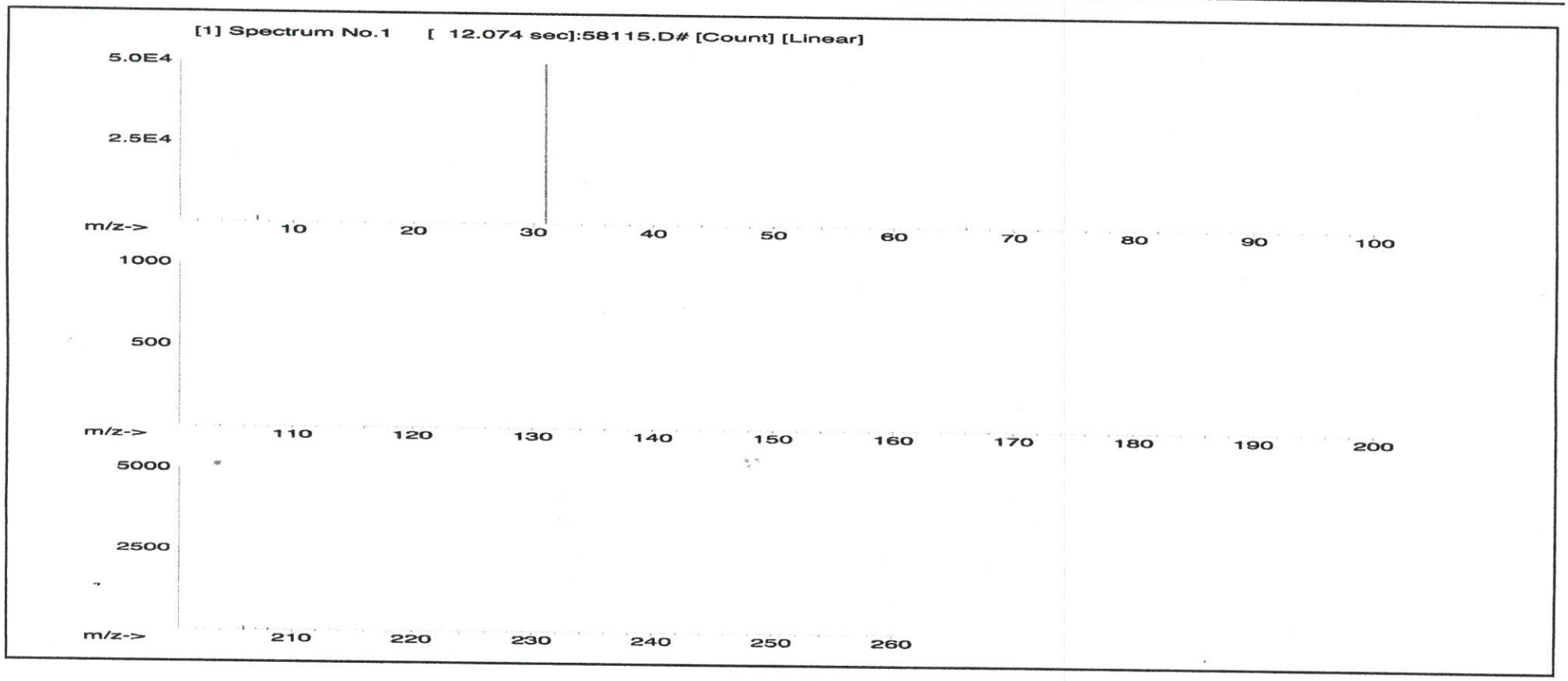
ANAB ISO 17034 Accredited
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CERTIFIED WEIGHT REPORT:

Part Number:	**57115**		**Lot #**	
Lot Number:	**032921**	**Solvent:**	20370011	Nitric Acid
Description:	**Phosphorous (P)**	2%	60.0 (mL)	Nitric Acid
Expiration Date:	032924			
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):	3000.41	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	032921
Reviewed By:	Pedro L. Rentas	032921

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	PV052018A1	10000	99.999	0.10	27.3	109.9063	109.9093	**10000.3**	**20.0**	7722-76-1	5 mg/m3	NA	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.

* The certified value is the concentration calculated from gravimetric and volumetric measurements 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).

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Certificate of Analysis

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Christiansburg, VA 24073 USA
inorganicventures.com

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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.

$$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$$

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

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/4}$$

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



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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)

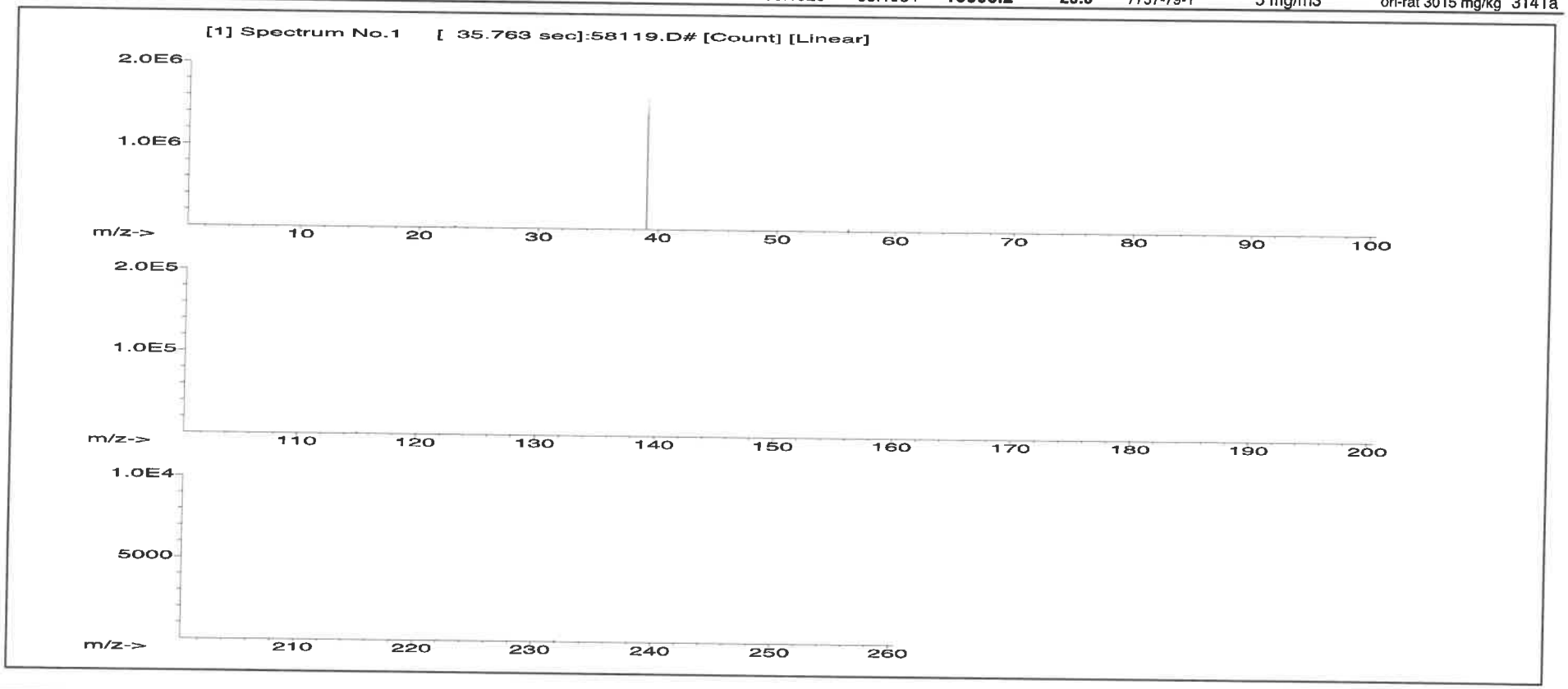
Expiration Date: 071125
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

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.
* 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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M5387 . M5389 . M5390 . M5391 . M5392

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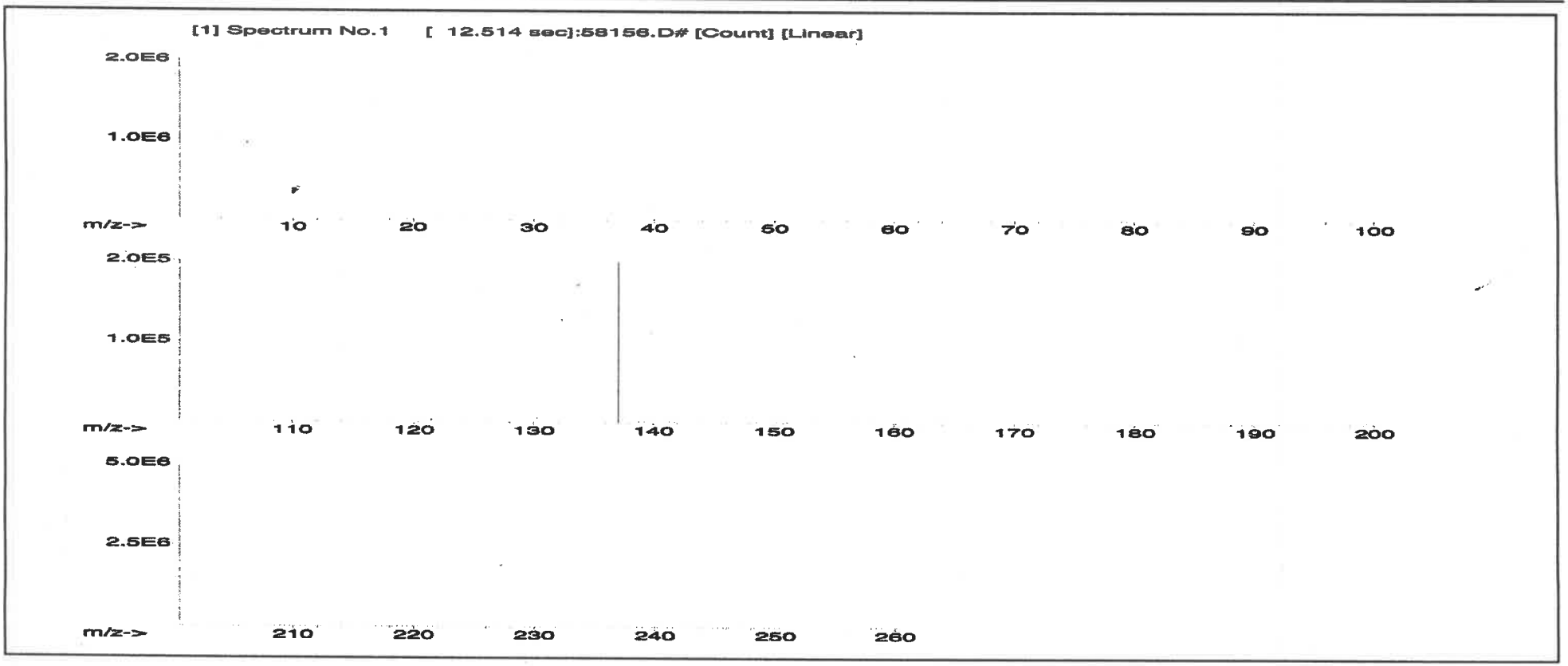
CERTIFIED WEIGHT REPORT:

Part Number:	**57056**		**Lot #**		
Lot Number:	**072122**	**Solvent:**	20510011	Nitric Acid	
Description:	**Barium (Ba)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	072125				
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	072122
Reviewed By:	Pedro L. Rentas	072122

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	3.82426	**1000.0**	**2.0**	10022-31-8	0.5 mg/m3	orl-rat 355 mg/kg	3104a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

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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M5429 R1 01/26/23 BH

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CERTIFIED WEIGHT REPORT:

Part Number: 57103
Lot Number: 070622
Description: Lithium (Li)

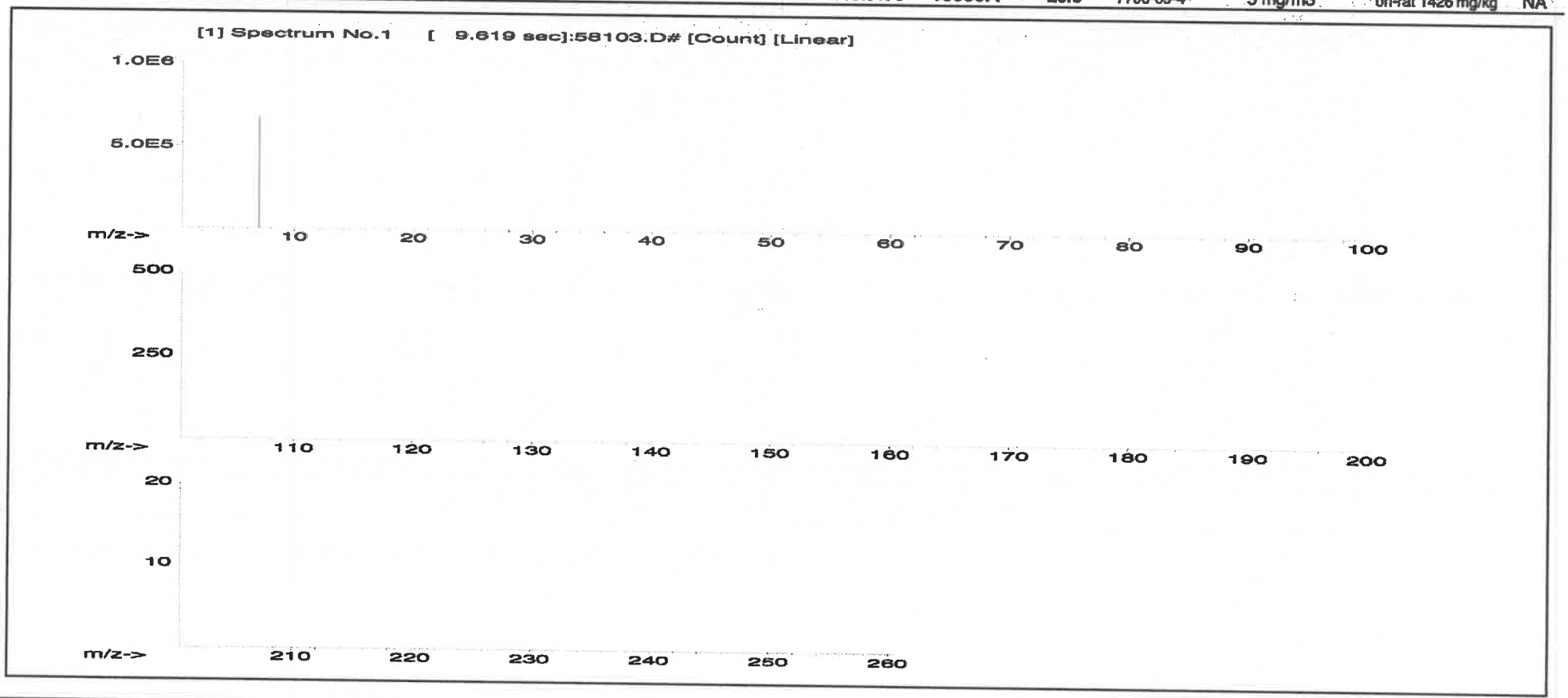
Expiration Date: 070625
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12

	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



QI-603-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	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.

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* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M 5466

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CERTIFIED WEIGHT REPORT:

Part Number: 57058
Lot Number: 061322
Description: Cerium (Ce)

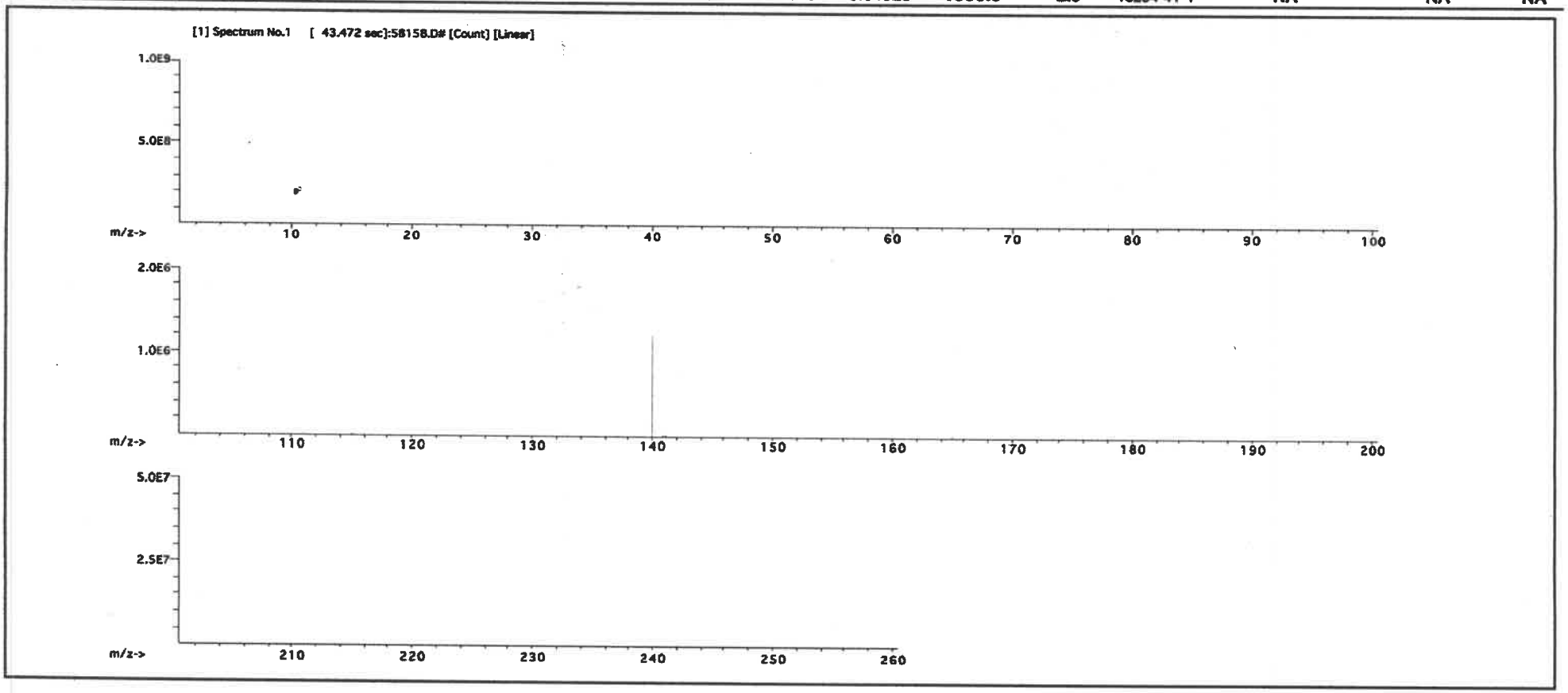
Expiration Date: 061325
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12 ± 0.058 Flask Uncertainty

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	20.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Lawrence Barry	061322
Reviewed By:	Pedro L. Rentas	061322

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cerium nitrate hexahydrate (Ce)	IN146	Z512CEB1	1000	99.999	0.10	32.8	3.04919	3.04923	1000.0	2.0	10294-41-4	NA	NA	NA



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	T	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M5496 R 7/20/23

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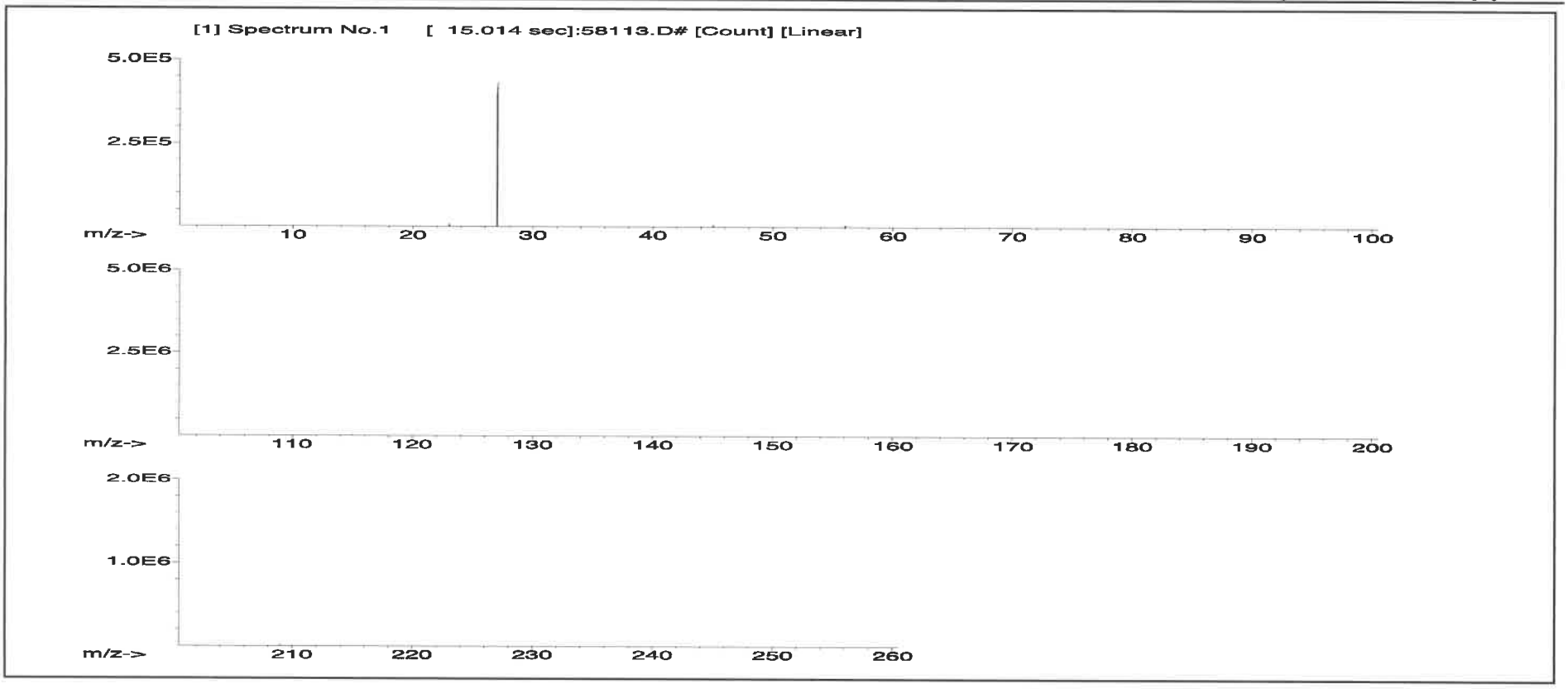
CERTIFIED WEIGHT REPORT:

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)

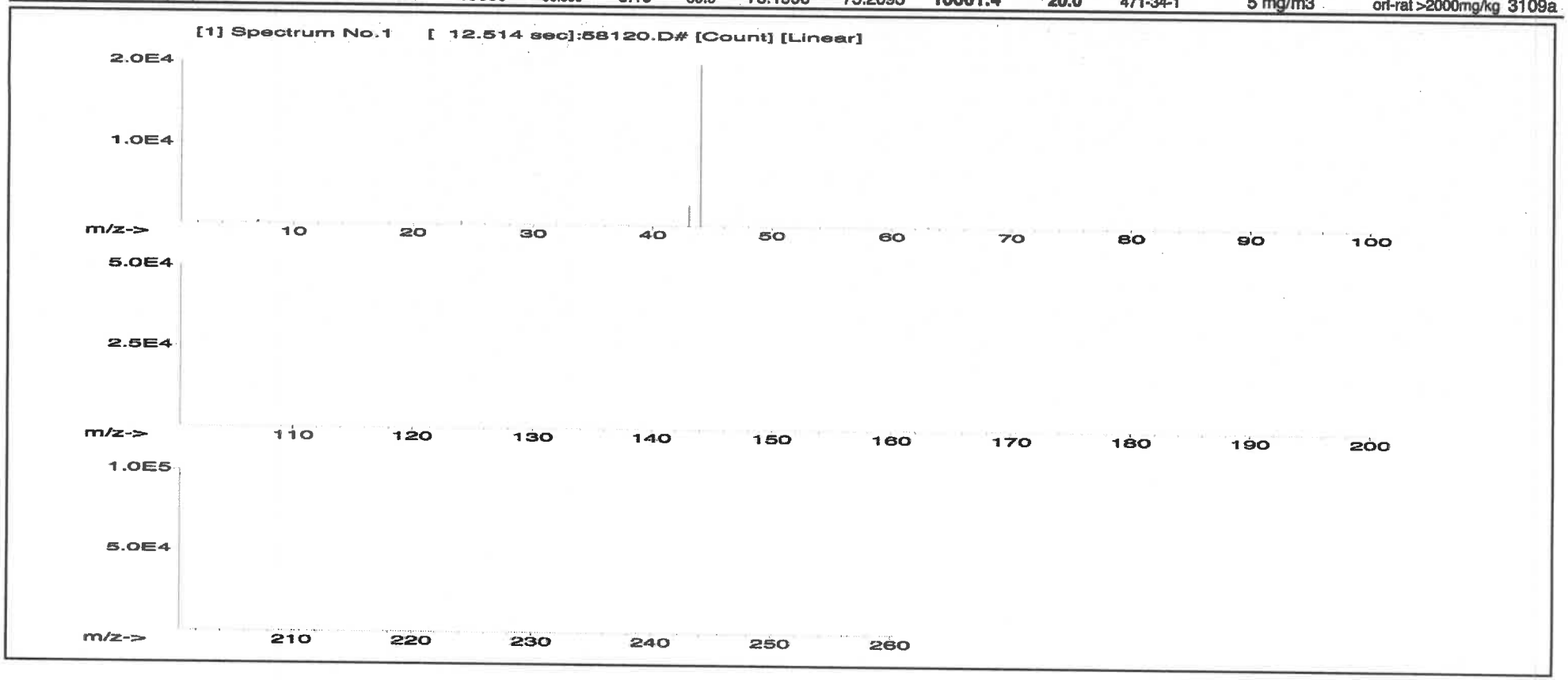
Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41

	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



CAS-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	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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M546 M547 R: 03/17/22 BH

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CERTIFIED WEIGHT REPORT:

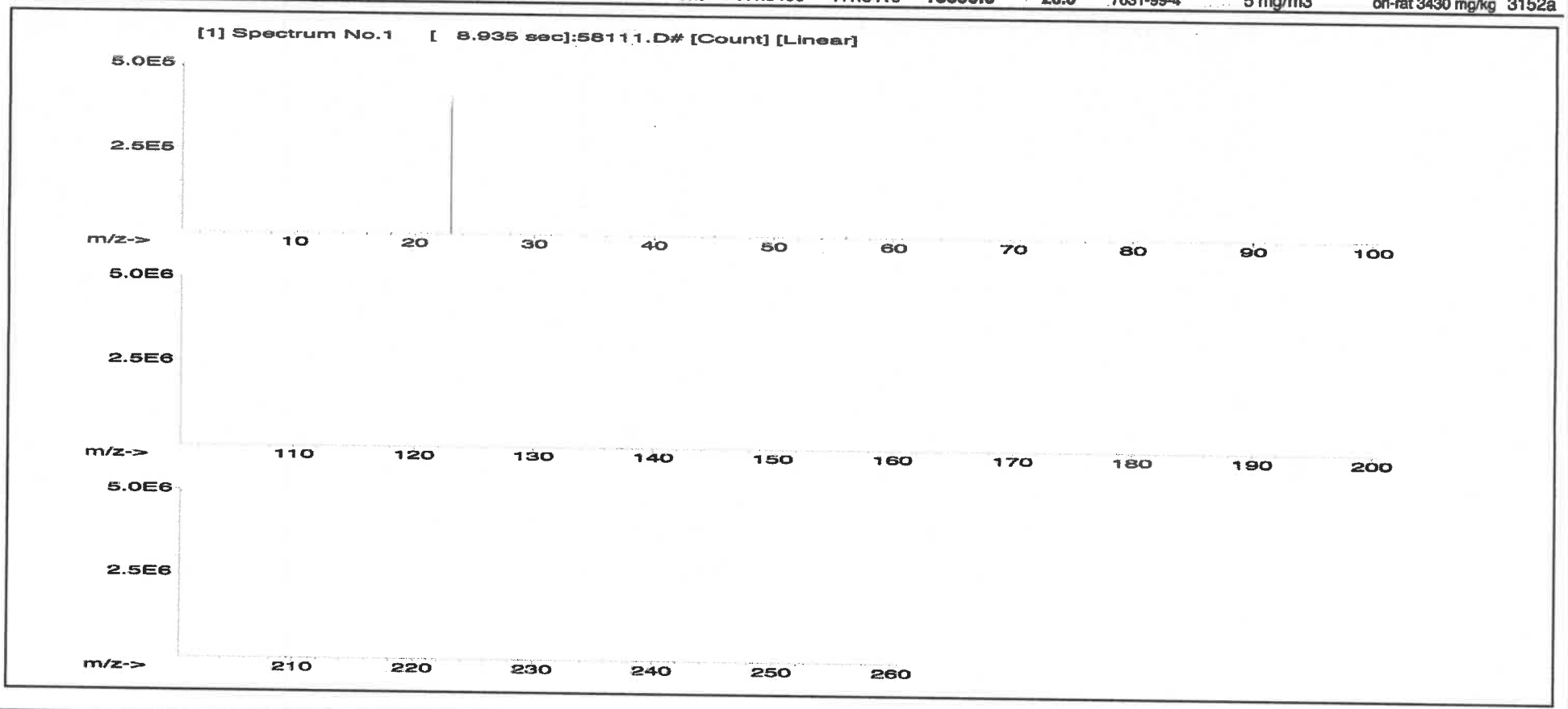
Part Number: 58111
Lot Number: 022123
Description: Sodium (Na)

Expiration Date: 022126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41 5E-05 Balance Uncertainty 0.06 Flask Uncertainty

	Lot #	
Solvent:	21110221	Nitric Acid
2%	60.0 (mL)	Nitric Acid

Formulated By:	Lawrence Barry	022123
Reviewed By:	Pedro L. Rentas	022123

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	111.5406	111.5410	**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	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	T	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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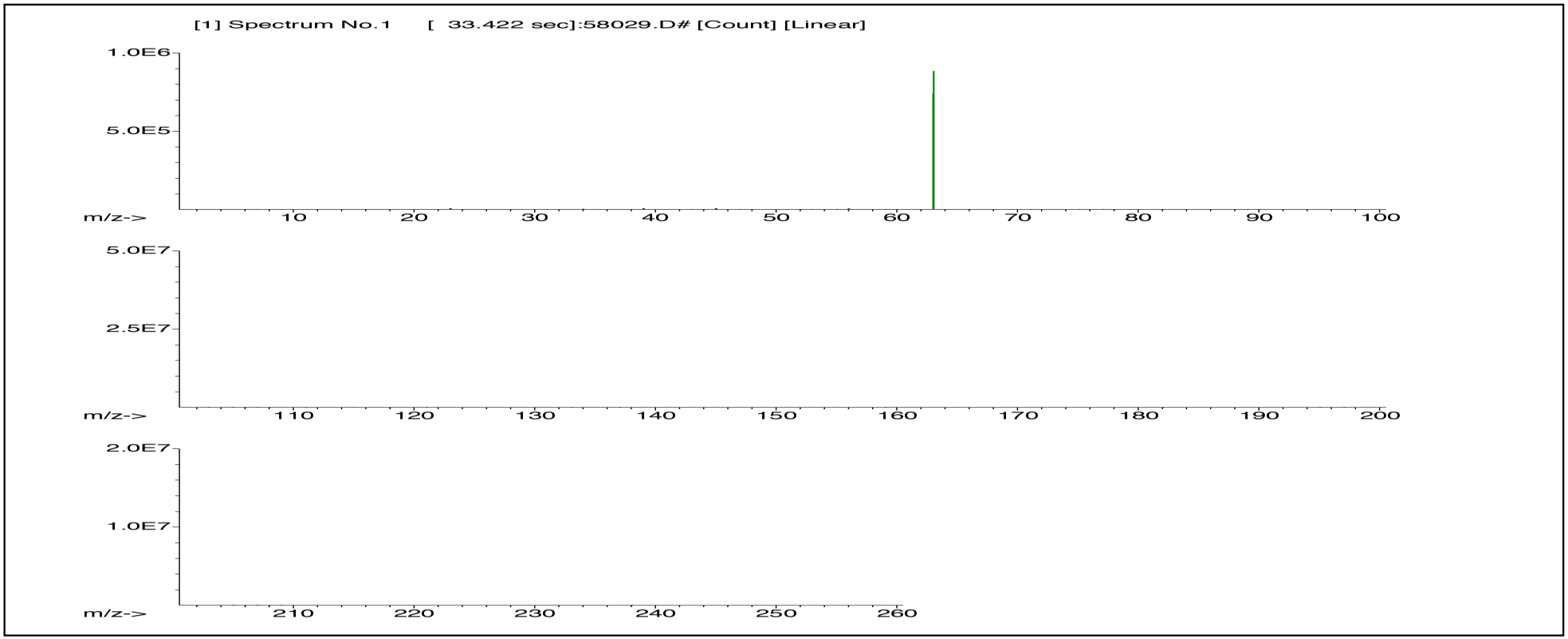
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58029**	20510011	Nitric Acid	
Lot Number:	**102622**			
Description:	**Copper (Cu)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	102625			
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:	Eli Aliaga 102622
Reviewed By:	Pedro L. Rentas 102622

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	021422	0.1000	200.0	0.084	1000	10000.8	**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:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* 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).

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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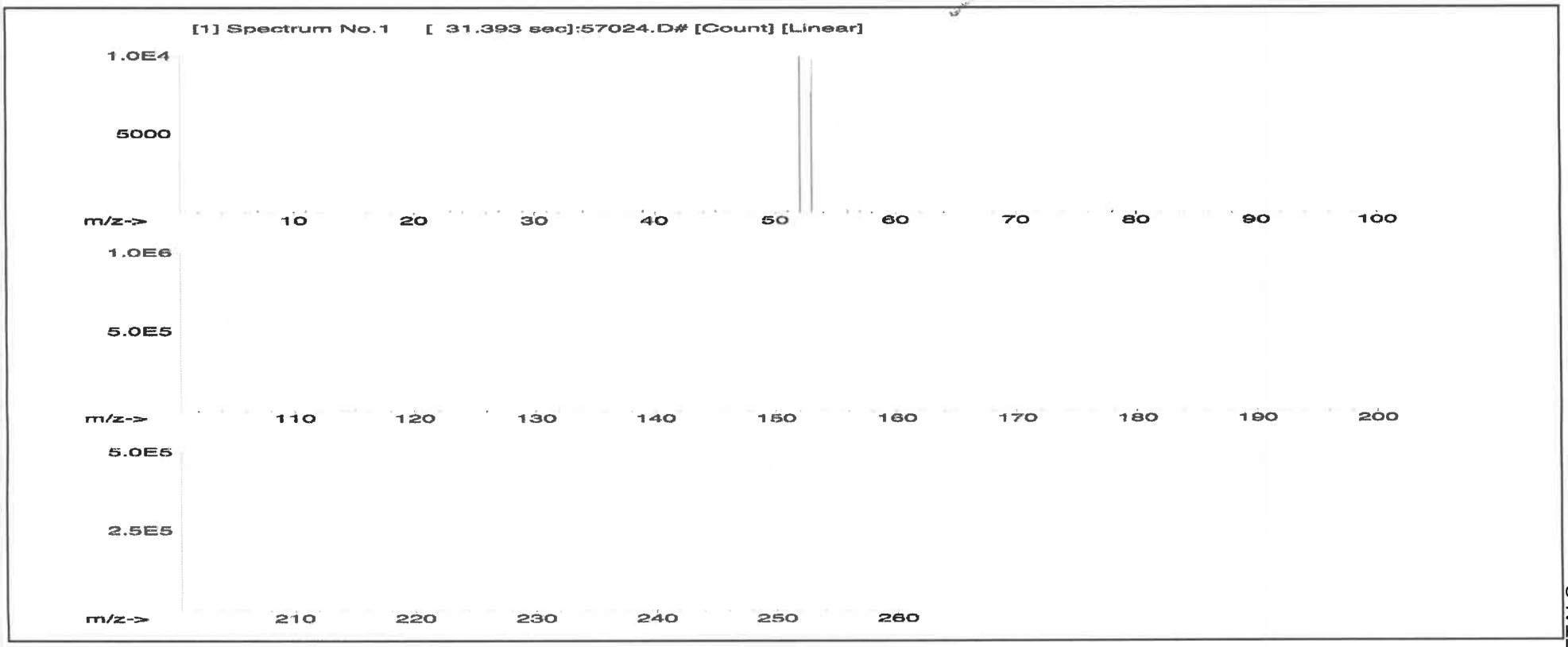
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CERTIFIED WEIGHT REPORT:

		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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* 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 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

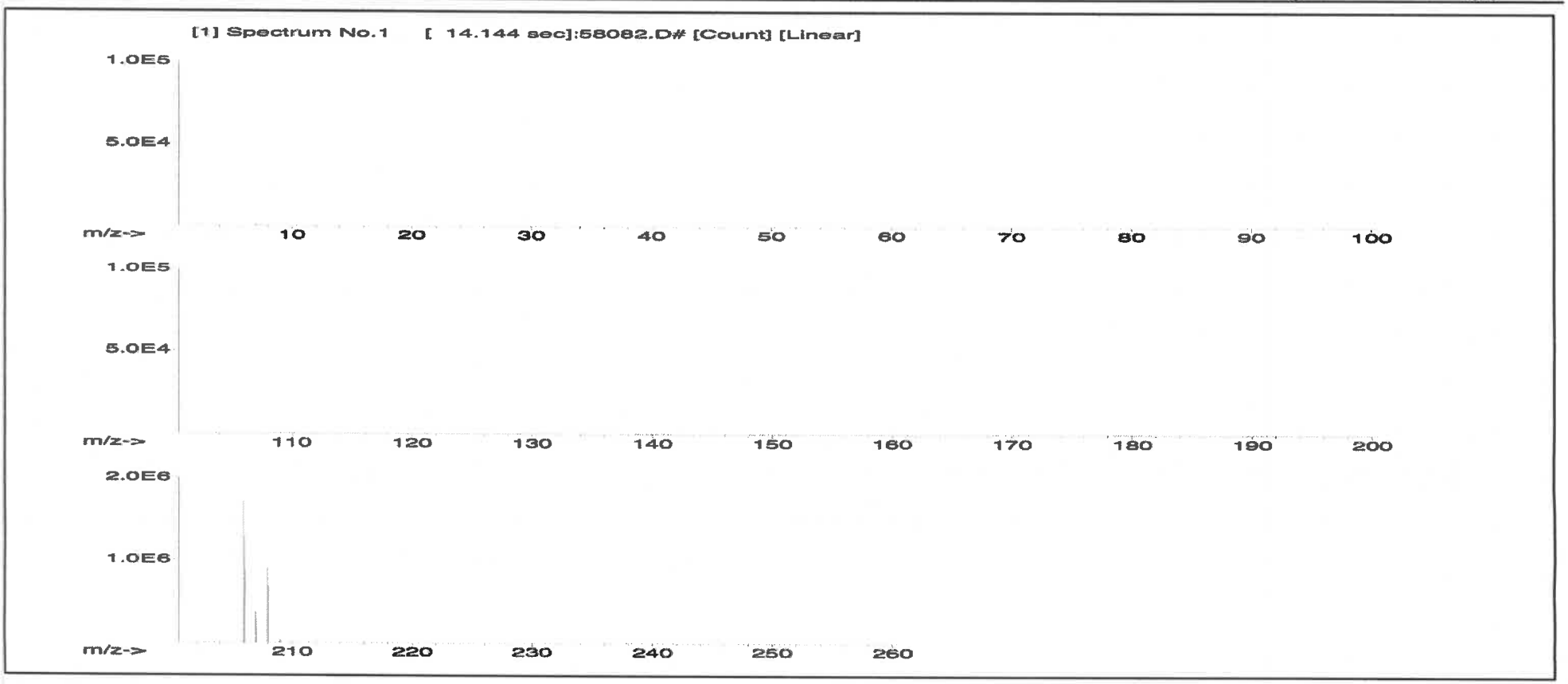
Weight shown below was diluted to (mL): 3000.41 ± 0.06 Flask Uncertainty

	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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R: 12/20/23 M5748

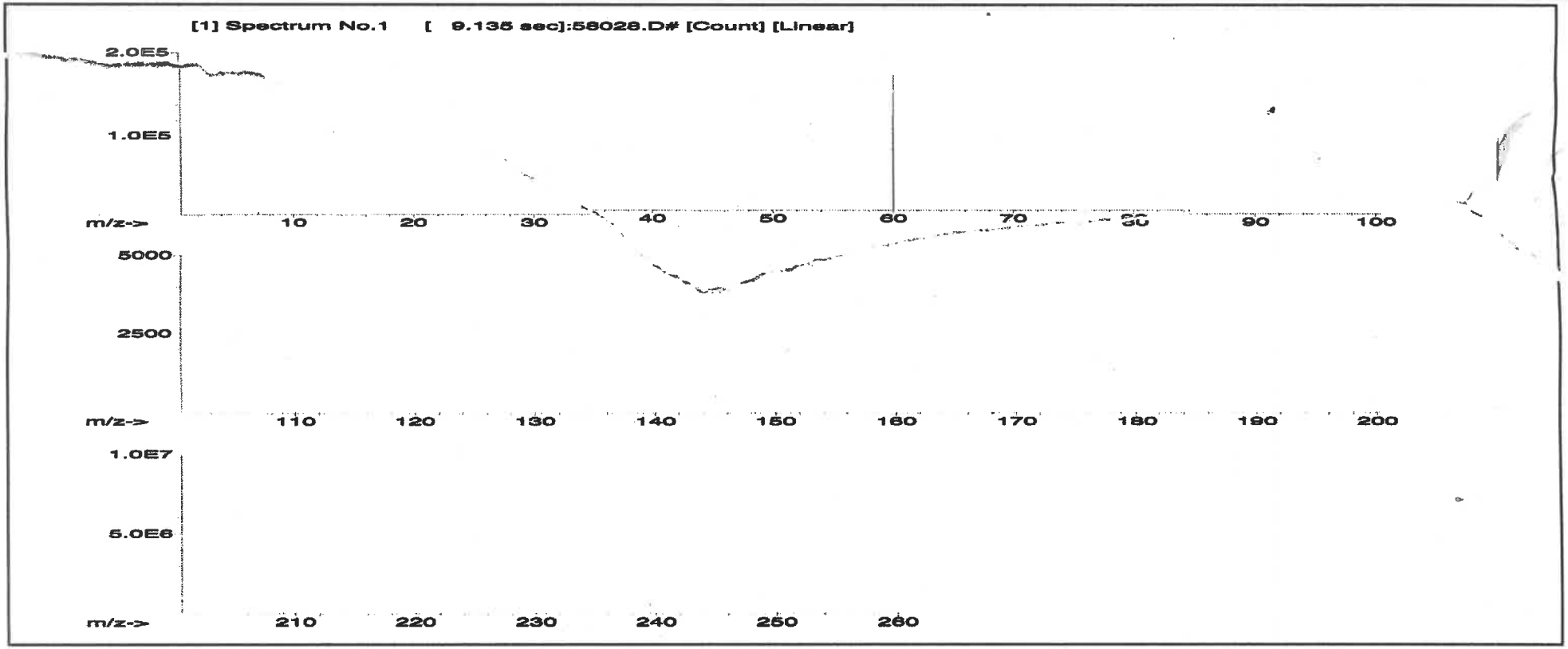
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57028**	24002546	Nitric Acid	
Lot Number:	**091223**			
Description:	**Nickel (Ni)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	091226			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	091223
Reviewed By:	Pedro L. Rentas	091223

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Nickel(II) nitrate hexahydrate (Ni)	58128	062023	0.1000	200.0	0.084	1000	10000.4	**1000.0**	2.2	13478-00-7	1 mg/m3	orl-rat 1620 mg/kg	3136



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	T	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
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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.
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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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M5768 M5769 (BP) R:1/3/24

Certified Reference Material CRM

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CERTIFIED WEIGHT REPORT:

Part Number: 58112
Lot Number: 091823
Description: Magnesium (Mg)

Expiration Date: 091826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

M5768. M5769 (BP) R: 1/3/24

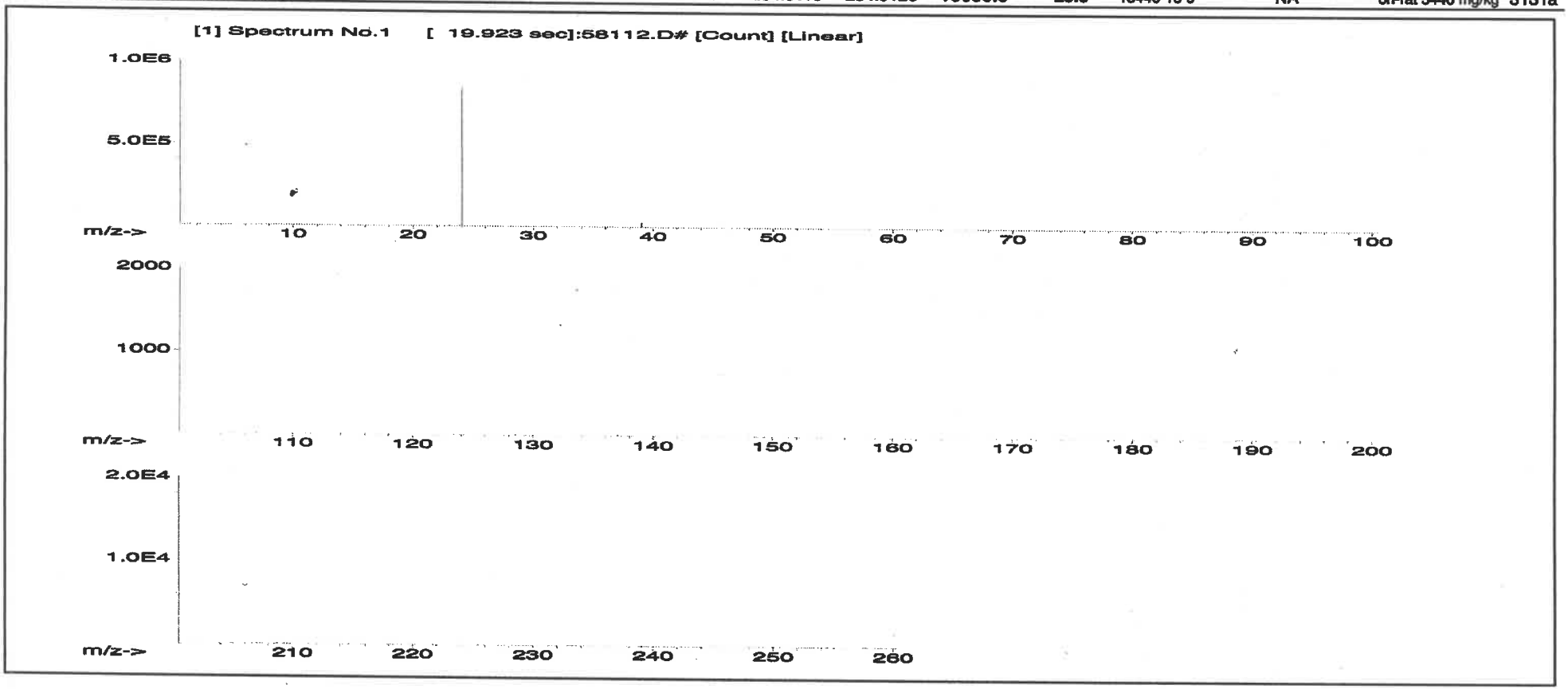
Weight shown below was diluted to (mL): 2000.02 ± 0.058 Flask Uncertainty (5E-05 Balance Uncertainty)

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

Formulated By: Lawrence Barry 091823

Reviewed By: Pedro L. Rentas 091823

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	234.9118	234.9126	**10000.0**	**20.0**	13446-18-9	NA	ort-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.

* 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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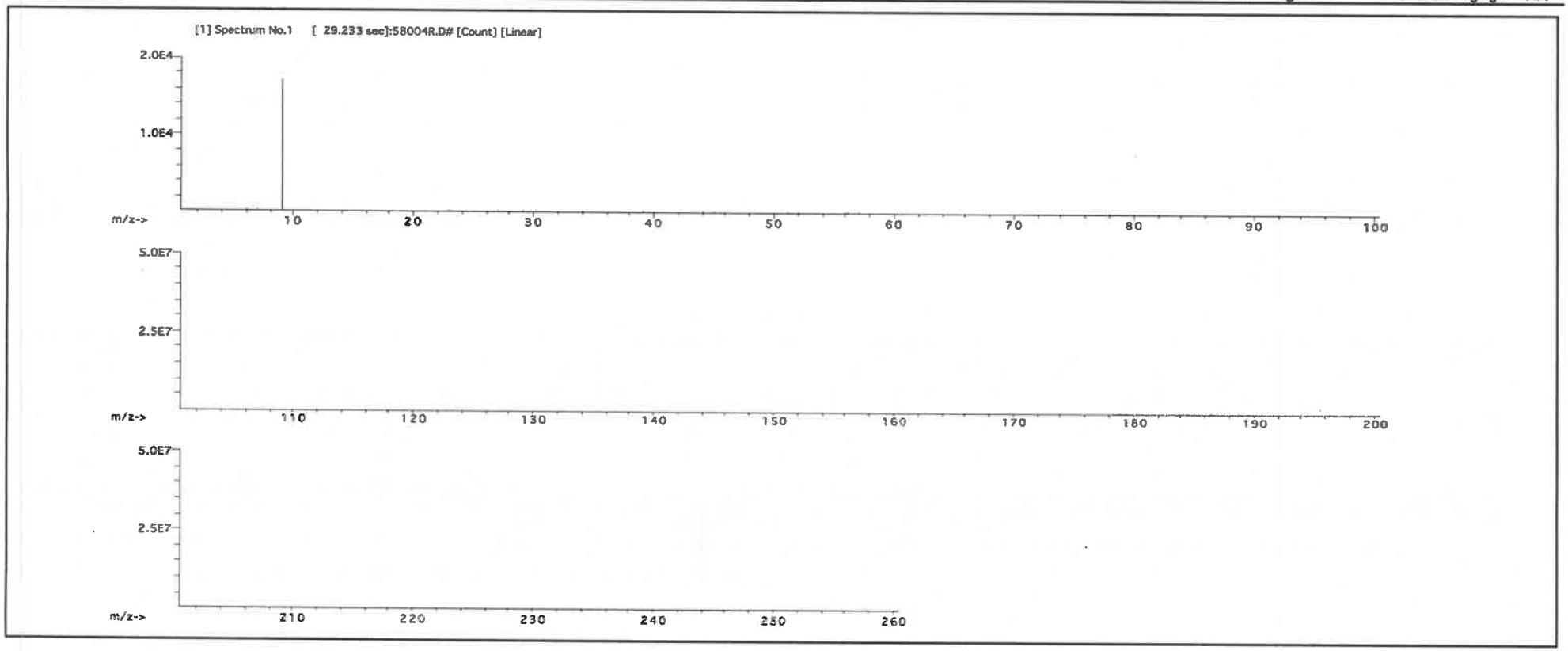
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CERTIFIED WEIGHT REPORT:

		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.
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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

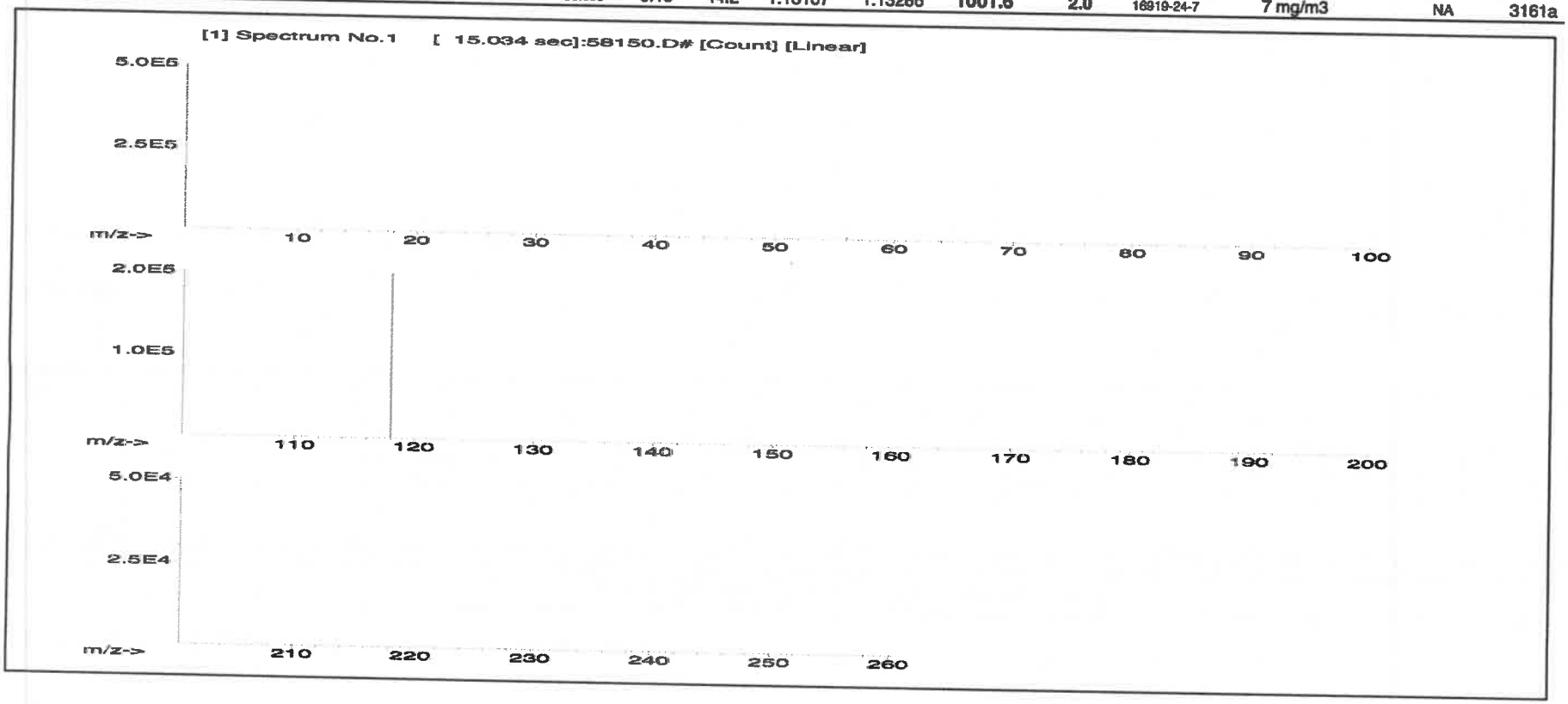
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	Lot #	
Solvents:	21110221	Nitric Acid
	22D0562008	Hydrochloric acid
2%	10.0	Nitric Acid
6%	30.0	Hydrochloric acid
	(mL)	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Benson Chan	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium hexafluorostannate(IV) (Sn)	IN010	SND042023A1	1000	99.999	0.10	44.2	1.13107	1.13286	**1001.6**	**2.0**	16919-24-7	7 mg/m3	NA	3161a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<500	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	T	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* 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).

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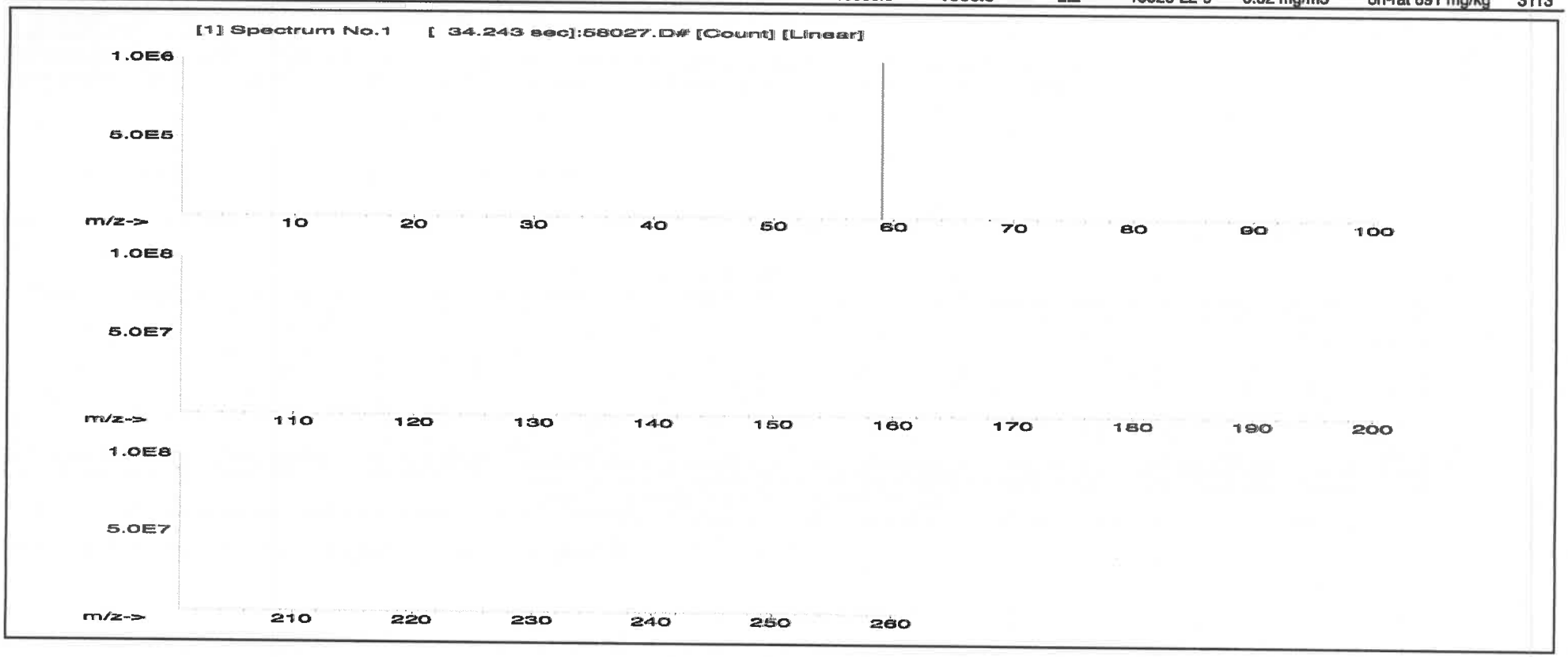
CERTIFIED WEIGHT REPORT:

		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.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
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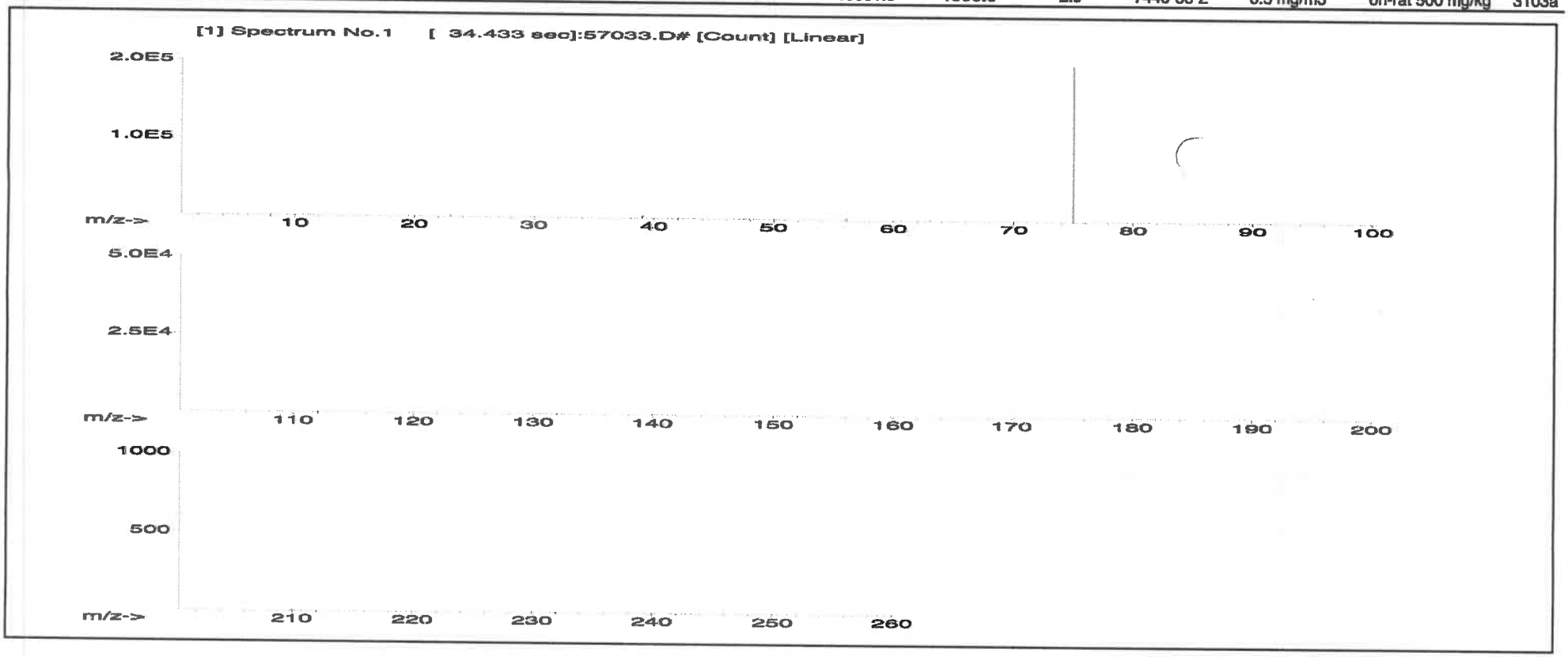
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CERTIFIED **WEIGHT** REPORT:

		Lot #	Solvent:		
Part Number:	**57033**	24002546	Nitric Acid		
Lot Number:	**111323**				
Description:	**Arsenic (As)**	2.0%	80.0 (mL)	Nitric Acid	
Expiration Date:	111326				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty		

Formulated By:	Lawrence Barry	111323
Reviewed By:	Pedro L. Rentas	111323

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Arsenic (As)	58133	020522	0.1000	400.0	0.084	1000	10001.0	**1000.0**	2.0	7440-38-2	0.5 mg/m3	orl-rat 500 mg/kg	3103a



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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

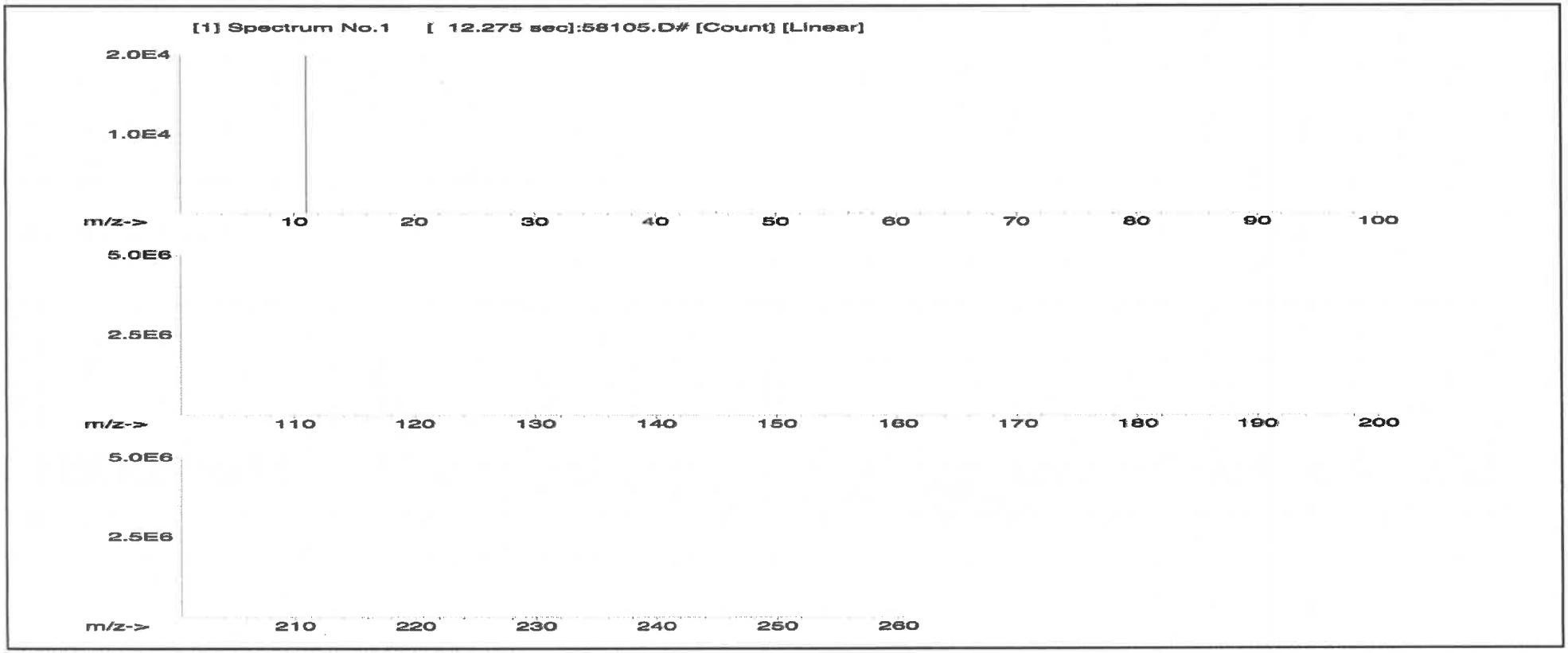
	Lot #			
Solvent:	MKBQ8597V	Ammonium hydroxide		
	2.0%	40.0 (mL)	Ammonium hydroxide	

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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Certified Reference Material CRM

R: 02/09/24 M5816

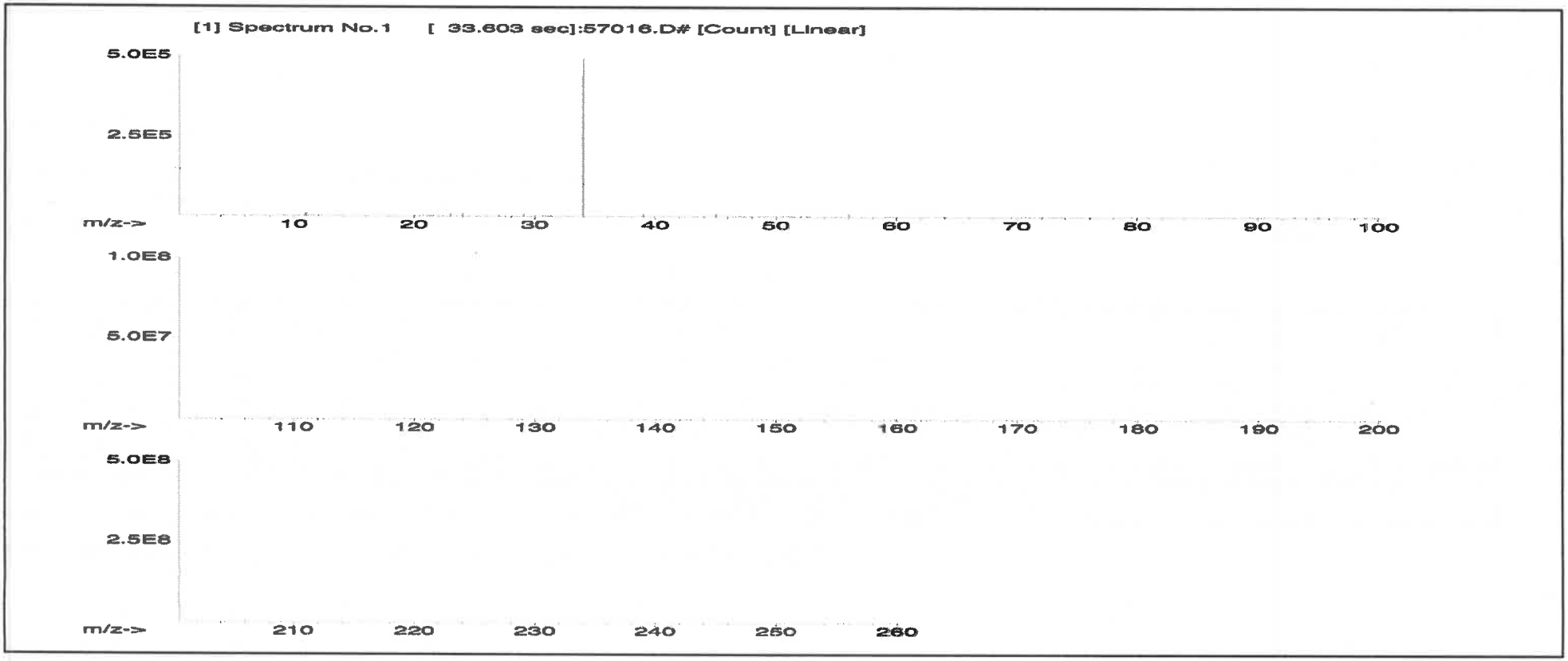
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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CERTIFIED WEIGHT REPORT:

Part Number:	**57016**		**Lot #**	
Lot Number:	**122923**	**Solvent:**	122923	ASTM Type 1 Water
Description:	**Sulfur (S)**			
Expiration Date:	122926			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty	

Formulated By:	Benson Chan	122923
Reviewed By:	Pedro L. Rentas	122923

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium sulfate (S)	IN117	SLBR7225V	1000	99.9	0.10	24.3	16.4979	16.4980	**1000.0**	**2.0**	7783-20-2	NA	orl-rat 4250mg/kg	3181



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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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* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

R: 02/09/24 M5817

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CERTIFIED WEIGHT REPORT:

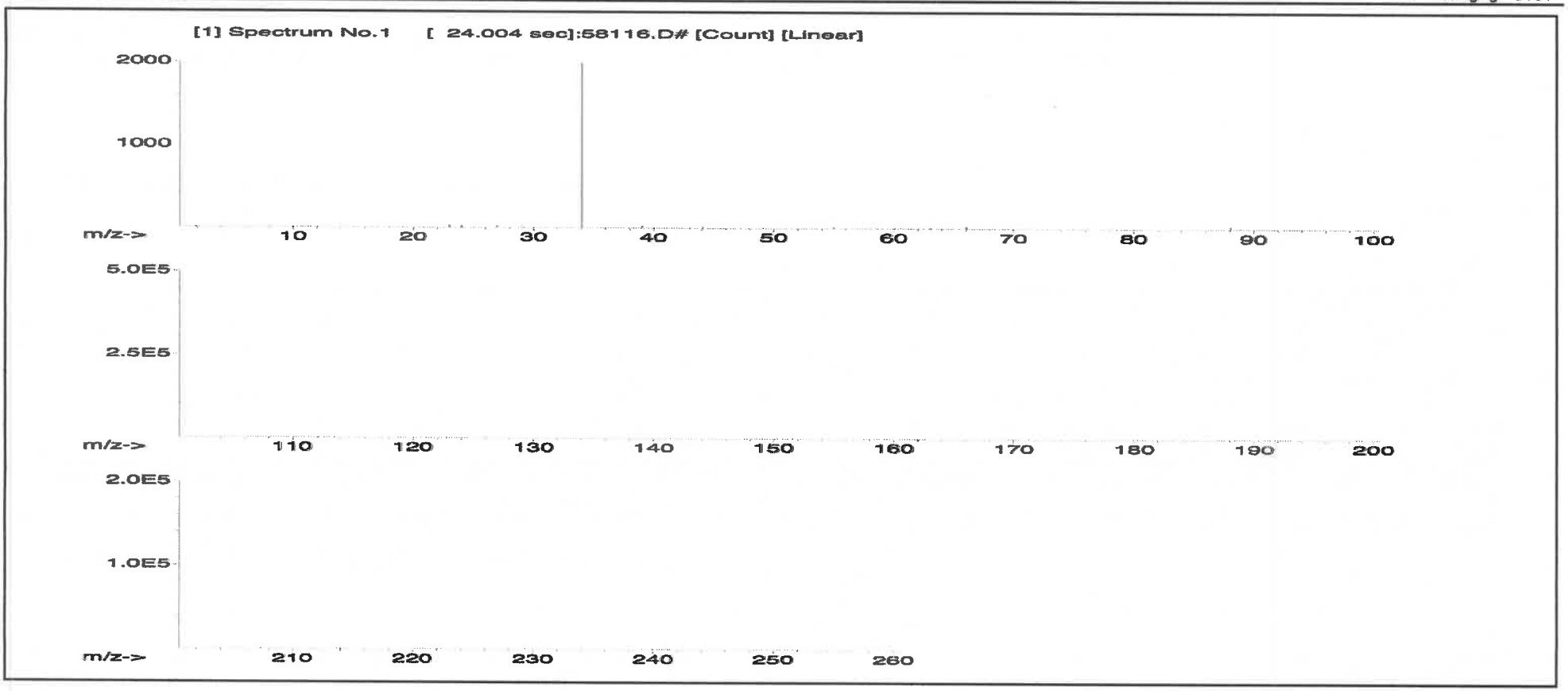
Part Number: 57116
Lot Number: 071123
Description: Sulfur (S)

Lot #
Solvent: 071123 ASTM Type 1 Water

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

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	orl-rat 4250mg/kg	3181



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AR-1539 Certificate Number
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<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:

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Certified by:

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Certified Reference Material CRM

R: 02/09/24 M5820

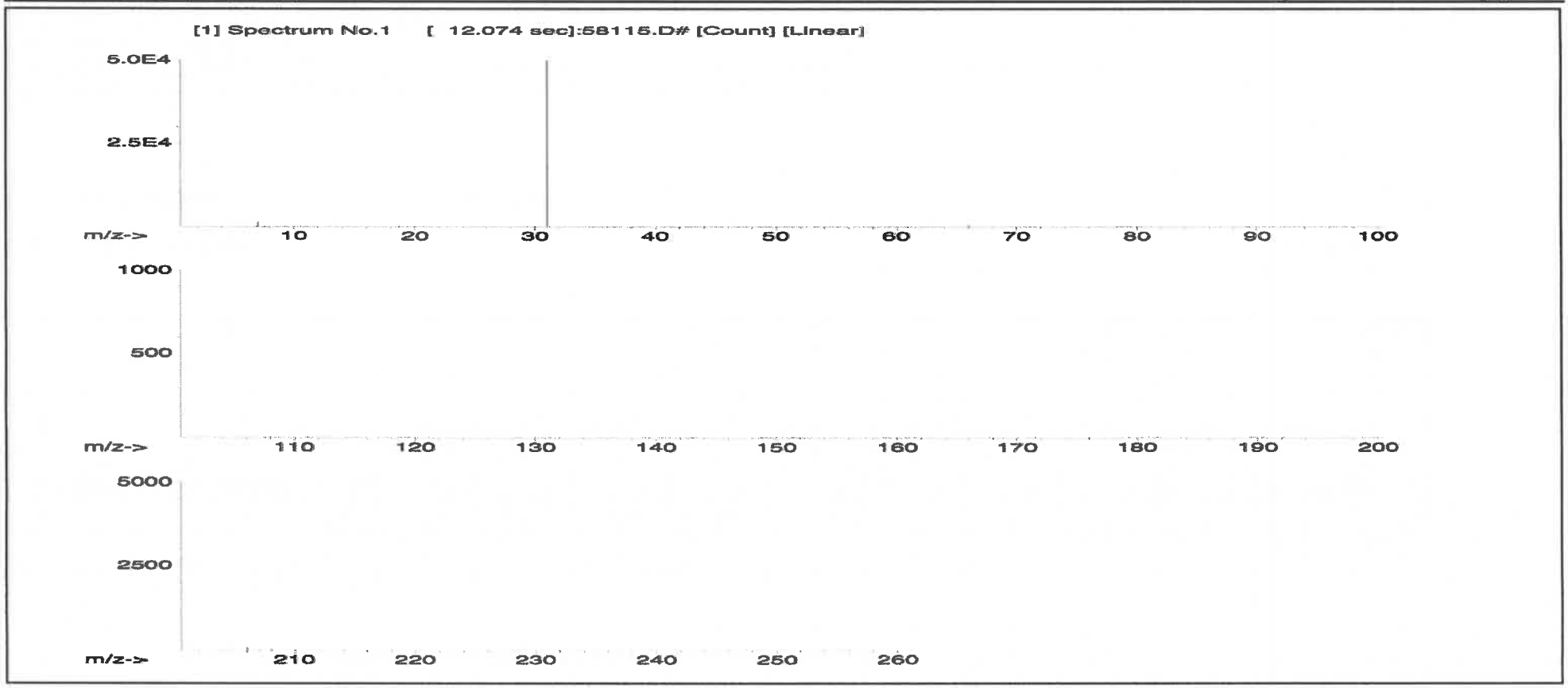
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CERTIFIED WEIGHT REPORT:

Part Number:	**57015**			**Lot #**	
Lot Number:	**091123**	**Solvent:**	24002546	Nitric Acid	
Description:	**Phosphorous (P)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	091126				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	091123
Reviewed By:	Pedro L. Rentas	091123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium dihydrogen phosphate (P)	IN008	PV082019A1	1000	99.999	0.10	27.5	7.2729	7.2730	**1000.0**	**2.0**	7722-76-1	5 mg/m3	orl-rat >2000mg/k	3186



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

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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
Refine your results. Redefine your industry.

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 (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.004600	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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5970, M5971 R: 7/01/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57003
Lot Number: 062124
Description: Lithium (Li)
Expiration Date: 062127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 250.11

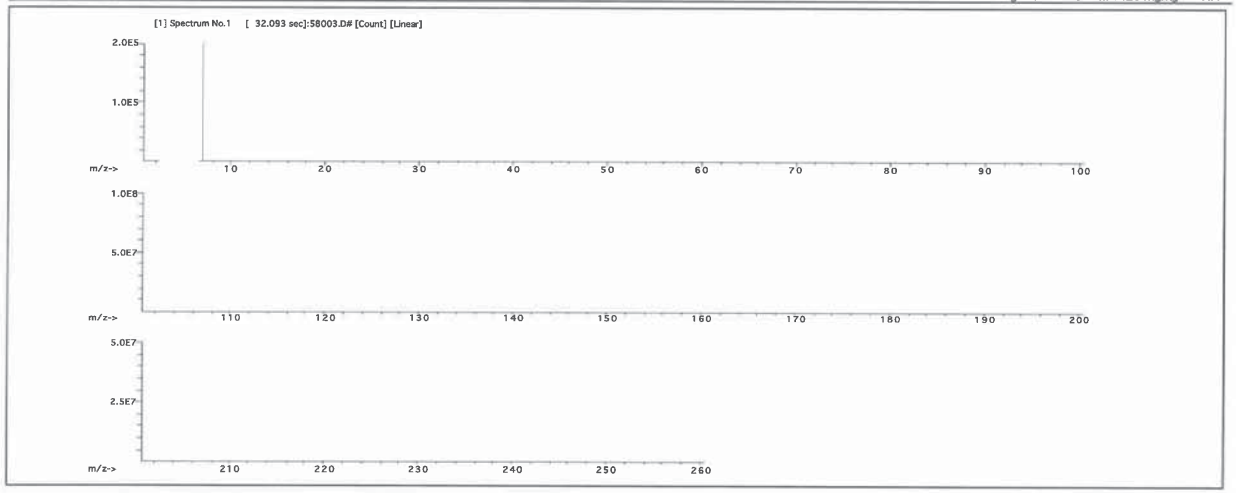
Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	5.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.016 Flask Uncertainty

Giovanni Esposito
Formulated By: Giovanni Esposito 062124

Pedro Rentas
Reviewed By: Pedro L. Rentas 062124

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lithium nitrate (Li)	58103	070622	0.1000	25.0	0.004	1000	10000.4	**1000.0**	**2.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/kg	NA



Absolute Standards, Inc.
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www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	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).

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:

$$X_{CRM/RM} = (X_a)\,(u_{Char\,a})$$

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)

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	Al		0.000872	O	Fe		0.003225	O	Nb	<	0.043560	O	Si		0.004735
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=Z (where X = Zr, Mo, Ru)]
ICP-OES 323.452 nm	0.0054 / 0.00092 µg/mL	1	Ce, Ar, Ni
ICP-OES 334.941 nm	0.0038 / 0.000028 µg/mL	1	Nb, Ta, Cr, U
ICP-OES 336.121 nm	0.0053 / 0.000034 µg/mL	1	W, Mo, Co

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.5798; 540.585.3030; Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 17, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on 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 Kozlikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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MS985
R: 6/14/24

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGIN10
Lot Number:	U2-IN729349
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Indium
Starting Material:	Indium Metal
Starting Material Lot#:	2511
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.044 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10021 ± 56 µg/mL** ICP Assay NIST SRM 3124a Lot Number: 110516
Assay Method #2	**10035 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	**10001 ± 33 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000760	M	Eu	<	0.000760	O	Na		0.012771	M	Se	<	0.023000	M	Zn	<	0.006100
M	Al		0.003385	O	Fe		0.004462	M	Nb	<	0.000760	O	Si		0.024619	M	Zr	<	0.000760
M	As	<	0.004600	M	Ga	<	0.000760	M	Nd	<	0.000760	M	Sm	<	0.000760				
M	Au	<	0.002300	M	Gd	<	0.000760	O	Ni	<	0.005100	M	Sn	<	0.000760				
O	B		0.003692	M	Ge	<	0.001600	M	Os	<	0.000760	O	Sr	<	0.000610				
M	Ba	<	0.001600	M	Hf	<	0.000760	n	P	<		M	Ta	<	0.000760				
O	Be	<	0.000130	M	Hg	<	0.003100	M	Pb		0.001400	M	Tb	<	0.000760				
M	Bi	<	0.000760	M	Ho	<	0.000760	M	Pd	<	0.001600	M	Te	<	0.000760				
O	Ca		0.004616	s	In	<		M	Pr	<	0.000760	M	Th	<	0.000760				
M	Cd	<	0.000760	M	Ir	<	0.000760	M	Pt	<	0.000760	O	Ti	<	0.001100				
M	Ce	<	0.000760	O	K		0.007078	M	Rb	<	0.000760	M	Tl	<	0.000760				
M	Co	<	0.000760	M	La	<	0.000760	M	Re	<	0.000760	M	Tm	<	0.000760				
O	Cr	<	0.001300	O	Li	<	0.000130	M	Rh	<	0.000760	M	U	<	0.000760				
M	Cs	<	0.000760	M	Lu	<	0.000760	M	Ru	<	0.000760	M	V	<	0.001600				
M	Cu	<	0.003800	O	Mg		0.000707	n	S	<		M	W	<	0.001600				
M	Dy	<	0.000760	O	Mn		0.000149	M	Sb	<	0.000760	M	Y	<	0.000760				
M	Er	<	0.000760	M	Mo	<	0.002300	M	Sc	<	0.000760	M	Yb	<	0.000760				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 114.82 +3 6 In(H2O)6+3

Chemical Compatibility -Soluble in HCl, HNO3, and H2SO4. Avoid neutral and basic media. Stable with most metals and inorganic anions. The oxalate, sulfide, carbonate, hydroxide and phosphate are insoluble in water.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

In Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); Oxide (Soluble in mineral acids); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 115 amu	1 ppt	n/a	115Sn, 99Ru16O
ICP-OES 158.583 nm	0.05 / 0.002 µg/mL	1	
ICP-OES 230.606 nm	0.1 / 0.03 µg/mL	1	Ni, Os
ICP-OES 325.609 nm	0.2 / 0.05 µg/mL	1	Mn, Mo, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 21, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- February 21, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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

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Refine your results. Redefine your industry.

Certificate of Analysis

R! 08/22/24 M6058, M6059

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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:	CHEM-CLP-4
Lot Number:	V2-MEB746172
Matrix:	3% (v/v) HNO3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	1 000 ± 5 µg/mL	Molybdenum, Mo	1 000 ± 5 µg/mL
Silicon, Si	1 000 ± 7 µg/mL	Tin, Sn	1 000 ± 5 µg/mL
Titanium, Ti	1 000 ± 6 µg/mL		

Density: 1.032 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	190605
B	Calculated		See Sec. 4.2
Mo	ICP Assay	traceable to 3134	U2-MO739068
Si	ICP Assay	Traceable to 3150	S2-SI702546
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	traceable to 3162a	T2-TI725816

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2 (u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

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

August 12, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- August 12, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Joseph Burns
Custom VS Manager



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

M6074
M6075
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M6077

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EXP.: 9/6/2029

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CHEM-CLP-4
Lot Number:	V2-MEB746762
Matrix:	3% (v/v) HNO3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	1 000 ± 5 µg/mL	Molybdenum, Mo	1 000 ± 5 µg/mL
Silicon, Si	1 000 ± 7 µg/mL	Tin, Sn	1 000 ± 5 µg/mL
Titanium, Ti	1 000 ± 6 µg/mL		

Density: 1.033 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	190605
B	Calculated		See Sec. 4.2
Mo	ICP Assay	traceable to 3134	U2-MO739068
Si	ICP Assay	Traceable to 3150	S2-SI702546
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	traceable to 3162a	T2-TI725816

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 06, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- September 06, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Joseph Burns
Custom VS Manager



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

R -> 11/12/24

M6126

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

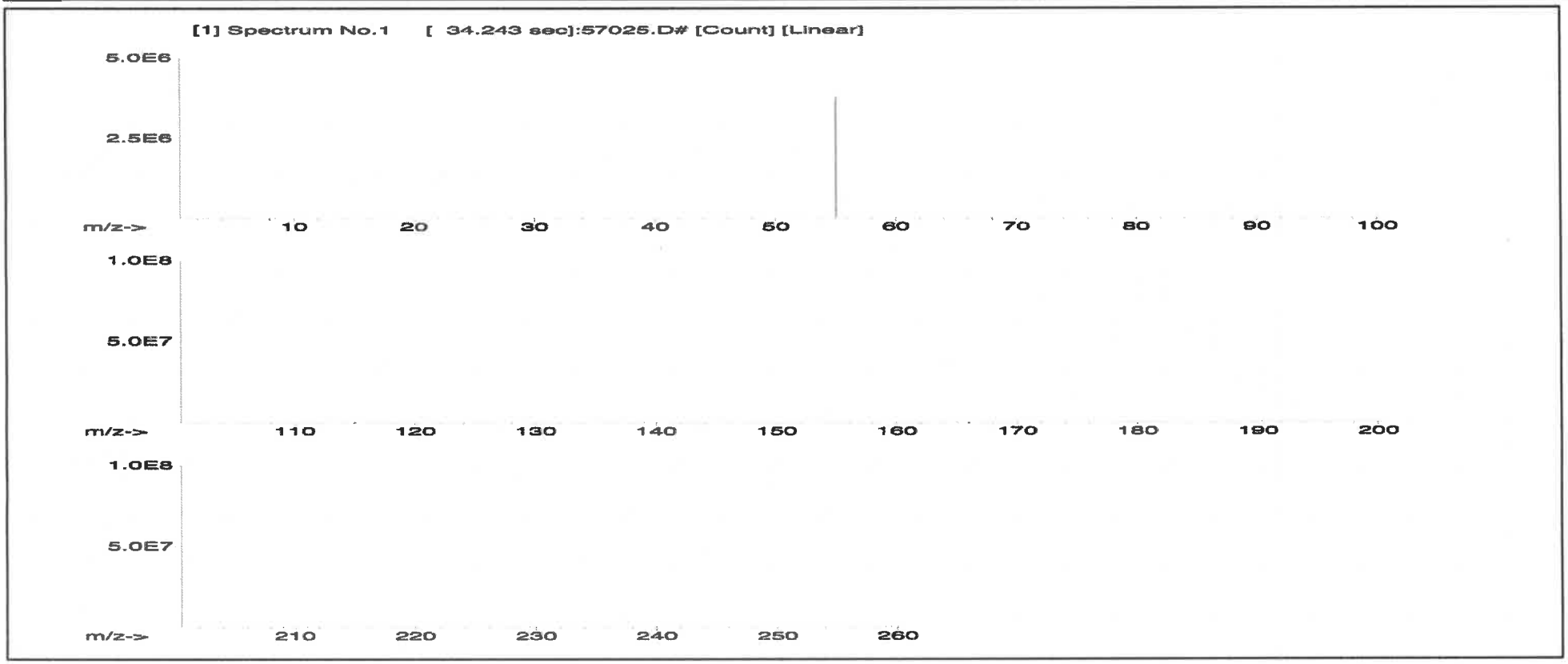
R->1/13/25
M6128

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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www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	T	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

M6137 R→10/3/24

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSI1
Lot Number:	V2-SI744713
Matrix:	tr. HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Silicon
Starting Material:	Silica
Starting Material Lot#:	1771
Starting Material Purity:	99.9981%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 6 µg/mL

Density: 1.003 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**999 ± 5 µg/mL** ICP Assay NIST SRM Traceable to 3150 Lot Number: S2-SI702546
Assay Method #2	**1000 ± 7 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2 (u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000310	M	Eu	<	0.000310	O	Na		0.001656	M	Se	<	0.022000	M	Zn	<	0.002500
M	Al		0.010787	M	Fe	<	0.027000	M	Nb	<	0.001300	s	Si	<		O	Zr	<	0.001900
M	As	<	0.001900	M	Ga	<	0.001300	M	Nd	<	0.000310	M	Sm	<	0.000310				
M	Au	<	0.000910	M	Gd	<	0.000310	M	Ni	<	0.005500	M	Sn		0.000096				
M	B		0.016180	M	Ge	<	0.001900	M	Os	<	0.000610	O	Sr		0.000092				
M	Ba		0.000096	M	Hf		0.000423	i	P	<		M	Ta		0.002542				
O	Be	<	0.000570	M	Hg	<	0.000610	M	Pb	<	0.000310	M	Tb	<	0.000310				
M	Bi	<	0.000310	M	Ho	<	0.000610	M	Pd	<	0.000610	M	Te	<	0.000910				
O	Ca		0.011557	M	In	<	0.000310	M	Pr	<	0.000310	M	Th	<	0.001900				
M	Cd	<	0.000310	M	Ir	<	0.000310	M	Pt	<	0.000310	M	Ti		0.001078				
M	Ce	<	0.000610	O	K		0.000577	M	Rb	<	0.009100	M	Tl	<	0.000310				
M	Co	<	0.001600	M	La	<	0.000310	M	Re	<	0.000310	M	Tm	<	0.000310				
M	Cr	<	0.010000	O	Li	<	0.000460	M	Rh	<	0.000310	M	U	<	0.000310				
M	Cs	<	0.000310	M	Lu	<	0.000310	M	Ru	<	0.000310	O	V	<	0.001300				
M	Cu	<	0.002500	O	Mg		0.001348	O	S	<	0.570000	M	W	<	0.001900				
M	Dy	<	0.000310	M	Mn	<	0.002500	M	Sb	<	0.000310	M	Y	<	0.000310				
M	Er	<	0.000310	M	Mo	<	0.000310	O	Sc	<	0.000590	M	Yb	<	0.000310				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 28.09 +4 6 Si(OH)x(F)y2-

Chemical Compatibility -Soluble in HCl, HF, H3PO4 H2SO4 and HNO3 as the Si(OH)x(F)y2-. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths, or high levels of transition elements unless they are fluorinated. Stable with most inorganic anions with a tendency to hydrolyze forming silicic acid (silicic acid is soluble up to ∼100 ppm in water) in all dilute acids except HF.

Stability - 2-100 ppb levels - stability unknown - (alone or mixed with all other metals) as the Si(OH)x(F)y2-. 1-10,000 ppm single element solutions as the Si(OH)x(F)y2- chemically stable for years in 2-5 % HNO3 / trace HF in a LDPE container.

Si Containing Samples (Preparation and Solution) -Metal (Soluble in 1:1:1 H2O / HF / HNO3); Oxide - SiO2, amorphic (dissolve by heating in 1:1:1 H2O / HF / HNO3); Oxide - quartz (fuse in Pt0 with Na2CO3); Geological Samples(fuse in Pt0with Na2CO3 followed by HCl solution of the fuseate); Organic Matrices containing silicates and non volatile silicon compounds (dry ash at 4500C in Pt0 and dissolve by gently warming with 1:1:1 H2O / HF / H2SO4 or fuse / ash with Na2CO3 and dissolve fuseate with HCl / H2O); Silicone Oils - dimethyl silicones depolymerize to form volatile monomer units when heated (Measure directly in alcoholic KOH / xylene mixture where sample is treated first with the KOH at 60-1000C to "unzip" the Si- O-Si polymeric structure or digest with conc. H2SO4 / H2O2 followed by cooling and dissolution of the dehydrated silica with HF.) Note that the direct analysis of silicone oils in an organic solvent will result in false high results due to high vapor pressure of volatile monomer units like hexamethylcyclotrisiloxane. The KOH forms the K2+Si(CH3)2O= salt which is not volatile at room temperature.

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 28 amu	4000 - 8000 ppt	N/A	N2, 12C16O
ICP-OES 212.412 nm	0.02/0.01 µg/mL	1	Hf, Os, Mo, Ta
ICP-OES 251.611 nm	0.012/0.003 µg/mL	1	Ta, U, Zn, Th
ICP-OES 288.158 nm	0.03/0.004 µg/mL	1	Ta, Ce, Cr, Cd, Th

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 10, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 10, 2029**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor



Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



R : 4/20/21

QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

M6150

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) ***CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS***

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	CN^-	99

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

M6151

R→ 1/15/25

Material No.: 9530-33
Batch No.: 22G2862015
Manufactured Date: 2022-06-15
Retest Date: 2027-06-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl_2)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO_4)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO_3)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH_4)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
Trace Impurities - Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities - Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Magnesium (Mg)	≤ 10.0 ppb	2.9 ppb
Trace Impurities - Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities - Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities - Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities - Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities - Niobium (Nb)	≤ 1.0 ppb	0.8 ppb
Trace Impurities - Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities - Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities - Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities - Silver (Ag)	≤ 1.0 ppb	0.5 ppb
Trace Impurities - Sodium (Na)	≤ 100.0 ppb	2.3 ppb
Trace Impurities - Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Tantalum (Ta)	≤ 1.0 ppb	1.6 ppb
Trace Impurities - Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Tin (Sn)	≤ 5.0 ppb	4.0 ppb
Trace Impurities - Titanium (Ti)	≤ 1.0 ppb	1.5 ppb
Trace Impurities - Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities - Zirconium (Zr)	≤ 1.0 ppb	0.3 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result

For Laboratory,Research,or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

M6156

Certified Reference Material CRM

R→ 6/12/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

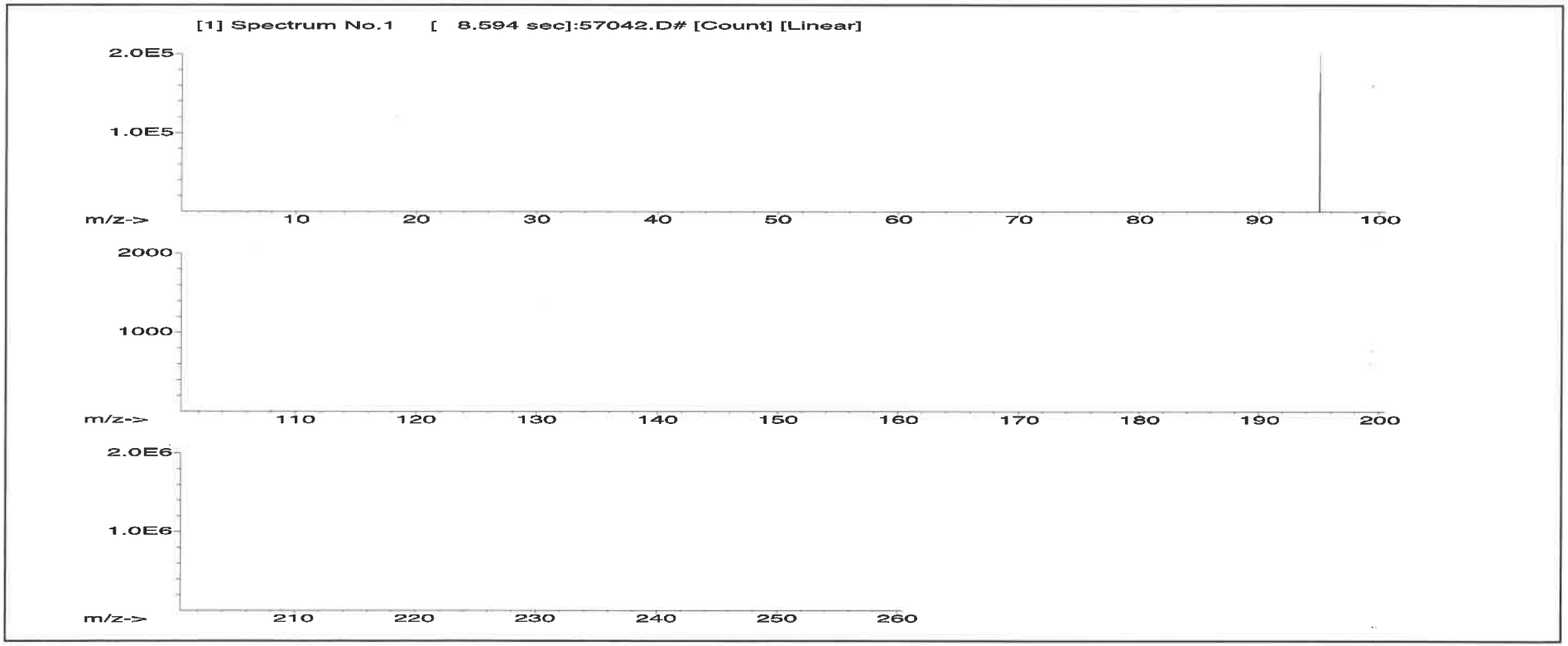
CERTIFIED WEIGHT REPORT:

Part Number:	**57042**
Lot Number:	**032123**
Description:	**Molybdenum (Mo)**
Expiration Date:	032126
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	032123
Reviewed By:	Pedro L. Rentas	032123

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	112322	0.1000	300.0	0.084	1000	10001.4	**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).

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

R-02102/2025

M-6158

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

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Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
Trace Impurities - Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities - Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities - Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities - Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities - Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count - 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count - 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

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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www.absolutestandards.com

Certified Reference Material CRM

M6030

R: 8/5/24

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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

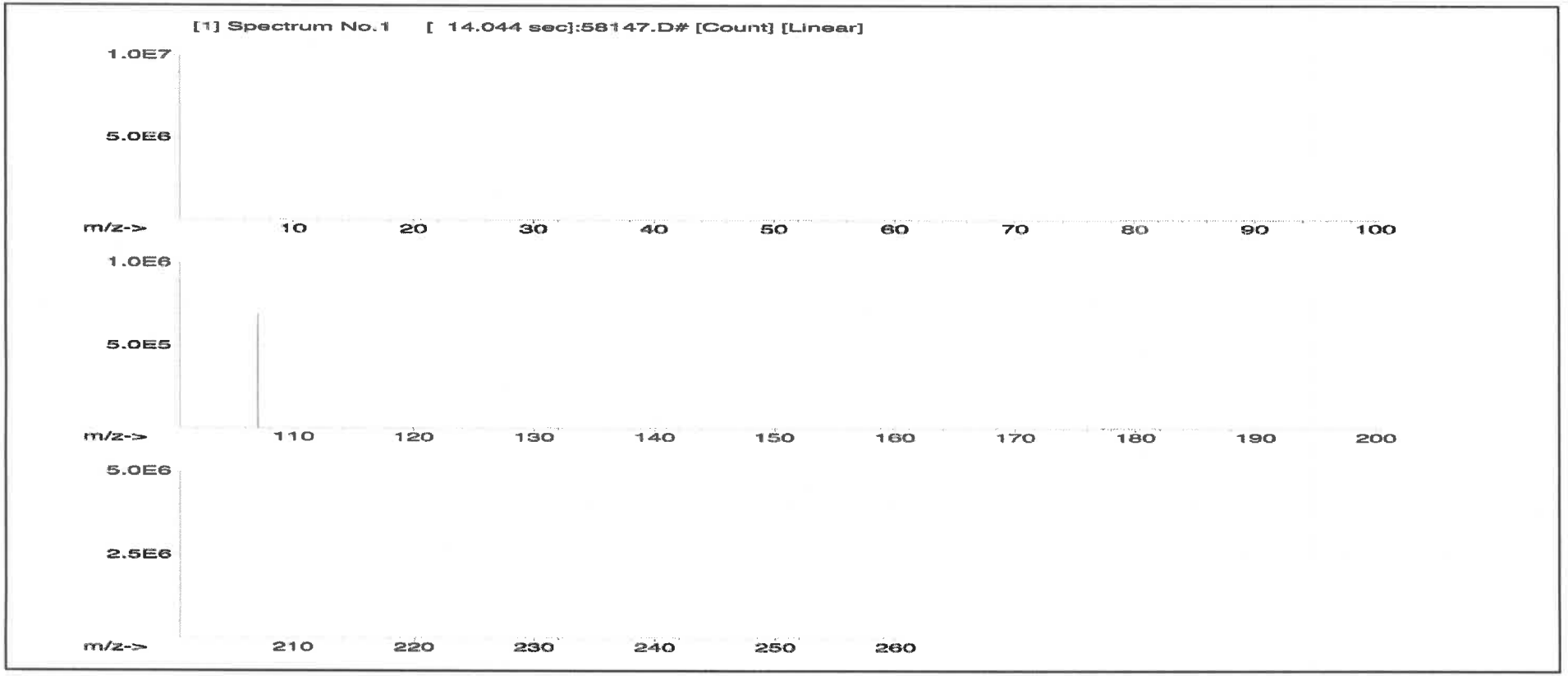
Weight shown below was diluted to (mL): 4000.30 0.058 Flask Uncertainty

	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.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

R : 04/20/21

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

APTIM

Instructions for QATS Reference Material: *ICP-AES ICS*

QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (ICSA WITH ICSB)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

M6152

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. **For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
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APTIM

Instructions for QATS Reference Material: *ICP-AES ICS*

QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (ICSA WITH ICSB)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

M6155

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. **For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

opened : 3/24/25

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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT: M6160

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

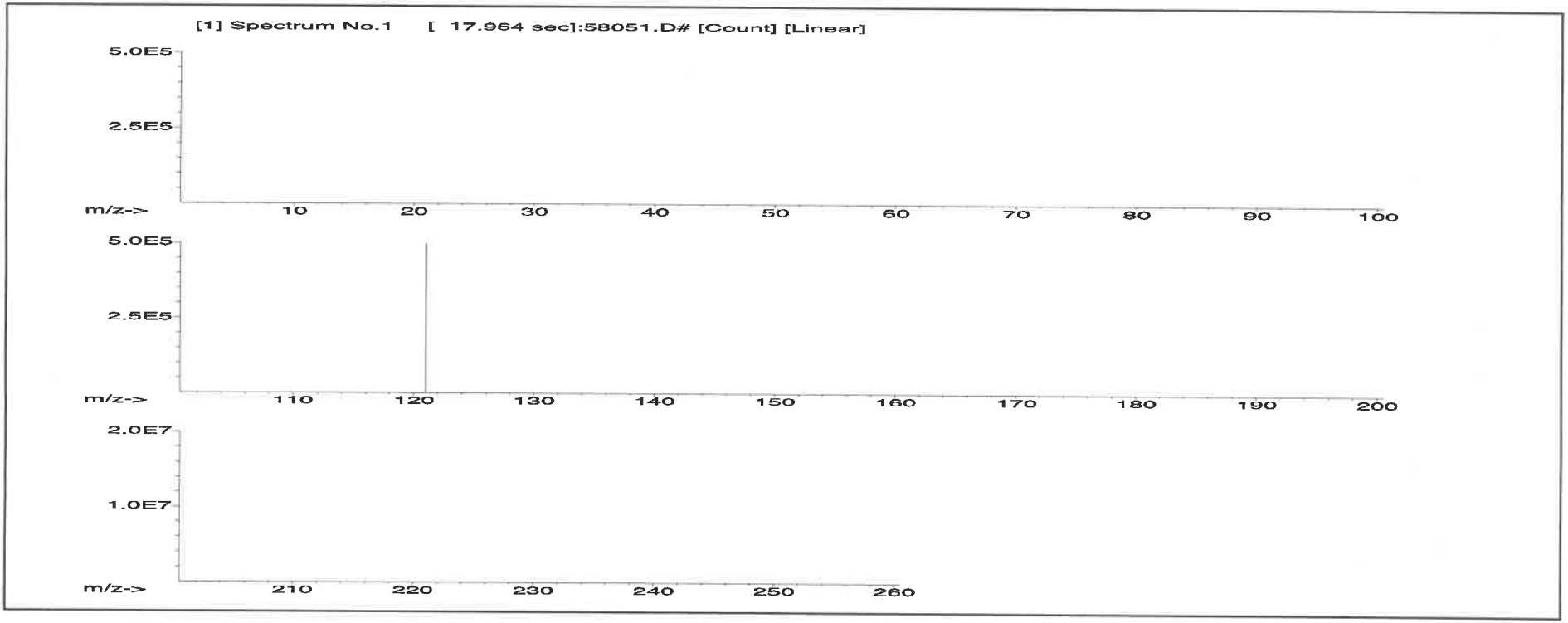
Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	40.0 (mL)	Nitric Acid	

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.
* 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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inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 888.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSR1
Lot Number:	U2-SR730227
Matrix:	0.1% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Strontium
Starting Material:	SrCO3
Starting Material Lot#:	M2-2192
Starting Material Purity:	99.9993%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1001 ± 3 µg/mL

Density: 1.000 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **998 ± 4 µg/mL**
ICP Assay NIST SRM Traceable to 3153a Lot Number: K2-SR650985

Assay Method #2 **1001 ± 3 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **1001 ± 2 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001980	M	Eu	<	0.000495	O	Na		0.000200	M	Se	<	0.013862	O	Zn		0.000143
O	Al		0.000370	O	Fe		0.000410	M	Nb	<	0.000495	i	Si	<		M	Zr	<	0.000495
M	As	<	0.000495	M	Ga	<	0.000495	M	Nd	<	0.000495	M	Sm	<	0.000495				
M	Au	<	0.000989	M	Gd	<	0.000495	O	Ni	<	0.007631	M	Sn	<	0.000990				
M	B	<	0.039606	M	Ge	<	0.000495	M	Os	<	0.000494	s	Sr	<					
M	Ba		0.006486	M	Hf	<	0.000495	i	P	<		M	Ta	<	0.000495				
M	Be	<	0.000990	M	Hg	<	0.000989	M	Pb	<	0.002970	M	Tb	<	0.000495				
M	Bi	<	0.000495	M	Ho	<	0.000495	M	Pd	<	0.003957	M	Te	<	0.027724				
O	Ca		0.004255	M	In	<	0.000495	M	Pr	<	0.000495	M	Th	<	0.000990				
M	Cd		0.001339	M	Ir	<	0.000494	M	Pt	<	0.002970	M	Ti	<	0.005940				
M	Ce	<	0.004950	O	K	<	0.008184	M	Rb	<	0.002970	M	Tl	<	0.000495				
M	Co	<	0.000495	M	La	<	0.000495	M	Re	<	0.000495	M	Tm	<	0.000495				
O	Cr	<	0.003207	O	Li	<	0.000884	O	Rh	<	0.012829	M	U	<	0.001485				
M	Cs	<	0.000990	M	Lu	<	0.002970	M	Ru	<	0.000989	M	V	<	0.001980				
M	Cu		0.000099	O	Mg		0.000064	i	S	<		M	W	<	0.003960				
M	Dy	<	0.000495	O	Mn		0.000066	M	Sb	<	0.014852	O	Y	<	0.000995				
M	Er	<	0.000495	M	Mo	<	0.001980	M	Sc	<	0.001980	M	Yb	<	0.000495				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 87.62 +2 6 $Sr(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1 - 3.5% HNO_3 / LDPE container.

Sr Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO_3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 88 amu	1200 ppt	N/A	72Ge16O, 176Yb+2, 176Lu+2 , 176Hf+2
ICP-OES 407.771 nm	0.0004 / 0.00006 µg/mL	1	U, Ce
ICP-OES 421.552 nm	0.0008 / 0.00004 µg/mL	1	Rb
ICP-OES 460.733 nm	0.07 / 0.003 µg/mL	1	Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 03, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 03, 2028**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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Certified Reference Material CRM

M6023

R ! 8/5/24

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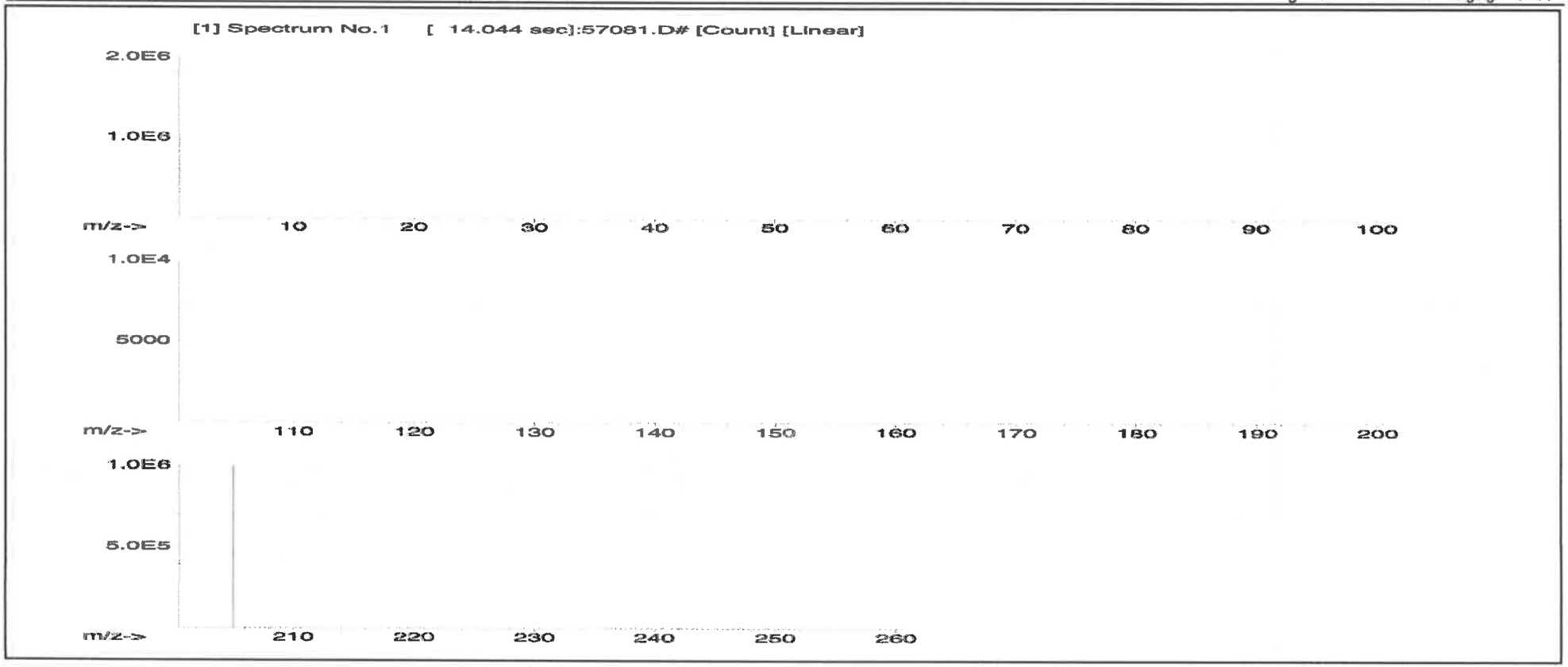
CERTIFIED WEIGHT REPORT:

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
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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	T	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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Certified Reference Material CRM

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Rc. 8/5/24

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57023**			
Lot Number:	**062424**	24002546	Nitric Acid	
Description:	**Vanadium (V)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	062427			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.3	0.06	Flask Uncertainty	

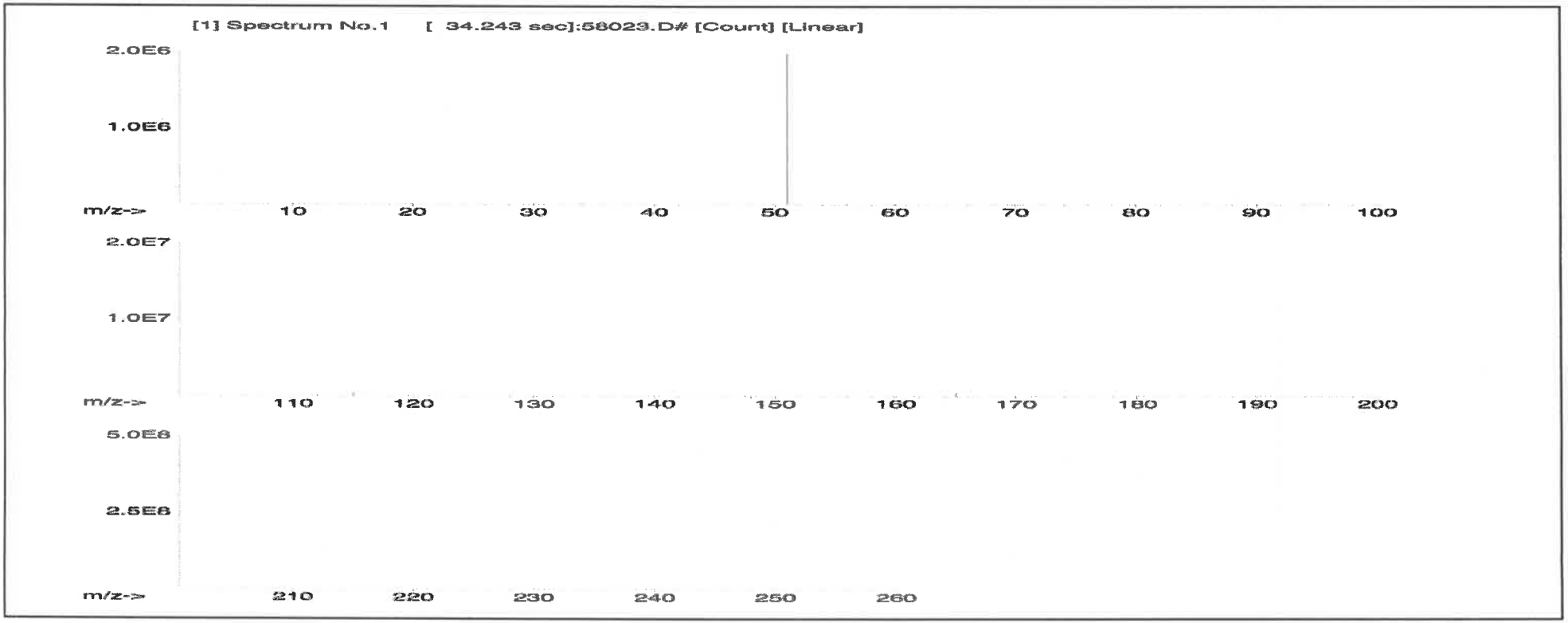
Aleah O'Brady

Formulated By:	Aleah O'Brady	062424

Pedro Rentas

Reviewed By:	Pedro L. Rentas	062424

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium metavanadate (V)	58123	021224	0.1000	200.0	0.084	1000	10000.3	**1000.0**	**2.2**	7803-55-6	0.05 mg/m3	orl-rat 58.1mg/kg	3165



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

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	T
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
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* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

SHIPPING DOCUMENTS

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Packing List

Date	Order #
03/03/2025	333289

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: SJ
3/5/2025 14:30

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
PO2-1517	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-WP	WP Trace Metals Set : (TM1, HG and SNTI)		
1	1	0	PT-TM1-WP	WP Trace Metals 1	WP0325	8264-04
1	1	0	PT-HG-WP	WP Mercury	WP0325	8264-05
1	1	0	PT-SNTI-WP	WP Tin & Titanium	WP0325	8264-38
1	1	0	PT-CR6-WP	WP Hexavalent Chromium	WP0325	8264-06
1	1	0	PT-DEM-WP	WP Demand	WP0325	8264-07
			PT-MINSET-WP	WP Minerals Set : (MIN1, MIN2 and COND)		
1	1	0	PT-MIN1-WP	WP Minerals 1 Only	WP0325	8264-08
1	1	0	PT-MIN2-WP	WP Minerals 2 Only	WP0325	8264-102
1	1	0	PT-COND-WP	WP Conductivity Only	WP0325	8264-72
1	1	0	PT-SOL-WP	WP Solids	WP0325	8264-09
			PT-NUTSET-WP	WP Nutrients Set : (NUT1, NUT2 and NUT3)		
1	1	0	PT-NUT1-WP	WP NUT1 Simple Nutrients Only	WP0325	8264-10
1	1	0	PT-NUT2-WP	WP NUT2 - Complex Nutrients	WP0325	8264-11
1	1	0	PT-NUT3-WP	WP NUT3 - Nitrite Only	WP0325	8264-69
1	1	0	PT-OGR1L-WP	WP Oil and Grease 1L	WP0325	8264-103
1	1	0	PT-CL-WP	WP Residual Chlorine	WP0325	8264-13
1	1	0	PT-PH-WP	WP pH	WP0325	8264-15
1	1	0	PT-CN-WP	WP Cyanide	WP0325	8264-14
1	1	0	PT-PHEN-WP	WP Phenolics	WP0325	8264-16

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Packing List

Date	Order #
03/03/2025	333289

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: SJ
3/5/2025 14:30

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
PO2-1517	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
1	1	0	PT-S2-WP	WP Sulfide	WP0325	8264-22
1	1	0	PT-SSOL-WP	WP Settleable Solids	WP0325	8264-17
1	1	0	PT-TURB-WP	WP Turbidity	WP0325	8264-20
1	1	0	PT-VOA-WP	WP Volatiles	WP0325	8264-26
1	1	0	PT-BN-WP	WP Base Neutrals	WP0325	8264-27
1	1	0	PT-ACIDS-WP	WP Acids	WP0325	8264-28
1	1	0	PT-PEST-WP	WP Pesticides	WP0325	8264-29
1	1	0	PT-CHLR-WP	WP Chlordane	WP0325	8264-30
1	1	0	PT-TXP-WP	WP Toxaphene	WP0325	8264-31
1	1	0	PT-PCBW-WP	WP PCBs in Water	WP0325	8264-32
1	1	0	PT-HERB-WP	WP Herbicides	WP0325	8264-36
1	1	0	RR-TPH1L-WP	WP TPH 1L	R40367	R40367-104
1	1	0	RR-VSOL-WP	WP Volatile Solids	R40367	R40367-18
1	1	0	RR-SIO2-WP	WP Silica	R40367	R40367-21
1	1	0	RR-COL-WP	WP Color	R40367	R40367-51
1	1	0	RR-GAS-WP	WP Gasoline Range Organics	R40367	R40367-62
1	1	0	RR-DIES-WP	WP Diesel Range Organics	R40367	R40367-63
1	1	0	RR-8011-WP	WP EDB/DBCP/TCP	R40367	R40367-98
1	1	0	RR-PAH-WP	WP PAH-Low Level	R40433	R40433-37

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Packing List

Date	Order #
03/07/2025	335989

6390 Joyce Dr., #100
Golden, CO 80403

Tel: +1-303-940-0033
Fax: +1-303-940-0043
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www.phenova.com

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Ship To

Alliance Tech Group - Newark
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Received by: SJ
3/11/2025 9:55

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
Email: Sohil Jodhani	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
1	1	0	RR-TRIAZINE-WP	WP Triazine Pesticides	R40480	R40480-108

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